Financial Stability Review

March 2008

South African Reserve Bank

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Comments and enquiries relating to this Review are welcomed and should be addressed to:

Head: Financial Stability Department
South African Reserve Bank
P O Box 427
Pretoria 0001
Tel. +27 12 313 3401/0861 12 7272

E-mail: sarbfsr@resbank.co.za

http://www.reservebank.co.za

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Purpose of the *Financial Stability Review*

The South African Reserve Bank (the Bank) defines its primary objective as the achievement and maintenance of price stability. In addition to this, the Bank endeavours to contribute to a South African monetary, banking and financial system that as a whole is as robust as possible. In pursuit of this objective and to promote a stable financial system, the Bank publishes this semi-annual *Financial Stability Review*. This publication aims to identify and analyse potential risks to financial system stability, communicate such assessments and stimulate debate on pertinent issues. The Bank recognises that it is not the sole custodian of financial system stability, and can only contribute towards a larger effort involving the government, other regulators and self-regulatory agencies, and financial market participants.

Defining financial stability

Financial stability is not an end in itself but, like price stability, is generally regarded as an important precondition for sustainable economic growth and employment creation.

Financial stability is defined as the smooth operation of the system of financial intermediation between households, firms, the government and financial institutions. Stability in the financial system would be evidenced by, firstly, an effective regulatory infrastructure, secondly, effective and well-developed financial markets and, thirdly, effective and sound financial institutions. In pursuit of financial stability, the Bank relies on market forces to the fullest possible extent and believes that any intervention should focus on containing systemic risk.

Financial instability, conversely, could manifest through banking failures, intense asset-price volatility or a collapse of market liquidity, and ultimately in a disruption in the payment and settlement system. Financial instability has the potential to affect the real sector through significant macroeconomic costs. It interferes with production, consumption and investment, and therefore defeats national goals of broader economic growth and development.

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Introduction

This edition of the *Financial Stability Review*, focusing mainly on the six-month period ending December 2007, comprises two main sections, namely financial stability developments and trends, and infrastructure and regulation.

The first section starts with an overview of current international macrofinancial conditions. It contains a discussion of the major developments in the international, emerging-market and regional environment which may influence financial stability in South Africa. This is followed by an analysis of the main developments in the domestic financial system and in some of the sectors that have a significant bearing on the overall stability of the financial system.

The second section focuses on the financial system infrastructure and regulation, and includes an overview of significant developments in the South African financial system environment.

Overview

The global financial market turmoil caused by the United States (US) sub-prime crisis once again features prominently in the *Financial Stability Review*. A sharp weakening in the US housing market and tight credit conditions have contributed to weaker economic growth in the US and in most of the other major industrialised countries, especially during the last quarter of 2007. Indications are that growth in gross domestic product (GDP) might continue to weaken globally in 2008.

Emerging-market economies could be affected negatively by the economic slowdown in the US and other major industrialised countries, depending on the severity of such a slowdown. Despite deteriorating conditions in global financial markets, total capital flows to emerging-market economies reached new highs in 2007. This supports the view that emerging-market economies might be able to rebalance the global economy in 2008. Africa is experiencing its highest, multifaceted economic growth in decades and some analysts expect the economic outlook for the Southern African Development Community (SADC) region in particular, to improve even further in 2008. Nevertheless, Africa still faces a number of downside risks that could impact negatively on economic and financial stability in the region.

Based on the analysis of selected financial soundness indicators from key financial sectors and their counterparts, the South African financial system remained sound during the period under review. Overall confidence in the financial services sector, as measured by the financial services index, remained high despite the slight decrease in the investment management confidence index. The banking sector remained concentrated and the market share of the four big banks remained high. The banks were well capitalised and profitable with the actual capital-adequacy ratio comfortably in excess of the minimum required. However, of note is the high annual growth rate, albeit from a low base, of non-performing loans and, in particular, of non-performing mortgage loans.

Using the ratio of free assets to the capital-adequacy requirement, the life insurance industry was deemed to be sound. Individual surrenders decreased and the number of new policies issued increased. However, the annual growth of share prices decelerated and individual lapses, claims and management expenses increased.

The level of foreign-exchange reserves was deemed to be sufficient to provide for short-term debt and there were no signs of undue pressure in the foreign-exchange market. The local equity market was less affected by the turbulences in the global financial markets than expected. As credit to the corporate sector continued to grow at a brisk pace, the corporate debt burden continued to increase. However, there were no indications that these developments would adversely affect the debt-servicing ability of companies as the number of liquidations decreased.

There was a slowdown in the growth rates of household financial assets, disposable income and net wealth. Although the annual growth rate of credit extended to the household sector was still high, households were spending a relatively small fraction of their disposable income to finance debt. The high level of household indebtedness could, however, present a potential source of vulnerability. The level of activity in the residential property market and the annual growth rate of house prices continued to moderate in line with the slowdown in the growth rate of the economy in 2007.

Efforts to maintain and strengthen the resilience of the South African financial system have been a key focus area for national authorities in recent years. It is expected that a number of significant regulatory and infrastructural developments that have the potential to improve

the robustness of the financial system will take place during the year. These include the implementation of the Co-operative Banks Act, 2007, which will pave the way for the introduction of co-operative banking in South Africa, and further consultation on proposed legislation, such as the Companies Bill, as well as the pension fund reform process.

Authorities involved in anti-money laundering activities are in the process of preparing for the Financial Action Task Force reassessment in August 2008, while the outcome of the Competition Commission inquiry into banking charges and access to the national payment system is awaited. Furthermore, it is expected that progress will be made towards a T+3 settlement cycle for equities and the demutualisation of the Bond Exchange of South Africa. There are ongoing developments in the supervision of financial entities and financial markets, in statistical data collection and in enhancing financial disclosure and governance, which contribute towards the overall resilience of the financial system.

Financial stability developments and trends[1]

International macrofinancial developments

The period under review was once again dominated by events brought about by the United States (US) sub-prime crisis, an issue that was covered extensively in the September 2007 edition of the *Financial Stability Review*. With the global impact of the sub-prime crisis still unfolding, uncertainty remains as to whether the US economy will fall into recession as many market observers have been predicting.

1 Unless otherwise indicated, data were supplied by the Bank Supervision, Research, Financial Markets and Financial Stability Departments of the South African Reserve Bank (the Bank).

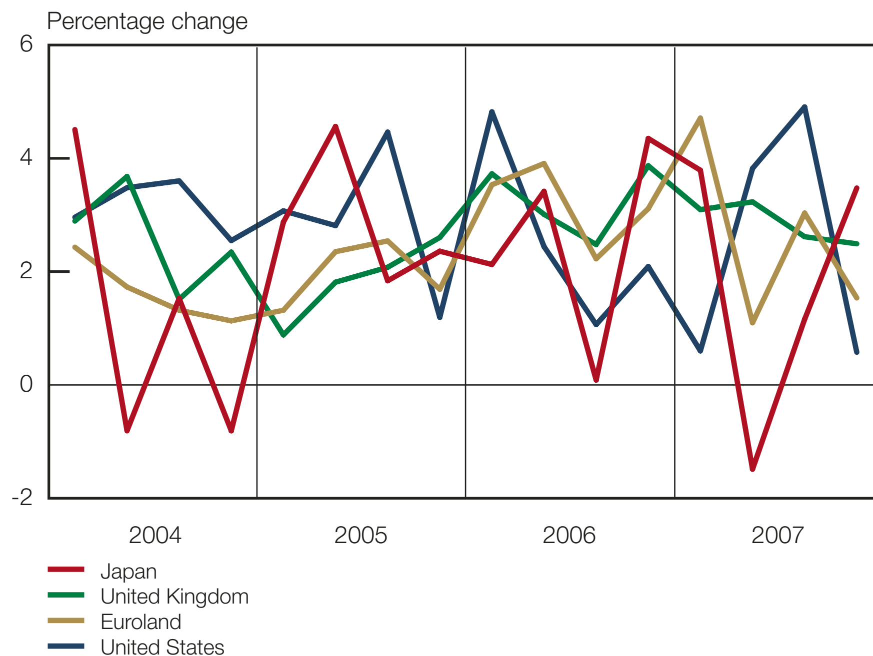
Economic growth and output in industrialised countries

According to the International Monetary Fund (IMF), world economic growth is projected to slow to 3,7 per cent in 2008, down from 4,9 per cent in the previous year. This expected slowdown in global growth is ascribed to intensified global financial market strains that primarily originated in the US sub-prime sector. US gross domestic product (GDP) growth weakened sharply in the first quarter of 2007 before rebounding to 3,8 per cent and 4,9 per cent in the second and third quarter, respectively. The acceleration in GDP growth in the second and third quarters primarily reflected increases in exports, consumption expenditure and private inventory investment. Since then, however, the sharp weakening in the US housing market and tight credit conditions contributed to weaker US economic growth (0,6 per cent) in the fourth quarter of 2007 and for the year as a whole (2,2 per cent). Both the IMF[2] and the World Bank[3] expect US GDP growth to moderate further in 2008.

2 International Monetary Fund. 2008. "IMF sees world growth slowing, with US marked down". *IMF Survey Magazine*, January.

3 World Bank. *Global Economic Prospects 2008*.

Figure 1 Quarterly growth in gross domestic product



Source: Thomson Financial Ltd (DataStream)

In Euroland, GDP growth slowed to 1,5 per cent in the fourth quarter of 2007 from 3 per cent in the third quarter. Economic data indicated that the credit crunch,[4] the strong euro, higher interest rates, high oil prices and slowing growth in some key export

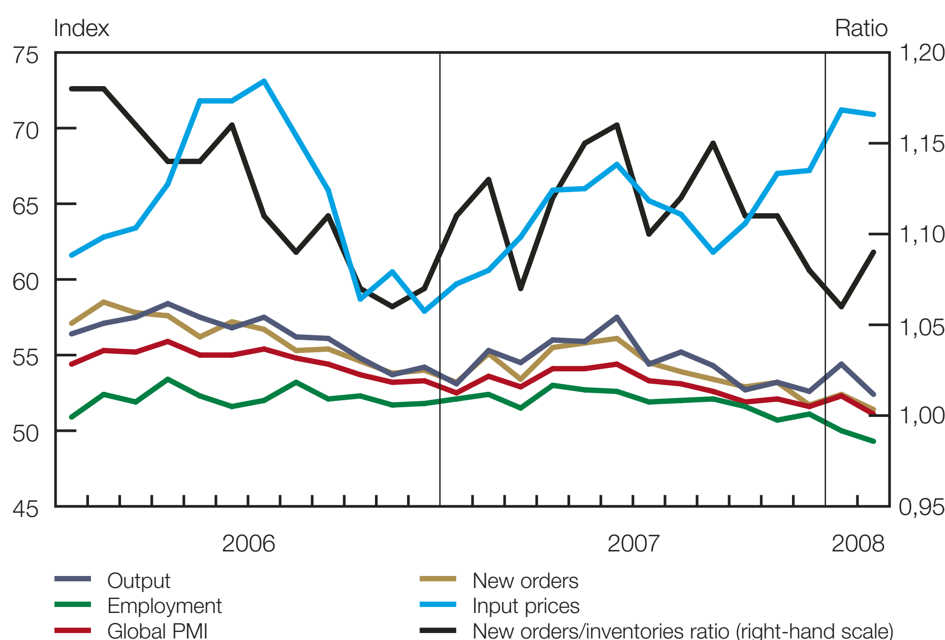
4 A credit crunch refers to a significant decline in the supply of credit by the banking system.

markets softened GDP growth in the fourth quarter of 2007 and for the year as a whole. GDP growth in the United Kingdom (UK) slowed to 2,5 per cent in the fourth quarter of 2007 from 2,6 per cent in the third quarter, mainly as a result of the negative effects of the credit crisis and the cumulative impact of interest rate increases by the Bank of England (BoE). According to the World Economic Forum's (WEF) 2008 *Global Risk Report*, the UK's financial market is "the most vulnerable to exposure due to the global credit crunch of all European countries". In Japan, however, GDP growth rebounded in the third and fourth quarter of 2007 to 1,2 per cent and 3,5 per cent, respectively, after a decline of 1,8 per cent in the second quarter. The increase was driven by an improvement in net exports and a rise in household spending.

After recording a surprising gain in January 2008, the global manufacturing Purchasing Managers Index[5] (PMI) for February continued its slide, falling to 51,1 – the lowest level since July 2003. The PMI has been falling almost uninterruptedly since June 2007. However, the PMI ratio of new orders to inventory, considered the best barometer of near-term momentum in the global manufacturing sector, improved slightly in February compared with January 2008. Despite the slight improvement, there are indications of further moderation in manufacturing output and continuation of weak GDP growth in 2008.

5 The global PMI is a survey of manufacturing output as measured by a global indicator, compiled by JPMorgan from selected developed countries and is viewed as a general indicator of world growth trends.

Figure 2 Global manufacturing PMI and its components

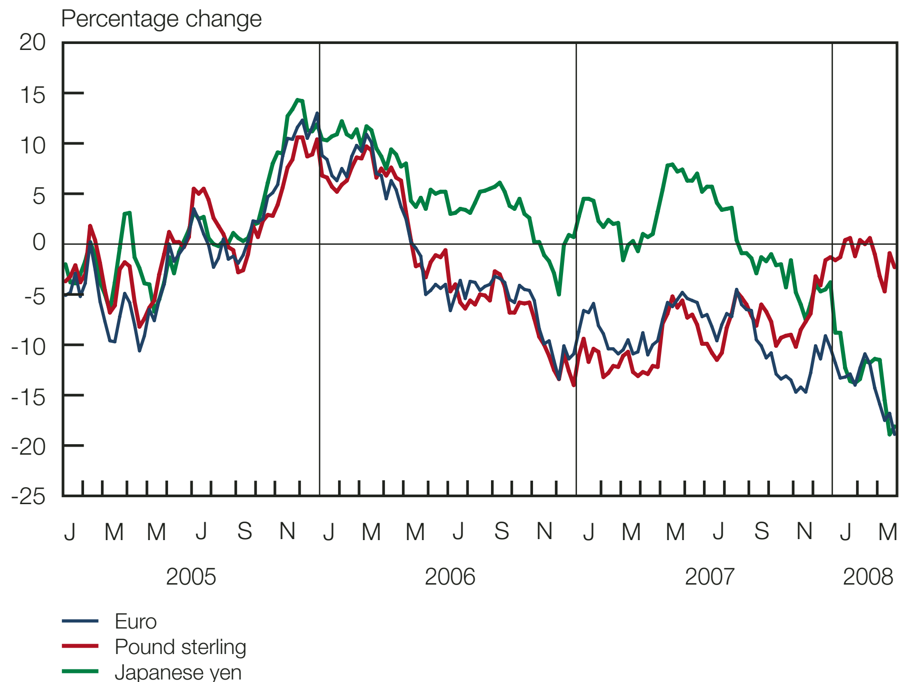


Source: JPMorgan

Global imbalances

Concerns regarding the global imbalances remained prevalent during the period under review, but the imbalances are now projected to narrow faster than earlier forecasts, mainly due to stronger prospects of a US recession and a weaker US dollar (Figure 3). Furthermore, surplus nations have made some progress in implementing policy plans to reduce the imbalances but, according to the IMF, some more action needs to be taken. The magnitude of current-account surpluses in Asia suggests that imbalances are deeply entrenched and still hold a threat to the global financial system. Although the probability of global imbalances causing major disruptions has diminished, the potential impact remains high.

Figure 3 Weekly exchange rate of the United States dollar to euro, pound sterling and Japanese yen



Source: Thomson Financial Ltd (DataStream)

Deterioration in the US housing market

Further deterioration in the US housing market and concerns about associated economic and financial risks continued during the period under review. Uncertainties about sub-prime and other credit market exposures remained, adding to more general concerns that the US housing market downturn would deepen and eventually cause the US economy to move into recession.[6] Credit losses tied to sub-prime mortgages continued to mount and central banks have been urged by the IMF to keep providing liquidity when needed to ensure smooth functioning of financial markets (see Box 1).

6 Bank for International Settlements. 2007. *Quarterly Review*, December.

Box 1 Liquidity management in the context of the global liquidity crisis

This box discusses the liquidity management considerations emerging from the sub-prime crisis[7] and describes the responses of selected central banks to the crisis.

