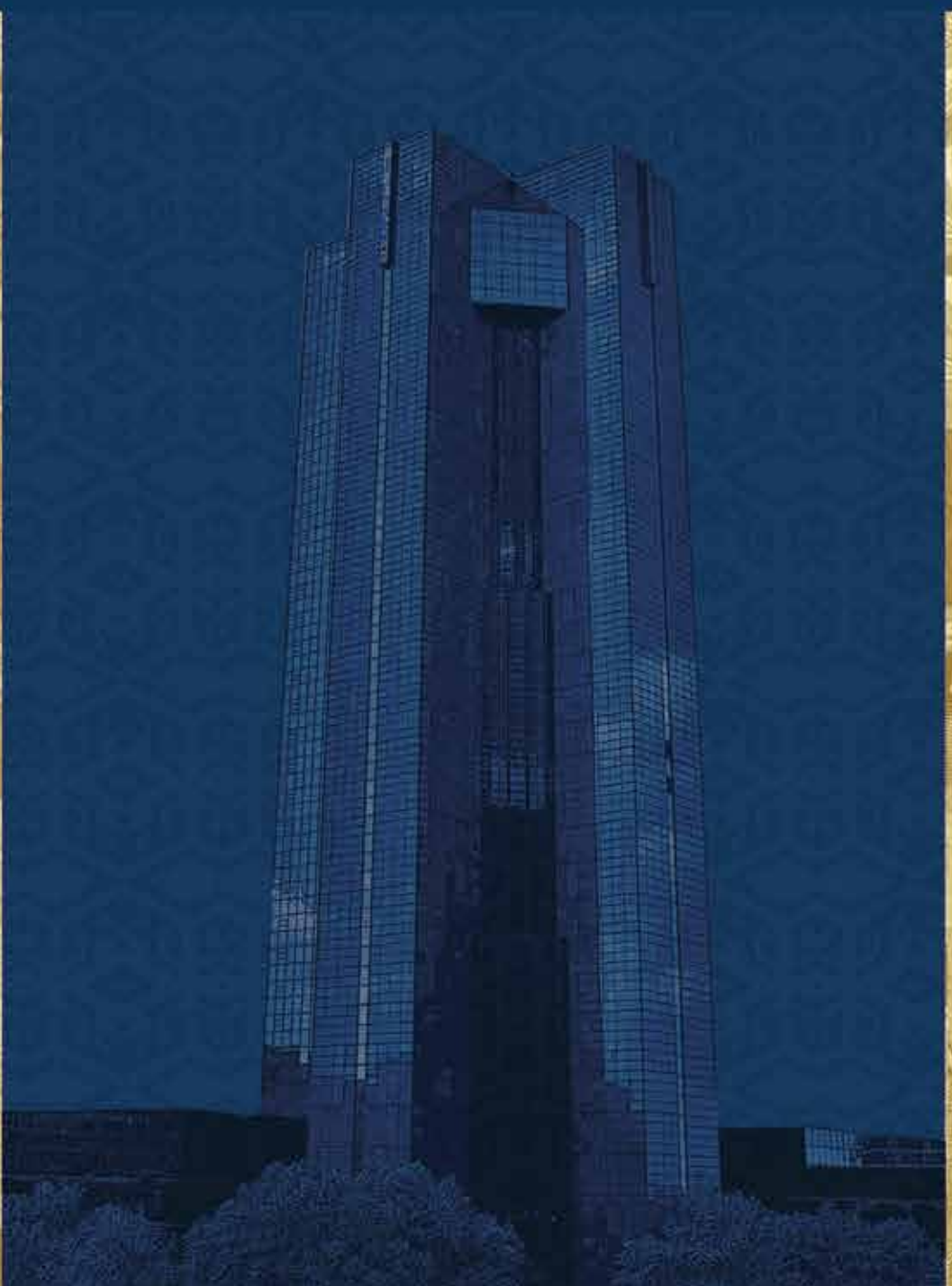
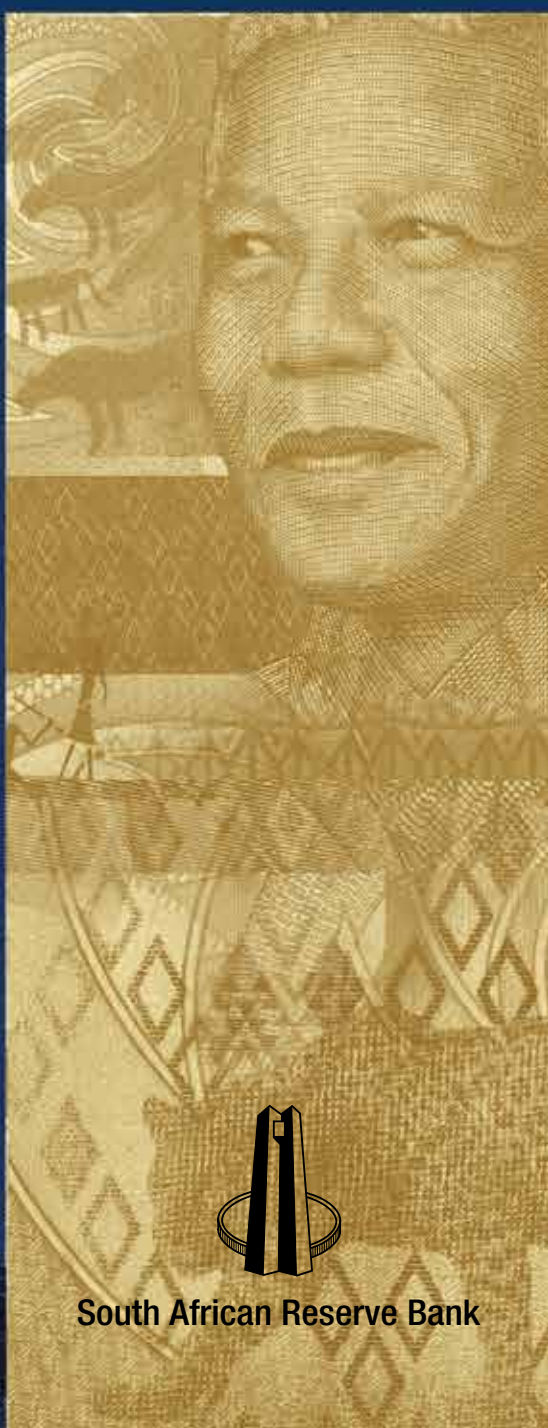
Financial Stability Review

First edition
2016







South African Reserve Bank

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This issue of the *Financial Stability Review* focuses mainly on the six-month period ending December 2015. However, selected developments up to the date of publication were also reported on. Data may include own calculations made for purposes of this publication.

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Purpose of the *Financial Stability Review*

The primary objective of the South African Reserve Bank (the Bank) is to protect the value of the currency in the interest of balanced and sustainable economic growth in South Africa.

In addition to this, the Bank's role of protecting and enhancing financial stability in the Republic of South Africa is affirmed in the Financial Sector Regulation Bill, 2015 which is expected to be promulgated in 2016. In pursuit of this objective and to promote a stable financial system, the Bank publishes a semi-annual *Financial Stability Review*. The publication aims to identify and analyse potential risks to financial system stability, communicate such assessments and stimulate debate on pertinent issues. The Bank recognises that it is not the sole custodian of financial system stability, but that it contributes significantly towards and coordinates a larger effort involving government, other regulators, self-regulatory agencies and financial market participants.

Defining 'financial stability'

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

Financial stability refers to a financial system that is resilient to systemic shocks, facilitates efficient financial intermediation and mitigates the macroeconomic costs of disruptions in such a way that confidence in the system is maintained.

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Overview

The South African financial system continues to be confronted and challenged by increased risks and uncertainty in the global environment and a deteriorating domestic economic growth and inflation outlook. In advanced economies the outlook has deteriorated as a result of increased uncertainty and setbacks to global asset markets. Lower commodity prices, concerns about China's economy, and uncertainty about the pace of monetary policy normalisation in the United States and policy diversion in advanced economies kept risks elevated in emerging-market economies. Recently, concerns increased about the ability of policy responses to counter the impact of increased economic, financial and political risks globally.

Central banks in advanced economies are relying on unconventional monetary policy such as quantitative easing and negative interest rates to stimulate economic growth. These policy options could give rise to increased financial stability risks. Near zero policy rates and quantitative easing had limited success in igniting a sustained rebound in global economic growth. The adoption of negative interest rates represents a major turning point for central banks and could adversely affect global banks' profitability. Expectations of lower earnings for banks and regulatory fines with associated litigation costs added to the strong downward movement in banks' share prices. Share prices of South African banks followed global trends despite more than adequate levels of capital and healthy profitability.

In addition to global issues, domestic economic, financial and political developments during the reporting period added significantly to the risks of the South African financial system. Continued low employment growth in the formal sector of the economy and sluggish economic growth negatively affected real values of households' financial assets. Although growth in household debt has moderated, rising interest rates have put pressure on household finances. Deteriorating debt-service abilities could impact negatively on banks' asset quality and require them to increase future provisioning for bad loans, weighing on their profitability. Total loan debt of government also remained relatively high. In line with global trends, South Africa's accumulation of foreign-exchange reserves also moderated in 2015.

South African non-financial corporates have increased their issuance of both domestic and international debt securities. Although these instruments provide an opportunity for corporates to raise finance for large capital projects, they could also increase their exposure to international shocks. Similar to other emerging economies, South African corporates have increased borrowing in foreign currencies albeit at less concerning levels. Despite being more leveraged, corporates generate sufficient cash flows to finance their interest expenses. At an industry level, the mining and quarrying industry is the only industry that recorded an interest coverage ratio below a conservative benchmark. Moreover, more than 70 per cent of South African corporates have one-year expected default frequencies of below 3 per cent. Nevertheless, the distribution of expected default frequencies has deteriorated marginally, meaning that more companies are now likely to face difficulties.

Financial markets in South Africa experienced two incidents of extreme volatility during the period under review. In December 2015 the Minister of Finance was replaced, unexpectedly causing a significant sell-off in South African financial assets. Bid/offer spreads in the bond and foreign-exchange markets widened sharply. Although the extreme levels of volatility eased when a former Minister of Finance was reappointed, financial conditions deteriorated even further in January 2016 when emerging-market currencies in general, and the South African rand in particular depreciated sharply after a series of stop-loss transactions had

been triggered. This was in reaction to strong data from the US and concerns about China's economic growth prospects, among other reasons. Confidence in the South African financial services sector declined to a six-year low in the fourth quarter of 2015, while business confidence deteriorated further.

Persistent weak economic fundamentals, a high current-account deficit, the growing trend of the fiscal debt and other structural constraints in the South African economy have raised concerns with credit rating agencies about the outlook for South Africa, causing two of the agencies to change the outlook from stable to negative. The impact of a further ratings downgrade to non-investment grade on the South African economy and financial system could lead to increased capital outflows; higher cost of, and reduced access to, funding; higher credit default swap spreads; and lower business confidence and corporate profits.

The South African Reserve Bank (the Bank) conducted a common scenario stress test of the South African banking sector to evaluate the resilience of the sector to a set of plausible adverse scenarios. The Bank followed a formal approach to risk identification and scenario design based on a Risk Assessment Matrix, and included both bottom-up and top-down stress tests. The results, reported in more detail in this *Financial Stability Review*, show that banks could withstand significant credit losses under the stress scenarios even without taking into account any mitigating action by bank management. These stress tests will be conducted regularly in future and reported in the *Financial Stability Review*. In addition, the envisaged Financial Sector Regulation Bill has been tabled in parliament. The bill provides for an enhanced framework for regulating the financial sector and represents a decisive shift away from a fragmented regulatory approach. This reduces the possibility of regulatory arbitrage and close gaps in the regulatory system, further contributing to the resilience of the financial sector.

In its assessment of potential financial stability risks, the Bank attempts to pre-emptively identify the possibility of risks materialising and their potential impact on the financial system in South Africa. Risks that emerged and which are reported in the Risk Assessment Matrix are firstly global risks such as spillovers from excessive volatility and risk aversion in global financial markets; a protracted period of slow economic growth in China, the euro area and spillbacks to the US economy; and vulnerabilities in global banking sectors. Secondly, risks such as continued low domestic economic growth and the possibility of a sovereign rating downgrade to non-investment grade for South Africa are also included.

These matters, among others, are continually monitored by the Bank's Financial Stability Committee. As part of its responsibilities, the Financial Stability Committee also regularly assesses the need for mitigating actions, including the implementation of a countercyclical capital buffer for banks. The objective of such a buffer is to curb excessive levels of credit extension. At its most recent meeting in February 2016 the Financial Stability Committee decided to set the buffer rate at zero for banks as none of the indicators used for this purpose show any signs of excessive credit extension.

Despite elevated levels of volatility in global financial markets and spillovers into domestic markets, the South African financial system continues to efficiently facilitate financial intermediation and mitigate negative spillovers and disruptions. Overall, despite some serious headwinds, the financial system is assessed as remaining robust, characterised by well-capitalised, liquid and profitable financial institutions.

Financial stability developments and trends

Economic growth and outlook

The international economic outlook remains challenging following a decline in economic growth in the advanced economies. The outlook for many emerging-market economies (EMEs) remains weak. For South Africa, the economic growth outlook has deteriorated further.

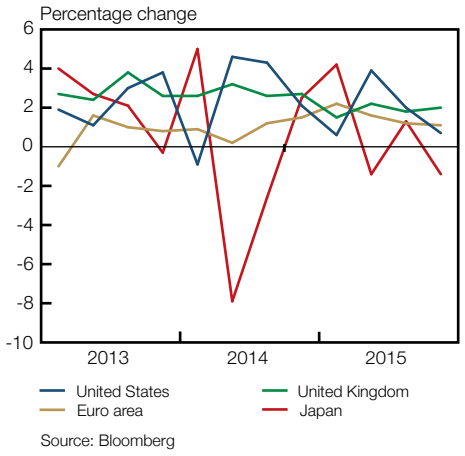
Downside risks to the global economic outlook persisted as the international environment faced challenges such as a slowdown in EMEs, monetary policy normalisation in the United States (US), rebalancing of the Chinese economy towards services and consumption, and lower commodity and oil prices. Overall, 2015 was marked by subdued global economic growth. Global economic activity slowed significantly in the last quarter of 2015, with estimated global growth falling to 1,7 per cent quarter on quarter and seasonally adjusted.[1] The tepid and bumpy recovery is expected to continue and any pick-up in global economic activity is thus expected to be gradual.[2]

Economic growth in the US slowed in the last two quarters of 2015 after a strong rebound in the second quarter (Figure 1). Disappointing consumer spending, weak trade due to a strong US dollar and a slump in commodity and oil prices offset robust employment figures and an increase in interest rates. Japan's gross domestic product (GDP) growth contracted to an annualised rate of 1,1 per cent in the fourth quarter of 2015 due to weakness in domestic demand. Revised third-quarter growth figures, from an annualised contraction of 0,8 per cent to an annualised increase of 1,4 per cent, indicated that Japan avoided a technical recession. Consumption expenditure declined at an annualised rate of 3,4 per cent in the fourth quarter of 2015 and public investment remained weak. Japan's economy is likely to remain under pressure despite continued monetary stimulus.

Growth in EMEs deteriorated during the second half of 2015. Both Brazil and Venezuela remained in recession and Argentina started showing signs of entering a recession. Growth in China decelerated amid a rebalancing of the economy. Furthermore, expectations are that monetary policy in some EMEs could be tightened in response to weaker commodity prices, lower export earnings and depreciating exchange rates.[3]

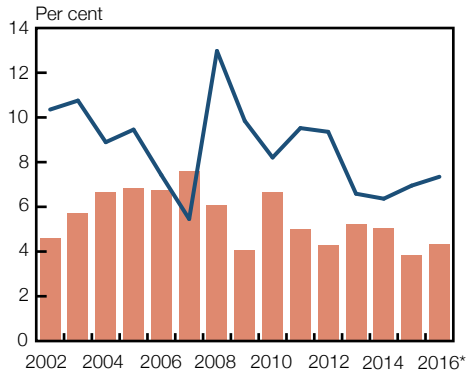
Economic growth in sub-Saharan Africa has slowed since 2010 and has decreased from a relatively strong rate of 5 per cent in 2014 to 3,8 per cent in 2015. While the economic outlook for the region is better than many other developing and emerging regions, deteriorating global financial conditions and falling commodity prices could put pressure on future economic performance in the region. Nevertheless, growth is expected to accelerate to 4,3 per cent in 2016[4] (Figure 2), boosted by a strong performance by low-income countries in the region that continue to be supported by ongoing infrastructure investment

Figure 1 Real economic growth in selected countries



Source: Bloomberg

Figure 2 Real GDP growth and average inflation in sub-Saharan Africa



* Data for 2015 and 2016 are International Monetary Fund estimates

Source: International Monetary Fund

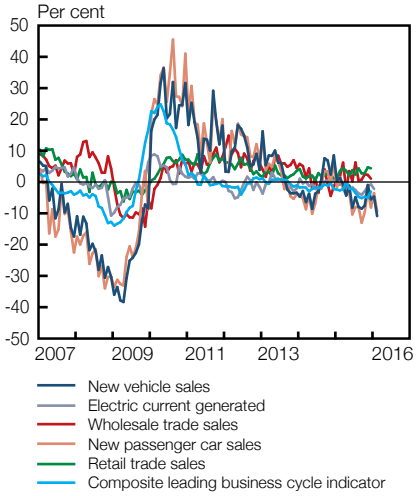
1 Institute of International Finance, *Global Economic Monitor,* 18 February 2016.
2 International Monetary Fund, *World Economic Outlook Update*, January 2016.
3 South African Reserve Bank, *Quarterly Bulletin*, March 2016.
4 International Monetary Fund, *World Economic Outlook Database*, January 2016.

and solid private consumption. Inflation is also increasing again, partly as a result of the exchange rate pass-through and higher food prices (amid a drought in the region). Higher inflation has triggered monetary policy responses in a number of countries including Ghana, Uganda, Kenya and Angola.

