

Capital Inflows Since The End of Apartheid and The 2001 Currency Crisis

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INTRODUCTION



[Source: South African Reserve Bank (SARB) online historical data]

The end of apartheid and the relatively peaceful transition to democracy, combined with the introduction of slow-paced financial market liberalization in 1995, led to large increases in the amount of capital inflows into South Africa. Figure 1 shows net capital flows from 1978 to 2002. This paper examines the effects of more domestic liquidity as a result of the large net capital inflows and argues that the surge in inflows is cause for concern because of the potential for instability it produces in the economy. This paper draws heavily from the analysis of financial crises in Palma (2003) who argues a 'Kindlebergian' proposition that the *d*fects of massive surges in inflows on domestic liquidity are "key to understanding" financial crises. Many countries experienced financial crises since the mid-1990s.¹ Each of these countries attempted to absorb the large increases in capital inflows in different ways. Palma convincingly shows that large capital inflows are the key to explaining financial crises in all these countries despite these different absorption methods.

Foreign direct investment is an important element of the South African government's economic policy. The government seems to believe that their chances of attracting foreign direct investment and more access to capital will improve if they show investors that they are committed to maintaining orthodox macroeconomic fundamentals and other elements of the Washington Consensus. They do not seem overly concerned about the disruptive effects that capital flows can have on a country's financial system and economy as a whole despite numerous financial crises in developing countries since the mid-1990s and the South African currency crisis in 2001. This indicates that they may be more convinced by the explanations of financial crises offered by neo-liberal or orthodox economists than those offered by heterodox economists.

¹ Mexico, South Korea, Thailand, Indonesia, the Philippines, Malaysia, Russia, Brazil, Turkey, Argentina and Uruguay have been plagued by financial crises since the mid - 1990s.

Most of the capital flows entering South Africa have been short-term portfolio flows. The bulk of these flows have been absorbed by the private sector. There has been an accompanying surge of private sector access to credit. The private sector has not utilized their improved access to credit for productive investment. Instead, easier access to credit has supported existing negative trends in the economy. For example, exuberance in the stock market experienced from the early-1990s that led to higher share prices seems to have been sustained and supported by easier private sector access to credit. The same applies to growth of imports and household consumption. In addition, capital flows are positively correlated with large-scale capital flight from the South African economy. Therefore, the surge in capital inflows was not associated with economic activity that would lead to long-term growth in the economy. Instead, one may associate the surge in net capital flows with maintaining exuberance that leads to higher share price indices, more imports, growth in private consumption and high levels of capital flight. All of these factors have the potential to weaken the economy over time.

Foreign exchange reserves have been increased in response to more imports and rising levels of short-term debt. However, the investment in growing reserves was not enough to deter a currency crisis at the end of 2001. In 2000 there was a huge drop in the amount of portfolio flows and despite the growth of reserves relative to short-term debt investors realized that a drop in the value of the rand was imminent. This led to flight from rand-based assets that in turn led to panic and more flight. By the end of 2001 portfolio inflows were negative and the value of the rand had dropped by 35% relative to the US dollar. Depreciation of the rand relative to the major currencies contributed to a rise in inflation. The SARB in an attempt to meet the inflation targets increased interest rates by 4% in 2002, further hurting an already bruised economy.

Fortunately, the surge in net capital flows after 1994 were not as large as the inflows received by countries like Mexico, Brazil, Korea, Malaysia and Thailand after they liberalized their economies. Since the increase in capital flows after 1994 have gone into securities trading, increased imports and private consumption and capital flight one may assume that much larger flows would have intensified this behaviour. Therefore, one can speculate that fragility risk in the South African economy would have increased signific antly and the economy would have been more vulnerable to a full-blown financial crisis if there had been even larger growth in net capital flows.

The lesson of the surge in net capital flows from the early 1990s and the 2001 currency crisis is that uncontrolled capital flows have been very disruptive for the South African economy. A second lesson is that the surge in net capital flows was not absorbed into productive activities but reinforced negative trends present in the South African economy, such as growing imports and consumption, rising share price indices and capital flight.² The policy lesson is that there should be adoption of effective capital management techniques that include not only prudential regulations but also early warning systems and different types of temporary and permanent capital controls (see Grabel, 2001 and Epstein, Grabel and Jomo, 2003).

The next section of this paper provides a literature review that investigates recent debates between orthodox and heterodox economists on the causes and cures for financial instability and crises. The South African literature on capital flows and currency or financial crises was found to be thin and reference is made to a few papers that provide insights into capital flows in South Africa. The third section examines the surge in net capital flows and provides a global context and conceptual framework for examining these flows. The fourth section examines how the surges in net capital flows were absorbed by the South African economy. This section focuses on

² It seems that the surge in net capital flows that is associated with more liquidity and access to credit allowed spending to be maintained at a high level despite the downturn in the global economy associated with the Asian financial crisis and the burst of the dot.com bubble.

the private sector because this sector received most of the growth in inflows. The fifth section explains the link between the surge in net capital flows and the 2001 currency crisis. The conclusion is the final section of the paper.

