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Martina Metzger and Günther Taube

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THE RISE OF EMERGING MARKETS' FINANCIAL MARKET ARCHITECTURE: CONSTITUTING NEW ROLES IN THE GLOBAL FINANCIAL GOVERNANCE

Martina Metzger and Günther Taube[1]

ABSTRACT

This paper analyses the impact of the global financial crisis on Brazil, India and South Africa whose financial markets have shown strong resilience to the global financial turmoil. The paper shows, that in contrast to advanced countries in these emerging market economies there is contagion from the real sector through a slump in exports and a decline in industrial production. Although exposure to toxic assets has been very low, financial markets of the economies under consideration have come under pressure in the second half of 2008 resulting in steep stock market corrections, and a strong volatility of prices, in particular exchange rates. However, there was no bail-out of financial institutions and in 2009 financial markets of these countries strongly recovered. The paper identifies a combination of a reduction of foreign debt exposure, a macro-prudential approach in supervision and rule-based approach in regulation complemented by a variety of country-specific rules applied by these countries already before the crisis together with non-orthodox monetary and fiscal policy during the crisis as the main features of their success. The paper concludes that this achievement has already changed policy coordination between advanced countries and emerging markets and will continue to do so both in terms of voice and content.

JEL classification: E63, F55, G01, G18

Keywords: emerging markets, financial sector resilience, art of supervision, foreign debt, global financial governance

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1. INTRODUCTION

Financial sector related crises are not novel occurrences in advanced countries and emerging market economies. In fact they date back to the beginnings of financial systems themselves and seem so intimately bound up with them that they can seem part and parcel of such systems, a vital ingredient like the evil-doer in the fairy-tale. This time, however, it seems to be different in terms of magnitude and coverage as not only a single financial institution defaulted or not only an individual country was affected, but it involved almost all advanced countries. Many advanced countries' financial sector was at risk to collapse requiring unprecedented monetary and fiscal intervention by policy authorities to stabilize it. Advanced countries financial sectors piled up systemic risk comprising almost all financial institutions; the high cross-border exposure between the financial institutions resulted in a core meltdown when the bubble burst in 2008. The course of the current crisis displayed widespread flaws in regulation and supervisory failure. Meanwhile there is a consensus that financial market architecture both domestically and globally has to be revisited and many debates and reform initiatives, notably by the G20 and the Basel Committee on Banking Supervision, have been started. Against this backdrop we discuss the financial market architecture of those countries which were least affected and whose financial sector proved to be robust.

We shall start by briefly reviewing the debt crisis of the 1980s and the currency crises of the 1990s. Thereby we focus on the two major factors which triggered these past crises episodes. This will be followed by an analysis of how the global financial crisis affected selected emerging market economies. The countries under consideration here are Brazil, India and South Africa as the financial sector of these three countries showed a remarkable resilience to the global financial turmoil. Nonetheless the global financial crisis impacted the real economy of these countries via the financial sector and trade sector as main transmission channels which will be at centre stage of the third section. As a second aspect of this section we will discuss how monetary and fiscal authorities responded to address the vulnerabilities and to mitigate the most severe impacts. Our paper does not, however, claim to give a comprehensive overview on the course of this period of stress in Brazil, India and South Africa nor will it present an in depth examination of the various instruments and measures applied by these countries. It is rather selective in offering an intersection of the most severe effects and the policy initiatives to successfully cushion them. The fourth section examines special features of the domestic financial market architecture of the three countries including

their macroeconomic approach in supervision, prudential regulations and country-specific rules. We will argue that the art of supervision developed and applied by Brazil, India and South Africa already before the outbreak of the global financial crisis explains both the high resilience of their financial sectors and the policy scope to initiate counter-cyclical measures to moderate repercussions. Finally, the paper elaborates on the implications of the success in terms of macroeconomic and financial stability by emerging markets for the current and upcoming debate on a globally co-ordinated financial regulation and global policy coordination.

2. DEVELOPING COUNTRIES, EMERGING MARKET ECONOMIES AND PAST CRISES

While the 1980s are characterised by the debt crisis of developing countries provoked by the announcement of default by then Latin America's biggest debtor Mexico in late summer 1982, the 1990s were shaped by frequent so-called currency crises with strong devaluations of (mainly fixed) exchange rates by emerging market economies. The latter group includes Mexico (1994), South-East Asian countries (1997), Russia (1998), Brazil (1999) and Argentina (2001). Despite all differences in the appearance and run of the two modes of crises, underlying development strategies were based on a build-up of foreign debt which was used to finance the growth process (Metzger 2001).

Foreign debt or in other words debt denominated in foreign currency entails the risk of balance sheet effects; balance sheet effects arise as results of changes in the exchange rate or in international interest rates when loans or bonds are denominated in a foreign currency. A depreciation of the domestic currency implies a revaluation of external liabilities measured in domestic currency and increases the cost of servicing and repayment of the foreign debt by domestic borrowers. A similar argumentation applies to short-term loans or bonds with floating interest rates; even in the case when the affected exchange rates are stable, an interest rate increase constitutes a real appreciation of the debt service. Moreover, if interest rates will increase on a global level, the opportunities for a roll-over of bonds and loans will also deteriorate.

Balance sheet effects were a major factor which exposed developing countries and emerging market economies most to hazard with regard to macroeconomic stability and development as

they put domestic borrowers with foreign debt under severe pressure in case of exchange rate devaluations. The ‘fear of floating' (Calvo and Reinhart 2002) has inclined many developing countries and emerging market economies to seek a unilateral nominal peg to an international key currency (or a basket of major currencies) with all the devastating consequences of overvaluation, e.g. current account deficits, increasing maturity and currency mismatches.

A new phenomenon which has emerged in the 1990s was financial globalization. Widespread liberalization of capital accounts and financial innovation resulted in a strong rise of private portfolio flows which are short-term in nature in contrast to the predominant bank loans in the 1980s. Private capital flows are generally pro-cyclical and volatile; however portfolio flows are the least stable flow of funds in comparison with bank loans and foreign direct investment. Emerging market economies which were considered target locations by international investors were prone to sudden stops and U-turns of capital flows resulting in amplified boom-bust-cycles with detrimental effects on sustained growth and development. Volatility of international capital flows is rarely limited to a single country; herding behaviour by international investors can easily infect other countries thereby disseminating macroeconomic and financial instability even if countries have good economic fundamentals. In comparison with net creditor countries net debtor economies are in a weaker position to cope with these instabilities; in the course of exchange rate depreciations net creditor countries gain competitiveness and thereby improve their current account and growth prospects; in contrast net debtor countries put their financial system and corporate sector at risk of bankruptcy due to their foreign indebtedness and the balance sheet effects derived from a depreciation of their currency.

At the turn to the new millennium a rising disillusion settled in emerging market economies' perception of capital flows as a stable source of funding for their growth process. “While, in principle, capital account liberalisation is expected to benefit the host economy and raise its growth rate, this theoretical conjecture is not supported by the accumulated empirical evidence. Despite an abundance of cross-section, panel, and event studies, there is strikingly little convincing documentation of direct positive impacts of financial opening on the economic welfare levels or growth rates of developing countries. There is also little systematic evidence that financial opening raises welfare indirectly by promoting collateral reforms of economic institutions or policies. At the same time, opening the financial account does appear to raise the frequency and severity of economic crises” (Mohan 2009: 8).

Volatile capital flows and balance sheet effects of debt denominated in foreign currency strongly limited emerging markets room for manoeuvre and in some cases enforced harsh financial and economic adjustments. Hence, after two decades of crises experience emerging market economies switched to a policy which comprises the reduction of foreign debt exposure and the accumulation of foreign exchange reserves (Hausmann and Panizza 2010). Though systemic instabilities would not be abolished by such a policy stance, emerging market economies were convinced that it could diminish vulnerabilities to external shocks, dampen repercussions on individual countries and re-store policy space. The global financial crisis marks the first earnest testing of this new policy.

3. Impacts of the global financial crisis on Brazil, India and South Africa

In the first half of 2008 several emerging market economies perceived that they would be able to decouple from the downward trend prevailing in advanced countries – one reason being the steady and rising inflow of private capital flows since the turn of the millennium. Commercial banks and institutional investors driven by a big appetite for risk and a low level of nominal interest rates in advanced countries had increasingly purchased financial instruments in emerging market economies. "Foreign investors snapped up emerging market bonds and equities, pushing indicators of valuations towards and in some cases beyond the upper end of their historical range" (BIS 2006: 1). Central Banks in many recipient countries managed to sterilize those inflows and seized the opportunity to increase their foreign exchange reserves.

During the second half of 2008, latest with the Lehman Brothers default, however, emerging market economies were increasingly affected. First round effects or direct impacts of the financial meltdown in advanced countries on emerging market economies in general and Brazil, India and South Africa in particular were low as exposure of their domestic financial institutions to toxic assets had been small (InWEnt 2009, 2010). In addition, the share of foreign banks with majority ownership in the domestic financial system is negligible in India and South Africa, while in Brazil it is still low compared with more affected emerging market economies and transition countries; hence, direct spill-over from banking headquarters in advanced countries to host countries was limited. However, there had been considerable second-round effects via the financial sector and more importantly the trade sector as main transmission channels.

