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*Veronica Kalema**

I. Introduction

Private capital flows to sub-Saharan Africa have shown two clear trends since the early 2000s: a substantial increase and a diversification away from foreign direct investment to portfolio and cross-border bank lending (captured in other private financial flows)[1]. Following a net outflow in 2008-2009 due to the global financial crisis, capital flows have improved strongly. Net private capital flows are estimated by the IMF to exceed the pre-crisis peak of US$21bn in 2008, reaching US$30bn in 2013.

As in emerging markets with a much longer history of surging capital flows, the increased inflow reflect structural factors in Africa – improved fundamentals and good growth prospects – that are likely to continue drawing capital inflow in future. Cyclical factors – extremely low interest rates, excess liquidity and weak growth in developed countries, and still relatively high commodity prices – are also contributing to inflow.

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Capital inflow typically brings many economic and financial benefits to receiving countries. However, they can present macroeconomic and financial stability risks (Suchanek et al, Milhalkel, IMF and BIS various reports). Due to the risk of reversal or sudden stops, portfolio and cross-border lending carry more challenges and risks than direct investment inflow.

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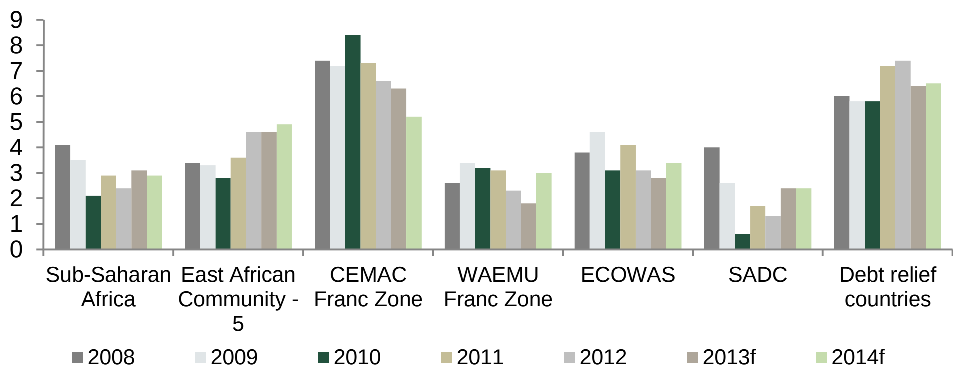
[1]On net basis private financial flows are impacted by African assets such as official reserves bank deposits placed offshore.

II. Recent Trends in Capital Flows to Sub-Saharan Africa

II.1 Direct Investment

Direct investment flows are by far the largest share of private capital inflow. In the past decade foreign direct investment (FDI) has increased for many countries in sub-Saharan Africa (SSA), going into recently discovered minerals, infrastructure and other investment. Although direct investment inflow can bring real appreciation pressure if they persist, they have less downside risk as they are stable and tend to finance capital import and thus, have a smaller effect on the exchange rate and financial stability.

Figure 2: SSA net FDI inflow (% of GDP)



Source: IMF Regional Economic Outlook, Sub-Saharan Africa, October 2013

II.2 Portfolio Investment

The majority of portfolio capital flows in SSA are attributable to South Africa[2] owing to its deep and liquid capital markets. At end-2012, South Africa's equity market capitalisation was 159.0 per cent of GDP while debt market capitalisation was 47.0 per cent of GDP. Over the years, South Africa has devised ways of managing the downside macroeconomic and financial stability risks of capital flows, which involve prudential measures and macroeconomic policies. For example, a flexible exchange rate and inflation targeting were introduced in February 2000 and, during portfolio inflow surges, the South African Reserve Bank (SARB) intervened to increase buffers and reduce appreciation pressures. Micro and macro-prudential measures have kept South Africa's financial system stable and sound during the previous capital flow cycles and global financial shocks. As

[2] South Africa is an emerging market with different challenges in terms of capital flows. While South Africa is used as an example and for comparison, in this report we address financial stability issues of capital flows to SSA countries outside South Africa.

capital markets develop in other SSA countries, they will be able to draw on South Africa's experience.