REVIEW OF RECENT LITERATURE ON CAUSES AND CURES FOR FINANCIAL CRISES

The South African literature on capital flows and potential risk of financial crisis is very thin so most of this literature review refers to literature dealing with global trends in capital flows and financial crises. The South African government, which seems to be the major client for work on the country's position in international financial markets, continues to adhere to neo-liberal solutions, which imply that their thinking on financial crises is in line with mainstream neo-liberal thinking. This may be a reason for the paucity of South African economic literature on this important subject. The government and SARB have accepted the mainstream argument that financial liberalization is good for the œonomy. As a result, the government is pushing ahead with plans to liberalize controls over the movement of capital by South African residents, despite their tacit acknowledgement that there has been large capital flight in the form of a foreign exchange amnesty.

The currency crisis of 2001 that negatively affected growth and the current recovery of the rand that negatively impacts on exports and potentially on growth, illustrates the type of uncertainty and volatility associated with financial openness.³ A few publications provide interesting insights that support arguments that the South African economy has become more volatile since 1994. These studies indicate the preferences of foreign investors and the volatility associated with openness. Wesso (2001) shows that the main determinant of direct investment into South Africa after 1994 was the swap agreement where South African firms were allowed to invest offshore if they could secure foreign investment into South Africa. This finding indicates that investors prefer to take short-term positions in South Africa. Wesso also finds that "Portfolio investors usually chase high-yield interest bearing securities" (p.75). He says that foreign investors tend to sell off South African equities when there is a significant decline in domestic interest rates relative to foreign country interest rates.

Farrel (2001) finds that "... the conditional volatility of South African exchange rates was lower during the financial rand period than in the contiguous periods when the exchange rate was unified, and that volatility in the financial rand did not impact on the commercial rand exchange rate". Aaron and Muellbauer (2002) say that nominal exchange rate shocks have less impact than monetary shocks on the economy in the short-run. However, they highlight their important finding that exchange rate volatility appears to be increasing as the economy opens. The three studies cited offer support for the contention that South Africa is more vulnerable to surges in inflows and outflows of capital or "hot money" and the damage these flows may inflict. However, I have not found many voices in the South African literature calling for capital controls.

Many mainstream economists like Bhagwati (1998), Stiglitz (2002), Krugman (1998) and Rodrik, (1998) have actively argued in favour of capital controls. Heterodox economists have taken the recent paper by Ken Rogoff (Economic Counsellor and Director of Research at IMF) and others as a major concession by the IMF in the debate over financial integration (see Prasad, Rogoff, Wei and Kose, 2003). This paper finds that "there is no proof in the data that financial

³ Frankel and Rose (1995) define a financial crisis as a situation where the nominal exchange rate of the domestic currency to the US dollar falls by 25%. By this definition South Africa had a financial crisis at the end of 2001. I break with this convention (maybe unwisely) to differentiate what happened in South Africa from the financial crises analysed in Palma (2000). As a result I call the large decline in the value of the rand in 2001 a currency crisis.

globalisation has benefited growth" in developing countries. The paper also concedes that there are heightened risks of macroeconomic volatility associated with integration because "... cross country financial linkages amplify the effects of various shocks and transmit them more quickly across national borders" (p. 5).

Despite this recognition of increased volatility and the danger of financial crises associated with financial liberalization and increased financial integration, most mainstream economists cling to neo-liberal solutions and only grudgingly mention government regulation. The main neo-liberal solutions are to increase prudential supervision and transparency in financial markets and to ensure market discipline. The Washington Consensus position, which espouses conservative macroeconomic policies (low fiscal deficits and tight monetary policy, including inflation targets) and open financial markets, is unsurprisingly also the mainstream solution for avoiding financial crises. There has been much criticism of IMF bailouts of countries in financial crises because these have come to the aid of financiers not borrowing countries. Eichengreen (1999, 2002) reflects the views of many mainstream economists when he argues for market discipline. He says that financiers that lend to or invest in countries with high risk (for Eichengreen and other mainstream economists this means unsustainable macroeconomic or financial policies) should "bear the consequences of their actions".⁴

Underlying mainstream critiques of regulation of financial markets is the belief that information technology has made regulation passé. Eichengreen (2002) reflects mainstream conventional wisdom when he argues that strengthening regulation rather than market institutions will be ineffective because the regulators will always be a few steps behind the regulated. Therefore, for mainstream economists (and neo-liberals in general) the solution is building self-regulating markets and institutions. Contrary to mainstream conventional wisdom, case studies of capital management techniques in many developing countries show that "capital management techniques can contribute to financial stability, macro and micro-economic policy autonomy, stable long-term investment, good current account performance and more stable currencies" (Epstein, Grabel and Jomo, 2003).

The reason mainstream economists cling to their Washington Consensus mantra as a solution for financial crises is because they are unwilling to accept the full consequences of uncertainty and asymmetric information. Full acceptance of these consequences would lead to a devastating critique of the economics underlying their macroeconomic prescriptions. All neoclassical and neo-liberal macroeconomic models abstract from time and ignore uncertainty. They deal with uncertainty by assuming that they can develop a probability distribution of all future outcomes.

