

Capital Flows and Capital Account Liberalisation in the Post-Financial-Crisis Era: Challenges, Opportunities and Policy Responses¹

By

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Abstract

This paper invokes a flow-of-funds framework to scope the challenges, opportunities and policy responses regarding capital flows and capital account liberalisation as Africa emerges from the global financial crisis. The framework is used to highlight the transmission of the financial crisis from the foreign sector (the rest of the world) to the household sector, company sector, banks and capital markets, as well as the government sector. Financial prices, mainly the exchange rate and stock prices, provide the propagation mechanism for contagion effects of the financial crisis; for example, *collapse of the exchange rate, collapse of stock prices, and capital outflows including capital flight*. The paper notes that by the end of 2007, the scenario was that remittances and other private capital flows had overtaken official aid as the main source of external finance for sub-Saharan Africa. It is argued that the financial crisis seems to be distorting the pattern and predictability of capital flows into Africa. Moreover, given the intensity of the financial crisis and the bail out packages for banks in the US and UK, among others, it is unlikely that the Gleneagles commitment of the G-8 heads of state in 2005 to double aid to Africa by 2010 will be met. But perhaps, “the angel is in the details”: the flexibility of individual African countries to manoeuvre out of the crisis will very much depend on financial sector reforms, especially relaxation of controls on portfolio investment and FDI, and capital account liberalisation. Hence, the paper considers the current trends in capital controls and capital account liberalisation in Africa, the magnitude and determinants of capital flows into Africa and the capital account liberalisation challenges and policy responses. The paper concludes with lessons and policy agenda for Africa in the post-crisis period; in particular, it emphasizes that policymakers face particular challenges and opportunities in maintaining sound macroeconomic management, transparent capital account policies, and undertaking financial sector reforms in order to attract inflows in a competitive global environment and to manage the inflows to target economic recovery.

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1. Introduction

There is already a plethora of good papers on the possible causes and trend dynamics of the current global financial crisis. There is also much heated debate among academics, policy makers and the general public about the size and possible efficacy of the bail out packages that the US and UK governments, among other OECD governments, have put in place to abate the velocity and longevity of the crisis. This paper departs from the aforementioned stream of work and debate. It seeks to invoke a flow of funds approach to analyze the complexity of the financial crisis and its implications for capital flows and capital account liberalisation in the post-financial crisis era in Africa.

It is useful to note that African countries, like most emerging economies, have enjoyed substantial increases in private capital inflows since 2000, as we show later (Table X) where individual African countries are compared to the BRIC economies. Private capital flows to sub-Saharan Africa reached over US\$53 billion in 2007, which was about four times larger than flows in 2000. Most flows were directed to Nigeria and South Africa, but also in Ghana, Uganda, and Zambia, portfolio flows have been on the rise, following financial sector reforms, improvements in investment climate and high country risk ratings. By the end of 2007, the scenario was that remittances and other private capital flows had overtaken official aid as the main source of external finance for Africa. Hence, most African countries have been basking in the glory of stable macroeconomic performance, high global demand for commodities, increased capital inflows and debt relief thanks to the HIPC initiative.

But this scenario simulates “the calm before the storm”. Indeed, the outbreak of the global financial crisis has changed all the positive indicators, because one of the main channels through which the financial crisis is hurting African economies is through financial links, namely a reduction or reversal in capital flows to the region, including FDI. Aid flows are also under threat. Given the intensity of the financial crisis and the bail out packages for banks in the US and UK, among others, it is unlikely that the Gleneagles commitment of the G-8 heads of state in 2005 to double aid to Africa by 2010 will be met.

But perhaps, “the angel is in the details”: the flexibility of individual African countries to manoeuvre out of the crisis will very much depend on a number of factors, including financial sector reforms, especially relaxation of controls on portfolio investment and FDI, and capital account liberalisation. It will also depend on whether a country is oil-exporting, resource rich or otherwise. It will also depend on the composition of capital flows. For example, there are some key differences between aid flows and private capital flows into Africa. The former mainly goes to the government sector and can easily and carefully be incorporated in the government budget; indeed the budgets of many African countries are funded by aid inflows. Private capital inflows are received by private sector agents and they can be quickly reversed in case of an external shock, as capital outflow or capital flight.

Hence, this paper invokes a flow-of-funds framework to scope the challenges, opportunities and policy responses regarding capital flows and capital account liberalisation as Africa and the rest of the world emerge from the global financial crisis. The framework is used to highlight the transmission of the financial crisis from the foreign sector (the rest of the world) to the household sector, company sector, banks and capital markets, as well as the government sector. The paper examines the factors which influence the distribution and composition of recent private capital flows to African countries; factors such as including macroeconomic performance, capital account liberalisation, and financial market development. It also highlights the policy challenges associated with the recent increase followed by a sudden decline in capital flows before and during the current crisis. It is noted that policymakers face particular challenges and opportunities in maintaining sound macroeconomic management, transparent capital account policies, and undertaking financial sector reforms in order to attract inflows in a competitive global environment and to manage the inflows to target economic recovery.

The rest of the paper is structured into four sections. After using the flow of funds framework (Section 2) to underpin the mechanisms for capital flows in relation to the financial crisis (3), the paper focuses capital flows and capital account liberalisation in Africa in Section 4. It considers the current trends in capital controls and capital account liberalisation in Africa, the magnitude and determinants of capital flows into Africa and the capital account liberalisation challenges and policy responses. In Section 5, the paper concludes with lessons and policy agenda for Africa in the post-crisis period; in particular, it emphasizes that policymakers face particular challenges and opportunities in maintaining sound macroeconomic management, transparent capital account policies, and undertaking financial sector reforms in order to attract inflows in a competitive global environment and to manage the inflows to target economic recovery.

2. Flow-of-Funds Framework

We invoke a flow-of-funds framework in order to underpin the special role played by capital flows in linking the domestic economy with the rest of the world and how these flows relate to financial transactions by households, companies and the government, in the sense that a “...main function of the flow of funds accounts is to reveal the sources and uses of funds that are needed for growth ...” (Klein, 2000, p.ix). We argue that this special role by capital flows can be distorted by an exogenously propelled financial crisis, in which case careful remedial policies are required to restore the capital flows to previous levels.

In the context of this paper, we argue that flows of funds arise from the transactions which take place within the economy and the rest of the world, mainly involving exchanges of assets and liabilities. These transactions generate flows of funds from one agent to another and from one sector to another. In Table 1, flow-of-funds accounts show net transactions in financial instruments among the key economic sectors (Green and Murinde, 1998). Each row (i) represents an asset, and each column (j) a sector. Each cell (i,j) in the matrix shows net purchases(+) or sales(-) of asset i by sector j during the unit time period. The row sums of the matrix are zero as net purchases of an asset must equal net sales, and each column (j) sums to the j 'th sector's surplus or deficit i.e. its Net Acquisition of Financial Assets (NAFA). When households and companies make consumption and investment decisions, changes in the stocks of assets and liabilities are tracked through identities which state that the current stock is equal to the sum of: the previous period's stock, net flows into or out of the stock through transactions (purchases or sales by any given sector), changes in valuation (capital gains or losses), and depreciation of the pre-existing stock. Net flows into or out of a stock correspond to entries in the flow of funds account for any given sector. Capital flows are part of the flow of funds of the foreign sector relative to the domestic economy in Table 1.

Flow of funds models are generated by representing the assets and liabilities into identities and then reparameterising some identities into behavioural equations (which include policy instruments such as interest rates and exchange rates). Examples include models to explain the portfolio behaviour of the household sector, the company sector or the banks sector, and the role of flow of funds in interest rate determination.² In addition, these models seek to explore why agents in a particular sector hold specific assets and why the agents choose to substitute assets within their portfolio i.e. asset demand equations. A specific example here is to specify an equation for capital flows or the demand for assets by the foreign sector. Also, as shown by Moore, Green and Murinde (2006a, 2006b), stochastic policy simulations within a flow-of-funds model can shed light on the type of financial reform policies for influencing outcomes for households, companies, banks and

² See, in particular, Tobin and Brainard (1968), Green (1992), Green and Murinde (1998, 2004, 2005).

government.³ As Fleming and Giugale (2000) emphasize, a key advantage of the flow of funds is that it imposes internal consistency on analyses and forecasts, and provides an exposition of the complete financial implications of policy or other changes. The framework in Table 1 can be extended so that the entries in the rows and columns reflect asset prices as well as instruments. The important instruments include private non-bank lending, corporate debt and equity, foreign direct investment, overseas development assistance (aid), total capital flows, and remittances. The inclusion of these instruments reflects not only the growth of non-bank institutions and capital markets in most African economies in recent years, but also the importance of capital flows in financing Africa's growth.