Figure 3: SSA Net Portfolio Equity Inflow (US$m)

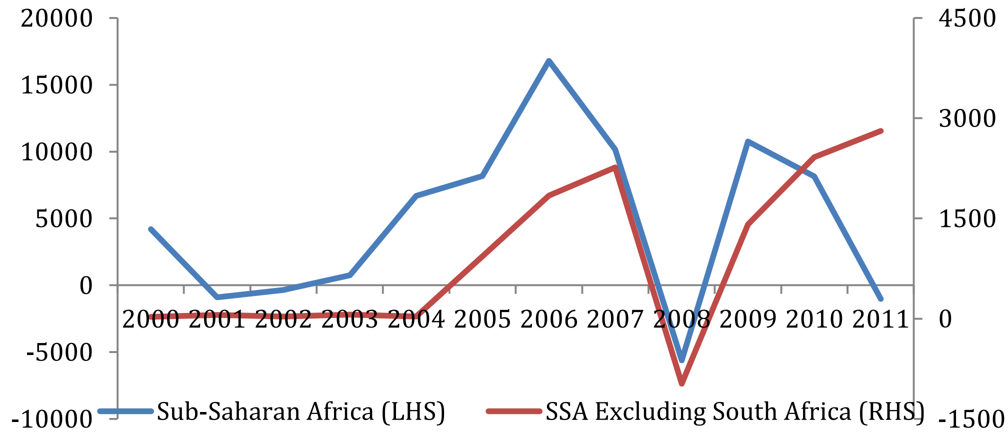


Table 1: Net portfolio equity inflow (US$m)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sub-Saharan Africa	4 198.3	-908.1	-354.5	745.8	6 694.1	8 161.9	16 799.6	10 165.7	-5 625.5	10 754.3	8 159.18	-1 026.5
SSA excluding South Africa	29.6	54.1	33.5	60.5	32.8	931.9	1 840.3	2 265.5	-975.4	1 411.3	2417.3	2 811.8

Source: World Bank Development Indicators Data

Portfolio inflow to local debt and equity markets in the rest of sub-Saharan Africa increased significantly, particular, SSA countries making effort to develop their local equity and bond markets; and improve capital markets access – the frontier markets[3].

Equities are by far the largest component of portfolio inflow in Africa, resulting in a rapid rise in market capitalisation. Total equity market capitalisation of 13 key frontier markets[4] captured by the World Bank development indicators had risen 4.4 times to US$120bn in 2012 from US$27bn in 2003. Of this total, almost half of equities capitalisation is attributable to Nigeria (US$56.4bn), followed by Kenya

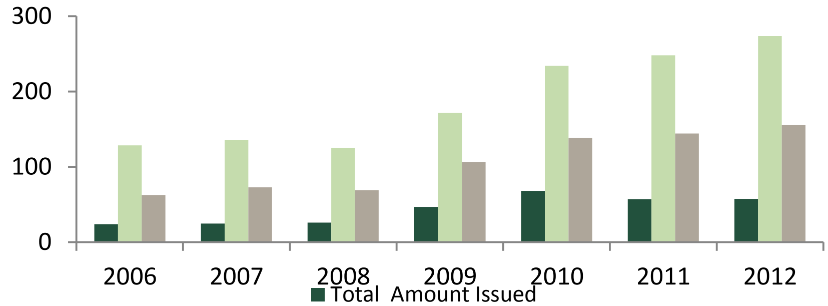
[3] The classification of frontier markets may vary slightly. A recent list by the IMF includes Angola, Ghana, Nigeria, Kenya, Mauritius, Mozambique, Senegal, Tanzania, Uganda, Zambia and Zimbabwe.
[4] This list also includes Botswana, Cote d'Ivoire, Namibia and Malawi.

(US$14.8bn). Portfolio equity inflow by foreigners peaked at around US$2.3bn in 2007, although about US$1bn reversed in 2008, the upward trend resumed in 2009, reaching US$2.8bn in 2011. Portfolio equity inflow including South Africa peaked at US$17bn in 2006.

Issued local bond securities in Africa[5] (including North Africa, but excluding South Africa) were US$155bn in 2012, up from US$62bn in 2006. Issued local treasury bills in Africa in 2011 were US$99bn.The biggest market in SSA after South Africa (US$125bn of bonds outstanding, US$33bn treasury bills in December 2012) is Nigeria, with US$29.4bn of treasury bonds and US$16bn of treasury bills in September 2013 and around 86 per cent of debt issued in local currency. About one-half of public debt in Kenya, Ghana and Zambia debt is in local currency. Since the mid-2000s, non-residents have been increasingly active in local debt markets, driven by yield and improved capital market access. Debt flows are very volatile, fluctuating in line with the interest rate cycle in the recipient country as well as global financial shocks/risk aversion[6]. Surges have also been influenced by inclusion in global indexes, for example Nigeria's inclusion in the JP Morgan Government Bond Index – Emerging Market (GBI-EM) in October 2012 contributed to a rise in non-resident holdings of all government securities from 1.7 per cent or US$500m at the end of 2011 to 10.3 per cent or US$5.1bn in December 2012 and 16.1 per cent or US$7.2bn in June 2013.