The ideas that shape heterodox economists' appeals for capital controls or capital management techniques are informed by the view that uncertainty and information asymmetries are important and together with psychological factors lead to phenomenon like panic and herding behaviour in markets. The heterodox view is also informed by the view that understanding institutions and history is important. For example, the unequal relationship between advanced industrial countries and developing countries is seen as important for understanding the financial system and causes of crises in developing countries. Therefore, colonial history and current forms of imperialism are taken into account. As a result, solutions offered by heterodox economists are specific to a country and tend to steer away from the type of blanket solutions offered by neo-liberals. For example, when talking about capital management techniques, Epstein *et al* stress that there is "... no best practice". They say, "We have found a variety of strategies that work in countries with

⁴ Eichengreen (2002) provides an up to date review of mainstream literature on financial liberalisation and the causes of financial crises as well as solutions. Blecker (2003) provides a good overview of heterodox perspectives as well as a review of mainstream literature. Blecker provides a number of solutions for financial crises.

very different levels of state and bureaucratic capacities, depth and degree of liberalization of financial markets, different mixes of dynamic and static controls and different mixes of prudential controls on international capital flows' (p. 44).

Grabel (2001, 2003) provides a useful outline of the risks that countries face due to "neo-liberal financial integration". She categorizes the following types of risk:

- Currency risk: this risk is present whenever a currency is fully convertible. She says that developing countries are especially vulnerable to this risk because they usually do not have enough reserves to protect the value of their currency when many investors leave.
- Flight risk: this risk is related to the herding behaviour of investors. Countries are vulnerable because those holding their liquid financial assets could sell them off enmasse. Flight can lead to herd behaviour that then turns into a self-fulfilling prophecy causing the value of assets to decline.
- Fragility risks: this is when there is a danger that the public and private financial borrowers will be unable to meet current obligations. This may be because of maturity (financing long-term obligations with short-term debt) or locational (financing debt in a foreign currency potentially causing problems when there is devaluation in domestic currency) mismatch. It may also arise when debt incurred was used for investment concentrated in a few sectors of the economy, which lead to formation of speculative bubbles in these sectors.
- Contagion risks: risk due to instability emanating in another country or region when a country is relatively open. The extent of the danger of contagion depends on how susceptible a country is to currency, flight and fragility risks.

Grabel adds that vulnerability to the above risks means that a country also suffers from risks to their sovereignty. Sovereignty risk is the risk that a country facing a financial crisis will be unable to pursue independent actions but have to consider actions to avoid flight risks and to increase investor confidence. This country may also have to accept help from the IMF or World Bank and agree to certain conditions to receive this help.

Blecker (1999, p.90) lists some solutions heterodox economists propose to deal with short-term capital flows (i.e. "cooling down hot money"):

- Measures that will slow down short-term international capital using taxes on foreign exchange transactions, e.g. the Tobin Tax;
- Capital and exchange controls in developing countries;
- Regulation of capital flows in industrialized countries such as prudential regulations on capital outflows and restrictions on short-term inflows to discourage the inflow of capital from developing countries when there is panic or contagion.

A critique of neo-liberalism is also inherent in the policy options offered by heterodox economists. The predominant role of financial capital within the global economy is cause for concern to many heterodox economists. For example, within post-Keynesian literature the idea that the relative size of the financial sector to the size of the rest of the economy is an indicator of the instability of the economy is generally accepted and the role of financial speculation is seen as negative for an economy (Singh, 1999), Shiller, 2000). The conclusion of Keynes (in <u>The General Theory</u>), and many of his followers, is that the state should play an important role in directing capital expenditure through controlling much of investment in a country either through directly investing itself or influencing where the private sector invests. In this way, aggregate demand can

be kept at a level that maintains full employment and the instability inherent in capitalist economies, which is enhanced by the growth of the financial sector, can be tamed (Block, 1978, Helleiner, 1994).

SOUTH AFRICA RECEIVES A SURGE IN NET CAPITAL INFLOWS

Capital flows really took off after the 1994 democratic elections (see Figure 1). After 1997 capital inflows seem to have been affected by the financial crises in East Asia and elsewhere. Capital inflows decrease from 1997 to 1998 and then increase again in 1999. In 2000 there is a severe drop in the level of net capital flows and it drops again in 2001. After the 2001 currency crisis the net flows improve

Three Routes to Financial Crises

Palma (2002) describes three routes to financial crisis using Mexico, Korea and Brazil (routes 1, 2 and 3 respectively) to illustrate the different routes to financial crises. The different routes are related to how countries absorbed the sudden large capital inflows experienced after liberalization. Palma's "routes" provides a framework for thinking about how large capital inflows may have affected South Africa.