3.1. FINANCIAL TRANSMISSION CHANNEL

With increasing liquidity requirements in their home countries and a higher risk perception international investors were pulling out capital from emerging markets; this turnaround of capital flows resulted in a jump of spreads between emerging market bonds and advanced country bonds as well as a high volatility of both exchange rates and share prices of emerging markets. Brazil, India and South Africa experienced a deep fall in portfolio investment liabilities vis-à-vis international investors between 38 per cent for South Africa and 45 per cent for the other two countries (figure 1). With the drying-up of private debt and equity flows exchange rates of Brazil, India and South Africa came under pressure and depreciated sharply (figure 2 and 3).

Stock market corrections were even more severe; share prices collapsed in the range of 40 per cent in South Africa to 64 per cent in the case of India (figure 4). In addition to international actors domestic institutional investors in the three countries also reduced their holdings of domestic stocks in order to limit their losses and make liquidity available; thus, after the drop in share prices primarily initiated by international actors, domestic institutional investors accelerated the downward trend.

While Brazil and South Africa were affected only from the second half in 2008, for India both share price and exchange rate devaluations already began at the beginning of 2008 (figure 3 and 4). At that time India was confronted with deteriorating terms of trade due to rising food and oil prices which negatively affected macroeconomic balances and let the inflation rate rise. Hence, exchange rates and share prices started to ease even before the global financial crisis hit India. Similarly, foreign exchange reserves of India began already to dwindle in the second quarter of 2008, though the major drawdown on reserves was effected only in the following quarters (figure 5).

Latest from the third quarter of 2008 the issuance of shares or bonds in the domestic markets was no option anymore for companies in emerging market economies to raise finance. Exporting companies which were depended on short-term trade finance were increasingly cut off from opportunities to roll-over their foreign denominated liabilities. Therefore, companies seeking finance turned progressively to domestic banks in demand for credit.

On the other hand, banks in emerging market economies became more cautious in creating or even extending credit to companies although their balance sheets were not directly negatively affected by the crisis. There was a high uncertainty of how strong the financial crisis in advanced countries would affect global growth and hence how domestic companies and exports would perform in the near future. Business confidence was falling and banks' expectation regarding domestic growth and credit impairment deteriorated resulting in tightening credit conditions. Thus, many companies were confronted with a situation in which they were demanding domestic credit while domestic credit supply was generally reduced and more expensive.

"The sharp phase of the crisis generated a credit crunch and this was the main issue in Brazil. (…) Especially for small and middle sized institutions the credit crunch represented a great challenge." (Tesouro Nacional 2009: 1-2). India also reported a "credit squeeze" (RBI 2009: 257) in particular for medium and small sized companies while banks experienced a "liquidity crunch" (RBI 2010a: 219). Although a liquidity or credit squeeze was not stated by the South African Reserve Bank, the rate of bank credit declined steadily and significantly since the third quarter of 2008 resulting in a contraction of bank credit to the corporate sector and record low levels of credit granted to the household sector (SARB 2009a).

Despite reported differences in the magnitude and severity of the financial transmission channel, policy responses by monetary authorities of the three countries were similar. In a first step central banks increased liquidity by cutting policy rates to a degree of 4 to 5 percentage points over the period 2008 to 2009 (figure 6). Though inflation was above the target range, South Africa reduced its interest rates even more than Brazil or India. Nonetheless, it was argued that these reductions were not induced by liquidity concerns. "It was also not to assist the banking sector or to react to the global financial crisis. South Africa's banking sector and financial markets continued to operate effectively during the crisis to date" (Brink 2009: 43).

In a second step central banks reduced reserve requirements and compulsory deposits to provide additional liquidity to credit institutions. India also used unconventional measures, e.g. government securities were bought back and a special interest rate was introduced to deal with mutual funds and non-bank financial institutions (RBI 2010a). On the other hand, Brazil

established several credit lines in both domestic and foreign currency to prevent shortages in particular by small-sized financial institutions (Tesouro Nacional 2009).

A third measure covered companies and banks which were affected by the restricted access to international and domestic finance. The central bank of Brazil offered foreign exchange to companies with exporting operations in form of export credit and foreign exchange swaps, while the Brazilian government provided special credit facilities via its major development bank BNDES, increased the credit supply by two main public commercial banks and conceded interest subsidies to companies (Barbosa 2009). India extended previously existing interest subsidies for several selected sectors with high employment and export potential and made special financial resources available to its development bank SIDBI in particular to be allocated to micro and small enterprises (MoF India 2009, 2010).

3.2. Real transmission channel

Besides the financial sector the trade sector operated as another main transmission channel of the global financial crisis to the real sector of emerging market economies. After years of sustained real growth between 4 and 6 per cent in Brazil and South Africa and between 6 and 10 per cent in India, these countries were confronted with a slow-down or in the case of India even a sharp decline of exports. Reduction of global demand was directly translated in a decline in industrial production. Due to the opening up of their trade sector during the last two decades and technological upgrading of exports, the manufacturing sector in all of the three countries is meanwhile highly correlated with world demand and business cycles are strongly synchronized; though counter-intuitive this is particularly true for India, which is considered to be the least open of the three countries and disposes over the biggest domestic market of the three countries (RBI 2010a).

The manufacturing sector followed by construction (and mining for South Africa) reported the largest negative contribution to domestic growth with considerable impact on employment (RBI 2010a, NEDLAC 2000). Hence, private investment in the three countries was negatively affected by deteriorating credit conditions and global demand in first instance and subsequently by a deceleration of private consumption which additionally depressed domestic

demand. These second-round and third-round effects of the global financial crisis resulted in a sharp slump of real growth (figure 7).

Thus, additional to the monetary policy measures fiscal policy in the three countries initiated a forth package of measures with discretionary counter-cyclical instruments to dampen negative impacts of the global crisis on domestic growth and employment. The Brazilian government decided to cut indirect taxes in particular for durable consumer goods, e.g. cars or electronic household goods as well as to reduce personal income tax progression for middle income households; in addition, it initiated new housing programmes for poor and middle income families and conceded an expansion in unemployment insurance. Moreover, both minimum wages and civil servant wages were increased. Finally, the central government provided additional budget transfers to state and local governments (Barbosa 2009). India adopted three fiscal stimulus packages targeted to promote companies with measures like cuts of the central excise duty and extension of guarantee schemes for companies (MoF India 2009). However, the infrastructure programme with the explicit objective to increase expenditures on public projects to create employment and public assets was the major part of the Indian stimulus measure (MoF India 2009); the Indian government conceded extra funding together with the authorization of issuing tax-free bonds to the main infrastructure vehicle, the India Infrastructure Finance Company.

Although neither the South African Reserve Bank nor the government of South Africa used the notion of a fiscal stimulus package, a comprehensive Framework Agreement on the Global Economic Crisis together with an International Economic Crisis Action Plan was adopted by social partners (NEDLAC 2009). The Framework identified six key areas on which South African efforts should be focused to respond to the global crisis and its impacts on South Africa, e.g. employment and social measures as well as public infrastructure programmes besides macroeconomic policy measures and global coordination. Employment and social measures for example consisted of an extended public work programme and capacity building for unemployed. Again, infrastructure programmes which increased spending on education and health as well as investment expenses by public corporations account for the major part of the fiscal response (National Treasury 2009, 2010). "To a large extent our public infrastructure programme provided an essential stimulus to the economy during the recession. Not only has the spending boosted economic activity, it also represents an investment in the future growth of our economy" (National Treasury 2010:4).

There is no statistically firm data on the concrete extend of the fiscal stimulus packages. IMF estimates show relatively low discretionary measures for Brazil and India of an amount of 1.2 per cent of GDP each during the years 2009 and 2010, while South Africa is reported to have a discretionary stimulus of 5.1 per cent of GDP in these two years (IMF 2009: 15). These figures do neither include automatic stabilizers nor off-balance sheets nor do they clearly differentiate between pre-crisis and during-crisis measures.

The difference between measures planned before the crisis and measures initiated only during the crisis is somehow blurred, as both India and South Africa in many cases extended infrastructure programmes already existing before the crisis; India's current five-year plan is targeted towards faster and inclusive growth, while South Africa was busily preparing the football world championship. In addition, India settled considerable discretionary fiscal measures in off-balance sheets. Moreover, according to own information, the Brazilian Ministry of Finance calculated the discretionary stimulus with temporary and structural measures during the crisis alone with 3.1 per cent of GDP until September 2009 (Barbosa 2009). What can be stated is that one part of the stimulus packages is only temporary in nature with a sunset clause or arranged as once and for all measures, while in particular the infrastructure programmes have a longer time horizon and will persist even after the crisis.