[5] Aggregated data is difficult to obtain. This aggregated data set, which includes North African countries, is from the African Financial Markets Database published by the African Development Bank.
[6] For example, non-resident holdings of Zambia's government debt rose from just 1 per cent in early 2005 to a peak of 18% in 2006 and dropped to 12.5% in July 2008 (Muhanga et al, 2008). In Uganda foreign investor participation in the treasury bills market rose to 17% in 2011 and had fallen back to 3.2% in October 2013 due to the interest rate cycle. For the bond market, the numbers are 5.4% in 2011 rising to 8.8% in September 2013 (BoU). Ghana does not allow foreign investment in the treasury bills market. Foreign participation in the bond market had risen to 27.5% in June 2013 from 19% in December 2010 due to very high interest rates (BoG).

Figure 4: Domestic bonds in Africa (including northern African countries) (US$ bn)



Source: African Development Bank data portal

Table 2: Share of Non-resident Holdings of Domestic Debt (per cent of outstanding)

	2008	2009	2010	2011	2012	2013 latest
Ghana T-bills	0	0	0	0	0	0
Ghana T-bonds			19.0	19.2	26.6	27.5
Uganda T-bills	7.2	1.5	0.6	17.0	4.6	3.2
Uganda T-bonds	5.6	4.6	1.5	5.4	5.7	8.8
Nigeria T-bills						
Nigeria T-bonds*				1.7	10.3	16.1

** includes t-bills and t-bonds*

Sources: Various Central Banks, Nigerian Debt Management Office.

Portfolio bond inflow also took the form of bond issues on international markets. South Africa has been a regular issuer on the Eurobond market since 1994. Since 2007, SSA sovereigns have also started issuing international bonds. After a lull, during the global financial crisis, issuance of sovereign bonds by SSA countries resumed in 2011. To date, US$10.6bn in international bonds have been issued by 11 sovereigns (US$19.4bn outstanding, including South Africa). Four Nigerian banks and two African multilaterals have also tapped the Eurobond market for a total of US$3.5bn. International bond issuance promises to be a potentially important source of financing for governments and other entities in Africa. Three more African countries – Kenya, Ethiopia and Uganda – plan to access the Eurobond market for the first time over the next two years, while some plan to return. Kenyan[7] corporates have also recently announced their intention to

[7] Kenya Power, ARM Cement Ltd (Kenya) are considering issuing Eurobonds according to Bloomberg reports in November 2013

access the Eurobond market. During 2012 and 2013, a number of African countries have issued international bonds on favourable terms. Since these bonds are issued offshore, concerns will be on market access and refinancing these bonds once global interest rates rise. However, at present, overall SSA (including South Africa) Eurobond issuance is small, about 2.5 per cent of SSA GDP, and has minimal implications for financial stability. Nonetheless, Eurobonds are in the main, being issued to finance wider deficits. To the extent that bond flows finance capital imports for infrastructure development, this will mitigate their macroeconomic impact.

African Eurobonds, alongside emerging markets Eurobonds experienced a sell-off during global risk aversion. This would normally delay access until the situation normalises, but is not destabilising to local economies.