In route 1 countries, the inflows were passed on as massive increases in the amount of credit available to the private sector. As a result foreign debt increased tremendously and the term structure of the debt was heavily weighted towards short-term debt. The inflows led to reduced interest rates and revaluation of the currency. The combination of increased credit availability and interest rate reductions led to a consumption boom, a stock market bubble and real estate bubble, and a decline in savings. The consumption boom led to a massive increase in imported consumer goods that resulted in a huge deterioration of the current account. Foreign lenders soon realized that the situation in Mexico was unsustainable and as soon as some asset holder started pulling their funds out of Mexico (or selling their Mexican assets) the herd followed and the result was a major financial crisis.

In Korea, the massive surge in short-term inflows was also passed on as a surge of low interest credit to the private sector. Unlike Mexico, the credit did not go into consumption but was used to sustain high levels of investment. Korean chaebol had an ambitious investment programme related to increasing their share of international sales in many key but highly competitive industries like electronics and automobiles. One problem with this strategy was that levels of profitability were in decline because of high levels of competition in these industries. To remain competitive in these industries it was necessary to continually invest huge amounts into maintaining technological superiority. As a result, large Korean corporations, which absorbed most of the surge in inflows, were hugely over-borrowed. At the same time the Central Bank of Korea maintained low levels of foreign reserves. The result was that foreign lenders soon lost confidence in Korea when it suffered some low growth despite its history of high levels of growth and productivity. The withdrawal of finance led to a major financial crisis.

Malaysia and Thailand had elements of both route 1 and route 2 when they had their crises. Their massive inflows of short-term capital were also directed to the private sector. However, unlike route 1 they did not revalue their currencies, did not have consumption booms and lower savings. The experience of stock market and real estate bubbles financed with short-term foreign debt was similar to route 1 countries. Like route 2 countries, the increased access to credit went into investments in the productive sector. Unfortunately, the economies of Malaysia and Thailand were attempting to break into value-added new markets in competition with countries that they had previously subcontracted for. At the same time, China emerged as an important competitor in many of the markets that Malaysia and Thailand depended on for their exports. The result was

that they had low growth at a time when their foreign borrowings were very high. So despite a strong track record of high growth and productivity these countries were affected by financial crises when managers of short-term funds embarked on panic-ridden flight from their economies.

The massive short-term inflows in Brazil, route 3, did not lead to consumption or investment booms. Fear of spiralling inflation caused the Brazilian authorities to increase interest rates. Learning from the Mexican experience, the Brazilian authorities maintained high interest rates to avoid a consumption boom and stock market and real estate bubbles. However, this strategy led to big problems in their public finance sector and lots of fragility in the private banking system. At the same time, due to the very high interest rates, public debt was increasing faster than revenues and returns on foreign exchange reserves. The high interest rates negatively affected industry and the tax revenues of government declined even further. However, Brazil could not reduce interest rates because of internal politics, lack of public sector reform and the need to maintain their exchange rate. A decline in the value of their currency may have deepened the financial problems of the banks that had big foreign debt. These obvious problems in Brazil led to a quick loss of confidence that led to withdrawal of finance causing a major financial crisis.

Palma concludes with the insight "So, the moral of the story of the 'three routes' is that no matter how LDCs facing sudden and massive surges in capital inflows have handled their absorption, they have ended up in major financial crises" (p.32).



The Nature of Capital Flows into South Africa

[Source: SARB]

The change in the composition of net capital flows is of interest in South Africa. South Africa was affected by the reluctance of banks to lend to developing countries after the 1980s debt crisis. In figure 2 one observes that before the 1985 moratorium on short-term debt and the five-day suspension of foreign exchange, net other investment flows, which includes bank lending, was the

largest part of net capital flows. Net other investment flows did not recover in Latin American countries after the debt crisis and the same seems to have happened in South Africa. The net other investment flows seem to have been replaced by a surge in net portfolio investment flows and net direct investment flows (related to privatisation) in Latin American countries. South Africa has also experienced a surge in portfolio flows and certain increases in direct flows also related to privatisation.

From 1985 to 1993 net capital flows were negative. There is noticeable positive growth in flows of net portfolio flows from the 1990s. During the 1994 to 2000 period direct investment was a small proportion of total capital inflows in South Africa. In 2001 when there is a significant drop in net portfolio flows, net direct investment is a more significant portion of total capital inflows. In 2001 net direct investment is large (probably because of privatisation revenues) and net portfolio and net other capital flows relatively small. The instability in capital inflows during the period after 1995 is related to the movements of short-term portfolio flows. This movement seems closely related to contagion resulting from financial crises in other parts of the world and economic slowdown in developed economies. The surge in short-term capital flows greatly increases a countries vulnerability to financial crises. This will be discussed in more detail below.