In sum, the financial sector in Brazil, India and South Africa turned out to be robust besides a short period of volatility. There was only minimal investment in complex instruments and marginal exposure to risky financial products – marginal to such an extent that it was not necessary by regulatory authorities to fall back on counter-actions. Therefore, none of the countries had to adopt banking rescue packages and bail-out financial institutions like most advanced countries. The real economy had to bear the major burden; in the wake of declining exports production, investment and employment fell and real growth was depressed; all three countries slipped into a recession with economic contraction over several quarters.

Monetary and fiscal policy in the three countries responded to the crisis promptly and comprehensively. In contrast to previous crises, this time central banks and governments disposed over multiple instruments, including non-conventional monetary measures and counter-cyclical fiscal measures, and, more importantly, over the scope to use these instruments.

There was a sizable monetary accommodation to cushion liquidity shortages and credit crunches in order to stabilize the domestic financial sector. The fiscal stimulus packages focused on stabilizing the level of domestic demand. Governments provided finance to mitigate the most severe impacts on vulnerable groups, in particular poor and low-income households as well as small-and-medium-sized enterprises. On the other hand, the governments of India and South Africa extended pre-crisis infrastructure programmes and initiated new ones in order to strengthen their economies' potential to grow and at best to increase the economic inclusiveness. Although outlook is friendly in all of the three countries at the moment, the current level of economic activity is still on a pre-crisis level; in addition, domestic private investment has not picked up yet. There are concerns that the cautious recovery might be stalled in an early stage and growth might be lastingly subdued, in particular if demand by advanced countries will not improve.

4. Features explaining the financial sector resilience of Brazil, India and South Africa

The capacity to manage a crisis mainly depends on what policy has realized during good times, e.g. the creation of sound financial institutions, the improvement of regulatory and institutional capacities, the deepening and broadening of domestic financial markets and the design of an adequate monetary and fiscal framework which allows the involved institutions to work out a consistent response to a crisis in a coordinated way. Still, the low impact of the financial meltdown in advanced countries on the financial sector of Brazil, India and South Africa raises the question whether and to what extent specific characteristics and features of their financial market architecture and their regulatory approach can explain the high resilience. In the following sections four factors will be presented which stand out and might claim to have insulated the financial sector of emerging market economies from the worst woes of the global financial crisis.

4.1 Crisis heritage

Each of the three countries experienced a financial sector nemesis in the past and this experience decisively determined speed and extent of financial sector reforms and financial

sector regulation in the three countries. Although they were subject to different modes of crises (boxes 1 to 3) economic, financial and social costs of resolving them were high. These past crises were partly caused by domestic politics; hence, each of the three countries embarked on a policy stance to improve their macroeconomic fundamentals. However, good macroeconomic fundamentals might not be sufficient to protect countries from adverse effects as was impressively shown during the East Asian crisis. With rising openness and integration of domestic financial markets into the global economy the risk of spill-over and contagion from shocks is also increasing. Accordingly, Brazil, India and South Africa applied a gradual approach to capital account liberalization. In addition, they initiated financial market reforms in order to enhance the capacity of the domestic financial system to cope with capital flows and to increase the soundness of their financial institutions, in particular the banking system, which had been heavily affected by the past crises. "A key consideration in the choice of pace and sequencing has been the management of volatility in financial markets and implications for the conduct of monetary operations." (Mohan 2007: 21).

As basis of their supervisory practice the three countries adopted regulations recommended by international standard setters, e.g. the core principles of bank supervision, concepts of risk management and control systems. In addition, they consider other countries experience – either successful or failed - for the design of their regulatory framework. "(…) we believe that what is new in a market is not necessarily new in other markets. Therefore when we think that a new financial instrument needs to be introduced in our market, we try to verify if this particular instrument has been regulated in any other market (Gomes 2009: 3). This applies particularly to the approval of more sophisticated financial products which entail higher risk and are less transparent in nature; the more sophisticated financial products are and the more actors participate in financial market activities the easier might risk be spread throughout institutions and spill-over to the real sector. Thus, Brazil, India and South Africa have only gradually introduced innovative financial products and thereby they also benefited from other countries' experience. "An advantage for emerging-market countries in pursuing financial innovation and adopting synthetic or structured financial products is that they can learn from the mistakes of others and in that way shorten the learning curve (Mminele 2008: 6).

One key problem of the past crises had been the high foreign indebtedness and the thereof derived currency and maturity mismatches; thus, Brazil, India and South Africa reduced their outstanding foreign debt to levels of 16 to 19 per cent of gross national income (table 1). The

ratios of short-term external debt are particularly comfortable for Brazil and India (table 2 and 3), although India displays a strong increase of short-term maturities in recent years with which it financed its rising oil and food bill. From the turn of the millennium the countries also succeeded to increase their foreign exchange reserves supported by a favourable world economic environment. At the start of the global financial crisis India could have still repaid its total external debt simply by using its foreign exchange reserves; Brazil's and South Africa's reserves covered nonetheless 80 per cent of its total external debt (figure 8). Joining South Africa, Brazil became a net creditor country in 2008, an "unprecedented fact in our economic history" (BCdB 2008: 3) which was highly appreciated by Brazil's central bank. At large, the encouraging improvement of the foreign debt position provided Brazil, India and South Africa with the necessary policy scope to respond to the global financial crisis without delay and effectively and has helped to mitigate its impact. "Thus, it is important to highlight that the risk management decision of the government to increase international reserves and to reduce short foreign exchange rate exposure from 2004 to 2008 made it possible for the Central Bank of Brazil to manage the financial turmoil of 2008 without a dramatic increase in the interest rate" (Silva 2010: 11).

BOX 1 BRAZIL'S CRISIS HERITAGE

Brazil was plagued with high inflation throughout the 1980s. Since 1981 average annual inflation rate had been three-digit, while end of decade rates hit four-digit numbers with peak monthly inflation rates of 80 per cent. A comprehensive indexation of all sorts of contracts, including public bonds, tax liabilities or wages, was both cause and consequence of a dynamic inflation process which perpetuated inflationary expectations and resulted in inflation inertia. Economic consequences of such an inflation process were the dominance of short-term maturities of contracts in particular in the financial sector, the decline of real activities and the deprivation of the monetary authority's scope of intervention. Since mid-80s several Brazilian governments undertook so-called stabilization plans (Cruzado, Bresser, Verao, Collor I and II) in order to break inflation inertia; all these plans failed and Brazil suffered notorious stop-and-go phases with high real interest rates, high inflation rates and depressed real growth. Only with the Plan Real in 1994 indexation could be broken up by using the exchange rate as a nominal anchor and inflation subsequently declined to US levels. However, the domestic banking system had to be restructured and several financial sector institutions to be recapitalized to prevent a collapse of the financial system (BCdB 1995). Because of the overvaluation of the exchange rate Brazil's current account switched into high deficits and Brazil became increasingly depended on net capital inflows and thus enhanced its external vulnerability. Struck by the spill-over from the East Asian crisis in 1997/1998 Brazil had to raise its policy rates to unprecedented levels of about 40 per cent and more in real terms to dampen portfolio switches. In addition, Brazil had to fall back on international financial credit lines mainly from the IMF to shore up its nominal anchor; despite all these endeavours, in 1999 Brazil had to announce the floating of the real after private net capital outflows caused a dramatic shrinking of foreign exchange reserves.

4.2 MACRO-PRUDENTIAL APPROACH

The macro-prudential approach which is applied by the central banks of Brazil, India and South Africa is another distinguishing mark of their financial architecture. As their experience has shown that financial sector related crises are an important feature of market economies, their central bank policy takes into account financial stability considerations – a task which many central banks in advanced countries rejected due to a perceived conflict of interest with the objective of price stability. Although Brazil (since 1999) and South Africa (since 2000) follow an inflation targeting framework, their central banks regard the promotion of financial market stability by any means consistent with price stability. "The global financial crisis has shown that central banks have a vested interest in financial stability, and that the financial stability objective is a necessary corollary to the price stability objective. Else, monetary policy execution can be too easily thwarted by financial system disturbances. Whether responsible for supervision of banks or not, central banks need to expand their mandates and resources to assess and foster broader financial stability" (Bezuidenhout 2009: 6-7).

A macro-prudential approach implies that simple compliance with rules and regulations by financial market institutions does not necessarily prevent financial instability. Single institutions might even be sound, however due to the interconnectedness and the inherent pro-cyclicality of financial sector activities systemic risk might be built up. "It is necessary that we alter the central banks inspection philosophy. Today, this activity concentrates more on verifying formal compliance with specific norms set down in regulations than it does on analyzing the equity situation of these institutions" (BCdB 1995: 4). Thus, the establishment of system-wide surveillance to detect structural vulnerabilities and exposure in the financial system was a crucial measure within the design of the financial sector framework by Brazil, India and South Africa (Mohan 2009; Reddy 2008; Selialia 2009, 2010; Tombini 2006). For years now all three central banks regularly publish a thorough financial stability report or review; they conduct stress tests to analyse systemic risks including liquidity risks, asset price bubbles or the interconnectedness between financial and macroeconomic factors with credit risk. Based on their macro-prudential supervision monetary authorities have developed policies to mitigate systemic risks and to adjust prudential regulation.

