The international banking crisis and domestic financial intermediation in emerging market economies: issues for South Africa

South African Reserve Bank

Differences between South Africa and other emerging market economies (EMEs) during the crisis

South Africa has not been directly affected by the financial crisis due to a mixture of historical, fundamental and circumstantial factors. In general, South African financial institutions have had fairly limited exposure to foreign structured finance products, and have been subjected to fairly conservative financial regulation and risk management practices, within the context of sound macroeconomic policies.

As a result, in contrast to central banks in the industrialised world, the South African Reserve Bank (SARB) has not experienced any pressure to alter its monetary operations since the onset of the financial crisis. The fluctuations in the amounts of liquidity provided in its refinancing auctions, even though subdued, were exaggerated by the relatively small money market shortage, which fluctuated between South African rand (ZAR) 9 billion and ZAR 14 billion. The SARB did not have to respond to any shortage of liquidity by increasing the amounts offered in its monetary operations.

The SARB, in accordance with its inflation targeting framework, implemented a tightening monetary policy stance from June 2006, in reaction to a deteriorating inflation outlook at the time. The repurchase rate was increased from 7.0% to a peak of 12.0%. In December 2008, the Monetary Policy Committee of the SARB reduced its policy rate by 50 basis points (bp), followed by further cuts to the current all-time low level of 6.5%. However, as explained in the monetary policy statements, these reductions were facilitated by an improved inflation outlook against a backdrop of slowing economic growth and declining commodity prices. Consistent with the SARB's exchange rate policy of non-intervention, the rate changes were not intended to influence the level of the exchange rate, which is left to be determined by market forces, nor were they changed 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.

In South Africa, the spread between the market rate (as measured by the South African Benchmark Overnight Rate (Sabor) on deposits) and the SARB's repurchase rate continued to fluctuate within its usual range. The spread also remained negative, that is, market rates remained below the policy rate, indicating an absence of extraordinary upward pressure on overnight rates. Volumes of overnight interbank lending activity in South Africa also continued as usual. If anything, volumes increased somewhat towards the end of 2008, but not to the extent that the volumes indicated any underlying trend or problem in the interbank market.

The level of the SARB's gross reserves declined by around USD 500 million to USD 33.8 billion as at the end of February 2009. However, this decline can essentially be attributed to valuation changes, as the price of gold declined and the US dollar appreciated. The SARB reduced its borrowed reserves from USD 3.5 billion in 2006 to around USD 640 million as at the end of February 2009. This reduction in borrowed reserves was a strategic decision taken due to the fact that South Africa's foreign reserves position had become healthier, and was not due to the financial crisis. In line with its exchange rate policy of non-intervention, the SARB did not use its reserves to influence the ZAR exchange rate

and has not been required in any way to use its reserves to support the stability of the financial system.

This is not to say that the South African financial system is not at risk of the second-round effects of a dwindling global economy, or that the crisis will not highlight some financial sector weaknesses that have to be resolved. South Africa is therefore very much part of the global reform agenda and is totally committed to finding ways to strengthen the global financial system without placing unnecessary burdens on countries that have no need for the measures needed in others.

Stylised facts

1. Cross-border bank lending to EMEs

(a) Supply versus demand factors

In our view, most of the decline (both in value and in number of transactions) relates to demand factors (primarily the severe contraction in international trade). In our chosen EMEs, the competitive banking landscape remains strong and certain institutions have taken the opportunity, given the strains on certain global banking institutions, to increase their market share.

Banking institutions globally have, since mid-2008, repriced risk more appropriately, which has contributed to the decline of cross-border EME lending. There is adequate supply from banks, however, at a significantly increased cost. Banks made strategic decisions to withdraw from specific markets and products, which also affected the supply/demand balance.

As a result of the crisis, international banks' available capital was eroded and capital requirements increased, as did the cost of funding. With the expected stepping up of financial regulations globally, where banks will be required to hold more capital against their risk-weighted assets, there will be further constraints on the amount of lending globally and the terms of lending that banks will be prepared to undertake.