Table 1: Flow of Funds Framework (excluding financial prices and policy instruments)

	Household Sector	Company Sector	Banks Sector	Government Sector	Foreign Sector
	H	P	B	G	F
1. Income-expenditure					
1.1 Income (Y)	Y^H	Y^P			
1.2 Taxes (T)	T^H	T^P		T^G	
1.3 Consumption (C)	C^H	C^P		C^G	C^F
1.4 Investment (I)	I^H	I^P		I^G	I^F
Net acquisitions (S)	S^H	S^P		S^G	S^F
2. Assets and liabilities: Balance-sheet accounts					
2.1 Capital (K)	K^H	K^P		K^G	K^F
2.2 Loans (L)	L^H	L^P	L^B	L^G	
2.3 Domestic money (M)	M^H	M^P	M^B	M^G	
2.4 Foreign money (R)				R^G	R^F
Net worth (W)	W^H	W^P	W^B	W^G	W^F

In the context of the financial crisis and capital flows in Africa, the flow-of-funds serves at least three main purposes. First, the framework underpins the sources and uses of funds between the household, company and banks sectors, on the one hand, and the foreign sector, on the other. When a financial crisis erupts in the rest of the world (for example, the USA in the case of the current crisis), the contagion effects of the crisis are transmitted via the foreign sector and its link to the rest of the economy. At least two financial prices provide the propagation mechanism for the contagion effects: the exchange rate and stock prices; equally, the transmission may occur via the differences between the domestic interest rates and the world interest rates – theory shows a stable relationship among exchange rates, interest rates and stock prices, so any two of these prices may well do the damage. The banks sector is also important here because it provides financial intermediation from the household sector to the company sector; financial instruments (such as deposit and loan interest rates), financial reforms, and bank regulation influence the size of intermediation. Two results occur: (a) the exchange rate depreciates rapidly and investors panic to convert their local currency holdings into foreign money and take the lot outside the country i.e. *exchange rate collapse and capital outflows*; (b) foreign investors sell their shares on the local stock

³ The implementation of flow of funds accounts in official statistics follows the UN System of National Accounts (SNA; United Nations, 1968 and 1993).

exchange and stock prices fall i.e. *stock price collapse*. We argue, therefore, that the flow-of-funds framework is used to highlight the transmission of the financial crisis from the foreign sector (the rest of the world, or specifically the USA) to the household sector, company sector, banks and capital markets, as well as the government sector. Financial prices, specifically the exchange rate and stock prices, provide the propagation mechanism for contagion effects of the financial crisis. For this matter, the early-warning symptoms for contagion effects into African economies are likely to include rapid depreciation of the exchange rate, collapse of the stock market index, capital outflows and potential (or actual) bank run.

Second, the flow of funds framework underpins the centrality of banks in Africa's financial system. Because the current financial crisis is characterised by bank fragility, it may impair (through exchange rate and stock price effects) the financial intermediation function of domestic banks in Africa in three main ways: (a) the immediate effect is a reduction in the supply of intermediary capital i.e. a *credit squeeze*, popularly known as a *credit crunch*; (b) a collapse of the prices of real assets (e.g. residential houses) and company real assets, leading to a *collateral squeeze*; (c) price and other incentives for attracting deposits from household sector fall, leading a contraction in the supply of savings i.e. a *savings squeeze*.

Third, the role of the government sector in the flow of funds and the financial crisis is important because in most African countries, companies require government guarantees to access funds from the foreign sector (international banks and capital markets). In addition, at the early signs of contagion effects, the government sector should react by bailouts to banks and companies or by funding company redundancies. Also, the government is centre stage in other supporting functions, including the legal infrastructure. Above all, the government sector is important because these mechanisms all depend on the degree of *capital account liberalisation* in force in the domestic economy, and as we shall show there are sharp variations across Africa, ranging from strict exchange controls to full capital account liberalisation.

3. The Global Financial Crisis

3.1 After the Mexican, Asian and Russian financial crises

In a flow-of-funds context, a financial crisis may be transmitted from the foreign sector to the domestic economy, when international financial prices such as exchange rates and stock prices provide the propagation mechanism for the contagion effects. In the domestic economy, the role of financial intermediation by banks is impaired to the extent that banks become dysfunctional and the corporate and financial sectors experience a large number of insolvency and bankruptcies. To highlight this argument, we briefly review the current global financial crisis in view of the three main financial crises in recent history.

The Mexican Peso Crisis broke out on 20 December, 1994 when the Mexican government suddenly announced that the peso was devaluated by 15% (Han, Lee and Suk, 2003). The peso continued to fall as currency traders and investors panicked and sold their peso holdings. At the same time, there was rapid capital outflow and the Mexican stock market (Mexican IPC) fell by 47.94% in one month. The "tequila effect" spread to neighbouring countries, especially Brazil (Sharma, 2001). Hence, the main symptoms of the Mexican crisis were threefold: exchange rate depreciation, fall in stock prices and huge capital outflows.

The 1997 East Asian Financial Crisis⁴ has been attributed to different factors by different researchers; however, there is consensus that the main causes included large

⁴ The crisis first exploded in Thailand in September 1997 and almost immediately spread to Malaysia, the Philippines, Indonesia and Korea.

external deficits, property market bubbles and stock market bubbles. The main symptoms were the collapse of the exchange rate and stock prices (see, for example, Grouzille and Lepetit, 2008).⁵ Also, the crisis is attributed to the presence of internal weaknesses in the financial sector, such as traditional banking practices and inadequate bank regulation.⁶ Inadequate bank regulation and supervision was rampant to the extent that “new banks and finance companies were allowed to operate without supervision or adequate capitalization.” (Radelet et al, 1998:35). Some foreign banks tried to impose some capital adequacy measures; for example, it has been argued that “Japanese banks were the critical actors who triggered the Asian crisis when they reduced their credit, first to Thailand in early 1997, in order to meet capital requirement” (Brana and Lahet, 2008:98).⁷ In addition, the crisis is attributed to excessive foreign borrowing mainly by the private sector; “firms borrowed heavily to fund plant expansion and acquired unsustainable debt/equity ratios” (Jackson, 1999:6). Various East Asian countries increased a large proportion of their net foreign liabilities. When the crisis arose in mid-July 1997, there were large scope of indebtedness of short-term and un-hedged loans exceeding 50 percent of GDP of Thailand, Indonesia and Philippines. Furthermore, not only was the indebtedness of these countries substantial, they were also held back by the short-term loans which amounted up to 22 percent of their respective GDPs. It is argued by Radelet et al (1998) that many foreign investors assumed that they would be bailed out by host governments in case of repayment problems by companies. Moreover, the literature suggests that premature capital account liberalization was a root cause of the 1997 Asian financial crisis (Wang, 2007). The "double-edged sword" of capital account liberalization was that while the opening up of domestic capital markets greatly increased capital inflows, the same attracted substantial international hot money which was potentially destructive. For example, speculative hot money led by George Soros's Quantum Fund was destabilizing to fragile local financial markets in the absence of adequate financial regulation. However, an interesting lesson from the Asian financial crisis is that countries in the regions were not directly vulnerable to contagion effects. According to Jackson (1999), countries such as Singapore and Hong Kong escaped the spread of the crisis in the region because they had stronger financial systems, including adequate bank regulation. In this context, financial reforms which strengthen bank regulatory and supervisory framework may help to mitigate adverse contagion affects of the financial crisis.

The 1998 Russian Financial Crisis broke out in August 1998, approximately one year after the break out of the Asian financial Crisis. Russia's foreign currency reserves fell sharply, the Rouble rapidly depreciated and huge capital outflows followed. The stock market index fell quickly. The Rouble depreciated further by 34% at the end of December 1998, amid speculative panics that marked the outbreak of the Russian financial crisis. Some analysts have attributed the crisis to economic fundamentals, such as the erosion of federal government revenues and collapse of fiscal discipline, while forced the government to borrow heavily by issuing bonds. Foreign investors holding government bonds started to panic when the Rouble depreciated rapidly (see Sojli, 2007).

The global financial crisis was triggered by the US subprime mortgage crisis in the spring of 2006, when the US second-largest subprime mortgage company (New Century Finance) announced it was filing for bankruptcy protection (Mizen, 2008). This was followed quickly by announcements of trouble among several big names in banking and investments in

⁵ The Asian financial crisis has also been described as a currency crisis, defined as a nominal depreciation of the currency of at least 30 percent that is also at least a 10 percent increase in the rate of depreciation compared to the year before (Frankel and Rose, 1996).

⁶ A sound domestic financial system is important. In the case of the Asian financial crisis, Mullineux, Murinde and Pinijkulviwat (2003) show that the standard regulatory instruments of Central Bank of Thailand were inadequate to deal with the financial crisis.