BOX 2 INDIA'S CRISIS HERITAGE

India experienced a balance of payments crisis in combination with a public debt crisis against the backdrop of a highly regulated domestic market at the beginning of the 1990s. India's banking system was characterized by strong financial repression comprising a wide range of intervention, e.g. a selective credit policy with price and quantitative controls and a set of regulations requiring banks to hold a large stock of government securities (Schelkle 1994, Thomas 2005). This policy of credit rationing resulted in an increase of dualism and disintermediation of the financial system, suppressed inflation and de-capitalization of banks due to rising non-performing loans. In addition, the Reserve Bank of India was committed to three different and partly mutually inconsistent functions: as a central bank it had to stabilise the financial system, as a development institution it should promote the financial system and as bank of the state it was obliged to finance public deficits. This domestic financial market architecture was complemented by capital controls and an administered exchange rate system. Since mid-1980s India was confronted with the twin problems of both rising public deficits and current account deficits (Saraogi 2006); despite high depreciations of the nominal exchange rate the real exchange rate appreciated resulting in a loss of external competitiveness. Furthermore, the government exercised expansionary fiscal policy to counteract the depressing impact of the financial repression and the suppressed inflation. Both deficits required financing and thus domestic and foreign public debt rose sharply with an increasing share of short-term debt. At the beginning of 1991 foreign exchange reserves had been almost deployed, while India had only restricted access to international capital markets to raise new debt. As an alternative to a default, India applied for an IMF emergency loan in exchange for its gold reserves. Since then the Indian government and the Reserve Bank of India initiated a process of financial sector reforms, including a re-capitalization of the Indian banking sector and the improvement of the institutional regulatory framework (Krishnan 2009, Mohanty 2009); in addition, they embarked on a policy stance to reduce short-term foreign debt and to accumulate foreign exchange reserves while only gradually opening-up the domestic market. During the second half of the 1990s, India was still a relatively closed economy in comparison to its neighbouring countries, which might be one reason for the low impacts of the East Asian crisis on India. "It is almost certain that the slow implementation of public and private sector reforms coupled with the lack of full current account convertibility prevented the crises from affecting India" (Nahrain 2007:29).

4.3 STRICT PRUDENTIAL REGULATION

Though Brazil, India and South Africa have adopted international standards, their prudential regulation is often stricter than envisaged by international standard setters. The minimum regulatory capital for bank lending for example is considered to be a cornerstone of international banking regulation and set by 8 per cent of risk-weighted assets. In all three countries authorities requested higher capital requirements already before the global financial crisis, e.g. Brazil 11, India 9 and South Africa 9.5 (Tesoro Nacional 2008; RBI 2009: SARB 2009b). Similarly, the launch of a new financial product or service is linked to strict and

sometimes higher requirements than commonly applied in other countries. “One additional thought I would like to share with you is that when a new financial instrument is introduced in the market normally regulators don’t know exactly how it will work in practice. We are in the beginning of the learning curve. So there is a strong incentive for the regulator to set up more strict and detailed rules in order to make itself more comfortable with the new product in the market” (Gomes 2009: 4;).

Moreover, central banks of the three countries tighten prudential requirements in a forward-looking and pre-emptive manner when deemed necessary. For instance Brazil increased capital requirements for foreign exposure for cross-border positions within international banking groups already in 2007 (Tesouro Nacional 2009). On the other hand, India increased provisioning requirements and risk weights for loan exposures to the real estate sector and consumers to dampen a domestic asset price bubble. “This ‘dynamic provisioning’ approach has facilitated adequate buffers within the banking system” (Mohan 2009: 13). South Africa introduced deposits for some kind of loans and temporarily increased minimum capital requirements “to take into account financial stability considerations” (SARB 2009b: 33).

Another aspect in the financial market regulation shared by the three countries is the rule-based rather than principle-based approach. While a principle-based approach which was followed by the two countries of origin of the global financial crisis, US and UK, provides regulators and market agents with more operational flexibility and is conducive to innovations, it is much more complex and entails less predictability of legal decisions. In addition, the influence of the financial service industry tends to increase, and due to the complex rules the response time of regulators on anomalies and irregularities are longer. In contrast, a rule-based approach with universal standards entails less forbearance and enables less regulatory arbitrage; supervisors’ decision are based on transparent and reliable indicators, e.g. equity capital, non-performing loans or credit ratios. Hence, regulation based on a rule-based approach is easier to impose and decisions can be taken quicker which is backing pre-emptive surveillance. “The key is to keep it simple and return to basics. Perhaps a modification of Warren Buffet’s investment rules should be considered: *Make regulations that are simple to understand and comply with, and enforce them. Never allow any activity that you cannot understand yourself and whose risks cannot be defined in terms of simple regulations* (Bezuidenhout 2009: 8, emphasize in the original).

BOX 3 SOUTH AFRICA'S CRISIS HERITAGE

South Africa on the other hand was also subject also to a balance of payments crisis, albeit in combination with a debt crisis by mainly private actors on the backdrop of rather liberalized markets in the mid-80s (Kahn 1991). South Africa increasingly liberalised its capital account transactions with the complete abolition of capital controls for non-residents finally in 1983 and only limited controls remaining for residents (Merwe 1996). The improved access to international capital markets resulted in soaring foreign debt of mainly short-term maturity. "From late 1981 and clearly from 1982, South African borrowers in both the public and notably the private sector went on what may best be described as an orgy of borrowing from private international banks directly and from the international capital market by means of bond issues" (Padayachee 1991: 95). Net capital inflows were nevertheless not sufficient to finance the current account deficit. Thus, to prevent a default South Africa fell back on an IMF credit in 1982. One year later South Africa switched from a dual quasi fixed exchange rate system to a rather market-determined exchange rate system in order to release the central bank from protecting the level of reserves. In the following period current account deficits could not be sufficiently financed by net capital imports; hence, the rand depreciated with highly adverse effects on the balance sheets of South African banks and companies with foreign currency denominated debt. After two and a half years with finally two-digit losses against the major currencies in last months, liberalisation was reversed; in September 1985 the South African Reserve Bank closed the foreign exchange market, re-introduced both capital controls and the dual exchange rate system. The South African Reserve Bank established a bank supervision department in the same year to vigorously monitor the banks foreign activities and one year later supervision was extended to domestic activities of all banks (SARB 2005). In addition, the South African Reserve Bank concluded several debt standstill agreements with private international creditors to prevent a collapse of the indebted banks and companies. The debt re-scheduling marked the beginning of the recovery of its financial system, albeit rather involuntary; at that time Apartheid South Africa was subject to broad financial sanctions and international financial markets were de facto closed for new borrowings. In 1994, South Africa again concluded Debt Arrangements with foreign creditors to settle the final repayment of the debt still outstanding from the 1980s until 2000. Thus, in 1995 the dual exchange rate system was ultimately abolished, giving way to a managed exchange rate system and accompanied by only gradually relaxing exchange controls. Nevertheless South Africa was still very vulnerable to spill-over from international capital markets; alone in 1998, 2001 and 2002 it was hit by high net capital outflows resulting in double-digit depreciation rates of the rand.

4.4 COUNTRY-SPECIFIC RULES AND REGULATIONS

Brazil, India and South Africa as well exhibit country-specific features in a narrow sense which contributed to the resilience of their financial systems; rules and regulations have evolved over time according to the specific history and circumstances and, therefore are unique to the respective individual country. With regard to Brazil it is worth mentioning that

the supervision covers all financial institutions, including hedge funds and OTC derivative markets. “Differently from other countries, there are no important players outside the Central Bank supervision (Tesouro Nacional 2009: 12). The OTC derivative market regulation was formerly introduced for tax reasons, but also proved to be of value for mitigating systemic risk. Already back in 1998 Brazilian regulation required from investment banks to erect a so-called Chinese wall in order to separate their trust activities from their commercial bank activities (BCdB 2002). Another particularity is the so-called Public Hearing Process for regulatory proposals concerning securities in which interested parties can participate and give an opinion within a pre-determined time frame. Later on the Brazilian securities commission has to deliver a report arguing which of the submissions will be taken into consideration and which will not be followed and why they will not be followed. “Public Hearing is almost mandatory under the Brazilian securities act, through the public hearing process we can address at least one of “the conflicting demands” faced by a regulator that we mentioned before that is: *Be responsive and not be captured by the industry*“ (Gomes 2009: 3, emphasize in the original).