Most developed economies have recently experienced a significant decrease in market liquidity as banks reduced their market activities and credit spreads widened. A general loss of confidence in the interbank money markets followed. In an attempt to alleviate concerns about banking-sector losses and provide liquidity to the money markets, the United States (US) Federal Reserve (Fed), the European Central Bank (ECB), the Bank of England (BoE), the Bank of Canada (BoC) and the Swiss National Bank (SNB) co-ordinated their responses to the liquidity distress in global financial markets. The Fed resorted to reducing interest rates and established a temporary Term Auction Facility and foreign-exchange swap lines with the ECB and the SNB.[8] Under the Term Auction Facility, the Fed auctioned term funds to depository institutions against a wide variety of collateral that could be used to secure loans at the discount window. The Fed, ECB and SNB further offered US dollar funding to Eurosystem counterparts. These two initiatives effectively formed a new onshore and offshore dollar liquidity facility. The BoE and the BoC announced sweeping changes to their collateral rules to allow banks to pledge a much wider range of securities in exchange for funds.[9]

Recently, the Fed announced a lending programme that would allow the biggest banks in the US to borrow Treasury securities and post mortgage-backed securities as collateral. This programme would have no limit on the amount of money that can be borrowed. In mid-March 2008, the Fed lowered the federal funds rate by 75 basis points and the rate for borrowing from its discount window by a further 100 basis points. In addition, the Fed facilitated a take-over of Bear Stearns by JPMorgan, but fears of other Wall Street banks being among the victims of the liquidity crisis still abound.

7 Previously discussed in the March 2007 and September 2007 editions of the Bank's *Financial Stability Review*.

8 CentralBankNews. 2007. "Central banks collaborate to ease interbank woe", 12 December. Available online at: http://subscription.centralbanknews.com.

9 Giles, C & Tett, G. 2007. "Central banks change the rules of intervention". *Financial Times*, 12 December. Available online at: http://www.ft.com.

The sub-prime crisis had a limited effect on emerging-market economies. For example, various banks in India were affected by the liquidity crisis but India's financial system remained resilient. Russia was only slightly affected by the global liquidity crisis due to the prompt action of its regulatory authorities. The Russian central bank injected liquidity into the financial system and the government announced that it would provide additional liquidity when necessary. Similarly, South Africa was not directly affected by the crisis.

Should the need arise, South African regulatory authorities have an established approach to dealing with liquidity management, both in normal times and in times of distress. At the financial markets level, the liquidity-related interventions of the South Africa Reserve Bank (the Bank) are primarily in the form of providing liquidity through repurchase agreements. Repurchase agreements can be collateralised by eligible liquid assets as prescribed by the Bank.[10] In addition to providing market liquidity, temporary liquidity problems in solvent banks during crisis times can be addressed by the Bank providing liquidity assistance against the pledge of suitable assets under certain conditions. An insolvent bank will usually not 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 such a case, the government may decide to assist such a bank in the interest of protecting the financial system.[11]

A report by the Organisation for Economic Co-operation and Development (OECD) released in April 2008 suggested that worldwide losses (first-round losses, not write-downs) would reach up to US$422 billion.[12] Based on comments made by some key market participants, it would appear that the full extent of the market fallout from the collapse of the US sub-prime mortgage market has yet to be seen. House prices in the US have been slowing down markedly and continuously since the beginning of 2006. After peaking at 13,7 per cent in the second quarter of 2005, growth in house prices in the US started to moderate and by the end of the fourth quarter of 2007, increased by less than 1 per cent (measured over a period of 12 months). In certain regions of the US, annual house price growth has been negative for some time. Negative house price growth could increase incidences of negative equity, resulting in more homeowners being unable to draw upon their capital gains buffer to cushion against adverse financial events such as job losses or mortgage resetting by refinancing.[13] Defaults among homeowners could therefore become more common. Furthermore, real residential construction declined by more than 20 per cent at an annual rate in the second half of 2007.

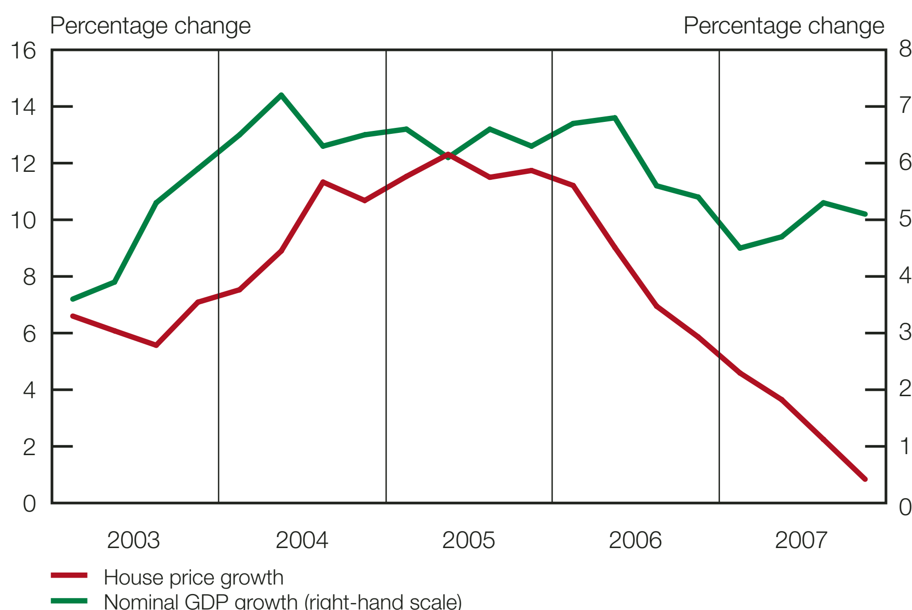
10 The Bank accepts two categories of assets as eligible collateral in its refinancing operations. Category 1 collateral comprises government bonds, Land Bank bills, Separate Trading of Registered Interest and Principal of Securities (STRIPS), South African Reserve Bank debentures and Treasury bills. Category 2 collateral comprises certain securities included in the All Bond Index of the Bond Exchange of South Africa.

11 See the March 2004 edition of the Bank's *Financial Stability Review* for a more comprehensive discussion on emergency liquidity assistance.

12 Organisation for Economic Co-operation and Development (OECD). 2008. The subprime crisis: size, deleveraging and some policy options, April.

13 Greenlaw, D, Hatzius, J, Kashyap, A K & Song Shin, H. 2008. "Leveraged losses: lessons from the mortgage market meltdown". *US Monetary Policy Forum conference draft*, 29 February.

Figure 4 Annual house price and gross domestic product growth in the United States

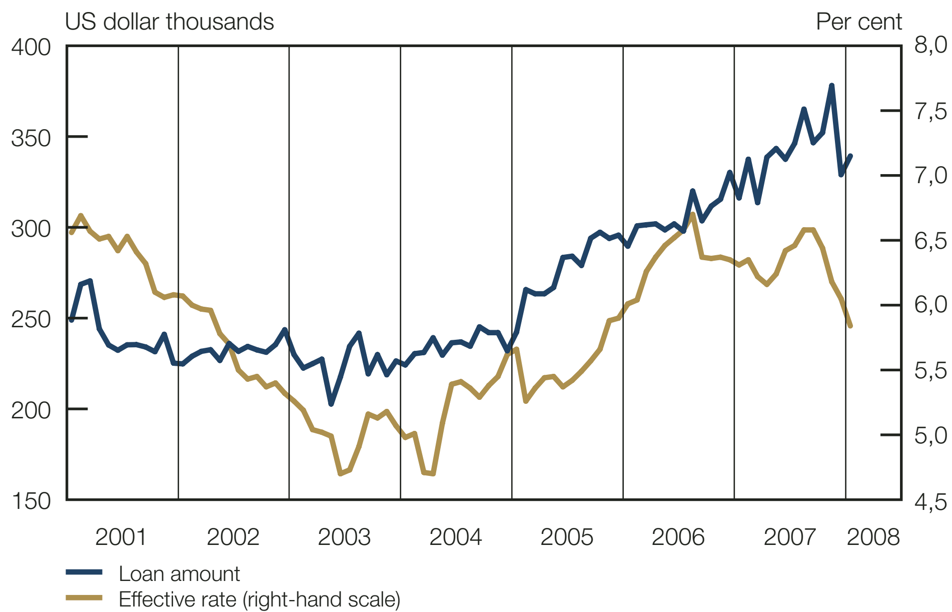


Source: Thomson Financial Ltd (DataStream)

14 Mortgage Bankers Association. 2008. *Delinquencies and foreclosure increase in latest MBA national delinquency survey*, 6 March.

According to the US Mortgage Bankers Association (MBA), the total home-loan delinquency rate is now the highest since 1985, and the rate of foreclosure starts and the percentage of loans in the process of foreclosure are both at the highest levels ever recorded. Prime fixed-rate loans and sub-prime fixed rate and adjustable-rate loans showed increases in foreclosure starts compared to the third quarter of 2007.[14] The MBA regards the declining house prices as the driving factor behind the foreclosures. However, it would appear that the resetting of adjustable-rate mortgages (ARMs), which has been mentioned as a major concern for borrowers (see the September 2007 *Financial Stability Review*), is becoming less of a threat because the six-month London Interbank Offered Rate (LIBOR), the index rate used for many sub-prime ARMs, has come down by about 2,5 percentage points since September 2007.

Figure 5 Average loan amount and average effective rate for adjustable-rate mortgage loans



Source: Thomson Financial Ltd (DataStream)

15 *Financial Times*. 2008. “Scrutiny switches to ‘counterparty risk’”, 17 March.

16 Monoline insurers are specialist insurance companies that insure against the risks of a bond or other security defaulting.

The global credit crisis is, however, not only about the sub-prime market but also about other vulnerable segments of the credit market. Credit default swaps (CDSs), a relatively new financial instrument that allows bondholders to insure against default, is one such segment. The size of the CDS market is estimated at about US$45 trillion,[15] more than three times the US annual GDP. As insolvency rates go up, so will the payment obligations under the CDS contracts. Should protection sellers, for example monoline insurers,[16] default on a large scale, protection buyers, who erroneously assume that they are protected, could also default, causing serious financial contagion. Furthermore, since there is uncertainty surrounding the value of the securitisation market, given its relative illiquidity, it will take some time for losses to become apparent. The impact of ongoing uncertainty on business sentiment will be more damaging than the losses themselves.

The turmoil in the financial markets caused by the US sub-prime crisis also featured on the agenda of the 2008 annual meeting of the WEF (see Box 2).

Box 2 Summary of selected risks in the global environment

Discussants at the World Economic Forum (WEF) annual meeting in Davos, Switzerland, in January 2008 highlighted a number of economic, financial and social risks in the global environment. The agenda was organised under five sub-themes. Some of the main risks identified under each of these sub-themes are as follows:

Economics and finance: Addressing economic insecurity. The unfolding financial crisis should be viewed as a chapter in a much larger, more profound story, being the rebalancing of global wealth away from the West and towards the emerging economies of Asia, and towards the Middle East. The challenge to policy-makers and business people as the crisis subsides will be how to alleviate the more dangerous side-effects of global economic growth, namely rising inequities within nations and a worsening global environment. In addition, climate change has underscored the limits of development because without dramatic advances in resource efficiency and reductions in emissions, universal prosperity is not attainable. Bankers point out that sovereign wealth funds have been ideal investors, but scepticism has emerged about whether the fund owners would refrain from interfering if their national interests were at stake.

Geopolitics: Aligning interests across divides. Collaborative innovation is the desired framework to address major global challenges linked to the intensification of globalisation. But, collaboration among nation states is not sufficient to address pressing global problems as participation of business and civil society is also needed.

Business: Competing while collaborating. To survive and prosper in the rapidly evolving global marketplace, companies must "win the war" for talent and innovate rapidly but also collaborate, even with competitors. In addition to shifts in technology, the global business climate continues to be profoundly affected by shifts in power from developed economies to emerging markets including Brazil, Russia, India and China.

Science and technology: Exploring nature's new frontiers. Science and technology are progressing so fast that advances are challenging assumptions about the human experience. By unravelling the very essence of individuality (DNA), it might be possible to forestall the inevitable. While science may decrease mortality, the total cost of health care will rise.

Values and society: Understanding future shifts. Globalisation's impact on cultures, societies and values must be the subject of deeper, more qualitative analysis. Increasing interconnectedness has not always led to homogenisation. In fact, it has often exacerbated divisions. The growth of economic opportunity as a result of globalisation must be combined with a sense of values centred on the notions of justice and freedom to ensure the sustainability of globalisation in the long run.

Source: Adapted from World Economic Forum. 2008. Executive Summary. Annual Meeting. Available online at: www.weforum.org

The impact of the credit crisis on South African financial institutions is limited and is not expected to take on systemic proportions due to structural differences between the South African and US housing and securitisation markets (see the September 2007 edition of the *Financial Stability Review* for a comprehensive discussion). However, should US GDP growth slow sharply and push the US economy towards a recession, a sharp drop in equity prices, further weakening of the US dollar and persistently high oil prices could have implications for global economic and financial stability, including in South Africa.

Emerging markets

In the past five years, emerging-market economies (EMEs) recorded strong economic performances and reported impressive gains in capital markets. As a result, the MSCI Emerging Markets Index[17] rose strongly over this period and increased by 36 per cent in 2007 alone. Despite deteriorating credit market conditions, US recession fears and volatile financial markets, EMEs proved their resilience. EMEs now account for more than half of the global GDP growth. This strong performance has been led by China, India and Russia who achieved GDP growth rates of 11,4 per cent, 9,2 per cent and 8 per cent, respectively, in 2007.[18]

17 The MSCI Emerging Markets Index measures the performance of the core capital markets' asset classes comprising global equities and bonds.

18 IMF. 2008. *World Economic Outlook*, April.

19 Hoguet, G R. 2008. "Outlook for emerging market economies and equities in 2008". *Global Active Equity*.

According to the Institute of International Finance (IIF),[19] total capital flows to emerging markets reached an estimated US$782,4 billion in 2007 from US$568,2 billion in 2006 and US$521 billion in 2005. Much of this increase was in the form of foreign direct investment, which rose to US$255,6 billion in 2007 from US$167,4 billion in 2006. The IIF stated that the rise in capital flows to EMEs in the past few years (also see Box 3 on sovereign wealth funds and financial stability considerations) was the result of four main factors. First, sound debt management and rising commodity prices had helped reduce volatility and produced real income gains. Second, sharp reductions in US interest rates had promoted outflows to higher-yielding markets. Third, strong growth and rising inflationary pressures in many EMEs had created the expectation that public policy would respond by pushing interest rates higher. Fourth, bank lending had been robust since the onset of global credit market turmoil. Additional factors that have driven the strong performance by EMEs are technological advancement, media and telecommunications revolution, outsourcing and an increase in world trade.

Box 3 Sovereign wealth funds and financial stability considerations

Sovereign wealth funds (SWFs) are financial intermediaries owned by governments that hold, manage or administer separate pools of public funds and invest them in a wide range of assets. The growth of SWFs is part of a larger process of accumulation of foreign-exchange assets by emerging and developing countries during the recent commodity boom. Some observers believe that the establishment of SWFs provides macroeconomic stability for national development, and are an effective tool for price smoothing and crisis prevention.

The rapidly increasing scope and scale of the activities of SWFs have, however, raised profound questions about their impact on the structure and stability of the global financial system. Transparency in the supply of information relating to SWFs is poor, but assets under management by SWFs are estimated to be more than US$3 trillion with nearly 75 per cent of SWF assets belonging to oil producers. Analysts estimate that within a decade the SWF industry could grow to more than US$10 trillion. The lack of clarity about how these funds operate has raised two concerns at the global level: One is that, as government entities, their investment activities and actions in a crisis may be motivated by political objectives rather than purely commercial and financial objectives. The other concern is that their sheer size may be a destabilising influence in the global financial system, as governments pursue a more aggressive investment strategy than has traditionally been the case with government holdings of official foreign-exchange reserves.

Following the US sub-prime crisis and the consequent liquidity crisis, SWFs have attracted attention because of some high-profile investments in developed countries' financial institutions, particularly banks. In some cases SWFs purchased shares in troubled banks quite cheaply after announcements of major losses, which led to mixed views about the merits of receiving such funds. Some observers cite national security concerns, while others believe these actions by SWFs helped calm fears about banks' solvency and the reduction of share prices, and it could be said that SWFs became the capital providers of first and last resort.