The process of neo-liberal global integration has been happening since the breakdown of the Bretton-Woods arrangements in the 1970s and escalated during the Reagan-Thatcher era in the 1980s. By the end of the 1980s, most countries, including developing countries, had moved towards full convertibility of their currencies and the push for liberalization of financial markets was well under way. The apartheid government was also influenced by the drive towards neo-liberal integration and had attempted financial liberalization, starting with an attempt to end the dual currency exchange rate system in 1983. This experiment failed because a number of foreign banks, spooked by heightened internal resistance to apartheid in the 1980s and pressure by the international anti-apartheid movement, decided to withdraw or not renew lines of credit. The rand exchange market and the Johannesburg Stock Exchange securities market. This suspension lasted five days: from August 28 to September 1, 1984. One of the tasks of the new government after the first democratic elections in 1994, once political stability seemed to have been attained, was to renew this process of financial liberalization starting with the abolition of the dual exchange rate system.

The end of apartheid coincided with a period when there was a lot of liquidity in international markets. There was huge growth in the value of the assets of institutional investors. According to Palma, the average increase for the G7 group of countries between 1988 and 1996 was about 40% of GDP and the growth in the US was 60% of GDP while in the UK it was as high as 80% of GDP (Palma, 2000, p. 9). Palma adds that massive international liquidity was an important contributing factor to the massive increase in flows to some developing countries but not the only reason. He argues that some developing countries play the role of "market of last resort", especially when an increase in international liquidity occurs at a time when there is slow growth in OECD countries. After the democratic elections South Africa became an important option for institutional investors looking to expand their portfolios to include Sub-Saharan Africa. It is the strongest economy in the region with the most developed industrial sector and a wealth of mineral resources.

Another reason for movements of capital to certain developing countries is the belief by investors that economic reforms (such as those suggested by the Washington consensus) would lead to environments where they could earn good returns on their investments. The new South African government made a concerted effort to attract capital flows by assuring credit rating agencies, financiers and potential investors that it would maintain strong macroeconomic fundamentals and

implementing other reforms such as trade liberalization. The government's problematic assertion that GEAR is nonnegotiable is obviously part of this effort.

Some developing countries are relatively more attractive to foreign investors because of opportunities for profit, such as undervalued asset markets (especially stocks and real estate), high interest rate spreads and the expectation that there will be a real appreciation in exchange rates. Palma argues that some developing countries will artificially develop these attractions to gain inflows (ibid, p. 10). South Africa was relatively attractive to foreign investors due to the existence of relatively undervalued assets as a result of years of international isolation and high real interest rates. The interest rate spread was kept relatively high at 4.7% in 1994 and increased to 5.3% by 2000.

The huge inflows into developing countries are an important cause of financial crises in the neoliberal era. Since the end of apartheid, South Africa has joined the club of developing countries experiencing relatively large capital inflows. A large proportion of the inflows are short-term, highly volatile inflows.

Figure 1 shows the rapid rise in net capital flows into South Africa from 1994. At its peak in 1999, net capital flows were 4.1% of GDP. The huge surge in net capital flows into South Africa fortunately was not as large as the flows that went into Brazil (about US\$200-billion), Mexico (nearly \$150bn) or the East Asian countries (Malaysia, Thailand and Korea added to about \$250bn) that had crises. For example, before the crisis in Malaysia, net capital flows were about 25% of GDP. The flows to South Africa may be smaller than those to Mexico, Brazil and the East Asian countries for a number of reasons. South Africa became available as suitable destination later than these countries and many institutional investors had committed funds to the other countries. The institutional investors were less interested in Sub-Saharan Africa and had dedicated fewer resources to research investments there. There was confidence with respect to the economies of Mexico, Brazil and East Asia and in some of these countries speculative bubbles emerged. These investment bubbles probably limited the amount of funds that could be diverted to investing in South Africa and limited interest in South Africa. The South African economy was just emerging from a period of instability and the new government had a huge challenge ahead in reducing poverty and improving the lives of a highly politicised citizenry. Therefore, despite the new South African government's overtures towards the Washington Consensus, foreign investors may have chosen relative restraint when making decisions to invest in South Africa. Despite this restraint the net capital flows were huge compared to previous inflows into South Africa.

Figure 2 shows that South African net portfolio investment flows increased from 1991 once negotiation for the transition to democracy had started. Net portfolio investment flows skyrocket from its level early in the early 1990s to about USS\$8.5bn by 1999. By 2002, after the currency crisis, net portfolio investment flows remain negative. Historically most portfolio investment inflows (liabilities) into South Africa went to the public sector. During the period 1995 until the 2001 currency crisis the bulk of portfolio inflows went to the private sector.



[Source: SARB]

In figure 3 we see that from 1994 the share of portfolio investment inflows to the "private nonbanking sector" increases steadily and as early as 1995, the "private non-banking sector" share of portfolio flows is larger than the share to the public sector (i.e. public authorities and public corporations). The share of portfolio flows to the private sector is much larger than the share to public sector until 2001 when the portfolio inflows to both public and private sector are negative. In 2002 portfolio inflows to the private sector were still negative and flows to the public sector had improved a bit.