⁷ Another additional factor is exchange rate overvaluation, which is blamed on governments for maintaining fixed exchange rates and allowing currencies to become overvalued (Jackson, 1999:3).

the US. Goodhart (2008) categorizes the reason of the crisis as the mis-pricing of risk, the new financial structure, the poor credit rating agencies and insufficient liquidity. Similarly, Mizen (2008) acknowledges the period of exceptional macrostability, the global savings glut, and financial innovation in mortgage-backed securities as the precursors to the crisis. Raynes and Zweig (2009) suggest that the proper valuation of these securities are seen as being crucial to resolving the financial crisis. However, Wallace (2009) argues that fair-value accounting provides better monitoring of institutions on a long-term basis, and was not a major cause of the economic crisis in the U.S.⁸

Hence, the previous financial crises in Asia, Mexico and Russia have some important common element elements. These crises, especially the 1997 Asian Financial Crisis and the current global financial crisis, can be attributed not simply to monetary issues or sub-prime mortgage problems, or any other form of credit crunch, but mainly to the spread of contagion effects due to financial globalization.

3.2 *Implication for banks, companies, investors, governments and capital flows*

The current financial crisis has important implications for banks, companies, investors and governments. In a flow of funds context, the main implication for banks is the centrality of the financial intermediation role, such that there must be a stable source of funding for all types of banks, including commercial banks and investment banks. Hence, it is very important for banks to maintain capital ratios to avoid liquidity and solvency risks. When the subprime mortgage crisis broke out in 2007, the loss of market confidence made liquidity extremely difficult. Consequently, Northern Rock could not finance its business, and it ultimately ended up with U.K. government nationalization. The main implication of the crisis for companies relates to executive compensation and corporate government; also sometimes labelled “the fat cat problem” or simply “greed”. The point is that companies should beware of high incentive used in management which led to uncontrollable risks. Research shows that in 2007 the United States executives’ salary level was 275 times that of ordinary employees. The ratio was only 35 to 1 about 30 years ago (Bloomberg, 2008). Therefore, it is learnt that companies in any industry should have a reasonable margin of incentives, which must not breach the industry standard and appropriate balance of the principles of social equity. For investors, the main implication of the crisis is that investors need to remember is the importance of diversification and government bonds in their portfolio management. Governments, in particular, have important lessons to learn from the current financial crisis. First, all governments must be aware of the extensive risks associated with rapid financial innovations, including the likelihood of causing financial bubbles. The ongoing financial crisis has been triggered and spread by the U.S. subprime mortgage losses due to improper uses of financial derivatives, such as securitisation of U.S. mortgage agencies (Fannie Mae and Freddie Mac) into mortgaged-backed securities for sale in the market. Then, investment banks used their financial engineering technology to repackage and trade the securities. Second, governments should beware of the excessive uncertainties and risks resulted from over-speculation. Looking back the history of financial crises, no matter big and small, almost all of them are connected and caused by the excessive speculation ignorance of risk control. Moreover, modern investment banking business is heavily engaged in financial derivatives, which have leverage effects, such that investors can easily enlarge profits (as well as risks) by bearing a small amount of trading margin. High leveraging ratio has made investment banks highly dependent on financing. However, during the credit crunch,

⁸ Sub-prime mortgage crisis in the US is attributed to sub-prime lending. This is where customers who are unable to receive a prime level mortgage due to low or no credit ratings. They are therefore given a higher rate subprime mortgage by banks and lenders. U.S. subprime loans are usually classified for borrowers with a FICO score of less than 680. Subprime loans give customers with low credit ratings the opportunity to become homeowners, however, for lenders this is often a risk which is taken on.

investment banks' balance sheet deteriorated dramatically, rating agencies (such as S&P and Moody's) therefore lowered their rating so that the financing costs increased significantly. The Big Five on Wall Street at the time (Bear Stearns, Lehman Brothers, Merrill Lynch, Goldman Sachs, Morgan Stanley) exhibited this problem (Bloomberg, 2008). Hence, in order to maintain the stability of financial markets as well as the whole financial system with sustainable developments, it is absolutely necessary for all governments to take effective measures to curb excessive speculation and prevent the spread of over-speculation (e.g. setting up thresholds of leverage with strict penalties).

Hence, it is noted that in the context of the flow of funds framework, all the sectors of African economies are inextricably linked in the crisis and must be perceived as part of the problem as well as the solution. This is simply because most financial crises, including those reviewed above, are preceded by a credit boom enjoyed by households, companies and banks, an asset bubble enjoyed mainly by households and banks, and widening current account deficits which the government initially chooses to ignore. The financial crisis represents the unwinding of unsustainable financial exposures in a disruptive manner. Policy requirement is to stop the bubble before it becomes unsustainable, but this is partly a political economy problem. When the economic boom is rolling, no government has any incentive to step in and stop it, and a regulator who tries to do it would have to be very brave.

The foreign sector of the flow of funds framework is important in linking the financial crisis to capital flows and capital account liberalisation in Africa. When the crises occurred, key financial indicators, such as exchange rates, stock prices, short-term interest rates, asset prices, number of business bankruptcies and collapse of several financial institutions, deteriorated in the large African economies. Moreover, the Asian financial crisis, Mexican Peso crisis and the Russian financial crisis, which occurred in emerging economies, were characterised by uncertainty in capital flows. The main reason is: "In an emerging market financial crisis, an economy that has been the recipient of large-scale capital inflows stops receiving such inflows and instead faces sudden demands for the repayment of outstanding loans. This abrupt reversal of flows leads to financial embarrassment, as loans fall into default or at least are pushed to the brink of default." (Radelet et al, 1998:4).

4. Capital Flows and Capital Account Liberalisation in Africa

4.1 The current trends in capital controls and capital account liberalization in Africa

Table 2 shows the typology of controls on portfolio investment and FDI in Africa. It highlights the regulatory framework for capital account transactions in most African countries, based on the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) database, as reported in IMF (2008). It covers both capital account or financial openness (the de jure status of regulations affecting capital account transactions) and financial integration (the de facto degree of openness as measured by the actual size of capital inflows). The tables illustrate the fact that the frameworks for regulating capital account transactions in African economies are quickly changing, although they are still highly complex and opaque. Exchange controls have been lifted in most countries, but there are still some administrative or bureaucratic procedures in place, which limit capital flows. The controls range from: significant restrictions, as in Cameroon; to partial opening as in the case of Nigeria and South Africa; to no controls, as in the case of Uganda and Zambia. What is interesting is across the typology, there are no controls on debt outflows and debt inflows, except in Cameroon and South Africa. FDI inflows are not restricted, except that there are some administrative procedures (such as registration), which may work as barriers to the domestic market.

Table 2: Typology of controls on portfolio investment and FDI in African countries

Control type/Country	Debt		Equity and FDI	
	Inflows	Outflows	E&FDI Inflows	E&FDI Outflows
<i>No controls</i>				
Uganda	Bonds: no controls	Bonds: no controls	Shares: no controls	Shares: no controls
	Money market securities: no controls	Money market securities: no controls	FDI: no controls	FDI: no controls
	Derivatives: no controls	Derivatives: no controls		
Zambia	Bonds: no controls	Bonds: no controls	Shares: no controls	Shares: no controls
	Money market securities: no controls	Money market securities: no controls	FDI: no controls	FDI: no controls
	Derivatives: no controls	Derivatives: no controls		
<i>Minimal controls</i>				
Nigeria	Bonds: no controls	Bonds: no controls	Shares: no controls	Shares: no controls
	Money market securities: controls	Money market securities: controls on resident purchases abroad	FDI: no controls, only registration	FDI: no controls
	Derivatives: no controls	Derivatives: no controls		
South Africa	Bonds: controls on resident sale or issue abroad	Bonds: controls	Shares: controls on resident sale or issue abroad	Shares: limits on resident purchases abroad
	Money market securities: controls on resident sale or issue abroad	Money market securities: controls	FDI: no controls	FDI: controls
	Derivatives: controls on resident sale or issue abroad	Derivatives: controls		
<i>Controls</i>				
Cameroon	Bonds: controls	Bonds: controls	Shares: controls on issuing, advertising, and sale of foreign securities of more than CFAF 10 million	Shares: no controls
	Money market securities: controls	Money market securities: controls	FDI: no controls if below CFAF 100 million	FDI: no controls if below CFAF 100 million
	Derivatives: Not applicable	Derivatives: Not applicable		

Source: Adapted from IMF (2009), Table A3.1, page 69-70.