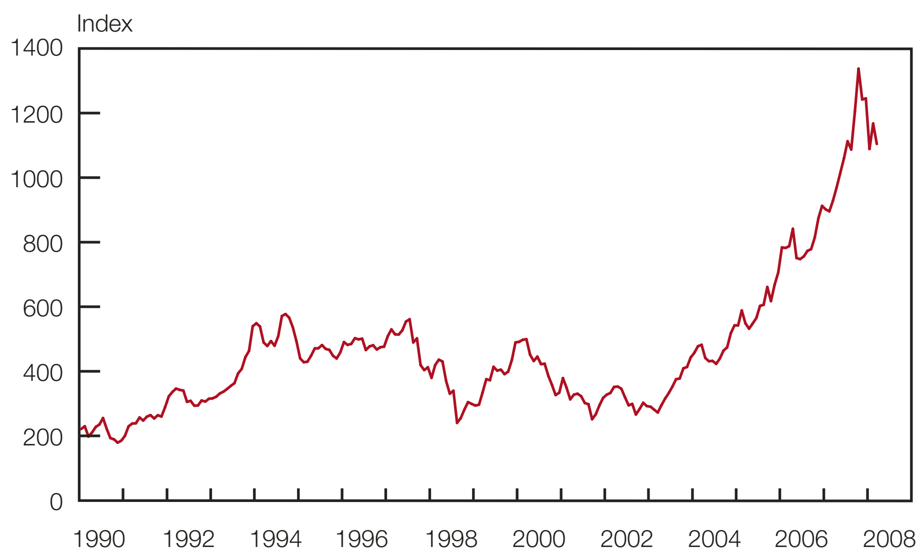
As a result of the issues raised above, efforts are under way within the International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD) and the World Bank to establish best practice regarding the governance and investment practices for SWFs.

20 IMF. 2008. *World Economic Outlook*, April.

Towards the end of 2007, however, global risk aversion caused a reversal in portfolio investment flows to EMEs. According to the IIF, portfolio investment flows to EMEs fell to US$43,5 billion in 2007 from $53,4 billion in 2006. The MSCI Emerging Markets Index (Figure 6) fell by 11 per cent in the first quarter of 2008. The possibility of a US recession, slow GDP growth in other industrialised countries and continued uncertainty in global credit markets in 2008 have therefore created a less benign economic environment for EMEs. Spreads on EME sovereign debt have continued to widen and currencies have depreciated as a result. The IMF predicts that GDP growth in EMEs will moderate from 7,9 per cent in 2007 to 6,7 per cent in 2008.[20] The main risk to EMEs is that a severe US recession and ongoing turmoil in global financial markets could disrupt capital flows to EMEs and cause volatility in domestic financial markets.

Emerging European countries, the Commonwealth of Independent States and countries with large current-account deficits (including South Africa) are particularly exposed because of their reliance on portfolio inflows to finance these deficits. Other risks to the outlook of EMEs include a sharp fall in commodity prices (which would reduce terms of trade for commodity-exporting countries), inflationary pressures (due to rising food and oil prices), heightened geopolitical concerns and oil-supply shocks which could lead to further oil price rises.

Figure 6 MSCI Emerging Markets Index



Source: Bloomberg

Despite the uncertainty and risks emanating from the possibility of a US recession, there are expectations that the global economy will rebalance in 2008 due to the strong momentum of EMEs such as China, India, Brazil and Russia. The extent to which these EMEs will, however, be able to rebalance the global economy (decoupling theory) is still debated actively and remains a source of controversy. Nevertheless, consumer demand in EMEs is expected to remain strong as consumers are less credit-reliant, local currencies are relatively undervalued and most EMEs have lower budget deficits than industrialised countries, high savings ratios and improved public finances.

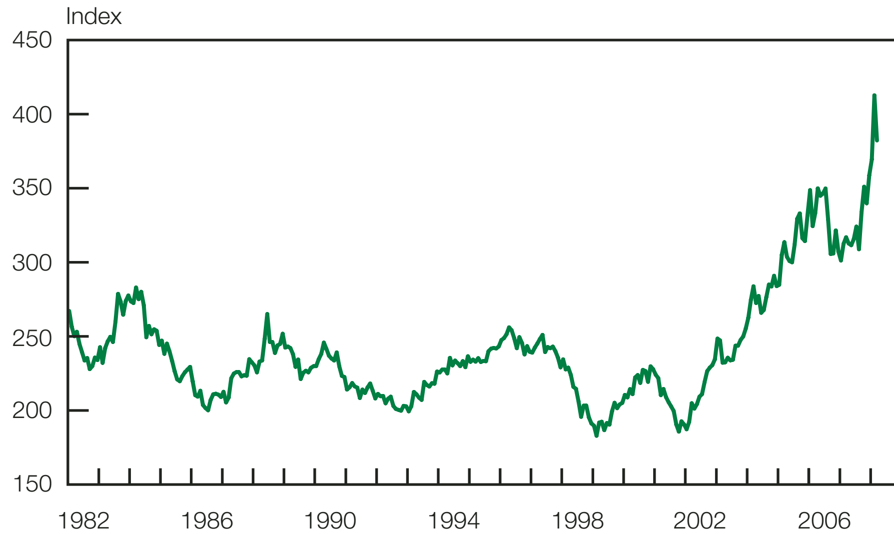
Commodities

After declining in 2006, the Reuters/Jefferies CRB Index[21] displayed an impressive recovery and rose by 17 per cent in 2007. Commodities as an asset class tend to do well in periods of a weakening US dollar, rising inflation and geopolitical uncertainty; events that tend to depress other asset classes such as bonds and equities. Precious metal prices benefited from the global financial market turmoil experienced since August 2007, with gold, platinum and palladium prices reaching new record highs and rising by 15 per cent, 14 per cent and 11 per cent, respectively, in 2007. The strong performance of precious metals initially continued in early 2008.[22] However, increased concerns of an abrupt slowdown in US economic growth have somewhat threatened the positive outlook, causing the Reuters/Jefferies CRB Index to lose some of its gains achieved earlier in the year. If the downward trend continues, it would be of concern to commodity-producing countries.

21 The Reuters/Jefferies CRB Index serves as a measure of global commodity prices.

22 The Reuters/Jefferies CRB Index rose by 6 per cent in the first quarter of 2008.

Figure 7 Reuters/Jefferies CRB Index

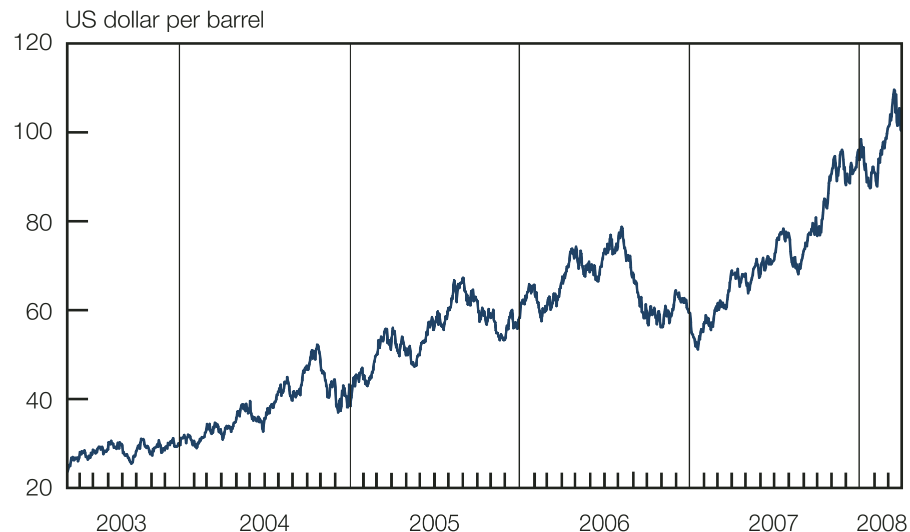


Source: Bloomberg

It is, however, anticipated that precious metal prices will continue to benefit from the turmoil in financial markets as precious metals have become increasingly popular as a portfolio diversifier. In addition, precious metals are expected to be supported by strong physical and speculative demand and supply concerns. On the base metals side, sentiment has been shaken by concerns of lower demand mainly due to the slowdown in the US housing market, but prices are expected to remain strong (when compared with historical levels) given a weaker dollar and low inventory levels.

Elevated and volatile oil prices remain a key risk to financial stability, both globally and domestically. In 2007, the price of Brent crude oil reached record levels and rose by 11 per cent. The main drivers of this strong performance were the weakening US dollar, rising geopolitical tensions, strong speculative and physical demand, low stockpiles, supply disruptions in major oil-producing countries and modest growth in non-Organization of the Petroleum Exporting Countries (OPEC) supply. In the first quarter of 2008, the price of Brent crude oil rose by 6 per cent and traded at about US$100 per barrel (compared with US$61 per barrel in the same period last year).

Figure 8 Brent crude oil



Source: Thomson Financial Ltd (DataStream)

In its February 2008 *Oil Market Report*, the International Energy Agency (IEA) revised its growth forecast for world oil demand in 2008 downwards to 1,9 per cent, from its previous estimate of 2,2 per cent because of slower economic growth in the US. However, the IEA also noted that low inventories and political tensions are supporting oil prices. Oil markets are expected to remain tight in 2008 and this could have significant implications for economic and financial stability in South Africa through the potentially damaging effect of higher oil prices on inflation, interest rates, asset prices and the already large current-account deficit.

Regional developments in Africa

Africa is experiencing its highest, multifaceted economic growth rate in decades, recording GDP growth of 5,5 per cent in 2006, which is expected to have increased to 5,9 per cent in 2007. According to the OECD, Africa's economic growth is set to remain buoyant in 2008.[23] The rapid growth was mainly driven by oil-exporting countries that performed well in 2007 due to increasing oil production and sustained high oil prices. Non-oil-exporting countries also contributed to growth, especially the metal-producing countries that profited from higher precious metal and base metal prices and in some instances, higher export volumes. The average inflation rate of African countries (excluding Angola, the Democratic Republic of Congo, Guinea-Bissau and Zimbabwe) reached 9,1 per cent in 2006. The OECD expects this rate of inflation to reach 12,7 per cent in 2007 and rise even further to 12,9 per cent in 2008, driven by high food and oil prices.

23 OECD Development Centre. 2007. "Africa in 2007 multifaceted growth". *Policy Insights*, No. 47, April.

Stronger macroeconomic fundamentals, lower debt levels and restored creditworthiness following debt relief from the IMF and other international institutions have increased the attractiveness of African countries to investors.[24] The external debt of low-income countries in Africa has declined significantly as a result of debt relief from the enhanced Heavily Indebted Poor Countries (HIPC) Initiative, launched in 1996, and the Multilateral Debt Relief Initiative (MDRI) launched in 2005. Before the HIPC Initiative, eligible African countries were, on average, spending slightly more on debt service than on all forms of social services. The total amount of debt relief accorded to African countries by the IMF, in the framework of the MDRI, is expected to reach US$42 billion in 2007. Reflecting this, as well as stronger GDP and export growth rates, Africa's debt sustainability outlook has improved substantially.

24 IMF. 2008. "Countries and regions, debt relief bringing benefits to Africa". *IMF Survey Magazine*, 25 February.

External debt to official creditors (as a percentage of GDP) in sub-Saharan Africa declined from 40,3 per cent in 2003 to 13,8 per cent in 2006, and is estimated by the IMF[25] to decline further to 9,8 per cent in 2008. External debt to official creditors as a percentage of GDP in the Southern African Development Community (SADC) region declined from 24,2 per cent in 2003 to 8,8 per cent in 2006 and is estimated to decline even further to 6,2 per cent in 2008 (Figure 9).

25 IMF. 2007. *Regional Economic Outlook*, October.

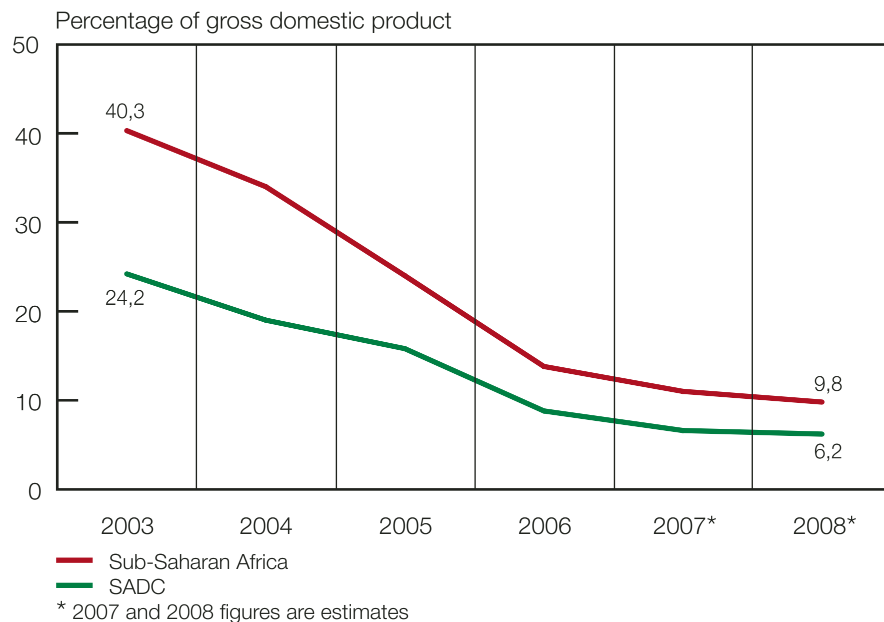
Sub-Saharan Africa is experiencing its strongest economic growth and lowest inflation rates in 30 years. Economic growth in sub-Saharan Africa accelerated from 5,7 per cent in 2006 to 6,1 per cent in 2007. According to the World Bank,[26] these high rates of economic growth were driven by an 8,1 per cent GDP growth rate for the region's oil-exporting countries and a 5,3 per cent growth rate for oil-importing countries (excluding South Africa). Sub-Saharan Africa's economic growth is expected to increase further to 6,8 per cent in 2008, mainly due to new production facilities in oil-exporting countries such as Angola and Nigeria.

26 World Bank. *Global Economic Prospects* 2008.

SADC is one of the most diverse sub-regions in sub-Saharan Africa, both in terms of growth performances and level of economic development. It has the strongest continental representation of middle-income and EMEs. The IMF[27] showed that real GDP growth in the SADC region reached 5,9 per cent in 2006, and is estimated to have increased to 6,4 per cent in 2007 and an estimated 6,6 per cent in 2008.

27 IMF. 2007. *Regional Economic Outlook*, October.

Figure 9 External debt to official creditors



Source: IMF *Regional Economic Outlook*, October 2007

28 SADC. *Official SADC Trade, Industry and Investment Review* 2007/2008.

Strong economic growth in the SADC region can in part be attributed to the growing tourism industry. The demand for travel and tourism in the SADC region grew from US$12,65 billion in 1990 to US$28,93 billion in 2006,[28] reflecting an average annual growth rate of 10 per cent. The tourism industry in the region is expected to grow to 3 per cent of the global market share of tourist arrivals by 2015. According to SADC, this target, when realised, should account for more than 4 million jobs in SADC, thereby helping considerably to alleviate poverty.

In Angola, the region's fastest-growing economy, economic growth is robust and increased from 16,9 per cent in 2006 to an estimated 24,3 per cent in 2007 (albeit from a low base), with both oil and non-oil sectors contributing. The IMF expects growth among Africa's oil exporters to slow to 6,9 per cent by 2009, as oil prices are forecast to decline in that year and as investment projects begin to unwind. Robust growth in the agricultural, manufacturing, construction and the power sectors can boost activity in the non-oil sectors. Electricity shortages and high energy costs are, however, constraining faster expansion among oil-importing countries.

The presence of well-developed, deepening and robust financial systems in the SADC region will increase flows of foreign investment into the region. According to the *Official SADC Trade, Industry and Investment Review 2007/2008*, banking systems in much of the region are exhibiting greater stability and the range of financial services is increasing. Banks in selected countries are also expanding their cross-border operations. The region, however, has a narrow range of intermediaries and limited financial instruments, and can benefit considerably from structural deepening of, for instance, capital markets.

29 OECD Development Centre. 2007. *Policy Insights*, No. 47, April.

Although Africa is enjoying a period of growth prosperity, it also faces a number of downside risks that could hamper further growth. Improved transparency and a fight against corruption are two key factors in realising and maintaining buoyant growth. Another challenge for growth is to invest the income earned from the commodities sector in infrastructure and human capital development. According to the IMF, weaker-than-expected global economic activity may weaken demand for African commodity exports and pose a downside risk to the growth forecast. The OECD[29] reported that continuing

high oil prices are a major medium-term risk for Africa's oil-importing countries, as the resulting larger current-account deficits may lead to macroeconomic instability. Political developments in individual countries may also pose a downside risk to the growth forecast.

