Financial Stability Review

September 2004

South African Reserve Bank

Financial Stability Review

September 2004

South African Reserve Bank

Editorial committee

Comments and enquiries relating to this Review are encouraged and should be addressed to:
Head: Financial Stability Department
S A Reserve Bank
P O Box 427
Pretoria 0001
Tel. +27 12 313 3401

E-mail: sarbfsr@resbank.co.za

http://www.resbank.co.za

ISSN 1811-2226

Contents

Introduction

The South African Reserve Bank (the Bank) defines its primary objective as “the achievement and maintenance of financial stability.” The Bank’s first task, derived from its constitutional mandate, is to ensure price stability. In addition to this the Bank has responsibility for ensuring that the South African monetary, banking and financial system as a whole is as robust as possible. In pursuit of this objective, the Bank publishes this semi-annual *Financial Stability Review* to communicate its assessment of financial system stability and stimulate debate around the issues. The Bank recognises, though, that it is not the sole custodian of financial system stability. It can only contribute towards a larger effort involving the government, other regulators and self-regulatory agencies.

This edition of the *Financial Stability Review* comprises two main sections:
- financial stability developments and trends, and
- infrastructure and regulation.

The first section presents an overview and assessment of the current state of macroeconomic and macrofinancial conditions. It contains a discussion of the major developments in the international, emerging-market and regional environment, which might influence financial stability in South Africa. The domestic assessment is based on selected macroprudential indicators for banks, financial markets, and insurance, corporate, household and, among others, the real-estate sectors. Issues that are discussed include:
- bank concentration and financial stability;
- early warning system models;
- the new banking Capital Accord;
- rand volatility; and
- real-estate bubbles.

The national payment system plays a major role in reducing risk and promoting efficiency in the financial system. The second section therefore includes an article on the oversight of the national payment system in South Africa, giving a broad overview of the scope of the oversight function and major payment system developments. The section concludes with an article discussing the challenges of broadening access to finance and attendant financial stability concerns. The development of the Financial Services Charter as well as dedicated banks and the financial safety net are also discussed.

Overview

Since the March 2004 *Financial Stability Review* international financial market conditions have continued to improve in response to strengthened economic fundamentals as well as improved investor confidence. With the global economic recovery becoming well established and projected to gain further strength, certain risks to financial stability have diminished somewhat.

The global economic performance has strengthened and broadened. Recent data suggest that global growth in gross domestic product has remained solid in the first half of 2004[1]. Although the pace and nature of recovery in individual countries varied considerably initially, the current expansion is the most synchronised in decades.

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

Following an extended period of expansionary monetary policy, the global economy seems to be entering a phase of rising interest rates led by the United Kingdom (UK) and the United States of America (US). Debt levels increased sharply during the recent cycle of lower interest rates and a tightening of monetary policy might negatively impact financial system stability in the future should the quality of assets deteriorate. A surge in energy and other input prices has redirected investors' and policy-makers' concern towards the acceleration in inflation.

South Africa is now Africa's second largest source of foreign direct investment. Since March 2002, business of the South African banking sector in the Southern African Development Community (SADC) increased markedly. The increase in South African investment in the continent could change the face of investment in Africa. These are positive developments in the context of the New Partnership for Africa's Development (NEPAD) and may contribute towards changing the foreign investors' perceptions of the continent.

The South African financial system remained stable during the period under review. The banking sector was deemed to be sufficiently healthy to weather adverse shocks. The capital adequacy ratio was well above the minimum required. Also, there were improvements in the financial services index and banks' share prices. The insurance sector was also deemed to be healthy. The number of lapses and surrenders declined, while the number of policies increased and the share prices of insurance companies improved.

The equities market was not subjected to large fluctuations implying increased certainty regarding future profits, thereby indicating lower risk. The debt-servicing capacity of both households and corporations remained fairly aligned with debt obligations.

Annual house price increases in the real-estate sector continued on an upward trend. The increase in house prices was attributed to genuine shifts in demand rather than suggestive of a property bubble. The surge in house prices that began in September 2003, following aggressive interest rate cuts, has begun to lose momentum. This is reflected by the downward trend in the month-on-month growth rate in house prices since January 2004. Also, there was no cause for concern emanating from developments in either the micro-finance sector or the medical-aid industry.

The South African financial environment appears to be sound and no evidence could be found that suggests any threat to financial stability.

Financial stability developments and trends

International macrofinancial developments

The global economic performance has strengthened and broadened. After global real gross domestic product (GDP) growth averaged 2,6 per cent in 2003, recent data suggest that it has remained solid in the first half of 2004[2]. Although the pace and nature of recovery in individual countries varied considerably initially, the current expansion is the most synchronised in decades. The economic growth gap between major economies is narrowing. Although the improved outlook supports global financial stability, its sustainability is subject to a variety of challenges and risks.

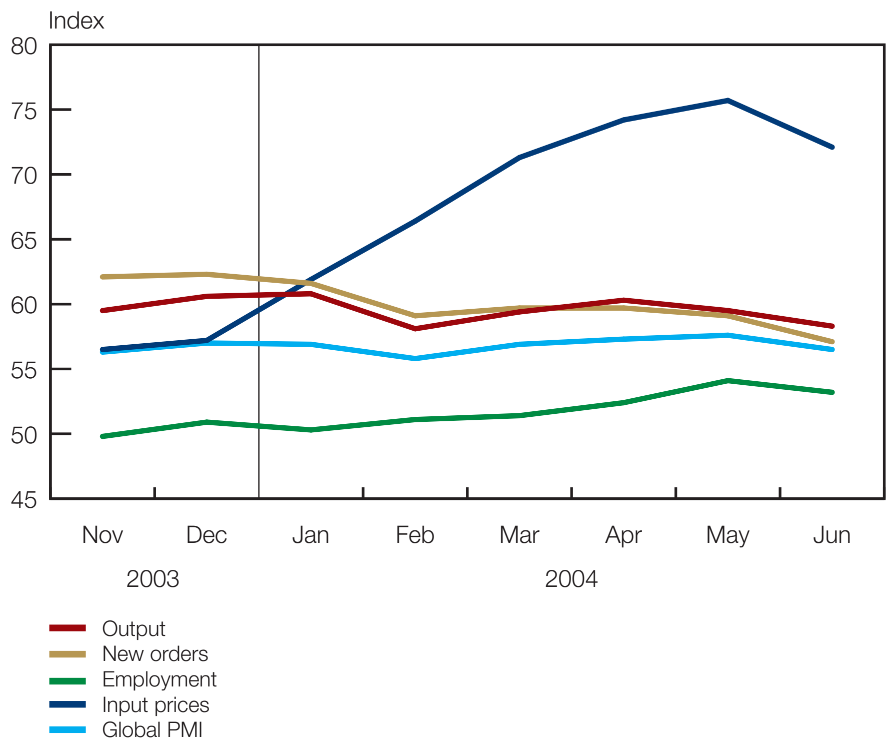
2 *Thomson Financial Ltd.* Datastream.

Global growth, output and employment

The Global All-industry Purchasing Managers Index[3] (PMI) recorded a lower reading in June compared with May 2004 (see Figure 1). It has nevertheless remained at a level that is consistent with robust expansion in manufacturing activity. Employment showed strong gains before tapering off slightly in June 2004. Input prices, although slightly lower, remained high, confirming the build-up of price pressures in manufacturing sectors. Although rising production prices generally were evident, they were not consistently transformed into higher consumer prices. There was no indication of imminent financial system risk emanating from global production trends.

3 *The Global PMI is a survey of manufacturing output as measured by a global indicator, compiled by JPMorgan from selected developed countries.*

Figure 1: Global All-industry Purchasing Managers Index and its components



Source: JP Morgan Chase Bank, Economic Research, July 2004

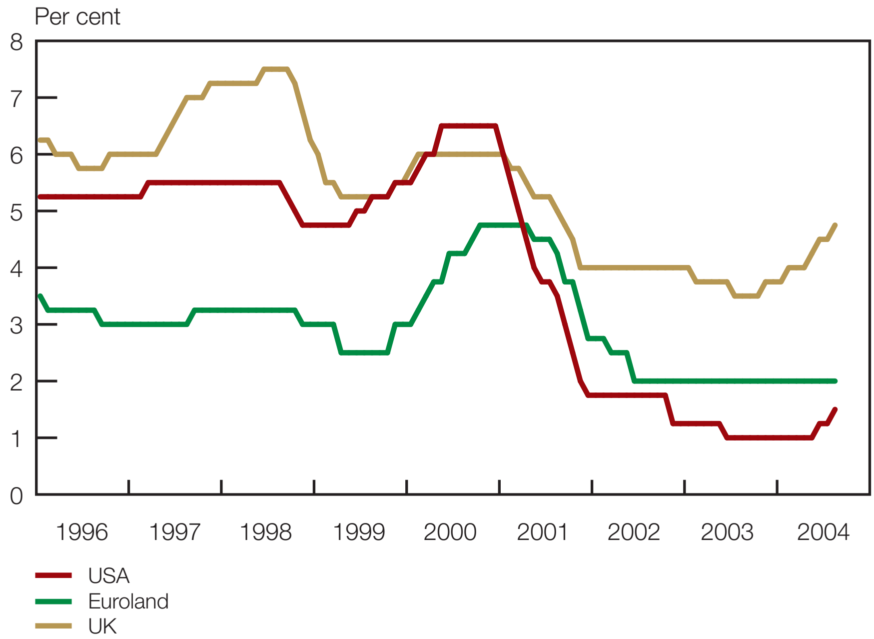
The global rising interest rate environment

History shows that some form of financial market fragility or crisis often follows rising interest rates. Although this might be purely coincidental, the 1982 Latin American crisis, the 1987 Savings and Loan crisis, the 1994 Mexican crisis, the 1997 emerging-market crisis and the 1999/2000 bursting of the technological bubble, were all preceded by interest rate increases in the US.

Following an extended period of expansionary monetary policy, the global economy seems to be entering a phase of rising interest rates led by the UK and the US (see Figure 2). Debt levels increased sharply during the recent cycle of lower interest rates. In a low interest rate environment there is the danger that asset prices could rise beyond what is dictated by economic fundamentals. Interest rate increases could then lead to a downward over-correction of asset prices, disrupting financial markets.

Furthermore, interest rate increases change banks' risk pricing and provisioning. Financial players and regulators, therefore, need to be particularly alert to, and monitor closely, the pricing of risk and the build-up of leverage and concentrated position-taking within different stages of the interest rate cycle.

Figure 2: Central bank policy rates – United States of America, Euroland and the United Kingdom



Geopolitical risks and the increase in the price of oil

Although geopolitical risks appeared to have eased somewhat in the first half of 2004, terrorism remains a threat. In Iraq the situation has deteriorated steadily. Since the US officially ended hostilities, insurgence activity has increased. Serious challenges remain which, if not addressed, could threaten the prospects of full sovereignty.

The current rate at which oil prices increase presents a big risk to global economic recovery, as well as to the inflation rate, interest rates and financial stability in South

Africa. Furthermore, increasing dependence on a single source of supply, namely Saudi-Arabia, and the risk of acts of terrorism seriously disrupting oil supply, pose a threat to global financial system stability.

During the current reporting period a surge in energy and other input prices has redirected investors' and policy-makers' concern towards the acceleration in inflation. The US consumer price index rose on a monthly basis by 0,3 per cent in June, with the annual rate 3,3 per cent higher. This increase was mainly a result of a 2,6 per cent increase in energy prices.

It is possible, however, that strong inflation pressures as a result of higher energy prices may lead to more aggressive interest rate increases. As a result profit margins could be squeezed and business expansion undermined, causing financial market disruption.

Large external imbalances

According to the US Commerce Department, the current-account deficit widened to about 5,7 per cent of GDP in the second quarter of 2004. This sharp increase since the mid-1990s has been accounted for by corresponding increases in surpluses in Europe, Japan and in emerging-market economies (EMEs), particularly in Asia.

Generally, the adjustment of current-account deficits is associated with a depreciation of currencies and a marked slowdown in economic growth. Were that to happen in the US in particular, the impact on financial systems globally could be negative. Current-account balances have been relatively more stable in the other main industrialised countries.

Any serious attempt by the US to correct its current-account deficit can have a dramatic impact on countries with large trade and current-account surpluses with the US. Three possible scenarios of adjustment of the global external imbalances could evolve over the next few years[4]:

- A large and disorderly adjustment with abrupt movements in exchange rates as a result of reduced willingness among foreign investors to invest in US assets. Such a scenario is undesirable and could have serious consequences, with potential spill-overs into other financial markets, including higher US interest rates.

- Asian central banks continue to accumulate foreign reserves. The global allocation of capital remains distorted and, by delaying adjustment, the risk of larger and more disruptive adjustments later on will increase.

- The least disruptive scenario would be a gradual reduction of global external imbalances supported by a lagged impact of moderate dollar depreciation on US trade, greater exchange rate flexibility in Asia and higher global domestic demand.

International banking sector stability

Despite slow progress with fundamental restructuring in some countries, the improved global economic climate has supported the stability of banking sectors in developed countries and EMEs. The banking sectors in developed countries remained generally sound, with most banks well capitalised and profitable. The risk of default for US, UK and European banks remained low and indications are that banks are paying more attention to managing credit risk, probably encouraged by preparations for the new Capital Accord.

4 *Bank for International Settlements. 2004.* 74th Annual Report, June.

The economic recovery and rising equity market in Japan supported bank profitability. Japanese banks' non-performing loans were lower as a result of an improvement in corporate profits and a decline in business failures. Banks are confident to achieve the supervisory requirement of halving the non-performing loan ratio to 4 per cent by March 2005.

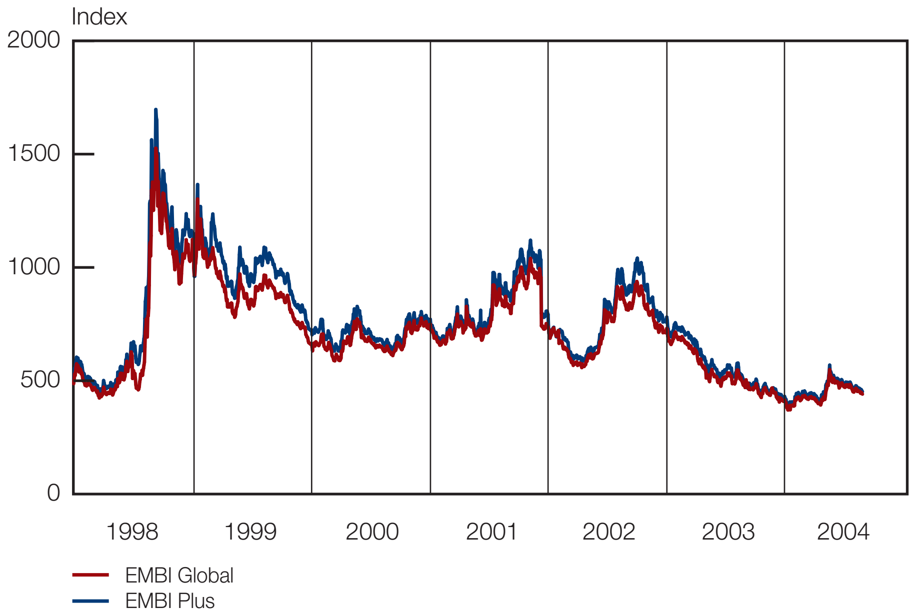
Banking systems in emerging Asia continued to recover, although growing credit risk exposure to certain sectors deserves closer attention. In China, the recent capital injection of US$45 billion into two large state-owned banks may represent an important step towards strengthening the banking system. However, restructuring plans, improved governance and oversight of these two banks need to be implemented.

Severe liquidity pressures on distressed banking systems in Latin America are receding. Lacklustre economic growth and political factors are, however, exacerbating financial distress in the banking systems of some countries. In Russia a potential banking crisis threatened the system in early July 2004 when one of the major banks suspended its operations.