India actively manages its capital account. Hence, it has still exchange controls which restrict domestic banks’ investment in off-shore financial instruments (RBI 2009). Complex structures like synthetic securitisation have been banned outright (Mohan 2009). Securitisation guidelines are applied for both banks and non-bank financial companies; they cover a broad range of aspects, e.g. liquidity and capital adequacy provisions for special purpose vehicles, resulting in a conservative treatment of securitisation exposures (Reddy 2008). In addition, the Reserve Bank of India instructed banks to base their investment decision not only on the recommendations of external rating agencies, but to apply the usual criteria of credit checks as in the case of direct lending. Furthermore, banks have to make provisions for a counter-cyclical Investment Fluctuation Reserve (Reddy 2008), which bears some resemblance to the currently debated liquidity buffers by the Financial Stability Board. India also developed a special framework for non-banking financial companies (NBFCs) with an explicit treatment and deliberate prudential norms of those entities. “The overarching principle is that banks should not use an NBFC as a delivery vehicle for seeking regulatory arbitrage opportunities or to circumvent bank regulation(s) and that the activities of NBFCs do not undermine banking regulations” (Mohan 2008: 2003).

Though South Africa has no specific regulatory framework on hedge funds, they are covered by the regulation on collective investment schemes. The regulation comprises a ban of using leverage and short selling strategies; in addition, provisions require collective investment schemes to hold enough liquidity to continue to operate a scheme at least for three months in case of winding up (Hadebe 2008). The Financial Services Board supervises the non-bank financial services industry, including collective investment schemes; its Enforcement Committee which was established in 2001 and is endowed with extensive competences pursues violations against existing legislation and regulation. In case of an (alleged) contravention of legislation administered by the Financial Services Board, a process similar to a law suit is set in with a panel appointed for each specific case. "The Committee may impose unlimited penalties, compensation orders and cost orders. Such orders are enforceable as if it was a judgment of the Supreme Court of South Africa" (FSB South Africa 2001). Accordingly, decisions are published on the FSB's website. Furthermore, with the National Credit Act (NCA 2006) South Africa developed a broad spectrum of instruments to protect consumers' rights when borrowing by credit providers, credit bureaux and debt counsellors; all of them have to be registered to operate legally and follow a standardized manner of credit granting supervised by the National Credit Regulator (NCR 2007). In case of complaints by consumers and disputes with credit providers, including banks, the National Consumer Tribunal enforces a hearing process at which end it can completely suspend the credit agreement to the disadvantage of the credit provider when proved reckless. "The adoption of the NCA has, therefore, reined in reckless lending practices and improved consumer protection while at the same time indirectly saving South Africa from the fate of the global financial crisis" (Selialia 2010: 5).

Taking into account the art of supervision in Brazil, India and South Africa which is based on a macro-prudential approach and strict prudential regulation complemented by a variety of country-specific rules and legislation it comes to no surprise that banks in the three countries are on average sound and banking behaviour has adapted to legal restrictions and norms; they even hold reserves and liquidity in excess of regulatory requirements which was considered to be inefficient and non-innovative before the crisis. More importantly, at the time of writing banks in Brazil, India and South Africa have not been infected by the notorious originate-and-distribute virus of granting loans which was a major driver of the credit and securitization bubble which finally resulted in the global financial crisis; instead they still execute the

original banking model with a buy-and-hold strategy based on thorough credit assessment and borrower supervision.

In sum, the high resilience of the financial sectors of Brazil, India and South Africa is a result of continuously strengthening financial sector institutions and adjusting the regulatory framework to their country's needs and vulnerabilities. This is an on-going process which started already two decades ago. Thereby, crisis heritage has constituted a major motivation for macroeconomic and financial sector improvements while at the same time Brazil, India and South Africa constructively turned the drastic experience into a cautious and thorough handling of financial-sector related issues. In the hostile environment of a global financial crisis the specific art of supervision performed by Brazil, India and South Africa was put to test – and impressively passed it.

5. CONSTITUTING NEW ROLES IN THE GLOBAL FINANCIAL GOVERNANCE

Meanwhile there is no doubt that emerging market economies have gone through the global financial turmoil not only better in terms financial and macroeconomic stability than expected taking into account their former crises performances, but also better than G7 countries. Against this backdrop the question arises whether the high stability and resilience of their financial markets will constitute just a passing comment of contemporary economic history or whether it will have implications for the current and upcoming debate on a globally co-ordinated financial regulation. The view advanced here is that it has already changed policy coordination between advanced countries and emerging markets and will continue to do so both in terms of voice and content.

The evolution of global macroeconomic coordination and international financial regulation follows a crisis-cycle and can be considered to be a learning-by-doing process. The international capital accord Basel I which was adopted in 1988 introduced for the first time a compulsory standard on capital adequacy based on credit risk for internationally operating banks; Basel I was a response to the alarming meltdown of banks' capital in particular in the US as a result of the international debt crisis in the first half of the 1980s (Metzger 2006). After the Mexico crisis in 1994 an amendment to Basel I was adopted which required considering market risk in the banks' capital reserves in particular for foreign exchange risk

of debt securities and equities; the Mexican currency strongly depreciated and put in foreign currency indebted Mexican banks and companies at risk of default with negative impacts for creditor banks' balance sheets in advanced countries, including write-offs and debt rescheduling.

In 2004 Basel II was adopted which replaced Basel I; it was the East-Asian crisis which gave the major impulse to revise the old capital accord; already in 1999 the Basel Committee launched the initiative with the objective of redesigning international banking rules in order to prevent bad banking by introducing more risk-sensitive standards for internationally operating banks which were accused to have excessively expanded credit to East-Asian debtors (Metzger 2006). At the time of writing the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (Basel Committee) lead-managed by the G20 currently discuss a broad regulatory agenda, e.g. increase of quality and quantity of banks' capital, the introduction of counter-cyclical liquidity buffers and leverage ratios as well as measures dealing with systemically important financial institutions and derivative markets (Rhee 2010). In the near future there will be definitely changes and adjustments either in form of an amendment to Basel II or alternatively a new capital accord Basel III.

Similarly, global macroeconomic coordination proceeded, albeit until the global financial crisis with less impetus and covering only few topics. After signing the Smithsonian Agreement in 1971 with which G10 countries agreed upon to move on to flexible exchange rates, it took almost 15 years to come to the Plaza Agreement (1985) and the Louvre Agreement (1987) with which the US, (West) Germany and Japan arranged to intervene in the foreign exchange market, the former limiting the US dollar's appreciation and the latter restricting its depreciation against other key currencies.

Institutions – be it formal or informal – are required to come to an agreement and mutual commitments between several stakeholders. Thus, the evolution of macroeconomic and financial policy coordination groups follows the needs of coordination arising from the respective challenges in each particular period. Only if a crisis is considered to be of global nature and sufficiently dramatic, will policy coordination groups emerge which adequately reflect voice and participation. The current crisis was the first crisis after WWII which was perceived as global by the G7 and more importantly, it was their countries in which the crisis originated and it was their policy, though involuntarily, which brought about the crisis. This

explains why the G7 was prepared to open the exclusive club and invite emerging markets to join the table which meanwhile spans over 80 per cent of world population and world output.

Thus, over the last two years a remarkable shift of power has taking place within global economic and financial governance structures which broadened their membership and hence increased policy outreach; in 2009 the G7 which until then constituted the unchallenged major international policy coordination group on global macroeconomic and financial issues gave way to the G20, a group which had displayed a rather dozy performance most of the years since coming into existence. Parallel to that both the Financial Stability Forum which was renamed into FSB and the Basel Committee invited emerging markets as new members. While the G20 brings together financial ministries and central banks, the FSB additionally comprises 5 member countries, financial regulatory and supervisory authorities as well as international financial institutions and standard setters. The FSB can be considered as the central coordination forum on financial market topics between the various institutions and organisations dealing with these matters under the auspices of the G20. On the other hand, the Basel Committee which is the most comprehensive forum with regard to member countries (FSB members plus Belgium, Luxembourg and Sweden) disposes over the most focused mandate of banking supervision.

The perception of a crisis as being of global nature is only a necessary, however not sufficient condition. The transition to flexible exchange rates in the 1970s, the debt crisis in the 1980s and the currency crises in the 1990s all constituted state of affairs with global impact and harsh economic and social repercussions; nonetheless from the point of view of developing countries and emerging markets economies agreements and stipulations were all drafted behind closed doors. This time G7 countries considered the situation to be different and this has much, if not solely to do with the strong economic and financial standing of emerging market economies. Already before the global financial crisis they consolidated and subsequently strengthened their position by reducing their foreign exchange exposures and increasing foreign exchange reserves. Ironically, this policy move was induced by a lack of an accepted multilateral policy framework for crisis resolution; financial support by the IMF for crisis-afflicted countries during the 1980s and 1990s was criticised as too low, too late and too lopsided. In the course of the current crisis emerging market economies could additionally strengthen their reputation due to the high resilience of their financial markets and their successful policy response.