Table 2: Examples of Capital Account Liberalisation Process

Status/ Sequencing	Fully Open	Partially Open	Fairly Open
One-step opening	Uganda (1997) Liberalization part of a broad package of market-oriented reforms, privatization and trade liberalization		
Sequenced opening	Zambia (1990-95) 1993-94: liberalization of capital transactions 1995: banks allowed to accept foreign currency deposits Liberalization part of broad reforms focused on economic stabilization, competitiveness, and debt restructuring, accompanied by financial market reforms	Ghana (1995-2006) Mid-1990s: partial liberalization of portfolio and direct investment 2006: Foreign Exchange Act, allowing nonresidents to buy government securities with maturities of three years or longer, minimum holding period of one year Liberalization following economic stabilization and debt restructuring: parallel reforms in the primary government debt and stock markets; efforts to develop interbank money and foreign exchange markets and to strengthen financial sector supervision and soundness	Cameroon (2000 to present) 2000: Harmonization of national foreign exchange regulations and liberalization of capital flows within CEMAC Prudential limits on banks' net open foreign positions Residents' foreign exchange deposits prohibited Continued administrative restrictions remain on most capital outflows No immediate plans for further opening
		Nigeria (1985-2006) Economic reforms initiated in the mid-1980s and subsequently reinvigorated in the mid-1990s, starting with treatment of dividends and profit repatriation, then later removal of controls in other areas such as derivatives and real estate; some remaining administrative restrictions Foreign exchange market reformed at various points from the mid-1980s to wholesale Dutch auction system initiated in 2006, along with growing importance of interbank market, and the effective unification of the parallel and official exchange rates	
		Tanzania (1990) 1990: start of FDI liberalization 1997: full liberalization of FDI flows 1998: supporting foreign exchange regulations Continuing restrictions on portfolio investments (government securities) FDI liberalization coinciding with privatization program, creation of one-stop shop, and investment promotion policy	Senegal (1999 to present) 1999: elimination of controls on inward FDI and foreign borrowing by residents Continuing administrative restrictions remain on capital outflows to non-WAEMU countries

Source: IMF (2009), Table A3.2, p71; and Ndikumane (2003), Table A2, pp 56-59 on the evolution of these figures

However, the capital account liberalisation may involve a complex process. Table 3 illustrates the fact that the frameworks for regulating capital account transactions in African economies are quickly changing, although they are still highly complex and opaque. Exchange controls have been lifted in most countries, but there are still some administrative procedures in place, which limit capital flows.

Both Tables 2 and 3 explore the different approaches of moving from strict controls to full liberalisation. It appears that in most African countries, the markets for transactions for long term capital flows, such as bond transactions, have been liberalized before the transactions for short term capital flows such as money market transactions. It is also shown that the speed capital account liberalization is different across the countries; Uganda liberalized in ‘big bang’ fashion, while Ghana, Nigeria, and Zambia have adopted a gradualist approach. Some countries are still exploring the way forward with capital account liberalisation. In some countries such as Ghana, Nigeria and Zambia, capital account liberalisation has been implementation as part of comprehensive financial sector reforms. However, some countries have combined these approaches; for example, Uganda implemented a ‘big bang’ approach but as part of broad macroeconomic policy reforms.

Taking into account these variations, it seems plausible to sequence capital account liberalisation such that FDI which has growth enhancing effects is liberalised first, followed by all short term and long terms flows are liberalised in the second stage and full liberalisation is achieved in the third stage. During this phased approach, some other institutional reforms should be implemented; say: reform of the financial legal framework; improving accounting and statistics; strengthening systemic liquidity arrangements and related monetary and exchange operations; strengthen prudential regulation and supervision, and risk management; and develop capital markets, including pension funds (IMF, 2008).

4.2 *The magnitude and determinants of capital flows into Africa*

The recent trend in capital flows to Africa indicates a rapid increase in all forms of capital flows since 2000, especially to Nigeria and South Africa, but also to countries which have undertaken financial sector reforms. According to IMF (2008), private capital flows to African countries have increased almost fivefold, from US\$11 billion in 2000 to US\$53 billion in 2007.3; portfolio flows increased from 2002 to 2006, while private debt flows and FDI have also gone up substantially since 2000. Non-resource-intensive low-income countries in Africa have also enjoyed the increase in capital flows. However, the capital inflows have been volatile, as measured by the ratio of the standard deviation of capital inflows to their average. According to IMF (2008), total capital inflows to Africa averaged 4.9 percent of GDP for 2000–2007, with a standard deviation of 8.7 percent of GDP; in terms of specific components of the flows, FDI inflows were least volatile whereas debt-creating inflows were most volatile during the period 2000-2007.

We highlight the trend in capital flows into Africa by looking at three components: FDI stock and flow measures; external long term debt of all types including bond financing and company instruments; aid and associated official financial flows; and remittances. We also highlight the position of international reserves for selected African countries. What is interesting is that the stable growth in capital flows during 2000 -2006 seems to be declining by 2007 in some countries, with a further decline in 2008-2009 due to the financial crisis.

Table 4 reports the stock and flow measures of FDI for selected African countries and BRIC during 2000-2007. There are at least two interesting observations. First, some African countries registered a higher percentage change in FDI flows between 2006 and 2007 than the BRIC economies. Second, some African economies witnessed a contraction in FDI flows during the same period; for example, Algeria, Tunisia, South Africa and Nigeria.

Table 4: FDI flows and stock for selected African and BRIC countries

Year		2000	2001	2002	2003	2004	2005	2006	2007	%change
Kenya	Flow	110.9	5.3026	27.625	81.735	46.064	21.282	50.727	728.01	1335.17
	Stock	931.3	936.61	964.23	1046	1092	1113.3	1164	1892.1	62.54
Mozambique	Flow	139.2	255.4	347.25	336.7	244.7	107.85	153.73	427.36	178.00
	Stock	1249.2	1504.6	1851.9	2188.6	2441.6	2630.2	2788.7	3216.1	15.33
Uganda	Flow	180.81	151.5	184.65	202.19	295.42	379.81	400.25	367.9	-8.08
	Stock	807.1	962.3	1146.9	1349.1	1644.6	2024.4	2424.6	2909.2	19.99
Tanzania	Flow	216	388.8	387.6	308.2	330.6	567.9	521.7	599.5	14.91
	Stock	2777.8	2959.7	3242.7	4138.6	4758.5	4390	5342	5942	11.23
Zambia	Flow	121.7	71.7	303.4	347	364	356.9	615.8	983.9	59.78
	Stock	2332.4	2404.1	2707.5	3054.5	3418.5	3775.4	4391.2	5375.1	22.41
Angola	Flow	878.62	2145.5	1672.1	3504.7	1449.3	-1303.8	-37.769	-1499.9	3871.17
	Stock	7977.9	10123	11795	11988	13437	12133	12171	12207	0.30
Cameroon	Flow	158.8	73.285	601.75	383	319.34	224.66	309	284.33	-7.98
	Stock	1600.2	1673.4	2275.2	2658.2	2977.5	3202.2	3511.2	3795.5	8.10
Algeria	Flow	438	1196	1065	633.8	881.9	1081.3	1795.4	1664.6	-7.29
	Stock	3497.2	4693.2	5758.2	6392	7273.9	8355.2	10151	11815	16.40
Egypt	Flow	1235.4	509.9	646.9	237.4	2157.4	5375.6	10043	11578	15.29
	Stock	19955	20465	21112	21349	23506	28882	38925	50503	29.74
Tunisia	Flow	778.8	486.4	821.3	583.9	638.9	782.4	3311.8	1617.9	-51.15
	Stock	11545	11520	13861	16229	17844	16840	21853	26223	20.00
Botswana	Flow	57.319	30.84	404.62	419.5	391.55	281.32	488.8	494.9	1.25
	Stock	1826.6	1388.5	854.09	1167.2	982.11	806.28	805.1	1300	61.47
Namibia	Flow	186.46	365.19	181.39	148.74	225.85	347.99	386.57	697.48	80.43
	Stock	1276.3	715.01	1822.5	2951.9	4120.4	2453.4	2785.7	3822.5	37.22
South Africa	Flow	887.92	6788.7	1572.8	733.67	799.23	6643.8	-527.1	5692.1	-1179.87
	Stock	43462	30568	30604	46868	64444	78985	87782	93474	6.48
Ghana	Flow	165.9	89.3	58.9	105.4	139.27	144.97	636	855.4	34.50
	Stock	1605.1	1694.4	1753.3	1858.7	1997.9	2142.9	2778.9	3634.3	30.78
Nigeria	Flow	1309.7	1277.4	2040.2	2171.4	2127.1	4978.3	13956	12454	-10.77
	Stock	23786	25064	27104	29275	31402	36381	50337	62791	24.74

BRIC

Year		2000	2001	2002	2003	2004	2005	2006	2007	%change
Brazil	Flow	32779	22457	16590	10144	18146	15066	18822	34585	83.75
	Stock	122250	121948	100863	132818	161259	195562	236186	328455	39.07
China	Flow	40715	46878	52743	53505	60630	72406	72715	83521	14.86
	Stock	193348	203142	216503	228371	245467	272094	292559	327087	11.80
India	Flow	17517	20326	25419	31221	38183	44458	52369	76226	45.56
	Stock	-	-	-	-	-	-	-	-	-
Russia	Flow	2714.2	2748.3	3461.1	7958.1	15444	12886	32387	52475	62.03
	Stock	32204	52919	70884	96729	122295	180313	271590	324065	19.32

Source: UNCTAD (2008): <http://stats.unctad.org/FDI/TableViewer/tableView.aspx?ReportId=1254> [Accessed 30/03/2009]

Table 5: Capital Market Indicators and Capital Flows for a Sample of African and BRIC Countries