The hypothesis that there has been a decline in cross-border bank lending to EMEs is not necessarily true for sub-Saharan Africa, as the region has seen an increase in bank lending. Figure 1 below shows that there was a decline in 2008 in line with the global markets but an increase in 2009.

South African financial institutions are forming funds to enable them to lend to finance sub-Saharan African transactions. There has also been an increase in loans from development finance institutions (DFIs) such as the International Finance Corporation (IFC), Deutsche Investitions- und Entwicklungsgesellschaft (DEG)/Kreditanstalt für Wiederaufbau (Kfw) to South African institutions for projects on the continent.

Some possible reasons for the decline in cross-border funding levels in 2008 could be attributed to:

- Reduced appetite for riskier sectors overall (see section (b) below).
- Increased oversight by parent banks of subsidiary lending, resulting in a reduction of overall lending exposure.
- Expensive pricing levels have deterred companies from coming to market; those companies prefer instead to wait until the markets re-stabilise.

- Increased focus on maximising total return on equity (ROE), resulting in a rationalisation of absolute numbers of clients banked.
- The decline in volume was also partly due to the long execution timeline of transactions in sub-Saharan Africa. In project finance specifically, projects require government or parliamentary sign off. Projects for parastatals take longer to finalise in terms of structuring, approvals and development to bankable stage, contributing to a perceived decline in the number of deals executed.

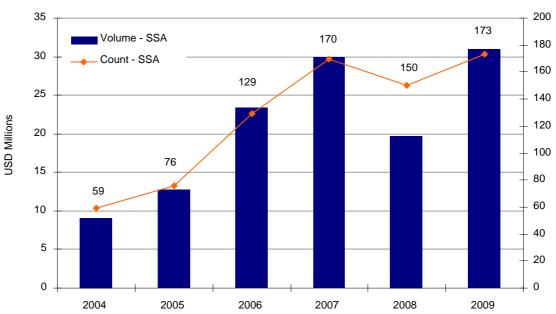


Figure 1

Movements in bank loan volumes in sub-Saharan Africa

Source: Dealogic, SSA bank loan movements, 11 January 2010

Figure 2 illustrates the decline in cross-border lending in Europe, the Middle East and Africa (EMEA) global syndicated lending activity. The decline was most likely due to the financial conditions prevailing at international banks and the subsequent policies imposed or adopted after the onset of the crisis. Banks have continued to prioritise limited available capital for existing clients offering specific ancillary business opportunities. In addition, banks have limited their exposure to northern/eastern European names in general, and have broadly stuck to their areas of expertise. There has been a reduction in the number of European institutions due to European government restrictions or the conditions pertaining to the bailout funds received during the crisis. Some representative offices and branches have been closed down due to EU Commission discussions and guidance. The contraction in the number of European and other African banks to increase their market share of business.

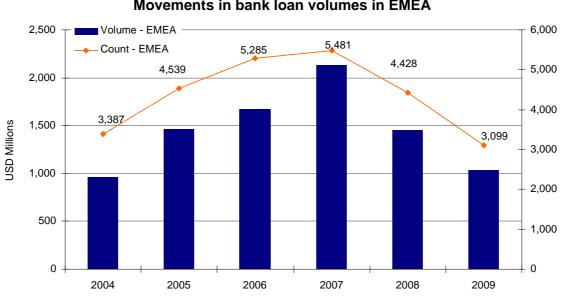


Figure 2 Movements in bank loan volumes in EMEA

Source: Dealogic, EMEA bank loan movements, 11 January 2010

In summary, it can be said that South African banks are not heavily dependent on foreign funding, and cross-border bank lending is generally low. During the crisis, South African banks' general experience was that, although the price and maturity of cross-border bank lending was affected, it was still possible for the large South African banks to obtain the lending they required. Any decline in cross-border lending was therefore caused by a mixture of supply and demand factors, ie the foreign lending banks increased the price, whether for risk management reasons or because of their own balance sheet weakness, and the South African domestic banks also took on less funding due to the decline in their own lending as a result of the economic contraction.