Growth in the South African economy has decelerated markedly since 2011. Output increased by just 1,3 per cent in 2015 and forecasts suggest growth will be less than 1 per cent in 2016.[5] In the final quarter of 2015, economic growth slowed to 0,6 per cent. The two biggest contributors to growth were the finance, real-estate and business services industries, the wholesale and retail trade, catering and accommodation industries.[6] Fragile global economic conditions, weak domestic demand, low commodity prices, a weak rand and the impact of the drought weigh on domestic growth prospects. Also, the Bank's leading business cycle indicator for January 2016 confirmed the subdued outlook, with the largest negative contributions from the number of residential building plans passed, as well as the US dollar-based export commodity price index. The BankservAfrica Economic Transaction Index (BETI)[7] for February 2016 also trended downwards. The Barclays Purchasing Managers' Index (PMI)[8] (seasonally adjusted) fell below the neutral 50-index-point level to 43,5 index points in February 2016, more than 5 index points below the average level recorded in 2015.

Short-term indicators of real economic activity (Table 1 read with Figure 3) mostly displayed negative or low growth rates for the six months under review and moved in line with the composite leading business cycle indicator. Building plans passed and buildings completed mostly recorded negative annual growth, although building plans passed ended 2015 on a positive note.

Figure 3 Selected indicators of real economic activity and the composite leading business cycle indicator



Sources: Statistics South Africa. Data on new vehicle and new passenger car sales were obtained from the National Association of Automobile Manufacturers of South Africa.

Table 1 Selected indicators of real economic activity[1]

Annual percentage change in monthly indicators

Activity indicators	2015					
	Jul	Aug	Sep	Oct	Nov	Dec
Building plans passed	-8,51	-15,85	1,76	-33,67	-14,45	15,63
Buildings completed	-13,75	12,31	17,39	-6,79	-8,16	-8,62
Utilisation of production capacity[2]	…	…	80,08	…	…	80,51

1 At constant prices, seasonally adjusted
2 Quarterly indicator, per cent
… Denotes unavailability of data

Source: Statistics South Africa

Both retail and wholesale trade sales maintained positive growth throughout the second half of 2015, albeit at somewhat subdued levels. New vehicle sales and new passenger car sales also recorded negative growth rates for the period under review, except for August when new passenger car sales experienced positive growth. Although electricity generated followed the same negative growth trend, the rate of decline has been falling since August 2015.

5 To be read in conjunction with the Bank's *Monetary Policy Review*, April 2016.
6 Statistics South Africa, Gross Domestic Product, 1 March 2016.
7 BankservAfrica BETI, Johannesburg: BankservAfrica, 9 March 2016. The BETI is designed as an early economic scorecard which will give an overall trend in economic activity in the near term.
8 Barclays PMI, Stellenbosch, February 2016.

The Bank revised its domestic economic growth forecasts down to 0,8 and 1,4 per cent for 2016 and 2017 respectively and to 1,8 per cent for 2018 amid a weak global environment and challenging domestic economic conditions. In the 2016 Budget Speech[9] it was emphasised that in order for South Africa to expand growth it needs to support innovation, protect jobs, diversify the economy and explore new opportunities, which in turn should support financial stability.

Unemployment

High levels of unemployment remain a big challenge in the South African economy. The unemployment rate fell to 25,1 per cent in the fourth quarter of 2015 after rising to 25,3 per cent (seasonally adjusted) in the third quarter.[10] The total labour force increased by approximately 1 million workers to 21,2 million for the year up to the third quarter of 2015, but on a quarter-on-quarter basis it decreased by 36 000 employees. During the fourth quarter the number of employed workers increased by 190 000, while the number of unemployed fell by 225 000. Most jobs were lost in the agriculture, manufacturing and construction sectors. The youth unemployment rate,[11] however, rose slightly to 50,4 per cent in the fourth quarter from 49,9 per cent in the third quarter.

Weak global and domestic growth prospects paint a somewhat bleak picture for local employment and high levels of unemployment could hamper the stability of the domestic financial system. Government also stated in the 2016 Budget Speech that the local economy is not growing fast enough to raise the level of employment. Job creation still remains one of government's top priorities and it was once again stated at the 2016 State of the Nation Address (SONA) as one of the aims of the nine-point plan for economic growth.

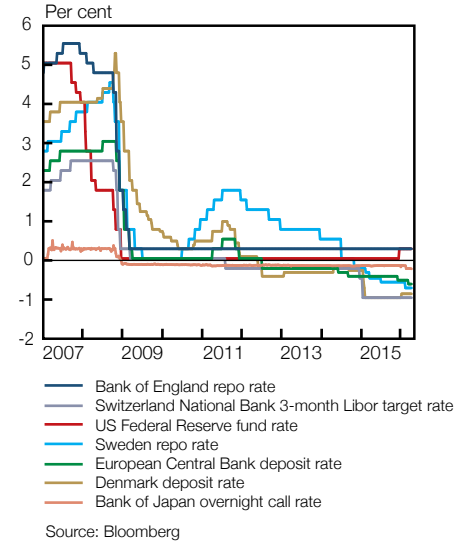
Financial market developments and trends

Central banks in developed economies moved from conventional monetary policy, driven by adjustments in policy rates above the zero bound, to unconventional policy such as quantitative easing and negative interest rates. In the unconventional monetary policy framework, financial stability risks could arise through wealth effects from asset markets.

Negative interest rate policies

Central banks have cut policy rates numerous times since the collapse of Bear Stearns in March 2008 and have also purchased a combined US$12,3 trillion of assets, according to Bank of America Merrill Lynch.[12] Given the limited success of near zero policy rates and quantitative easing in igniting a sustained rebound in global economic growth, the adoption of negative interest rates represents a major turning point for central banks. At the end of January 2016 the Bank of Japan unexpectedly announced it would apply a rate of -0,1 per cent to reserves that financial institutions placed with it. In July 2012 the Danish National Bank also set its rate below zero. In June 2014 the European Central Bank (ECB) also adopted a negative deposit rate, followed by the Swiss National Bank in December 2014 and Sweden's Riksbank in February 2015 (Figure 4).

Figure 4 Negative nominal policy rates



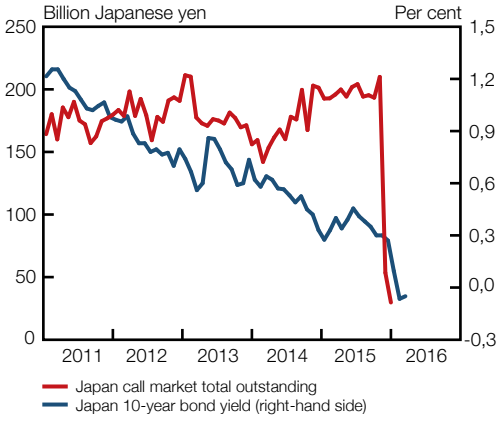
Source: Bloomberg

9 National Treasury, 2016 *Budget Speech*, 24 February 2016.
10 Statistics South Africa, *Quarterly Labour Force Survey*, Quarter 4, 2015.
11 The youth unemployment rate is the proportion of the labour force between 15 and 24 years that is unemployed.
12 'Big central banks tear up interest rate plans', *Business Day*, 14 February 2016.

For the ECB, Sweden's Riksbank and Bank of Japan, negative nominal interest rates are intended to stimulate bank lending and fend off the persistent threat of deflation. By penalising banks for keeping excess reserves left on deposit with central banks, these central banks hope to stimulate the supply of new loans. In Denmark and Switzerland, the aim has been to prevent their domestic currency from appreciating excessively against the euro and other currencies of major trading partners. In this regard, negative interest rates are intended to discourage investors from buying domestic currency and thereby pushing up its value.

For depositors, negative interest rates mean they must pay banks to hold their cash, a phenomenon that may adversely affect the availability of deposits. For bond investors, negative interest rates imply that the investor will not get the full principal investment back at maturity. About US$7 trillion, or almost 30 per cent of all outstanding sovereign bonds currently have negative yields. In Germany, two-year and five-year government bonds are trading at negative rates, while the benchmark ten-year bonds trade at yields very close to 0 per cent. In France, yields on short-term instruments and long-dated bonds with a maturity of up to eight years also have negative yields. On 1 March 2015, the Bank of Japan successfully auctioned US$19,4 billion worth of the benchmark ten-year bond with a negative yield of -0,024 per cent on average.[13]

Figure 5 Adverse effects of negative interest rates on interbank lending in Japan



Source: Bloomberg

Evidence from Japan's money market shows that negative interest rates can destabilise the orderly functioning of financial markets with huge repurcussions. On 29 February 2016, Japan's banks almost stopped lending to one another in the overnight market. The outstanding balance of interbank activity declined by 79 per cent to a record low, threatening to undermine the impact of the central bank's negative interest rate stimulus[14] (Figure 5).

The increase in Japan's bond market volatility index to a two-and-a-half-year high was a reflection of the extent of instability in the market, as diminished trading volumes in the call market dislocated funding for a range of debt investments. Sharp swings in bond yields weighed on lending as investors found it difficult to price bonds with negative interest rates. Although the rate cut pushed bond yields into negative territory, it failed to lift equity prices or to stop the appreciation of the yen, meaning that such a policy is not achieving its intended goals.

The negative interest rates also adversely affected banks' performance. Net interest income as a percentage of assets declined in 2015 for both Danish and Swiss banks following the introduction of negative policy rates. In Denmark, many homeowners have mortgages with negative interest rates.[15] Negative interest rates cost Danish banks more than one billion kroner (about US$145 million) in 2015.[16] In Sweden, the annual costs of keeping reserves overnight at the central bank is estimated to be US$600 million for 2015.[17]

13 'Negative interest rates: another new normal?', *Bangkok Post*, 26 February 2015.
14 'Negative rate fizzles with freeze on lending', *The Japan News*, 29 February 2015.
15 This implies that, instead of paying the bank the usual principal amount plus interest, homeowners pay the principal amount less interest.
16 'Less than zero: living with negative interest rates', *Wall Street Journal*, 8 December, 2015.
17 'Swedish banks strain to cope with negative interest rates environment', *Wall Street Journal*, 16 July 2015.

Other implications of negative interest rates as experienced in Switzerland are that while money-market and longer-term rates adjusted swiftly into negative territory, deposit rates remained positive and banks' margins were negative, exerting further pressure on banks' interest rate margins and profitability. While any gains from a policy of negative interest rates are not yet clear, some adverse effects are already apparent.

Sell-off in global bank shares

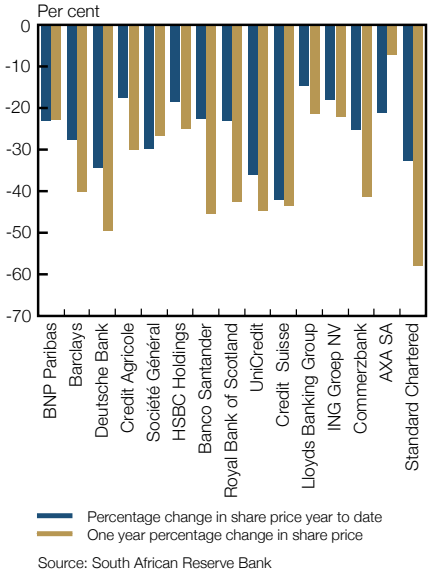
The adverse impact of negative interest rates on banks' profits, lower-than-expected earnings, and regulatory fines and associated litigation costs drove global bank shares down at the beginning of 2016 (Figure 6). Standard Chartered's share price was down almost 60 per cent after posting a surprise 2015 pre-tax loss of US$1,5 billion rather than the expected US$1,37 billion profit. In January 2016 Hongkong and Shanghai Banking Corporation (HSBC) reported a fourth-quarter pre-tax loss of US$858 million compared to the expected US$1,9 billion profit.[18] The share price of Deutsche Bank AG, the largest bank in Germany, recorded an almost 50 per cent drop after it issued an unexpected profit warning in early February 2016, exacerbating market volatility and the sell-off in global bank shares. Deutsche Bank AG reported a net loss of €6,8 billion for 2015. The main contributors to the record loss were the US$2,5 billion fine imposed on Deutsche Bank AG by US and British authorities for its role in the London Interbank Offered Rate (Libor) rigging scandal, as well as an estimated €3,6 billion in litigation costs.

As a result, investors became wary that banks facing similar challenges would not be able to repay their outstanding debt on time. The concern about global banks' capital and liquidity positions caused a sharp increase in the credit default swap (CDS) spreads of global systemically important banks in Europe and the US (Figure 7). Leading the rise in the CDS spread during February was Deutsche Bank AG's subordinated debt instruments, which breached the 500 basis point level in February 2016. The weakness in the banking sector is also apparent in price-to-book valuations (Figure 8). According to this measure, banks in the euro area are trading at levels last seen during the European sovereign debt crisis period, while US counterparts are trading at levels comparable to the global financial crisis period. Previously, these low levels marked the turning points in the share prices of both US and European banks. However, the negative interest rate environment and concerns about banks' capital and liquidity positions may continue to weigh on global bank shares.

Contingent convertible capital instruments

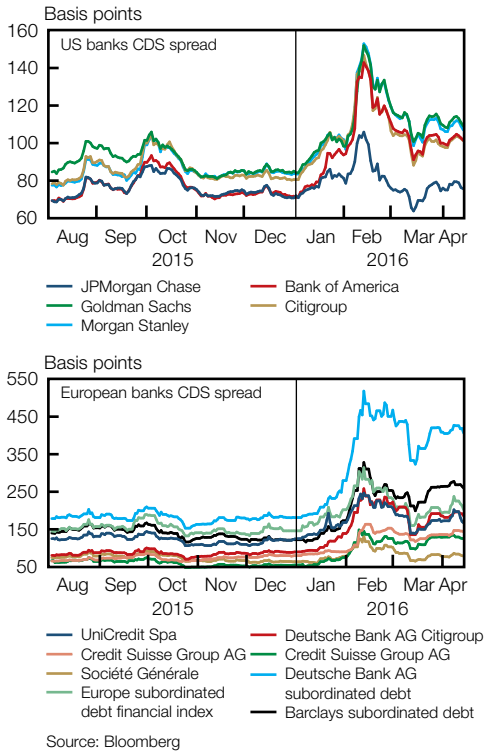
When European regulators created a new type of bank debt, namely contingent convertible capital instruments (commonly referred to as 'CoCos'[19]), the intention was to transfer associated risks from taxpayers to investors. Investors bought US$102 billion of CoCos in search of yield.

Figure 6 Capital and liquidity concerns affect share-price performance of European banks (as at the end of February 2016)



Source: South African Reserve Bank

Figure 7 Global CDS spreads of US and EU banks

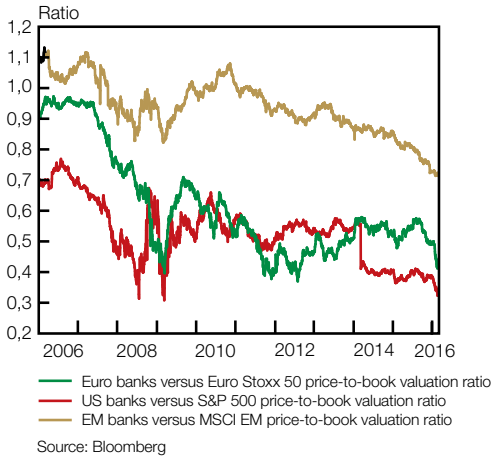


Source: Bloomberg

18 'Stop being surprised at mediocre bank results', *Bloomberg*, 25 February 2016.