Not only membership of global financial governance structures, but also content has already been broadened. Besides the above mentioned agenda of designing a new international regulatory framework for the financial sector, the G20 established expert groups covering topics of a development agenda like financial inclusion and trade finance, but also energy. However, the crucial contribution of emerging markets involvement on the agenda setting will come to the fore only in the future: There is an alternative, tested and scrutinised by financial markets. Since the beginning of the 1990s the notion of market supremacy became the hegemonic yardstick for economic policy, inducing widespread liberalization and deregulation. There was one model that served as a rule and it was commonly practiced by international financial institutions condensed in the credo 'one size fits all'. Now there is an alternative approach, not necessarily conflictive by any means, however more balanced and less bound. Though this approach has existed all those years, it could emerge on the international arena as a serious mindset only due to the good macroeconomic performance by emerging market economies.

The alternative may be supportive in multiple respects. It helps to resist advanced countries' requests to harmonize international standards and to give up country-specific rules and regulation. It may also help to strengthen the voice of those developing countries which are not sitting at the table yet and will not in the foreseeable future, either. There is a big overlap of topics, which are of interest for both emerging market economies and developing countries of which some have already entered the G20 agenda. Whether the gain in influence by emerging markets will also provide an opportunity to increase involvement of developing countries will depend on whether emerging market economies apply a bottom-up or rather a top-down attitude towards them. A potential avenue might consist in furthering the regional dimension; some of the emerging market economies are heavy weights in their region and play an important role in the already existing regional monetary and financial cooperation frameworks, e.g. in South-East Asia or Southern Africa (Metzger 2008a, 2008b). However, in other regions regional cooperation in terms of monetary and financial issues is just at its outset; it remains to be seen whether the modification in global governance structures towards emerging market economies can give fresh impetus to these regional schemes. And finally, the alternative approach may stimulate future debates on financial market reforms and earnest global macroeconomic coordination in order to design a globally accepted framework of economic and financial crisis prevention with a coherent and aligned crisis resolution

mechanism. That way the global financial crisis could eventually be beneficial even for advanced countries.

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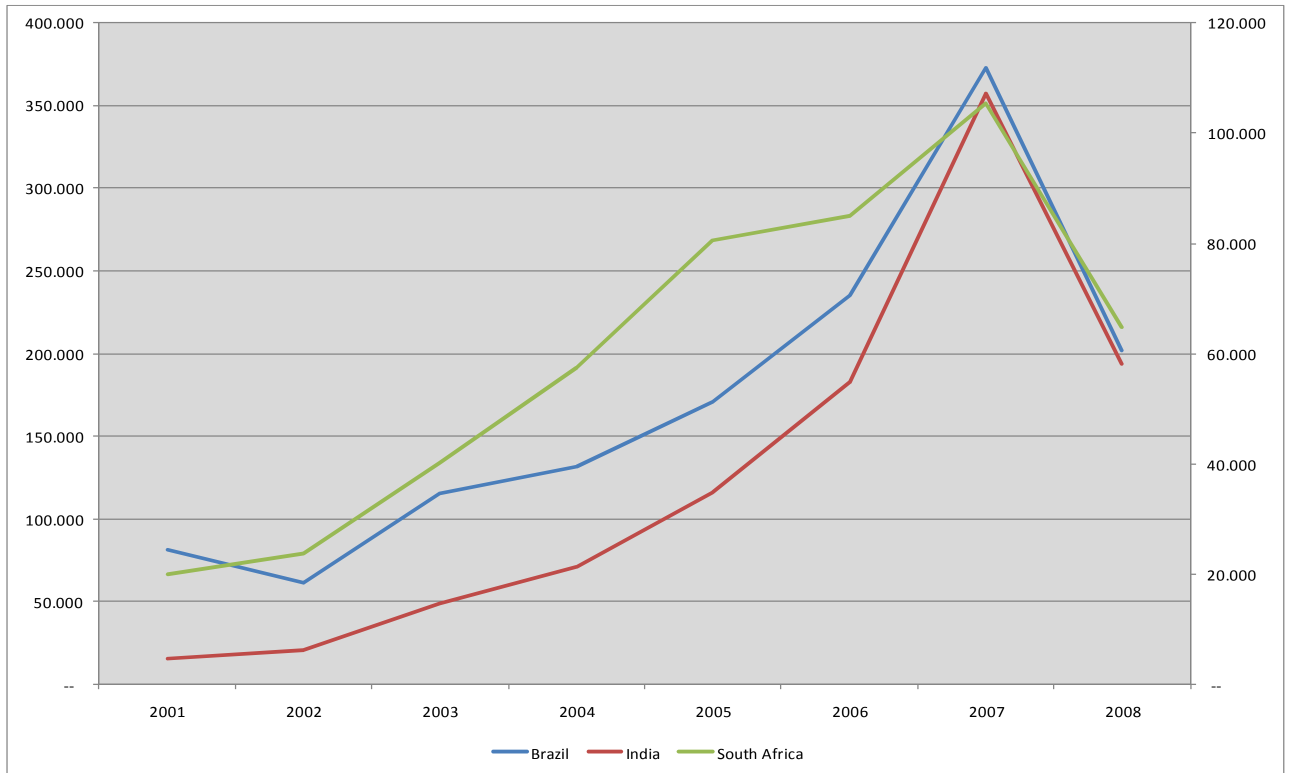
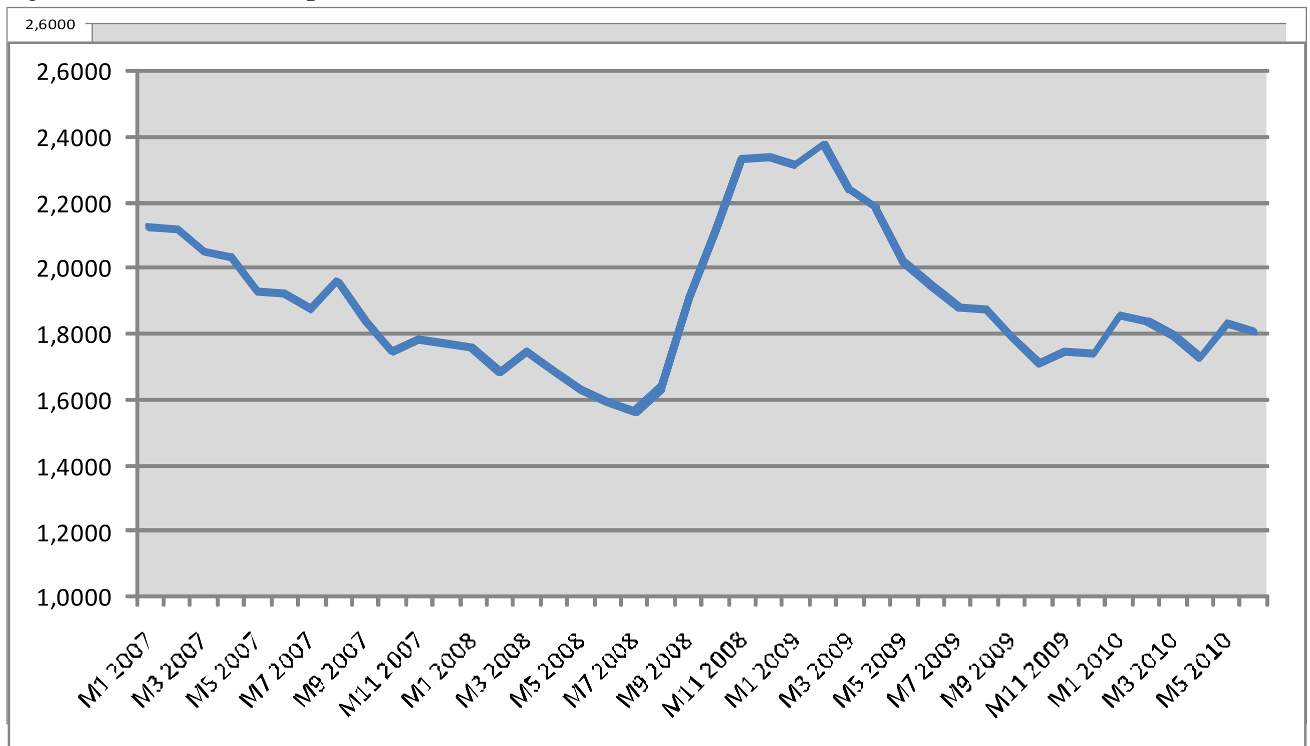
ANNEX

Figure 1 Total portfolio investment liabilities (in millions US dollars)