(b) Types of lending that have been hardest hit

There has been a general "flight to safety" both in terms of credit quality and collateral. This has benefited the sovereign issuers and highly rated corporate issuers. Longer-dated financing and hard currency financing have been constrained due to the availability of term funding and the related (higher) cost of borrowing in hard currencies.

Tier 2, unsecured and mezzanine lending has all but evaporated, while investor appetite for securitised assets has declined significantly. Furthermore, certain project financings, particularly in the resources sector, have been delayed given the uncertainty in the global economy. Trade finance continues to be available, although the decline in international trade has impacted this market. The majority of export letters of credit (L/Cs) volumes are received from EMEs, mostly from the Far East.

The top five hardest hit industries in sub-Saharan Africa were the insurance, food and beverage, mining, property, and textile industries, each lending significantly less in 2009 than in 2008, as illustrated in Figure 3 below.

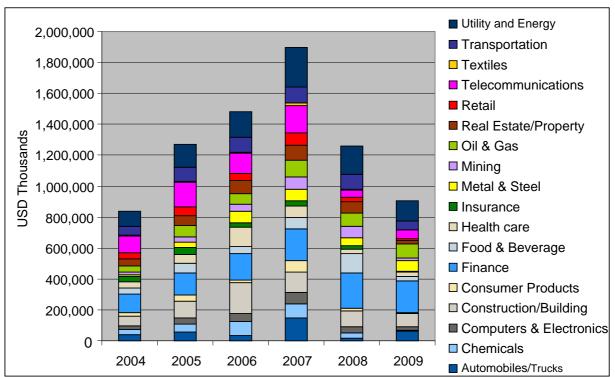


Figure 3 Sub-Saharan Africa credit extension

Source: Dealogic, sub-Saharan Africa credit extension, 11 January 2010.

In South Africa, the financial services sector has been significantly affected by the financial crisis, as well as property finance – specifically hotels and the leisure sector due to their dependency on consumer demand. Banks have not ventured into significant sub-Saharan property lending and do not have comparable history.

Microfinance institutions' funding sources dried up because international DFIs significantly reduced their funding to domestic DFIs in order to shore up their own balance sheets. Smalland medium-sized enterprises and borrowers seeking new money have suffered, as existing credit relationships have been given priority.

(c) Evidence of changes in cross-border lending terms

There has been a general tightening of lending criteria in all respects for cross-border lending, largely driven by the higher liquidity cost of hard currency funding plus the perceived deterioration of counterparty risk. Banks have also sought to reduce their exposure to various types of other risks.

Generally, maturities have shortened, spreads have widened significantly and there has been a shift towards better-rated counterparties and collateral. The upward shift in credit margins reflects both the pricing of risk and the liquidity premium now demanded. This is a material shift in practice where liquidity was previously taken for granted and excluded from pricing considerations.

(d) Changes in the terms of derivatives contracts offered by international banks

There have been no significant changes in the product offerings or terms relating to derivatives contracts. There has, however, been a trend towards improved contract enforceability and better collateral. In this regard, banks are now only willing to transact

against formal International Swaps and Derivatives Association (ISDA) agreements and require settlement to be through continuous linked settlement (CLS). Most banks have also reviewed and changed the collateral threshold requirements under the related credit support annex (CSA) agreements (ie exposure limits have been reduced).

There is, however, a general move towards lower thresholds in margining agreements. Thresholds are negotiated in line with the bank's external credit rating. In most instances, the threshold would reduce to zero should the counterparty be rated sub-investment grade. The margining agreements only provide for the posting of cash in EUR, USD and GBP as collateral.

There have been no significant changes in the approach of international banks to the four largest South African banks, although, generally, all parties have been pushing for tighter CSA requirements with financial institution (FI) counterparties in line with international trends.