The recent political crisis in Kenya, once regarded as a pillar of stability and democracy in Africa,[30] has had a negative impact on its economy. The political violence impacted negatively on the economies in the East African region. Uganda, Rwanda and Burundi, which depend on Kenya's port at Mombasa and on manufactured goods from the country, were affected most. The violence disrupted the road networks and supply lines, which resulted in extremely high commodity and staple food prices, as well as fuel shortages. In Zimbabwe, economic activity is continuously deteriorating. Its economy shrank by 6 per cent in 2007 due to a decline in production across all sectors of the economy. Official inflation is currently higher than 100 000 per cent.[31] Increases in prices of domestic power such as electricity, gas and other fuels were the main contributors to inflation in 2007. Political uncertainty, exacerbated by the recent elections, is adding to a volatile environment causing more illegal immigrants to cross the border into South Africa. Despite economic hardship, record-high inflation and political uncertainty, investors still hope to benefit from future opportunities that may arise following the outcome of the parliamentary and presidential elections.

30 South African Department of Foreign Affairs. 2008. "Kenyan situation and impact on other regions", 20 February.

31 Central Statistical Office, Zimbabwe. 2008, March.

Domestic macroprudential analysis

This section of the *Financial Stability Review* assesses the soundness of the South African financial system by analysing selected financial soundness indicators in the banking and insurance sectors. It provides an analysis of developments in the external, corporate and household sectors, as well as the real-estate and the bond and equity markets. The objective is to identify looming vulnerabilities that can have undesirable effects in the financial system.

Level of confidence in the financial sector

The level of confidence in the financial sector, as measured by the Ernst & Young Financial Services Index[32] remained high in the fourth quarter of 2007 (Table 1). The retail banking confidence index gained one index point from the third to the fourth quarter of 2007, mainly due to strong profit growth. Compared with the second quarter, the retail banking confidence index dropped significantly. The investment management confidence index shed 2 index points from the third to the fourth quarter as profit growth continued to fall for investment managers. The investment banking and specialised finance confidence index, as well as the life insurance confidence index remained at the maximum 100 index points.

32 The Ernst & Young Financial Services Index is calculated as the unweighted average of the retail banking, the investment banking and specialised finance, the investment management and the life insurance's confidence indices. The indices that make up the Financial Services Index are based on the results of surveys and range on a scale of 0 to 100, where 0 shows extreme lack of confidence, 50 is neutral and 100 shows extreme confidence.

Table 1 Financial Services Index and its components

Indices	2007		
	2nd qr	3rd qr	4th qr
Financial Services Index	97	98	98
Retail banking confidence index	100	94	95
Investment banking and specialised finance confidence index	100	100	100
Investment management confidence index	97	99	97
Life insurance confidence index	90	100	100

Sources: Bureau for Economic Research and Ernst & Young

Banking sector

The market share of the top four banks (based on total assets) increased in December 2007 compared with December 2006. Concentration in the banking sector remained high in December 2007, using either the Gini concentration index or the H-index as a measure of concentration.[33] Banks remained profitable and well capitalised with the capital-adequacy ratio comfortably above the required minimum of 10 per cent. However, the year-on-year percentage change in the share prices of banks decelerated markedly. The increase in the ratio of non-performing loans (net of provisions) to capital and the year-on-year increase in non-performing loans should also be noted and closely monitored. The latter grew by 56,4 per cent in the year to December 2007 compared with an annual growth rate of 17,2 per cent in the year to June 2007. This is high by historical standards, but was to be expected, given the prolonged periods of high growth rates of credit extension to the household sector, followed by a period of relatively higher costs of servicing debt.

33 The Gini concentration index is used to estimate the degree of inequality among banks in terms of market share. The index is scaled between 0 (which implies perfect equality or no concentration) and 100 (which implies perfect inequality or complete concentration). The H-index is computed as a sum of squares of the market share of all banks. Values less than 0,10 indicate no concentration, values greater than 0,18 indicate high concentration, and values between 0,10 and 0,18 indicate moderate concentration.

Table 2 Selected indicators of the South African banking sector*

Per cent, unless indicated otherwise

	2006		2007	
	Jun	Dec	Jun	Dec
Market share (top four banks)	82,2	84,1	83,9	85,1
Gini concentration index	82,9	83,1	83,3	83,4
H-index	0,178	0,184	0,185	0,190
Banks' share prices (year-on-year percentage change)	23,1	22,7	33,2	6,1
Regulatory capital to risk-weighted assets (total)	12,8	12,3	12,2	12,8
Regulatory Tier 1 capital to risk-weighted assets	9,0	9,0	8,9	9,5
Non-performing loans net of provisions to capital (180 days)	5,9	5,6	7,3	8,2
Non-performing loans to total gross loans (180 days)	1,2	1,1	1,2	1,4
Non-performing loans (year-on-year percentage change)	-0,10	-6,6	17,2	56,4
Return on assets (smoothed)	1,2	1,4	1,4	1,4
Return on equity (smoothed)	16,0	18,3	18,4	18,1
Interest margin to gross income (unsmoothed)	45,1	43,9	48,9	58,5
Non-interest expenses to gross income (unsmoothed)	59,9	48,4	68,2	48,6
Liquid assets to total assets (liquid asset ratio)	4,5	4,6	4,4	4,6
Liquid assets to short-term liabilities	9,0	8,7	8,7	8,7
Aggregate net open position in foreign exchange to capital	1,9	1,5	1,0	0,7

* Data updated on 7 April 2008

Source: South African Reserve Bank

Increasing volatilities in financial markets have highlighted the importance of understanding potential vulnerabilities in financial systems and searching for methods of assessing them. Regulators and risk managers have, therefore, developed a number of

quantitative techniques to assess potential risks to individual institutions as well as financial systems. A range of quantitative techniques that could serve the purpose is commonly known as stress testing.[34]

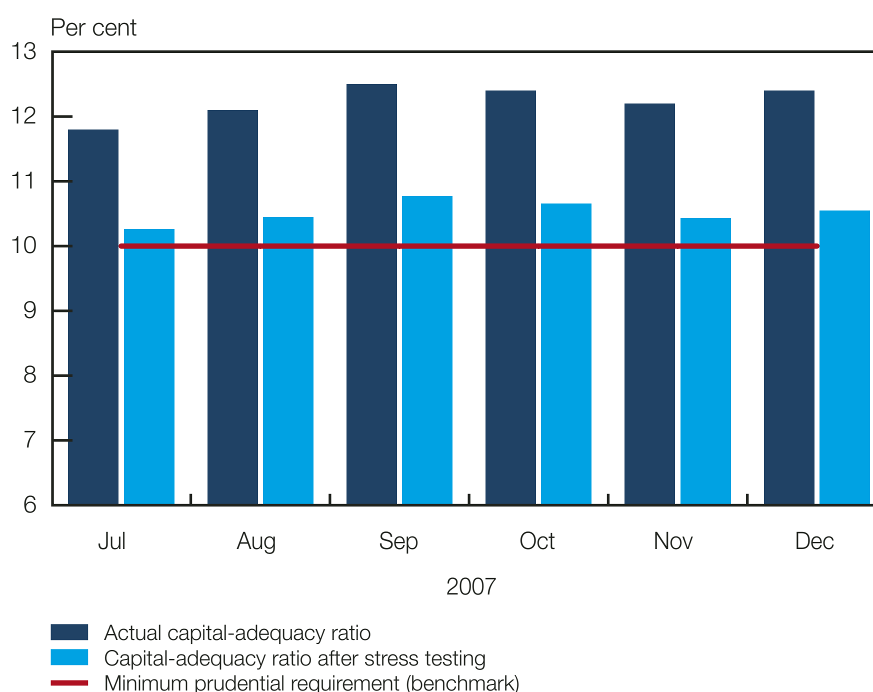
Three stress-testing frameworks are applied in this edition of the *Financial Stability Review*. Two of them assess the resilience of the banking sector to adverse shocks. The first assesses the exposure of the sector to credit risk and the second is applied to a modified core set of the financial soundness indicators to assess whether stress signals could be identified early.[35] The third assesses the financial soundness of the household sector, again to assess whether stress signals could be identified early.

The resilience of the banking sector to plausible shocks was assessed by stress testing the sector with respect to the behaviour of non-performing loans. Worst-case scenarios were assumed for variables such as exchange rate changes, credit extension and the prime lending rate. The results of the stress test indicated that the shock-absorption capacity of the banking sector was sufficient in the second half of 2007. Compared to the minimum regulatory capital requirement of 10 per cent, the capital-adequacy ratio after stress testing in December 2007 was 10,6 per cent (Figure 10).

34 It has to be emphasised, however, that stress testing is not an end in itself. It is only a tool for improving risk management and is not its substitute. In most cases, stress tests lack benchmarks or standards for evaluating the results and do not reveal probabilities. Stress-testing results should therefore be interpreted with care.

35 The core set is a set of selected financial soundness indicators for the banking sector as stipulated in the *Financial soundness indicators compilation guide* of the IMF.

Figure 10 Aggregate stress test for credit risk



Source: South African Reserve Bank

Stress testing the core set of financial soundness indicators assists in monitoring developments in individual indicators at any point. In stress testing the set, the most recent value of each indicator is compared to the threshold or benchmark level and is interpreted to give a signal of vulnerability in the banking sector if it crosses the threshold level (see Table 3 on page 18). The threshold level is calculated as the mean of the indicator adjusted by the less-favourable standard deviation.

Table 3 Financial soundness indicators for the banking sector*

Annual growth rates, unless indicated otherwise

	Mean	Standard deviation	Threshold	Actual Dec 2007	Signal
Capital adequacy					
Regulatory capital to risk-weighted assets	12,65	0,65	12,00	12,78	No
Regulatory Tier 1 capital to risk-weighted assets	9,25	0,56	8,69	9,48	No
Earnings and profitability					
Return on assets (smoothed)	1,01	0,34	0,67	1,36	No
Return on equity (smoothed)	13,01	4,52	8,49	18,11	No
Interest margin to gross income	50,37	11,12	39,25	58,51	No
Non-interest expenses to gross income	64,28	11,32	75,60	48,64	No
Liquidity					
Liquid assets to total assets	4,56	0,24	4,32	4,63	No
Liquid assets to short-term liabilities	8,89	0,71	8,18	8,71	No
Sensitivity to market risk					
Aggregate net open position in foreign exchange to capital	1,65	0,76	2,41	0,69	No
Asset quality					
Non-performing loans to total loans and advances	2,20	0,86	3,06	1,38	No
Specific provisions to total loans and advances	1,52	0,45	1,07	0,86	Yes
Share of mortgage advances in private-sector credit	43,06	3,46	46,52	48,95	Yes

* From January 2001 to December 2007

Source: South African Reserve Bank

Two warning signals were issued among the banking-sector indicators, namely the share of mortgage advances in private-sector credit and specific provisions to total loans and advances. For the former, the results suggest that the banking sector could be unduly exposed to the real-estate market. The signal issued by specific provisions to total loans and advances could be giving an indication that specific provisions are not growing in line with total loans and advances, which could be unhealthy for the financial system. When considering the level of specific provisions, it is important to analyse the impact of International Financial Reporting Standards (IFRS) on specific provisions. With the implementation of Basel II from 1 January 2008, it is important for market participants to understand the linkages between IFRS and Basel II (see Box 4 for details).

Box 4 Basel II and IFRS – loan-loss provisioning aspects[36]

It is a requirement both in terms of the Basel II capital framework and International Financial Reporting Standards (IFRS) that banks model and measure the risks associated with their asset portfolios. While locally registered banks have been required to comply with IFRS since 2005, Basel II has only been effective in South Africa from 1 January 2008. The implementation of both models is not simply a matter of risk management, but has wider implications for prudent capital regulation, supervision and financial stability. There is considerable debate in the accounting and regulatory fraternity about the implications, differences, similarities and synergies between the two frameworks and their impact on the capital of banks.

While there are many similarities between the two frameworks, their overall objectives differ conceptually. The overall Basel II objective is to ensure the stability of the banking system through rigorous risk and capital management requirements. By contrast, the objective of IFRS is to provide

36 The content of the box is largely based on the work of Ruddy, T and Schutte, A of KPMG (SA), 2008, “A comparison of Basel II and IFRS”, (unpublished paper) and PricewaterhouseCoopers, 2004, “Joining the dots: Tackling the Basel II and IFRS debate”.

decision-useful information to the users of financial statements, based on the entity's position at its balance-sheet date. There is an important difference between the IFRS approach to loan-loss provisioning and the Basel II approach to calculating expected loan losses. International Accounting Standard (IAS) 39, *Financial Instruments: Recognition and Measurement,* specifically governs the loan-loss provisioning (or impairment) of financial assets. Table A highlights some of the differences.

Table A

Area	IAS 39	Basel II
Objective and purpose	The purpose of IFRS (including IAS 39) is to provide useful information to users of the financial statements for the reporting period and as at the entity's balance-sheet date.	The overall objective is to provide for the stability of the banking system by ensuring, among other things, that the lender has sufficient capital to support its losses over the ensuing 12 months.
Definitions of losses	IAS 39 bases the impairment of financial assets (where relevant) on an incurred loss model, based on loss events that have occurred by the entity's balance-sheet date. IAS 39 only requires an entity to test for impairment if objective evidence of impairment (e.g. breaches and adverse changes in local economic conditions) exists.	Basel II is about expected and unexpected losses. Loss is based on a definition of default, applied to the obligor. There are several different definitions of default, depending on the asset class/ loan type (e.g. being past 90 days due on its payment obligations).
Timing of losses	IAS 39 requires that an impairment loss be recognised as at balance-sheet date (a "point in time" approach) and that expected losses as a result of future events are not recognised. It is for these reasons that IFRS has been regarded as backward-looking.	Basel II takes into account all defaults that have already occurred and that are likely to occur over the next 12 months (a "through the cycle" approach). It is therefore regarded as forward-looking.

Incurred losses under the IAS 39 approach are based on actual individual (specific) losses that have occurred and have been identified as at balance-sheet date, as well as collective (general) impairment arising from impairment testing of groups/portfolios of assets that share similar credit risk characteristics. IAS 39 explicitly states that expected losses as a result of future events, regardless of how likely they are to occur, are not recognised. The level of provisions will thus only take into account incurred losses in respect of the carrying values of financial assets as at the reporting date.

In terms of Basel II, expected and unexpected losses must be calculated in respect of the entire asset portfolio of the bank (in contrast to IFRS which only requires impairment testing for financial assets not stated at fair value). Basel II allows for various methodologies for each main risk type (credit risk, market risk and operational risk) to calculate these losses. Banks are required to compare the expected and unexpected loss calculation (regulatory perspective) with the total amount of provisions (accounting perspective) that they have made. In practice, this could mean that the provisioning level for incurred losses is insufficient to cover the expected losses. From a regulatory perspective, any "shortfalls" in provisioning will incur a capital charge and would have to be deducted from capital (50 per cent from Tier 1 capital and 50 per cent from Tier 2 capital). Any "excesses" may be eligible as Tier 2 capital.

An important economic consequence of the two loan-loss provisioning frameworks is that they both work in tandem with business cycles and could lead to possible pro-cyclical trends. Loan-loss provisioning typically decreases in times of an economic boom (with a positive impact on bank profitability) and increases in an economic downturn (with a negative effect on profitability). Although economic triggers may be used as an indicator of possible impairment of a group of assets, provisioning under the two frameworks may exacerbate business cycles. It must, however, be stressed that under the Basel II framework, neither regulators nor banks wish to see erratic movements in capital requirement levels. A reasonable Basel II strategy therefore seeks to reduce volatility in the level of capital requirements over the economic cycle. Stress testing and the building up of additional capital buffers are important mitigating techniques.

