Macroeconomic environment and remittances in post-independent Sub-Saharan Africa: Magnitudes, trends and stylised facts

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MACROECONOMIC ENVIRONMENT AND REMITTANCES IN POST-INDEPENDENT SUB-SAHARAN AFRICA: MAGNITUDES, TRENDS AND STYLISED FACTS

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Abstract

This paper examines macroeconomic performance and policy environment of post-independent sub-Saharan Africa (SSA) *vis-à-vis* remittance flows to the sub-region. The paper finds that SSA is the only developing region in the world that still depends on foreign aid as its leading external non-debt capital and attracts the least remittances, notwithstanding the positive growth trend since the pursuit of economic policy reforms in the 1980s. In general, low inflation, higher real income growth, domestic savings, investment, exports, financial development, and fiscal policy effectiveness strongly and positively correlate with remittance inflows. This implies remittances are likely to be driven by sound macroeconomic environment in recipient countries. An affirmation of this finding is that, in SSA, (and, indeed, for all developing economies), remittances are pro-cyclical and positively correlate with macroeconomic performance and stability.

1. Introduction

Of the 54 sovereign states in Africa, 48 of them are in Sub-Saharan Africa (SSA). Nearly all these SSA countries became politically independent from the imperial European masters in the 1960s with Ghana being the first within the sub-region in March 1957. Ethiopia and Liberia were fully independent states whereas Sudan just as Egypt was never colonised by any European colonial empire, but were effectively under British administration between 1882 and 1922.

Although the sub-region is blessed with abundant human and natural resources, it has consistently remained the poorest and the least developed in the world. This is clearly evident in the consistent ranking of more than 75% of SSA countries in the bottom quartile by the United Nations in its Human Development Reports over the years. Furthermore, 33 out of the 48 SSA countries have attained the unenviable status of being debt trapped and as a result fall into the category of Heavily Indebted Poor Countries (HIPC) as at June 2010.

The post-independence political atmosphere in SSA has generally been unstable as public expectations of ordinary citizens were very high and issues related to nationality, cultural identity, tribe and ethnicity, as well as the type of economic system and brand of political regime to adopt became predominant. In response, probably out of over anxiety, fear of insecurity and pressure to please loyalists, most leaders committed some fundamental mistakes in leadership, governance and in the formulation as well as implementation of economic policies. In the end, it was quite clear that most leaders were unable to forge national entity that transcended the various ethnic, political, geographical, religious, social and economic interests in their countries. The perceived absence of transparency and fairness in the distribution of national resources resulted in frequent military interventions in state governance in the sub-region until very recently. Thus, although most SSA countries became republics and tried to adopt parliamentary democracy under

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presidential system of governance, practically, none of these countries succeeded in maintaining the momentum on a permanent basis as they cycled through *coup d'états* that ushered in military governments and dictators. For instance, within a decade of post-independence, SSA recorded not less than 21 successful coups between 1960 and 1969 and at least 58 successful presidential and other high-profile political assassinations between 1961 and 2005.

Notwithstanding the Darfur crisis, which has been ongoing since February 2003, the Somalia civil war, the Chad civil war and the hardly settled border and territorial dispute between Nigeria and Cameroon over the right of ownership of the Bakassi Peninsula, largely, the political economy of modern SSA appears to be relatively more stable since post-independence. Today, virtually every SSA country has what can be described as a multi-party democratically-elected president. Again, collectively, countries within the SSA sub-region now visibly frown on military take-overs, dictatorships, and the use of constitutionally unapproved means to assume political leadership. More than ever before, the African Union and the international community, especially western trade and donor partners now act very swiftly to sanction governments and leaders that violate human rights, adopt extremist discrimination practices, and exploit undemocratic means to assume political leadership in countries within the sub-region. For instance, unprecedented in the history of the Economic Community of West African States (ECOWAS), the sub-regional body acted very swiftly to review the political and security situation in Côte d'Ivoire after the declaration of certified second round Presidential election results on 28 November 2010. Subsequently, ECOWAS issued a statement within ten days after the elections to denounce the incumbent President, Laurent Gbagbo, and asked him to concede defeat without delay. This is expected to continue to create the propitious environment for some consistency in the formulation and implementation of pro-growth and sustainable development policies under adopted national economic development programmes towards the socioeconomic progress of the sub-region.

The strides being made in improving good governance and building stronger state institutions signify reduced political risks necessary for creating the ideal investment environment required for the mobilisation of critical resources in SSA. Apart from the encouraging developments on the political landscape of the sub-region, various macroeconomic policy reform programmes were adopted and implemented by SSA countries since political independence in the 1960s. Each of these programmes were, among other things, centred on mobilising domestic and external resources, crucial to the socioeconomic development agenda of the sub-region, as SSA has been identified as the region most lacking critical resources (Devarajan *et al.,* 2002; Gupta *et al*., 2006). And as the sub-region is identified as one of the leading net exporters of skilled and unskilled labour to the industrialised world (Migration Policy Institute, 2006), the question that has remained unanswered is: Has the implementation of various macroeconomic policies led to higher inflows of migrant remittances during the post-independence era? In other words, are remittances inflows from SSA migrants from abroad responsive to changing macroeconomic policy environment? In order to find the appropriate response to this question, this paper seeks to basically explore the relationship between the changing inflows of migrant remittances and the various macroeconomic policies implemented by SSA as a sub-region since independence. In doing so, rather than adopting rigorous macroeconometric analytical approach, this paper uses a set of simple descriptive statistics to provide an insight into the performance of the sub-region in attracting remittances during the post-independence era.

The rest of this paper is organised as follows: Section 2 presents the analysis of the magnitude and trends of remittances as an external capital flows to SSA. This is also the Section in which the correlation between remittances and selected macroeconomic indicators are carried out. The stylised facts on remittance flows to SSA are presented in Section 3. Section 4 concludes with some policy imperatives for SSA as a sub-region.

2. Remittances as an external capital flow to SSA (1960-2009)

2.1 Composition and trends in external capital flows to SSA: A global outlook

Conventionally, besides contractual loans, capital flows to SSA and other developing economies are a composition of foreign direct investment (FDI), official development assistance (ODA), and portfolio equity. In recent years, however, remittances have emerged as a complementary source of external capital for developing countries. Figure A1 in the Appendix depicts the trends in external capital flows to the various developing economies of the world.

Figure 1 shows the trends in external capital flows to SSA since 1960. Clearly, external capital flows to SSA were generally low during the pre-reforms era. From the reforms era in the 1980s and onwards, there have been somewhat consistent low upward trends in external capital flows to the sub-region even though these trends except for migrant remittances have been fluctuating widely. On the average, the least external capital inflow is portfolio equity whereas, consistently, ODA has been the highest inflow to the sub-region since independence. As depicted in Figure 1, the sub-region has not been successful in attracting external capital inflows in a consistent manner, except probably for migrant remittances. Arguably, the apparent consistency in the inflows of migrant remittances could be attributed to the continuously growing poverty in the sub-region and development gap between SSA and the industrialised world. The persistently high rates of unemployment and underemployment, a feature of developing countries and the ever-increasing income gap have become a recipe for emigration and remittance inflows in SSA. In this case, driven by altruism, migrants from SSA are compelled to continue to remit home, mainly for consumption purposes, so long as the economic conditions at home do not improve. Miotti *et al*. (2010: 17) notes that, given the severity of poverty within the sub-region, unlike migrants from other developing world, SSA migrants are compelled to "send money for current expenditures rather than for investment purposes".