HOW THE SURGE IN CAPITAL INFLOWS WAS ABSORBED BY THE SOUTH AFRICAN ECONOMY

Palma's description of the different routes to financial crises highlights the importance of the manner in which a country absorbs surges in capital flows. It does make a difference whether surges in capital flows are used for productive purposes or feeds consumption and speculative acquisition. When capital inflows are used wastefully it weakens the economy because a country's liabilities are increased but there is no growth in productive assets. This type of behaviour is unsustainable and constrains a country's ability to raise foreign capital for productive purposes in the future. The experience of Latin American countries with financial crises provides an important lesson because they have gone through surges of other flows in the 1980s, portfolio flows in the 1990s and direct flows related to privatisation from the mid-1990s. During the 1980s and 1990s the surges in capital flows seem to have been absorbed by more

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wasteful and fewer productive activities. Now these countries have limited inflows of other investment and portfolio investment and have little left to privatise. They may face a situation where they have very low capital inflows in the future. Therefore, it is important that policy towards capital flows in South Africa guards against huge surges in capital and ensures that capital inflows into the country are invested in growth and not used wastefully.

Figure 4 shows that the increase in net capital flows was associated with expanding credit to the private sector. Domestic credit to the private sector increased significantly since 1997 from 117% of GDP to 143% of GDP in 2000. This is a relatively high share of credit to the private sector.



[Source: World Bank Global Development Indicators (GDI)]

Palma shows that before their crises, Mexico had domestic credit to private sector of about 50%; Chile's was just less than 60%; and Korea's less than 80%. Brazil chose not to expand credit to the private sector by attempting massive sterilization. South Africa's level of domestic credit private sector is high compared to countries that had financial crises.

South Africa seemed to be a relatively safe emerging market after the financial crises in Asia in 1997 and managed to maintain relatively high levels of net capital flows until 1999. Figure 5 shows that after the surge in net capital flows in 1997 was followed by a reduction in real lending rates from 1998. There seemed to have been a process where increased net capital flows led to more liquidity and reduced the real cost of capital. As shown in figure 4, there was an associated rapid increase in domestic credit available to the private sector. The question that remains to be answered is how the private sector in South Africa utilized the increased capital available to them.



[Source: International Monetary Fund's (IMF) International Financial Statistics (IFS)]



[Source: World Bank GDI]

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Figure 6 shows that private gross fixed investment as a percentage of gross fixed investment was static from 1994 to 1997 at around 73% (this was a large increase from 64% in 1991) but drops to 67% in 1998 and recovers to 69% in 1999. Therefore, gross private fixed investment did not increase significantly at a time when there was a large increase in domestic credit to the private sector.



[Source: SARB]

Figure 7 provides further evidence that the surges in net capital flows and more credit to the private sector were not associated with more private investment. Figure 7 shows private gross fixed capital formation (GFCF) as a percentage of GDP. There is a decline in private GFCF as a percentage of GDP from the early 1980s to 2000. From 1993 to 1997 there is a recovery of 1.5% and then another decline of 1% from 1997 to 1998. There is a slight recovery in 2000 and 2001. On the whole, private GFCF was poor during the 1990s and the surge in net capital inflows that translated into more credit to the private sector did not lead to the private gross capital formation levels of the 1980s. Therefore, the surge in capital flows in South Africa was unlike those in East Asian countries but more like that of countries in Latin America. In countries like South Korea, Malaysia and Thailand the surge in inflows was related to demand for capital to maintain high levels of investment during a period when their profits were falling rapidly. ⁵ In countries like

⁵ This is not to say that the surge in net capital flows did not lead to exuberant behaviour in the East Asian countries. Malaysia and Thailand had such large surges that they had real estate and stock market bubbles related to the increase in availability of capital.



Mexico, Argentina and Chile the surge in capital flows was as a result of external supply rather than domestic demand.

[Source: SARB]

Figure 8 shows imports of goods and non-factor services as a percentage of GDP for the period 1978 to 2000. Throughout the 1980s there is a decline in imports as a percentage of GDP. During the early-1990s this decline slows and from 1994 there is a sharp increase in imports as a percentage of GDP and in 2002 it is back to its level in 1981. It seems that there is a relation between net capital increases in South Africa from 1994 and the growth of imports of goods and non-factor services as a percentage of GDP. This variable grew even though there was a significant decline in the real effective exchange rate of the rand. It was shown earlier that increases in gross capital formation or private fixed investment as a percentage of gross fixed investment were not large and not comparable to the growth in imports. Therefore, one may conclude that the increases in imports were related to domestic consumption and possibly non-capital inputs into production (or some other non-household activity). The larger proportion of imports was for private consumption. The conclusion one may draw from this is that more consumption and more imports occurred at the same time as the increase in net capital flows into South Africa.

Figure 9 shows that there was a huge increase in household consumption throughout the 1980s that continued into the early-1990s – until 1992. The growth in consumption as a percentage of GDP remains at the 62% to 63% of GDP level from 1992 until 2002. It seems that the weak investment performance from the early-1980s is related to the strong increase in household consumption. It is of interest that the growth in household consumption in the 1980s was at a time when there was a big decline in imports. The high level of household consumption is maintained during the 1990s though to 2002 when imports increased significantly. Therefore, after 1994 high

levels of consumption, of which a rapidly increasing component seems to have been imported goods, occurred at a time when there were large net flows of capital into South Africa. It seems that the large net capital flows allowed consumption to remain at a very high level at a time when more of consumption was imported goods. The increase in net capital flows may have helped maintain the high levels of consumption and consumption of imports by offsetting the declining real effective exchange rate of the rand.