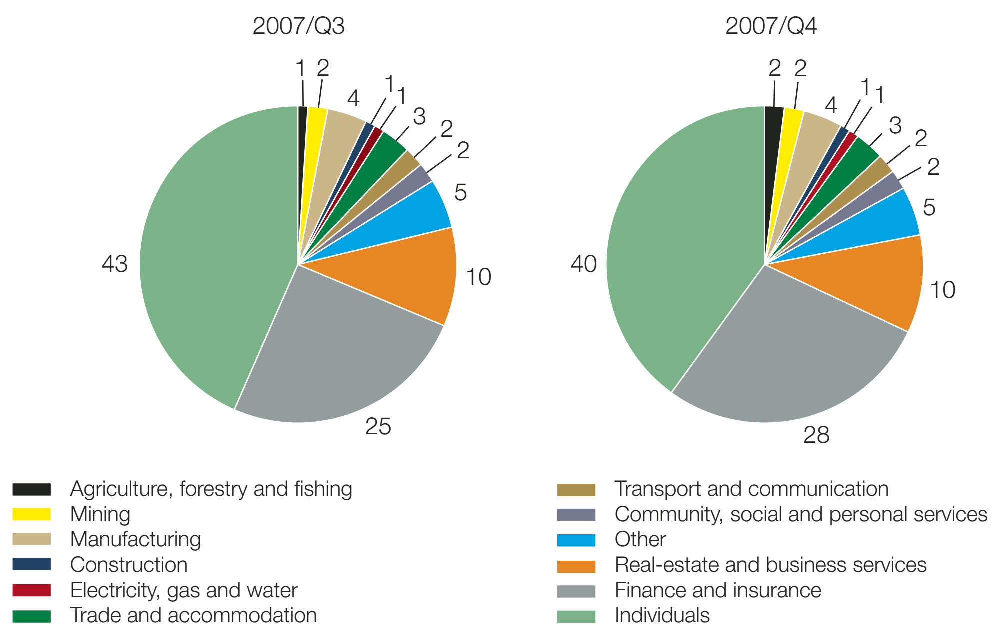
There are a number of benefits for banks to using an integrated approach for IFRS and Basel II to leverage on the similarities between these two frameworks. These benefits include cost savings and consistency on risk reporting to regulators, auditors and other market participants. Since provisioning under IAS 39 is mostly backward-looking and pro-cyclical in nature, total provisions are typically less than the expected losses under the Basel II framework. It is therefore important for banks to manage the reputational risks that could arise when reporting on the discrepancies arising from loan-loss provisioning between the two frameworks. Sufficient disclosure should be given on the differences between incurred losses and expected/unexpected losses to avoid inappropriate conclusions being drawn by market participants. In order for regulators to regulate the level of a bank's capital consistently and adequately, they would also need to regulate provisions, since provisions are an integral part of the capital framework. Managing the complexity of IFRS and Basel II rules is an ongoing challenge for banks, regulators and the auditing profession.

Nevertheless, the banking sector remained well capitalised and profitable, and no warning signals were recorded in these areas. These capital-adequacy results are in line with those obtained from the aggregate stress test for credit risk.

Sectoral distribution of credit

At the end of the fourth quarter of 2007, 68 per cent of credit to the private sector, as classified according to Standard Industrial Classification of all economic activities, was granted to individuals and the finance and insurance sectors. Their respective shares in total credit to the private sector were 40 and 28 per cent. Compared with the previous quarter, the share of credit to individuals had dropped by 3 percentage points, while the share of the finance and insurance sector increased (Figure 11). The banking sector is, therefore, relatively more exposed to these sectors. As shown in Table 8 on page 26, more liquidations are generally recorded for the financing, insurance, real-estate and business services sectors.

Figure 11 Sectoral distribution* of credit to the private sector (per cent)



* Classified according to the Standard Industrial Classification (SIC) of all economic activities. Advances to individuals who are owners of one-person businesses or partnerships are included under the relevant industry. Advances to individuals who are employees are included under "individuals" irrespective of the industry in which the individual is employed. Figures do not necessarily add up to 100 due to rounding.

Source: South African Reserve Bank

Bond, equity and currency markets

Domestic bond yields increased from May 2007 until the third week of August when they declined by more than 20 basis points. The decline was ascribed to, among other things, renewed appetite for emerging-market assets after the US Federal Reserve reduced interest rates and the subsequent recovery in global financial markets, the purchase of R20 billion of domestic bonds by non-residents and the recovery in the external value of the rand. Bond yields then increased until November 2007. It is believed that the increase was in reaction to the increase in the repurchase (repo) rate at the end of October, worse-than-expected inflation data and expectations of further interest rate increases. During December 2007 government bond yields initially increased but later declined by between

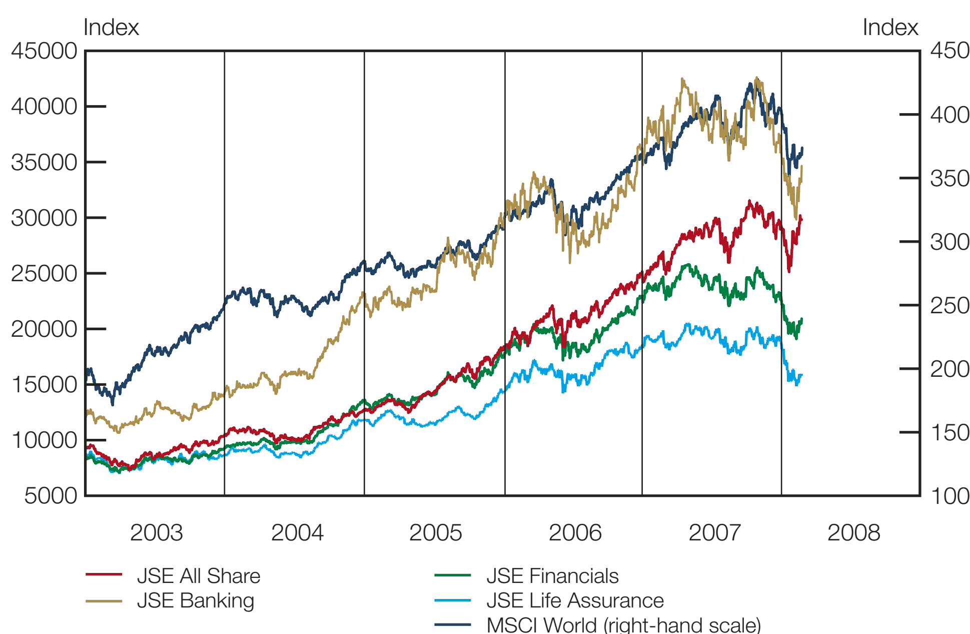
1 and 12 basis points. In 2008, bond yields increased due to global risk aversion and domestic factors such as electricity constraints.

Figure 12 Selected domestic bond yields

Source: I-Net Bridge

In the second half of 2007 both the global and domestic equity markets were negatively affected by the US sub-prime meltdown coupled with declines in non-commodity prices and increases in inflationary pressures, which resulted in financial institutions liquidating their exposures to sub-prime-related securities. The domestic equity market managed to recover in August as it was becoming clear that South African financial institutions had limited exposure to sub-prime-related securities.

Figure 13 Share price indices*



* Daily movements

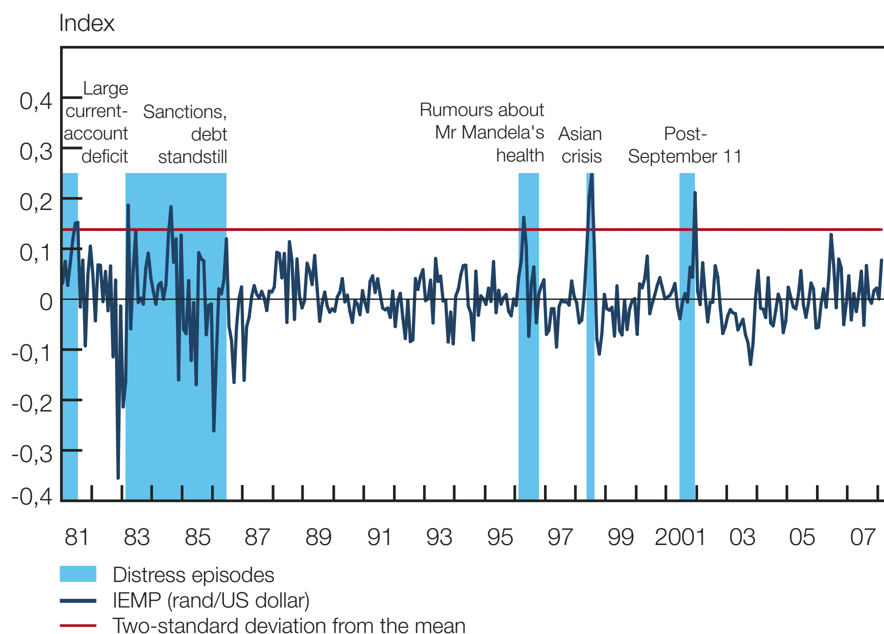
Source: Bloomberg

Another episode of financial markets turbulence occurred in November 2007 when there was a global equity sell-off as the US housing market continued its gradual downturn. This happened in tandem with expectations of a drop in US consumer spending and fears of a recession in the US. The events resulted in a credit crunch as financial institutions factored in the effects of sub-prime-related losses. All these factors raised financial stability concerns. Despite the gloomy economic outlook, both the global and domestic equity markets managed to recover somewhat in January 2008, with the all-share index close to the 30 000 level towards the end of March 2008. These two episodes of financial market turbulence served as a test of the resilience of the domestic financial system.

Assessing pressure build-up in the foreign-exchange market

Using the index of exchange market pressure (IEMP) as a measure of pressure build-up in the foreign-exchange market with regard to the local currency, and the two-standard deviation as a threshold, no indications of undue pressure build-up were identified during the second half of 2007 and the first two months of 2008. Although the South African rand depreciated by about 12 per cent against the US dollar in the first quarter of 2008, the index remained below the benchmark and was, therefore, not pointing to undue pressure in the foreign-exchange market, which could impact on the stability of the financial system.

Figure 14 Index of exchange market pressure*



* The index of exchange market pressure is usually defined as a weighted average of the depreciation of the local currency, the percentage change in international reserves and the change in domestic interest rates. A rise in the value of the index indicates increasing pressure in the local currency and vice versa.

Source: South African Reserve Bank

Insurance sector

The total number of long-term typical insurers dropped from 31 in December 2006 to 26 in December 2007 (Table 4). The drop in the number of typical insurers was a result of the re-classification of companies. Four companies were re-classified as run-off companies and one as a linked company.[37]

37 Run-off companies are companies that no longer write new businesses because they are winding up business. Linked investment insurers are those insurers that underwrite policies whose value is directly linked to the value of the assets invested in and no guarantees are offered.

Table 4 Free assets to capital-adequacy requirement

Free assets to capital-adequacy requirement (long-term typical insurers)*	Number of insurers	
	December 2006	December 2007
Covered 0 – 1 time	0	0
Covered 1 – 2 times	6	7
Covered 2 – 5 times	16	14
Covered 5 – 10 times	7	4
Covered 10+ times	2	1
Total	**31**	**26**

* Typical insurers are those that offer most of the six classes of business as defined in the Long Term Insurance Act, No 52 of 1998, in the primary market. The figures are not audited

Source: Financial Services Board

The financial strength of a long-term insurer is usually measured by the ratio of free assets to capital-adequacy requirement. In December 2007, all the long-term insurers were covered by free assets to capital-adequacy requirement in excess of the minimum legal requirement (a coverage ratio of one).

When a selected set of other financial soundness indicators for long-term typical insurers was analysed, mixed results were obtained (Table 5). On the positive side, the ratio of individual surrenders to new policies issued during the period decreased, the total number of new policies increased, commission as a percentage of net premiums remained unchanged and the index for long-term insurance share prices increased by an annual rate of 7,8 per cent in the year to December 2007.

Table 5 Selected indicators for long-term typical insurers[1]

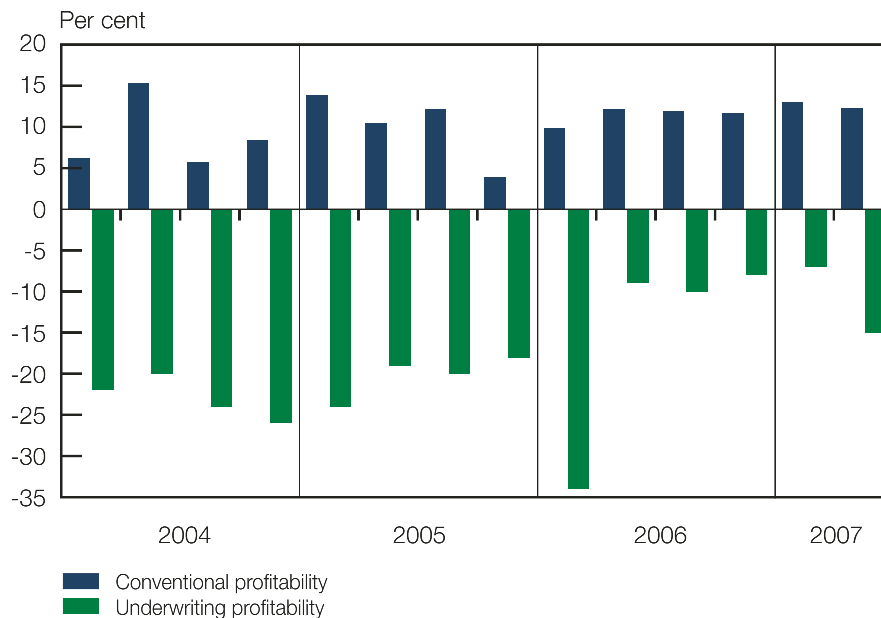
	2005	2006	2007[5]	2007
Individual lapses[2]	27	38	36	44
Individual surrenders[2]	18	22	13	16
Number of policies (year-on-year percentage change)	7	4	7	7
Share prices (year-on-year percentage change)[3]	15,0	26,3	30,3	7,8
Claims (percentage of net premiums)	103	94	100	101
Management expenses (percentage of net premiums)	8	8	9	11
Commission (percentage of net premiums)	8	6	6	6
Underwriting profitability[4]	-18	-8	-15	-18
Conventional profitability[6]	3,9	11,7	12,3	...

1 Twelve months ended December
2 Expressed as a percentage of the number of new policies issued during the period using statistics that were not audited
3 Share prices represent share price movements for life insurers
4 Net premium income less net premium expenditure all divided by net premium income. Profit used when calculating profitability refers to underwriting profit, which is money earned by insurers in their underwriting operations excluding money earned in the investment of assets and other sources
5 Six months ended June
6 Profit over total revenue. Profit used when calculating conventional profitability is the excess of revenue over expenditure

Source: South African Reserve Bank and Financial Services Board

On the negative side, the ratio of individual lapses to new policies issued during the period increased in 2007. Furthermore, management expenses and claims (all expressed as percentage of net premiums) increased, and underwriting profitability deteriorated and continued to be negative. It should be noted, however, that underwriting profitability is defined in terms of premium income accrued from core activities of the insurance sector, which is different from conventional profitability. Figure 15 gives a comparison of underwriting and conventional profitability for typical long-term insurers. As shown in Figure 15, conventional profitability has been positive throughout the review period.

Figure 15 Conventional and underwriting profitability for typical long-term insurers (ratios)

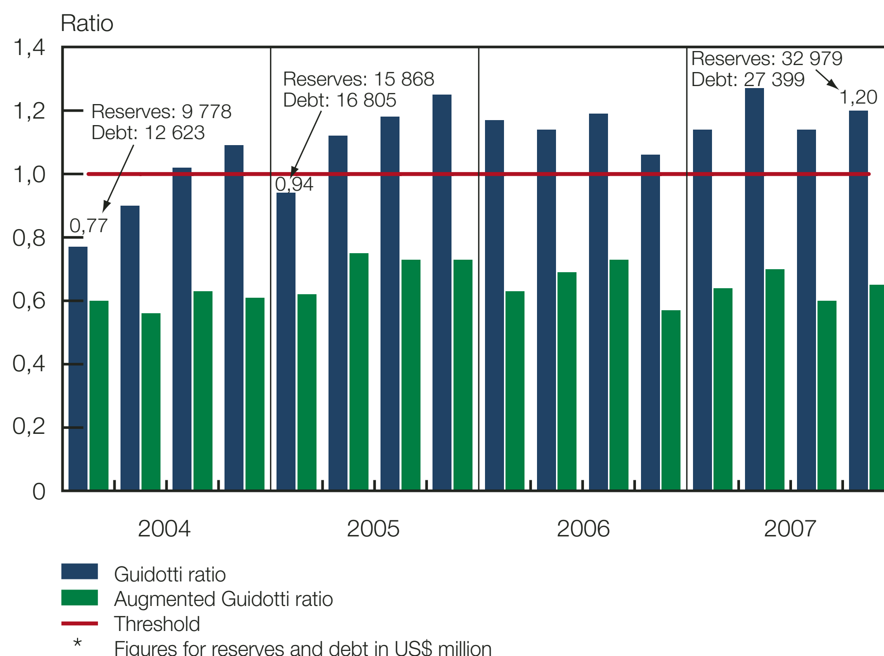


Source: South African Reserve Bank

External sector

The Guidotti ratio (GR) provides an estimate of a country's resilience to foreign-currency liquidity problems. Countries have to hold sufficient foreign-exchange reserves that can be used to mitigate the adverse impact of unexpected external shocks. Despite the deterioration in the GR (from the second to the fourth quarter of 2007), available foreign-exchange reserves were still 14 percentage points above the country's short-term debt in the third quarter of 2007. In the fourth quarter of 2007, the improvement in the GR (compared with the third quarter) can be attributed to the higher annual growth rate of foreign-exchange reserves (28,8 per cent) relative to that of short-term external debt (13,4 per cent). The augmented Guidotti ratio (AGR) deteriorated in the third quarter due to the wider current-account deficit. It, however, improved in the fourth quarter of 2007 (compared with the third quarter), even though available foreign-exchange reserves were still falling short of the country's total short-term external financing requirements.