Africa Eurobonds

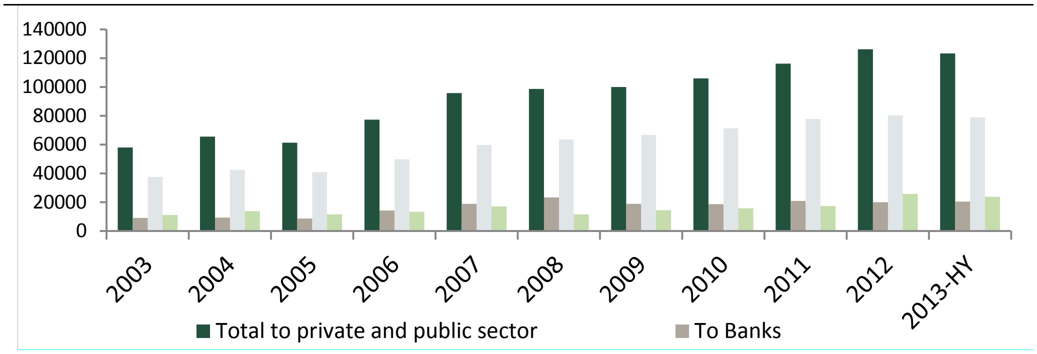
African Sovereigns	USDm	Coupon	Maturity	Moody's	S&P	Duration	DV01/MM	Bid PX	Ask PX	Bid YTM	Ask YTM	Bid Z	Ask Z
REPUBLIC OF GHANA	530	8.5	04/10/2017	NR	B	3.23	354	107.5	108.5	6.27	5.98	534	506
REPUBLIC OF GHANA	1000	7.875	07/08/2023	B1	B	6.48	660	98	99	8.18	8.02	566	551
GABONESE REPUBLIC	774	8.2	12/12/2017	NR	BB-	3.37	413	116.5	118	3.75	3.38	276	240
REP OF ANGOLA (NORTHERN	1000	7	16/08/2019	Ba3	BB-	4.72	368	108.375	109.375	5.29	5.1	367	347
UNITED REP OF TANZANIA	600	6.3921	09/03/2020	NR	NR	0.29	N/A	105	105.75	5.41	5.27	507	493
MOZAMBIQUE EMATUM FINAI	500	6.305	11/09/2020	NR	B+	5.3	N/A	94.5	95.5	7.35	7.15	540	520
REPUBLIC OF NIGERIA	500	5.125	12/07/2018	NR	BB-	4	423	102.5	103.25	4.52	4.34	327	309
REPUBLIC OF NIGERIA	500	6.75	28/01/2021	NR	BB-	5.58	624	108	109	5.39	5.22	332	316
REPUBLIC OF NIGERIA	500	6.375	12/07/2023	NR	BB-	7	751	103.5	104.5	5.89	5.76	332	319
REPUBLIC OF SENEGAL	500	8.75	13/05/2021	B1	B+	5.52	620	111	112	6.84	6.68	476	459
REPUBLIC OF NAMIBIA	500	5.5	03/11/2021	Baa3	NR	6.36	664	103	104	5.04	4.88	276	260
IVORY COAST	2519	5.75	31/12/2032	NR	NR	7.41	696	88.25	89.25	7.58	7.43	478	463
REPUBLIC OF ZAMBIA	750	5.375	20/09/2022	NR	B+	6.66	596	87.5	89	7.33	7.07	487	462
REPUBLIC OF RWANDA	400	6.625	02/05/2023	NR	B	6.78	645	94	96	7.52	7.22	501	470
African FI's		Coupon	Maturity	Moody's	S&P	Duration	DV01/MM	Bid PX	Ask PX	Bid YTM	Ask YTM	Bid Z	Ask Z
GTB FINANCE BV	500	7.5	19/05/2016	NR	BB-	2.23	237	105	106	5.3	4.88	484	442
GTB FINANCE BV	400	6	08/11/2018	NR	BB-	4.18	418	98.375	99.375	6.39	6.15	504	480
ACCESS FINANCE BV	350	7.25	25/07/2017	NR	BB-	3.07	320	99.5	101.5	7.4	6.77	656	593
FIDELITY BANK PLC	300	6.875	09/05/2018	NR	B	3.7	355	93.5	95.5	8.67	8.1	751	694
FBN FINANCE CO BV	300	8.25	07/08/2020	NR	B	3.74	397	102	104	7.61	7.23	650	598
EASTERN & SOUTHERN AFRICA	300	6.875	09/01/2016	Ba1	NR	1.9	205	104	106.5	4.85	3.63	445	324
AFRICAN EXPORT-IMPORT BA	300	8.75	13/11/2014	NR	NR	0.92	99	106.5	107.25	1.8	1.04	153	77
AFRICAN EXPORT-IMPORT BA	500	5.75	27/07/2016	Baa2	BBB-	2.42	264	106	107	3.36	2.98	285	247
AFRICAN EXPORT-IMPORT BA	500	3.875	04/06/2018	Baa2	BBB-	4.02	412	100	101	3.87	3.63	267	242