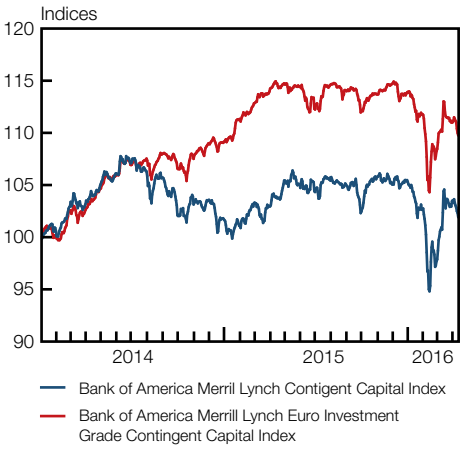
19 Contingent convertible capital instruments are hybrid capital securities that absorb losses when the capital of the issuing bank falls below a certain level. They are the only type of instruments that may be issued and count as additional tier 1 capital (AT1) under EU legislation. Under the new regime, AT1 is assumed to be the second most loss-absorbing form of capital on a going-concern basis, after common equity tier 1 (CET1) capital, where CET1 consists of ordinary shares and retained earnings.

Figure 8 Global banks are trading at a discount to their net asset values



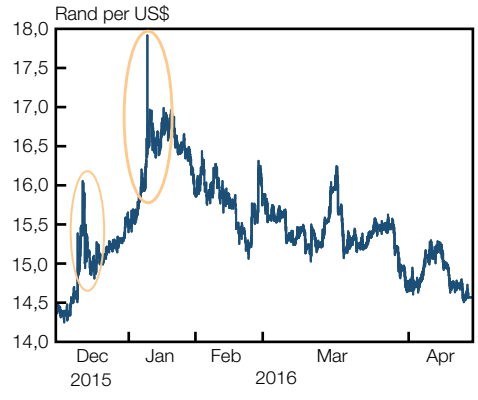
Source: Bloomberg

Figure 9 CoCos fall on concern of banks' capital and liquidity positions



Source: Bloomberg

Figure 10 Rand per US dollar intraday exchange rates



Source: Bloomberg

During February 2015, Deutsche Bank AG had the credit rating for some of its debt cut by rating agency Standard & Poor's (S&P), which cited concerns that the bank could report a loss that could restrict its ability to pay its obligations. The yield on Deutsche Bank AG's CoCos rose to about 11,7 per cent from 7,5 per cent at the beginning of 2016. The bank's share price was down more than 40 per cent over the same period. The sell-off in the CoCo market stemmed from concerns that banks will not be in a position to pay upcoming coupon payments or the debt which matures in 2016 or 2017. This implied that Deutsche Bank AG would have to raise new capital to fund its bond obligations, in turn exerting downward pressure on its share price (Figure 9).

Volatility in South African markets

South African financial markets experienced two incidents of extreme volatility during the period under review when liquidity was significantly impaired. The first incident took place on 9 December 2015, when the then Minister of Finance was unexpectedly replaced. Subsequent to this event, South Africa's financial assets sold off in significant quantities. Trades were largely one directional, dominated by sellers. Bid/offer spreads in the bond and currency markets widened drastically. Extreme volatility eased when a former Minister of Finance was reappointed, but these events had a significant negative impact on general confidence in the country.

The second incident occurred on 11 January 2016 when the exchange rate of the rand momentarily depreciated to a level of R17,91 against the US dollar from R16,35. Aside from the impact of deteriorating domestic economic conditions on the rand, the rand was already on a depreciating trend along with other emerging-market currencies, following better-than-expected US non-farm payroll data and concerns about China's economic growth. Consequently, the rand's vulnerability triggered a series of stop-loss transactions. For about 18 minutes on that day, there was neither a bid made nor an offer received (Figure 10).

Subsequently, the rand recovered somewhat during that day and bid/offer spreads normalised. As this episode took place during the Asian trading session when South African markets were closed for trade, there were no direct spillovers into other South African asset classes. Thin liquidity conditions appear to be a recurring problem for the rand, often reflected by large fluctuations in the exchange rate. However, these conditions tend to self-correct soon thereafter.

Sovereign credit rating downgrades

Global risks rotated to EMEs during 2015 as a result of mounting credit and liquidity risks, and generally lower risk appetite.

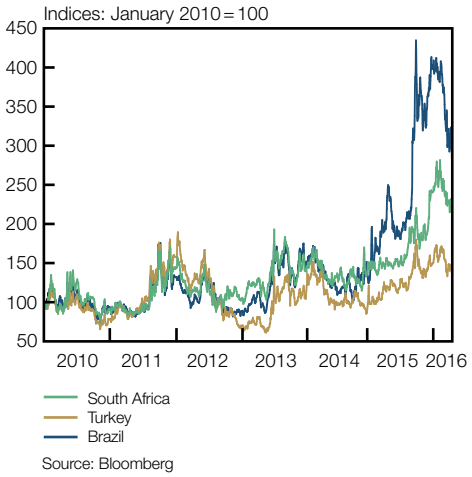
Consequently, sovereign CDS spreads of EMEs increased sharply, particularly after S&P downgraded Brazilian bonds in September. This was also the case for South Africa, Turkey and Russia. South Africa's CDS spread, however, has been outpacing those of most emerging-market countries since late last year. While the predictive power of CDS spreads is not always that clear,[20] the impact of the downgrade was markedly evident in Brazil's financial markets. Also, in the two weeks following the downgrade, the Brazilian real depreciated by almost 10 per cent and the ten-year

20 Bank for International Settlements. 'Sovereign ratings of advanced and emerging countries: their reliability and roles', August 2015. This study shows little correlation exists between CDS spreads and rating actions.

government bond yield increased by about 200 basis points to almost 17 per cent. The equity market initially did not display a similar reaction but lost 6 per cent in one week soon thereafter.

Although developments in South African markets during 2015 could partially be attributed to the woes of commodity-based countries, an upward trend in South Africa's CDS spread was already evident in late 2014. This, however, became more pronounced from July 2015.

Figure 11 A comparison of five-year CDS spreads



Source: Bloomberg

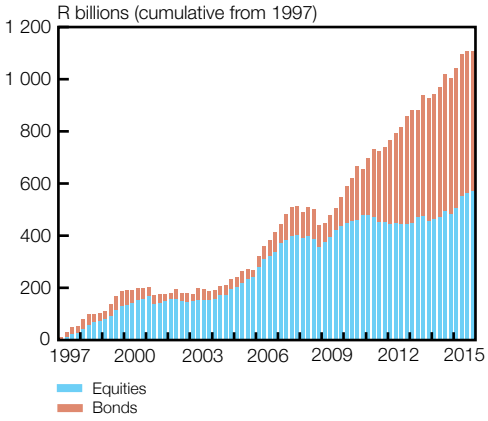
Portfolio flows

The result of reduced global risk appetite in 2015 was clearly reflected in portfolio flows. According to the Institute of International Finance (IIF), portfolio flows to EMEs, which amounted to more than US$1 trillion per annum between 2010 and 2014, are estimated to have moderated in 2015 to around US$230 billion. On a regional and country level, portfolio flows were even more volatile.

This global downward trend in net portfolio flows, however, already started in mid-2014. This was followed in 2015 by the lowest annual inflows in more than ten years. However, on a net basis, South Africa already recorded portfolio outflows amounting to R56 billion in 2014, and R24 billion in 2015. Net outflows intensified in 2016, amounting to R20 billion in the first two months of the year.

As reflected in Figure 12, the quantitative-easing-related spillover (i.e. the search for yield) was clearly evident in terms of bond inflows. This was, however, further impacted by specific South African bonds included in various global (benchmark) bond indices. Due to the increased demand for South African bonds, non residents' holdings of outstanding government bonds increased from 10 per cent in 2007 to 38 per cent in mid-2014, before dropping to 32 per cent in January 2016.

Figure 12 Non-resident investment in South African equities and bonds



The IIF forecasts portfolio inflows globally to be slightly higher in 2016 than what was recorded in 2015. Nonetheless, some distinct behavioural patterns have emerged thus far in 2016. Increased demand for safe-haven bonds in core countries such as the US and Japan is evident due to rising risk aversion, causing investors to divert from EMEs in general, and especially from high-yielding corporate debt. Global equity markets also experienced a large sell-off over this period.

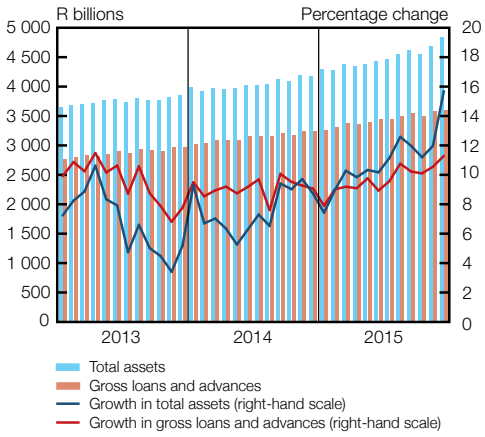
Financial institutions

Banks and bank-lending conditions

South African banks are exposed directly and indirectly to the effects of the decline in commodity prices through their loan books and trading activities. This raises concerns about the economic performance throughout the domestic industry and on the African continent where the economies are largely driven by commodities and where South African banks have presence. More idiosyncratic factors such as electricity supply interruptions and the effects of the prolonged and severe drought on the agricultural sector were also prevalent.

Consumers remained constrained against the backdrop of slow employment growth, sluggish disposable income growth and rising inflation. This, combined with tighter affordability criteria following the implementation of amendments to National Credit Regulations, resulted in subdued growth in retail credit exposure.

Figure 13 Total banking-sector assets



Credit extension to the corporate sector, by contrast, has been buoyant. However, cumulative increases of 200 basis points in the repurchase (repo) rate of the Bank during the past 24 months, together with the economic backdrop and sovereign-risk issue, require renewed focus on the sector's management of credit risk. Overall, the South African banking sector nevertheless remained financially sound and profitable during 2015 (see Box 1 for an update on: Barclays Plc's intention to reduce its stake in Barclays Africa Group Limited; African Bank; and Old Mutual's managed separation announcement).

Table 2 Selected indicators of the South African banking sector[1]

Per cent, unless indicated otherwise

	2015					
	Jul	Aug	Sep	Oct	Nov	Dec
Market share (top four banks)	90,19	90,05	90,16	90,01	89,87	89,22
Gini concentration index	83,32	82,36	82,41	82,79	82,72	82,44
Herfindahl–Hirschman Index (H-index)	0,180	0,180	0,181	0,179	0,179	0,176
Banks' share prices (year-on-year percentage change)	17,85	14,83	11,12	16,59	3,31	-13,12
Capital adequacy						
Total capital adequacy ratio	14,35	14,22	14,23	14,40	14,19	14,19
Tier 1 capital adequacy ratio	11,52	11,41	11,41	11,54	11,40	11,44
Common equity tier 1 capital adequacy ratio	11,08	10,98	10,98	11,11	10,98	11,03
Credit risk						
Gross loans and advances (R billions)	3 466,6	3 488,0	3 535,8	3 492,8	3 573,3	3 600,8
Impaired advances (R billions)[2]	114,8	114,1	113,1	113,3	110,1	112,4
Impaired advances to gross loans and advances	3,33	3,27	3,20	3,24	3,08	3,12
Specific credit impairments (R billions)	51,91	52,91	53,61	54,54	53,76	53,72
Specific credit impairments to impaired advances	45,23	46,37	47,42	48,13	48,84	47,80
Specific credit impairments to gross loans and advances	1,51	1,52	1,52	1,56	1,50	1,49
Profitability						
Return on assets (smoothed)	1,20	1,19	1,10	1,09	1,09	1,16
Return on equity (smoothed)	16,64	16,48	15,29	15,20	15,28	16,35
Interest margin to gross income (smoothed)	55,62	55,64	56,16	56,34	56,47	56,02
Operating expenses to gross income (smoothed)	55,08	55,23	56,26	56,45	56,47	55,39
Liquidity						
Liquid assets to total assets (liquid-asset ratio)	9,41	9,22	8,86	9,30	8,94	8,98
Liquid assets to short-term liabilities	18,44	17,88	17,09	18,04	17,30	17,63
Liquidity coverage ratio	87,20	88,25	83,44	84,61	86,14	84,43
Effective net open foreign currency position to qualifying capital and reserve funds	0,13	-0,07	0,05	-0,42	-0,36	-0,25

1 Data were updated on 9 March 2016
2 Impaired advances are advances in respect of which the bank has raised a specific impairment

Sources: South African Reserve Bank. Data on share prices were obtained from the JSE Limited.

Growth in total banking-sector assets picked up noticeably in December 2015 at 15,7 per cent (year on year) to R3,6 trillion. Banking-sector assets were comprised largely of loans and advances at 74,5 per cent at the end of December 2015. Impaired advances, an indicator of the banking sector's credit risk, decreased from R114,8 billion in July 2015 to R112,4 billion in December (Figure 14). The ratio of impaired advances to gross loans and advances also displayed some improvement over this period, but given a weak domestic and international growth outlook, impaired advances are expected to increase again.

Banks' main source of funds remained deposits, which in December 2015 constituted about 84 per cent of banks' total liabilities. Of these deposits, about 40 per cent originated from corporates and about 25 per cent from retail customers. While most banking-sector assets have long-term maturity durations, these are funded mainly by liabilities with short contractual terms, again emphasising the importance of liquidity management by banks.

Banking-sector profitability, as measured by the return-on-equity (ROE) ratio, dropped slightly from 16,64 per cent in July 2015 to 16,35 per cent in December (Figure 15). Net interest income remained the largest contributor to total income at 56 per cent in December 2015. The cost-to-income ratio, also known as the 'efficiency ratio' (an indication of the portion of operating expenses used to generate operating income) deteriorated over this period from 55,08 per cent in July to 55,39 per cent in December 2015. Staff expenses remained the largest component of operating expenses at 55,8 per cent in December 2015.

The banking sector remained adequately capitalised. The banking sector's total capital adequacy ratio (CAR) remained well above the regulatory requirement of 10 per cent but dropped slightly from 14,35 per cent in July 2015 to 14,19 per cent in December (Figure 16). Similarly, the tier 1 and the common equity tier 1 CARs decreased from 11,52 per cent to 11,44 per cent and from 11,08 per cent to 11,03 per cent respectively over this period.

Figure 14 Impaired advances

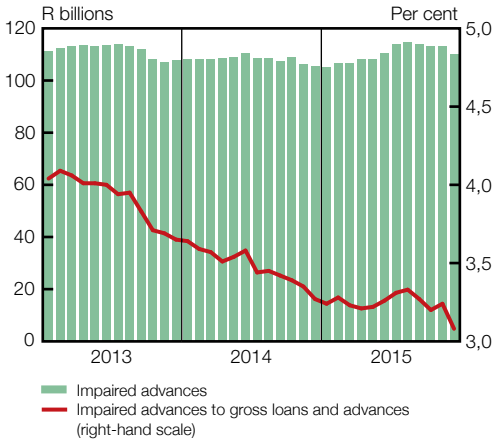
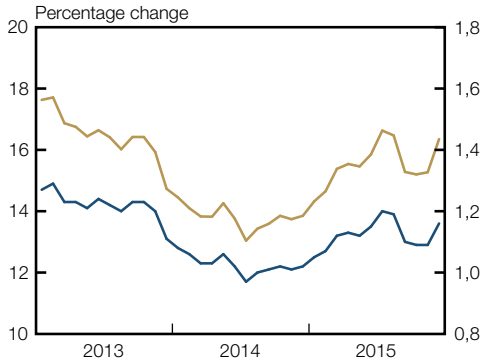


Figure 15 Profitability



Sources: South African Reserve Bank and First National Bank

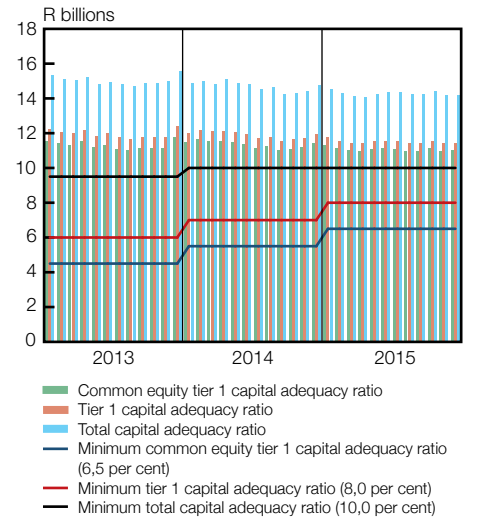
Common scenario stress testing of South African banks

The Bank conducted a common scenario stress test to evaluate the soundness of the South African domestic banking sector during 2015/16. Participating banks were requested to conduct a bottom-up (BU) stress test, while the Bank conducted a complementary top-down (TD) stress test in order to validate and benchmark the results.

Risk identification and scenario design

The Bank followed a formal approach to risk identification and scenario design using the Risk Assessment Matrix (RAM).[21] The RAM involves the identification of the most relevant risks from the global and domestic environments, an assessment of their likelihood as well as a qualitative evaluation of their impact on the real economy, the banking sector and the financial system. Also, for this stress-testing exercise, four macroeconomic scenarios were identified based on major global risks. These include a surge in global financial market volatility combined with a prolonged period of slower economic growth in advanced economies and EMEs, further aggravated by a possible slowdown in economic activity in China.