Figure 16 The Guidotti and augmented Guidotti ratios*



Source: South African Reserve Bank

Table 6 Guidotti and augmented Guidotti ratios

	US$ millions			Guidotti ratio	Augmented Guidotti ratio
	Gross foreign exchange reserves*	Short-term foreign debt**	Current-account deficit		
2005: 3rd qr	19 535	16 514	-10 249,21	1,18	0,73
4th qr	20 650	16 457	-11 639,05	1,25	0,73
2006: 1st qr	22 969	19 661	-17 032,72	1,17	0,63
2nd qr	23 950	21 031	-13 905,72	1,14	0,69
3rd qr	24 650	20 738	-12 961,24	1,19	0,73
4th qr	25 613	24 171	-20 566,43	1,06	0,57
2007: 1st qr	26 518	23 315	-17 943,09	1,14	0,64
2nd qr	28 279	22 319	-17 560,51	1,27	0,71
3rd qr	30 523	26 773	-23 674,67	1,14	0,61
4th qr	32 979	27 399	-23 150,95	1,20	0,65

* Official reserves (measured by the gross gold and other foreign-exchange reserves)

** Short-term debt (maturing within a year) includes all external debt by the public authorities, public corporations, monetary authorities, banking and other sectors, and the short-term component of foreign direct investment

Source: South African Reserve Bank

Corporate sector

The annual growth rate of credit to the corporate sector and gross fixed capital formation decelerated further in the third and fourth quarters of 2007. There was an annual increase in the corporate debt burden as a percentage of annualised profits despite the

deceleration in the annual growth rate of credit to this sector. This was due to an even larger deceleration in annualised profits. As a percentage of GDP, credit to corporations remained almost unchanged at the end of the fourth quarter of 2007 compared with the previous quarter. It had, however, increased marginally compared with the second quarter.

Table 7 Selected indicators for the corporate sector

	2007			
	1st qr	2nd qr	3rd qr	4th qr
Credit to the corporate sector* (year-on-year percentage change)	30,3	35,4	31,3	25,3
Gross fixed capital formation (year-on-year percentage change)	27,2	27,5	24,4	23,2
Credit to the corporate sector as percentage of gross domestic product	34,3	35,9	36,9	36,8
Credit to the corporate sector as percentage of annualised profits	187,2	174,1	179,4	187,4
Business confidence index**	81	80	72	67
Net operating surplus*** (year-on-year percentage change)	20,6	15,1	22,7	17,6

* Credit to the corporate sector includes instalment sales, leasing finance, mortgage advances, overdrafts, credit card debtors and other loans and advances

** The business confidence level is measured on a scale of 0 to 100, where 0 indicates an extreme lack of confidence, 50 neutral and 100 extreme confidence

*** Gross operating surplus minus depreciation

Sources: South African Reserve Bank and Rand Merchant Bank/Bureau for Economic Research

The business confidence level, as measured by the Rand Merchant Bank/Bureau for Economic Research (RMB/BER) business confidence index, declined by 5 index points to 67 index points in the fourth quarter of 2007. Reduced volumes and lower price margins appear to be the major drivers of the decline in business confidence. A further decline (of 19 index points) to 48 index points was recorded in the first quarter of 2008 – the lowest level in seven years. The reasons given for the drop included a deepening in the slowdown in business volumes, rising costs, which put pressure on profit margins, and increased economic and political uncertainty.[38]

38 Bureau for Economic Research and Rand Merchant Bank. 2008. *Business confidence index*, 12 March.

Table 8 Total number of liquidations by industry*

Industry	2007		
	Jun	Sep	Dec
Agriculture, hunting, forestry and fishing	0	3	2
Mining and quarrying	1	1	4
Manufacturing	12	15	13
Electricity, gas and water	1	1	1
Construction	4	10	7
Wholesale and retail trade, catering and accommodation	55	75	74
Transport, storage and communication	7	10	4
Finance, insurance, real-estate and business services	90	371	85
Community, social and personal services	11	21	16
Total number of liquidations	181	507	206

* Information on liquidations is obtained from the Registrar of Companies and Close Corporations, Department of Trade and Industry

Source: Statistics South Africa

The stability of the financial sector is affected by the ability of companies to meet payment obligations as they become due. The financial health of companies is, among other things, assessed by monitoring the number of liquidations. The total number of liquidations increased to 206 in December 2007, from 181 in June 2007. Most liquidations were recorded in the finance, insurance, real-estate and business services sector, followed by the wholesale and retail trade, catering and accommodation industries.

Household sector

Households' financial position

The financial position of households deteriorated in the fourth quarter of 2007 compared with the second quarter. There was a significant deceleration in the annual growth rates of household disposable income, financial assets and net wealth (Table 9). Given that household financial assets and net wealth include deposits with financial institutions, shares in pension funds and other financial assets, the deceleration in the annual growth rates in the fourth quarter of 2007 compared with the second quarter can be ascribed to relatively higher costs of servicing debt coupled with increases in insurance policy lapses and surrenders (see Table 5 on page 23). The deceleration in the growth rate of the three variables was also reflected in the deceleration in the growth rate of household consumption expenditure. The high ratio of household debt to disposable income (see Figures 18 and 19 on page 29), could therefore be a cause for concern given the deceleration in the annual growth rates of household financial assets and net wealth.

Table 9 Selected indicators for the household sector

Annual growth rates, unless indicated otherwise

	2007			
	1st qr	2nd qr	3rd qr	4th qr
Household disposable income	14,0	14,0	12,7	12,5
Household financial assets[1]	22,0	16,5	15,7	10,7
Household net wealth[2]	18,8	13,7	12,3	7,7
Consumer confidence index[3]	23	21	18	22
Household consumption expenditure to GDP	61,6	62,7	62,1	61,2
Real household consumption expenditure	8,7	7,7	6,5	5,1
Credit to households	23,0	21,7	20,2	19,5
Saving as percentage of household disposable income	-0,6	-0,5	-0,5	-0,5
Household debt to GDP	45,9	47,2	48,0	47,3
Capital-gearing ratio[4]	18,7	19,7	20,4	20,6

1 Household financial assets include households' deposits with financial institutions, their share in pension funds and a proxy for their holdings of shares
2 Household net wealth comprises household total assets, that is, total fixed assets plus financial assets less liabilities
3 The consumer confidence index is expressed as a net balance between optimistic and pessimistic consumers. According to the BER, the index can vary between -100 for extreme pessimism and +100 for extreme optimism, with 0 as neutral
4 Capital gearing refers to household debt as percentage of total assets of households

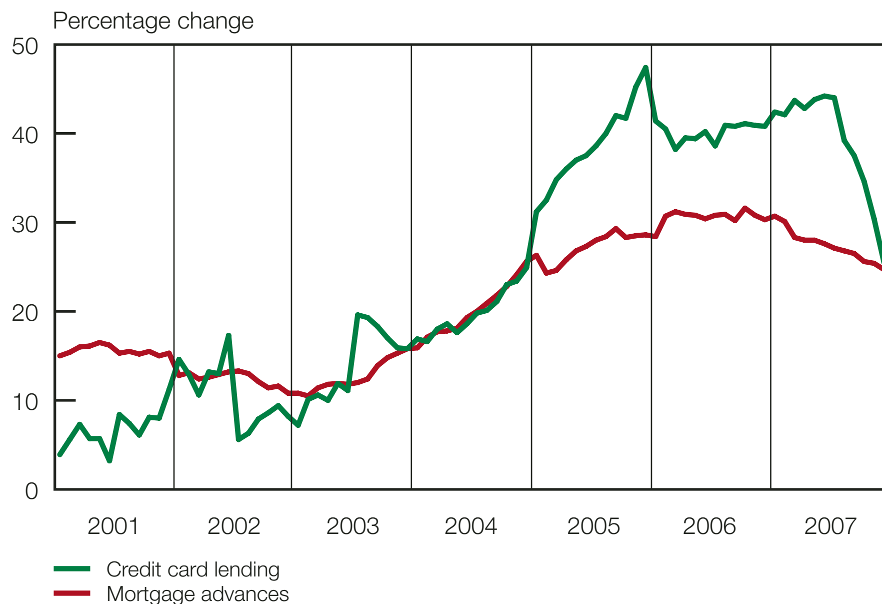
Sources: South African Reserve Bank and Bureau for Economic Research

Consumer confidence, consumption expenditure and credit extension

The level of consumer confidence rebounded to 22 index points (Table 9) in the fourth quarter of 2007, closer to a recent high of 23 index points recorded in the first quarter of 2007. The BER attributed the rebound to generous salary increases, increased employment and, possibly, the perception among consumers that the rate hike threats and higher inflation would be transitory.

The annual growth rate of credit to the household sector also decelerated further in the fourth quarter, probably due to more stringent credit conditions emanating from the implementation of the National Credit Act (NCA) coupled with the relatively high cost of credit. After peaking at 44,2 per cent in June 2007, the annual growth rate of credit card lending dropped from 44 per cent in July to 25,5 per cent in December 2007. The annual increase in mortgage advances also slowed down in line with the developments in the housing market and moderated to 24,7 per cent in the 12 months to December 2007, down from 27,6 per cent in June 2007 (Figure 17).

Figure 17 Annual growth in credit card lending and mortgage advances*



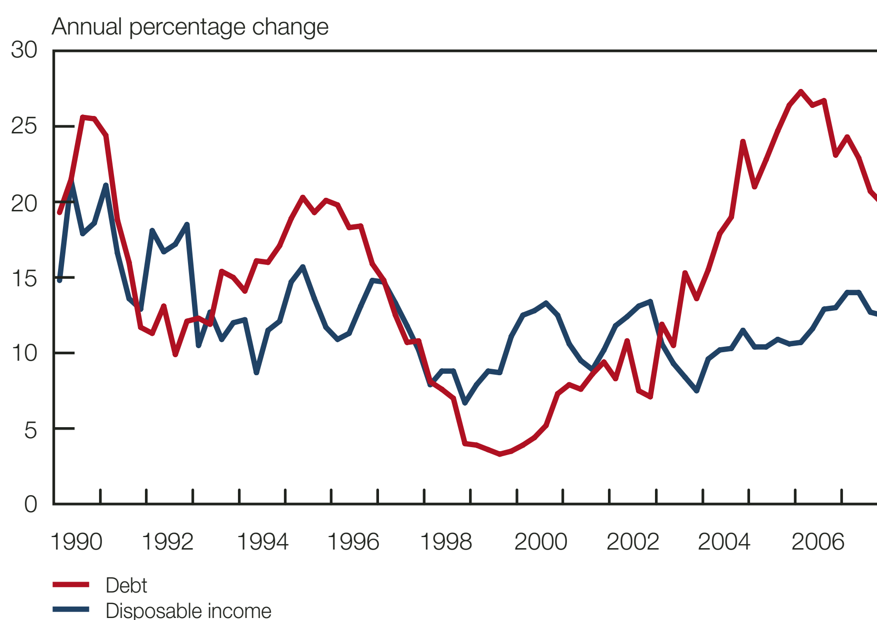
* Credit card lending includes lending to both the corporate and household sectors

Source: South African Reserve Bank

Household indebtedness

In the second half of 2007 the ratio of household debt to disposable income continued to trend upwards. Household debt constituted 77,6 per cent of disposable income in the fourth quarter of 2007, almost unchanged from 77,5 per cent recorded in the third quarter. As a percentage of GDP, household debt decreased slightly from 48 per cent in the third quarter to 47,3 per cent in the fourth quarter of 2007. The growth rate of household debt continued to outpace that of disposable income. It grew at an annual rate of 20,7 per cent in the third quarter and at 19,9 per cent in the last quarter of 2007, while the corresponding figures for disposable income were 12,7 and 12,5 per cent, respectively.

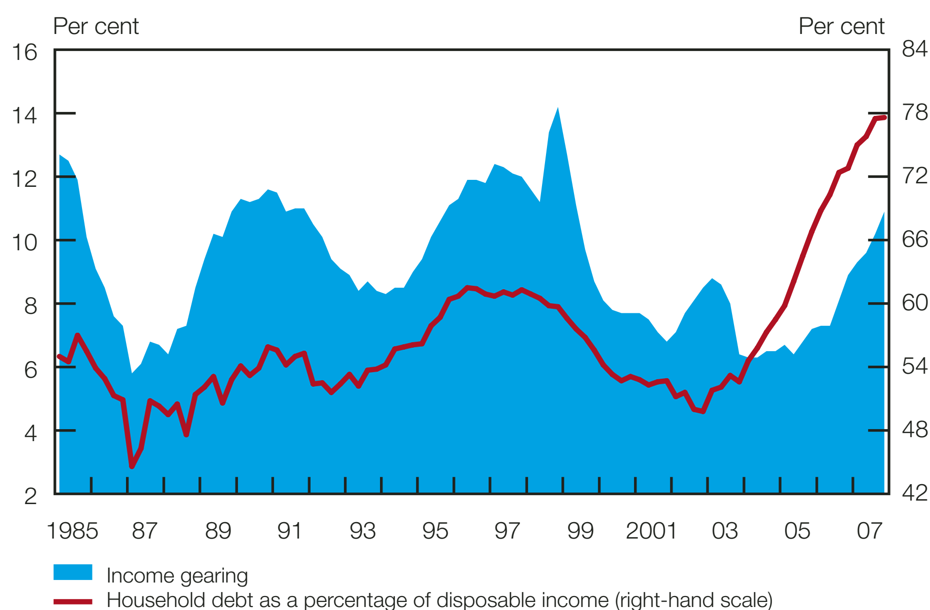
Figure 18 Household debt and household disposable income



Source: South African Reserve Bank

The high level of household indebtedness continues to present a potential source of vulnerability in the event of an adverse shock to the repayment capacity of households. High debt-servicing costs, somewhat lower income growth, the slowdown in the growth rate of household financial assets and net wealth, and the low level of household saving may affect credit quality adversely and pose debt servicing difficulties in future. There was a pass-through effect from higher interest rates to higher financing costs of household debt, as income gearing increased from 10,2 per cent in the third quarter to

Figure 19 Ratio of household debt to disposable income and income gearing



Source: South African Reserve Bank

around 11 per cent in the fourth quarter of 2007. Over the same period, capital gearing remained almost unchanged at 20,6 per cent. Household debt as a percentage of financial assets of households amounted to 30,6 per cent (not shown in table 9) in the fourth quarter of 2007. In terms of household indebtedness, South Africa does not compare unfavourably with a selection of other countries. (See Box 5 for a comparison of household debt and debt-service ratios for selected countries.)

Box 5 Country comparison of household debt burden

The high levels of household debt in many countries have been driven by, among other things, favourable financial conditions including low interest rates, increases in disposable income, the boom in housing markets, innovation in credit markets and the introduction of new financial products. Mortgage refinancing or mortgage equity withdrawal could have played a role as well. Debt-servicing costs have also increased in keeping with the turnaround in interest rate cycles in a number of countries. These developments resulted in concerns as to whether the household sectors in respective countries have become more vulnerable in the event of unexpected shocks. It is, however, generally believed that the strong household net wealth positions, mainly reflecting increases in property values, may provide a buffer against adverse macrofinancial developments.

Variations in household indebtedness across countries partly reflect structural differences between financial systems, differences in the computation of aggregate household debt data and the respective positions in the interest-rate cycles. These factors, coupled with difficulties in obtaining same-period data, make international comparisons difficult.

A major limitation in using aggregate data for household indebtedness and debt-service burden is that data conceal the distribution of household debt burden among different household groups. A recent trend among central banks has been to conduct household debt surveys to obtain micro-level data that can shed more light on the distribution of household debt by, for example, age, income groups, secured versus unsecured debt and first-time buyers of property or otherwise. This has provided a complementary perspective on the issue of household-sector vulnerability.

Aggregate household debt data show that in many countries household debt has risen faster than disposable income. From the list of selected countries, Iceland had the highest ratio of household debt to disposable income in 2006.[39] The household debt-service ratio of Iceland was also the highest among the list of selected countries. Turkey had the lowest figures for both household debt and debt-service ratios. For South Africa, the ratio of household debt to disposable income was 77,6 per cent and debt servicing costs were 10,9 per cent of disposable income in the fourth quarter of 2007. South Africa is, therefore, not out of line compared with these countries, notwithstanding the structural differences among countries.