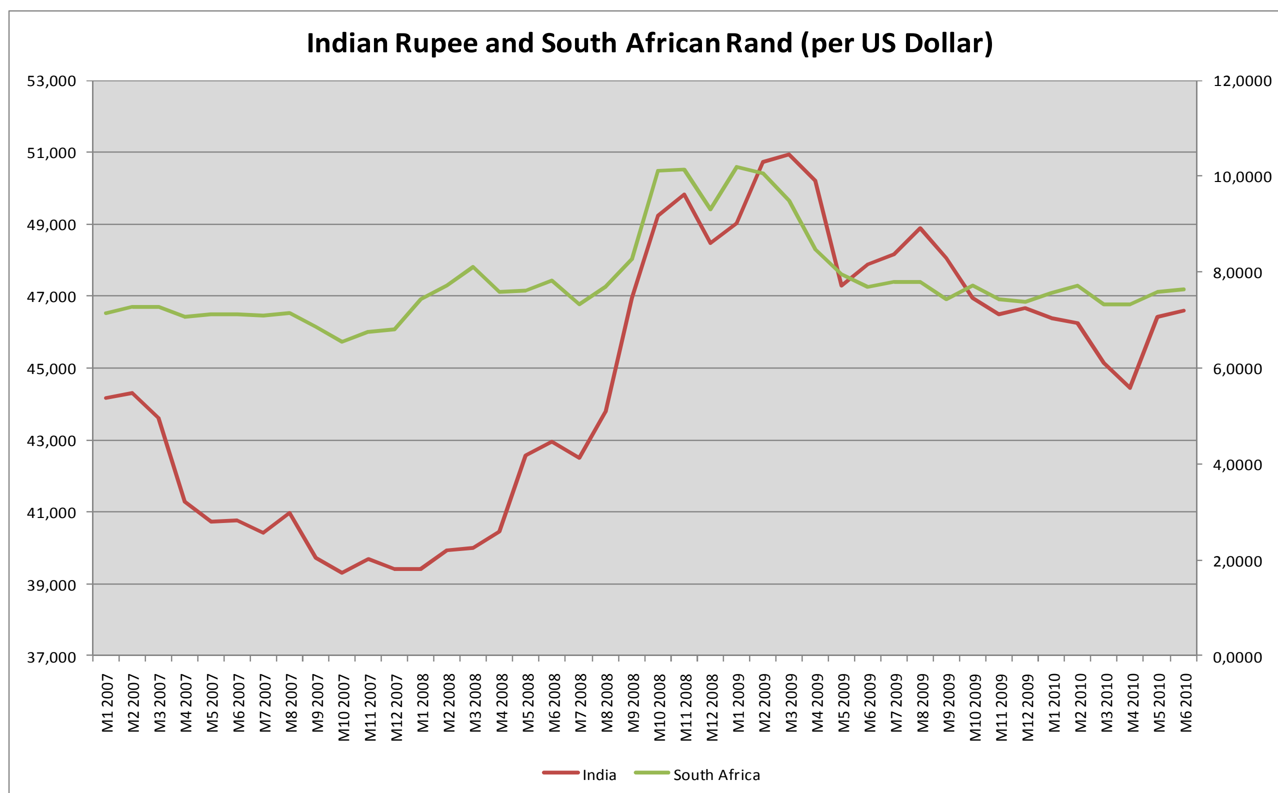
Source: IMF, Coordinated Portfolio Investment Survey (CPIS) online database, August 2010. Right-hand scale: South Africa.

Figure 2 Brazilian real (per US dollar)



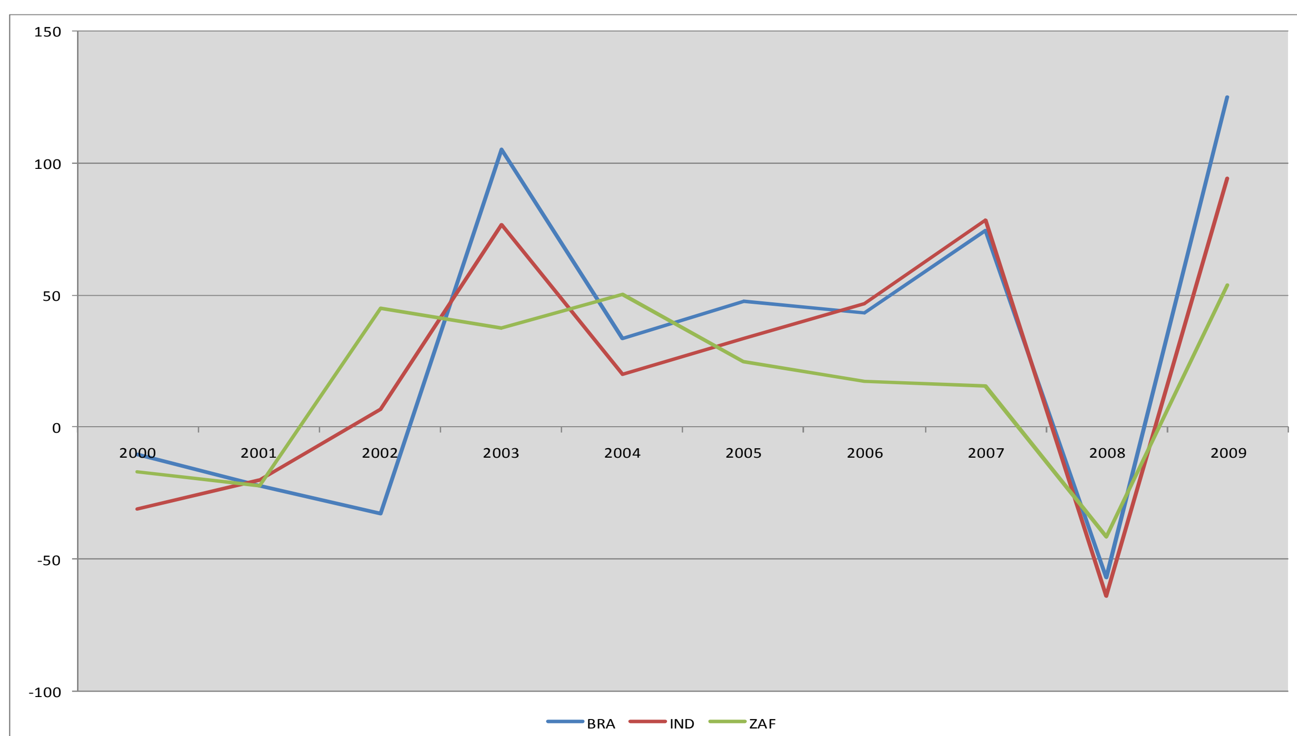
Source: IMF International Financial Statistics (IFS) online database, August 2010. Exchange rates are end of period; an increase indicates depreciation.

Figure 3 Indian rupee and South African rand (per US dollar)



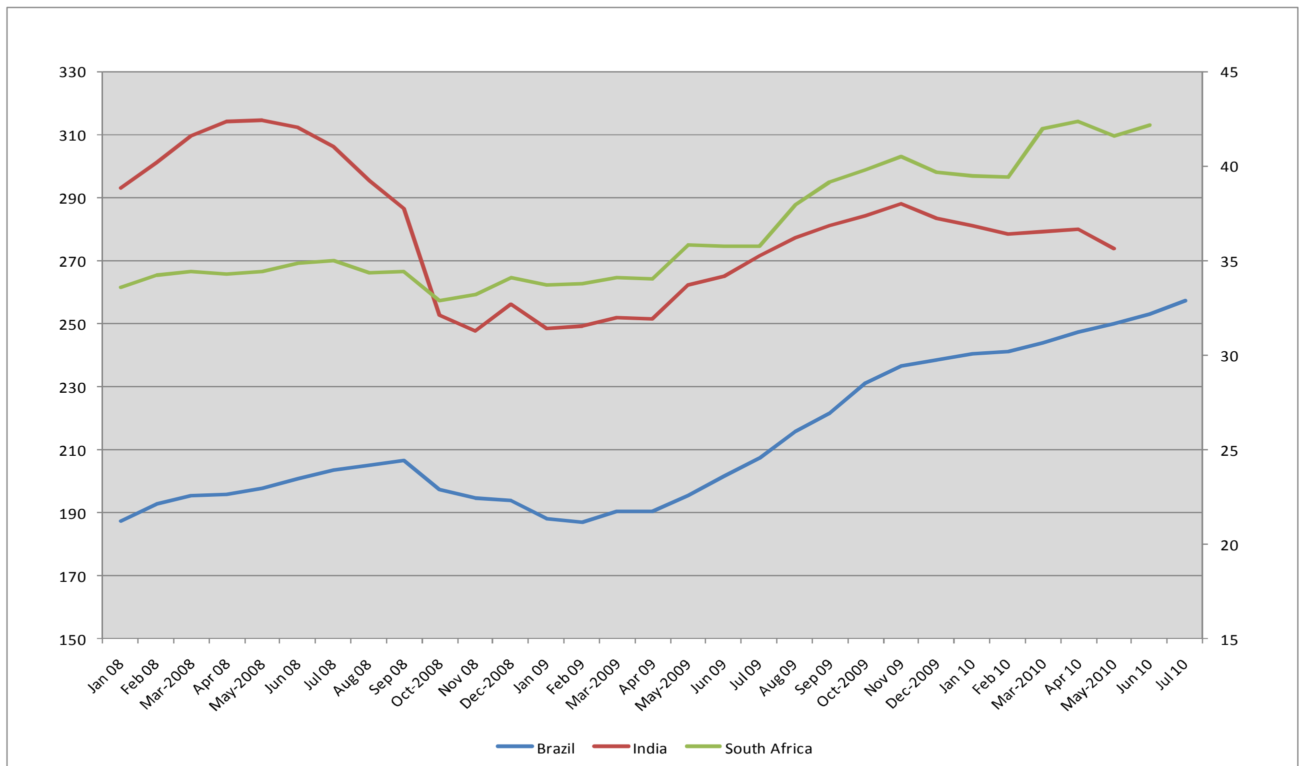
Source: IMF IFS online database, August 2010. Exchange rates are end of period; an increase indicates depreciation. Right-hand scale: South Africa.