Figure 16 Capital adequacy



21 For this exercise, the RAM that was reported on in the September 2015 *Financial Stability Review* was used.

Figure 17 System-wide bottom-up credit losses

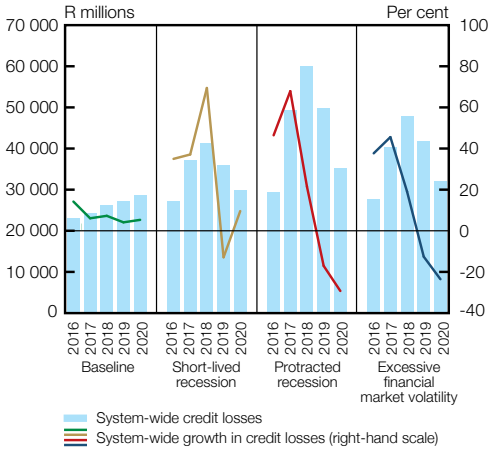


Figure 18 System-wide top-down CET1 capital and risk-weighted assets

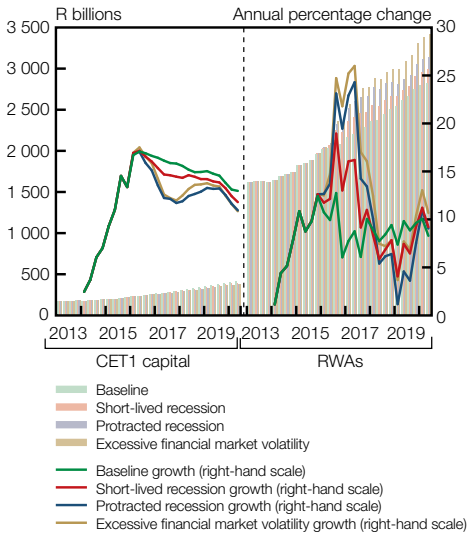
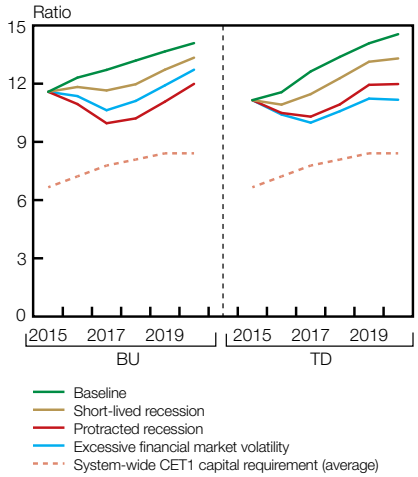


Figure 19 System-wide bottom-up and top-down CET1 capital adequacy ratios



More specifically, the four macroeconomic scenarios included the following factors:

- **Baseline scenario:** Modest domestic GDP growth over the next five years, a persistent high unemployment level, and a gradual increase in South African interest rates.
- **Short-lived recession (the least adverse scenario):** A disorderly exit from unconventional monetary policy in the advanced economies with increased financial market volatility and higher-than-expected global interest rates.
- **Protracted recession (severely adverse scenario):** Rapid monetary policy normalisation occurs in the US and UK combined with a disorderly exit from unconventional monetary policy in the euro area and Japan. Capital flows are severely affected leading to even greater financial market volatility. A collapse of the single currency in the euro area occurs and global growth deteriorates significantly with world financial markets severely strained, similar to the 2008 financial crisis.
- **Excessive financial market volatility and risk aversion:** Portfolio outflows from South Africa increase sharply and inflows dry up. As a result, the exchange rate of the rand is assumed to depreciate by 56 per cent (the most of all three adverse scenarios) at the end of the forecast period. South African equity prices fall but given the rand hedge nature of the all-share index this is somewhat subdued. Inflation rises due to a weaker exchange rate, but this impact is dampened by a widening negative output gap and fragile economy. Interest rates rise to counter inflationary effects from the depreciating exchange rate. Credit extension is weak and economic growth is below potential.

The results of the BU stress tests were aggregated and validated against the Bank's TD stress test. Although the stress scenarios resulted in higher system-wide credit losses over the stress horizon (Figure 17), these losses were offset by overall growth, albeit at a slower rate, of gross operating income and profits throughout the period.

Positive profitability allowed banks to conserve capital although deteriorating asset quality resulted in an increase of the average risk-weighted assets (RWAs) (Figure 18).

Figure 19 shows that even in the most adverse scenarios, CET1 capital outperforms the growth in RWAs, which ultimately resulted in sufficiently high system-wide CARs. More specifically, the increase in the RWAs, reflecting higher probabilities of default and loss-given default across all asset classes, did grow at a slower pace than that of CET1 capital.[22]

Participating banks are therefore regarded as adequately capitalised to withstand significant credit losses throughout the stress scenarios before taking into account any mitigating action by banks' management. This resilience stems from the high capital buffers already prevailing in the banking system. From the third quarter of 2015, the average CET1 CAR of the participating banks was 11,6 per cent of RWAs,[23] well in excess of the regulatory minimum of 6,75 per cent.[24]

22 In the TD stress test, each year's capital amount is calculated as the previous year's capital plus the net income in the current year, and is net of the loan-loss provision and the dividend pay-out.

23 The CET1 CAR is for banks solo, excluding foreign banking operations. The number is based on the data submitted in the BU stress tests.

24 This requirement includes the Basel III CET1 requirement, Pillar 2A and Pillar 2B charges.

Shadow banking

The Financial Stability Board broadly defines shadow banking as credit intermediation involving entities and activities that are outside of the official banking system. In a country like South Africa, where financial inclusion is important, the availability of non-bank credit also plays an important role. However, non-bank intermediation channels can lead to systemic risks as these institutions operate with less regulatory oversight than the official banking sector.

In 2015 South Africa once again participated in the annual shadow banking monitoring exercise of the Financial Stability Board. In addition to the annual monitoring exercise, South Africa also participated in an information-sharing exercise and a peer review. The information-sharing exercise included risk metrics, risk mapping and an innovations-mapping template. Data limitations, however, constrain the assessment of shadow-banking risks. The peer review included an evaluation of jurisdictions' adherence to the overarching principles set out in the *Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities*[25] (policy framework). In South Africa, the implementation of the policy framework is at a relatively early stage.

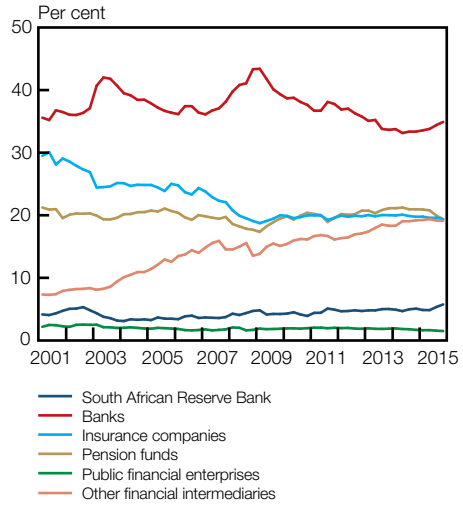
Comparing the distribution of financial assets between financial intermediaries, one can observe an increase in banks' share of financial assets in 2015, while shadow banks' share of assets remained relatively constant. Assets related to shadow banking activities amount to roughly a quarter of the assets held by banks.

In South Africa, the largest share of financial assets are held by banks (see Figure 20). After peaking at 43,3 per cent in 2008, banks' share of financial assets decreased slowly until mid-2014, before increasing steadily for most of 2015. The share of assets held by other financial intermediaries (OFIs), a broad measure for shadow banking activities,[26] has remained relatively constant during most of the period under review.

In line with the Financial Stability Board's approach, activities and entities that do not pose shadow banking risks can also be excluded from the OFI measure to arrive at a 'narrow measure' of shadow banking activities. In South Africa, activities that are excluded from the measure for shadow banking include all equity funds, participation bond schemes and real-estate investment trusts. The shadow banking estimate thus includes money-market funds, the non-equity portion of multi-asset funds, hedge funds, fixed-income funds, finance companies and securitisation activities. Credit insurance activities by insurance companies are also included in the shadow banking measure.

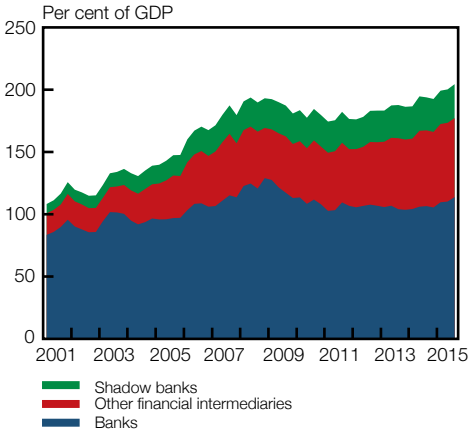
Measured as a percentage of GDP, the assets related to shadow banking activities have been expanding at a relatively slow pace, from 24 per cent of GDP in 2008 to 27 per cent of GDP in 2015 (Figure 20). This contrasts with the fast pace observed in the assets held by OFIs. While the shadow banking estimate has increased only marginally when measured in terms of GDP, the composition of the measure has changed over time (Figure 21).[27]

Figure 20 Distribution of total assets between financial intermediaries in South Africa



Sources: ASISA, Financial Services Board and South African Reserve Bank

Figure 21 Assets of banks, other financial intermediaries and shadow banks



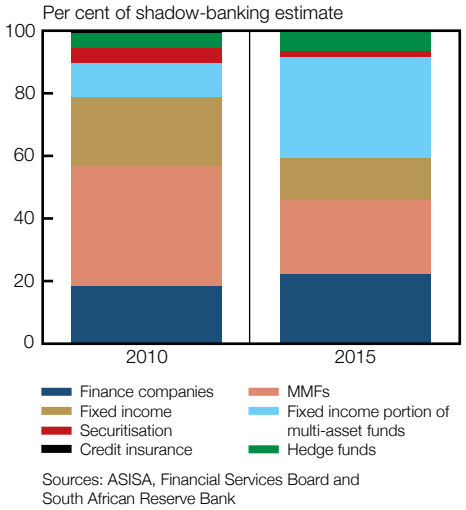
Sources: ASISA, Financial Services Board and South African Reserve Bank

25 Available online at http://www.fsb.org/2013/08/r_130829c/

26 According to the Financial Stability Board's approach. For more information, see the annual shadow banking monitoring exercise report.

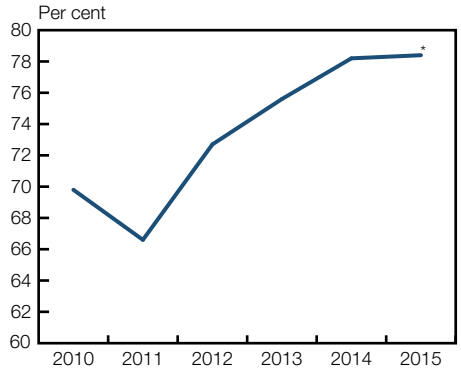
27 The measure for shadow banking is continuously being improved, and it is likely that in future other activities could be included.

Figure 22 Assets of banks, other financial intermediaries and shadow banks



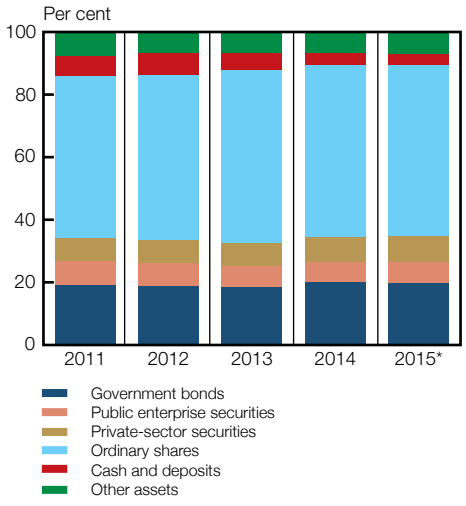
Sources: ASISA, Financial Services Board and South African Reserve Bank

Figure 23 Total assets as a percentage of GDP of the pension and provident fund industry



* September 2015

Figure 24 Investment allocation of pension funds



* September 2015

The fixed-income portion of multi-asset funds has increased from 10,9 per cent of shadow banking activities in 2010 to 32,5 per cent in 2015. In contrast, assets held by money-market funds (MMF) and fixed-income funds decreased. The attraction of multi-asset class funds is that the allocation to the asset classes is left up to the fund manager, and multi-asset funds are able to invest, within certain restrictions, in various asset classes.

Non-bank financial institutions

Pension and provident funds

Assets of pension and provident funds (including both official and private self-administered funds) grew by 4,7 per cent year on year during the third quarter of 2015 (latest available data). For the same period, the significance of the pension fund industry in the domestic economy – as measured by the ratio of assets to GDP – decreased marginally to 78,4 per cent, from 79,9 per cent during the previous quarter. The role played by pension funds in the financial system and the potential impact on the stability of the financial markets come through pension funds' investment behaviour. Both investment of official pension and provident funds in fixed-income securities and in equities increased compared to the previous year.

Total assets as a percentage of GDP of the pension and provident funds industry (including both official and private self-administered funds) increased marginally in the third quarter of 2015 compared to the previous year (Figure 23).

Overall, the investment allocation of the pension and provident funds industry (including both official and private self-administered funds) has remained broadly unchanged in 2015 (Figure 24). Ordinary shares and government bonds account for the biggest share in the portfolio investment allocation of pension funds.

Insurance sector

During the fourth quarter of 2015 the assets of the long-term insurance industry grew at 6,2 per cent year on year (Table 3) and, in relation to the size of the domestic economy, remained fairly stable. Through investment in especially fixed-income securities (both public and private) the long-term insurance companies continued to play an important role in financial intermediation by contributing to liquidity in the financial system.

Table 3 Spread and categorisation of assets of primary long-term insurers (excluding professional reinsurers and insurance companies in runoff)

Kinds of assets	12 months ended December 2013		12 months ended December 2014		12 months ended December 2015	
	R millions	Per cent	R millions	Per cent	R millions	Per cent
Cash and deposits	193 901	9	186 022	7	224 582	8
Government and semi-government	178 194	8	190 478	8	181 219	7
Equities and collective investment schemes	1 470 533	65	1 637 469	65	1 728 878	65
Debentures and loan stock	215 743	9	257 257	10	282 721	11
Immovable properties	49 571	2	49 473	2	49 774	2
Fixed assets	2 367	0	2 153	0	1 881	0
Debtors	133 930	6	147 790	6	151 173	6
Other assets	33 909	1	34 007	1	40 711	1
Total	2 278 148	100	2 504 650	100	2 660 938	100

Source: Financial Services Board

Individual lapses (expressed as a percentage of new policies) decreased from 76 per cent in December 2014 to 72 per cent in December 2015, while individual surrenders (expressed as a percentage of new policies) increased from 10 per cent to 13 per cent over the same period (Figure 25).

Primary long-term insurers[28] maintained adequate capital buffers. Most long-term insurance companies were covered by a free assets-to-capital-adequacy requirement – also referred to as CAR cover – of two to five times (Table 4). Any insurer with a CAR cover below 1 is investigated and corrective measures are taken by the Registrar of Long-term Insurance. There is currently no insurer with a CAR cover below 1.

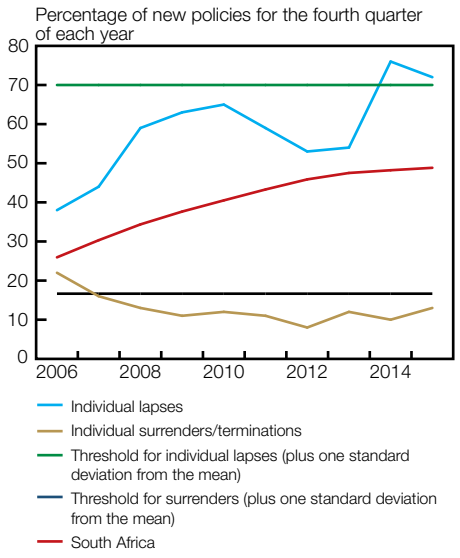
Table 4 Free assets-to-capital-adequacy requirement of all primary long-term insurers

	Number of insurers		
	12 months ended December 2013	12 months ended December 2014	12 months ended December 2015
Covered 0–1 time	0	2	0
Covered 1–2 times	19	23	24
Covered 2–5 times	32	30	30
Covered 5–10 times	11	6	7
Covered 10+ times	3	6	7

Source: Financial Services Board

In December 2015, the net premium income written by the typical short-term insurers[29] increased by 1 per cent when compared to December 2014. The biggest contribution to total net premiums of insurers came from motor vehicle insurance (55 per cent), followed by property insurance (31 per cent).