39 According to the OECD, in 2006 the household debt to disposable income in Iceland was higher than in any other OECD member country except Denmark (260 per cent) and the Netherlands (246 per cent). (OECD. 2006. “Has the rise in household debt made households more vulnerable?”. *OECD Economic Outlook*, No. 80). Household debt figures for Denmark and the Netherlands are not shown in the table.

Table A Household debt as percentage of disposable income and household debt-service ratios – country comparisons*

Country	Household debt as percentage of disposable income	Household debt service ratio
Iceland	216	20,0
Norway	191	5,4
New Zealand	162	14,1
Australia	159,3	11,7
United States	138,1	14,5
Canada	128	7,3
Germany	105	4,0
South Africa	77,6	10,9
Turkey	26,5	4,4

* For Norway, Iceland, Germany and the US, data are for the fourth quarter of 2006; second quarter of 2007 for Canada; third quarter of 2007 for New Zealand, Turkey and Australia; and fourth quarter of 2007 for South Africa

Sources: National statistics offices, central banks and Organisation for Economic Co-operation and Development

Assessing the financial soundness of the household sector

To assess the vulnerability of the household sector to shocks, the financial soundness indicators for the household sector were analysed. The assessment involves the comparison of the threshold value with the actual value. The methodology followed is similar to the one explained earlier for stress testing the core set of financial soundness indicators for the banking sector. Three household-sector indicators that issued warning signals in the fourth quarter of 2007 were household debt to GDP, the ratio of household debt to disposable income and the capital-gearing ratio.

Table 10 Financial soundness indicators for the household sector*

Annual growth rates, unless indicated otherwise

	Mean	Standard deviation	Threshold	4th qr 2007	Signal
Disposable income	11,3	2,0	9,3	12,5	No
Financial assets	14,3	7,3	7,0	10,7	No
Net wealth	13,8	6,2	7,6	7,7	No
Debt	14,3	7,0	21,3	19,9	No
Debt to GDP	37,2	4,2	41,4	47,3	Yes
Debt to disposable income	58,9	7,1	66,0	77,6	Yes
Real consumption expenditure	4,4	2,2	6,6	5,1	No
Consumption expenditure to GDP	62,5	0,7	63,2	61,2	No
Credit extension	14,1	7,0	21,1	19,5	No
Income-gearing ratio	9,1	2,1	11,2	10,9	No
Capital-gearing ratio	19,2	1,2	20,4	20,6	Yes
Insolvencies**	-1,0	30,0	29,0	13,2	No
Summonses**	2,0	12,7	14,7	-20,1	No

* First quarter of 1993 to the fourth quarter of 2007. For credit extension, insolvencies and summonses the mean is for the period January 1995 to December 2007

** Figures for December 2007

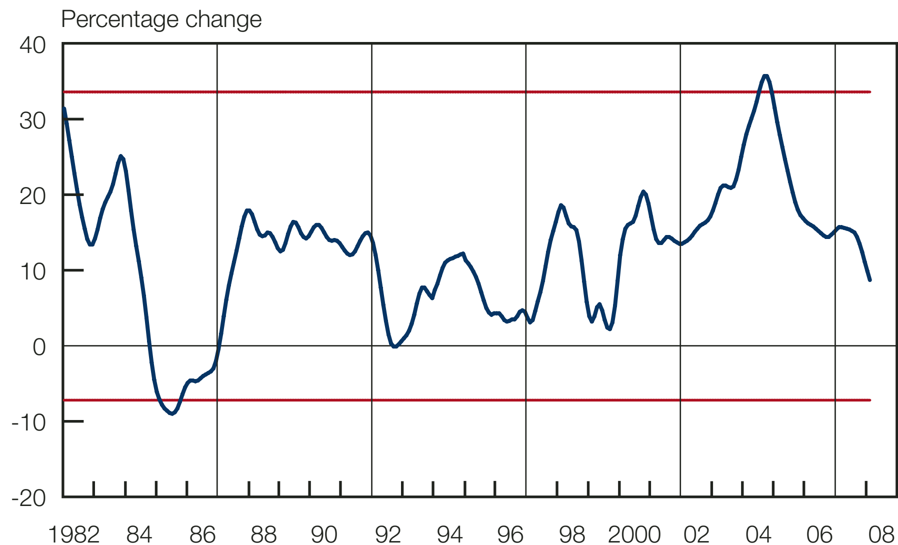
Sources: South African Reserve Bank and Statistics South Africa

For the debt to disposable income ratio the results were expected seeing that the ratio has been increasing since the beginning of 2003 (see Figure 19 on page 29). For the capital-gearing ratio, the results indicate a slower growth rate of household financial assets in 2007. Even though households still spend a reasonably low fraction of their disposable income (10,9 per cent) to finance debt, the deceleration in the annual growth rate of household financial assets could be a cause for concern.

Real-estate sector

The annual growth rate of residential property prices slowed further in February 2008. According to Absa, the annual growth rate of house prices decelerated to 8,7 per cent in February compared with 9,9 per cent in January 2008. This was the lowest growth recorded in almost nine years. These developments were largely driven by higher borrowing costs, the impact of the NCA on credit extension to the private sector and pressure on housing affordability. Using the two- standard deviation as a threshold, the growth in house prices was still within the non-signal range.

Figure 20 House price index*



—— +/- two-standard deviation from the mean

* The Absa House Price Index is based on the total purchase price of houses in the 80 – 400 m[2] size category valued at R2,9 million or less in 2007 in respect of which loan applications were approved by Absa. Prices are smoothed in an attempt to exclude the distorting seasonal factors and outliers in the data

Source: Absa Bank Limited

Table 11 gives a comparison of growth rates of house prices in certain countries compared with the growth rate of house prices in South Africa. As shown in the table, South Africa registered the highest average annual house price growth rate in 2006 and 2007. The high growth rates were in line with the upward business cycle in South Africa during those years. At present there is moderation in the annual growth rate of house prices in South Africa and further moderation is expected in 2008. The latest available information shows that Australia is experiencing the highest growth rate in house prices followed by New Zealand and Sweden.

Table 11 Annual house price growth rates – selected countries

Country	2006*	2007*	Latest**
South Africa	15,4	14,5	8,7
United Kingdom	8,0	9,7	4,2
United States	6,5	2,0	-0,3
Norway	13,2	12,4	7,3
Switzerland	3,2	2,6	2,4
Sweden	12,2	10,2	11,3
Ireland	11,8	-7,3	-7,3
Australia	7,0	10,2	12,3
New Zealand	10,5	12,1	11,4

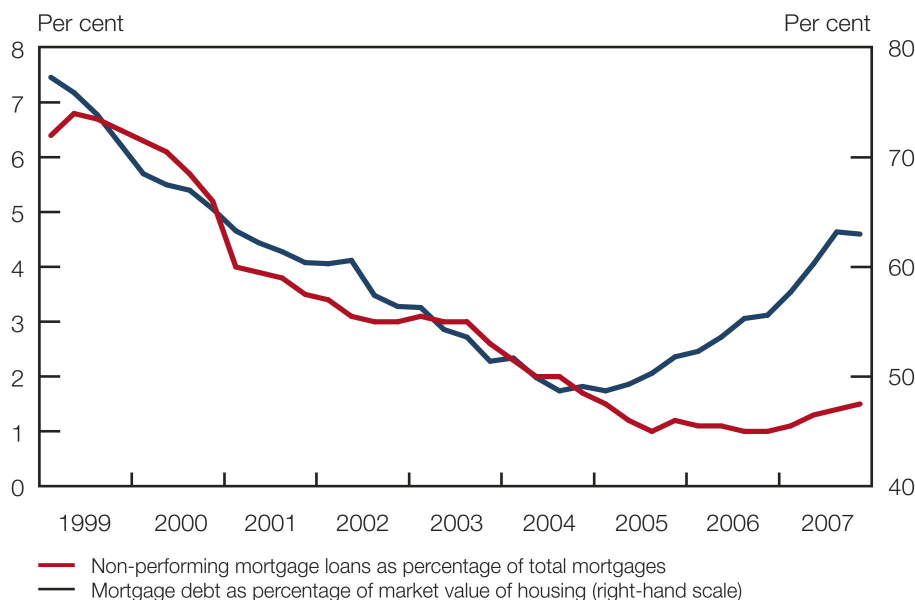
* Average growth rate for the year

** For the United States, Norway, Sweden, Ireland and Australia, data are for the fourth quarter of 2007; third quarter of 2007 for New Zealand; and February 2008 for the United Kingdom and South Africa. Switzerland's quarters end in January, April, July and October

Sources: National statistics offices, central banks, Halifax and Office of Federal Housing Enterprise Oversight

Both the ratio of mortgage debt as a percentage of the market value of housing and the ratio of non-performing mortgage loans as a percentage of total mortgage loans remained almost unchanged in the fourth quarter of 2007 compared with both the second and third quarters.

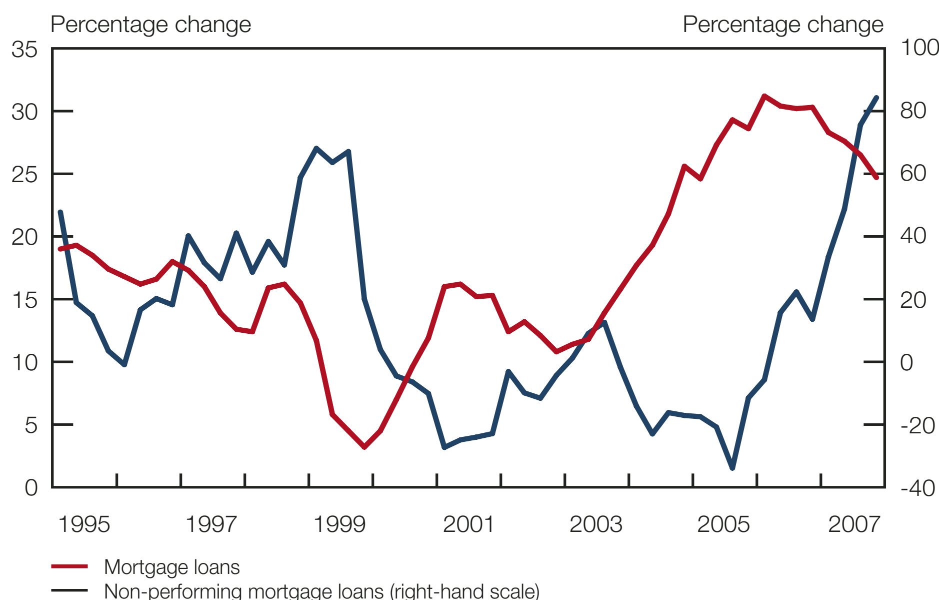
Figure 21 Non-performing mortgage loans and mortgage debt



Source: South African Reserve Bank

Even though the ratio of non-performing mortgage loans as a percentage of total mortgage loans was relatively low (Figure 21), non-performing mortgage loans have been growing strongly since the second quarter of 2006, recording an annual growth rate of 84,3 per cent in the fourth quarter, up from 75,6 per cent in the third quarter. Possible factors that could be contributing to the recent high growth rate of non-performing loans include the recent hikes in interest rates after a prolonged period of high credit extension coupled with a deceleration in the growth rate of household financial assets and net wealth.

Figure 22 Annual growth in mortgage loans and non-performing mortgage loans



Source: South African Reserve Bank

40 The RPCI measures activity on a scale of 1 to 10, where 1 to 3 indicates "not very active", 4 to 6 indicates "stable", 7 to 8 is "active" and 9 to 10 indicates a "very active" market. Activity is defined as "feet through doors", which translates into the number of potential home buyers visiting show houses.

According to property professionals, the activity level in the South African residential property market slowed down in the fourth quarter of 2007. The residential property confidence indicator (RPCI),[40] which measures the level of activity in the residential property market, indicated that the overall activity level decreased marginally to 5,1 in the fourth quarter compared with 5,3 in the third quarter of 2007 (Table 12).

Other indications of the slowdown in activity included the fact that properties remained in the market for almost three months on average, sellers struggled to obtain their asking prices, a low proportion of first-time buyers and that the buy-to-let market was at an all-time low. Research by First National Bank (FNB) indicates that the constraining factors continue to be the rising interest rates, inflationary pressures and the effects of the NCA.

Confidence in the residential and non-residential sector

The level of confidence among residential property contractors remained unchanged at 76 index points in the fourth quarter of 2007. Even though the level of confidence was unchanged in the fourth quarter, FNB is of the view that business conditions could remain tight or even deteriorate in the first quarter of 2008, should profit margins continue to be under pressure and building demand for residential houses weaken.

Table 12 Residential property confidence indicator and business confidence indices of contractors

Indicator/index	2007			
	1st qr	2nd qr	3rd qr	4th qr
Residential property confidence indicator	6,7	5,8	5,3	5,1
Residential contractors	86	82	76	76
Non-residential contractors	94	94	91	92
Building Confidence Index*	87	88	85	86

* The FNB Building Confidence Index measures the business confidence of all the major role players and suppliers involved in the building industry such as architects, quantity surveyors, contractors, sub-contractors, wholesale and retail merchants, and manufacturer of building materials

Sources: First National Bank and Bureau for Economic Research

Both the non-residential building contractors and the overall building confidence indices increased slightly in the fourth quarter of 2007. According to FNB, business conditions in this sector are expected to remain stable, despite the shortage of skilled labour and, to a lesser extent, building material in the non-residential sector. A factor contributing favourably to the business conditions is the further acceleration in the growth of profitability well above what was expected. Robust growth of building activity due to the 2010 FIFA World Cup preparations also resulted in gains to employment.

Infrastructure and regulation

Overview of significant developments in the South African financial system environment

Financial authorities, agencies and policy-makers have the responsibility to review the financial system environment proactively in an effort to ensure that the financial system, including key financial markets and financial institutions, is capable of functioning efficiently under all types of economic conditions. This section highlights some of the significant current developments in the South African financial system environment that have the potential to improve the robustness of the financial system. These developments have been grouped into three broad areas, namely financial regulation and supervision, disclosure and data quality, and market infrastructure.

Financial regulation and supervision

Banking

The Banks Amendment Act, No 20 of 2007, was promulgated and assented to in 2007 following extensive consultation with relevant stakeholders over a number of years and came into effect on 1 January 2008. The amended legal framework gives effect to current international standards and best practice relating to banking supervision and regulation, and in particular to the new capital framework as envisioned in Basel II. In addition, during 2008 the financial services industry will be subjected to an assessment to be conducted by the IMF and World Bank under the Financial Sector Assessment Programme.

As part of its efforts to improve access to finance, South Africa is moving towards a co-operative banking regulatory framework in order to advance the social and economic welfare of South Africans.[41] Significant progress has been made to date, including the recent promulgation of the Co-operative Banks Act, No 40 of 2007. The applicable supervisory bodies are in the process of establishing the required developmental and supervisory structures. The Act and the Regulations are likely to be implemented concurrently during 2008.

It is expected that talks would resume between constituencies from the Financial Sector Charter[42] Council over the target percentage of direct black ownership for the sector.[43] The lower target of 10 per cent direct black ownership of financial institutions as per the Financial Sector Charter (the Charter) was originally accepted in the light of the additional commitments in the Charter in terms of access to finance and the financing of black economic empowerment (BEE) deals in this and other sectors. It is generally regarded as essential that a suitable compromise is reached between the parties to the Charter.

Financial markets

The current T+5 settlement cycle for equities is not in line with international best practice and the shortening of the cycle to T+3 has been under discussion for a number of years. The JSE Limited (JSE) implemented a two-phase project, which was aimed at identifying the obstacles to moving to a T+3 settlement period and then implement T+3 with minimum risk and disruption to the South African market. In 2007 the JSE produced a document[44] detailing these obstacles, which include, among other things, the availability of systems, the movement of shares between registers and real-time trade processing.

41 For a more detailed discussion of the concept of co-operative banking, refer to the September 2007 edition of the Bank's *Financial Stability Review*.

42 The Financial Sector Charter is a commitment made in 2003 by the financial sector to the development of black economic empowerment in the financial services industry. It sets targets for various aspects of the financial services industry, including human resources development, procurement and empowerment financing. Access to financial services is one of the key aspects of the Charter. More information is available online at: www.fscharter.co.za.

43 The Charter provides for a target of 10 per cent direct black ownership of financial institutions, whereas the Department of Trade and Industry's (dti) Black Economic Empowerment Codes of Good Practice provide for a 25 per cent target for black ownership.