Source: Nedbank Global Markets, Bloomberg 27/11/2013

III. Cross-border Bank Flows

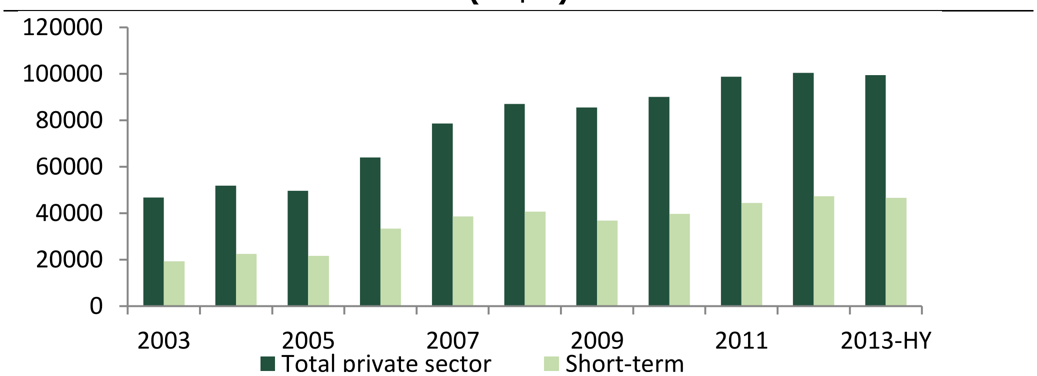
Sub-Saharan African countries have also recorded a surge in cross-border bank lending, comprising majorly gross loans and trade credit. According to BIS data, consolidated cross-border lending surged from US$61bn in 2000 to US$96bn in 2007. After stabilising over the period, 2007-2009, it grew more gradually, reaching US$123bn in the second quarter of 2013. However, a breakdown of these flows show that cross-border lending to the banking sector is yet to recover, declining to US$20.4bn in second quarter of 2013 from a peak of US$23.5bn in 2008. Cross-border lending to the non-bank private and public sectors was less affected and maintained a steady growth during the global financial crisis. Short-term lending, though affected by the crisis, had recovered since 2010 reaching US$47bn in second quarter of 2013, up from US$40.7bn in 2008.

Figure 5: Cross border lending to SSA (US$m)



Source: BIS Data, September 2013

Figure 6: Cross Border Lending to SSA - Private Sector and Short-Term (US$m)

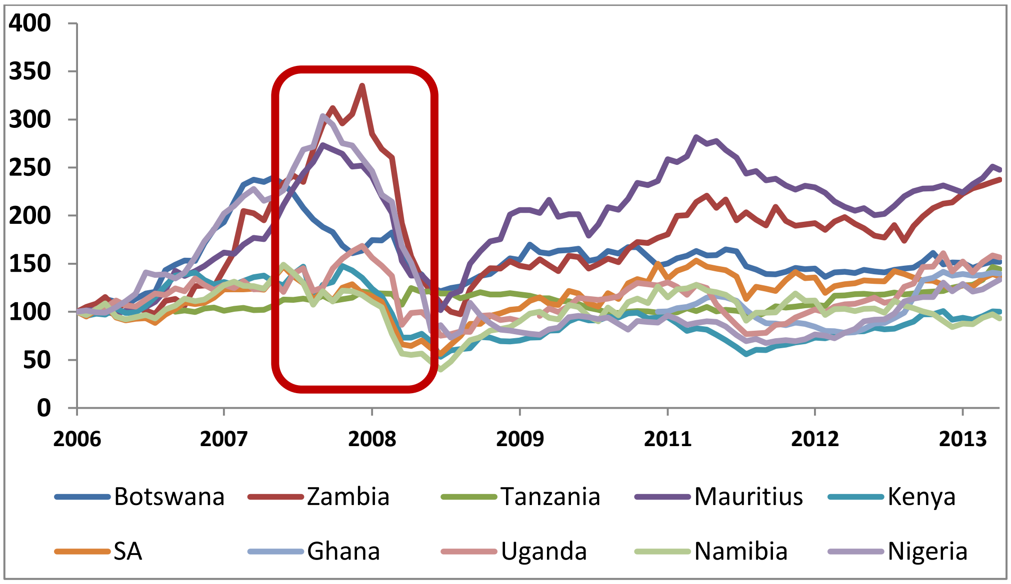


Source: BIS Data Analysis, September 2013.