(e) Parent financing to affiliates versus financing to unrelated parties

"Home bias" appears to be a strong theme at the moment and banks have been more inclined to direct capital towards business areas in markets where they have a very strong presence and well-established franchise. In this regard, affiliates that are not contributing materially to the group income statement or long-term group strategy have seen capital withdrawn by parent banks only to be reallocated to areas where client business is substantial and strategic.

This changing trend is a consequence of the changing risk appetite, "back to basics" banking and a smaller pool of available bank capital following significant balance sheet impairments.

2. Domestic bank intermediation: domestically owned versus foreign-owned banks

Changes in bank business models in the domestic market

(a) Changes in bank funding

Domestic banks' response to the crisis was less drastic than that of foreign-owned banks, but there is evidence of a contraction in lending and a shortening of maturities. Domestic banks voluntarily increased their holdings in statutory liquid assets noticeably over a sustained period.

The interbank market was not severely affected by the crisis and continued to function normally, but with slightly increased caution and an increased preference for shorter-term funding. Sources of funding remained unchanged, and wholesale funding from Asian countries became more accessible.

It should be noted that the maturity of South African domestic bank funding is generally short, with up to 50% of funding being short-term. It may have shortened further as a result of the crisis. Nevertheless, the interbank market never ceased to function, and there were no instances of banks being unable to fund themselves due to hoarding in the market. The retail component of South African bank funding is also generally quite small, with up to 50% of funding being wholesale, ie interbank and other FIs' deposits with the banks. This may also have worsened as a result of the crisis, as the savings of individuals dwindled due to layoffs. Nevertheless, it is a fairly "closed" system as a result of the long period of exchange control and, therefore, excess funds always tend to end up with the banks. While contractually short-term and wholesale, much of the bank funding is in practice constantly rolled over, so the de facto maturity is much longer.

(b) Changes in bank lending

Domestic banks' lending contracted over the crisis period. Banks became much more riskaverse and tightened their credit criteria. Demand from the household sector declined over the period owing to the high levels of indebtedness and the aftermath of the high interest rates.

Corporate bond origination ceased almost entirely over the period while loans experienced subdued demand.

Generally, the most significant change in bank lending was a rapid decline in the rate of growth in almost all types of lending. South African banks experienced a long period of high lending growth despite the fact that lending standards were never lowered to the same extent as in the United States, for instance. When the financial crisis occurred, the South African financial system was not directly affected, but when the world economy started to slow and exports began to decline, bank lending growth all but disappeared. This was due both to the procyclical behaviour of banks and the shrinking demand from retail borrowers in particular, who had "learnt their lesson". The loan to value ratio for mortgage lending was lowered, resulting in more secured lending. Corporate lending decreased in proportion to household lending due to the economic contraction. South African banks' exposure to debt securities did not change significantly during the crisis, and is generally low.

(c) Liquidity of banks' balance sheets

There is evidence of a build-up in liquid assets as banks have placed money in short-term instruments that qualify as liquid assets. Figure 4 below shows how the liquid assets held by the banking sector have increased.

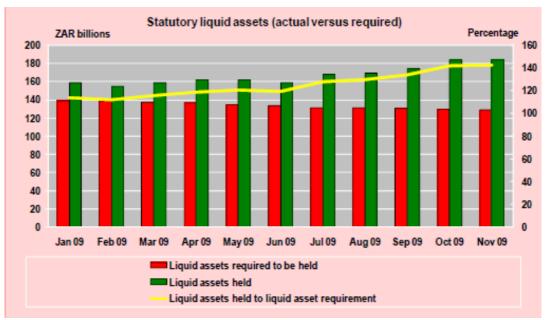


Figure 4

Banks' holding of statutory liquid assets

Regarding the shortening of lending maturities, banks generally contracted their lending activities. Lending commitments were generally either formally withdrawn or not honoured. In addition short-term assets matched with shorter-term funding.

Changes to South African banks' balance sheets were not as dramatic and rapid as in other countries. Banks deleveraged under the pressure of international expectation by shrinking lending books, holding back on dividends, and general cost cutting. South African banks' leverage was rather low in comparison to other jurisdictions, around 17 times, and has improved even further following the crisis. Liquid assets as a percentage of total assets remained conservative and well within the regulatory requirements throughout the crisis period. It is likely, however, that banks shortened the maturity of their loan books as a result of the crisis.