Figure 25 Individual lapses and surrenders[1] for typical long-term insurers



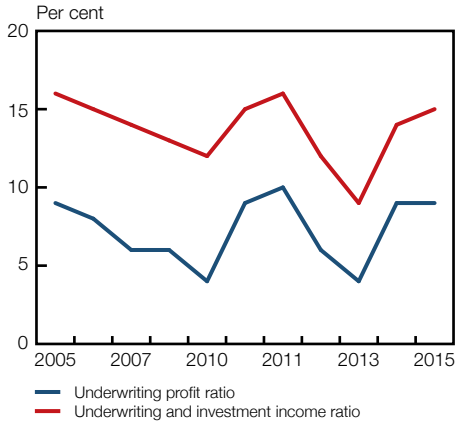
[1] Expressed as a percentage of the number of new policies issued during the period using statistics that were not audited.

Source: Financial Services Board, *Quarterly Report on the Results of the Long-term Insurance Industry*, various reports.

28 The primary long-term insurance industry includes typical insurers, niche insurers, cell captive insurers, linked investment insurers and assistance insurers, but excludes reinsurers.

29 Typical insurers are those insurers who offer most of the eight classes of business as defined in the Short-term Insurance Act, 1998.

Figure 26 Underwriting results of typical short-term insurers



Source: Financial Services Board

Underwriting results (where underwriting profit is expressed as a percentage of net written premiums) for the typical short-term insurance sector remained constant at 9 per cent in the fourth quarter of 2015 (Figure 26).

Table 5 Performance indicators for typical short-term insurers

Performance indicators	12 months ended December 2013	12 months ended December 2014	12 months ended December 2015
Net premium increase (year-on-year percentage change)	7	12	1
Loss ratio*	66	62	60
Combined ratio*#	91	86	85
Management expenses**	22	22	22
Commission**	8	8	8
Underwriting profit/loss ratio**	4	9	9
Underwriting and investment income ratio**	9	14	15
Capital adequacy ratio cover (median)	1,9	1,7	1,8

* Expressed as a percentage of net earned premium during the period
** Expressed as a percentage of net written premium during the period
# Claims plus commission plus expenses less total investment income as a percentage of net earned premium

Source: Financial Services Board

Confidence in the financial services sector

The weakening economy resulted in a decline in the EY Financial Services Confidence Index to a six-year low of 52 in the fourth quarter of 2015 from 66 in the third quarter. Although confidence in all the segments of the financial sector dropped, the drop in confidence of asset managers was more pronounced and registered its lowest level in 12 years.

Table 6 Financial Services Index and its components

Indices	2014				2015			
	1st qr	2nd qr	3rd qr	4th qr	1st qr	2nd qr	3rd qr	4th qr
EY Financial Services Index	67	61	58	66	73	77	66	52
Retail banking	38	46	50	60	74	67	54	42
Investment banking and specialised finance	73	69	64	89	82	75	92	80
Asset management	77	66	52	33	45	74	36	10
Life insurance	79	64	67	81	92	93	80	74

Source: EY

Non-financial institutions

Growth in credit granted to the domestic non-financial corporate sector accelerated further in the fourth quarter of 2015 (Table 7). The strong credit growth was mainly driven by an increase in general loans and advances and, to a lesser extent, mortgage advances.

Corporate sector profitability, as measured by the net operating surplus, contracted markedly in the third and fourth quarters of 2015. The poor profitability of corporates has been fuelled by slowing domestic and global growth prospects, falling commodity prices, severe drought conditions (see Box 2), weaker domestic demand conditions and higher average unit costs. Increasing inflation, coupled with a deteriorating exchange rate, could put further pressure on corporate profitability. Despite the fall in corporate profits, growth in corporate deposits increased in the fourth quarter of 2015 to 10,8 per cent year on year from 7 per cent in the third quarter. The concurrence of the movements in corporate deposits and profits is indicative of the low domestic business confidence (Table 8).

Table 7 Selected indicators for the corporate sector

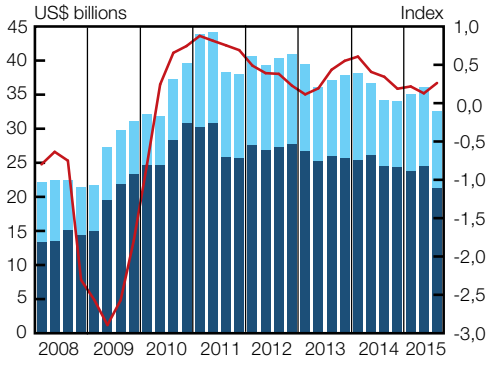
Annual percentage change, unless indicated otherwise

Performance indicators	2014	2015			
	4th qr	1st qr	2nd qr	3rd qr	4th qr
Bank credit granted[1]	13,2	13,7	10,9	11,2	14,1
Gross fixed capital formation[2]	1,6	3,0	4,4	3,9	3,3
Credit as a percentage of GDP	40,1	42,6	42,8	44,4	45,6
Credit as a percentage of annualised profits[3]	202,0	218,7	187,9	218,2	243,1
Net operating surplus[4]	-2,6	-2,0	-1,0	-7,3	-5,5
Deposits	5,4	7,1	8,5	7,0	10,8

1 Bank credit to the corporate sector in this case includes instalment sale and leasing finance, mortgage advances, overdrafts, credit card debtors, and other loans and advances
2 At current prices (seasonally adjusted)
3 Bank credit to the corporate sector and net operating surpluses of corporations were used as proxies for corporate debt and for corporate profits respectively
4 Gross operating surplus minus depreciation (seasonally adjusted rates)

The growth in credit along with rising interest rates has resulted in higher interest payments for corporates. Furthermore, the continued contraction in corporate earnings has made it more difficult for corporates to meet rising debt obligations. While the financial health of domestic corporates deteriorated in the fourth quarter of 2015, the Experian Business Debt Index (BDI) is still positive but decreased to 0,082 index points from 0,263 index points in the third quarter.[30] As expected, given the contraction in operating surpluses of corporates, growth in gross fixed investment by the private sector also moderated in the fourth quarter of 2015 to 3,3 per cent year on year from 3,9 per cent year on year in the previous quarter. Aside from the recent macroeconomic developments, including falling commodity prices, low business confidence and decreased expectations of future profitability, companies have been holding back on investing in additional capacity amid subdued demand, an uncertain domestic policy environment, the rising cost of credit and the current tax structure.[31]

Figure 27 Non-financial corporates' domestic debt securities, international debt securities and the Experian Business Debt Index[1]



[1] For the Experian Business Debt Index 0 is the base, > 0 indicates improving business conditions and < 0 shows deteriorating business conditions.

Sources: Bank for International Settlements, debt securities statistics and Econometrix

30 The Experian Business Debt Index is a measure of the debt stress experienced by domestic corporates. For the BDI, 0 is the base, >0 indicates improving business conditions and <0 shows deteriorating business conditions.

31 Bureau for Economic Research, *Manufacturing Survey*, Stellenbosch: Bureau for Economic Research, September 2015.

Table 8 Business confidence index[1]

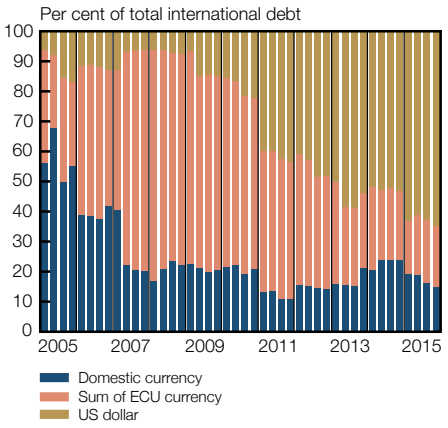
Indices	2014	2015			
	4th qr	1st qr	2nd qr	3rd qr	4th qr
Business confidence index	51	49	43	38	36
New vehicle dealers' confidence	30	44	23	27	19
Retail traders' confidence	55	60	52	34	40
Wholesale traders' confidence	60	61	64	50	47
Building contractors' confidence	66	49	48	45	39
Manufacturers' confidence	42	30	29	34	34

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

Source: Bureau for Economic Research, Stellenbosch University

Business confidence continued to deteriorate in the second half of 2015, falling by a further 2 index points to 36 index points in the fourth quarter of 2015 (Table 8). This indicates that only 36 per cent of the firms surveyed are satisfied with the current business conditions. The fall was driven by a decrease in the new vehicle dealers', building contractors' and wholesale traders' confidence subcomponents, falling by 8 index points, 6 index points and 3 index points respectively. The weak domestic economic environment, rising interest rates and higher inflation have affected sales volumes of vehicles, thus causing the fall of new vehicle dealers' confidence. Further, while retail traders' confidence increased by 6 index points in the fourth quarter, it is still at a low of 40 index points. Unfavourable domestic conditions continued to affect the retail sector's sales volumes and overall profitability. The depreciation of the rand and expected rise in food and fuel prices could further affect retail sales volumes and profitability. Manufacturing confidence was unchanged at 34 index points as higher domestic sales compensated for slower export growth. Given the correlation between the business confidence and investment, the continued fall in confidence could have adverse effects on real economic developments and thus financial stability.

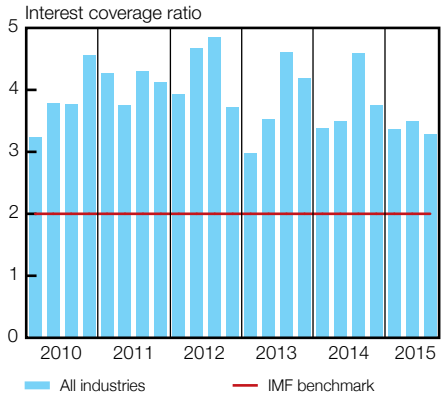
Figure 28 Non-financial corporates' international debt securities by type of currency



Source: Bank for International Settlements, debt securities statistics

The development of local debt markets and the increased access to international debt markets for South African corporates has reduced the concentration of risk in the banking sector. Since the beginning of 2015, there has been an increase in the issuance of both domestic and international debt securities. The growing importance of the international securities market to South African corporates (Figure 28) has also increased the exposure they have to international shocks. Furthermore, while these instruments provide an opportunity to corporates to raise money for large capital projects, the increased leverage has not translated into higher profits or substantial increases in investment (Table 7). The rising importance of the international debt securities market is a cause for concern for financial stability as rising domestic and international interest rates and the recent depreciation of the rand will increase the burden of servicing these types of debt and affect corporates' ability to manage debt. This is shown by the decrease in the BDI (Figure 27) since the beginning of 2014.

Figure 29 Non-financial corporate sector: aggregate interest coverage ratio[1]



1 Excluding public administration, defence activities and education

Sources: Statistics South Africa, International Monetary Fund and researchers' computations

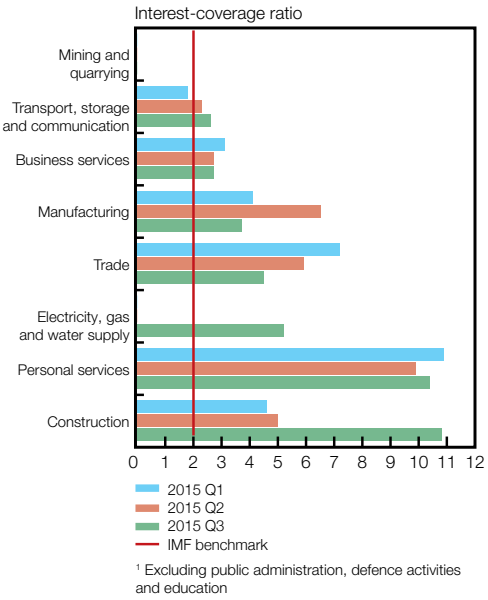
Similar to a number of other emerging markets, South African corporates have increased leverage by borrowing increasingly in foreign currencies. The value of international debt securities issued by corporates has accelerated since the beginning of 2015, and of the US$11,1 billion outstanding international debt securities issued by South African non-financial corporates in the fourth quarter of 2015, 14,7 per cent was local currency denominated, 20,4 per cent was euro denominated and 64,9 per cent was US dollar denominated (Figure 28). US dollar-denominated debt has been increasing since 2009, while debt denominated in domestic currency and euros has been gradually decreasing. The rise in foreign currency denominated debt can be a cause for concern as it exposes domestic borrowers to additional risks, such as exchange rate volatility.

A firm's ability to generate cash flows to finance its interest expenses on outstanding debt can be determined by estimating an interest coverage ratio (ICR). This is done by dividing a firm's earnings before interest and taxes (EBIT) by its annual interest expenses. According to a benchmark used by the International Monetary Fund (IMF), 'weak firms' are identified as those with an ICR below 2. For South African corporates (Figure 29), this metric decreased to 3 in the first three quarters of 2015. Although it remains above the IMF benchmark, thereby indicating that South African corporates generate enough cash to service their interest commitments, their ability to do so has deteriorated. Given the current tightening interest rate cycle and subdued economic growth (both domestically and abroad), corporates could be challenged financially in the near future.

At an economy industry level (Figure 30), the mining and quarrying industry is the only industry that recorded an ICR below the benchmark of 2 in the third quarter of 2015. Half of the industries recorded lower ICRs for the third quarter of 2015. Therefore, while corporates in these industries have generated enough cash to service their debt, they seem to be more constrained as subdued domestic and international economic growth prospects have negatively affected their net profits. The electricity, gas and water supply industry had an ICR well above the benchmark for the first time since the third quarter of 2014. The reason for this improvement is an increase in net profits of the industry as the electricity tariff increases for the 2015/16 financial year came into effect in the second quarter of 2015.

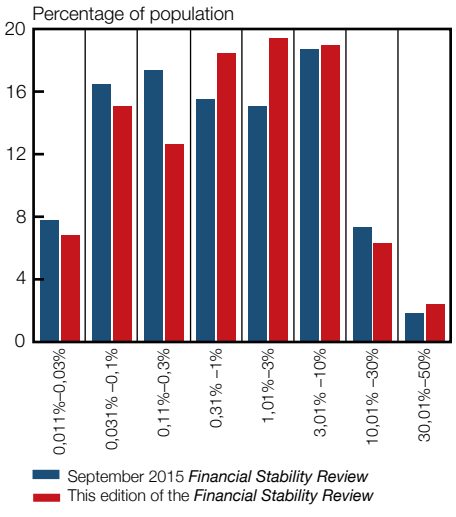
The expected default frequency (EDF) of a firm measures the probability that a firm will default within a given time horizon by failing to make an interest or principal payment. Higher market values serve as an incentive and generate the ability for equity holders to pay the debt obligations of a firm by selling its assets to raise cash or by issuing additional debt or equity. Therefore, the value of a firm's assets and liabilities drives the EDF of that firm. In general, an EDF measures the probability that a firm's future market value will be insufficient to meet its future debt obligations. Over 70 per cent of South African corporates have EDFs below 3 per cent (Figure 31), meaning that there is a less than a 3 per cent chance that these corporates will not be able to honour their debt obligations in the following year (given a one-year EDF). Therefore, out of the 206 South African companies included in the portfolio, 149 of them have EDFs of 3 per cent or less. As can be seen in Figure 31, the distribution of EDFs has shifted to the right since the September 2015 *Financial Stability Review*, as a higher percentage of firms recorded higher EDFs than before. Therefore, more South African companies are now more likely to have financial difficulties.

Figure 30 Non-financial corporate sector: sectoral interest coverage ratio[1]



[1] Excluding public administration, defence activities and education

Figure 31 Non-financial corporate sector: EDF distribution of South African incorporated firms



Source: Moody's Analytics; CreditEdge

Of particular concern is that 5 per cent of companies have an EDF higher than 30 per cent. South African non-financial corporates have an average one-year EDF of 3,58 per cent.

Households

Growth in households' disposable income remained at 5,6 per cent year on year in the fourth quarter of 2015 (Table 9). This is in line with the BankServAfrica Disposable Salary Index, which also shows that the average take-home salaries moderated in 2015. This trend can be attributed to increased personal income taxes, continued low employment growth in the formal sector and sluggish domestic economic growth. Growth in households' net wealth, total assets and financial assets have remained low for most of 2015. According to the Momentum South African Household Wealth Index,[32] households' financial assets have been negatively affected by a decline in the real value of financial investments in shares listed on the JSE and a slowdown in house price growth in 2015. Lower growth in disposable income is also reflected in the continued fall in savings.