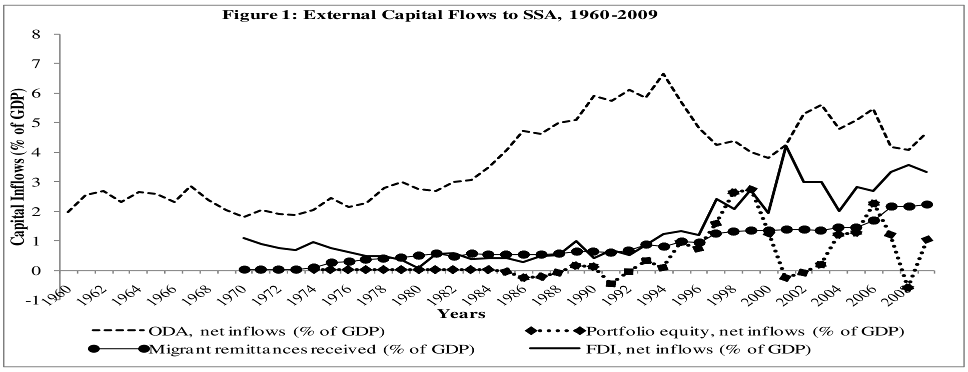
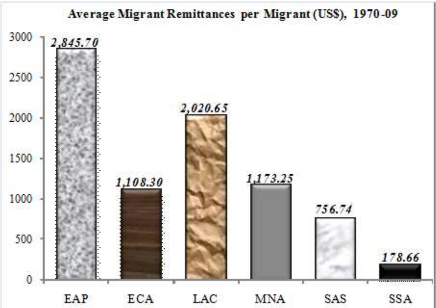


Figure 1: External capital flows to SSA, 1960-2009
Source: Authors based on World Bank (2010)

Under this circumstance, international migrants from the sub-region are compelled to remit to their families back at home for altruistic motives and not in response to successful implementation of economic policies by governments. As evident from various survey studies from different parts of the world migrant remittances are mainly used for consumption (Tongamoa, 1987; Hayes, 1993; Miotti *et al*., 2010), and most migrants from poor countries are under social obligations to remit home (Morauta, 1985; Tongamoa, 1987; Brown and Poirine, 2005). It should, however, be emphasised that as to whether a migrant will patronise the formal financial sector in remitting home or use the unofficial money transfer channel, is largely dependent upon the degree of financial efficiency, an aspect of financial development which incorporates the cost of financial service delivery including the cost of international money transfers. Unofficial money transfer channels are private and often unorganised money transfer channels to target recipients in developing countries. These channels may include funds sent through fellow international migrants travelling home and individuals who act as agents for informal money institutions. Also, migrant easy access for migrants to offshore banking services, online banking and the availability of innovative international financial products, which are all aspects of financial system development, can be instrumental in attracting remittances through the formal financial sector.

Figure 2 reconfirms the information in Figure 1 that, generally, there has been a positive growth trend in remittances received in SSA and other developing economies, when measured as remittances received per migrant. This trend is also consistent with what is revealed in Figure A1 as well as Figure A2 in the Appendix. With the exception of ECA which recorded a sharp drop in remittance flows between 1970 and 1990, virtually all the developing regions, including SSA, have witnessed a consistent positive growth trend in migrant remittances per migrant.



Year	EAP	ECA	LAC	MNA	SAS	SSA
1970	-	-	9.42	77.39	7.33	2.45
1975	10.14	2,840.48	37.02	309.10	28.08	36.68
1980	567.96	1,941.07	343.39	1,511.63	338.24	108.31
1985	761.07	1,443.75	455.76	877.43	359.29	90.45
1990	1,115.64	107.44	887.98	1,250.01	350.31	127.20
1995	2,928.37	218.92	2,442.82	1,477.42	754.72	191.68
2000	3,923.40	367.20	3,588.30	1,375.69	1,337.33	294.02
2005	10,613.30	839.20	8,400.53	2,507.37	2,878.66	578.51
TOTAL	19,919.87	7,758.08	16,155.80	9,308.64	6,046.63	1,426.86
MEAN	2,845.70	1,108.30	2,020.65	1,173.25	756.74	178.66

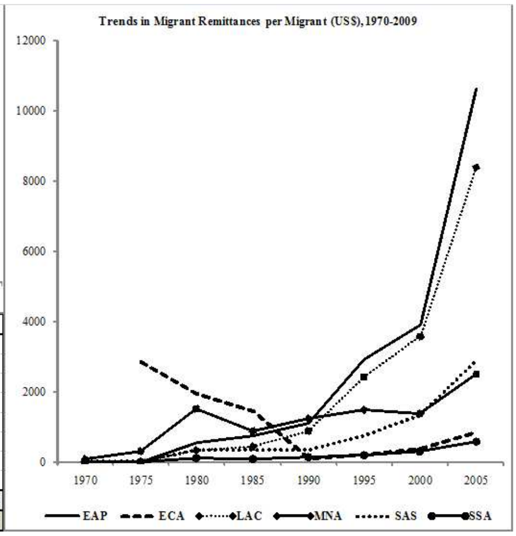


Figure 2: Migrant remittances received per migrant (US$) in developing economies, 1970-2009*

Source: Authors based on World Bank (2010)

*Computation based on 5-year data point intervals for which data is available on total international migration stock reported in WDI by the World Bank (2010).

Although SSA is the least recipient of remittances per migrant, both in total amount and in terms of growth since 1970, like many other developing economies, the sub-region has witnessed a positive growth trend since the post-reforms era. What is clear from Figure 2 above is that, on the average, international migrants have been increasing the amount they send home overtime. This may be due to the ever-increasing income gap between industrialised countries where migrants are resident and developing countries where migrants are natives. Another possible reason is that developing countries which are the exporters of migrants, have not been able to improve the circumstances under which their citizens live; hence the compelling need for migrants to keep increasing remittances in support of families left behind to enable them to access basic human needs such as food, clothing and healthcare. Also, in particular, between the years 2000 and 2005, there was an upsurge in remittances per migrant to SSA and, indeed, to other developing economies. This may be due to how the United States of America and many advanced countries, which are the main host of international migrants, strengthened regulations and clampdown on international funds transfers through informal channels following the September-11, 2001 Al Qaeda attack.

Thus, unlike in the past, migrants are now obliged to transfer funds home using official channels. It is also likely that more migrants from SSA might now be more interested in returning home. Several studies, including Merkle and Zimmermann (1992), Brown (1997), and Cai (2003) found that migrant intention to return home (or future migration plans) has a strong positive impact on the probability of remitting and the amount of funds transferred by migrants. The magnitude and trend in external capital flows to SSA appear quite unique from what occurs in other developing economies of the world as shown in Figure A1 in the Appendix. For instance, as shown in Figure A1, migrant remittances are either the highest (as is the case for

Middle East and North Africa (MNA) and South Asia (SAS)) or the second-highest (as is the case for East Asia and Pacific (EAP), Europe and Central Asia (ECA) and Latin America and Caribbean (LAC)) external capital inflows, but in the case of SSA alone, migrant remittance inflows are only slightly higher than portfolio equity inflows. Again, in SSA, ODA has remained consistently the highest external capital inflows to the sub-region, but for all other developing economies, ODA has either been the lowest (as is the case for EAP and LAC) or the second-lowest (as is the case for ECA, MNA and SAS). Since the inflows of FDI are generally driven by profit motives whereas ODA are mainly linked to humanitarianism of donor institutions, the fact that SSA constantly receives ODA as the highest form of external capital inflows is a signal that the sub-region has not been able to implement the appropriate economic policies to pull quality external resources to advance its growth and development in a sustainable fashion.

It is also of interest to note that migrant remittances have been the most consistent growing external capital flows to developing economies in the world whilst ODA and portfolio equity have been the most volatile as shown in Figure A1. Apart from its high volatility, generally, ODA to developing economies has been declining. This is an indication that it will be prudent for developing countries, particularly those in SSA, to put policy measures in place to facilitate an improved mobilisation of non-aid investment-related external capital to finance their development projects as well as to enable them to address their numerous underdevelopment problems on a permanent basis. Evidently, migrant remittances have been the least sensitive to shocks given its high relative smooth pattern inflows to SSA and other developing economies. Another important observation is that whereas there seems to be a somewhat general positive correlation between FDI and migrant remittance inflows to developing economies, in contrast, there seems to be a negative relationship between migrant remittance inflows and ODA across the developing world. Thus, developing economies that attract higher migrant remittances also attract higher FDI but relatively lower ODA and vice versa. For instance, while being the sub-region receiving the least remittances, SSA also receives the least FDI but the most recipient of ODA, whereas the opposite condition commonly holds for the other developing economies (see Figure A1).

According to altruistic theory, given the income of the migrant, remittances should negatively correlate with the income level of the target recipients (Lucas and Stark, 1985; Rapoport and Docquire, 2006). Indeed, some macro-level studies notably Bougha-Hagbe (2004) and World Bank (2006) conclude that in countries with less developed financial systems remittances are countercyclical. Contrary to this highly held view of remittance counter-cyclicality, it has been revealed in this study that, migrant remittance inflows generally correlate positively with real GDP per capita, growth in real per capita GDP, real GDP growth and even real GDP per person employed in developing economies as shown in Table 1 (for most recent evidence and a more detailed analysis on SSA, see Adenutsi *et al*., 2011: 143). Other empirical studies which found that remittances are largely pro-cyclical in the recipient countries include studies by the IMF (2005), Sayan (2006), and Lueth and Ruiz-Arranz (2007).