[Source: SARB]

Statistics South Africa reports data for buildings completed. From this data we can conclude that there was not a real estate bubble as in Mexico or the East Asian countries before their financial crises. The total value of buildings completed as a share of GDP was 3% in 1994 and stayed at this level until 1998. It dropped to 2% of GDP in 1999 and stayed at this level until 2000. The bulk of the decrease in total buildings completed was from residential building that dropped from 1.7% of GDP in 1995 to 1% of GDP by 2000. Non-residential buildings started out at 0.6% of GDP in 1994 and 1994 then increased to 0.9% of GDP by 1997 and then reduced back to 0.6% of GDP by 2000. Similarly, the data on real estate transaction values provided in the IFS of the IMF shows that real estate was 8.1% of GDP in 1994 and then reduced to 6.6% of GDP by 2000.



[Source: IMF's IFS]

Figure 10 shows the index of industrial and commercial share prices on the Johannesburg Stock Exchange. There was fast growth in prices throughout 1990s. There was very slow growth during the early-1980s with a relatively sharp drop in prices in 1986 and a slow recovery until 1990. The sharp growth in share prices during the 1990s, probably fuelled by the international exuberance for information technology stocks, coincides with the surge in ret capital flows from 1994. The price index increases from 66.5 to 120 from 1993 to 1997. After 1997 the index remains over 100 until 2001 despite the instability in international financial markets. While there may not have been a stock market bubble, there does seem to have been exuberant growth based on easy access to credit in the private sector.

The South African government is offering an amnesty to residents who have violated South African exchange controls indicating that they are concerned about capital flight. Preliminary estimates of capital flight from South Africa for the period 1986 to 2000 are presented in figure 11.⁶ These preliminary estimates indicate that capital flight from South Africa increased a lot after the democratic elections in 1994. Figure 11 compares capital flight as a percentage of GDP and net capital flows as a percentage of GDP for the period 1986 to 2000. We see that after 1994 there is a very strong similarity in the trends of both capital flows and capital flight. In fact, there is a positive Pearson correlation between adjusted capital flight as a percentage of GDP and capital flows into South Africa as a percentage of GDP for the period 1986 to 2000 of 78%.

Ndikumana and Boyce's (2002) investigation of capital flight from certain countries in Southern Africa (excluding South Africa) shows that there is a significant positive relationship between

⁶ I estimated capital flight for a paper that is still in draft form. These estimates are preliminary and I will be doing more work to refine the calculations. I use the methodology to capital flight used by Boyce and Ndikumana (2002).

increase of debt into Southern African countries and capital flight. The strong correlation between capital flows and capital flight in figure 11 indicates that this may be the case in South Africa as well. During a period when there was a surge in net capital flows that increased the availability of credit to the private sector there was also a significant increase in capital flight.



[Source: SARB and Mohamed (forthcoming)]

Examination of how the surge in net capital flows was absorbed by the South African economy shows that contrary to mainstream thinking more access to capital may actually weaken the South African economy. This sad situation arises because the surges have not contributed to investment in productive capacity that will lead to future growth in the economy. Instead, the net surges have reinforced existing exuberant trends by providing easier access to credit for pushing up the share price index and increasing consumption and imports. There has also been substantial capital flight since 1994 that may have been fuelled by the increase in capital flows during the same period. In addition, along with the sharp increase in imports, the increased level of net capital flows has led to a need to increase foreign exchange reserves. Reserves are necessary but they are idle assets and there is an opportunity cost to the economy when maintaining relatively high levels of reserves. Therefore, the surge in capital flows is associated with activities that may increase the liabilities in the South African economies without the accompanying investment that would lead to growth in our assets and productive base in the future.

SURGE OF NET CAPITAL FLOWS AND THE 2001 CURRENCY CRISIS

Grabel (2001) provides a useful outline of the risks that countries face due to "neo-liberal financial integration", such as currency risks, flight risks, fragility risks and contagion risks (see the literature review for a more detailed outline of these risks). I have shown that the size of net flows of capital into South Africa since the democratic elections in 1994 were large but not as

large as the capital flows that moved into Mexico, Brazil and East Asian economies after they liberalized and before their crises. The relatively smaller size of the net capital flows – for example, relative to GDP and size of exports – may mean that South Africa is less vulnerable to a financial crisis than the aforementioned countries. In other words, the relatively lower surge in net capital flows means that fragility risks were lower in South Africa. However, South Africa was still at risk because the surge in net capital flows made South Africa vulnerable to contagion, flight and currency risks.