Table 9 Selected indicators for the household sector

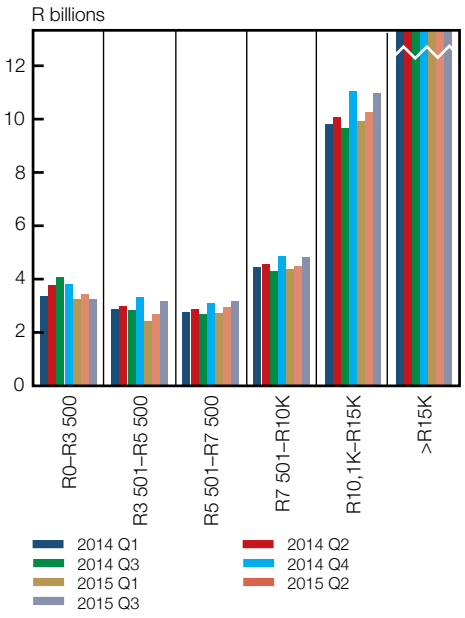
Annual percentage change, unless indicated otherwise

	2014	2015			
	4th qr	1st qr	2nd qr	3rd qr	4th qr
Disposable income	7,1	5,5	6,2	5,6	5,6
Financial assets	8,9	10,6	4,1	3,2	3,9
Total assets	8,7	10,2	4,7	3,5	4,4
Net wealth[1]	9,4	11,3	4,5	3,0	4,1
Consumption expenditure	1,2	1,6	1,6	1,6	1,6
Consumption expenditure to GDP	60,2	60,2	61,1	61,3	60,8
Capital gearing[2]	18,1	17,8	18	18,4	18,4
Credit extension	3,6	3,6	3,5	4,3	4,5
Mortgage advances extended to households	2,3	2,7	2,8	3,8	4,4
Mortgage debt as a percentage of household disposable income	37,2	37,4	36,8	37,0	36,8
Savings as a percentage of disposable income	-2,2	-2,3	-2,3	-2,3	-2,4
Debt as a percentage of disposable income	77,8	78,5	77,8	78,0	77,8
Debt to GDP	45,8	46,2	46,5	46,8	46,2
Debt-service cost of household debt	16,1	12,0	11,0	11,8	10,4
Debt-service cost as a percentage of disposable income	9,3	9,4	9,4	9,6	9,7
Debt	5,7	5,2	5,7	5,7	5,6
FNB Household Debt-Service Risk Index	5,96	6,02	5,99	6,06	na

1 Household net wealth is defined as total assets of households less total financial liabilities
2 Capital gearing' refers to household debt as a percentage of total assets of households. Data are preliminary.

Sources: South African Reserve Bank and First National Bank

Figure 32 Credit extended to consumers by gross monthly income level



Source: National Credit Regulator, *Consumer Credit Market Report*, third quarter, September 2015

Growth in household debt moderated slightly to 5,6 per cent year on year in the fourth quarter of 2015, but the low growth in household income coupled with increasing interest rates have put more pressure on household finances. Furthermore, the persistent high levels of debt faced by households have made them particularly vulnerable to economic downturns and interest rate or income shocks. The vulnerability of households to interest rate or economic shocks is also substantiated by the deterioration in the First National Bank (FNB) Household Debt-Service Risk Index.[33]

32 Momentum and Unisa, summary South African Household Wealth Index, Q3 2015.

33 The FNB Household Debt-Service Risk Index is compiled from three variables, namely the debt-to-disposable-income ratio of the household sector, the trend in the debt-to-disposable-income ratio, and the level of interest rates relative to long-term average (five-year average) consumer price inflation.

The index, currently at 6,06 index points (Table 9), remains above the key level of 5,5 index points, and indicates that households still fall within the 'high-risk range'.[34]

Credit extended to households, which increased in the fourth quarter of 2015 to 4,5 per cent year on year, was driven mainly by an acceleration in the growth of general loans and advances and overdrafts. Mortgage advances to households increased by 4,4 per cent year on year in the fourth quarter of 2015 from 3,8 per cent. According to the National Credit Regulator,[35] the rejection rate by lenders decreased to 52,7 per cent in the third quarter of 2015 from 56 per cent in the second quarter, and the applications for credit decreased by 2,4 per cent in the third quarter, signalling a fall in demand for credit.

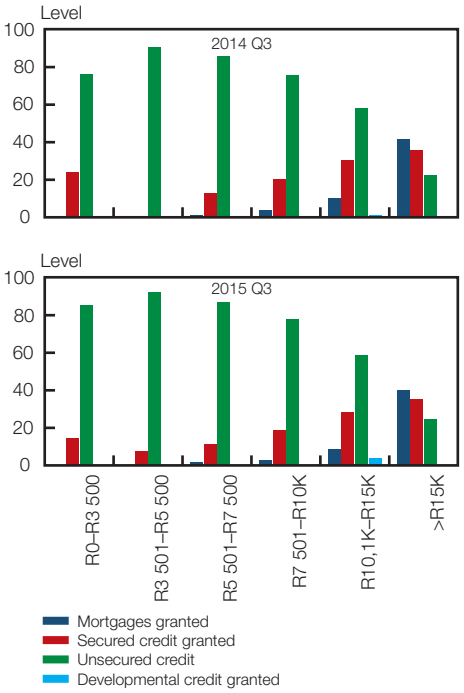
Consumers with relatively higher gross monthly incomes accounted for the largest share of total credit granted (Figure 32). The lowest-income consumers represented only 2,7 per cent of total credit granted in the third quarter of 2015 (latest available data). Furthermore, credit granted to the lower-income consumers has decreased since the third quarter of 2014, while all other income categories have recorded an increase in credit. More than 78 per cent of credit held by consumers is held by those consumers who earn more than R15 000 per month.

Higher-income earners generally have higher credit, but the majority of credit is secured. In the third quarter of 2015, 40,2 per cent of the total credit granted to consumers who earned more than R15 000 was made up of mortgages, while only 11 per cent was made up of unsecured credit (Figure 33). Total unsecured credit continues to make up the majority of total credit to lower-income earners. The percentage of total unsecured credit to total credit granted has increased since the third quarter of 2014 for all categories of income earners, but for those earning less than R3 500 per month, it now represents 85,5 per cent of total credit and 50 per cent for all earning less than R15 000 per month.

While household debt as a percentage of disposable income has gradually decreased since its peak of 88,8 per cent in the first quarter of 2008, household debt levels have remained high, failing to fall back to levels seen before the international financial crisis. Further, regardless of the gradual decrease in debt compared to income since 2013 (Figure 34), household debt-service costs have risen. This could be attributed to the rise in interest rates following the upward interest rate cycle applied by the Bank.

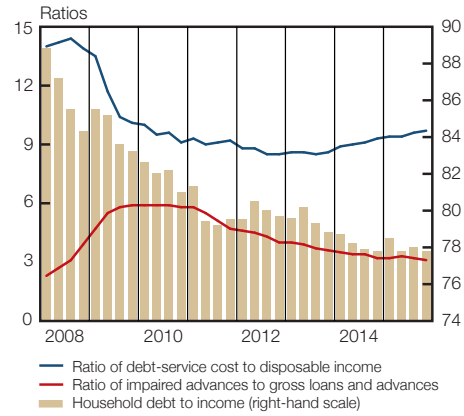
The MMI Unisa Consumer Financial Vulnerability Index (CFVI)[36] showed that while credit to households accelerated in 2015, consumers continued to view their financial situation as 'mildly exposed', with the index lowering to 50,9 index points (Figure 35) in the fourth quarter of 2015 from 52,7 index points in the first quarter. Futhermore, while this was an improvement from the 46 index points recorded in the third quarter of 2015, consumers remain on the verge of becoming financially 'very exposed'.[37] The increase in the CFVI in the final quarter was mainly driven by the fact that consumers became more secure with regard to their income.

Figure 33 Credit extended to consumers by type of credit and gross monthly income level



Source: National Credit Regulator, *Consumer Credit Market Report*, third quarter, September 2015

Figure 34 Household debt and impaired advances



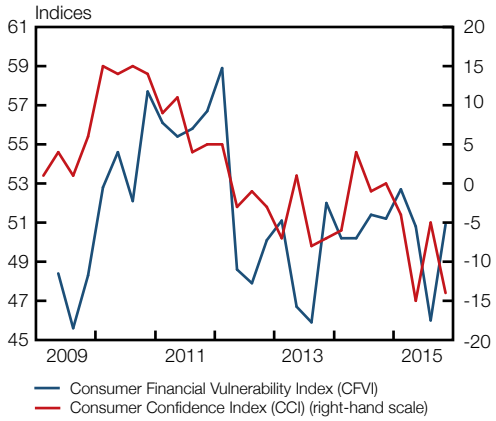
34 An index can very between 1 and 10. 1–3,4 means 'low risk', 3,5–5,4 means 'medium risk' and 5,5–10 means 'high risk'.

35 *Consumer Credit Market Report*, third quarter, September 2015.

36 Compiled by MMI Holdings and the Bureau of Market Research, Unisa.

37 Refer to Figure 35 for an explanation of the measurement scale.

Figure 35 Consumer Financial Vulnerability Index[1] and the Consumer Confidence Index[2]

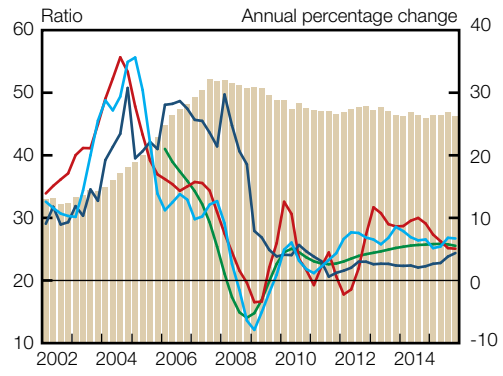


[1]0–20 means 'financially very vulnerable', 20–39,9 'financially vulnerable', 40–49,9 'financially very exposed', 50–59,9 'financially mildly exposed', 60–79,9 'financially secure' and 80–100 'financially very secure'.

[2]The consumer confidence index is expressed as a net balance between optimistic and pessimistic consumers. According to the Bureau for Economic Research (BER) at the University of Stellenbosch, the index can vary between -100 for 'extreme pessimism' and 100 for 'extreme optimism', with 0 being 'neutral'.

Sources: MBD Credit Solutions; Bureau of Market Research, Unisa; FNB/BER, Stellenbosch University

Figure 36 House price indices and mortgage advances



Sources: South African Reserve Bank, Absa Bank Limited, First National Bank and Lightstone Property

For the year, the fall in the index was driven by a 2,3 per cent and 1,7 per cent deterioration in the income and debt-servicing vulnerability scores respectively, showing that consumers experienced a larger burden on their cash flow, bringing them closer to being classified as financially 'very exposed'. While all the other sub-indices are categorised as 'mildly exposed', the debt-servicing vulnerability index continues to be categorised as very exposed, making households' debt servicing ability their biggest concern.

After recovering in the third quarter of 2015, the First National Bank/ Bureau for Economic Research (FNB/BER) Consumer Confidence Index (CCI) decreased drastically in the fourth quarter of 2015 to -14 index points from -5 in the third quarter of 2015. All sub-indices of the CCI declined in the fourth quarter with respondents regarding the time to buy durable goods recording the largest decline of 12 index points to -21 index points (the lowest value since the 2008/09 recession). This means that more respondents expect a further deterioration in the domestic economic situation in the next 12 months. The deterioration in all sub-indices shows that consumers not only feel constrained by their current conditions but they also expect future conditions to continue to deteriorate. While households continued to be pressured by high unemployment levels, higher interest rates and rising inflation, domestic developments, including student protests, the depreciation of the rand exchange rate, drought conditions and water restrictions in some areas contributed to the steep decline in consumer confidence in the fourth quarter of the year. Furthermore, while lower to middle-income households recorded the lowest consumer confidence levels, high-income consumers experienced the largest deterioration in confidence (a fall of 15 index points to -14 index points). This indicates that they too have become more concerned about their financial prospects. Such a drastic deterioration in consumer confidence suggests that consumers' willingness to spend (financed either through borrowing or using cash reserves) has declined, which could also have adverse effects on the country's future economic growth and financial stability prospects.

Residential real estate

Housing market trends and developments also serve as an indicator of financial system health and confidence in the economy. Not only does residential housing make up approximately 24 per cent of households' total assets, mortgage advances is the biggest component (about 58 per cent) of banks' total credit to households. Therefore, any fluctuations in house prices tend to have an impact on the balance sheets of both households and banking institutions.

A common interpretation of the link between real-estate markets and the household sector is that mortgage lending could drive house prices up, especially in the presence of inelastic housing supply. Yet, mortgage lending can also be driven by rising house prices through the wealth and collateral channels. When house prices increase, home owners may perceive themselves as wealthier, inducing them to borrow and spend more. For South Africa, mortgage loan growth has been persistently low, failing to grow by more than 4 per cent since the end of 2010, and this has played an important part in keeping house price growth relatively flat. However, there was an increase in mortgage advances granted to households in the second half of 2015 but this has not translated into an acceleration in house price growth. On average, house prices grew by 5,8 per cent year on year in the last quarter of

2015, down from 5,9 per cent[38] year on year in the third quarter, while growth in mortgage advances increased to 4,4 per cent year on year from 3,8 per cent (Figure 36). Tighter monetary policy conditions, lacklustre economic activity, subdued consumer confidence and high unemployment could continue to impact negatively on house prices.

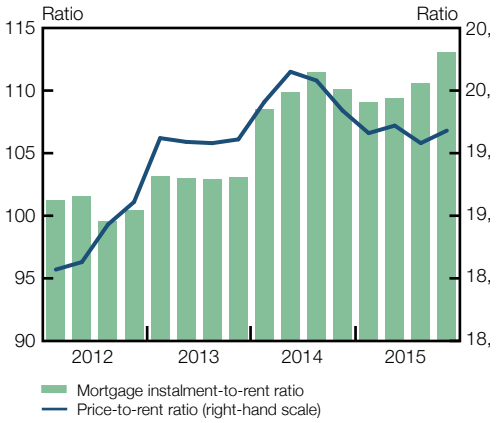
The mortgage instalment-to-rent and price-to-rent ratios depicted in Figure 37 indicate the affordability and profitability of owning residential property in South Africa. The mortgage instalment-to-rent ratio has increased since the beginning of 2015, indicating that it has become less profitable to own property. The higher cost of financing property helps explain the slow growth in house prices. Furthermore, the price-to-rent ratio increased in the last quarter of 2015, indicating that it has become relatively cheaper to rent than to buy property. This is expected given that rental prices[39] have moderated at a faster rate than house prices.

The FNB/BER Building Confidence Index[40] rose for the first time since the last quarter of 2014, increasing to 48 index points in the final quarter of 2015 from 44 index points the previous quarter. This was due to a rise in four of the six subcomponents. The confidence index is close to 50 index points, implying that respondents are neither overly optimistic nor overly pessimistic about prevailing business conditions. The rise in confidence was mainly driven by a noticeable increase in residential building activity and higher retail sales of building materials. On the downside, however, non-residential contractor confidence fell by 17 index points, marking the lowest level of confidence since the fourth quarter of 2012. This can be explained by the sharp slowdown in non-residential building activity. Despite the rise in overall building confidence, the fact that fewer than 50 per cent of the respondents are satisfied with their current business conditions has discouraged residential and non-residential building activity.[41]

Government finances

Since the latter part of 2008, total loan debt of national government has maintained a gradual upward trend, with domestic debt contributing about 90 per cent of total debt by December 2015 (Figure 38). The annual growth rate of government debt, however, continued to moderate to 11,7 per cent in December 2015 from 15,2 per cent in December 2014. Total loan debt of national government as a percentage of GDP increased from 47,1 per cent at the end of 2014 to 50,1 per cent in the fourth quarter of 2015. In view of fiscal sustainability and faster fiscal consolidation, government expects this debt as a percentage of GDP to stabilise at 46,2 per cent in 2017/18 and to reduce the budget deficit from 3,9 per cent at the start of 2016, to 3,2 per cent and 2,6 per cent of GDP in the following two fiscal years. This will be achieved mainly through tightening government spending, by not filling non-essential civil servant positions and increasing wealth taxes.[42]

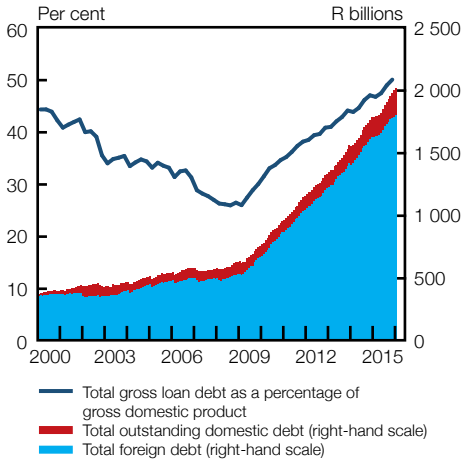
Figure 37 Mortgage instalment-to-rent and price-to-rent[1] ratios



[1] A ratio of 6–15: more affordable to buy, 16–25: renting less expensive but buying might be better, 26–35: more affordable to rent

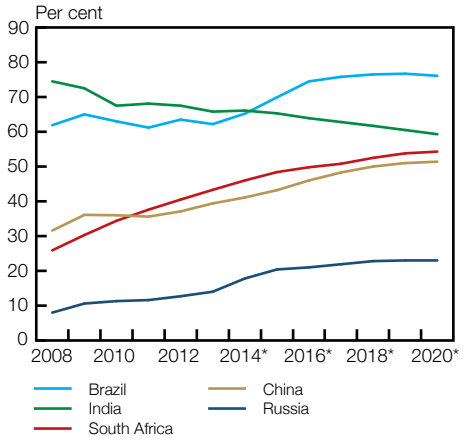
Sources: Absa Bank Limited, Statistics South Africa and South African Reserve Bank computations

Figure 38 Loan debt of national government



Source: South African Reserve Bank

Figure 39 General government debt-to-GDP ratios of BRICS countries



*Data after 2014 are International Monetary Fund forecasts

Source: International Monetary Fund

38 Calculated by taking the average of all three house price indices' growth rates.

39 Rental prices have decreased to 5,92 per cent year on year in the fourth quarter of 2015 from 7,90 per cent year on year.