Emerging markets

The South African financial system is, as a result of the risk of contagion, exposed to the performance of, and vulnerabilities in other EMEs. Fortunately, EMEs had a good year in 2003, resulting in a compression of spreads on sovereign bonds.

Figure 3: Emerging-market bond index



The spread of the JPMorgan emerging markets bond indices (EMBIs) over US treasuries widened during May 2004, but has subsequently narrowed somewhat (see Figure 3). Further tightening in US monetary policy might, however, result in another widening of spreads. This will adversely affect EME debt dynamics and possibly lead to a reversal of financial inflows. A reduction of inflows would increase liquidity risk in those EMEs with large external financial requirements as a result of debt servicing and/or current-account imbalances. The immediate impact is, however, likely to be cushioned since many EMEs have built up significant foreign exchange reserves after the 1997/98 Asian crisis (see Table 1).

Table 1 Foreign exchange reserves
US$ billions

	1996	2000	June 2004
China	105,0	165,6	506,8
Hong Kong	63,8	107,6	120,8
India	19,7	37,3	114,2
Korea	33,2	95,9	166,2
Taiwan	88,0	106,7	245,9
Argentina	17,7	24,4	15,8
Brazil	58,3	32,5	49,6
Mexico	19,2	35,1	59,2
Russia	11,3	24,3	84,5
South Africa	0,9	5,8	9,4

Source: Bank for International Settlements, 74th Annual Report, June 2004 and Thomson Financial Ltd (Datastream).

Foreign exchange reserve accumulation, however, exposes the financial systems of EMEs to several risks, such as the following:

- Should resistance to appreciation of a currency through reserve accumulation prove to be unsustainable, large investments in the export industry will become unproductive and cause excess capacity with adverse implications for economic growth.

- Lower long-term interest rates and the accompanying expansionary forces raise the risk of a boom-and-bust cycle for the economy. Such a risk is especially high in EMEs with illiquid financial markets, and those exposed to speculative capital inflows that could reverse and trigger a sharp fall in asset prices and the exchange rate.

- Central banks are exposed to potential future losses from reserve accumulation. The carrying cost of reserves might appear to be small at low domestic interest rate levels but, if domestic interest rates were to rise, the cost of sterilisation[5] would increase significantly.

Another area of potential risk in EMEs is a low interest rate environment, which can cause a rise in consumption expenditure normally supported by an expansion in bank credit to households. The vulnerability of households to higher debt levels differs widely among EMEs. Thailand and Korea, for example, are particularly vulnerable due to sharp growth in credit card debt[6].

Finally, a general increase in interest rates globally could cause a tightening of domestic monetary conditions in EMEs, especially in those countries with fixed exchange rate systems. Public-sector debt has not only risen in certain EMEs in recent years, but a number of those countries hold a large share of their debt at variable interest rates.

The reallocation of credit risk

The recent growth in credit derivatives and the lack of transparency on these transactions have raised concerns and prompted research on the transfer of credit risk. This broader and increased rate of reallocation of credit risk, traditionally managed within the banking sector, may have implications for financial stability.

5 *Sterilisation refers to the process of mopping up excess liquidity in the domestic market that arises from foreign currency purchases.*

6 *Bank for International Settlements. 2004.* 74th Annual Report, June.

In recent years there has been stronger growth in the credit exposure of the insurance sector compared with that of the banking sector. This transfer of risk from the banking sector to the non-banking corporate sector of the financial system, and even beyond, is a fundamental development that impacts directly on the resilience of the international financial system. This reallocation of risk often implies a transfer of credit risk from relatively more regulated and more transparent institutions to relatively less regulated and less transparent institutions. Ultimately these risks will be transferred to the end-users of the financial system, i.e. households, corporates and public-sector entities.

Issues that need to be taken cognisance of include the extent to which these risks are dispersed, whether the recipients of the risks are able to manage them, and the potential for regulatory arbitrage. Inconsistencies and gaps in regulation and supervision could create strong incentives to exploit such shortcomings.

The global rapid growth of the hedge fund industry has focused attention on the potential impact on financial system stability. Any destabilising impact of hedge fund strategies will depend on the structure of the markets in which they are executed. Small markets with limited liquidity and depth are more likely to experience financial instability from hedge fund activities. As the hedge fund industry and its regulatory structure evolve, it is important to monitor developments closely.

Regional developments

Financial system stability is widely recognised as one of the necessary conditions for sustainable economic growth. While growth is not a prerequisite for financial stability, the lack thereof in the Southern African region may have financial stability implications, given the growing trade and investment flows between South Africa and the rest of the continent. While intra-African trade accounts for only about ten per cent of Africa's total trade, South Africa's exports to the continent have grown from nine per cent of the export basket in 1988 to 17 per cent in 2003. Zimbabwe remains South Africa's largest trading partner in Africa, followed by Mozambique and Angola.

Foreign direct investment (FDI) is one of the key drivers of economic growth. According to the United Nations Conference on Trade and Development (UNCTAD), FDI inflows to Africa rose by 30 per cent to US$14 billion in 2003, up from US$11 billion in 2002. The surge was due to a number of large investment projects in natural resources and an improving policy environment with the unfolding of NEPAD[7]. An UNCTAD Global Investment Location Expert Survey forecasts an improvement in FDI prospects globally in the short (2004-2005) and medium term (2006-2007). South Africa is perceived as the most attractive location in Africa, followed by Angola and Tanzania in joint second place[8].

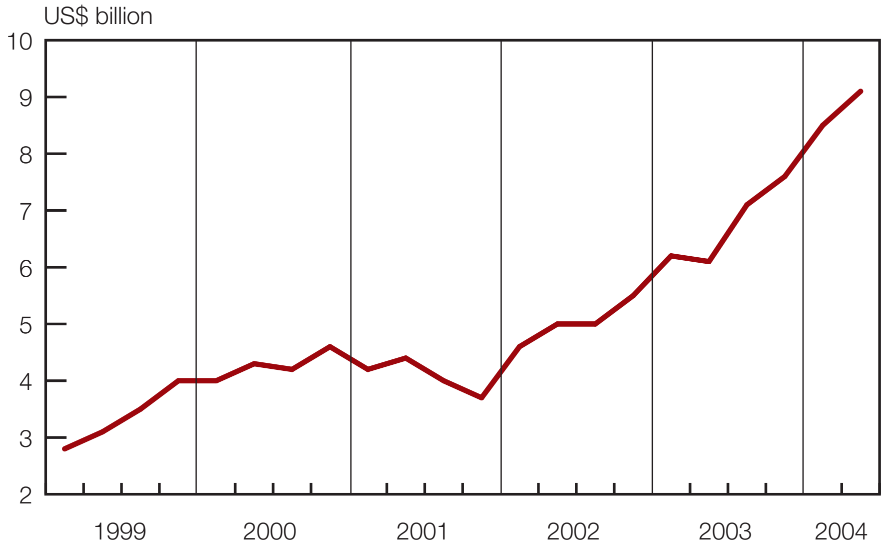
South Africa is now the second largest source of FDI to the rest of Africa. Business considerations behind this increase in investment have also been driven by the gradual relaxation of exchange controls. Currently South African companies can use up to R2 billion of South African funds per project to finance approved foreign direct investment in Africa, while 20 per cent of the excess cost can be funded from South Africa.

Since March 2002, business of the South African banking sector in other SADC countries increased markedly (see Figure 4). By March 2004, the total assets of the big five South African banks held in these countries increased to US$8 billion, from US$4,6 billion in March 2002. Nevertheless, this represents only 4,2 per cent of total assets of the sector.

7 *UNCTAD press release. Global FDI decline bottoms out in 2003. 12 January 2004.*

8 *UNCTAD. Prospects for FDI flows,* Transnational corporation strategies and promotion policies: 2004 – 2007. *27 April 2004.*

Figure 4: Total assets of the big five South African banks in the SADC region excluding South Africa



The increase in South African investment in the continent could change the face of investment in Africa. These are positive developments in the context of NEPAD and may contribute towards changing the foreign investors' perceptions of the continent. Attendant risks, however, need to be managed. Banks and corporates engaged in cross-border lending or having other cross-border exposure are exposed to country risk.

Though the levels of exposure of South African entities to the SADC and the rest of Africa may seem relatively low, a balanced assessment of risks, consistent with the level of the institutions' cross-border exposure, is required. In the regional context, these would include macroeconomic instability, conflict and war, in addition to the customary credit risk.

Domestic macroprudential analysis

This assessment is based on a set of selected macroprudential indicators. Assessing the overall risks to financial stability in South Africa requires an examination of domestic sources of financial fragility in the banking, financial markets, insurance, corporate, household, real-estate and micro-lending sectors, as well as the medical-aid schemes industry. This analysis largely covers the period ending June 2004, however, where data permit, the analysis goes beyond the second quarter of 2004.

Banking sector

The South African banking sector comprised 18 locally controlled banks, 6 foreign controlled banks, 2 mutual banks and 15 branches of foreign banks in June 2004. The banks were well capitalised. Against a minimum regulatory capital adequacy requirement of ten per cent, the banking sector's capital adequacy ratio improved from 12,3 per cent in June 2003 to 13,4 per cent in June 2004. The market share of the four big banks (based on total assets), which indicates the extent of their domination, increased marginally from 80,7 per cent in June 2003 to 82,2 per cent in June 2004. The banking sector remained concentrated. The Gini concentration coefficient, which estimates the numeric value of concentration, taking into account the difference between actual concentration and the hypothetical state in which no concentration exists, stood at 82,6 per cent in June 2004, slightly down from 82,9 per cent in June 2003 (see box "Bank concentration and financial stability" for a discussion on two opposing views on bank concentration).

Bank concentration and financial stability

In emerging and developed economies around the world the increasing consolidation of banks is fuelling an active public policy debate on the impact of bank consolidation on financial stability. Bank consolidation raises important macroprudential issues – in particular, about the impact of consolidation on supervisory structures and systemic stability[9]. Economic theory provides conflicting predictions about the relationship between banking structure and bank fragility. On the one hand, there is a "concentration-stability" view. According to this view, a less concentrated banking sector with many small banks is more prone to financial crises than a concentrated banking sector with a few large banks. The reasons supporting this view include the following: Large banks can diversify better so that banking systems characterised by a few large banks will be less fragile than the banking systems with many small banks, concentrated banking systems might enhance profits and therefore lower bank fragility, it is easier to monitor a few large banks than many small banks so that corporate control of banks will be more effective and the risks of contagion less pronounced in a concentrated banking sector. Larger banks are able to employ better managers and deploy better risk management, and therefore may be less likely to get into difficulties. Proponents of this view maintain that consolidation is a laudable market response to industry changes that will bring significant benefits such as greater efficiency, economies of scale and a lower rate of bank failures. They also see consolidation as an effective way to shift resources out of banking, an industry they think is plagued with excess capacity.

Conversely, there is a "concentration-fragility" view, which takes a different view of bank consolidation. According to this view, a more concentrated banking system enhances bank fragility because the consolidation of the banking system is not driven by market forces, but rather by incentives created by government intervention through its "too-big-to-fail" policy. According to this view, if a bank is considered to be too big to fail, that is, so large that its failure might have adverse consequences for the national economy, it obtains implicit guarantees for all its liabilities. Therefore, attaining a certain size provides a bank with some free insurance and more complete coverage than it would get otherwise. Large banks receive subsidies from government through implicit "too-big-to-fail" policies. As a result of such subsidies, large banks intensify risk-taking incentives – increasing the fragility of the banking system. Proponents of this view disagree with the proposition that few large banks are easier to monitor than many small banks. "If size is positively correlated with complexity, then large banks may be more difficult to monitor than small banks, which would tend to produce a positive relationship between concentration and fragility" (Thorsten et al., 2003). Banks with greater market power tend to charge higher interest rates to firms, which induce firms to assume greater risk.

Despite the importance of the topic to policy-makers, empirical analysis of the relationship between bank structure and financial fragility is limited. Previous research has shown that restrictions that prevent banks from diversifying outside their traditional business reduce their ability to limit the riskiness of their portfolios. Other research has shown that while consolidation has the potential to improve operating efficiency in merged institutions and has done so in some cases, the overall evidence in favour of efficiency gains was weak[10]. To assess whether bank consolidation is good or bad it is

9 *See, for instance, Thorsten Beck, Asli Demirguc-Kunt and Ross Levine. 2003. "Bank Concentration and Crises", World Bank* Policy Research Working Paper *3041, and J.H. Boyd and S. Graham. 1991. "Investigating the Banking Consolidation Trend", Federal Reserve Bank of Minneapolis* Quarterly Review, *Spring, 1-15 and J.H. Boyd and S. Graham (1998), "Consolidation in US Banking", in Y. Amihud and G. Miller (eds),* Bank Mergers and Acquisitions, *Norwell, MA. Kluwer, pp 113-135.*

10 *See, for instance, Thorsten Beck, Asli Demirguc-Kunt and Ross Levine. 2003. "Bank Concentration and Crises", World Bank* Policy Research Working Paper *304 and Group of Ten. 2001.* Report on Consolidation in the Financial Sector, *Bank for International Settlements: Basel, Switzerland.*

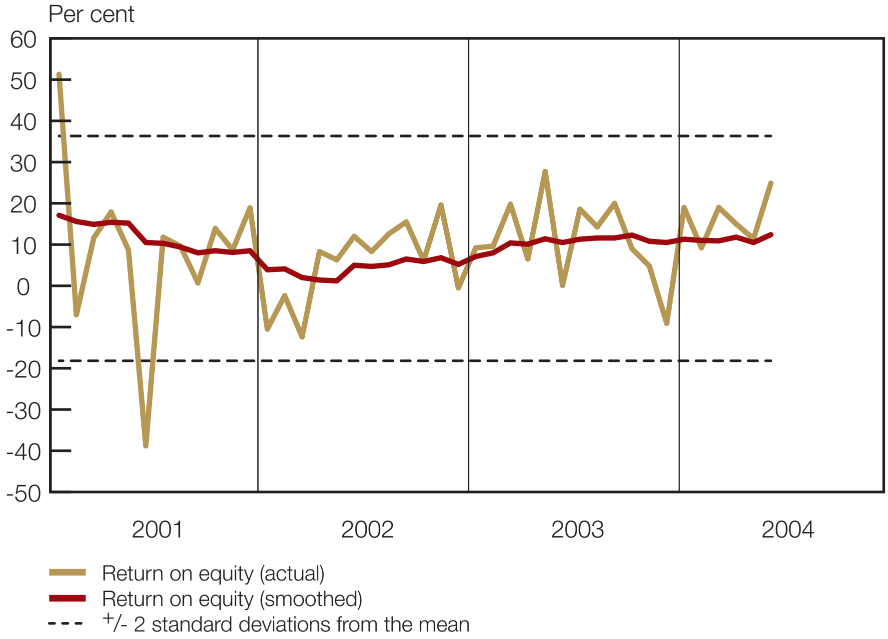
necessary to study the structure of the banking sector and the overall macroeconomic set-up. It is, however, believed that bank consolidation is not bad provided competitive market forces drive it.

Nonetheless, the public policy debate described above only addresses the probability of failure, not the potential impact thereof. It is much more difficult and costly to resolve a failure in a highly concentrated banking system than in a banking system with a larger number of equally sized banks.

The annual growth rate in total banking sector assets moderated markedly in 2004, from more than 26 per cent in June 2003 to less than a half per cent in June 2004 to a level of R1 349,4 billion. The high year-on-year growth rate in total assets recorded throughout 2003 was, however, mainly due to technical reasons[11]. The asset quality of banks improved compared with the year before. By the end of June 2004, gross overdues amounted to R21 billion (2 per cent of total loans and advances) compared with R25 billion in June 2003 (2,6 per cent of total loans and advances)[12]. Provisioning against overdue accounts was more than adequate. The improvement in asset quality translated to a decrease in specific provisions, measured as a percentage of total loans and advances, from 2 per cent to 1,6 per cent.