South Africa's increased vulnerability as a result of the surges in capital flows is illustrated by the rand currency crisis in 2001. The exchange rate of the rand to the US dollar dropped more than 35% and according to SARB figures the real effective exchange rate of the rand dropped about 20% between 2001 and 2002.⁷ The decline in the value of the rand is definitely related to the sharp decline in net capital flows from US\$5.3bn in 1999 to US\$0.3bn in 2000 down to - US\$0.5bn in 2001. The decline in net portfolio flows was from US\$8.6bn in 1999 to -US\$2.0bn in 2001. The inflow (liabilities) of portfolio flows was from US\$13.7 in 1999 to -US\$2.8bn in 2001.



[Source: SARB (Portfolio flows and foreign exchange reserves) and World Bank GDI (Short term external debt – only available for 1994 to 2001)]

⁷ Diwan (2001) following the convention initiated by Frankel and Rose (1995) defines a financial crisis as a situation where the nominal exchange rate of the domestic currency to the US dollar falls by 25%. By this definition South Africa had a financial crisis at the end of 2001. I break with this convention (maybe unwisely) to differentiate what happened in South Africa from the financial crises analysed in Palma (2000). As a result I call the large decline in the value of the rand in 2001 a currency crisis.

Figure 12 shows foreign exchange reserves, short-term external debt and portfolio inflows all as percentages of GDP. The negative gap between short-term debt and foreign exchange reserves was addressed by the new government and it made a huge effort to build up reserves. After 1996 they managed to reduce the gap between short-term debt and foreign exchange reserves. The SARB reports that the "ratio of imports covered by reserves (number of weeks)" improves from 5.6 in 1994 to 17.9 in 2001. However, this gap does not seem to have been enough to avoid liquidity problems caused by the massive drop in portfolio flows, which was probably due to the poor performance of developed country economies and contagion effects.

The share of net portfolio flows absorbed by the public sector after 1994 was not insignificant (see figure 3). A good part of these inflows seem to have been channelled into increasing the reserves of the SARB to decrease the risk of financial crises. The flows into foreign exchange reserves mean that more capital that could have been invested in production or in socio-economic investments such as education or infrastructure is idle. These reserves represent a cost to South African society. The implementation of capital management measures, including some forms of capital control and prudential regulation, may be a more cost effective and reliable means of protecting the economy from the destabilizing impact of currency flows.

The potential liquidity problems caused by a massive decline in net capital flows in 2000 probably led to panic in financial markets and further flight out of rand denominated assets. This flight would have raised expectations that there would be a massive decline in the value of the rand relative to the major global currencies. This expectation would then have led to herding behaviour and further flight. The result was the currency crisis at the end of 2001. Therefore, the comfort level provided by the huge build up in foreign exchange reserves was not enough to avoid the currency crisis that led to a significant increase in inflation rates. Unfortunately, this decline occurred in an environment where government had orthodox monetary and financial market polices. Therefore, the only tool available during crises is monetary policy. The interest rate was increased by 4% during 2002. This tightening of monetary policy has the potential to negatively affect investment, job creation and economic growth over the next few years.

The cost of current government macroeconomic policy and their position on capital management, which focuses on prudential regulation and ignores capital controls, has proven to be very costly for the South African economy. These costs can be measured in terms of instability and vulnerability in financial markets and the fallout in the real sector. Unfortunately, there has not been adequate public and academic debate about the 2001 currency crisis. There has also been insufficient research and debate about fragility risks faced by the South African economy.

CONCLUSION

The manner in which increases in capital flows since 1994 were absorbed by the South African economy provides an important lesson for South African policymakers. There are long-term potential costs to increasing consumption, imports, share prices and capital flight. The lessons of surges in capital flows, capital absorption and financial crises in other developing countries should make us weary of our potential for increasing fragility risks. The short-term cost of the 2001 currency crisis is an important signal that we should consider more effective capital management techniques and look beyond orthodox solutions to financial market instability. The potential problems that certain Latin American countries may have raising capital in the future

should alert us to the importance of well manage capital markets and ensuring that capital inflows are productively and effectively utilized.⁸

Fortunately, net capital flows into South Africa after 1994 were relatively small compared countries that had financial crises. Therefore, South Africa's vulnerability to fragility risk was small and the threat of the currency crisis to evolve into a full-blown financial crisis was contained. In other words, the large decline in the value of the rand increased the rand value of foreign debt but not to the extent where debt (both long- and short-term) could not be serviced. The important point for researchers and policymakers to keep in mind is that a financial crisis may have been avoided because net capital flows did not grow as much as they grew in countries that had financial crises. The potential cost of large surges of capital inflows and outflows on the economy is severe. The 2001 currency crisis and the damage it caused to the economy provides a strong rationale for the need for much more debate and research to consider the type of capital management techniques required to protect and stabilize the South African economy.

⁸ The potential problems that certain Latin American countries may have raising foreign capital are discussed above. In a nutshell: these countries have had surges in net capital inflows that have led to debt or financial crises. They have not utilized capital inflows productively. They had other investment in the 1980s and portfolio inflows in the 1990s both these sources seem to be scarce in these countries now. The last flow available to them is direct flows and this has increased with privatisation. However, there are a finite amount of state assets to privatise.

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