40 The FNB Building Confidence Index measures the business confidence of all the major role players and suppliers involved in the building industry such as architects, quantity surveyors, contractors, sub-contractors, retail merchants, and manufacturers of building materials. The index is compiled quarterly from the building, manufacturing, retail and wholesale opinion surveys undertaken by the BER at Stellenbosch University. FNB/BER Building Confidence Index, Johannesburg: FNB/BER, 17 September 2014.

41 Statistics South Africa, S*elected building statistics of the private sector as reported by local government institutions*, December 2015.

42 National Treasury, *Budget Review*, 24 February 2016.

Figure 40 Public debt holding by domestic financial institutions

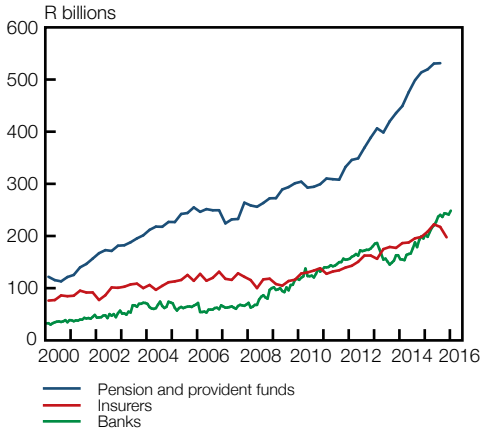
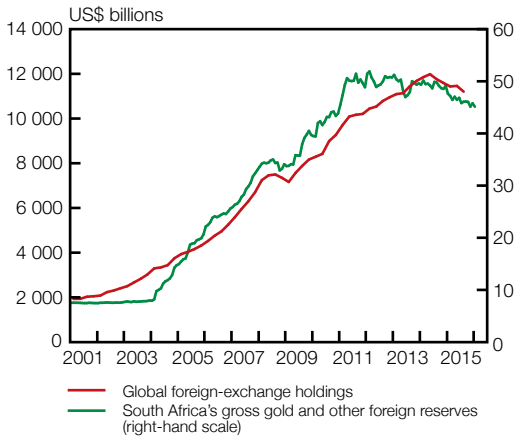


Figure 41 Domestic versus global foreign reserve holdings



Compared to other BRICS countries (Brazil, Russia, India and China), South Africa had the third-highest estimated general government debt-to-GDP ratio (Figure 39) at the end of 2014.

Pension and provident funds remain the biggest holders of government debt as government debt has been rising since 2008 and demand for government debt remains high (Figure 40). During the third quarter of 2015, pension and provident funds held more than R530 billion worth of government debt. Domestic commercial banks held R248,5 billion in government bonds in January 2016, while insurers held R197,5 billion.

In the 2016 *Budget Review* concerns were raised regarding investors' view on South Africa's fiscal integrity amid reports of a possible sovereign credit rating downgrade to below investment grade. Moody's Investors Service and S&P both kept their sovereign rating unchanged at investment grade, but changed their outlook from 'stable' to 'negative' during December 2015. Sluggish global and domestic growth, low business confidence levels and political pressure were cited as reasons for the change in the outlook. Moody's also announced that South Africa is under review for a possible downgrade, pending the outcome of a visit to the country and interaction with government. Fitch Ratings, however, downgraded South Africa and assigned an outlook of 'stable' in the same month, offering some of the same reasons, but also mentioning the continued increase in government debt, a persistent current-account deficit and slow implementation of the National Development Plan as additional motivations.

Table 10 Sovereign debt ratings for South Africa

Agencies	2014	2015			
	4th qr	1st qr	2nd qr	3rd qr	4th qr
Moody's Investors Service	Baa2 Stable	Baa2 Stable	Baa2 Stable	Baa2 Stable	Baa2 Negative
Standard & Poor's	BBB- Stable	BBB- Stable	BBB- Stable	BBB- Stable	BBB- Negative
Fitch Ratings	BBB Negative	BBB Negative	BBB Negative	BBB Negative	BBB- Stable

Sources: Moody's Investors Service, Standard & Poor's and Fitch Ratings

Adequacy of foreign-exchange reserves

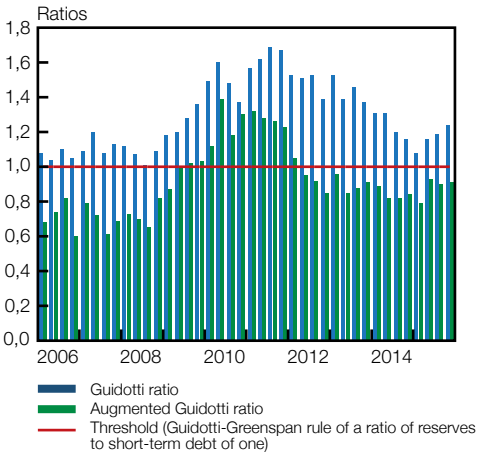
The general trend of increasing global reserve accumulation seems to have peaked at the end of June 2014 and has since been on a downward trend. China's intervention in the foreign-exchange market played a role in the recent slowdown in global reserve accumulation, but the declining oil prices, sanctions against Russia, worsening capital inflows in some EMEs and the general high cost of keeping reserves also contributed to this trend. South Africa's accumulation of foreign-exchange reserves has followed a similar pattern (Figure 41).

The Guidotti ratio[43] (GR) increased in all four quarters of 2015, recording a level of 1,24 in the fourth quarter, which is the highest level since the second quarter of 2014. The increase could mainly be attributed to negative growth in short-term foreign debt of -12,8 per cent year on year and a contraction of 6,8 per cent in foreign-exchange reserves. Should access to foreign-exchange markets suddenly reduce, the level of the GR implies that there should be sufficient funding to service short-term external debt due within the ensuing twelve months.

The augmented GR (AGR), recorded a slight increase from 0,90 in the third quarter to 0,91 in the fourth quarter. The AGR is calculated by extending the GR to take into account the current account (as a proxy for total external financing needs) and gives a more comprehensive picture of possible capital flight. At 0,91 the AGR suggests that existing foreign-exchange reserves were about 9 percentage points below the country's total external financing needs.

The import cover ratio increased to 5,33 months in the fourth quarter from 4,94 months in the third quarter, and the international reserves to broad money (M2) ratio was 29,24 per cent at the end of December 2015. Official reserves increased to around US$45,8 billion in December 2015 and then shrank to US$45,1 billion in January 2016. This is still relatively low compared to many other emerging-market countries, but much higher than a decade ago and still robust given that South Africa adheres to a free-floating exchange rate regime.

Figure 42 Reserve adequacy for South Africa



43 The Guidotti–Greenspan rule states that a country's reserves should equal short-term external debt (maturity of one year or less), implying a ratio of reserves to short-term debt of 1.

Box 1: Update on developments relating to selected financial institutions

Update on Barclays Plc's intention to reduce its stake in Barclays Africa Group Limited

On 1 March 2016, Barclays Plc (Barclays) announced its intention to reduce its shareholding in Barclays Africa Group Limited (BAGL) from 62,3 per cent to below 20 per cent over the next two to three years, to a level that would permit it to deconsolidate from an accounting and regulatory perspective. Barclays highlighted that the aforementioned reduction was subject to shareholder and regulatory approvals in each jurisdiction.

Barclays indicated that a key consideration that had driven the need for a reassessment of its investment in BAGL relates to global regulatory pressures. The return on equity at group level is significantly reduced because of the additional capital and other regulatory requirements a large global bank such as Barclays needs to meet, for example the global systemically important bank (G-SIB) buffer, the minimum requirement for own funds and eligible liabilities (MREL), total loss-absorbing capital (TLAC) requirements and the United Kingdom (UK) Bank levy. Barclays has an additional 2 per cent capital requirement buffer as a G-SIB, which results in Barclays's shareholders receiving a lower return on capital compared to direct investors in BAGL. The TLAC requirements could require Barclays to issue disproportionate levels of TLAC compared to its holding in BAGL.

The above-mentioned aspects imposed on G-SIBs are as a result of mitigating the too-big-to-fail concept that was seen as a significant risk to the global financial system by the Financial Stability Board.

Barclays has been in regular contact with both National Treasury (NT) and the South African Reserve Bank (the Bank) on the matter and has committed to implementing the new strategy in a way that minimises the impact on the economies in which BAGL operates. The Bank will work with Barclays and BAGL to ensure that any potential risks from the transaction are mitigated and to ensure appropriate measures are taken to manage capital flows arising from the transaction.

Update on African Bank

Significant progress has been made towards the implementation of the resolution plan of African Bank Limited (African Bank). As reported in the September 2014 *Financial Stability Review*, the resolution plan announced in August 2014 entails the creation of a new bank (Good Bank) which will house the performing loans and other assets of African Bank. In this regard, Good Bank submitted the application to establish a bank in terms of section 12 of the Banks Act 94 of 1990 (Banks Act) which was granted in 2015 after following due process. Accordingly, Good Bank submitted its application for registration as a bank in terms of section 16 of the Banks Act as well as the application to register a bank controlling company in terms of section 43 of the Banks Act. After following due process, approvals to register a bank and a bank controlling company were granted.

At the time of the announcement of the resolution plan, it was contemplated that the current shareholders of African Bank Investments Limited (ABIL) would be offered a preferential right to participate in the capitalisation of the new holding company. Recognising the many challenges facing the delivery of the resolution plan, it was later concluded that an immediate initial public offering of new holding company shares was not appropriate. Instead, it was proposed that the consortium of banks, the Public Investment Corporation and the Bank will provide the full R10 billion of equity required by the new holding company of the new African Bank.

After an extensive review, a decision was taken to retain the name of African Bank for Good Bank and change the name of the existing African Bank to Residual Debt Services Limited. All the performing assets and other assets of the existing African Bank will be transferred to the new African Bank, which is planned to commence operations on 4 April 2016. The non-performing assets will remain in the existing African Bank for collection, which will remain under curatorship until the 'run-down' of the book. A new Board of Directors (Board) was appointed during 2015, consisting of a chairperson, chief executive officer, chief financial officer and five non-executive directors, and this Board assumed responsibility for the new African Bank with effect from 4 April 2016.

Old Mutual managed separation

Old Mutual has decided that the long-term interests of Old Mutual shareholders and other stakeholders will be best served if Old Mutual separated its four businesses – Old Mutual Emerging Markets (OMEM), Nedbank Group, Old Mutual Wealth (OMW) and Old Mutual Asset Management (OMAM).

Old Mutual Plc is intending to reduce its majority (54 per cent) shareholding in Nedbank Group Limited (Nedbank). However, it does not intend to sell any part of its shareholding in Nedbank to a new strategic investor. The remainder of the Nedbank shareholder base will be widely held by the time the Old Mutual managed separation has been completed.

Furthermore, during the period of the managed separation, Old Mutual Plc would like to reduce its current debt materially, mainly through asset disposals over time.

The separation process will involve significant ongoing regulatory and stakeholder engagement. A range of options is available and the feasibility, sequencing and timing of each element will be affected by a mixture of market, regulatory and other factors. Old Mutual intends to update its shareholders later in 2016 on the strategies of the underlying businesses and give greater clarity on its preferred route for the managed separation, and expects that the overall managed separation process will be materially completed by the end of 2018.

Box 2: Food prices and the drought

One of the strongest El Niño events of the past 50 years has pushed Southern Africa into the grip of an intense drought that has expanded and strengthened since the earliest stages of the 2015–16 agricultural season. The weather phenomenon is historically associated with suppressed rains and higher temperatures in large portions of Southern Africa during the main cropping season (October–July), which can adversely affect agriculture, water resources and food security. Drought emergencies have been declared in most of South Africa's provinces as well as in Zimbabwe and Lesotho. Authorities in Botswana, Swaziland, South Africa and Namibia are limiting water usage due to low water levels. Furthermore, lower than usual water levels at the Kariba Dam have caused power outages in Zambia and Zimbabwe.[1]

The rainfall in most southern African countries has been the lowest in decades and 30- to 50-day delays in the onset of seasonal rains has made planting difficult, resulting in widespread crop failure. Despite relief in certain areas since mid-January 2016, according to the Food and Agricultural Organization (FAO) of the United Nations, maize production will be poor over a widespread area, even if rainfall is normal for the remainder of the season (Table A).

Table A Crop production in South Africa

Tons, thousands

	Final crop in 2014	Final crop in 2015	Forecast 2016*
White maize	7 710	4 735	3 196
Yellow maize	6 540	5 220	4 060
Total maize	**14 250**	**9 955**	**7 256**
Sunflower seeds	832	663	687
Soybeans	948	1 070	725

* Second forecast

Source: Department of Agriculture, Forestry and Fisheries

Negative effects of lower domestic crops have spilled over to other parts of the agricultural sector, for example, the drought also impacted negatively on livestock industries that depend on grazing. Animals have died because of too little feed, while producers have also culled their herds due to insufficient grazing and/or high grazing costs.

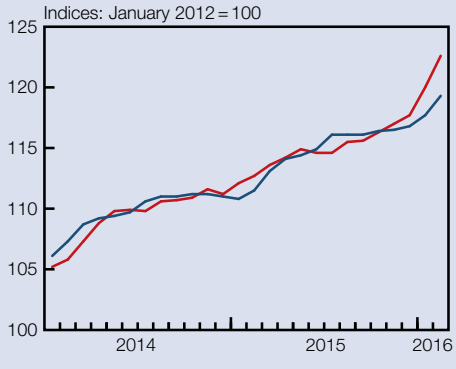
The relative contribution of the agricultural sector to the GDP of South Africa is small yet it continues to play an essential role in the wealth creation of the country, specifically in the rural areas.[2] Falling production in field crops such as maize, sunflowers and sugar cane contributed to the sharp decrease in agricultural activity in the third quarter of 2015,[3] and agricultural output continued to decline in the final quarter of 2015 as dry weather conditions adversely affected field crop production in most areas of South Africa.

Significant quantities of maize and other agricultural products will, as a result, have to be imported in 2016. As South Africa is normally an exporter of agricultural products, the total import volumes expected in 2016 are large. Lower exports and higher imports, specifically of maize, could further increase the current-account deficit of South Africa.[4] The financing required to fund the current-account deficit gives rise to financial stability risks. A sudden slowing of capital flows could aggravate the vulnerability.

Against the backdrop of already below-average production in 2015, the combination of the drought and the weaker exchange rate has already impacted severely on the agricultural commodity prices in South Africa. Food price inflation exceeded that of headline consumer price index (CPI) inflation (Figure A) between November 2015 and January 2016.

Higher food prices could intensify the strain that households are already experiencing. For the banking sector, however, exposure to the agricultural sector is estimated at R125,7 billion and represents only a small part of total banking-sector assets.

Figure A Food price inflation and headline CPI inflation



Source: Statistics South Africa

1 http://www.fao.org/news/story/en/item/382932/icode/

2 CJ Pretorius and MM Smal, 'Notes on the macroeconomic effects of the drought'. available at http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/5187/05Notes%20on%20the%20macro-economic%20effects%20of%20the%20drought.pdf

3 http://www.statssa.gov.za/?p=6135.

4 The current-account deficit increased to R208 billion in the fourth quarter of 2015, from R172 billion in the third quarter.

The robustness of the domestic financial infrastructure

This section reviews developments during the period under review, in the domestic and international financial infrastructure and regulatory environment.

Improving the robustness of the domestic financial infrastructure

This subsection reviews regulatory and legislative developments in the banking, insurance and other financial system infrastructures, and also highlights the harmonisation of the tax treatment of retirement fund contributions and benefits. This is preceded by an update on the proposed Twin Peaks regulatory framework and some important market conduct initiatives being undertaken ahead of the implementation of the framework.

A matter that is receiving increasing attention is that of combating the financing of terrorism (CFT) together with anti-money laundering (AML) measures. Not only has the recent spate of high-profile terrorist activities garnered increasing public concern in some regions of the world, but it has also focused the attention of financial and regulatory authorities around the world. It is a matter that has been addressed at the last Group-of-Twenty (G-20) Leaders Summit in Antalya in November 2015 and the recent G-20 Finance Ministers' and Central Bank Governors' Meeting in Shanghai in February 2016, as well as being the subject of a United Nations Security Council Resolution (UNSCR 2253) in December 2015, which focused on combating terrorist financing. Lax AML/CFT practices have a number of negative consequences for financial systems. One of these potential consequences is the curtailment and cutback of financial services in risky environments. In an EME context, such moves will have a debilitating impact on the growth of financial services and financial inclusion goals. Already, the decline of correspondent banking in some EMEs has, in part, been attributed to correspondent banks' de-risking of their exposures in markets they deem risky. Some steps have already been taken and as the Financial Action Task Force (FATF) and other financial regulatory authorities embark on further and specific initiatives to combat terrorist financing, the Bank will, where necessary, report on these in more detail in future editions of the *Financial Stability Review*.