IV. Financial Stability Implications

Financial stability risks – credit booms and increases in asset prices that can lead to bank crises – are associated mainly with portfolio and cross-border bank lending (Claessens et al, 2013, and various reports of IMF and BIS). As with other emerging markets, portfolio flows to Africa could impact African economies in several ways: lowering of bond yield; cause appreciation pressures; and trigger sharp asset movements. However, in Africa, the shallowness of markets and size of flows relative to the recipient country's capital markets and monetary base amplify these movements. When capital flows reverse, they cause sharp capital market movements and currency depreciation, which can spill over into financial stability. Following the first surge of portfolio inflow in 2004-2007, African frontier markets have already experienced destabilising macroeconomic effects[8]. They all recorded a reversal of inflow in 2008 and, due to the thinness and illiquidity of markets, experienced sharp currency depreciations and/or pressure on and falls in equity asset prices. In the case of Nigeria, the fall in equity prices exacerbated a financial crisis. Due to the potential for surging capital flows to propel stock and bond markets, especially in countries with shallower capital markets (IMF, 2011), the portfolio flow impact currently presents the greater source of risk to financial stability for African countries. In Kenya (market capitalisation 39.6 per cent of GDP in 2012), Nigeria (22 per cent of GDP), Uganda (36.7 per cent of GDP) surges in portfolio inflow caused a sharp increase in stock prices in 2012 and 2013[9].

Figure 7: SSA Stock Market Performance in US$ terms (normalised) 2006 = 100

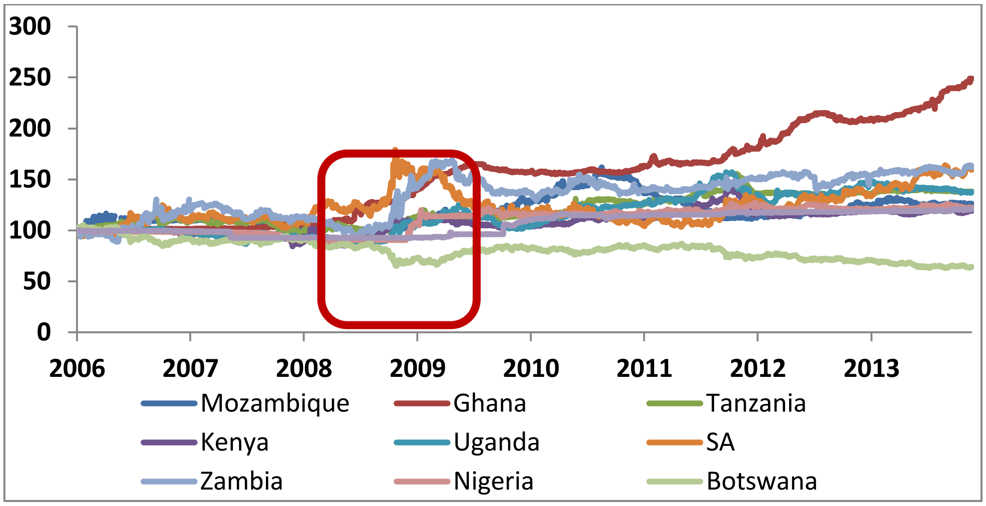


Source: Bloomberg.

[8] The frontier markets in Francophone Africa are not affected because they have no exchange rate risk due to the currency peg of the West African Economic and Monetary Union (WAEMU) and Economic and Monetary Community of Central Africa (CEMAC) zones to the euro.

[9] In Kenya, net foreign investor inflows in equity markets rose 9 769.7 per cent to US$250m in 2012 and by another US$260m in the first nine months of 2013 (US$3m in 2011, US$178m in 2010). Foreign investors held 22.4 per cent of the Nairobi Stock Exchange in September 2013, up from 7.9 per cent in December 2008. Market capitalisation in US$ terms rose 44 per cent in 2012 to US$14.8bn and 39 per cent in the first nine months of 2013 to US$20.7bn (Capital Markets Authority Kenya, Central Bank of Kenya).

Figure 8: SSA Currencies Performance against the US$ 2006=100



Source: Bloomberg.