(d) Responses of foreign-owned versus domestically owned local banks

Foreign-owned banks include Absa Bank Limited (Absa), which is the second largest bank in South Africa and specialises primarily in domestic retail and wholesale operations. However, Absa responded to the crisis in a similar manner to domestic banks and, therefore, the analysis of the response of foreign-owned banks does not include Absa.

As a result of the crisis, foreign-owned banks contracted their lending activities in an effort to maintain short, matched positions. Simultaneously, funding from their head offices dried up and local long-term funding became scarce, while spreads on shorter-term funding were increased. Foreign banks' exposures were concentrated mainly in the corporate sector. A number of locally originated derivatives transactions were booked or transferred abroad to regional head offices.

The main difference in the two responses was that foreign-owned banks with head offices in the worst-affected countries experienced greater funding difficulties following their head offices' withdrawal of excess funding and their decision to stop the provision of new funding.

Ever since their return to South Africa following the divestments of the 1980s, foreign-owned banks have not really re-entered the retail lending market and, therefore, any differences in their response did not affect the household market. Local banks continued to express confidence in the South African economy and seemed both confident and cautiously optimistic about their ability to weather the storm. Foreign-owned banks operating locally were impacted by the news about their principals and/or owners abroad, which, if bad, emphasised their de-linkage and independence, and which, if good, stressed the willingness of their parents to stand by them. Generally, mergers and acquisitions (M&A) activity and initial public offerings (IPOs) dwindled to almost nothing and, combined with the fact that trade-related financing activity all but disappeared, foreign-owned banks were generally either closing down or merely riding out the storm as best they could.

3. Impact on local money and debt markets

(a) Effects of the crisis on liquidity in various segments of EME foreign exchange markets and the implications for domestic money markets

Although several countries reported severe foreign exchange (FX) shortages, this was not the case in South Africa. Movements in the spot exchange rate of the South African rand were related to movements in the currencies of developed economies and were not due to any direct impact of the global crisis on South African markets. This was also the case in the FX forward market. Temporary month-end liquidity shortages resulted in movements in forward rates at month-end, but these rates generally stabilised after month-end.

There were, however, changes in the turnover in the various components of the FX market. The rate of growth in total FX turnover declined significantly in 2008 in light of the credit crisis. In the South African context, total turnover in the FX market increased by 62% between 2003 and 2007, and grew by 1.8% in 2008. FX swap and forward turnover declined in 2008, while spot turnover increased. The share of spot turnover increased to 25% from

22%, that of swaps declined to 68% from 70% and the share of forward exchange turnover remained unchanged at 7.0%.

The turnover figures referred to in the previous paragraph include the SARB's participation in these markets. However, the SARB's share is relatively small, and the impact on the domestic money markets was therefore also relatively small.

The events surrounding the collapse of Lehman Brothers had an impact on sentiment in the domestic markets, but movements in these markets were mainly due to domestic factors rather than the consequences of direct exposures by local institutions to events occurring as a result of the global financial crisis.

International financial integration and financial market liberalisation sharply increased the supply of FX to South African markets in the pre-crisis period. In addition, South Africa experienced strong capital inflows linked to both foreign direct investment and portfolio investment over the same period. This increasing inflow of foreign capital increased the volume of transactions in the spot, forward and swap markets and positively affected the ZAR exchange rate. There were no severe liquidity problems arising from the crisis in any of these markets. The domestic money market also continued to operate normally, with only normal fluctuations in rates and spreads.

However, there is no denying that the crisis increased the risk of a sudden slowdown or reversal of capital inflows driven by global deleveraging and flight to safety, in addition to the collapse in export demand associated with the global recession.