It can also be seen that migrant remittances are more strongly positively correlated with gross domestic savings and investment rather than what is popularly believed, namely that remittances are purely for consumption purposes and driven by altruism. If, indeed, remittances are spent on consumption in developing countries, then they are more likely to be spent on imported consumer goods as found by Tongamoa (1987) rather than on domestically produced goods. This is because as revealed in Table 1, there is a strong negative correlation between migrant remittances and household final consumption expenditure (HFCE) whereas they positively and robustly correlated with the import of goods in developing countries. This is one of the most consistent results across all the developing economies in the world. One should, however, be cautious in concluding that remittances are likely to be used for imports, since the correlation between the former and exports is also strongly positive for all developing countries. What seems clear from the foregoing is that migrant remittance inflows are likely to be highly associated with economic openness, given the high positive correlation coefficients with imports and exports as a proportion of GDP. However, although SSA has higher trade openness than ECA, the latter receives more remittances than the former. In addition, there is no basis to conclude that remittances are a substitute for exports in developing countries. Indeed, remittances, in excess of present consumption can be used in financing income-generating activities, leading to increased output and exports in labour-exporting countries.

It is also observed that remittance inflows are positively associated with improved current balance in migrant exporting developing countries. The correlation between migrant remittances received and portfolio equity is low and generally insignificant (with none attaining 45%). Conversely, the correlation between FDI and remittances is positive and robust for developing economies, except for EAP where the relationship is negative but low. Further evidence on the negative correlation between remittances and domestically produced consumables in developing countries can be ascribed to the strong positive relationship between remittances and gross fixed capital formation (a proxy for domestic investment) as well as remittances domestic savings. For SSA, the correlation between remittances and savings is 87% whilst that between remittances and investment is 54%. One intriguing results obtained in Table 1 is that, in SSA, just as is the case in all other developing regions, remittance inflows is negatively correlated with the rate of inflation. This implies either that migrant remittances contribute to reducing inflation in labour-exporting countries or that price stability is a sine qua non for remittance inflows to developing countries. Finally, taking the correlation coefficients into account, it can be concluded that there is no significant difference between the volume of migrant remittance inflows and migrant remittances received per capita in the context of macroeconomic implications.

Table 1:
Correlation between migrant remittances and selected macroeconomic indicators, 1990-2009*

	EAP		ECA		LAC		MNA		SAS		SSA	
	MRPC	MRem	MRPC	MRem	MRPC	MRem	MRPC	MRem	MRPC	MRem	MRPC	MRem
Current account balance (% of GDP)	0.727	0.721	0.008	0.007	0.721	0.717	0.152	0.219	0.079	0.071	0.451	0.457
FDI, net inflows (% of GDP)	-0.185	-0.189	0.932	0.931	0.280	0.269	0.874	0.899	0.946	0.944	0.653	0.653
GDP (constant 2000 US$)	0.986	0.984	0.881	0.881	0.961	0.962	0.840	0.917	0.971	0.968	0.954	0.956
GDP growth (annual %)	0.197	0.196	0.389	0.387	0.193	0.184	0.128	0.124	0.428	0.418	0.489	0.475
GDP per capita (constant 2000 US$)	0.985	0.983	0.868	0.868	0.940	0.944	0.855	0.927	0.886	0.879	0.953	0.955
GDP per capita growth (annual %)	0.296	0.294	0.384	0.381	0.287	0.278	0.231	0.249	0.408	0.399	0.512	0.498
GDP per person employed (constant 1990 PPP $)	0.141	0.145	0.859	0.860	0.842	0.847	0.864	0.905	0.975	0.973	0.960	0.964
Exports of goods (% of GDP)	0.889	0.884	0.438	0.437	0.874	0.864	-	-	0.951	0.949	0.850	0.846
Imports of goods (% of GDP)	0.760	0.755	0.479	0.478	0.805	0.794	0.206	0.071	0.954	0.956	0.740	0.729
Gross fixed capital formation (% of GDP)	0.801	0.800	0.285	0.288	0.068	0.081	0.442	0.458	0.922	0.922	0.540	0.542
Gross domestic savings (% of GDP)	0.940	0.940	-0.018	-0.017	0.738	0.736	0.813	0.848	0.785	0.782	0.867	0.867
HFCE (% GDP)	-0.985	-0.984	-0.037	-0.038	-0.856	-0.851	-0.805	-0.822	-0.859	-0.853	-0.927	-0.929
Inflation, GDP deflator (annual %)	-0.223	-0.220	-0.386	-0.385	-0.522	-0.512	0.096	-0.016	-0.2955	-0.284	-0.247	-0.2448
Portfolio equity, net inflows (% of GDP)	0.429	0.424	0.243	0.240	-0.171	-0.162	0.004	0.029	0.199	0.196	0.095	0.078

Source: Authors based on World Bank (2010)
Note: MRPC and MRem denote migrant remittances per capita and gross migrant remittances received respectively.
*The time coverage was reduced to 1990-2009 due to data constraint.

2.2 The dynamics of remittance inflows and the macroeconomic environment in SSA

From a macroeconomic perspective, there seems to be sufficient evidence for two stylised facts regarding remittance flows to developing countries: (i) geographically smaller countries are more likely to attract relatively higher migrant remittances probably because, as a result of their size, there is stronger social cohesion and ties; and (ii) although poorer countries are more likely to attract higher remittances because of hostile domestic economic conditions which encourage higher cross-border migration, remittance flows to these poor countries are not automatic but dependent on some macroeconomic fundamentals. For instance, as shown in Table 2, in terms of real GDP per capita, Seychelles, Mauritius, Botswana, Swaziland and Cape Verde can be described as relatively rich within the sub-region. Yet, in relative terms, these countries were the leading recipients of migrant remittances in SSA after only Lesotho between 1980 and 2009. Similarly, remaining countries in the top-10 remittance-dependent countries category such as Senegal, Comoros, Lesotho, Gambia, Lesotho and Sudan are by far, less poorer than Niger, Sierra Leone, Ghana, Rwanda, Ethiopia and Malawi, classified among the least-10 remittance-dependent countries as depicted in Figure 3. Thus, considering real GDP per capita, it is observed that the very poorest countries in the sub-region (Burundi, Ethiopia, Malawi, Niger and Sierra Leone) are among the least-10 remittance-dependent countries

(Table 2). Guinea-Bissau, Liberia, Uganda and Togo, however, managed to defy the odds and are among the top-10 remittance-dependent within the sub-region in recent years, when measured relative to GDP or population size in recent years (see Figure A4).

Table 2:
Comparative analysis of Top-10 and Bottom-10 migrant remittances per capita recipients in SSA

	Top-10 Migrant Remittance Recipient Countries in SSA, 1980-2009											
	Lesotho	C-Verde	Mauritius	Swaziland	Seychelles	Botswana	Senegal	Sudan	Comoros	Gambia	**Mean**	***Cor_***
Migrant remittances *per capita* (US$)	203.28	183.57	124.44	82.56	61.88	44.74	32.08	19.17	19.01	18.03	**78.88**	***1.000***
Bank liquid reserves to bank assets ratio (%)	18.20	20.33	7.09	22.45	12.81	9.93	9.58	34.45	44.88	15.76	**19.55**	***-0.257***
Bank credit to private sector (% of GDP)	14.19	35.10	47.86	18.55	19.43	13.31	24.17	7.20	12.11	14.94	**20.69**	***0.487***
FDI, net inflows (% of GDP)	9.56	4.42	1.15	3.91	9.23	2.69	0.95	2.29	0.64	4.12	**3.90**	***0.503***
GDP *per capita* (constant 2000 US$)	379.31	1,066.72	3,105.94	1,202.43	6,094.10	2,763.88	478.78	334.37	398.66	335.75	**1,615.99**	***0.017***
Exports of goods (% of GDP)	25.12	6.00	37.72	62.53	20.84	47.26	17.62	10.27	10.08	29.12	**26.66**	***-0.007***
Imports of goods (% of GDP)	107.66	44.04	45.74	0.00	56.77	37.92	27.19	8.73	0.00	48.35	**37.64**	***0.656***
Gross domestic savings (% of GDP)	-42.67	-3.78	21.27	5.27	19.72	36.86	6.36	11.26	-5.79	7.56	**5.61**	***-0.563***
Gross fixed capital formation (% of GDP)	43.51	30.94	23.78	19.71	26.54	26.95	21.13	13.28	16.87	19.63	**24.23**	***0.839***
HFCE *per capita* (constant 2000 US$)	484.68	1,063.60	1,969.11	943.06	3,917.06	955.96	367.89	286.97	330.14	259.74	**1,057.82**	***0.136***
Inflation, GDP deflator (annual %)	11.04	3.33	7.93	10.05	6.47	10.01	4.69	39.46	4.78	9.96	**10.77**	***-0.277***
Broad money (M_2) as % of GDP	35.72	57.34	67.51	24.18	59.69	25.31	24.74	16.89	21.28	29.70	**36.23**	***0.570***
Real interest rate (%)	4.78	7.73	10.26	4.86	6.99	3.71	9.97	-	6.66	14.35	**7.70**	***-0.296***
Tax revenue (% of GDP)	43.97	23.56	17.23	27.63	27.70	22.26	16.89	6.29	-	18.20	**22.64**	***0.686***