To the extent that they are intermediated through the domestic banking system, cross-border capital flows can lead to excessive credit growth, asset/liability currency mismatches and asset booms, increasing financial fragility (Moreno, 2011). In addition, there are risks from possible reversals and sudden stops in bank-intermediated capital flows while the short-term concentration of capital flows significantly raises the probability of crisis due to high volatility. Countries with a large number of foreign-owned banks have the most pronounced risk, for example Central and Eastern Europe during the 2008-2009 financial crisis (Mihaljek, 2008). This channel is less prevalent in Africa where, although foreign ownership of banks is large in some cases for historical reasons[10], it is not the dominant model and even in countries where it is, banks rely on domestic deposits to fund lending. BIS data shows that cross-border lending to Africa by BIS reporting banks did experience a surge prior to the crisis, albeit from a low base. The data also shows that flows to the banking sector reversed mildly in 2009 and 2010 and have since been constrained, staying below their pre-crisis peak. This reflects tighter regulation and deleveraging in advanced countries. Flows to the non-bank and public sectors were less affected by the crisis and have continued to rise, albeit more gradually than before. Despite the surge, cross-border lending, particularly to the banking sector which reached a high of US$23bn in 2008 or about 2 per cent of SSA GDP (about 10 per cent of SSA GDP for all cross-border lending), is still very small and thus, the risk to financial stability from this source

[10] Foreign banks accounting for over 30 per cent of deposits are Barclays (in Botswana and Seychelles); HSBC (Mauritius). These and several other banks account for at least 20 per cent of deposits in a number of other countries. Portuguese banks account for over 60 per cent of deposits in Mozambique and Angola and 80 per cent in Cape Verde. IMF REO April 2012 Appendix 2.4.

remained low with potential to change with increased global financial integration.

V. Limiting the Financial Stability Risks

Responses have typically involved macroeconomic policies which mainly deal with challenges such as exchange rate appreciation pressures and depreciation on reversal of capital flows, managing the impact of excess liquidity and credit growth on inflation, etc and prudential policies with a focus on micro prudential policies to ensure the soundness and resilience of financial institutions. These are often complemented by capital flow management measures (CFM) aimed at managing capital surges and sudden outflow. These worked very well for African frontier markets (except Nigeria) in the 2008-2009 financial crisis; despite some pressures, banking systems remained resilient due to strong capital buffers and liquidity and low non-performing loans but also because of their low integration with global financial markets, particularly relatively low capital inflow through the banking system limited the impact of global financial shocks on their banking systems. South Africa's banking system also remained resilient, in contrast to other emerging markets which showed varying degrees of stress, partly because South Africa started to adopt macro-prudential policies as far back as the early 2000s[11]. For example, a national credit act introduced in 2006 slowed credit growth and prevented potential stresses due to excessive build-up of credit.

V.1 Prudential Policies

V.1.1 Micro-prudential

Micro prudential policies that promote healthy banking systems through strong buffers and maintaining the quality of credit are usually a good starting point. These have more or less been adopted in Africa after the fallout from liberalising banking sectors in the 1990s when the region went through a series of banking crises. Policies on financial soundness indicators promote strong capital adequacy ratios, low non-performing loans (NPLs), loan loss provisioning requirements, stringent requirements on foreign lending and limits to net open positions of financial institutions and strengthen supervision capacity to enable supervisors to enforce compliance.

V.1.2 Capital Flow Management Measures

Capital flow management (CFM) measures, which are intended to manage inflow and outflow, are part of the toolkit of prudential measures. Capital controls

[11] A financial stability department was set up in SARB in 2001. Financial stability reports are published semi-annually.

are typically residency-based (essentially capital controls) or non-residency based (on the basis of currency). They take the form of taxes on certain flows and restrictions on investments, minimum holding periods and restrictions on capital outflow. They do have costs – which can be wide-reaching for the country such as reducing investment attractiveness, impeding financial market development and increasing costs of international trade (IMF, 2011, 2012) – and need to be assessed vis-à-vis the benefits. The IMF suggests they should be temporary, in response to a surge or to contain an outflow.

Frontier markets have used a range of CFM measures. The main one is restrictions on non-resident purchases of government securities (Tanzania, (all non-residents), Ghana (securities less than three years), Kenya and Nigeria (selective restrictions)). Tanzania has used the most measures, including a minimum holding period of three months for local investors on all shares and securities, limits on direct and indirect foreign exchange exposure, maximum on shares purchased by individual investors, maximum of total share of national companies held by non-residents (also applied by Kenya and Zimbabwe) and presentation of audited accounts or compliance with tax obligations before repatriation (also applied by Zambia) (IMF, REO Oct 2013).