The ratio of net profit to average capital (return on equity) reflects the banking institutions' efficiency in using capital and, over time, it provides information on the sustainability of deposit-takers' capital positions. A high ratio may indicate either high profitability or low capitalisation, and a low ratio may mean either low profitability or high capitalisation.

Figure 5: Return on equity



Compared with June 2003, the return on equity (ROE) improved from 8,1 per cent to 26,5 per cent in June 2004. The ROE tends to be highly volatile (see Figure 5). By using a twelve-month moving average, this volatility, which is being exacerbated since the introduction of fair value accounting in 2003, is more subdued. Calculating ROE on this

11 In terms of an amendment to the regulations relating to Banks, all banks registered in South Africa were required, as from 1 January 2003, to report their trading-book positions on the basis of gross values instead of net balances. Also, in adherence to the requirements of Accounting Statement AC133, all derivative transactions which, prior to 2003, were recorded off balance sheet, are now recorded on balance sheet.

12 The Bank Supervision Department regards loans classified as being "doubtful" or "loss" as falling within the definition of "overdue" or "non-performing". "Doubtful" loans are loans that are more than 180 days overdue and are not adequately secured, whereas loans classified as "loss" are not only more than 180 days overdue, but are also considered to be uncollectable.

basis, it would appear that the ROE improved from 12 per cent in June 2003 to 13,3 per cent in June 2004. This increase in ROE could mainly be ascribed to a decrease in operating expenses in June 2004 compared with June 2003, contributing to an improvement in net income. The improved ROE was therefore a result of increased profits and not lower capitalisation. In fact, the net qualifying capital and reserves of the banking sector increased by 12,6 per cent compared with a year before.

A two-standard deviation (either above or below the mean) is usually used as a warning signal of emerging problems. The ROE remained well within the two standard deviations benchmark from the indicator's mean (see box "Early warning system models" for a discussion of the relevance of the standard deviation technique).

Early warning system models

An early warning system (EWS) model for financial crises can be defined as a system of data collection to monitor threats posed by adverse economic developments to the financial system, particularly the banking sector. The ultimate objective of EWS models is to forecast the likelihood of a financial crisis so that appropriate corrective actions could be taken before the crisis. The models differ widely in terms of the definition of a financial crisis, the time span over which the model is estimated, the forecasting accuracy, the selection of indicators, and the statistical or econometric method employed. There is no theoretically optimal system or standard textbook blueprint for the structure of an EWS model.

An effective EWS model must include regularly updated data collection and pattern analysis for all types of disasters to enable effective early warnings for all potential threats. It must also eliminate false alarms, that is, the probability of sending wrong signals should be reduced at all costs. Many banking supervisory bodies and central banks in both emerging and advanced economies have developed or are in the process of developing early warning systems for the early detection of both currency and banking crises[13].

13 See for example, Andrew Logan. 2000. G10 Seminar on systems for assessing banking system risk.

The main approaches used in the EWS models include the following four broad categories: Supervisory rating (on-site and off-site), financial ratio and peer group analysis, comprehensive bank risk assessment systems, and statistical models. In order to pursue one of these EWS approaches, an integrated and comprehensive bank-wide database is a pre-requisite[14].

14 See Basel Committee on Banking Supervision Working Paper *No 4. 2000. for more details about these approaches.*

Overall, the EWS models still show mixed results in terms of forecasting accuracy. However, they offer a systematic, objective, and consistent method to predict crises and are more informative than complete random guessing. Even though the models' forecasts have been found to be statistically significant predictors of crises in some instances, they still generated a substantial number of false alarms and also missed some signals[15].

15 See for example, IMF. 2002. Global Financial Stability Report, *March.*

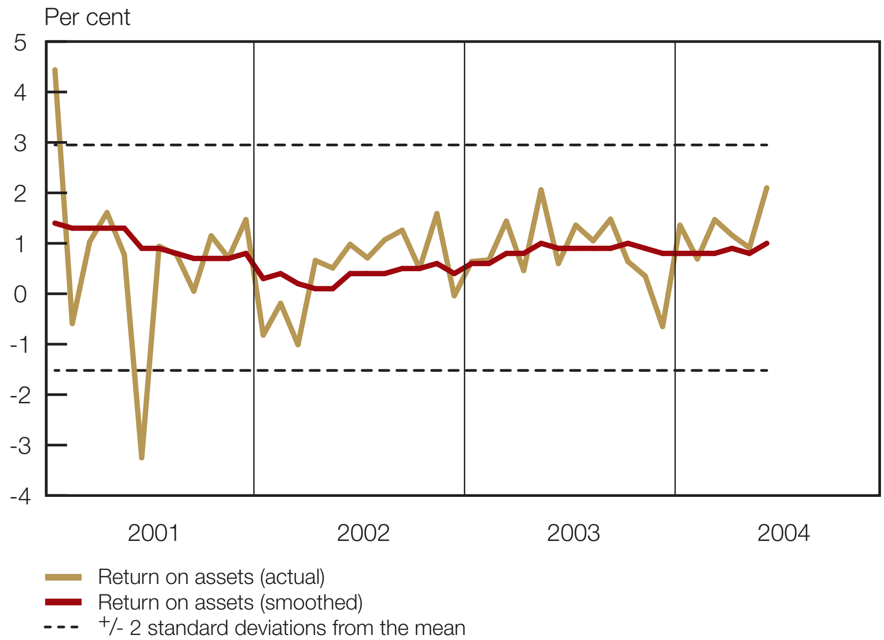
The approach followed in this review is that of using the financial ratio analysis. In this approach selected financial soundness indicators (FSIs) or financial ratios are analysed on a monthly basis with the use of an indicator's standard deviation as a threshold for each indicator. The threshold is set to be two standard deviations above and/or below an indicator's mean. The threshold is chosen to strike a balance between the risk of missing many crises and the risk of having too many false signals.

When an observed outcome of the indicator crosses the threshold during a particular month, it is considered to be an extreme value and thereby issues a warning signal. An extreme value provides an early warning signal about the likelihood of fragility in the financial system. Once a warning signal has been issued, further investigations of the particular sector are warranted to get a better understanding of any new developments. The intention is to extend the current EWS (financial ratio analysis) to include a signal approach in future[16]. However, it is important to note that EWS models are not yet accurate enough to be used as the sole method to anticipate crises, but they can contribute to the analysis of vulnerability in conjunction with more traditional surveillance methods and other indicators. As is the case with risk management models, they are not a substitute for sound and balanced judgement on financial weaknesses. The advantages of EWS models lie in their objective and systematic nature because they process data in a mechanical way.

16 A signal approach involves monitoring movements in a number of economic variables or indicators. When one observation of these indicators deviates from the sample's normal level or beyond a certain threshold or benchmark value, this is taken as a warning signal about the possibility of a currency or banking crisis within a specified period of time. The larger the number of warning signals the higher the probability of financial distress. The information provided by all the indicators issuing a warning signal could be combined to construct a composite indicator for assessing the likelihood of an upcoming crisis.

The return on assets (ROA), i.e. the ratio of net profits to total assets, is another measure of banking institutions' profitability, indicating how efficiently a financial institution's assets are employed. ROA increased from 0,6 per cent in June 2003 to 2,1 per cent in June 2004, supported by the strong improvement in net profits. ROA also remained within the two standard deviations benchmark during the review period.

Figure 6: Return on assets

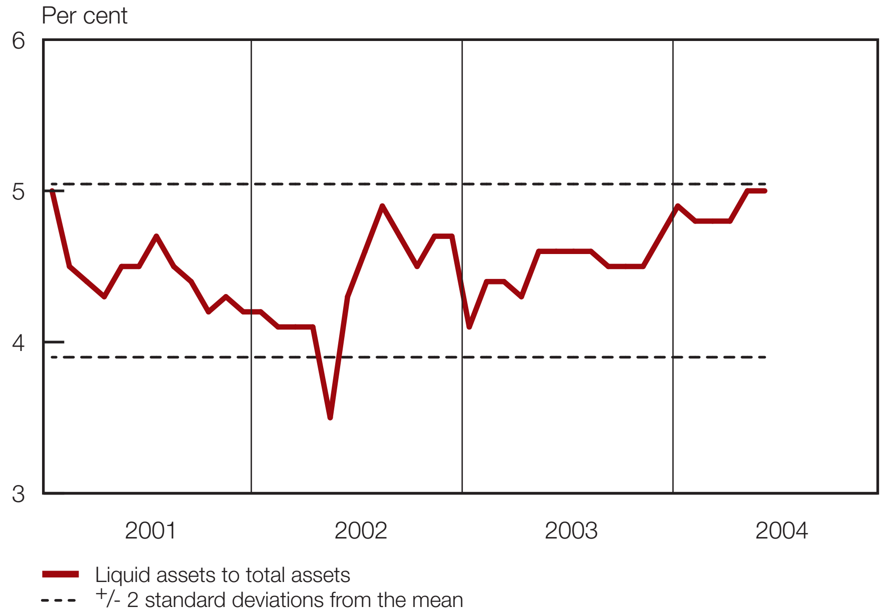


The liquid assets ratio[17] reflects the liquidity available to meet expected and unexpected demands for cash from a bank. A positive ratio indicates less liquidity risk. The liquid-assets ratio for South African banks increased from 4,6 per cent in June 2003 to 5 per cent in June 2004. The ratio has been displaying an upward trend since the beginning of 2003.

17 The average daily amount of liquid assets held as a percentage of total assets.

Based on the above indicators, the South African banking sector appears healthy. During the period under review, there were no signs of fragility in the sector as the indicators' monthly observations were moving within their thresholds. A major challenge facing the banking sector currently is the implementation of the new Capital Accord (see box "Update on the new banking Capital Accord").

Figure 7: Liquid assets as a percentage of total assets



Update on the new banking Capital Accord

After reaching consensus in May 2004 on most of the outstanding issues regarding the proposals for a new international capital standard, the central banks' governors and the heads of bank supervisory authorities of the Group of Ten (G10) countries endorsed the publication of the "International Convergence of Capital Measurement and Capital Standards" on 26 June. The revised framework, commonly referred to as Basel II, represents a significant departure from the 1988 Accord, which was widely perceived to lack sufficient risk sensitivity.

The Basel Committee on Banking Supervision, the author of the Basel II text, intends to have the new framework available for implementation in member jurisdictions as of year-end 2006. The most advanced approaches to risk measurement will only be available for implementation as of year-end 2007. The fundamental objective of revising the 1988 Accord was "the development of a framework that further strengthens the soundness and stability of the international banking system while maintaining sufficient consistency that capital adequacy regulation will not be a significant source of competitive inequality among internationally active banks"[18].

18 *Basel Committee on Banking Supervision.* International Convergence of Capital Measurement and Capital Standards. *June 2004: 2.*

Basel II is based on a three-pillar approach. The first pillar represents a significant strengthening of the minimum capital requirements set out in the 1988 Accord, while the second (the supervisory review process) and third (market discipline) pillars represent innovative additions to capital supervision. Compared to the third Basel Committee consultative paper (CP3), the final framework contains only limited changes[19]. Most of the changes were made to Pillar 1.

19 *Basel II Alert July 2004. Online:* http://www.baselalert.com

Changes to Pillar 2 were mainly limited to the clarification of some issues, while Pillar 3 has remained broadly unchanged. The revised framework provides a range of options for determining the capital requirements for credit risk and operational risk to allow banks and supervisors to select approaches that are most appropriate for their operations and their financial market infrastructure.

Initially, it was decided that all South African registered banks had to be Basel II-compliant with, at least, the simplified standardised approach to credit risk, the basic indicator approach to operational risk and the requirements of Pillar 2 and Pillar 3 by the end of December 2006. That was to be followed by implementation of the advanced approaches only in 2008[20]. Subsequently, it was decided to combine implementation of all approaches for 1 January 2008. This means that South Africa will adopt Basel II one year later than the G10 countries. This decision was deemed preferable to ensure sufficient time to implement Basel II effectively.

20 South African Reserve Bank. Bank Supervision Department, Annual Report 2003.

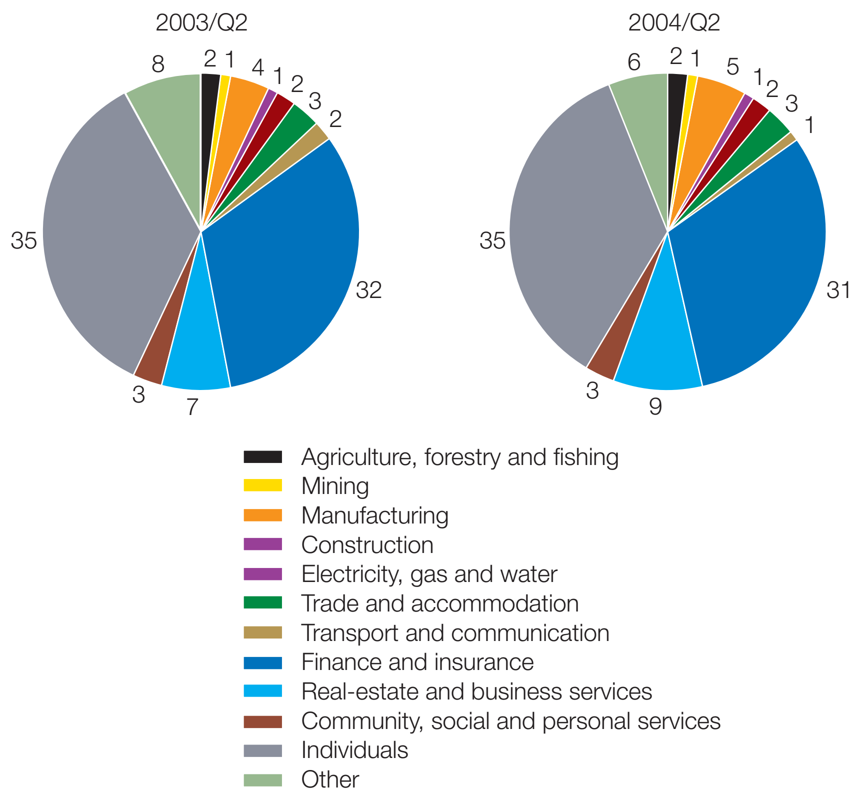
In February this year the Bank Supervision Department (BSD) of the South African Reserve Bank, which is tasked with implementing Basel II within a South African context, published for comment its first consultative paper[21]. The consultative paper sets out, *inter alia*, the BSD's position on the scope of application of Basel II, the BSD's views on certain items of national discretion and also dealt with various technical aspects pertaining to credit risk.

21 Banks Act Circular 2/2004. First Consultative Paper on the Implementation of the New Basel Capital Accord ("Basel II"). *27 February.*

The Bank has established a consultative structure, the Accord Implementation Forum, to ensure that adequate consultation takes place with banks and that each aspect of the implementation of Basel II is carefully examined. Topics that have already been earmarked for discussion include the preparation of data that are necessary for the validation of internal risk models and the likely impact of the various policy options that could be followed by the South African regulatory authorities.

The improved returns reported by the banking sector were also reflected by the annual increase in banks' share prices of 18,8 per cent in July 2004, up from 5,6 per cent recorded in July 2003. The increase in bank share prices is positive for financial stability since it reflects increased confidence by investors in future returns.