44 The document is available online at: http://www.jse.co.za.

The Financial Services Board (FSB) is considering an application from the Bond Exchange of South Africa (BESA) to demutualise.[45] It is likely that competition between BESA and the JSE will become more noticeable in the future as BESA has indicated an interest in trading in derivatives other than interest-rate derivatives. Following the significant growth in the volumes of South African government bonds traded on the London market, BESA will be presenting a proposal in 2008 to amend its rules to allow foreign-based players, without local representation, to join the local trading platform in an effort to increase trading on this platform.

45 Demutualisation, it is argued, will create the foundation for BESA's future positioning, with easier access to capital necessary to drive growth in the business, upgrade its technology and address product development. It also enhances the possibility of new alliances, joint ventures and strategic partnerships with other exchanges and technology providers.

Insurance and retirement

The National Treasury (the Treasury), in consultation with various stakeholders, is in the process of reviewing South Africa's retirement fund landscape.[46] In response to the two discussion papers released by the Treasury, the Department of Social Development issued a report that proposed a more redistributive approach to the retirement fund industry, which differed from the proposals tabled by the Treasury. It is expected that the Treasury will release a third discussion paper in this regard during 2008 and that drafting of a new Pension Funds Act will then commence.

In 2007, the Life Offices' Association of South Africa (LOA) and South African Insurance Association (SAIA) appointed a panel of experts to investigate and eradicate undesirable practices that are prevalent in consumer credit insurance.[47] Its findings and recommendations on how best to protect consumers in this market are expected later in 2008. During 2008, increased activity is likely to be seen following the announcement of formalised measures by the LOA for promoting insurance access to low-income earners in South Africa.[48] These measures are in line with the Charter's requirements, such as simplicity and affordability. For more information on this initiative see Box 6.

46 The objectives of the reform are to build a framework that contributes to a more consistent and coherent structure and regulation of the broader social security system in South Africa. This includes the encouragement of individuals to provide adequately for their own retirement and the needs of their dependants.

47 The public and insurer firms were given an opportunity to send in submissions and provide evidence at public hearings during 2007.

48 This will be in addition to the informal and largely unregulated schemes offered by the burial societies and *stokvel*s in certain communities.

Box 6 Zimele – granting insurance access to low-income earners

The Life Offices' Association of South Africa (LOA) announced new measures for granting access to low-income earners. This is in line with the Financial Sector Charter's requirements such as physical accessibility, appropriateness, simplicity and affordability. The products will be branded Zimele,[49] which indicates that the consumer is purchasing a product that meets the minimum requirements of fair charges, easy access and decent terms. The basic concepts underlying the products were developed by the LOA and are meant for South Africans earning less than R3 000 per month. The aim is to encourage life insurers to design appropriate, yet innovative and competitive products for the low-income market.

Life insurance products sold with the Zimele stamp of approval must comply with minimum standards, including the availability of policy summaries in the dominant languages of the province, the ability for consumers to pay the required premium or to amend the terms of the policy on a frequent basis and within a reasonable distance from their place of residence or work. Furthermore, consumers must be given the opportunity to lodge claims and receive payment for claims, also on a frequent basis and within a reasonable distance from their residence or work. The first products offered by life insurers under the Zimele brand are funeral products. Other protection measures included under this product are that the premium rate differentiation may only be based on age, payments must be made directly to beneficiaries and not to undertakers, and that a share-call line is available six days a week. Now that the full set of Zimele standards for funeral products has been approved, life companies can use this pricing blueprint to start developing other products that are not only affordable, but also appropriate for the living standard measure (LSM) 1–5 market. These will include credit cover, mortgage protection as well as life and disability cover.

49 Zimele is a Zulu word meaning "stand on your own two feet". More information on Zimele, the Financial Sector Charter and the Zimele advertising campaign is available online at: www.zimele-loa.co.za.

Disclosure and data quality developments

Enhanced public-sector financial disclosure

The International Public Sector Accounting Standards Board recently released a new accounting standard for governments and other public-sector entities titled *Presentation of Budget Information in Financial Statements*. These disclosures will contribute greatly to improving accountability by helping readers to compare budgeted amounts with actual amounts and by explaining material differences between the two amounts. The standard is likely to be applied in South Africa after approval by the Accounting Standards Board.

Audit of performance information

In 2007, the Auditor-General issued a directive on the audit of performance information under the auspices of the Public Audit Act, No 25 of 2004. The information related to performance against predetermined objectives for the different spheres of government is now subject to audit. A phasing-in approach has been adopted until such time as standards have been set and the environment promotes a state of readiness to provide reasonable assurance in the form of an audit opinion or conclusion. The focus is currently on obtaining an understanding of the internal controls relating to performance information and documenting system descriptions for the systems relevant to reporting on performance information. Full implementation is expected in the 2009/10 budget year.

Cyclically adjusted fiscal budgets

To enhance the efficacy of fiscal discipline and reduce the effect of business cycle revenues and fluctuations on the actual government budget balances, government indicated its intent in 2007 to introduce the concept of cyclically adjusted budget balances. This concept takes into account the effect of cyclical revenues on the budget.[50] Previously, cyclical revenues were treated in the same manner as normal revenue, but this methodology encourages the use of cyclical revenues to pay off debt and to save for the future.

Surveys by Statistics South Africa

Statistics South Africa (Stats SA) recently conducted several surveys in an effort to produce high-quality statistical information and to enhance trust in official statistics. One of the surveys, the Income and Expenditure Survey, was aimed at updating the basket of goods and services for the consumer price index (CPI). This will possibly influence the re-weighting of the consumer basket in determining the CPI going forward as proposed in a discussion document titled “Unpacking the CPI basket: A proposed new selection methodology and basket for the SA CPI”.[51]

It is expected that a new re-engineered quarterly survey of the labour force will be launched in August 2008, which will provide a more robust measurement of the dynamics of South Africa’s labour market. The survey results will be released within four weeks from the survey date and the content will focus on critical labour market trends that are in line with international best practice.

50 Fluctuations in the business cycle and external factors such as commodity prices can have a significant impact on government’s fiscal position. When economic activity is buoyant or commodity prices are high, tax receipts will be cyclically strong. The opposite is true when economic growth slows or commodity prices fall. The technical note issued by the National Treasury on the cyclically adjusted budget can be accessed online at: www.treasury.gov.za.

51 The document proposes the products and services that the CPI will consist of as from January 2009 and solicits comments from interested parties. Among the items to be included are taxi fares, Internet service provider fees and laptop prices.

Exchange controls

Significant progress has been made in support of the gradual phasing out of exchange controls. The South African Minister of Finance announced further reforms of exchange controls in his 2008 National Budget, facilitating the replacement of existing exchange controls relating to institutional investment with a system of prudential regulations. For a more detailed discussion on a new prudential framework for exchange control management and oversight abilities, see Box 7.

Box 7 Exchange control reforms

The gradual liberalisation of exchange controls was discussed in the March 2005 edition of the *Financial Stability Review*. In the 2008 Budget Speech, the South African Minister of Finance announced further significant reforms of exchange controls. These changes heralded a shift in the regulatory regime from control measures to prudential regulation. The changes that highlight this shift include the following:

- Pension funds and underwritten policies of long-term insurers may increase their foreign exposures from 15 to 20 per cent, and collective investment schemes, investment managers and the investment-linked business of long-term insurers may increase theirs from 20 to 30 per cent of total retail assets. These institutional investors are allowed an additional 5 per cent for portfolio investments in Africa.
- The removal of the pre-application process for portfolio investments, which has been replaced with a system of quarterly reporting to, and monitoring of, foreign exposures by the Exchange Control Department of the Bank.

Other reforms include the

- removal of the pre-approval process for outward foreign direct investments of up to R50 million for corporate entities. Authorised dealers (banks) will administer the directives and guidelines on these types of investments
- removal of restrictions on South African corporate entities to participate in foreign inward-listed securities on the JSE Limited (JSE) and the Bond Exchange of South Africa (BESA), including participation in rand futures
- introduction of a single R500 000 per annum discretionary allowance for purposes of travel, gifts, donations to missionaries and maintenance.

These changes will enable South African companies, trusts, partnerships and banks to manage their foreign exposure, since they will be permitted to participate without restriction in the rand futures market on the JSE. This will allow companies to diversify and hedge their currency exposure, support macroeconomic stability, and is expected to contribute to the reduction of exchange rate volatility and to deepen domestic financial markets. This dispensation is also extended to investment in inward-listed (foreign) instruments on the JSE and BESA.

The shift from exchange controls to prudential regulation changes the focus of activities from pre-approval of applications to monitoring of cross-border flows. Financial surveillance is expected to remain an important pillar of the financial stability framework.

Market infrastructure developments

Accounting and auditing framework

Following the adoption of the small and medium enterprise (SME) accounting statement for use by entities that do not have public accountability, small and medium enterprises in South Africa are now subject to a less stringent accounting framework than previously. Despite the fact that the international version is still in draft format and the likelihood of differences between the international version and the South African SME statement, the South African Institute of Chartered Accountants was of the opinion that the benefits of an early issue of the SME accounting statement outweighed any disadvantages.

Enhanced regulation of the audit profession is likely to be seen following the establishment of a new board of members and several committees by the Independent Regulatory Board for Auditors (IRBA).[52] IRBA will continue with the important task of

52 The IRBA is the statutory body controlling that part of the accountancy profession involved in public accountancy (i.e. the statutory audit attest function) in the Republic of South Africa. More information on IRBA can be obtained online at: www.irba.co.za.

setting in place the basic tenets that will ensure development of the profession through continued professional education, the disciplining of those who fail to comply or bring the profession into disrepute, accreditation of professional bodies and setting of auditing standards.

National payment and settlement systems

The Bank participated in a task group organised by the Committee on Payment and Settlement Systems to determine the size, duration, concentration and control of foreign-exchange settlement risk. The survey report will be published during 2008 and is likely to recommend specific actions by individual institutions, industry groups and central banks to reduce and control the remaining large and long-lasting exposures. The preliminary report indicates that South African banks are not exposed to any significant risks as far as the settlement of foreign-exchange-related payment obligations through the Continuous Linked Settlement (CLS) system[53] is concerned.

53 CLS is a concept pioneered by major international players in the foreign-exchange market to reduce settlement risk arising from the gross settlement of foreign-exchange trades by settling foreign-exchange transactions finally and irrevocably.

It is expected that the findings of the Competition Commission inquiry[54] into bank charges and access to the national payment system will be released in mid 2008. Measures could be introduced by the industry to address the concerns raised and recommendations made, provided, of course, that they will not introduce undue risks to the stability and efficiency of the payment system.

54 The Competition Commission has launched an independent public inquiry into particular aspects of competition in retail banking and the national payment system in South Africa. More information on the Enquiry into Competition in Banking may be obtained online at: www.compcom.co.za.

Combating money laundering and the financing of terrorism

As a member of the Financial Action Task Force (FATF), South Africa will undergo a reassessment in August 2008 of its system to combat money laundering and the financing of terrorism by a team to be led by assessors from a number of the FATF member countries.[55] The Financial Intelligence Centre (FIC) and other stakeholders will continue with their preparation processes to identify and address shortcomings proactively where possible, before the mutual evaluation commences. In this regard, the FSB successfully facilitated the signing of a memorandum of understanding (MoU) with the FIC during 2007 and efforts are under way to finalise an MoU between the Bank and the FIC.

55 The objective of the mutual evaluation will be to assess compliance with the international standards of FATF's 40 recommendations to combat money laundering and the 9 special recommendations to combat the financing of terrorism.

The FIC proposed amendments to its legislation to provide extended powers for supervisors and improve their ability to address compliance failures appropriately. It further contains provisions that will allow the FIC to inspect the compliance status of accountable institutions. During 2007 the FIC evaluated and considered the comments elicited from various stakeholders, including the Bank, and efforts are under way to table the proposed Amendment Bill.

Principles of business rescue

The Companies Bill was published for public comment in February 2007 as part of the ongoing Company Law Reform[56] process. One of the most significant changes to the current Companies Act is the principle of business rescue[57] proposed in Chapter 6 of the Companies Bill. Ongoing consultation will take place between the stakeholders as the concept of business rescue will introduce a shift in the South African insolvency industry to align it more with international standards.

56 In June 2004, the dti published a policy document titled "South African company law for the 21st century: guidelines for corporate reform". The policy document was discussed in more detail in the September 2006 edition of the Bank's *Financial Stability Review*.

57 The purpose of business rescue is to preserve the going concern of a financially distressed firm that is on its way to insolvency with the possibility of satisfying the claims of creditors more effectively than if the firm would have been liquidated.

Enhanced corporate governance principles

The Corporate Laws Amendment Act, No 24 of 2006, came into effect on 14 December 2007 and is aimed at improving the overall level of corporate governance as part of the ongoing Company Law Reform process. The proposed new Companies Act is likely to

improve regulatory oversight and redress for shareholders.[58] The proposed new Act as well as ongoing developments in the corporate landscape contributed to the need to update the principles of corporate governance in South Africa. It is expected that the King II Code will be updated and the new code released once the Companies Bill is promulgated. See Box 8 for the issues that are likely to be addressed in the new code.

58 It proposes new law in the form of a codified regime of directors' duties, including "a fiduciary duty and a duty of reasonable care", which operates in addition to existing common law duties.

Box 8 Update of King II corporate governance principles[59]

59 Institute of Directors. 2007. *Bulletin*, 4th quarter.

The King Committee has been tasked to deal with international trends in corporate governance in a bid to ensure that the updated code is at the forefront of governance in the world. Issues that are likely to be addressed in the new code include the following:

- Future annual statements would need to reflect how companies have affected the community in which they operate and also include plans to improve matters relating to sustainability.
- It is increasingly accepted around the world that alternative dispute resolution is a key element of good governance. It is therefore likely that directors will have to increase attempts to preserve business relationships through mediation and to afford novel solutions that judicial courts are currently unable to produce.
- Owing to the increased international trend towards a risk-based approach, it can be expected that internal auditors should report to their boards on their annual assessment regarding the adequacy of internal controls.
- The issue of information technology (IT) governance is likely to be dealt with for the first time, given the integral role that IT plays in the strategy of a business, and therefore confidentiality, integrity and continuity would be important attributes to address.
- The updated code will probably include a section on business rescue because of its novelty for companies in South Africa.
- In view of the expected changes in the new Companies Act, the code is also likely to include a section on mergers and acquisitions in order to ensure that directors are aware of their responsibilities and duties.

Concluding remarks

South Africa has now been fully integrated into the world economy and is not only regarded as an important market participant, but also as an important role-player, especially in the southern African region. When considering the financial system environment as a whole, it is evident that considerable efforts have been made in recent years to address regulatory and infrastructure developments that are both challenging in nature and on the international agenda. It is expected that a number of regulatory and infrastructure initiatives with the potential to contribute to maintaining and improving the robustness of the financial system will materialise during 2008.

Abbreviations

AGR	augmented Guidotti ratio
ARM	adjustable-rate mortgage
BEE	black economic empowerment
BER	Bureau for Economic Research
BESA	Bond Exchange of South Africa
BoC	Bank of Canada
BoE	Bank of England
CDS	credit default swap
CLS	Continuous Linked Settlement
CPI	consumer price index
CRB	Commodity Research Bureau
dti	Department of Trade and Industry (South Africa)
ECB	European Central Bank
EME	emerging-market economy
FATF	Financial Action Task Force
Fed	United States Federal Reserve
FIC	Financial Intelligence Centre
FNB	First National Bank
FSB	Financial Services Board
GDP	gross domestic product
GR	Guidotti ratio
HIPC	Heavily Indebted Poor Countries
IAS	International Accounting Standard
IEA	International Energy Agency
IEMP	index of exchange market pressure
IFRS	International Financial Reporting Standards
IIF	Institute of International Finance
IMF	International Monetary Fund
IRBA	Independent Regulatory Board for Auditors
IT	information technology
JSE	JSE Limited
LIBOR	London Interbank Offered Rate
LOA	Life Offices' Association of South Africa
LSM	living standards measure
MBA	Mortgage Bankers Association
MDRI	Multilateral Debt Relief Initiative
MoU	memorandum of understanding
MSCI	Morgan Stanley Capital International
NCA	National Credit Act
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PMI	Purchasing Managers Index
qr	quarter
repo	repurchase (rate)
RMB	Rand Merchant Bank
RPCI	residential property confidence indicator
SADC	Southern African Development Community
SAIA	South African Insurance Association
SIC	Standard Industrial Classification
SME	small and medium enterprise
SNB	Swiss National Bank
Stats SA	Statistics South Africa
STRIPS	Separate Trading of Registered Interest and Principal of Securities
SWF	sovereign wealth fund
UK	United Kingdom
US	United States
WEF	World Economic Forum