The experience of the 2008-2009 financial crisis showed that micro prudential regulation is not enough to ensure financial stability. For instance, for most countries that felt the crisis, financial soundness indicators were robust in the months prior to the global liquidity crunch, giving no sign of how easily a systemic financial crisis could be triggered. This emphasises the need to use macro-prudential policies that consider financial stability risk from a system-wide rather than individual point of view (Moreno, 2011). These macro-prudential policies focus on preserving the stability of the financial system over the economic cycle and preventing the build-up of systemic financial risks. They complement macroeconomic and micro prudential policies, although there can also be some overlap depending on the purpose of the measure. For example, measures to prevent excessive credit growth could be a macroeconomic response to address inflation pressures or a macro-prudential response to reduce financial sector vulnerabilities.

V.1.3 Macro-prudential

Macro-prudential policies address threats from excessive credit expansion and asset bubbles fuelled by capital inflow by using counter-cyclical requirements. These could include increased reserve requirements when capital inflow cause excess liquidity in the banking system; increased loan loss provisioning requirements or increased risk weights for certain sectors; and tightening various ceilings on credit growth (loan-to-value and debt-to-income rules can all be part of this toolkit). Systemic risks arising from foreign currency lending fuelled by surges in capital inflow could be addressed by capping foreign currency lending, limiting the net foreign open position and maturity mismatches that go further than normal micro prudential policies by targeting affected sectors.

The use of macro-prudential policies, however, requires a further strengthening of supervisory capacity, including the capacity to collect high-frequency data on the balance of payments for the composition and destination of flows, on asset prices including housing and developing analytical tools to assess systemic risks (IMF, 2012). Strengthening macro-prudential supervision is also increasingly needed for cross-border banking supervision of pan-African banks [12] and to include the increasingly important non-bank financial institutions.

Some SSA frontier markets, including Nigeria, Uganda, Ghana, Kenya and Mauritius, have started strengthening their capacity to assess systemic risk, establishing a financial stability department in the central bank and/or publishing semi-annual or annual financial stability reports. Some are starting to strengthen data collection and implement macro-prudential regulation. For example, since 2011, Uganda is compiling quarterly real estate indices for residential property, land and commercial property rent to facilitate the analysis and reduction of risks from real estate booms. New regulations to allow the Bank of Uganda to impose a countercyclical capital charge to dampen volatility in credit cycles and additional capital charges on domestically systemically important banks were introduced in May 2013 (BoU, June 2013).

VI. Summary

Capital flows to SSA have surged and diversified over the past decade to include a much greater portion of portfolio flows and cross-border lending, which create the greatest potential risks to financial stability due to volatility. Currently in SSA, portfolio flows present more risk due to the thinness and illiquidity of capital markets, which accentuates the impact of surges and reversals of capital flows. Cross-border flows are still relatively low and experienced mild instability in the last financial crisis. A combination of low integration and conservative regulation shielded African financial systems from the destabilising impacts of contagion in the 2008-2009 financial crisis.

[12] Kenyan, South African and Nigerian banks have expanded regionally. For Kenyan banks, expansion to date is focused on East Africa. Ecobank Transnational Incorporated (ETI) (registered in Togo) has subsidiaries in 34 countries in Africa.

Nonetheless, Nigeria's experience of financial instability in 2008-2009, exacerbated by a fall in equity prices, and other frontier markets that experienced sharp currency depreciations when investors exited their equity and bond markets have already resulted in strengthened supervision and regulation to take into account systemic financial risks. Growing financial integration, the emergence of pan-African banks and increasing complexity of domestic financial systems makes it imperative for adopting a system-wide approach to complement macroeconomic and micro prudential policies to mitigate and respond to global shocks.

The biggest source of vulnerability in the short-term (i.e. one-year horizon) is tapering. To date, African markets' response to talk of tapering by the Fed (which triggered a sell-off in emerging market currencies, stock and bond markets) has been muted, partly due to being illiquid and because risk aversion was temporary. This is unlikely to be sustained once tapering actually starts and a sell-off/risk aversion persists.

Frontier markets authorities will need to always prepare for tapering and apply a mix of policies depending on country specific situations. Countries with large current account and budget deficits and/or that have experienced capital flow surges recently were impacted the most.

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