	Bottom-10 Migrant Remittance Recipient Countries in SSA, 1980-2009											
	Mauritania	Niger	S-Leone	Congo	Ghana	Rwanda	Ethiopia	MAD	Tanzania	Malawi	**Mean**	***Cor_***
Migrant remittances *per capita* (US$)	2.50	2.31	2.24	2.12	1.65	1.65	0.92	0.69	0.18	0.09	**1.44**	***1.000***
Bank liquid reserves to bank assets ratio (%)	9.40	18.49	40.62	19.96	26.49	13.19	25.09	16.61	8.92	28.37	**20.71**	***0.083***
Bank credit to private sector (% of GDP)	28.32	10.40	4.31	11.42	8.56	9.05	15.02	13.30	9.31	10.84	**12.06**	***0.201***
FDI, net inflows (% of GDP)	4.23	1.38	0.57	6.82	2.16	0.70	1.99	1.92	2.45	1.16	**2.34**	***0.284***
GDP *per capita* (constant 2000 US$)	428.53	186.84	232.60	1,141.62	244.07	247.44	134.92	269.03	294.57	142.67	**332.23**	***0.358***
Exports of goods (% of GDP)	37.75	16.71	12.77	60.55	22.87	5.61	5.03	13.39	10.58	22.51	**20.78**	***0.410***
Imports of goods (% of GDP)	37.38	19.69	21.00	26.52	32.40	16.29	15.01	18.58	23.13	22.08	**23.21**	***0.388***
Gross domestic savings (% of GDP)	3.12	7.57	3.42	36.10	6.08	0.91	8.51	5.78	6.19	7.92	**8.56**	***0.145***
Gross fixed capital formation (% of GDP)	22.53	13.95	10.28	26.65	18.51	16.41	18.29	15.71	19.20	16.49	**17.80**	***0.076***
HFCE *per capita* (constant 2000 US$)	432.03	136.00	148.69	308.90	214.79	191.15	110.02	231.14	205.16	115.55	**209.34**	***0.444***
Inflation, GDP deflator (annual %)	8.83	4.33	35.54	6.95	31.37	9.03	7.60	15.61	15.96	22.24	**15.75**	***-0.115***
Broad money (M_2) as % of GDP	18.07	14.22	16.50	16.20	19.21	15.53	28.74	18.38	21.11	17.49	**18.55**	***-0.452***
Real interest rate (%)	9.04	11.68	-1.266	10.86	-16.46	7.81	1.10	14.47	3.55	7.74	**4.85**	***-0.026***
Tax revenue (% of GDP)	-	11.40	9.65	5.95	18.28	9.03	10.18	10.66	-	-	**10.74**	***-0.135***

Source: Authors based on World Bank (2010)

Note: Averages were computed for each country for only the years from 1980-2009 for which data was available. C-Verde, S-Leone, and MAD stand for Cape Verde, Sierra Leone, and Madagascar respectively.

Broadly, the top-10 remittance-dependent countries in SSA are those with relatively higher tax revenue, exports and imports of goods, FDI, domestic investment, financial deepening, bank credit to private sector ratio and real interest rate, but lower rate of inflation and domestic savings. These leading remittance recipients in per capita terms also have higher household consumption expenditure and real GDP per capita. However, taking a cursory look at country-specific features, it is observed that, with the exception of Sudan, the top-10 remittance-recipient countries in per capita terms are those with a stronger fiscal policy stance in terms of tax revenue mobilisation. Furthermore, countries which are successful in attracting higher remittances in per capita terms are those with more developed financial systems when measured in terms of improved financial depth and credit to the private sector over the past three decades. This is also true for countries that lead in attracting remittances in absolute volumes and, even in terms of GDP (see Figure A4). It should also be noted that Ethiopia, Malawi and Niger, can be described as the very poorest in the sub-region, taking into account real per capita GDP, but are not successful with the implementation of fiscal and monetary policies (measured by the aforementioned criteria), are also the very least in attracting migrant remittances as well as FDI. Consequently, it can be argued that the success in implementing fiscal and monetary policies, to some reasonable extent, could play a significant role in attracting migrant remittances from abroad. Alternatively, remittances could be important in determining the success of fiscal and monetary policy implementation in remittance-recipient countries within the sub-region.

For both top-10 and bottom-10 remittance-dependent SSA countries in Table 2, there remittances per capita positively correlates with real GDP per capita, bank credit to private sector and investment, whilst for the rate of inflation and real interest rate, the correlation is negative. With the exception of real GDP per capita, in each of these cases, the correlation is stronger for the top-10 than the for bottom-10 countries. The conspicuous differences, however, are that whereas migrant remittances per capita strongly correlates with financial deepening and tax revenue among the top-10 countries, the direction of correlation is reverse in the case of the bottom-10 countries.

With a coefficient in excess of 99% (Figure A3), there is near perfect positive correlation between remittances received per capita and remittances per migrant received in SSA and, indeed, for all other developing regions excluding ECA. For these other developing regions, the correlation coefficient ranges between 97% for MNA and 100% for EAP and LAC. In the case of ECA, a correlation coefficient of -37% (Figure A3) signifies a relatively low negative relationship between remittances per capita and remittances per migrant. Thus, generally, migrant remittances per capita should be seen as a 'perfect' proxy for remittances per migrant in developing economies, SSA inclusive. In line with this observation, Figure 2 should be seen as providing a good insight on the dynamics of remittances sent by international migrants from the sub-region remit to their native SSA countries over the past 30 years.

Although SSA as a sub-region has remained the least recipient of migrant remittances in the world, when measured in actual volume of inflows or as a ratio of population (Figure A2) or per migrant (Figure A3), on the basis of Figure 3 as well as Figure A2, it is evident that remittances received by the sub-region has been increasing steadily, especially during the post-reforms era. Comparing SSA to other developing regions, however, it is quite apparent that the rate of growth in total migrant remittance inflows as well as remittances received by the sub-region relative to population size (Figure A2) and international migrant stock is relatively slow (Figure 2).

For the individual countries within the sub-region, the number of SSA countries that received an annual minimum of US$1 in remittances per capita increased from 24 in the 1980s to 30 in the 1990s and to 31 in the 2000s (Figure 3). In the 2000s, none of the 31 SSA countries referred to above received less than US$2 in remittances per capita. A similar trend is observed when the number of SSA countries that received at least 1% of GDP is analysed. From 16 countries in the 1980s, the number of countries rose to 17 in the 1990s before reaching 21 in the 2000s, based on the 35 sampled countries for which consistent data are available over the past three decades (see Figure A4 in the Appendix). Furthermore, although only 16 SSA countries received an annual average of US$12 million, representing a monthly average of US$1 million in the 1980s, as many as 24 and 29 out of the 35 sampled SSA countries received this minimum amount of remittances in the 1990s and 2000s respectively (see Figure A5 in the Appendix).