(b) Effects of the crisis on local money markets

The impact of the global credit crisis on the domestic money markets was not as pronounced as in developed countries. South Africa experienced only negligible increases in domestic money market rates at the time when Libor rates increased significantly. The marginal increases happened only occasionally when local institutions that would otherwise have obtained funding from international markets resorted to domestic markets. In general, the local interbank market functioned effectively.

Generally, the increased supply of capital flows fed into and added to the liquidity supply in the domestic money markets. It contributed to the challenge facing financial authorities to drain the inflow of foreign capital from the domestic markets, and added to the cost of such sterilisation. Nevertheless, broadly speaking, the local money market operated normally throughout the crisis period.

(c) Effects of the crisis on secured and unsecured lending (local currency) between banks

The local interbank market experienced no disruptions as a result of the global crisis. South African banks were largely shielded against the direct effects of the crisis due to a sound regulatory framework and the fact that domestic banks had not invested heavily in high-risk securities and had very little exposure to foreign markets in their loan books. Furthermore, there were no indications that the interbank market in repurchase transactions had been adversely impacted.

In South Africa, interbank lending continued to function more or less normally, and there were no reported incidents where ostensibly sound banks were refused loans by other banks. There was no reason for the authorities to provide additional liquidity to the market or emergency liquidity assistance to any bank. In addition, the SARB did not have to guarantee any bank debt.

(d) Difficulties in the domestic government debt market

Causes of significant difficulties in the domestic government debt market during the crisis were:

- Large-volume selling of local shares and bonds by non-resident investors due to increased risk aversion.
- Increased budget deficit which necessitated increased government debt issuances. The South African Government had to issue a further ZAR 70 billion in domestic debt to finance the borrowing requirement (the budget deficit was revised upwards to 7.6% of GDP in 2009/10 from 1.0% in 2008/09, due to growth in government expenditure and lower projected revenue.)
- The SARB did not increase its holdings of government bonds to inject liquidity into the interbank market.

The broader economic context for the government debt market was a general rise in risk aversion, increasing concerns about the economic prospects and vulnerabilities of emerging markets, the negative impact of rising fiscal deficits linked to fiscal stimulus packages and the lack of appetite for government debt (sovereign risk).

The reality in international financial markets is that emerging market debt is significantly affected during a crisis. Thus, bond spreads and premia generally soar for EME government debt, especially for local currency government debt and where there is significant exchange rate volatility, which increases exchange rate risk.

South Africa did not experience the same level of difficulties as other EMEs, and even succeeded in the midst of the aftermath of the crisis to issue further debt that was oversubscribed and at favourable rates to South Africa. This is attributable to good investor confidence in the government's macroeconomic policies.

4. Central bank instruments to deal with the crisis

(a) Instruments at the disposal of central banks to deal with the domestic repercussions of an international financial crisis

The SARB did not have to implement unconventional monetary policy measures to dampen the impact of the global financial and economic crisis on the South African banking system. It did, however, introduce some flexibility in the execution of its inflation targeting mandate. Without sound banking and other financial regulations, the domestic financial markets would have been more severely and directly impacted by the global financial market turmoil. Capital controls pertaining to residents also contributed to the insulation of the domestic financial system from the global financial markets.

The SARB nevertheless has sufficient instruments at its disposal to deal with the impact of an international crisis, but each comes with a cost. The view of the SARB is that it is sometimes more difficult, but better in the long term, to do nothing rather than to react in a knee-jerk way. So, as the international financial crisis erupted, the SARB focused on pragmatic contingency arrangements such as consideration of the broadening of the definition of securities qualifying as liquid assets and eligible as collateral for emergency liquidity assistance. Other steps taken were the intensification of supervisory contact with the large financial institutions and keeping up to date with their conditions, risks and challenges. In addition, the SARB intensified its monitoring of international developments and became active in the various forums to evaluate the impact of the crisis and discuss measures to strengthen the financial system. This was considered important due to the different experience of South Africa and several other countries, and the need to ensure that the debate was balanced and that inappropriate reform measures were not imposed on countries where they had no relevance.