Figure 8: Sectoral distribution* of credit (per cent)

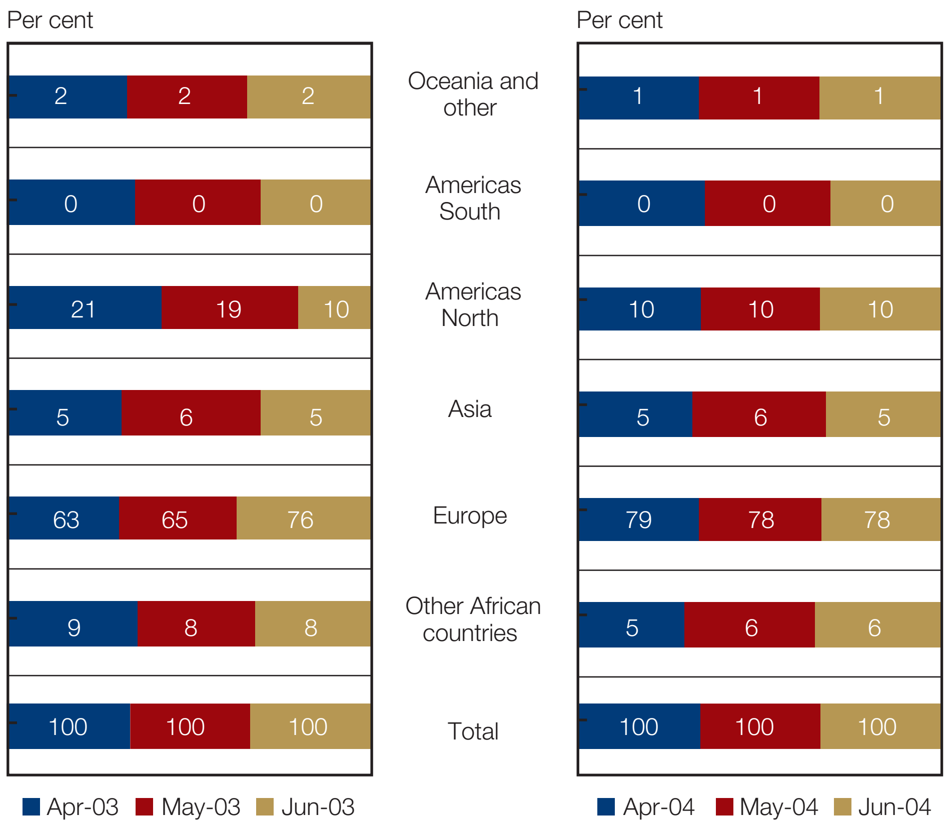


* Classified according to the Standard Industrial Classification (SIC) of all economic activities. Advances to individuals who are owners of one-person businesses or partnerships are included under the relevant industry. Advances to individuals who are employees are included under "individuals" irrespective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

Analysing sectoral and geographical distribution of loans allows for the monitoring of risks arising from exposure to certain sectors or countries, or group of sectors or countries. A large concentration of aggregate credit in a specific economic sector or activity may signal vulnerability of the banking sector to adverse developments in that sector or activity. Many financial crises in the past were partly caused or amplified by downturns in particular sectors of the economy spilling over into the financial system. The latest figures show that the banking sector continued to be exposed substantially to individuals (35 per cent) and to the finance and insurance sector (31 per cent) at the end of the second quarter of 2004. Compared to the year before, exposure to the various sectors remained fairly consistent.

At the end of June 2004, total loans and advances to other parts of the world stood at R130 billion (12,4 per cent of total loans and advances), of which 78 per cent had gone to Europe, 10 per cent to North America, 5 per cent to Asia and 6 per cent to other African countries (see Figure 9). Given the banking sector's exposure to Europe, a steady economic recovery in Europe bodes well for debt repayment in the domestic banking sector and hence for financial stability.

Figure 9: Geographical distribution of foreign loans and advances*



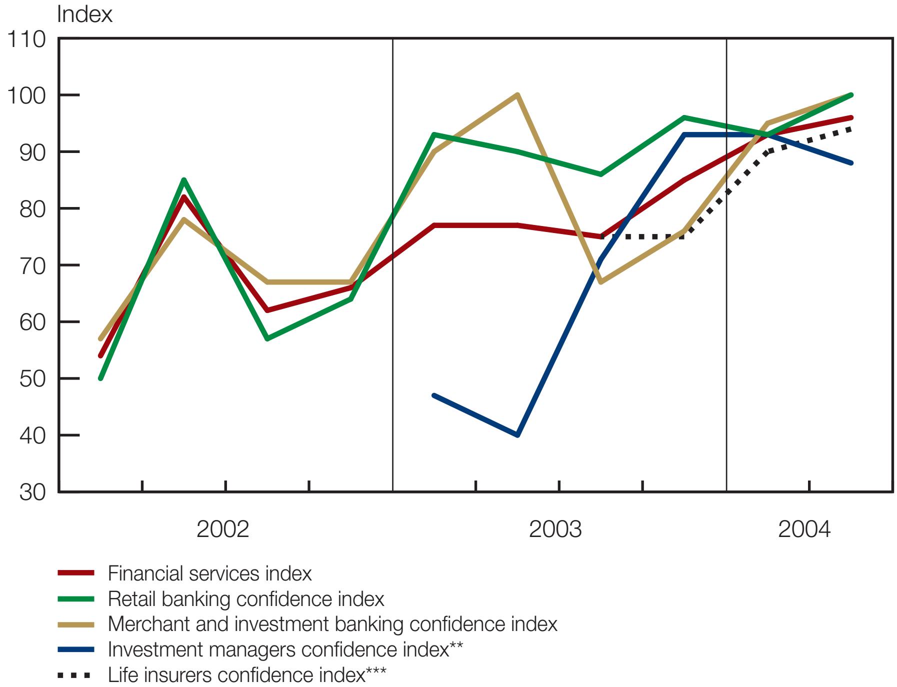
* Figures may not necessarily add up to 100 due to rounding off.

Positive developments were also recorded in Ernst & Young's financial services index during the second quarter of 2004. It increased to 96 index points, up from 93 in the first quarter of 2004[22]. The current quarter's increase was attributed to the higher business confidence levels of retail and investment banks as well as life insurers. The

22 The index is based on the results of a survey, which is designed to assist in analysing trends in the banking sector over the short run. The results of the survey reveal current and expected changes in banks' income, expenses, profitability, competitive position, credit standards and investment. The survey also covers life insurers and investment managers.

high levels of business confidence were attributed to the relatively low interest rate environment and higher share prices, which boosted the income of financial services providers. The business confidence of investment managers declined slightly, but remained high.

Figure 10: Financial services index and its components*



* The retail banking, merchant and investment banking, the investment managers and the life insurers' confidence indices are based on the results of surveys and range from a scale of 0 to 100, where 0 shows extreme lack of confidence, 50 is neutral and 100 shows extreme confidence. The financial services index is calculated as the unweighted average of the retail, the merchant and investment banking, the investment managers and the life insurers' confidence indices.

** Data is only available from the first quarter of 2003.

*** Data is only available from the third quarter of 2003.

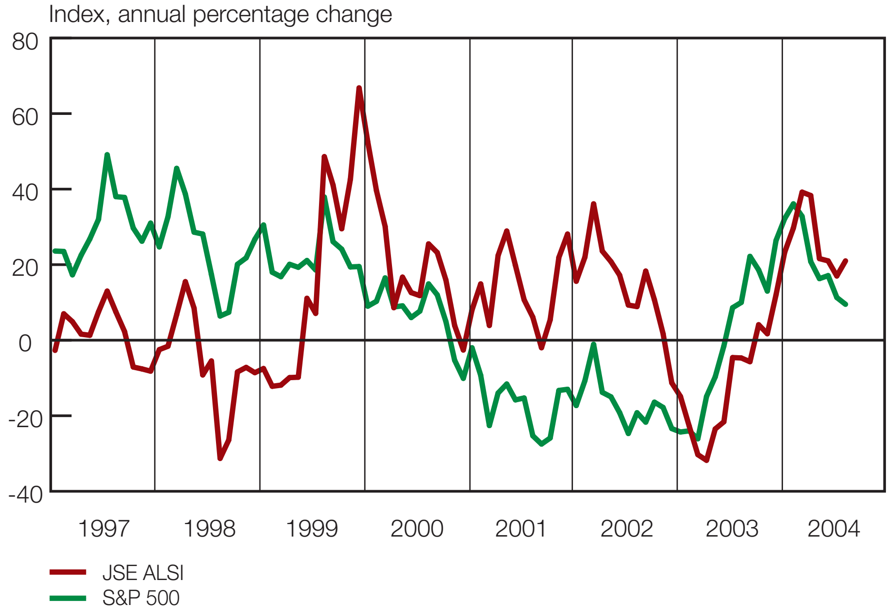
Source: Ernst and Young. *Financial Services Banking Survey.*

Financial markets

Financial markets (markets for bonds, equities, currencies, associated derivatives etc.) play a crucial role in channelling savings to investment projects and in diversifying risk. Trends in financial markets have a direct impact on banking institutions via their portfolio holdings. Wide fluctuations in these markets can threaten financial stability and spread financial instability from one country to another. Developments in domestic and international securities markets are monitored in order to identify potential risks to financial stability.

The equities market in South Africa is, to an extent, driven by trends in international markets but, having a relatively open economy, also reflects movements in the value of the rand (see Figure 11). For many years, equity markets in the US and South Africa have shown very close co-variation. Investors, therefore, who diversify their investments to equity markets abroad can reduce their market risk only to a limited extent.

Figure 11: JSE All-share Index and US Standard & Poor 500

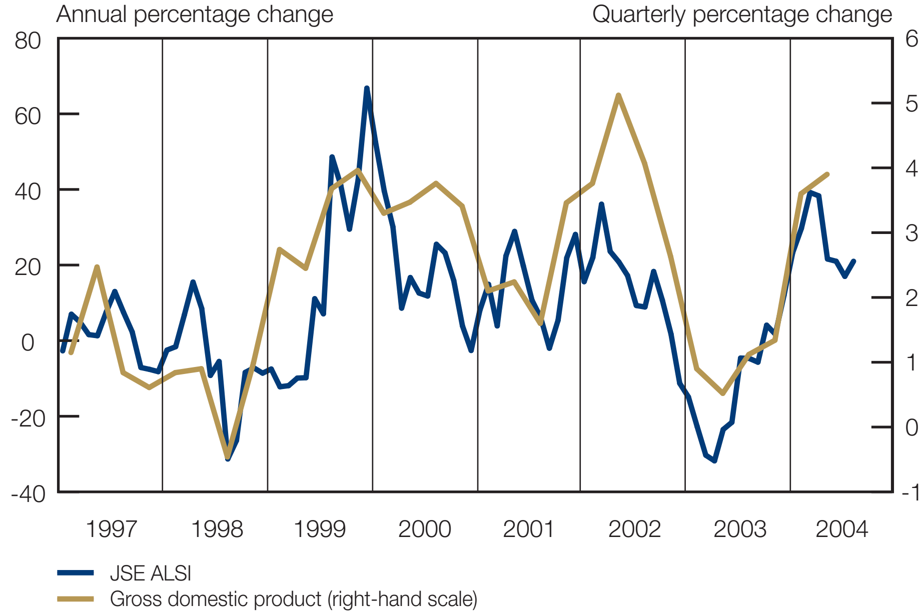


Source: Bloomberg

23 *The P/E ratio is the price of a share relative to the earnings of the share and indicates how long it takes for an investor to recover the initial investment.*

In theory, movements in equity prices should reflect movements in economic fundamentals. The co-variation between the growth rate of an economy and equity price movements reflects this concept (see Figure 12). A key ratio used to assess whether an equity market index for a group of companies is in line with economic fundamentals is the price-earnings (P/E) ratio[23]. The overall P/E ratio of all companies listed at the JSE Securities Exchange SA (JSE) increased from 14,8 in June 2004 to 15,4 in July 2004.

Figure 12: JSE All-share Index and gross domestic product



Source: Bloomberg and South African Reserve Bank

Developments in foreign ownership measure the extent of the openness of the JSE. The proportion of foreign companies listed at the JSE remained unchanged at 5,1 per cent in July compared to June 2004.

Financial markets play a crucial role in raising money for investment in the economy. Equity market developments give information about expected profitability of listed companies, which in turn affects their debt-servicing capacity. During the period under review, financial market developments did not pose a threat to financial stability, as they were not subjected to large fluctuations, implying increased certainty regarding future profits, thereby indicating lower risk.

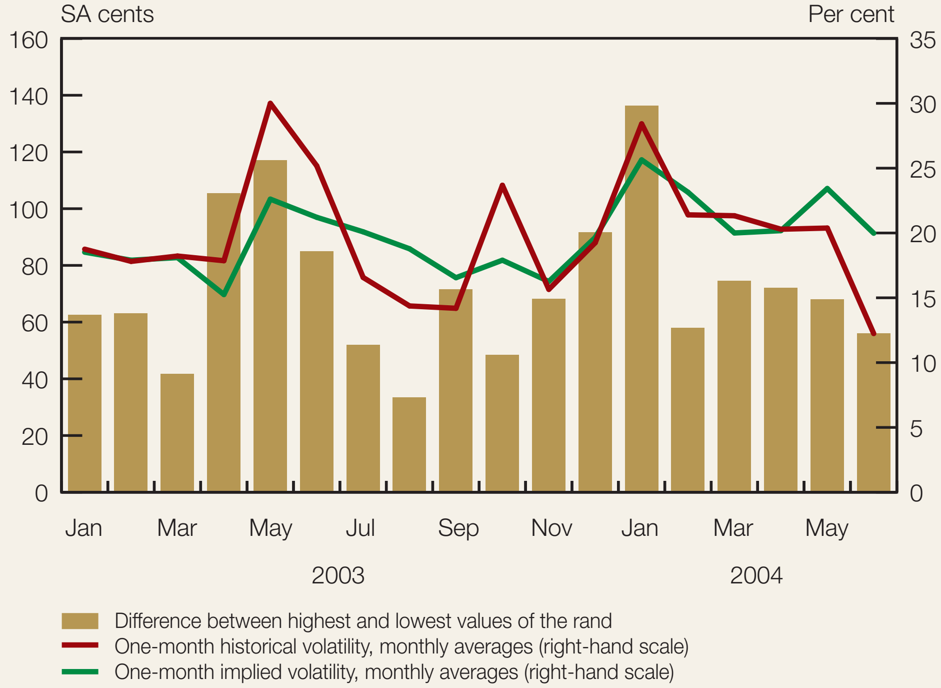
Moderation in rand volatility

Volatility in the exchange rate of the rand against the US dollar has diminished markedly since the beginning of this year. After increased volatility was recorded in December 2003 and January 2004, all three indicators of rand volatility (historical volatility[24], implied volatility[25] and the difference between the highest and lowest values of the rand in a specific month) moderated significantly during the six months ending June 2004. During this period the rand's external value was mainly in an appreciating direction and the daily changes were mostly moderate.

24 Historical volatility is the actual intra-day volatility of the rand averaged for the month.

25 Implied volatility is the expected volatility of the rand based on option pricing.

Figure A: Volatility indicators of the rand/US dollar exchange rate



During June 2004 the volatility indicators subsided noticeably. One-month historical volatility declined from an average of 20,4 per cent in May 2004 to 12,2 per cent in June, while implied volatility moderated from an average of 23,4 per cent to 20 per cent. This is an indication that the actual volatility of the rand exchange rate was lower than the volatility expected by foreign exchange traders.

Although the strengthening of the rand during the reporting period is sometimes perceived as potentially negative for short-term economic growth, the lower levels of volatility created a more certain operating environment for importers, exporters, borrowers and investors. This reduces the hedging costs of business operations with foreign exchange exposures, and is conducive to long-term financial stability and long-term economic growth.

Insurance sector

Insurers and banks have mutual exposures in many areas. Insurance companies cover banks and their customers against the usual range of risks and banks provide insurance companies with liquidity facilities to enable them to pay claims. The ratio of free assets to capital adequacy requirement indicates the financial strength of a long-term insurer, i.e. the number of times the capital adequacy requirement is covered by free assets. It is therefore used as a measure of the solvency of long-term insurers[26].

26 Free assets refer to the difference between total assets on the one hand, and the sum of total liabilities and required capital on the other hand. Capital adequacy requirement is defined as the minimum capital required by the Financial Services Board for registration of an insurance company and is equivalent to 13 weeks' worth of operating expenses.