In per capita terms, Lesotho (US$203), Cape Verde (US$184), Mauritius (US$124), Swaziland (US$83), Seychelles (US$62), Botswana (US$45), and Senegal (US$32) are SSA countries that have consistently received the highest inflows of remittances between 1980 and 2009. Nevertheless, during the immediate past decade, (2000-2009), Cape Verde and Mauritius displaced Lesotho and the traditional leading recipient of remittances in per capita terms. Benin and Botswana which ranked among the top-10 recipients of remittances per capita during the 1980s and 1990s, were dislodged by Nigeria and Togo in the 2000s. Whereas Botswana, just like Burkina Faso and Mozambique, recorded a consistent decline in remittances per capita over the past three decades, Nigeria defied the odds as the only country ranked among the bottom-10 recipients in the 1980s to occupy a position among the top-10 in the 2000s. By this feat, Nigeria has not only managed to effectively escape from the bottom-10 in per capita terms, but to progress from the 18th in the 1980s to the first position since the 1990s as the largest recipient of actual volume of remittances received (compare Figure 3 above with Figure A5 in the Appendix). The situation at the opposite end of the remittance per capita ladder can be described as less competitive as six of the countries (Malawi, Tanzania, Madagascar, Ethiopia, Rwanda and Ghana), have never moved out of the bottom-10 category throughout the past three decades (Figure 3).

Regarding remittances as a ratio of GDP (Figure A4), as in terms of remittances per capita, Lesotho (52%), Cape Verde (14%) and Swaziland (7%) maintained the top-three positions in the SSA for the period, 1980-2009, although Gambia dislodged Swaziland from the third spot in the 2000s. Here again, six countries (Malawi, Gabon, Tanzania, South Africa, Congo Republic and Madagascar) have remained within the bottom-10 recipients in terms of GDP throughout the past three decades. Nigeria originally ranked among the least-10 recipients moved from the 32nd position with approximately 0% in the 1980s to the 14th with a remarkable 3% in the 2000s. Other countries that made significant and consistent progress on the remittance-GDP ladder are Guinea-Bissau which moved from 18th position with about 1% to 6th with 8%, Kenya (17th;1%) to (8th;5%), Senegal (11th;2%) to (5th;8%), and Togo (15th;1%) to (4th;9%) from the 1980s to the 2000s. In contrast, Botswana (7th;4%) to (26th;1%), Burkina Faso (4th;7%) to (18th;1%), Mauritius (5th;6%) to (13th;3%), and Swaziland (3rd;11%) to (10th;4%) experienced the most significant and consistent retrogression on the remittance-GDP ladder.

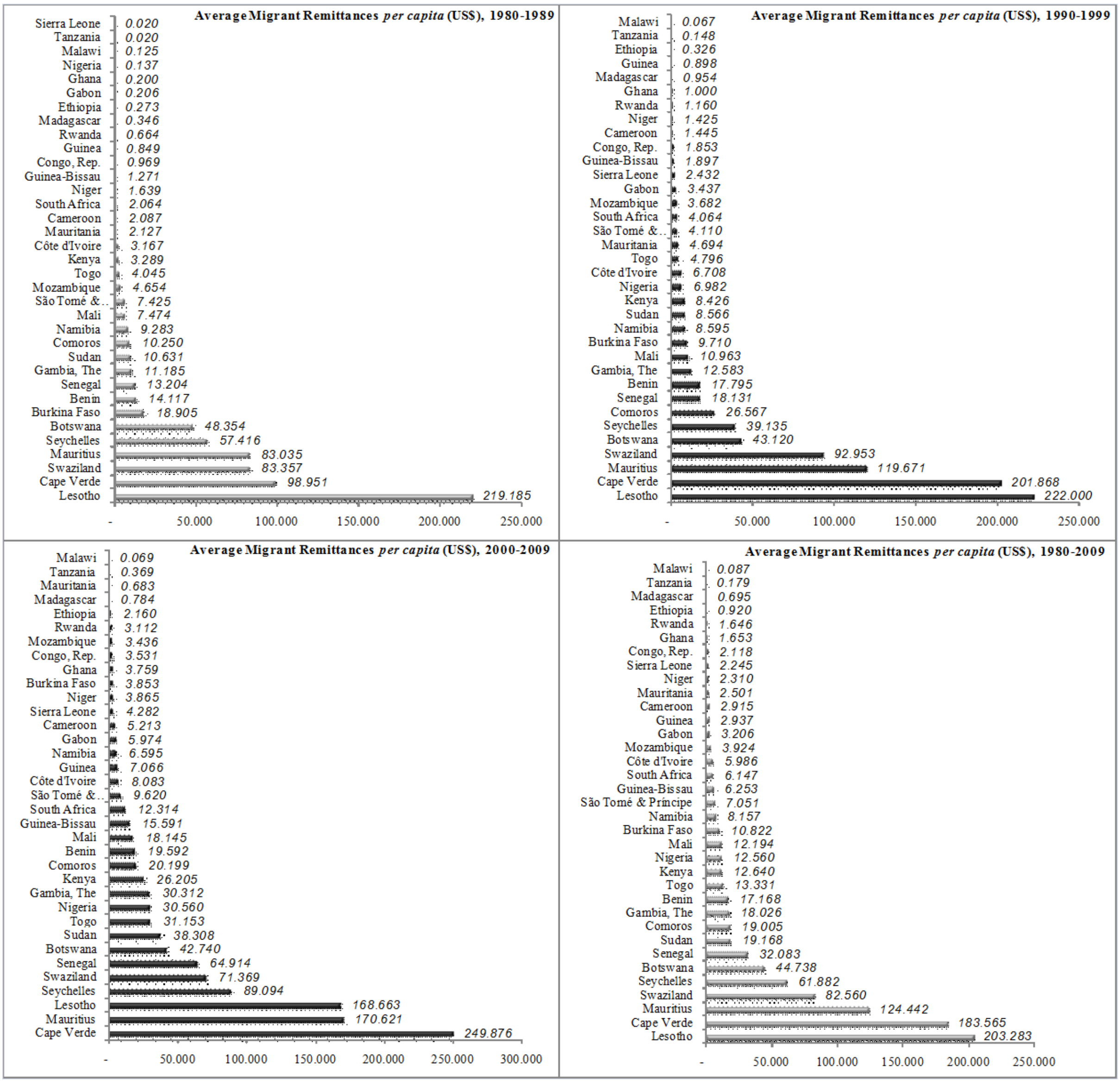


Figure 3: Migrant remittances received per capita by SSA countries (in US$), 1980-2009

Source: Authors based on World Bank (2010)

Note: Only the 35 sampled countries are included due to data constraint.

As far as actual volume of migrant remittances received is concerned, based on 1980-2009 average in millions of US dollars, Nigeria (1,758), Sudan (678), Kenya (419), Lesotho (344), Senegal (330), South Africa (269), Mauritius (143), Mali (127) and Benin (104) are the largest recipients in SSA. These are the countries that received an annual average of migrant remittances to the tune of US$100 million during the past three decades. At the opposite end of this same ladder, Malawi (approx. 1), São Tomé and Príncipe (approx. 1), Gabon (4), Seychelles (5), Mauritania (5), Congo Republic (6), Tanzania (6), Guinea-Bissau (9), Comoros (10) and Madagascar (10), each receiving an average migrant remittances of less than US$100 million per annum, are the least recipients between 1980 and 2009. Thus, in actual volume, Nigeria is the largest migrant remittance recipient in the sub-region with South Africa being the 6^{th} largest recipient, yet Nigeria is ranked as 14^{th}(16^{th}) and South Africa ranked as 20^{th}(32^{nd}) in relative terms of population and GDP respectively. Similarly, although Comoros and Seychelles are ranked as 27^{th} and 32^{nd} largest recipient of remittances in absolute terms, these countries are ranked 9^{th} and 5^{th} respectively in per capita terms with Comoros still occupying the 9^{th} position in terms of GDP. This implies that large and populous countries such as Nigeria and South Africa are likely to receive more migrant remittances in absolute terms whilst smaller and less populous countries like Comoros and Seychelles are more likely to be counted among the high remittance-recipients in relative terms. Notwithstanding this observation, there are reasons to believe that there may be certain policies and strategies that are essential to attracting remittances as some small countries with relatively low population size are high recipients of migrant remittances in absolute terms. These countries include Lesotho (4^{th}), Senegal (5^{th}), Mauritius (7^{th}), Benin (9^{th}), Cape Verde (12^{th}), Swaziland (13^{th}) and Togo (14^{th}). In contrast, some large countries such as Mauritania (31^{st}), Tanzania (29^{th}) and Madagascar (26^{th}), though with relatively large population, failed to attract larger volume of remittances over the past 30 years (see Figure A5 in the Appendix).