(b) Monetary policy responses

The SARB has adopted inflation targeting as a framework for monetary policy. This is very much a forward-looking approach and has informed monetary policy decisions since its inception in 2000. The South African economy is an open, commodity-based economy and, as such, is dependent on developments in the international economy. Although the well-regulated domestic banking system was relatively well-insulated from the fallout of the global financial crisis, the domestic economy was affected by the international economic downturn, and the resulting domestic recession required appropriate fiscal and monetary policy responses.

Apart from these concerns, the SARB has also focused on maintaining and improving its domestic market operations. Liquidity in the domestic and international interbank markets is carefully monitored. Although contingency plans were put in place and communicated to the banking counterparties, it was not necessary to provide any additional or special liquidity to domestic banks beyond the normal daily operations.

In general, the response of monetary policy to an international crisis should be determined by the long-term macroeconomic cost of the potential impact on the economy. If there is a possibility that disruption in the domestic financial system could have social costs of a magnitude greater than the private costs, then the monetary authority would be justified in using all means at its disposal to prevent the disruption or restore stability. This is because sustained price stability, which is without question the primary aim of the monetary authority, is either unattainable or of no value if there is chaos in the financial system. It is unattainable because an efficient financial system is the conduit for executing monetary policy, and it is of no value because price stability is of no consequence if intermediation failure damages the real economy beyond repair.

The SARB regularly considers possible currency depreciation as a factor in determining policy rates, whether before, during or after a crisis. However, it believes that only supply and demand in the international currency market can determine the value of the South African rand. The most it can do is to try and smooth out excessive technical volatility in the short term through open market operations within the current inflation targeting framework.

Consequently, although inflation was outside the target range of 3 to 6%, the monetary policy stance was loosened significantly in the face of an expected moderation in inflation and a weakening economy. Nevertheless, some upside risks to the inflation outlook are still prevalent and have constrained the monetary policy response somewhat.

(c) Measures taken to support (or replace) interbank lending in local currency

The interbank market in local currency continued to function effectively. It was not necessary at any stage during the crisis to introduce any additional or unconventional measures to maintain market functionality.

(d) Measures taken to support foreign currency refinancing of banks/corporations

The SARB's prevailing policy on intervention in the FX market consists of purchasing FX to fund foreign payments on behalf of clients and, depending on market conditions, to accumulate foreign reserves. However, the SARB did not intervene in the FX market to support the level of the currency.

In conclusion, the SARB believes that the value of the currency should be determined by the demand and supply of FX in the market and that it should not endeavour to change these conditions.

(e) Other available instruments

While no unconventional measures were contemplated by the SARB during the crisis period, should the need arise, South African regulatory authorities have established an approach to deal with liquidity management, both in normal times and in times of distress. At the financial market level, the liquidity-related interventions of the SARB are primarily in the form of providing liquidity through repurchase agreements, which can be collateralised by eligible liquid assets as prescribed by the SARB. In addition to providing market liquidity, temporary liquidity problems in solvent banks during crisis times can be addressed by the SARB through the provision of liquidity assistance against the pledge of suitable assets under certain conditions.

An insolvent bank will not usually be assisted in this way and an orderly exit plan will be followed, unless it is systemically significant. If an insolvent bank is regarded as systemically significant, the potential knock-on effects of settlement defaults on the financial system could have consequences far beyond the costs to the stakeholders of the ailing bank. In those cases, the government may decide to assist such a bank in the interest of protecting the financial system.

(f) Lessons learned from the crisis regarding the role of FX reserves and interventions

Over the past few years, the SARB has managed to substantially increase the level of official gross gold and FX reserves. Although the level is still below that of some peer economies, it is perceived to have contributed substantially to reducing the country's external vulnerability.

Lessons learned from South Africa's previous experiences and from various other countries are that it remains a severe risk for central banks in EMEs to intervene in the FX markets to influence the level of the exchange rate.

The crisis has not, therefore, changed the view of the SARB – for a small but open economy such as South Africa's, the level of FX reserves needed to guarantee that interventions will succeed in every case would be too onerous and costly for its economy to maintain.