Table 2 Free assets and capital-adequacy requirement

Free assets to capital-adequacy requirement (long-term typical insurers*)	Number of insurers	
	June 03	June 04
Covered 0 – 1 time	0	2
Covered 1 – 2 times	8	6
Covered 2 – 5 times	15	18
Covered 5 – 10 times	1	4
Covered 10+ times	5	1
Total	**29**	**31**

* *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. The figures are not audited.*
Source: Financial Services Board

Insurers covered by a free assets to capital adequacy requirement of 10 times and more decreased from five in June 2003 to one in June 2004 and those covered by a free assets to capital adequacy requirement of 5 to 10 times increased from one to four insurers (see Table 2). A large number of insurers fall in the category that was covered by free assets of 2 to 5 times. The five big insurers are also in this category, which implies that there is little reason for concern for the sector as a whole.

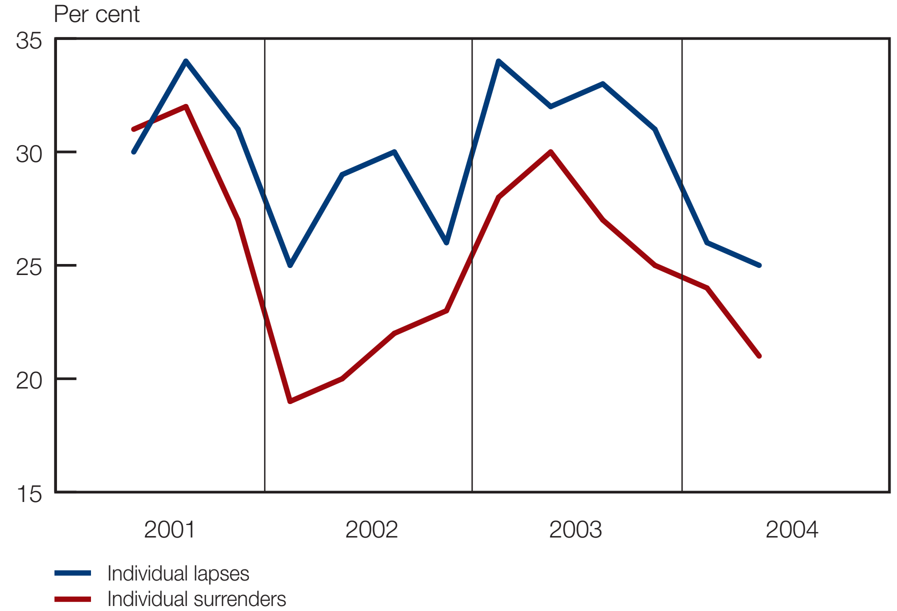
Other positive developments in the insurance sector included a decline in both the number of surrenders and lapses of long-term insurers see (Figure 13), a 4 per cent increase in the number of policies in the six months ending June 2004 and an annual increase of 8,1 per cent in share prices of long-term insurers in June 2004.

Table 3 Surrenders and lapses of policies for long-term typical insurers*

	6 months ending June 2002	6 months ending June 2003	6 months ending June 2004
Individual lapses	29	32	25
Individual surrenders	20	30	21

* *Expressed as a percentage of the number of new policies issued during the period using unaudited statistics.*
Source: Financial Services Board

Figure 13: Surrenders and lapses* of long-term typical insurers**



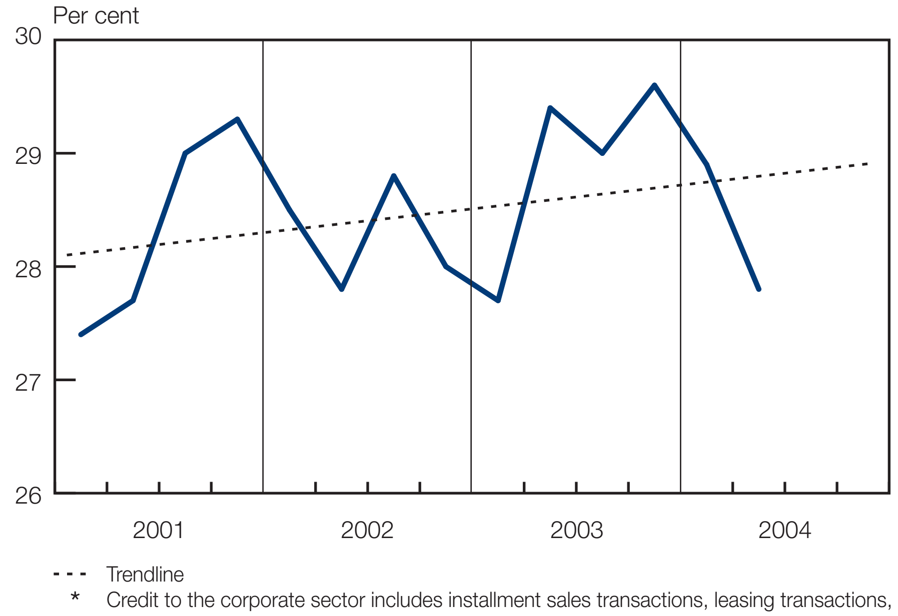
* Expressed as a percentage of the number of new policies issued during the period
** Typical insurers are those that offer most of the six classes of business as defined in the Long-Term Insurance Act No. 52 of 1998. The figures are not audited.

Source: Financial Services Board

Corporate sector

Rapid growth in the ratio of corporate-sector credit to GDP could be an indication of a lending boom. Such booms need to be monitored closely as they have preceded

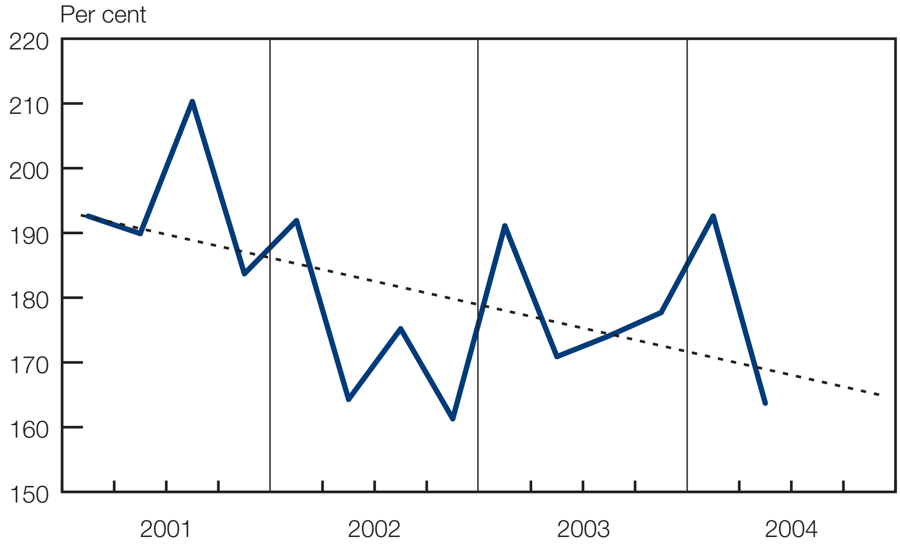
Figure 14: Credit to the corporate sector* as percentage of gross domestic product



* Credit to the corporate sector includes installment sales transactions, leasing transactions, mortgage advances, overdrafts, credit card debtors and other loans and advances.

financial crises in the past. Credit to corporations as a percentage of GDP decreased marginally from 28,9 per cent in the first quarter of 2004 to 27,8 per cent in the second quarter. Growth in corporate-sector credit was low relative to the nominal growth rate of the economy. In the second quarter of 2004, for example, credit to the corporate sector increased at an annual rate of only 2,7 per cent, while the annual nominal growth rate of the economy was 8,4 per cent.

Figure 15: Credit to the corporate sector as percentage of profits*



- - - Trendline

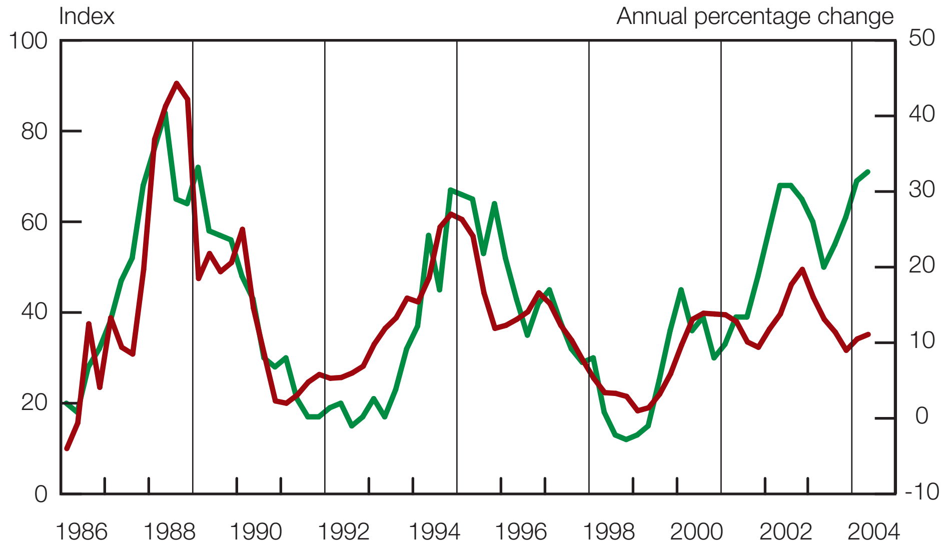
* Credit to the corporate sector and net operating surplus of corporations were used as proxies for corporate debt and corporate profits respectively.

The ratio of corporate debt to profit measures the debt-servicing capacity of businesses and is directly related to the health of the corporate sector. Corporate debt as a percentage of corporate profits decreased from 192,6 per cent in the first quarter of 2004 to 163,7 per cent in the second quarter.

Another positive development for the corporate sector was the increase in business confidence. In general, confidence indicators tend to lead real macroeconomic developments, which, in turn, influence financial stability. The Rand Merchant Bank/Bureau for Economic Research (RMB/BER) business confidence index increased from 69 in the first quarter to 71 index points in the second quarter of 2004.

According to RMB/BER, political and economic stability supported business confidence. The peaceful run-up to and smooth conduct of the national elections in April, the government's commitment and announcements of plans to boost economic growth through, among others, infrastructure development, job creation and support to small and medium-sized enterprises were also deemed to have boosted business confidence. There is a close correlation between the business confidence index and gross fixed capital formation, which, in turn, would be favourable for financial system stability (see Figure 16).

Figure 16: Annual growth in gross fixed capital formation and business confidence index*



Business confidence index
Gross fixed capital formation (right-hand scale)

* Business confidence is measured on a scale of 0 to 100, where 0 indicates an extreme lack of confidence, 50 neutrality and 100 extreme confidence. Gross fixed capital formation is used as a proxy for investment by private business enterprises.

Source: Rand Merchant Bank and South African Reserve Bank

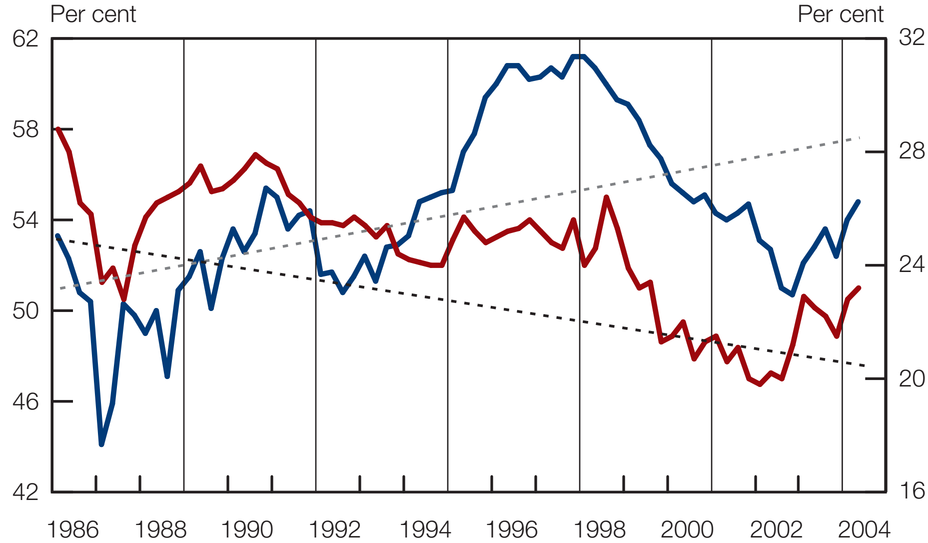
Household sector

The ratios of household debt to disposable income and household debt to financial assets provide an indication of households' ability to withstand strong economic downturns or shocks. At the end of the second quarter of 2004, household debt to disposable income increased to 54,8 per cent from 54 per cent in the first quarter of 2004. Over the same period, the ratio of debt to financial assets of households increased from 22,8 per cent to 23,2 per cent (see Figure 17).

Income and capital-gearing ratios are also useful financial stability indicators for the household sector. The income-gearing ratio shows the extent to which disposable income covers the financing costs of household debt, while capital gearing shows the extent to which total assets cover household debt. Capital gearing increased from 17 per cent in the first quarter of 2004 to 17,2 per cent in the second quarter (see Figure 18). Income gearing remained unchanged at 6,3 per cent in the second quarter of 2004 compared to the first quarter, after dropping from 6,5 per cent recorded in the fourth quarter of 2003. Both ratios suggested that there was no threat to financial stability arising from any inability of households to service debt.

For the household sector, the increase in the level of consumer confidence, as measured by the First National Bank/Bureau for Economic Research (FNB/BER) consumer confidence index (CCI), was a positive development. It rose to an all-time high of 17 index points during the second quarter of 2004 (see Figure 19). The rise indicates that most consumers were optimistic about future economic developments and personal financial prospects.

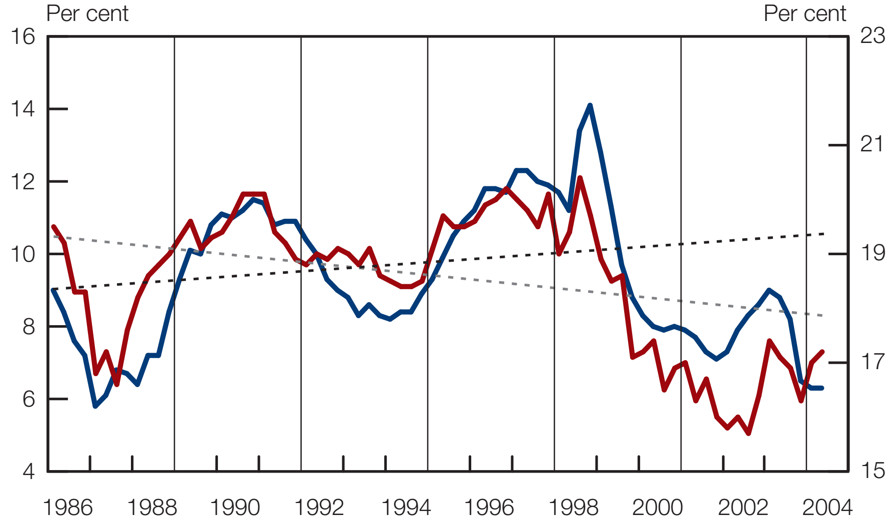
Figure 17: Household debt as a percentage of disposable income and financial assets* respectively



Household debt as a percentage of disposable income
Household debt as a percentage of financial assets (right-hand scale)
Trendline (household debt as a percentage of disposable income)
Trendline (household debt as a percentage of financial assets) (right-hand scale)
* Financial assets include household deposits with financial institutions, their share in pension funds and a proxy for their holdings of shares.