Country	Year	Inslife	Insnonlife	stmkcap	stvaltraded	stturnover	Listco	Intldebt	intldebtnet	nrbloan	offdep	remit
AFRICA												
Botswana	2000			0.1654462	0.0076604	0.0463017	16			0.0027696	0.2443523	0.004209
	2007		0.0095919	0.4191545	0.009344	0.0222926				0.0150792	0.2821469	0.0099178
Egypt	2000	0.001761	0.004102	0.3107006	0.1113799	0.3584799	1076	0.001008		0.0712865	0.3177874	0.0285661
	2007	0.0040283	0.004481	0.912432	0.4143859	0.4541553		0.0431598		0.1043663	0.428921	0.0457862
Ghana	2000			0.1442233	0.0020313	0.0140846	22	0.0505459		0.241105	0.2514963	0.0064289
	2007			0.1861185	0.0071444	0.0383862		0.0308036	0.0623133	0.140232	0.135099	0.0069037
Kenya	2000	0.007137	0.019069	0.1067166	0.0037362	0.0350109	57			0.0847231	0.4234449	0.0426768
	2007	0.0077605	0.016707	0.4223444	0.0446524	0.1057251				0.0450542	0.4392721	0.044055
Morocco	2000	0.008419	0.020514	0.3719554	0.03281	0.0882095	53	0.0123757		0.1710646	0.2390833	0.0583129
	2007	0.0097714	0.019611	0.8553718	0.3585976	0.4192301		0.0126336		0.0699022	0.2409376	0.0777887
Mauritius	2000	0.02318	0.016452	0.3353287	0.0168795	0.0503372	40	0.0171691	-0.0335621	0.3206492	0.7928312	0.0396033
	2007			0.7306699	0.0579915	0.0793676		0.0769247	0.0430615	1.491616	4.742743	0.0337891
Nigeria	2000			0.0782934	0.0057151	0.0729957	195	0.0448868		0.0317885	0.2246169	0.0302673
	2007	0.0007665	0.0041463	0.3593745	0.1012384	0.2817071		0.0015663		0.0345575	0.3000074	0.0200899
Tunisia	2000	0.001349	0.015099	0.1431607	0.0321808	0.2247879	44	0.0804569	-0.0023659	0.1580763	0.2055092	0.0409396
	2007	0.0020845	0.0177328	0.1408193	0.0186265	0.1322728		0.1054445		0.1092757	0.3267269	0.0476586
BRIC												
Brazil	2000	0.00356	0.017312	0.3545794	0.1571543	0.4432132	459	0.1300224	0.0003429	0.098333	0.1086883	0.0025587
	2007	0.0139137	0.0156	0.7934616	0.4451107	0.5609733		0.0883687	0.0015097	0.0613803	0.0608802	0.0033347
Russia	2000			0.2163808	0.0782114	0.3614528	249	0.1115085	-0.000027	0.1419043	0.1409198	0.0049094
	2007	0.0006762	0.0224421	0.9962026	0.5844539	0.5866818		0.0870442	0.0084554	0.0908406	0.2428689	0.0031761
India	2000	0.016645	0.005154	0.3644097	1.107817	3.040033	5937	0.010101		0.0423781	0.076014	0.0280107
	2007	0.0402505	0.0061855	1.127215	0.9458412	0.8390953		0.0244795	0.0028686	0.063276	0.0489135	0.0230578
China	2000	0.009705	0.0082	0.3810258	0.6020443	1.580062	1086	0.0146502	0.0006692	0.048074	0.1335671	0.00521
	2007			1.318386	2.375481	1.80181		0.0104359	0.0003713	0.0354735	0.1140292	0.0078362

Source: Selected and adapted from Beck, Dermiguc-Kunt and Levine (2009).

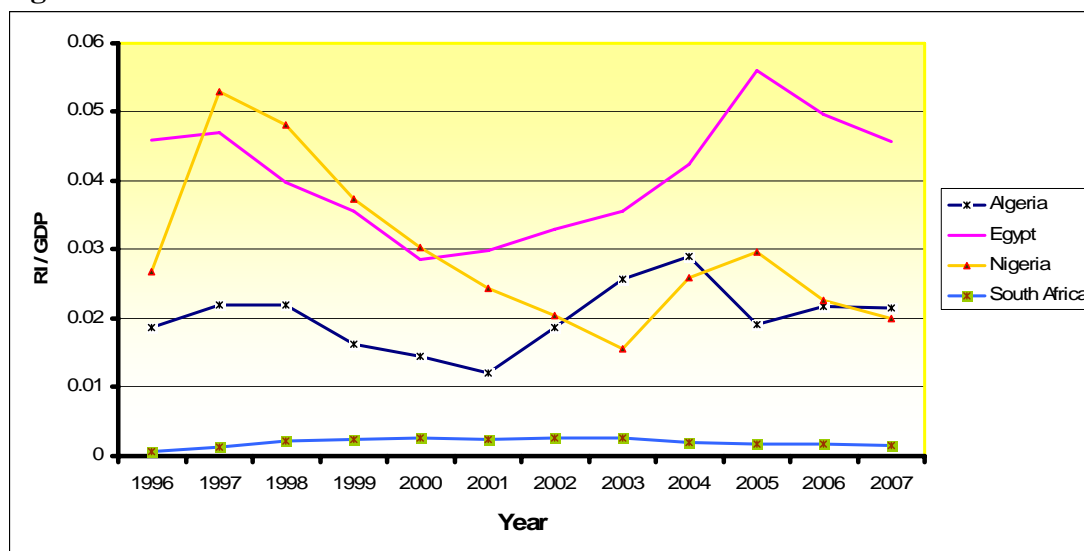
Notes: inslife = Life Insurance Premium Volume to GDP; insnonlife = Non-Life Insurance Premium Volume to GDP; stmkcap = stock market capitalization to GDP; stvaltraded = stock market total value traded to GDP; stturnover = stock market turnover ratio; listco_emdb = number of listed companies (EMDB); prbond = private bond market capitalization / GDP; pubbond = public bond market capitalization to GDP; intldebt = international debt issues to GDP; intldebtnet = loans from non-resident banks (net) to GDP; nrbloan = loans from non-resident banks (amt outstanding) to GDP; offdep = offshore bank deposits to domestic bank deposits; remit = remittance inflows to GDP.

In addition, Table 5 reports the magnitude of long term debt by selected African economies, compared to BRIC economies as a benchmark for most emerging economies. It is shown that for all debt instruments there was a steady increase in debt flows into African economies during 2000-2006. But it is also indicated in the last column of the table that the change in debt flows during 2005 – 2006 was negative for most African countries as well as some BRIC economies. Until recently domestic government securities markets have been dominated by short-term treasury bills that domestic banks purchase for liquidity management purposes. Development of long-term bond markets has intensified in the last few years but secondary trading is still limited or nonexistent.

The magnitude of aid flows was also stable during the period 2000-2006, both in terms of aid strictly defined as well as aid plus other official flows with a grant element. The change in aid flows during 2005 – 2006 is negative for some African economies and Brazil, among the BRIC economies.

Further, one important component of capital flows is remittances. As shown in Table 5 and Figure 1, remittances have been an important component of private capital flows and seems to have overtaken aid flows for some countries.

Figure 1: Remittance inflows to GDP ratio for the SANE economies



Note: RI = Remittance Inflows

Overall, although there is steady increase in all components of capital flows during 2000-2006, there are some unexplained variations in the relative changes that we see for 2005-2006. Hence, it is useful to highlight the key factors that determine the magnitude and direction of capital flows for African economies. In conformity with the existing literature, we distinguish between “push” and “pull” factors in order to determine whether the factors are permanent or transitory; however, it is fair to say that in practice both factors work together. The main domestic “pull” factors that have attracted FDI into Africa include a stable political environment (less political risk), sound macroeconomic policies, stable exchange rate, improved governance, capital market infrastructure, and the business environment. Also, most of these countries have attained good country risk and credit risk ratings, which has enabled them to access international capital markets. In addition, however, some factors have prompted private capital inflows to flow to Africa; for example, in the case of China,

the motive has been to secure natural resources such as oil and gas, mining, and infrastructure, with such ventures recently undertaken in Gabon, Congo and Susan. However, China has also taken investments in banking; for example equity investment in Standard Chartered Bank of South Africa.