Figure 4 S&P global equity indices (annual change in per cent)



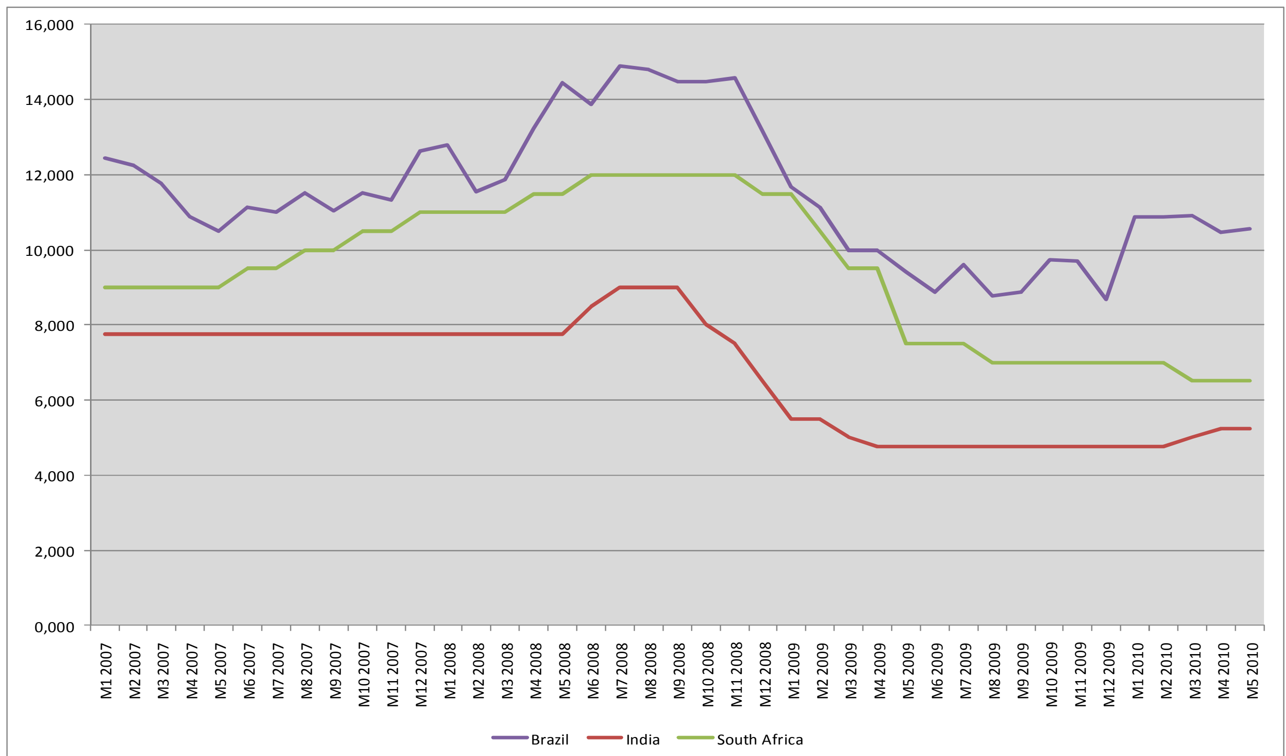
Source: World Bank, World Development Indicators (WDI) online database, August 2010.

Figure 5 Foreign exchange reserves (in billions US dollars)



Source: IMF time series data on international reserves/foreign currency liquidity, online database, August 2010. Foreign exchange reserves are foreign currency reserves in convertible foreign currencies. Right-hand scale: South Africa. Available at: www.imf.org/external/np/sta/ir/IRProcessWeb/colist.aspx

Figure 6 Policy rates (in per cent)

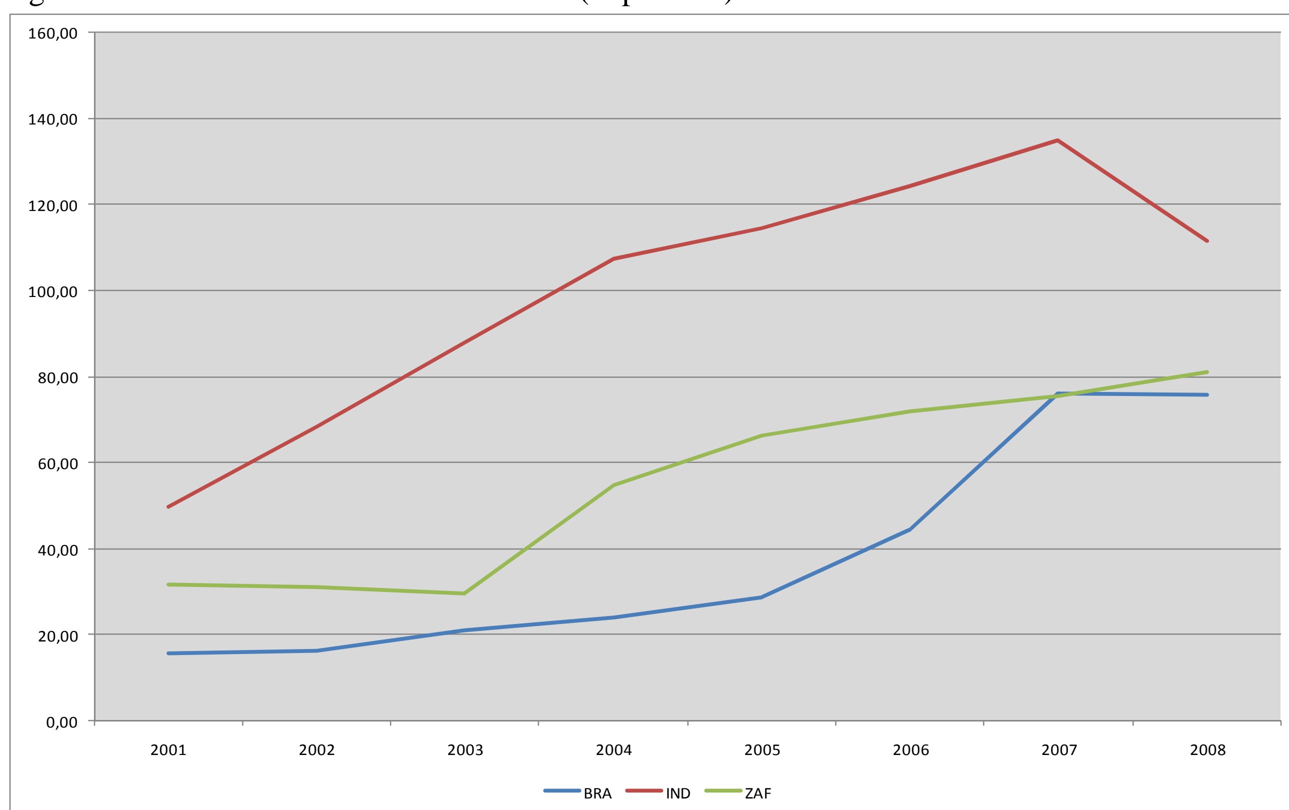


Source: IMF IFS online database, August 2010 (Brazil and South Africa) and RBI (2010b India). Interest rates are the Treasury bill rate for Brazil, the repo rate for India and the discount rate for South Africa.

Figure 7 Real GDP growth rates (annual change in per cent)

Source: IMF World Economic Outlook (WEO) online database, April 2010. Estimates start after 2008 (Brazil and India) and 2009 (South Africa).

Figure 8 Total reserves to total external debt (in per cent)



Source: World Bank, WDI online database, August 2010.

Table 1 Total external debt stock to gross national income (in per cent)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Brazil	39	43	47	44	34	22	18	18	16
India	22	21	21	20	18	15	16	17	19
South Africa	19	21	23	17	13	13	14	16	16

Source: World Bank, WDI online database, August 2010.

Table 2 Short-term debt to total external debt (in per cent)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Brazil	13	12	10	10	12	13	11	17	14
India	3	3	4	5	6	7	7	19	20
South Africa	38	35	29	27	29	31	43	38	43

Source: World Bank, WDI online database, August 2010.

Table 3 Short-term debt to total reserves (in per cent)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Brazil	94	79	62	50	48	45	24	22	19
India	8	6	6	6	5	6	6	14	18
South Africa	124	110	95	90	53	47	60	50	53

Source: World Bank, WDI online database, August 2010.