For the group of 35 sampled SSA countries, remittances received in absolute terms have been increasing steadily since 1980. From a low of US$42 million in the 1980s, remittances increased by over 100% to US$86 million and by a further 252% to reach US$303 million in the 1990s and 2000s respectively. Consistent with this increasing trend, for the 35 sampled SSA countries, remittances per capita also witnessed a steady rise since the 1980s. Between 1980 and 1999, the average remittances received by these sampled countries were US$21 per annum. This figure increased to US$25 for the 1990s, and to a further US$33 for the 2000s. This increasing trend might be due to the fact that the growth in remittances received was faster than the population growth rate of the sub-region during the period under review. It must be emphasised that this promising positive trend, notwithstanding, remittances received by the sub-region are still very low and can hardly be relied upon to solve key socioeconomic problems such as poverty.

Although for the sub-region as a whole remittances received as percentage of GDP has been increasing consistently, albeit slowly (Figure A1), it is also evident from Table A2 that, for the 35 sampled countries, remittances as percentage of GDP declined throughout the past three decades. For these set of countries, the average of remittances to GDP fell from high of 4% in the 1980s to 4% in 1990s and to a further 3% in the 2000s. This downward trend could be attributed to two main reasons: (i) even though remittances have been rising in actual volumes, the growth in GDP outweighs the growth rate in remittances received by these sampled 35 countries unlike in the case of the entire SSA sub-region; and (ii) leading remittance-recipient countries (in actual volumes) such as Nigeria, Sudan, Kenya, and South Africa, are also countries with relatively very high GDP, an explanation for the reason why none of these countries is listed among the top-10 remittance-dependent countries when measured as percentage of GDP (see Figure A4 in the Appendix). For example, out of the US$151,153 million remittances received by all the 35 sampled SSA countries between 1980 and 2009, Nigeria, the highest recipient, with a total of US$52,754 million controlled 35%, whilst second highest recipient, Sudan, which received US$20,345 million in total, together with Nigeria controlled 48%. Therefore, as these two countries are not ranked among the top-10 remittance-GDP recipients in the sub-region, the overall averaged could be affected negatively as manifested.

3. The stylised facts of migrant remittance flows to SSA

Based on the evidences from the above expositions, the underlisted are presented as constituting the stylised facts of international remittance flows to SSA:

- SSA is the least recipient of migrant remittances when measured in terms of absolute values and in relation to population or in terms of total international migration stock (as revealed in Figure A2 Panels A and B).

- In terms of remittance inflows as % of GDP, SSA is the third highest recipient after SAS and MNA in recent years (as depicted in Figure A2 Panel C). Since in absolute terms and in terms of population and international migrant stock SSA has consistently been the least recipient of remittances, but the sub-region emerged as the third highest recipient of remittances as % of GDP. This goes to show that, in relative terms, the sub-region has been recording a lower rate of GDP growth than the rate of growth in remittance inflows in contrast to what prevails in other developing economies.

- The correlation between remittance inflows per capita and remittances per migrant in SSA is positive and more than 99% (Figure A3). In effect, remittances per capita can be an excellent proxy for remittances per migrant in studies on SSA.

- SSA is the only sub-region in the world that is still aid-dependent and actually receives more ODA than remittances since the mid-1990s (see Figure A1 in the Appendix).

- Increasing inflows of remittances to SSA may not necessarily lead to moral hazard (dependency syndrome) as there exists strongly and positively correlates with exports, growth in real GDP per capita, but negatively correlates with household final consumption expenditure (Table 1).

- As revealed by the changing trend in remittance inflows as % of GDP in Figure A1, SSA is the sub-region with the lowest growth rate in remittance inflows and, arguably, the sub-region with the least volatility in remittance inflows.

- Of all external capital flows to the sub-region, remittances are the least volatile as is the case in all other developing economies (Figure A1).

- Remittance flows to SSA, in both absolute and relative terms, stagnated throughout the pre-reforms era, but with the inception of the reforms and especially during the post-reforms era, remittances to SSA have been growing at a faster rate (Figure A2).

- On average, richer SSA countries (when measured in terms of real per capita GDP) are the recipients of higher remittances per capita, which invariably suggests higher income at home positively correlates with higher remittances per migrant (Table 2).

- In SSA, countries that lead in attracting higher remittances (when measured in relative terms) also lead in attracting FDI as a ratio of GDP and these are countries with higher real GDP per capita, investment/GDP ratio and lower rate of inflation. This again points to the fact that macroeconomic performance and remittance inflows are positively related within the sub-region (Table 2).

- Fiscal policy effectiveness is also crucial to remittance to attracting remittance inflows as tax revenue/GDP ratio positively correlates with remittances received, with stronger correlation for the top-10 remittance recipients, which also have higher tax revenue/GDP ratio (Table 2).

- On average, the higher the bank-based financial development, the more remittances received in SSA. Thus, one fascinating fact revealed in this paper is that, five countries, *viz*. Cape Verde, Mauritius, Seychelles, Botswana, and Nigeria, which are classified by the IMF as having frontier financial markets have 'coincidentally' made strong showing in the top-10 remittance per capita recipients in the 2000s (Figure 3). A similar trend can be observed with reference to total remittances received as revealed in Figure A5. Even in relative to population and GDP, these 14 SSA countries with emerging and frontier financial markets still dominate as six and five are respectively listed among the top-10 recipients depending on the measure used. Virtually, all the countries ranked as least remittances recipients are those with highly underdeveloped financial markets.

4. Conclusion and policy imperatives for SSA

While recognising the heterogeneity and varying degrees of intensity of the underlying factors of underdevelopment, macroeconomic performance, and the timing of economic policy implementation across the sub-region, this paper focused essentially on macroeconomic factors, particularly financial and monetary policy variables, which have the most decisive consequences on the efforts of the sub-region to attract the requisite inflows of private foreign capital with emphasis on official remittances. There is the need for economic policy re-orientation directed at attracting higher remittances from abroad rather than over-relying on other volatile and unpredictable external capital especially ODA the inflows from which are largely exogenous to domestic economic policy design in recipient economies. Without doubt, the underlisted policy initiatives could be relevant to attracting international migrant remittances and enhancing the potential macroeconomic impact of remittances in SSA:

- Remittances received in excess of present consumption could be used for investment purposes rather than on imported consumer goods, which will result in accelerated economic growth since investment is an injection whereas imports are leakages.

- Given the changing cyclical behaviour of remittance inflows in SSA, it may important to consider analysing the macroeconomic determinants and impact of international remittances inflows in SSA to reflect how the influence of these determinants and macroeconomic effects evolve overtime.

- Governments of SSA countries could establish special international relations with foreign industrialised countries recognised as the main destinations of their migrants, so that through an agreed framework (similar to what pertains under double taxation agreement among nations), migrants could remit home without paying transfer fees and any other charges more than once. For instance, it should be possible for a migrant working abroad to remit home regularly towards the payment of his/her social security and pension funds without paying fees for this purpose.

- Implementation of macroeconomic policies aimed at stabilising the domestic prices and currency in SSA to motivate migrants to remit home more regularly. With stabilised domestic price and currency in SSA countries, it becomes easier for migrants to plan, predict and regularise the amount of money to remit home.

- Financial institutions could develop innovative financial products and incentive packages aimed at enticing migrants abroad to remit home using approved routes more regularly and conveniently at reduced cost. This can only be done sustainably when the domestic financial sector is open to competition and integrated at the domestic and in the international levels.

- Domestic banks could either directly go off-shore and open more branches strategically in major migrant 'host' countries or collaborate with foreign banks in these migrant 'host' countries so as strategically to increase banking convenience and access, thereby motivating SSA migrants to remit home more regularly and at reduced costs using official channels.

- A stable macroeconomic environment with some consistency in positive real growth is a signal of good economic fortunes in the future. Migrants who were compelled to seek greener pastures abroad because they lost hope in the domestic economy are likely to reconsider returning home in the future if there are better economic prospects. Such migrants are less likely to spend significant proportion of their earnings in their foreign resident countries, but rather remit more funds to their native countries towards investment projects such as financing entrepreneurial ventures. Under this circumstance, improved macroeconomic management could serve as a catalyst for receiving higher remittances through official routes in SSA.

- It is crucial for SSA to develop an appropriate policy framework for attracting remittances through the formal transfer channels since continuous and colossal inflows of foreign currencies through unapproved routes, which represent additional currencies outside the banking system, could endanger currency stability and pose challenges for effective macroeconomic management in the long run. This may have adverse effects on economic growth and development prospects of the sub-region in the long run.