Table 6: Official Financial Flows for Selected African and BRIC countries

AFRICA		2001	2002	2003	2004	2005	2006	%change
Kenya	Total official flows net	420.23	358.37	477.09	641.24	787.24	974.73	23.82
	Total ODA net	461.55	391.04	521.45	654.42	767.08	943.4	22.99
	Total OOF net	-41.32	-32.67	-44.36	-13.18	20.16	31.33	55.41
Uganda	Total official flows net	773.62	678.81	974.57	1189.1	1175.5	1546.4	31.55
	Total ODA net	790.35	709.65	976.14	1193.8	1177.5	1550.6	31.69
	Total OOF net	-16.73	-30.84	-1.57	-4.71	-1.97	-4.22	114.21
Tanzania	Total official flows net	1261.1	1122.4	1648.3	1662	1474.5	1833.1	24.32
	Total ODA net	1263.8	1235.9	1704.4	1751.2	1481	1825.3	23.25
	Total OOF net	-2.75	-113.5	-56.09	-89.18	-6.46	7.8	-220.74
Zambia	Total official flows net	362.45	594.77	491.83	1164.6	837.81	925.95	10.52
	Total ODA net	348.7	639.12	589.36	1125.2	934.96	1424.9	52.40
	Total OOF net	13.75	-44.35	-97.53	39.37	-97.15	-498.9	413.55
Algeria	Total official flows net	223.79	118.51	-28.82	-1262	-1135	-4134	264.18
	Total ODA net	223.56	328.41	234.44	314.25	371.36	208.52	-43.85
	Total OOF net	0.23	-209.9	-263.3	-1577	-1506	-4342	188.25
Egypt	Total official flows net	1479.7	1366.5	1188	1991.7	2062.9	1183.1	-42.65
	Total ODA net	1255.6	1236.9	986.75	1455.6	995.11	872.87	-12.28
	Total OOF net	224.09	129.53	201.27	536.14	1067.8	310.23	-70.95
Tunisia	Total official flows net	690.75	432	418.51	502.07	291.52	103.55	-64.48
	Total ODA net	376.93	264.71	297.67	327.61	364.99	432	18.36
	Total OOF net	313.82	167.29	120.84	174.46	-73.47	-328.5	347.05
South Africa	Total official flows net	511.92	434.87	1054.3	930.2	721.99	705.92	-2.23
	Total ODA net	427.83	504.57	641.25	628.2	679.95	717.78	5.56
	Total OOF net	84.09	-69.7	413.08	302	42.04	-11.86	-128.21
Nigeria	Total official flows net	-329	3229.4	417.42	734.4	6315.6	5339.9	-15.45
	Total ODA net	167.82	294.03	308.06	578.16	6415.8	11434	78.22
	Total OOF net	-496.8	2935.4	109.36	156.24	-100.2	-6094	5983.64
Brazil	Total official flows net	2767.8	1673.5	-293	-2489	132.37	2043.9	1444.06
	Total ODA net	228.78	202.39	194.19	157.08	195.54	82.42	-57.85
	Total OOF net	2539	1471.1	-487.2	-2646	-63.17	1961.5	-3205.0
China	Total official flows net	2862	-103.4	-1929	2043.7	2103.2	2332	10.88
	Total ODA net	1473.2	1471.3	1332.7	1685.1	1801.9	1245.5	-30.88
	Total OOF net	1388.8	-1575	-3262	358.59	301.34	1086.5	260.55
India	Total official flows net	1395.5	-1065	-1176	130.39	2880	3307.6	14.85
	Total ODA net	1701.4	1440.6	899.71	693.9	1728	1378.9	-20.20
	Total OOF net	-305.9	-2506	-2076	-563.5	1152	1928.7	67.43

Source: UNCTAD (2008):

<http://stats.unctad.org/Handbook/TableViewer/tableView.aspx?ReportId=1926> [Accessed 30/03/2009]

Note: ODA = Official Development Assistance; OOF = Other Official Flows

The data on capital flows reported in Tables 4-6 show that Uganda and Zambia have no capital controls and have received huge portfolio inflows, which suggests that capital account liberalisation influences capital inflows. However, some countries which still have some capital controls are also receiving substantial capital inflows. So, even in terms of anecdotal evidence, it is not clear cut to associate capital account liberalisation with an increase in capital inflows. This observation is consistent with the empirical findings in IMF (2008) in which the variable for capital account liberalisation is not significant in a model of the determinants of capital flows; hence, the evidence does not establish an empirical relationship between capital controls and capital flows in Africa.

In addition, private capital flows have increased via the creation of new investment funds; for example: Renaissance Capital (Rencap); the Investec Africa Fund; the Nigerian Africa Finance Corporation (AFC); Pamodzi Investment Holding; and the AfriCap Microfinance Fund.

Empirical studies reported in IMF (2008) show that the preferred specification for total capital flows (including FDI, portfolio, and debt inflows) has the following domestic determinants of total capital flows into Africa: macroeconomic performance (both real GDP growth and fiscal balance), the index of securities market development, and a dummy for South Africa and Nigeria (a proxy for market size). It is also shown that the preferred model for FDI has different determinants, namely growth performance, the quality of the business environment, and a dummy variable for oil producers. What is interesting is that the measure of capital account openness is not significant in the preferred specification, suggesting that capital account liberalisation has been weakly implemented in the sample African economies or it is not really important as a determinant of capital flows.

Further, it is shown that institutions matter for capital inflows to Africa; for example, capital market development is important for portfolio inflows as well as the allocation of capital flows, which is consistent with the theory on the role of capital markets in resource allocation. Also, initial conditions matter, which is consistent with earlier work by Kose et al. (2006). However, while the dummy for South Africa and Nigeria to measure market size is not important for total capital flows but not for the FDI component of total capital flows. Rather, FDI is shown to respond to the quality of the business environment. Macroeconomic policy matters: for example, large overvaluations have detrimental effects on capital flows and growth, which is consistent with earlier work by Prasad, Rajan, and Subramanian (2007). The development of the local capital market is a crucial factor in attracting capital flows, because the market provides a broad array of financial instruments such as equity shares, corporate bonds and government bonds for foreign investors. As can be seen on Table 3, portfolio flows to Africa countries that have well established debt and equity markets, such as South Africa and Nigeria, have received the lion's share of portfolio capital. In addition to South Africa, some countries such as Botswana, Ghana, Kenya, Nigeria, Uganda, and Zambia, which have functional capital markets have also attracted substantial portfolio inflows.

Table 7: Impact of the crisis on selected African financial markets in an international context

Country/Region	Index name	Index code	Benchmark 31.07.2008	Value, at end week 12.02.2009	Losses during financial crisis (%)
AFRICA					
Cote d'Ivoire	BRVM Composit Index	BRVM CI	242.54	169.34	-30.18
Egypt	CASE 30 Index	CASE 30	9251.19	3600.79	-61.08
Kenya	Kenya Stock Index	KSE	4868.27	2855.87	-41.34
Mauritius	Mauritius AllShares	SEMDEX	1735.77	1005.69	-42.06
Morocco	Casa All Share Index	MASI	14134.70	10352.81	-26.76
Nigeria	NSE All Share Index	NSE	52916.66	23814.46	-55.00
South Africa	All Share Index	JALSH	27552.65	20650.38	-25.05
Tunisia	Tunis se Tnse Index STK	TUNINDEX	3036.87	3049.60	0.42
BRIC					
Brazil	Bovespa Index	IBOVESPA	59505.00	41674.00	-29.97
Russia	RTS Index	RTSI	1966.68	624.21	-68.26
India	BSE SENSEX 30	BSESN	14355.75	9634.74	-32.89
China	Shanghai Composite	SHANGHAI COMPOSIT	2775.72	2320.79	-16.39
OECD					
UK	FTSE Index	FTSE 100	5411.90	4189.60	-22.59
USA	Dow Jones Industrial	DJ Index	11378.02	7850.41	-31.00
France	CAC 40 Index	CAC40	4392.36	2997.86	-31.75
Japan	Nikkei 225 Index	N225	13376.81	7779.40	-41.84

Source: Partly from African Development Bank (2009); updated as follows: UK: <http://uk.finance.yahoo.com/q/hp?s=%5EFTSE> [Accessed 23/03/2009]; Brazil: <http://uk.finance.yahoo.com/q?s=%5EBVSP> [Accessed 23/03/2009]; Russia: <http://www.rts.ru/en/index/rtsi/> [Accessed 23/03/2009]; India: <http://uk.finance.yahoo.com/q?s=%5EBSESN> [Accessed 23/03/2009]; China: <http://uk.finance.yahoo.com/q?s=000001.SS> [Accessed 23/03/2009].