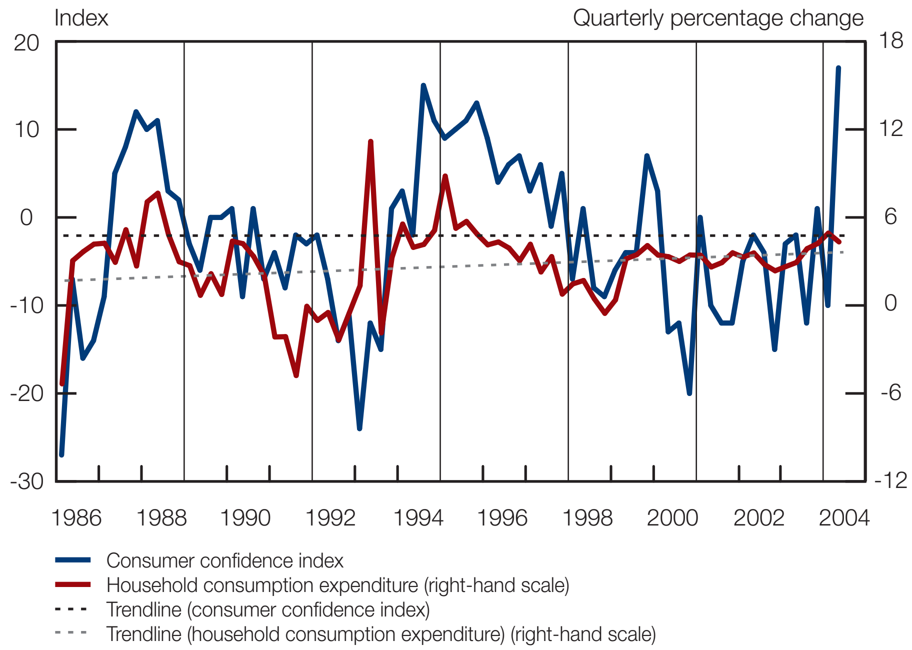
According to the FNB/BER, the increase in the CCI in the second quarter of 2004 was on the back of, *inter alia*, South Africa's successful bid for the 2010 soccer World Cup and the continuing housing boom and increased expectations of low interest rates.

Figure 18: Household sector income and capital-gearing ratios*



Income gearing
Capital gearing (right-hand scale)
Trendline (income gearing)
Trendline (capital gearing) (right-hand scale)
* Income gearing refers to financing costs of household debt as percentage of disposable income and capital gearing refers to household debt as a percentage of total assets of households.

Figure 19: Quarterly growth in household consumption expenditure and consumer confidence index*

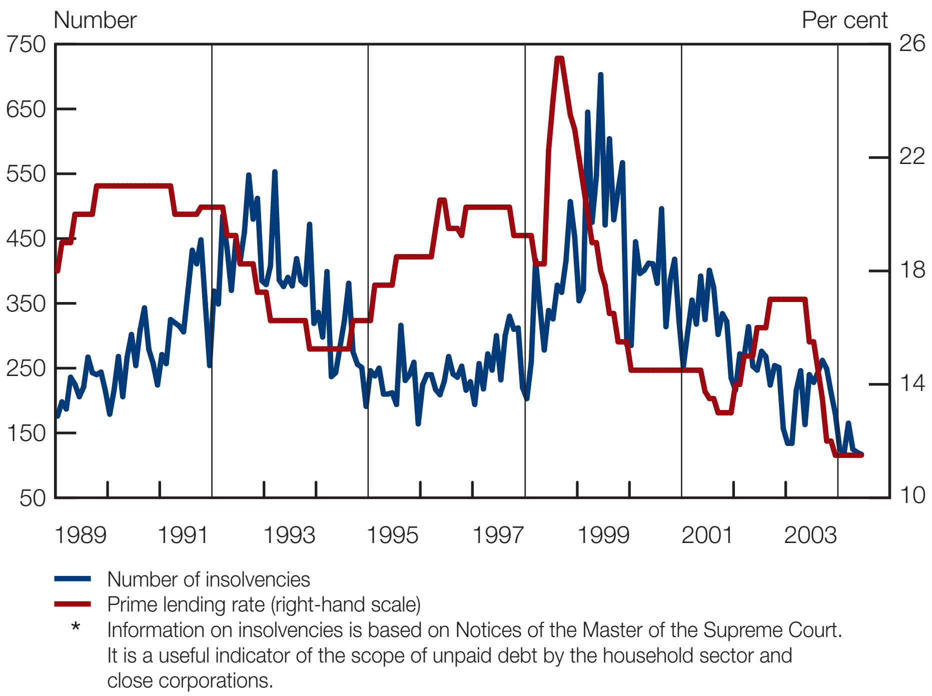


* The consumer confidence index is expressed as a net balance between optimistic and pessimistic consumers. According to the FNB/BER, the index can vary between –100 for extreme pessimism and +100 for extreme optimism.

Source: Bureau for Economic Research and South African Reserve Bank

Another positive development was the decline in the number of insolvencies from 120 in May 2004 to 117 in June. The number of insolvencies gives an indication of the scope of unpaid debt by the household sector and close corporations. The decline could be

Figure 20: Number of insolvencies* and prime lending rate



* Information on insolvencies is based on Notices of the Master of the Supreme Court. It is a useful indicator of the scope of unpaid debt by the household sector and close corporations.

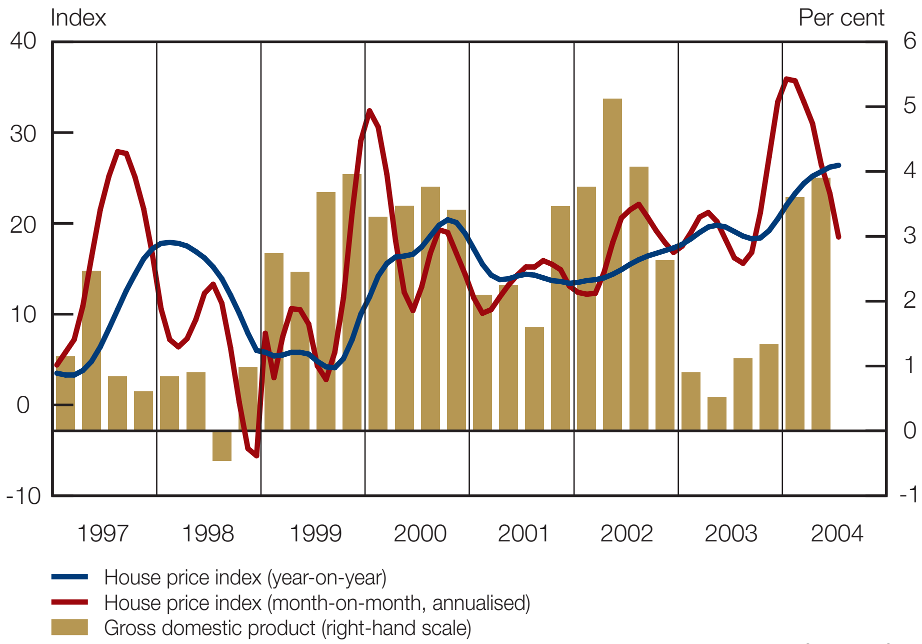
Source: Statistics South Africa and South African Reserve Bank ascribed to a relatively low nominal interest rate environment. This is a positive development for financial system stability as the household sector and small businesses are among major clients of banks.

Real-estate sector

In August 2004, house prices, as measured by the Absa house price index, recorded an annual nominal growth rate of 27,7 per cent. The growth in house prices was a reflection of improved economic fundamentals, with the economy having recorded positive growth since the third quarter of 1998. Other factors believed to have fuelled the surge in house prices included the relatively low interest rate environment, low inflation, increases in disposable income, the improved investment status of property compared with other asset classes and the influence of foreign investors as well as the emergence of a black middle class. The surge in house prices was therefore attributable to genuine shifts in demand rather than suggesting a property bubble (see box "Real-estate bubble" for more information). Moreover, the surge in house prices that began in September 2003, following aggressive interest rate cuts, has begun to lose momentum. This is reflected by the downward trend in the month-on-month growth rate in house prices since January 2004.

As economic fundamentals improve, the debt-servicing capacity of mortgage bondholders is expected to improve. Non-performing mortgage loans as a percentage of total mortgage loans reached a peak of 6,8 per cent during the second quarter of 1999 (see Figure 22), following a period of high interest rates in 1998. Since then, the ratio has been improving steadily, dropping to 2 per cent by the end of the second quarter of 2004. The declining trend in the ratio of mortgage debt to the market value of houses also implied that mortgage debt was growing at a slower rate compared with the growth in house prices. The percentage of mortgage debt to market value of housing was 35,4 per cent in the second quarter of 2004, down from 36,3 per cent in the first quarter of 2004.

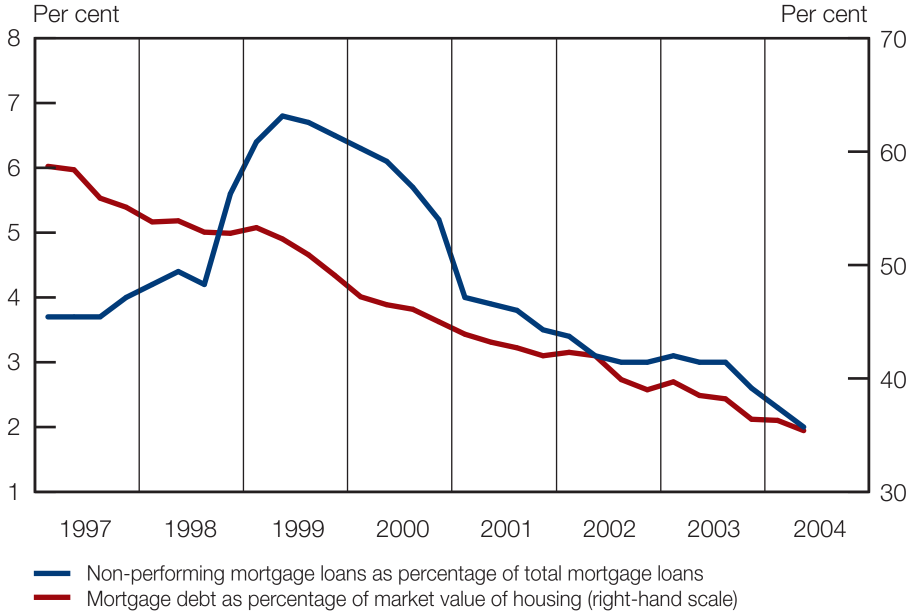
Figure 21: House price index* and gross domestic product



* The house price index is based on the total purchase price of houses in the 80m^2 – 400m^2 size category, valued at R1,5 million or less in respect of which loan applications were approved by Absa.

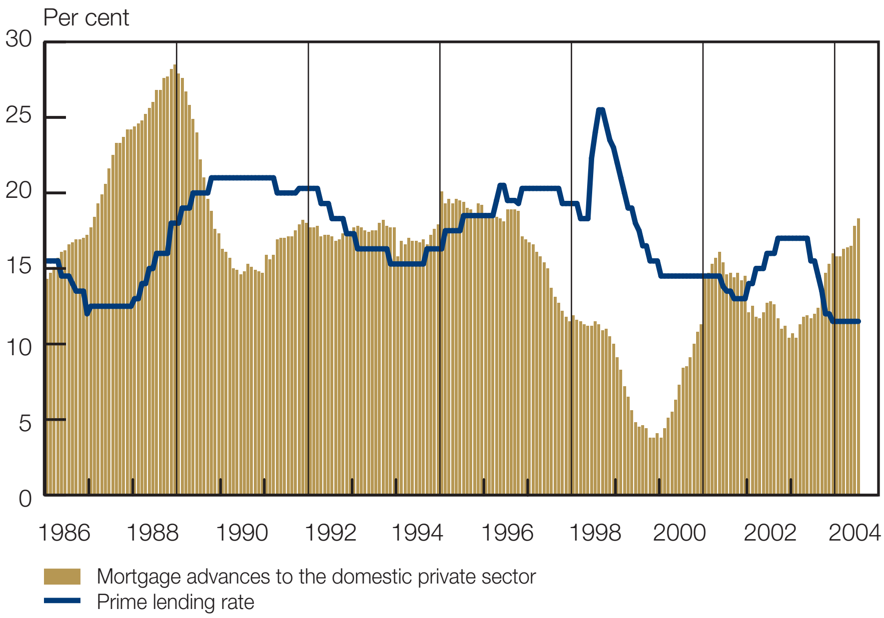
Source: South African Reserve Bank and Absa bank

Figure 22: Non-performing mortgage loans and mortgage debt



Mortgage advances to the domestic private sector have been increasing since June 2003 (see Figure 23). This was a reflection of the reduced cost of borrowing since the cut in interest rates during that period. The annual growth rate of mortgage loans increased from 12 per cent in July 2003 to 18,3 per cent in July 2004. Although home loans reached double-digit growth rates, this did not pose a threat to financial stability as it was in line with improved economic conditions.

Figure 23: Mortgage advances to the domestic private sector and prime lending rate



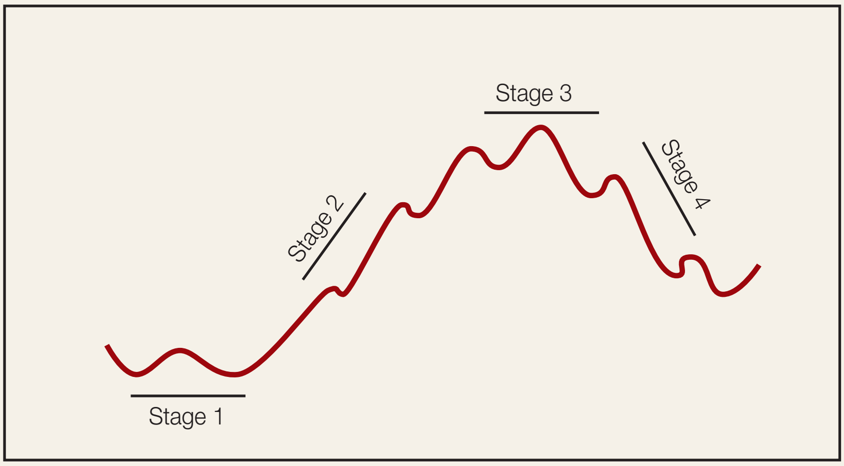
Real-estate bubbles

Real-estate trends are influenced by a host of market forces and macroeconomic fundamentals – interest rates, the expansion or contraction of the economy, consumer confidence, income levels, inflation, population trends, changes in tax laws, and even wars. A real-estate bubble arises when real-estate prices (particularly price increases) are not justified by these underlying forces and/or fundamentals. Real-estate bubbles are likely to develop during the second stage of a real-estate cycle (see Figure B), which begins when real-estate prices slowly start to rise and more buyers enter the market, thereby increasing the demand for property[27]. This pushes prices even higher and increasing property values attract more and more people who are eager to buy, which drives prices higher still.

27 The first stage of the real-estate cycle is characterised by severely depressed real-estate prices and few buyers and sellers in the real-estate market.

As demand continues to build, property values start to rise at a faster pace, resulting in the emergence of speculators entering the market with the purpose of making rapid profit. During this stage, property values can start to grow at double-digit rates of appreciation and rising real-estate prices eventually make headline news. Typically, this is when the general public starts to exhibit more and more buying interest, pushing prices even higher. As the market continues to boom everyone is uniformly optimistic about the economic outlook, based on the rationale that high real-estate values will continue on the upward trend. If the increase in property values is not in line with the abovementioned fundamentals, the boom may actually result in a bubble, which will eventually burst.

Figure B: The real-estate cycle



Source: Campbell (2002), Timing the Real Estate Market

In a bubble market, the justification for buying is the expectation of further price increases, based on the Greater Fool Theory[28]. According to this theory an investor may still purchase overvalued assets because there will always be a "fool" to purchase these assets at an even higher price. Once expectations change to possible price decreases, it becomes inevitable that a quick and drastic reduction in prices will occur because overpricing will call forth excess supply. Eventually, prices will fall sharply.