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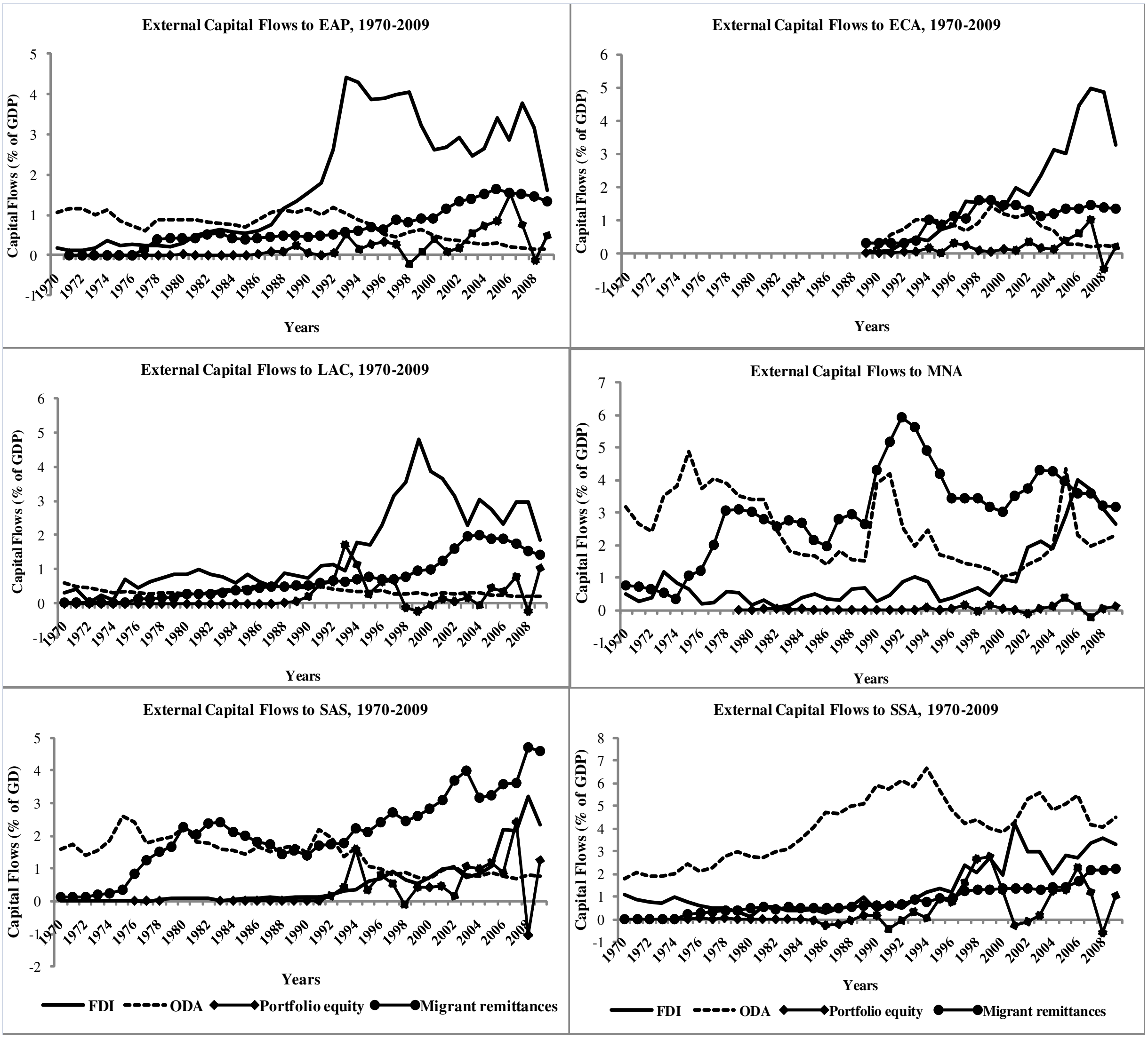
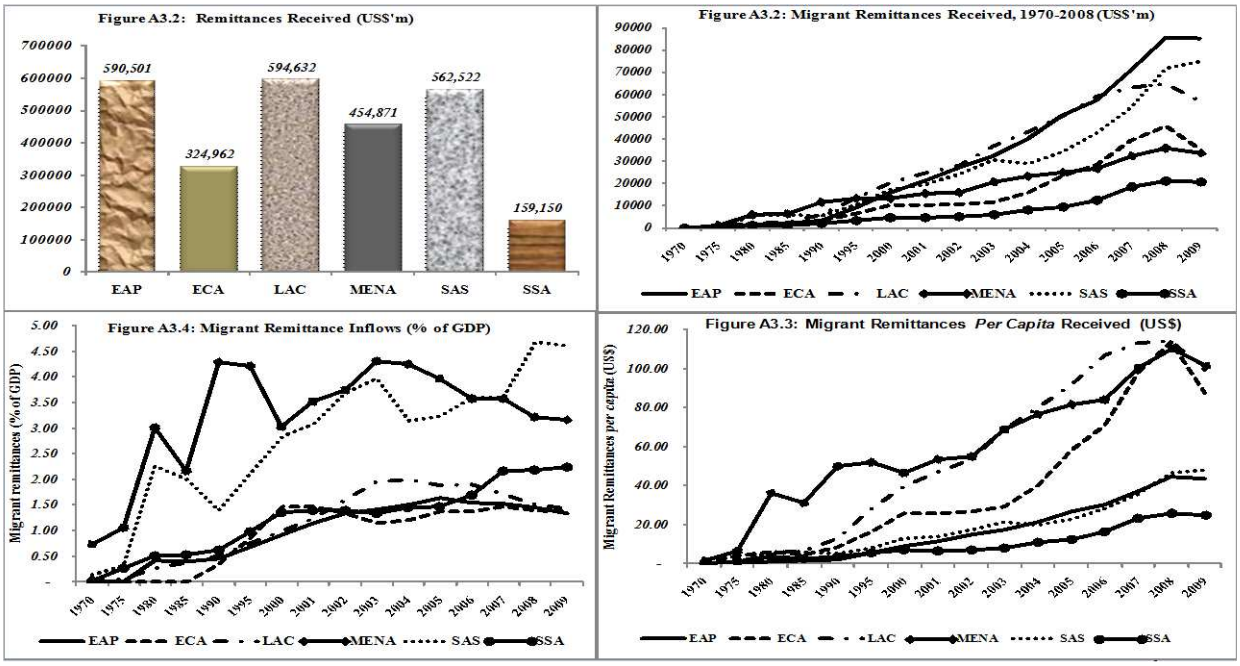
APPENDIX



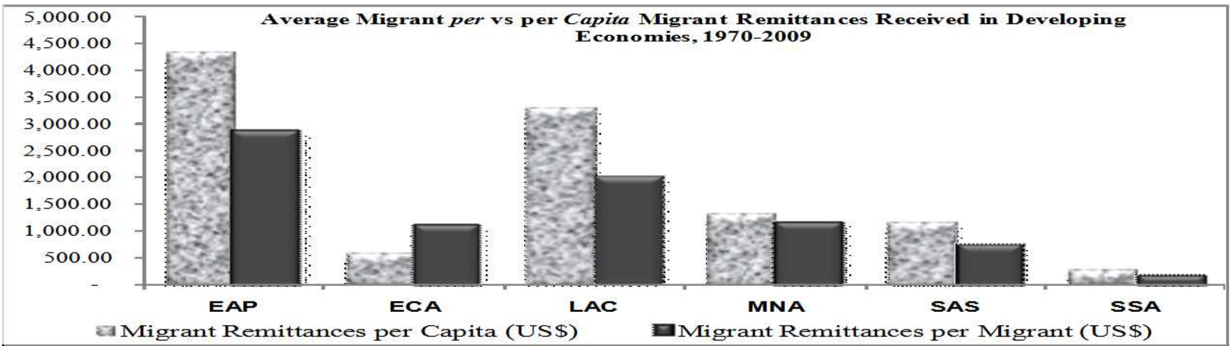
Source: Authors based on World Bank (2010)

Figure A1: Trends in external capital flows to developing economies, 1970-2009



Source: Authors' based on World Bank (2010)