Table 8: Exchange rates for selected African countries
(local currency per US Dollar)

Country	December 2006	December 2008	February 2009	% change (Dec 2008 - Feb 2009)
Botswana	6.03	7.52	7.96	5.89
Ghana	0.92353	1.21	1.34115	10.84
Nigeria	126.5	130.75	145.35	11.17
South Africa	6.9737	9.3035	9.9498	6.95
Tanzania	113.209	128.030	130.246	1.73

Source:

1- Botswana: http://www.bankofbotswana.bw/section_ExchangeRates.php?sectid=495

2- Ghana: <http://www.bog.gov.gh/index1.php?linkid=173>

3- Nigeria: <http://www.cenbank.org/Rates/ExchRateByCurrency.asp>

4- South Africa: <http://www.reservebank.co.za/>

5- Tanzania: <http://www.bot-tz.org/FinancialMarkets/FinancialMarkets.asp#ForeignExchangeMarkets>

Note: All accessed on 30/03/2009

Nevertheless, it is important to qualify our discussion of the magnitude and determinants of capital flows by pointing out that the current global financial crisis is likely to change the magnitude and pattern of these capital flows. This is because the main propagation mechanisms of the contagion effects of the crisis, namely the exchange rate and stock prices have already shown signs of perverse effects. Table 7 and 8 show the impact of the financial crisis on stock prices and the exchange rate, respectively. First, we examine the impact of the financial crisis on selected African capital markets, namely Cote d'Ivoire, Egypt, Kenya, Mauritius, Morocco, Nigeria, South Africa and Tunisia by calculating the change in the value of the respective stock market index between a benchmark period of 31 July 2008 and a cut-off period of 12 February 2009. We then compare the loss in the value of the index within that period for each of the sample African markets, compared to the BRIC capital markets on the one hand, and sample OECD markets for the UK, USA, France and Japan, on the other.

The results reported in Tables 7 and 8 are starting! The loss in the index value for each of the Egyptian market (CASE, -61.08%), the Nigerian market (NSE All Share Index, -55.0), and the Mauritius market (SEMDEX, -42.06), was higher than the loss in any the OECD market of UK, USA, Japan and Finance. Also, loss in index in each of the three African markets exceeded the loss of value in each of the BRIC, with the exception of Russia (-68.26%). These results are at variance with the view that African markets are insulated from the contagion effects of financial crisis because seemingly they are not strongly integrated with world capital markets. On the contrary, the results in Table 6 drive home the message that the main African financial markets, which are relatively liquid compared to the rest in the continent, have been perversely affected by the financial crisis. In a flow of funds framework, the contagion effect may be attributable to the over-valuation of stocks and the outflow of portfolio investments by the household sector and the company sector. As noted in ADB (2009), African investors and Egyptian and Nigerian investors in particular, recorded within six months an average loss of more than half the wealth invested at the end of July 2008, which is higher than the losses recorded on the sample OECD markets in Table 7.

Table 9: International Reserves Excluding Gold for African and BRIC Countries

<i>AFRICA</i>	2000	2001	2002	2003	2004	2005	2006	% change (last 2 years)
Burundi	32.9	17.7	58.8	67	65.8	100.1	130.5	30.37
Kenya	897.7	1064.9	1068	1481.9	1519.3	1798.8	2415.8	34.30
Malawi	243	202.5	161.5	122	128.1	158.9	133.8	-15.80
Mauritius	897.4	835.6	1227.4	1577.3	1605.9	1339.9	1269.6	-5.25
Mozambique	723.2	713.2	802.5	937.5	1131	1053.8	1155.7	9.67
Rwanda	190.6	212.1	243.7	214.7	314.6	405.8	439.7	8.35
Uganda	808	983.4	934	1080.3	1308.1	1344.2	1810.9	34.72
Tanzania	974.2	1156.6	1528.8	2038.4	2295.7	2048.8	2259.4	10.28
Zambia	244.8	183.4	535.1	247.7	337.1	559.8	719.7	28.56
Cameroon	212	331.8	629.7	639.6	829.3	949.4	1716.2	80.77
Algeria	12024	18082	23238	33125	43246	56303	77913.8	38.38
Egypt	13118	12926	13242	13589	14273	20609	24461.5	18.69
Morocco	4823.2	8473.9	10133	13851	16337	16188	20340.7	25.66
Tunisia	1811	1989.2	2290.3	2945.4	3935.7	4436.7	6773.2	52.66
Botswana	6318.2	5897.3	5473.9	5339.8	5661.4	6309.1	7992.4	26.68
Lesotho	417.9	386.5	406.4	460.3	501.5	519.1	658.4	26.83
Namibia	259.8	234.3	323.1	325.2	345.1	312.1	449.6	44.06
South Africa	6082.8	6045.3	5904.2	6495.5	13141	18579	23056.9	24.10
Swaziland	351.8	271.8	275.8	277.5	323.6	243.9	372.5	52.73
Benin	458.1	578.1	615.7	717.9	640	656.8	912.2	38.89
Burkina Faso	243.6	260.5	313.4	752.2	669.1	438.4	554.9	26.57
Gambia	109.4	106	106.9	59.3	83.8	98.3	120.6	22.69
Ghana	232.1	298.2	539.7	1352.8	1626.7	1752.9	2090.3	19.25
Nigeria	9910.9	10457	7331.3	7128.4	16956	28280	42298.8	49.57
Senegal	384	447.3	637.4	1110.9	1386.4	1191	1334.2	12.02
Sierra Leone	49.2	51.3	84.7	66.6	125.1	170.5	183.9	7.86
Togo	152.3	126.4	205.1	204.9	359.7	194.6	374.5	92.45
<i>BRIC (except Russia)</i>								
Brazil	32434	35563	37462	48847	52462	53245	85156.1	59.93
China	168277	215605	291128	408151	614500	821514	1068493	30.06
India	37902	45871	67666	98938	126593	131924	170737	29.42

Source: UNCTAD (2008)

<http://stats.unctad.org/Handbook/TableViewer/tableView.aspx?ReportId=1925> [Accessed 31/03/2009]

The bond market in some Africa countries was also affected by the crisis because of the adverse changes in the spreads in the bond markets. For example, although Tunisia is the only market with positive value in Table 4, it felt the brunt of the crisis in its attempt to issue bonds on the international financial markets, where it was faced with debt spreads estimated at between 45 and 50 basis points, such that it had to increase its offer by 25 basis points to attract entice investors (ADB, 2009).

Table 10: Examples of Capital Account Liberalization Challenges and Policy responses

Country and Exchange rate System	Impact of inflows/Policy Challenges	Policy Responses/Recommendations
Cameroon Hard Peg	<p>Oil Export receipts dominate private debt inflows</p> <p>Inflows have helped build international reserves, but have little impact on money growth and inflation</p> <p>The REER appreciated in line with the euro</p> <p>With low and stagnant private sector credit and high excess liquidity, challenge is to improve financial intermediation</p>	<p>Responsibility for monetary policy rests with regional central bank</p> <p>Recommendations:</p> <ul style="list-style-type: none"> - maintain fiscal sustainability - strengthen the financial sector - improve the business environment, including the legal framework and the judicial system
Nigeria Managed float Reserve money target	<p>Oil export receipts dominate inflows, though FDI and particularly portfolio flows are becoming more important</p> <p>The interbank foreign exchange market is deeper and has become the primary measure of exchange rate developments. Forward foreign exchange contracts are now offered</p> <p>Interest rates on government paper have been reduced</p> <p>Bank capital increases prompted inflows</p> <p>The REER has appreciated</p> <p>Capacity to monitor private capital inflows is limited</p>	<p>The authorities should maintain a prudent fiscal stance to avoid additional domestic demand pressure</p> <p>The Exchange rate has become more flexible, and short-term movements in the naira rate should ensure that investors perceive two-sided exchange rate risk</p> <p>The country is in transition to an inflation targeting regime</p> <p>Strengthening banking supervision and monitoring of flows is recommended</p>
Uganda Managed float Reserve money target	<p>Surge in inflows since 2004 has been causing appreciation pressures</p> <p>Policy trilemma with constraints on how much fiscal contraction can be implemented : if inflows persist, tensions between open capital account, monetary policy independence, and a competitive exchange rate will be heightened</p>	<p>Response was a mix of sterilized intervention, increase in base money and nominal appreciation</p> <p>Sterilized intervention was the first line of defence, but was incomplete leading to a large increase in base money</p> <p>Some appreciation was allowed, but concerns about high sterilization costs and export competitiveness prompted, for a short period, unsterilized intervention. This caused a temporary but large increase in reserve money</p>
Zambia Managed float Reserve money target	<p>Inflows have complicated the conduct of monetary and exchange rate policy. Their onset coincided with a surge in copper prices that led to a large initial appreciation, in the absence of sterilization</p> <p>Temporary reversals in inflows, associated first with the uncertainty before the 2006 elections and then with the subprime crisis in August 2007 caused by a sharp depreciation</p> <p>Challenges arise from the cost of sterilization, the limited availability of monetary policy instruments, and the difficulty of selling foreign exchange when the currency is appreciating</p> <p>In spite of good capital flows data, the authorities have difficulty forecasting the government's cash flow</p>	<p>Policy response after large appreciation has been to intensify sterilization operations (to meet reserve money target), but is costly</p> <p>Monetary policy helped by</p> <ul style="list-style-type: none"> - underexecution of the budget in 2007 - transfer of government funds in commercial banks to the Bank of Zambia - steps to increase monetary policy instruments, though liquidity management remains a problem - an active interbank market to manage liquidity should be developed

Source: Adapted from IMF (2009) Table A3.3, pages 72-73

Moreover, according to ADB (2009), the financial crisis amplified the increase in the margin applied to loans in the international financial markets. For Africa and other emerging economies, sovereign debt spreads rose by an average of 250 basis points, while the spread of the JPMorgan emerging countries equity index increased by 800 basis points in October 2008. At the height of bank rescues in the UK and US, the spreads increased by 100 basis points for Egypt and rapidly increased to above 200 basis points for Tunisia, subsequently forcing Kenya, Uganda and Tanzania to postpone plans for selling bonds on the international financial markets.