28 The Economists' Business Encyclopedia defines the greater fool theory as the investment strategy that assumes that it is wise to buy a stock or an asset that is not worth its current price. The assumption is that someone will buy it from you later for an even greater price.

A major challenge with bubbles is the difficulty of identifying them in advance. There is always the possibility that asset price appreciation reflects a favourable change in economic fundamentals. One difficulty is to judge correctly whether a hike in asset prices is caused by overly optimistic expectations or policy distortions, on the one hand, or genuine structural shifts in demand or gains in long-term productivity, on the other[29]. Another challenge is that bubbles are not similar and their collapse has produced various outcomes in different countries, with robust financial systems showing less systemic distress than weak systems.

29 *See Collyns, C. and Senhadji, A. 2002. Lending booms, Real Estate Bubbles and the Asian Crisis,* IMF Working Paper *No. 02/29.*

Micro-finance sector

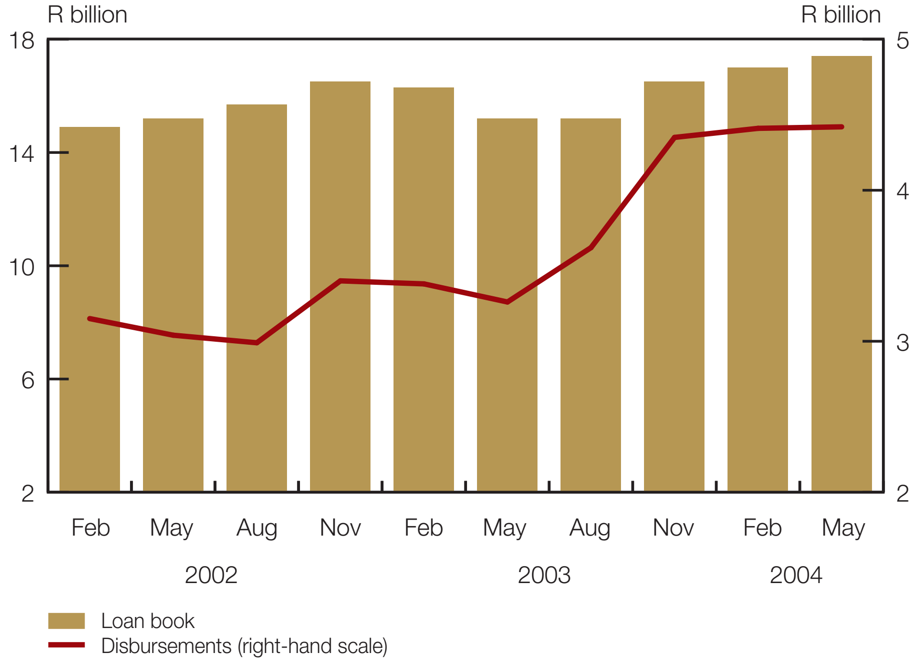
Non-bank micro-finance institutions and banks often have ownership and investment linkages that make each sector vulnerable to adverse developments in the other. Not only are some banks involved in micro-finance activities themselves, but micro-lenders are also major borrowers from banks. Micro-lenders' vulnerability and the fragility of the whole micro-finance industry can, therefore, have spill-over effects on the banking sector.

According to the Micro Finance Regulatory Council (MFRC), aggregate statistics by registered lenders indicate continued robust micro-lending activity for the quarter ending May 2004[30]. The total loan book of the micro-lending industry was estimated at R17,4 billion at the end of May 2004, up from R17 billion at the end of February 2004[31]. The recorded value of loan disbursements for the quarter ended May 2004 was estimated at R4,4 billion. The quarter ended May 2004 saw a significant increase in registrations, the bulk of which were close corporations (6 per cent), which accounted for 40 per cent of total industry loans. As a result of the increase in the number of micro-lenders, the average size of loans disbursed decreased from R1 433 to R1 353. Although the

30 *The MFRC quarters run from March to May, June to August, September to November and December to February.*

31 *Micro-loan statistics include both banks' micro-loans and non-bank micro-loan statistics.*

Figure 24: Micro-finance loan book and disbursements as at the end of each quarter



Source: Micro Finance Regulatory Council number of micro-loans is high, the total of such loans (R17,4 billion as at the end of May 2004) is small compared with total household debt (R446 billion as at the end of June 2004).

Medical-aid schemes

Medical-aid schemes are among the major clients of banks. It is, therefore, prudent to monitor developments in the financial aspects of medical-aid schemes. Solvency ratios indicate the financial soundness and sustainability of a medical-aid scheme and, in effect, represent a buffer against unforeseen and adverse business fluctuations.

The overall industry average solvency ratio for all registered schemes decreased from 29,3 per cent in the fourth quarter of 2003 to 28,2 per cent in the first quarter. Over the same period, the solvency ratio for restricted schemes decreased from 49,9 per cent to 47,2 per cent, while that for open schemes decreased marginally from 20,8 per cent to 20,7 per cent. At these levels the industry average and restricted medical schemes' solvency ratios were above the regulatory phase-in benchmark of 25 per cent for 2004. The solvency ratio of open medical schemes was, however, below the benchmark. Thus open schemes need to raise their reserve levels to meet the regulatory solvency ratios.

The Council for Medical Schemes has introduced an early warning system on financial soundness in terms of quarterly returns and a review of monthly management accounts in some instances.

Table 4 Solvency ratios of medical-aid schemes

	Solvency ratios for individual categories		
	Open schemes	Restricted schemes	All registered schemes
2003 1st qr	15,0	38,8	22,1
2003 2nd qr	15,9	41,3	23,6
2003 3rd qr	16,8	45,3	25,1
2003 4th qr	20,8	49,9	29,3
2004 1st qr	20,7	47,2	28,2

Source: Council for Medical Schemes. *Quarterly Report* (various issues).

Infrastructure and regulation

Oversight of the national payment system in South Africa

Introduction

The South African National Payment System Strategy and Framework document ("the Blue Book") was published in 1995. This document contained all the main objectives, strategies, fundamental principles and critical success factors for payment system reform in South Africa for the next ten years.

One of the major risk-reduction strategies was to implement an inter-bank real-time gross settlement system (the South African Multiple Option Settlement , or SAMOS), system) which became operational in March 1998.

The National Payment System (NPS) Act was promulgated in October 1998, which provides the South African Reserve Bank (the Bank) with the regulatory powers to oversee the safety and integrity of the national payment system, and thereby reduce risks in the payment system.

Further risk-reduction measures were implemented in the retail payment environment in 2001. These measures included, *inter alia*, the introduction of item-limits in the retail batch payment streams to reduce the high-value payments in these streams. These risk-reduction measures resulted in more high-value payments being settled directly on a gross basis in the SAMOS system.

Although the payment system risk-reduction measures had been implemented since 1998, the Bank only formally established its oversight function during 2001. This function is vested in a division of the National Payment System Department (NPSD) of the Bank. The main focus area of the oversight division is the reduction of payment system risks.

Since 2001 the South African oversight model has been aligned, developed and refined to cater for domestic payment system oversight. The aim of this section is to provide a broad overview of:
- the scope of the oversight function;
- objectives and functions of the oversight division;
- roles and responsibilities of the management and regulatory stakeholders in the payment system; and
- major payment system developments during 2004.

The scope of the oversight function

Generally, the oversight of a payment system spans the entire process of making a payment. In basic terms it entails the process of enabling a payer to make a payment (via a payment instruction) to a beneficiary, utilising a payment instrument (for example via a credit card). The payment is then cleared[32] via the payment clearing house (PCH) operator, and is then finally settled[33] between the banks (in the SAMOS system). The beneficiary would then receive the funds in terms of the payment. Within the described process, third-party payment providers, system operators, and agents of payers and/or beneficiaries are included. High-value inter-bank payments are settled directly via the SAMOS system, without following the clearing route.

32 Defined as the exchanging of payment instructions.

33 Defined as the final, irrevocable and real-time discharge of payment and settlement obligations.

Clearing of payment instructions between banks takes place within the framework of PCH agreements. Infrastructure to enable the exchange of payment instructions for clearing, the calculation of concomitant "netted" obligations and delivery of the instructions for settlement to the SAMOS system are facilitated by institutions that are normally owned by banks. These institutions are referred to as PCH system operators.

Any person that provides third party services to other persons within the payment system in respect of payment instructions can only do so if duly authorised in terms of the NPS Act. They are referred to as system operators.

Oversight of payment systems differentiates between systemically important payment systems (SIPS) and non-SIPS. SIPS are normally high-value or wholesale payment systems that could have a direct systemic effect on the financial system. It is important to identify non-SIPS as soon as possible and monitor their risks because they may develop into a systemic problem. Therefore, oversight of the payment system includes retail payment systems.

Oversight also includes monitoring of the payment system infrastructure. This infrastructure includes instruments, systems, applications, networks, payment, and clearing and settlement systems from a technology perspective.

In the oversight of the payment system cognisance is also taken of other legislation that may affect the payment system (for example, anti-money laundering legislation).

Objectives of the oversight function

The Bank used the Bank for International Settlement (BIS) Core Principles for Systemically Important Payment Systems as guidelines for the oversight of the payment system in South Africa.

The main objective of oversight is the reduction of systemic risk, which could result from legal, liquidity, credit, operational, settlement or reputational risk in the payment system.

The main focus areas of payment system oversight are to ensure:
- an effective oversight model;
- payment risks, that may have a systemic impact, are under control;
- an efficient and safe settlement system; and
- an efficient and safe clearing system.

The functions of the oversight division

Oversight of payment systems is primarily aimed at the promotion of a safe and efficient national payment system, and not individual participants. However, oversight of the payment system at times may involve that individual bank oversight and hence payment system profiles of the individual SAMOS participant banks are developed and monitored to provide an early warning mechanism for a settlement failure.

On a more practical level, oversight entails, *inter alia*:
- surveillance of payment system risks and developments;
- monitoring of developments and the performance of participants;
- analysis, evaluation and management of payment risks;
- the implementation of risk-reduction measures;
- facilitation (acting as catalyst), advice and assistance to stakeholders;

- relevant research to keep abreast of international developments and best practices;
- administration of NPS regulations via the NPS Act;
- alignment with internationally accepted payment system practices;
- creating public awareness;
- guiding the strategic development of the NPS;
- advancing the stability of the financial system; and
- maintaining public confidence in the NPS.

Roles and responsibilities of stakeholders in the payment system

Regulatory stakeholders

The NPSD of the Bank oversees the payment system and in this process issues position papers or directives. Position papers are documents containing guidelines that address payment system risks and foster sound practices within the payment system. Depending on the nature and/or the magnitude of the payment system risks, the Bank may also issue directives. Directives provide the Bank with wider and stronger powers to address payment system risks.

The Bank Supervision Department (BSD) of the Bank regulates deposit-taking in the financial system. Payments are primarily done by utilising funds on deposit. Therefore, close co-operation is required between BSD and the payment system overseer. All registered banks are allowed to take deposits but only those banks qualifying in terms of the Bank's payment criteria are eligible to clear in their own name and settle in the books of the Bank. Development paths exist for banks aspiring to become clearing and settlement banks.

Payment system participant associations

The South African Payments Strategy Association (SAPSA) addresses members' (banks') payment issues on a strategic level. The payment system management body (the Payment Association of South Africa, or PASA) manages the conduct of its members (banks) in relation to all matters affecting payments on a more operational level, focusing on regulatory and risk issues of its members. Close co-operation between PASA and SAPSA is required.

The South African National Payment System Forum (SANPAY) is a multi-stakeholder forum consisting of government departments and associations that represents persons that are actively involved in the payment system. SANPAY was established by the Bank to provide a forum for discussion and information sharing regarding relevant payment system developments and policies.

Major developments during 2004

Significant progress has been made during 2004 to ensure the overall effectiveness and integrity of the NPS in South Africa. The drafting of the NPS Amendment Bill (the Bill) was completed and the Bank set out on a national consultation process. The objective of the consultation process was to inform all interested parties of the proposed changes prior to the Bill being promulgated during the latter part of 2004.

The Bill caters mainly for the inclusion of the South African rand in the Continuous Linked Settlement (CLS) system to enhance South African foreign exchange settlement practices. The main aim of CLS is to reduce foreign exchange settlement risk by means of the synchronisation of the settlement between the two legs of foreign exchange transactions in a single time zone (Central European Time, or CET) within CLS Bank.

The CLS Board has in principle granted approval for the inclusion of the rand in the CLS system. The South African Reserve Bank, in conjunction with the banking industry, is involved in projects to include the rand as a settlement currency in the CLS system. Final ratification of the rand's inclusion will be given in the latter part of 2004.

The first round of on-site visits to all the SAMOS system participant banks has been completed. These visits addressed the banks' payment system issues on an individual basis. Processes were also put in place to enhance the oversight of banks' liquidity risks and other prudential requirements. The SAMOS system was also enhanced to include intra-day liquidity monitoring and control of participating banks' required liquid assets and reserve account holdings.

Conclusion

Since 1998 various risk-reduction measures have been implemented in the payment system. The oversight function was formally introduced in 2001 and was based on the BIS Core Principles. The oversight of the payment system was further developed to cater for domestic payment system developments. Good progress has been made in 2004 in pursuit of the objective to maintain an oversight function that is aligned to international best practice.

The inclusion of the rand in the CLS system will bring considerable potential benefits for the country as a whole[34]. It would not have been possible were it not for the many positive developments since 1995 to enhance risk reduction in, and ensure effective oversight of, the national payment system.

34 The rand will be one of only 15 currencies to be settled in this "risk-free" way, which should enhance the credibility of the currency and the country.

Broadening access to financial services: Developments and stability implications

Access to finance as a financial stability concern

The problem of broadening access to finance probably originates from the dichotomous nature of the South African economy: A first-world financial sector serving the developed economy, but is experiencing difficulty in adequately meeting the needs of the developing economy.

In addressing the access to finance challenge, financial stability concerns arise from two perspectives:

- The failure to extend access to basic financial services to broader sections of the population could perpetuate intolerable economic imbalances. Further, a failure to broaden access to financial services would exclude large sections of the population from formal financial intermediation, exposing them to the unregulated informal financial sector.

- Unsound policy decisions or financial sector initiatives to broaden access to financial services have the potential of posing a threat to the integrity of the formal financial sector. Socio-political pressure to address the needs of the lower end of the market could cause financial institutions and policy-makers to pursue ill-conceived initiatives, thus compromising a highly efficient and sound financial sector and its ability to service the developed economy.

It is against these competing imperatives that the challenge of broadening access to finance has to be addressed, and in a manner consistent with the maintenance of financial stability. The areas identified as being of key importance in terms of broadening access to finance are illustrated in Table 5.

Table 5 Financial services market segments and challenges

Market segment	Challenges
The unbanked/personal finance	- Reaching the mass market, especially in the rural areas - Addressing the consumers' lack of financial sophistication - Eliminating discriminatory practices - Introducing sound credit assessment criteria and practices - Expanding competition in the market
Mortgage finance	- Discrimination and redlining* - Credit assessment criteria and practices - Over-reliance on collateral - Risk of non-payment - Lack of competition in the market
Small and medium enterprise finance	- Poor business plans due to lack of skills - Credit assessment criteria and practices - Over-reliance on collateral - Lack of competition in the market

* Redlining is said to occur when a financial institution refuses a home loan to a borrower or household mainly due to the geographic location or neighbourhood of the property.

Lack of access to adequate credit and insufficient competition in the market have been identified as obstacles common to the extension of broader access to financial services in all identified segments. This section is divided into two broad areas: In the sections that immediately follow, the challenge of assimilating low-income groups into the mainstream economy, of the large-scale delivery of low-cost housing and of the development of a vibrant Small and Medium Enterprise (SME) sector are discussed. The second half of this article presents some current and planned initiatives to address these challenges.