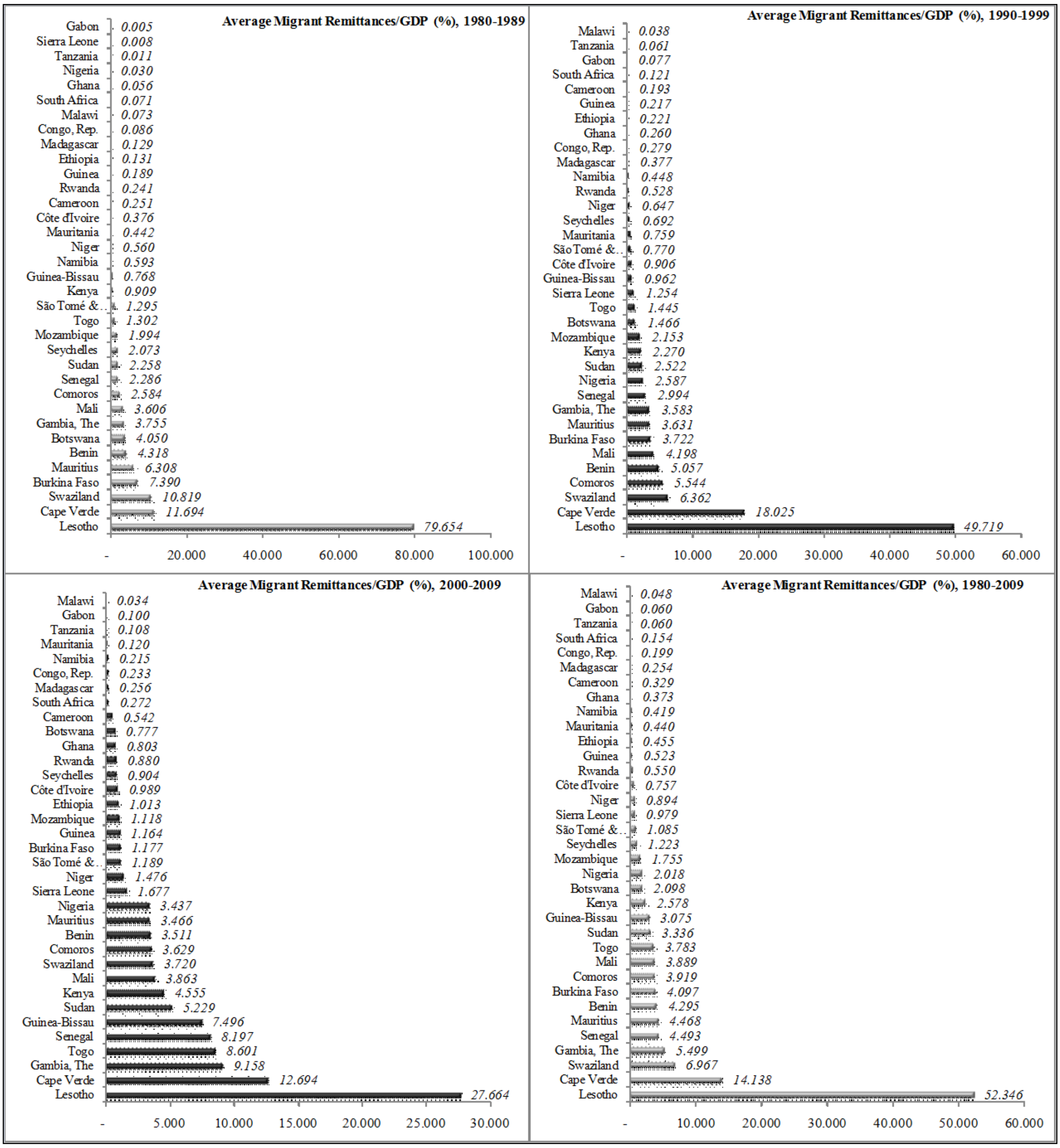
Figure A2: Migrant remittance flows to developing economies, 1970-2009



	EAP	ECA	LAC	MNA	SAS	SSA
Migrant Remittances *per Capita* (US$)	5,794.13	771.57	4,113.08	1,633.43	1,431.86	310.72
Migrant Remittances per Migrant (US$)	2,845.70	1,108.30	2,020.65	1,173.25	756.74	178.66
Correlation_MRPC,MRPM	0.99672	-0.37250	0.99938	0.96681	0.98672	0.99144

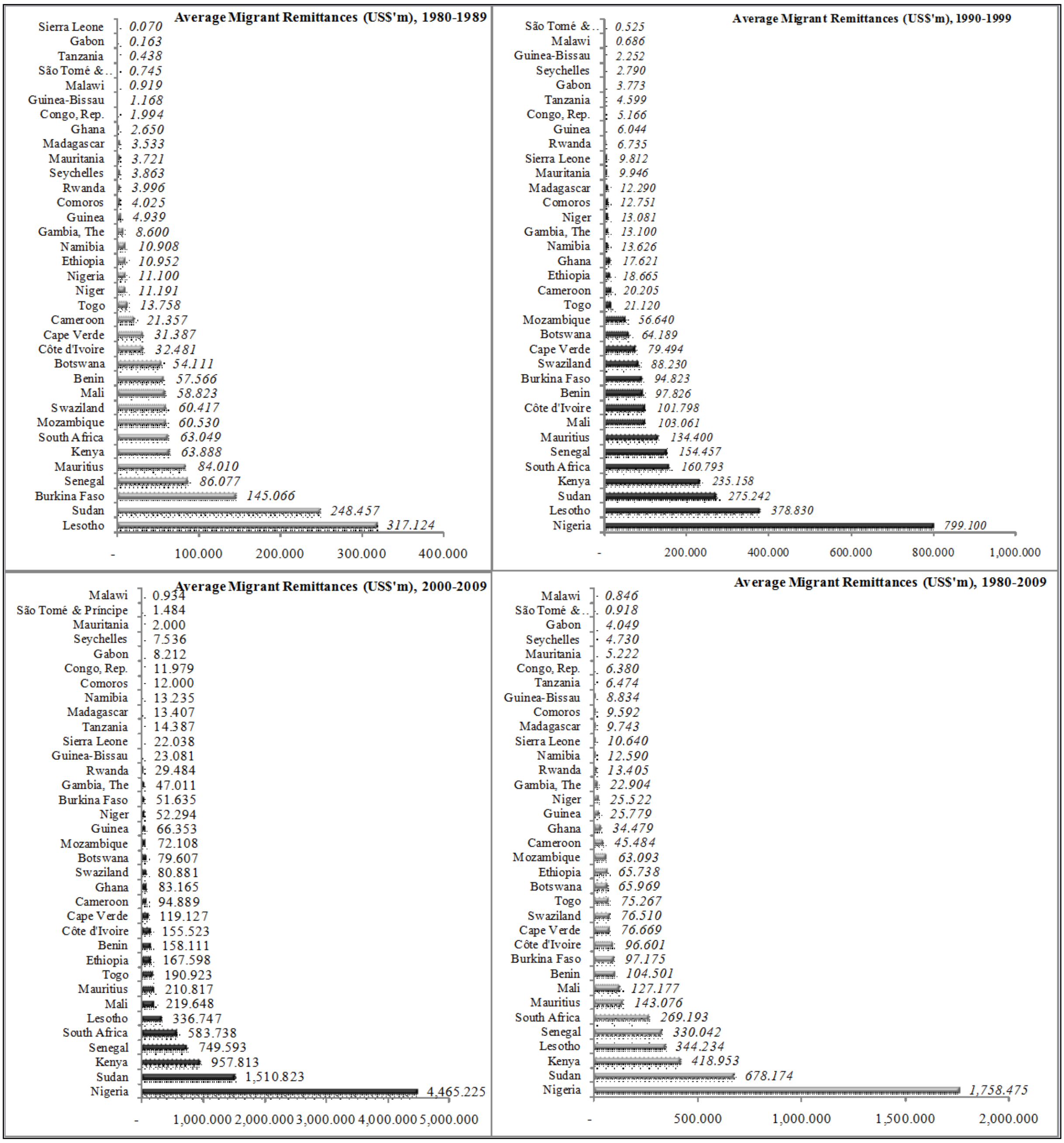
Source: Authors based on World Bank (2010). Notes: 5-year data ranging 1970, 1975,….2005 was used as data on total international migration stock was not reported on annual basis by the World Bank (2010). MRPC represents migrant remittances per capita whilst MRPM denotes (migrant) remittances per migrant.

Figure A3: Remittances received *per capita* versus per migrant in developing economies (US$), 1970-2009



Source: Authors based on World Bank (2010).

Figure A4: Migrant remittance-dependent countries in SSA (average, based on % of GDP), 1980-2009



Source: Authors based on World Bank (2010).

Figure A5: Migrant remittances received by SSA countries (annual average, in millions of US$), 1980-2009