These perverse effects of the financial crisis on Africa's financial system have grave implications for FDI and short term capital flows. For example, in the short term, FDI into Africa is expected to fall during 2009 and early 2010, which will further increase Africa's financial marginalization and undermine growth in foreign capital dependent sectors such as natural resources. In addition, remittances, which feed directly into rural credit markets, have fallen since 2007.

Some countries may be able to mitigate the impact of the crisis because of their reserve position. Table 9 reports the magnitude of international reserves excluding gold for selected African and BRIC economies. The argument is that the global financial crisis has not induced a sudden reversal of private capital inflows immediately because most African countries have enjoyed strong and stable position of international reserves since 2000.

4.3 Capital account liberalisation challenges and policy responses

Table 10 reports some examples of capital account liberalisation in African countries and the policy responses. It is shown that while the policy challenges associated with private capital inflows have been similar across countries, the policy responses have varied depending on the institutional factors as well as the monetary and exchange rate regime. The table identifies the challenges and policy responses associated with four regimes: countries with a hard peg, such as Cameroon; countries with a managed float and reserve money target, although Nigeria, Uganda and Zambia may be moving towards an inflation target.

It is shown that in the first category of countries with hard pegs, capital inflows did not have a substantial impact on inflation or the real exchange rate. For example, domestic structural weaknesses in the credit market have been such that domestic credit growth has not responded and excess liquidity has increased. For the second category, namely managed float, the key policy challenge has been to contain inflation without rapid depreciation of the exchange rate. The policy response has been to allow more flexibility in their monetary or exchange rate targets. In some cases, the foreign purchases of government securities have helped finance the current account deficit; for example, Ghana.

African countries should redesign their capital account liberalisation regimes, alongside their institutional and financial sector policies in order to tilt the composition of inflows toward longer-term flows. Good examples are Tanzania, Uganda, and Zambia, which have been able to lengthen the maturities held by foreign investors by issuing longer-term instruments, facilitated by financial sector reforms and the ability to maintain a credible, stable macroeconomic and political environment. It is important to lengthen the term structure of investments to help reduce both rollover risks and maturity mismatches in the financial sector, because longer-term bonds better match the liability structure of domestic institutional

investors. In addition, the long terms view of instruments is a better risk management strategy than short-term instruments in the face of a financial crisis because of the probability of huge capital outflows in the case of short term investments. We consider the lessons and policy agenda in the concluding section below.

5. Conclusion: Lessons and Policy Agenda for Africa

In the post-crisis era, the trend toward closer integration of Africa into global financial markets is likely to continue. African governments must prepare their economies to compete effectively and enhance capital inflows. This will require not only capital account liberalisation but also institutional and policy reforms. The macroeconomic policy framework and its credibility are important for managing risks from rapid capital inflows and possible reversals. Transparent capital account policies, and financial sector reforms will be needed to ensure that the inflows go to productive uses while avoiding macroeconomic instability. Improving the capacity to monitor the inflows is critical: the authorities need accurate and timely data on the size, composition, and maturity of the inflows to design an appropriate policy response.

Monetary and exchange rate policy responses should reflect the nature of capital inflows and the authorities' policy objectives. Large inflows could lead to macroeconomic instability, higher inflation, and disruptive exchange rate movements, and therefore need to be managed carefully. Sterilized interventions could help preserve exchange rate and monetary stability in the short term while allowing the build-up of official reserves in order to ensure against possible sudden reversals. Persistent inflows would thus require the adoption of more flexible monetary and exchange rate policy frameworks. Some of the more mature African countries are transitioning toward inflation-targeting-like regimes. Countercyclical fiscal policy can help mitigate the real appreciation pressures associated with the inflows. Keeping fiscal expenditures steady during episodes of large capital inflows has also been shown to foster better growth outcomes in the aftermath of these episodes.

In terms of capital account policies, in the short term, countries should focus on implementing coherent, transparent, and even handed capital account policies. As shown earlier in Tables 2 and 3, capital accounts across Africa remain fairly closed (*de jure*) compared with other regions, and exchange controls are complex and difficult to implement. This results in poor information and creates scope for corruption and mismanagement. Existing capital account regulations should be carefully reviewed to enhance transparency, and inconsistencies and inefficiencies between regulations should be eliminated.

Further on capital account liberalisation, in the medium term, a gradual and well-sequenced liberalization strategy would help countries reap the benefits of capital market access while limiting the associated risks. In parallel with the progressive liberalization of capital flows, starting with more stable and long-term flows, countries need to implement supportive institutional and regulatory reforms that will strengthen their capacity to manage capital inflows and the associated vulnerabilities. The timing of the liberalization process should depend on the extent of financial market development and institutions in each country.

Controls on capital inflows may at times play a useful role in giving policymakers additional room for maneuver, but this space is very limited in practice. The international experience is that such measures have at best a short-term effect on the composition of capital flows (see, for example, Magud and Reinhart, 2007). Reimposing capital controls in the face of a surge in inflows is not an appropriate

management tool, for these reasons and because rapid regulatory changes can contribute to the disarray that well-implemented and sequenced.

However, the post-crisis era may also be characterised by capital flight as agents shift their funds globally due to political risk, or weak macroeconomic environment; see, for example, Lensink, Hermes and Murinde (2000). Alternatively, when investors perceive that the fears of the crisis are over, there is likely to be a sudden increase in capital flows to emerging economies including Africa. In response to sudden capital inflow surges, the authorities could even consider accelerating the pace of liberalization to better manage capital flows and support other policy responses (e.g. exchange rate and monetary policies). If inflows are occurring in spite of capital controls, removing the controls can improve monitoring. Selective liberalization of capital outflows could also ease inflation and appreciation pressures, provided that foreign reserves are at a comfortable level. However, the impact of outflow liberalization in Africa deserves further study: African policymakers have been mostly concerned by capital flight, but in emerging economies there is some evidence that outflows liberalization has attracted further inflows (IMF, 2008).

In addition, financial sector and other structural policies are crucial. Better financial sector supervision and regulation are critical to efficient intermediation of the inflows and reduced vulnerabilities to sudden reversals. This is particularly important for African countries, where institutions tend to be weak and financial sectors shallow. Strengthened financial sector supervision and regulations and improved risk management capabilities of banks could help prevent the buildup of balance sheet vulnerabilities.

In some aspects, a regional strategy is desirable; for example, regional efforts and co-ordination to strengthen existing capital markets in order to attract capital inflows. The idea is to address the lack of functional capital markets which offer a range of financial instruments for investors. For example, only 20 African countries (less than 50%) have established equity markets, and of these, only 9 markets have more than 20 listings. Besides the small size of the overall market, the small volume of issues in the primary markets limits entry. The modest capitalization of listed equities also limits the foreign funds that can come in through equity markets. As for government securities, about 30 African countries issue or have issued treasury bills and 20 issue bonds. However, bond markets for the most part consist of only a handful of small issues, and there are no Nigeria attracted substantial inflows into its banks after the consolidation and meaningful secondary markets. Thirteen African countries have issues of corporate bonds, often stocks of foreign banks, but there are no real markets and there is no secondary trading.

Increased government borrowing in foreign and domestic currency associated with private capital flows could affect medium-term debt sustainability. The access to private capital is a welcome sign of success and increases the scope for public investment. But it needs to be carefully monitored, and the risks associated with the costs and structure of such instruments (e.g. bullet payments on international sovereign bonds) should be fully analyzed within the framework of medium-term debt management strategies. Moreover, government debt issuance strategies could support the development of the domestic yield curve and help broaden the local investor base. Governments should aim at a progressive lengthening of maturities on domestic debt instruments, at reasonable cost. This would attract institutional fund managers, provide higher-yielding savings options to the residents (bank deposits in Africa often yield negative interest rates after adjusting for inflation), and allow pension funds and insurance companies to better match the maturity of their assets and liabilities. A

broad local investor interest would also lower market volatility and the risk of sudden reversal of capital inflows. In the long run, capital inflows can leverage domestic institutional improvements. The benefits they bring depend on strengthened governance, better infrastructure, and human capital.

To further pursue the ideas in this paper, future research is required to map out a matrix type of study that uses the flow of funds framework to identify the financing gap for each African economy in order to map out the relationship among the component of capital flows (FDI, debt, aid and remittances) against each type of economy (resource-rich, non-oil exporting, other) and the pull factors that maximise financing for the economy. This type of research should be of interest to national governments, regional bodies and regional development banks (such as the African Development Bank).

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