The unbanked and personal finance markets

A recent study by FinMark Trust revealed that 51 per cent of the South African population falling within the age group of 16 to 85 years is fully banked, 14 per cent was previously banked (i.e. people who no longer access formal banking services) and 35 per cent are unbanked (i.e. people who have never had bank accounts)[35].

35 FinMark Trust. 2003. Finscope 2003 Report. *Johannesburg: FinMark Trust.*

There are many basic banking products targeting low-income consumers who constitute the majority of the unbanked, but as the FinMark study suggests, these efforts have not been completely successful. Two reasons are cited for the failure to reach the unbanked:

- Accessibility, i.e. bringing financial services within the physical reach of people who are often rural-based; and
- the relatively greater profit potential at the upper end of the market (compared with the unbanked market), despite increasing competitive pressures in this market.

If competitive forces have failed to reach the unbanked, then perhaps collaborative forces may succeed. The banking sector is currently engaged in a collaborative effort to introduce a National Bank Account, which will allow banks to jointly reach the unbanked market until servicing this market becomes competitively viable. This and other initiatives, discussed later in this article, were inspired by the commitment of government and industry to financial sector transformation.

The mortgage finance market

Although credit risk has a strong influence on efforts to broaden access to mortgage finance, the greatest obstacle to the expansion of the mortgage finance market has historically been of banks being unwilling to extend mortgage finance in areas where mortgaged assets are at considerable risk of devaluation. While the Code of Banking Practice prohibits redlining in a manner that does not pose a threat to the enterprise to which the code applies, banks have historically made a strong case for denying mortgage finance in certain areas on the basis of commercial risk.

With previously redlined districts now promising to become viable investment areas, the pressure to comply with the Financial Services Charter and the Home Loans Mortgage Disclosure Act of 2000, the possibility of a Community Reinvestment Act, and the associated reputational risks, broadening access to mortgage finance is being given greater attention within the financial sector, as discussed later in this article.

The small, medium and micro enterprise market

Access to loan finance has been identified as critical for the development of SMEs. The paucity of SME finance is compounded by lack of comprehensive business skills required to manage an SME in a competitive environment. In the start-up phase of SMEs, entrepreneurs are almost always unable to adequately demonstrate the potential of their businesses to deliver the required rates of return to financiers. Those that are able to attract financial support in the early stages of the venture fail to sustain the interest of financiers in their businesses due to lack of diverse business education, business experience and peer support.

The market for financing micro enterprises is almost non-existent, while that for SME finance is not as competitive as it could be. The relative cost and benefit considerations that have shaped commercial banks' reluctance to enter this sector include:

- the high cost of initiating micro-loans relative to the interest margin over the period of the loan;

- the high levels of risk, which is partially attributable to the lack of specialised skills in financial institutions – i.e. advising, mentoring, etc. – necessary to support these enterprises in starting up or on an ongoing basis;

- the granting of loans to borrowers who do not have adequate security or own capital is considered unsound banking practice;

- the costs of recovering loan amounts in the instance of non-payment are high because of difficulties with foreclosure laws; and

- benefits/rewards are capped by regulatory interest rate caps, in terms of the Usury Act, and self-imposed interest rate caps in terms of the reputational risk of charging high interest rates.

The financial services industry has committed, through the Financial Services Charter and complementary initiatives, to redress the difficulties experienced by SMEs in obtaining access to credit and in accessing ongoing advice and business support.

Review and reform of the financial regulatory framework

There is a range of initiatives aimed at reducing the uncertainty surrounding the nature of the unbanked market and the alternate means of reaching this market. One such initiative is the co-operative effort between the Bank and National Treasury (NT) to develop second and third-tier banking legislation. This joint effort to diversify the banking regulatory framework is meant to work in tandem with the efforts of the Department of Housing (DoH), the Department of Trade and Industry (DTI) and the financial sector to address the challenge of broadening access to financial services.

The Financial Services Charter

The financial sector sought to pre-empt legislative compulsion in respect of black economic empowerment (BEE) and socio-economic transformation by developing a voluntary Financial Services Charter (the Charter). In general, the industry believes that the Charter has set ambitious BEE objectives without sacrificing financial soundness or unduly increasing risk to the banking sector.

Development of the Financial Services Charter

The Financial Services Charter (the Charter) is a broad-based commitment by financial sector institutions to the development of a transformed, vibrant, and globally competitive financial sector that:
- reflects the demographics of South Africa;
- effectively provides accessible financial services to black people; and
- directs investment into targeted sectors of the economy[36].

The Charter is the outcome of negotiations between the Banking Council of South Africa (with a subcommittee for the foreign banks), the Life Offices Association of South Africa, the Association of Black Securities and Investment Professionals (representing black business and the Black Business Council), the South African Insurance Association, the Association of Collective Investments, the Investment Management Association of South Africa and the South African Reinsurance Offices.

The Charter aims to introduce improvements in the following key financial services areas:

- The financial services industry is obliged to come up with new or adapted assurance, savings and credit products to broaden access to the financial system and to increase access to financial services for the unbanked. Banks may be forced to co-operate in respect of broadening access to financial services for the unbanked (for instance in the creation of a National Banking Account), as well as in meeting their empowerment commitments in terms of training and development.

- There is to be a stronger focus on skills development among the previously disadvantaged by committing the financial services industry to employing, training, developing and nurturing black staff at every level, with the objective of furthering black ownership, control and management.

- A greater commitment to creating and developing BEE companies through increased financial services for small and medium-sized black businesses and meeting specific targets for procurement from black-owned businesses. The Charter obliges the financial services industry to lend money and skills, experience and infrastructure to developing black companies.

36 http://www.banking.org.za/Downloads/Charter-Final.pdf

The Charter is effective from 1 January 2004 to 31 December 2014, with provision for a midway review in 2009. There are, however, specific targets to be attained by 2008. Financial firms bound by the Charter are to produce annual BEE reports accompanied by an audited scorecard. There are no blanket exclusions, and foreign banks are also affected. The implementation of the Charter across the various subsectors of the financial sector is to be monitored by a yet-to-be-formed Charter Council.

Government and business still have to determine how much money should be raised for low-income housing, small-scale agriculture and small enterprise finance, and for financing BEE transactions in general. Given the nature of their respective businesses, banks and other financial institutions will have to place implicit caps on the degree to which they can expose themselves to greater risks in the interest of furthering BEE.

Government and regulatory authorities have a pivotal role to play before the industry can effectively pursue the specified targets. One of the fundamental issues that will underlie the implementation of the Charter is its role within the regulatory framework and whether it is capable of satisfying the demands of relevant stakeholders within the specified time frames. In addition, black economic empowerment and broadening access to finance have to be addressed with deference to the overriding regulatory objective of achieving a high degree of economic efficiency and consumer protection in the economy, while securing systemic stability in the financial sector and in the broader economy.

Broadening access to mortgage finance

The DoH is in the process of developing a battery of legislation to discourage discrimination in mortgage lending on non-commercial bases. The DoH's Community Reinvestment (CR) Bill was presented to Cabinet in 2003. At the request of Cabinet, the CR Bill is to be held in abeyance until banks have been given the opportunity to act on the Financial Services Charter.

Meanwhile, the DoH is operationalising the Home Loans and Mortgage Disclosure Act of 2000 (HLMDA), which is the precursor to the CR Bill. The objective of the HLMDA is to promote fair lending practices, predicated on disclosure of information regarding the provision of home loans by financial institutions, to an Office of Disclosure. The DoH is in the process of finalising the HLMDA regulations and setting up the Office of Disclosure.

Broadening access to consumer credit

The DTI has initiated a Credit Law Review with the objective of improving disclosure of the actual costs of debt finance and addressing regulatory uncertainties and inefficiencies in the credit market. While many of these deficiencies need to be addressed within a broader programme of economic reform, the following proposals for reform were the key outcomes of the Credit Law Review process:

- One "Consumer Credit Act" to replace the Usury Act, No 73 of 1968 (the Usury Act), the 1999 Usury Act Exemption Notice (the Exemption Notice), which fostered the creation of the Micro Finance Regulatory Council, and the Credit Agreements Act, No 75 of 1980 (the Credit Agreements Act). The proposed Act will provide for the equal treatment of all credit transactions, irrespective of form, prohibit unfair conduct and create enforcement mechanisms within the national consumer credit regulator and provincial government.

- A single consumer credit regulator needs to be established to regulate all forms of consumer credit, including bank credit.

- Higher disclosure standards must be prescribed. There is a need for simple, standardised disclosure and comparability between credit providers. Such disclosure will mitigate inflation of costs through "add-on charges" like credit life insurance.

- Deceptive or hazardous credit agreement stipulations, like incremental repayment terms and "zero interest" marketing, must be prohibited.

- Consumer education should be incorporated into the mandates of the consumer credit regulator and provincial consumer agencies.

- Legislative requirements to assess consumers' ability to meet their debt service obligations, prior to advancing credit, must be introduced.

- The feasibility of penalties on consumers that provide false information or act fraudulently must be investigated.

The review of the existing credit laws is nearing conclusion and may lead to the promulgation of a new Consumer Credit Act. In addition to consumers benefiting from stronger protection against abuse and better disclosure requirements, SMEs would also benefit from the proposed new Act. The removal of restrictions, both in terms of the Usury Act and the Exemption Notice, will allow SMEs broader access to finance in a more competitive lending environment. The greater emphasis on disclosure and financial education of borrowers may assist entrepreneurs to make more informed financial decisions.

The Credit Law Review process also has implications for the Charter and the proposed legislation in respect of multi-tiered banking. If a suitable regulatory space is created, second and third-tier banking institutions could go a long way toward satisfying credit needs, particularly at the lower end of the market.

Extending basic banking services through a multi-tiered banking sector

The Bank is currently drafting second-tier banking legislation in the form of the Dedicated Banks Bill. This Bill provides for the establishment of two types of dedicated banks: Core and narrow banks.

Due to the narrower range of activities permitted to dedicated banks and the "risk-matching" of activities on both sides of their balance sheets, these banks would be inherently safer than fully-fledged banks. It follows that the prudential requirements applicable to dedicated banks would be less stringent than those applicable to fully-fledged banks. Regulatory compliance would therefore be less costly for dedicated banks and they would be easier to establish, manage and supervise.

On the one hand, narrow banks should be the safer of the two types of banks in that their deposits may only be held in safe, liquid public paper. Narrow banks specialise in deposit-taking and credit payment activities and are prohibited from debit payment activities and lending to the private sector. They have to invest all their deposit liabilities in risk-free central government paper of a similar maturity profile[37].

37 *Falkena, H.B. et al. 2002. Establishing Narrow and Core Banks and their Competitive Impact on Fully-Fledged Banks in South Africa. Pretoria:* Task Group of the Policy Board for Financial Services and Regulation.

On the other hand, core banks are permitted to indulge in lending activities, thereby exposing themselves to credit risk. The scope of core banks' activities will be limited to areas where banks have a demonstrated comparative advantage, such as cheque accounts, savings and money-market deposit accounts, the provision of payment, trust

38 Ibid

and custody services, and loans to individuals, small businesses and medium-sized companies. Core banks would therefore be more restricted in their daily operations than fully-fledged banks, but less so than narrow banks[38].

Dedicated banks and the financial safety net

39 Dedicated banks are narrow and core banks. Narrow banks specialise in deposit-taking and credit payment activities and are prohibited from debit payment activities and lending to the private sector. Core banks specialise in deposit-taking and payment activities but are restricted in their operations to those functions where fully-fledged banks apparently make the bulk of their profits, i.e. cheque accounts, savings and money-market deposit accounts, the provision of payment, trust and custody services, and loans to individuals, small businesses and medium-sized companies.

The objective of the Dedicated Banks Bill is to help facilitate the provision of banking services in areas which, or to consumers to whom, such services have not previously been readily available. The Bill creates the regulatory framework for a second tier of formal banking in South Africa in the form of narrow and core banks[39]. The creation of these new forms of banking enterprises raises questions as to what the role, function and impact of dedicated banks would be within the financial safety net.

For dedicated banks to operate without financial safety nets, they must be perceived by the public as being financially viable and virtually risk free. From an investor's point of view, it would appear that deposits with dedicated banks are relatively safe and that investors would have relatively easy access to their funds. Only a deposit insurance scheme, however, could address altogether the risk of default from narrow banks. Exclusion of dedicated institutions from a deposit insurance scheme would undermine consumer confidence in these institutions and lead to deposit insurance failing to protect the very low-income consumers it is conceptualised to protect. It is possible that a separate fund for dedicated banks, distinct from the fund for fully-fledged banks and with limited cross-subsidisation across these funds, will be maintained within the deposit insurance scheme. Although a flat insurance premium would initially be preferable within each tier of banking participating in the deposit insurance scheme, a strong argument can be made for differential premiums across tiers, given the huge differences in risk exposures.

40 Dedicated institutions could then offer investors higher returns since they would not have to offset the cost of deposit insurance premiums. However, investors would be at greater risk since they would not have the benefit of depositor protection. The adverse impact of this risk would grow as the ability of the investor to adequately price for risk declines, i.e. it would be a greater problem at the lower end of the market where investors lack financial sophistication.

Failure to include dedicated institutions within the deposit insurance scheme could lead to adverse selection, as they would be exempted from insurance premiums[40]. Conversely, given the restricted nature of their activities, dedicated banks may be tempted to engage in high-risk lending in an attempt to increase profitability. While the relatively restricted activities of narrow banks and their *de facto* 100 per cent capital reserve requirement would make them relatively less risky than core banks, both banking structures might be included in a financial safety net system to pre-empt regulatory arbitrage and to safeguard the integrity of second-tier banking.

Second-tier banking is to be complemented by third-tier banking and a legislative framework for co-operative banking has been proposed. This legislation would bring community deposit-taking institutions (CDIs), or financial service co-operatives, within the regulatory net of the Registrar of Banks. The third-tier banking legislation would increase competition, particularly at the lower end of the market, encourage the entry of new institutions and promote the efficiency in existing institutions by providing greater structural flexibility.

Formalising CDIs, would contribute to greater consumer confidence in these institutions and allow CDIs to further their role in broadening access to financial services. In the past, financial services co-operatives (FSCs) operated under an exemption from the Banks Act and were in effect self-regulated. This meant they never achieved the desired credibility to propagate to the extent necessary to make a difference to the lack of access to financial services in rural areas. The proposed new legislation will address this shortcoming and formalise banking through financial services co-operatives.

The extent to which these proposed new types of banks will contribute significantly to a reduction of concentration in the banking sector and generate greater competition, remains to be seen. It is anticipated that both the Dedicated Banks Bill and the co-operative banking legislation will be made available for comment later this year.

The role of the Postbank in extending access to basic banking services

The Postbank operates under exclusion from the Banks Act (as opposed to exemption), i.e. it has its own legislative framework, the Postal Services Act of 1998. The Postbank is classified as a deposit-taking institution and is therefore permitted only a limited product offering under the current regulatory framework. The Postbank currently has 1,5 million customers, mostly from low-income groups. The future of the Postbank would be determined by the following:

- The success of its corporatisation process and its ability to operate as a distinct entity from the Post Office;
- the development of a favourable regulatory framework with the potential for the Postbank to operate as a registered bank (and no longer as an exclusion from banking regulation); and
- the possible extension of its product offerings.

The exact role of the Postbank in broadening access to finance is often strongly debated but it is always considered a significant one. The Postbank has the potential to be transformed into a truly narrow bank, which would promote broader access to financial services.

Conclusion

While government has the responsibility of establishing the framework within which the banking industry operates, the implications of the pace of change within the financial sector must be appreciated. Financial sector transformation at too slow a pace may destabilise the sector, however, change at too rapid a pace could pose an even greater threat to financial stability. A balance has to be maintained between responding to growing pressures for socio-economic reform and preserving the integrity of, and confidence in, the financial sector.