Twin Peaks update

In the March 2015 *Financial Stability Review* progress on the Financial Sector Regulation Bill 2015 (FSRB) was reported on. The Minister of Finance tabled the FSRB in Parliament on 27 October 2015. It is envisaged that the FSRB will be assented to by the President of the Republic during 2016 with a possible implementation date of 2017. The FSRB also affects other financial services legislation such as the Insurance Bill.

Financial Services Board market conduct regulatory framework

In parallel with its preparations for the implementation of the Twin Peaks regulatory framework, the Financial Services Board (FSB) has been reviewing its market conduct regulatory framework. Two components worth

mentioning in this regard are the Retail Distribution Review (RDR) and Conduct of Business Returns (CBRs). An update of the RDR discussion document was published in December 2015.[44] Against the background of the Treating Customers Fairly (TCF) approach to regulating market conduct in financial services, the RDR discussion document issued in November 2014 proposed far-reaching reforms to the regulatory framework for distributing financial products to customers.

The RDR discussion document proposes 55 specific regulatory objectives. The RDR status update confirms that these proposals would be implemented in three broad phases and aligned to the broader reform of financial regulation in terms of the Twin Peaks regulatory model. In the first phase, changes are meant to be effected within the existing regulatory framework, using existing subordinate legislative and administrative powers before the FSRB comes into force. These proposals are expected to be largely implemented from July 2016 onwards.

The second phase changes will be enabled through the FSRB. The implementation window for such changes is broadly between the effective date of relevant provisions of the FSRB and the effective date of any future market conduct legislation.

Lastly, the third phase changes will involve longer-term structural changes to be implemented once the proposed Conduct of Financial Institutions Act (CoFI Act) is effective. Typically, these changes would be most pragmatic to implement once the harmonisation of existing sector-specific legislation under the CoFI Act, and the revised market conduct licensing framework for financial institutions, are in place. The FSB expects this to happen in 2018.

With particular reference to the insurance sector, the new emphasis on market conduct regulation will introduce the CBRs. The CBRs are designed to provide a wide range of market conduct indicators such as new business arising from replacements and policies terminated.

This will support a more pre-emptive and proactive approach to conduct supervision as contemplated in the TCF Roadmap and the FSRB. The returns to be submitted by the regulated entities will enable the regulator to carry out sufficiently detailed off-site analysis of insurers' business conduct and customer treatment practices. It is proposed that, among other things, these returns should include:

- reporting on key conduct risk indicators;
- quantitative sales and premium information;
- details of remuneration such as commission, binder, outsourcing and other fees; and
- detailed claims information.

Harmonisation of the tax treatment of retirement fund contributions and benefits

With effect from 1 March 2016, NT implemented the Taxation Laws Amendment Act 31 of 2013 in order to harmonise the tax treatment of retirement fund contributions and benefits. The stated aim of the reforms

44 A general update on the status of the *Retail Distribution Review* is found at https://www.fsb.co.za/NewsLibrary/FSB%20Retail%20Distribution%20Review%20General%20Status%20Update%202015.pdf

is to help retirees from provident funds to better manage longevity risk (i.e. the risk of outliving retirement savings when in retirement) and investment risk (i.e. the risk of volatility of market prices in securities), and prevent retirees from spending their retirement assets too quickly and becoming excessively reliant on the government or their families for support. This law allows for a 27,5 per cent tax deduction up to a maximum of R350 000 per annum for all retirement fund contributions.

However, certain provisions of the reform initiative have been postponed to 2018 in order to allow for further stakeholder engagement by NT. In particular, the effective date for provisions related to the requirement to purchase an annuity with respect to provident funds and the tax-free transfer from pension funds to provident funds was rescheduled to 1 March 2018.

Regulatory developments impacting the domestic banking sector

Update on the limitation on fees and interest rates

In the September 2015 edition of the *Financial Stability Review* the proposals of the Department of Trade and Industry (dti) on capping interest rates and fees applicable to credit agreements were explored.[45] Subsequently, on 6 November 2015, the dti gazetted the final regulations on its review of the limitations on fees and interest rates, whereby it left the proposed caps largely unchanged. It was only the cap on the unsecured credit transactions category of credit agreements that were revised upwards by about 2 per cent, resulting in a new cap for this category of 27 per cent based on the prevailing repo rate at the time the final regulations were published.[46] These limitations on interest rates and fees will come into effect on 6 May 2016 and will only affect new credit agreements entered into on or after the effective date.

Revised market risk framework for banks

On 14 January 2016 the Basel Committee on Banking Supervision (BCBS) published its revised standards on minimum capital requirements for market risk of banks.[47] The final standards follow on from the measures introduced to the Basel II.5 market risk framework in 2009[48] to address the most pressing deficiencies which had been exposed during the 2007–08 period of severe market distress and the BCBS's fundamental review of the trading book that resulted in further consultative documents in this regard being released in 2012–14.[49] As the BCBS states, the aim of the revised market risk framework is to ensure that the standardised and internal model approaches to market risk deliver credible capital outcomes and promote consistent implementation of the standards globally.

45 For more details refer to article and boxes on pages 28–30 and 35–36 of the September 2015 *Financial Stability Review*.

46 See *Government Gazette* No. 39379, 6 November 2015.

47 The final standard is titled *Minimum capital requirements for market risk* and it is available on the BIS website at https://www.bis.org/bcbs/publ/d352.pdf.

48 See *Revisions to the Basel II market risk framework* issued in July 2009 and updated in December 2010 (February 2011), also available on the BIS website.

49 For more details on these consultative document go to https://www.bis.org/bcbs/publ/d305.htm

Key elements of the revised market risk framework[50]

While the Basel II.5 reforms included, among other things, provisions to hold additional capital against default risk, ratings migrations and an additional value-at-risk (VaR) capital charge fine-tuned for stressed market conditions (i.e. the 'stressed VaR'), its enhancements did not address all structural shortcomings within the market risk framework. The improvements in the new market risk framework include the following:

- A revised boundary between the trading book and banking book: The boundary between these two regulatory books has been amended to reduce the incentives for a bank to arbitrage its regulatory capital between the banking and trading books, while at the same time respecting banks' risk management practices. In addition, the new framework contains clearer guidance on trading book instruments, capital disincentives and enhanced supervisory powers to limit the transfer of instruments between the banking and trading books.
- A revised internal models approach: The internal models approach has been strengthened in the following three ways: (i) more coherent and comprehensive risk capture by replacing the two VaR measures with a single expected shortfall (ES) metric that takes better account of tail risks, significant financial market distress and market illiquidity; (ii) a more rigorous and granular model approval process that allows supervisors to remove approval for each trading desk; and (iii) constraints on the capital-reducing effects of hedging and portfolio diversification in the internal models approach.
- A revised standardised approach: The new standardised approach remains suitable for banks with limited trading activity and does not require sophisticated measurement of market risk. Key changes to the revamping of the standardised approach to market risk include a closer calibration between the revised standardised and internal model-based approaches, and incorporating risk sensitivities sufficiently to make it serve as a credible fallback as well as a floor to the internal models approach.

These revisions in the new market risk framework are aimed at aligning and calculating inputs to capital charges for market risk for both regulatory books adequately and at reducing the variability of RWAs for market risk.

Impact analysis

The BCBS has conducted impact analyses of the revisions to the market risk framework based on separate quantitative impact studies (QIS). The final calibration work was based on end-June 2015 data. Using that data, the impact analyses determined that the minimum capital required under the final standard will be less than what was required under the previous proposals and account for less than 10 per cent of total RWAs compared to approximately 6 per cent under the current framework. On the whole and compared to the current framework, the analyse point to higher capital requirements when the revised market risk framework is implemented as it is "likely to result in an approximate median increase of 22 per cent and approximate weighted average increase of 40 per cent in total market risk capital requirements (i.e. including securitisation and non-securitisation

50 This section is based on the documents released by the BCBS on the revised market risk framework, unless otherwise stated.

exposures within the scope of the market risk framework)".[51] However, these assessment do not take into account any adjustments that banks would make to manage these risks under the new framework.

Domestic perspective

South African banks have been involved in the development of the new framework through their participation in the QISs as well as the discussion forum provided by the Banking Association South Africa (BASA). The Bank Supervision Department has also had regular engagements with the banks during the supervisory review meetings about the possible impact of the new framework. It is generally expected that there will be a capital increase across all banks. Banks with operations in other parts of the African continent are also in support of a more simplified standardised approach for which the BCBS requested proposals from various affected supervisory authorities. A major cost implication of moving to the new framework will come from the information technology (IT) infrastructure required by banks to implement the new framework. Banks are already exploring and engaging various system vendors for preferred options in this regard.

Conclusion

The revised market risk framework will come into effect on 1 January 2019 and the BCBS has indicated that it will continue to monitor the capital impact of this revised standard. It is a key component of the Basel III reforms and the BCBS's contribution to build strong and resilient financial institutions in the banking sector – a major theme in the global regulatory response to the global financial crisis. Apart from cost implications and implementation challenges, the domestic banking sector is unlikely to be faced with any significant obstacles to meeting this new standard.

Regulatory developments impacting the domestic insurance sector

Update on the Insurance Bill

In the September 2015 edition of the *Financial Stability Review*, developments in the insurance sector were reported on. The draft Insurance Bill proposes a prudential regulatory framework. Other non-prudential insurance-related amendments will be accommodated in the existing long- and short-term insurance acts. Some significant amendments were made to the Insurance Bill after the May 2015 public comments deadline. These changes were made in consultation with the Solvency Assessment and Management (SAM) governance structure, including various stakeholders and, in particular, insurance industry bodies.

Significant amendments that were made include:

- amendments to definitions, in particular, definitions of policyholders, personal lines, beneficiaries, life insurance policies, non-life insurance policies and controlling companies;
- provisions relating to linked insurers, most importantly the removal of the dedicated license requirement. Linked insurance and other life insurance business will now be allowed to be written under the same license;

51 BCBS, *Explanatory note on the revised minimum capital requirements for market risk*, pages 7 and 10.

- provision for cell-captive insurers to underwrite inward reinsurance from foreign insurers;
- allowing the reinsurers to conduct both life and non-life insurance business under the same license;
- the exclusion of Lloyds and branches of foreign reinsurers from the resolution chapter in the draft Insurance Bill. This is likely to affect the broader resolution framework that is in the process of being developed by NT, in consultation with the Bank and the FSB;
- providing licenses for controlling companies of insurance groups;
- clarification of implications for not meeting financial soundness requirements;
- removal of preferred policyholder claims during winding-up; and
- alignment of references in the draft Insurance Bill to references in the FSRB. This includes:
    - interpretation clauses relating to which acts take precedence in cases where there are inconsistencies between the Insurance Bill and other legislation; and
    - references to financial conglomerates that have been omitted from the Insurance Bill as the regulatory framework for financial conglomerates is already contained in the FSRB.

Subsequent to the changes that were effected, the draft Insurance Bill was approved by Cabinet on 4 November 2015. The draft Insurance Bill was then tabled in Parliament by the Minister of Finance on 28 January 2016. It is expected that the draft Insurance Bill will be considered by the Standing Committee on Finance in Parliament during 2016 with an envisaged commencement date in 2017.

Development of prudential standards to give effect to the Insurance Bill

The draft Insurance Bill empowers the Prudential Authority to prescribe prudential standards for insurers. The approach to the development of prudential standards will be focused on outcomes and will be based on both the rules and principles. The development of prudential standards is part of the move towards a Twin Peaks regulatory framework. The Prudential Authority's objective will be to maintain and enhance the safety and soundness of regulated financial institutions and these standards will assist in ensuring appropriate and intensive supervision of insurance companies under the supervision of the Prudential Authority.

A preliminary outline of how the standards will be constructed is as follows:

- general standards which will include micro insurance business thresholds as well as insurance business excluded from or included in the application of the Insurance Bill;
- fit and proper standards which will provide a fit and proper framework;
- governance standards which will address risk management, solvency assessment and outsourcing arrangements;

- financial soundness standards which will include the framework for financial soundness, measurement of assets and liabilities, calculation of the minimum capital requirement, and calculation of the solvency capital requirement using the standardised formula;
- auditing standards which will detail the duties and functions of auditors; and
- reporting and disclosure standards for supervisory purposes and public disclosure.

It is envisaged that the prudential standards will be circulated for public consultation by the second quarter of 2016. Overall, the promulgation of the Insurance Bill will put in place the SAM framework as well as a framework for formal insurance group supervision and a micro insurance framework. These are all likely to become effective in 2017. The above legislative changes are aimed at strengthening the supervisory framework for prudentially regulated entities with the aim of creating a robust and resilient financial sector, which will foster financial stability.

Regulatory developments impacting the domestic financial markets

Progress in implementing over-the-counter derivatives market reforms in South Africa

The Financial Stability Board published its tenth progress report on the implementation of over-the-counter (OTC) derivatives market reforms on 4 November 2015.[52] The report notes that, overall, 12 member jurisdictions have central clearing frameworks in force that apply to over 90 per cent of transactions in their OTC markets, and in 8 jurisdictions platform trading frameworks are in force that apply to over 90 per cent of transactions. The implementation of capital requirements for non-centrally cleared derivatives has remained most advanced for some time, and there have been no changes in this reform area since the Financial Stability Board's July 2015 progress report. Most jurisdictions are in the early phases of implementing the BCBS–International Organization of Securities Commissions (IOSCO) framework for margin requirements for non-centrally cleared derivatives.

On 5 June 2015, NT and the FSB issued a second draft of a policy document under the Financial Markets Act 19 of 2012 (FMA) on proposed regulations for central counterparties (CCPs) and trade repositories (TRs). The regulations will enhance supervision of OTC derivatives markets in South Africa by requiring that OTC derivative providers (ODPs) be authorised as a category of regulated persons and by ensuring sound and resilient CCPs. The regulations also seek to: (i) extend the regulations to the OTC derivatives markets and participants and enable the registrar to enforce rules and supervise the OTC derivatives market participants; (ii) provide for financial market infrastructures (FMIs) such as CCPs to be licensed and supervised and to perform the functions and duties specified under the FMA; (iii) provide for the external market participants to enter the South African financial markets and, in particular, proposes a recognition framework for external participants; and (iv) enable the provision of transitional arrangements to allow market participants to comply with the proposed requirements.

52 This report can be accessed at http://www.fsb.org/2015/11/otc-derivatives-market-reforms-tenth-progress-report-on-implementation/

On 27 February 2016 the Chairperson of the Financial Stability Board, in a letter to G-20 Ministers and Governors on financial reforms, emphasised the important role of using CCPs to clear standardised OTC derivatives transactions as a key element of the G-20's efforts to reduce systemic risks, both by making banks less complex and systemic, and by making derivatives markets more robust. There is work underway to address the CCPs becoming too big to fail.

Central clearing of OTC derivatives is aimed at attaining greater efficiency and reducing costs and risks to participants by providing centralised clearing, settlement and recording of financial transactions. Through the centralisation of specific activities, participants are enabled to manage their risks more efficiently and effectively and, in some instances, reduce or eliminate certain risks. Central clearing can also promote increased transparency in particular markets and contribute to overall financial stability.

Financial stability risks and outlook

Assessing financial stress

The mechanics behind the compilation of the Financial Stress Index (FSI)[53] and its application for South Africa was explained in the March 2015 edition of the *Financial Stability Review*. Since September 2013, there appears to be an upward trend in the average financial stress until December 2015. This increase in the level of financial stress was mostly driven by slowing house prices and widening bond spreads.

Figure 43 Financial Stress Index for South Africa



Assessing financial stability risks

Geopolitical tensions remain acute in many regions across the world. Central banks globally and international standard-setting bodies such as the Financial Stability Board and the IMF have noted geopolitical developments as a potential risk that could affect financial stability, for example, through sharp adjustments in asset prices and increased volatility that could dampen the economic growth outlook.

In addition to these global geopolitical developments, the Bank also considers possible direct or indirect spillovers from global financial market developments or trends in an attempt to pre-emptively detect and mitigate risks to, and weaknesses in, the domestic financial system. A number of key scenarios regarding potential threats to financial stability are identified. These potential threats are rated according to the likelihood of their occurrence as well as their expected impact on the domestic financial system. Risks identified are classified as 'high', 'medium' or 'low'.[54]

Table 11 Risk assessment matrix

Risk and probability	Expected impact
Sovereign rating downgrade to non-investment grade	
Medium to high	High
• Weak economic fundamentals • Twin deficits • Negative economic growth outlook • 2016 Budget Speech ensured continuation of fiscal discipline but some concerns over the implementation of outlined measures still exist • Rating agencies monitor other factors, including economic growth • Negative perceptions about direction of economic policy	• Capital outflows, potential spillovers to rand-denominated South African government debt; sovereign ceiling downgrades leading to higher cost of, and reduced access to, funding; reduced credit to the private sector • Increasing CDS spreads, receding business confidence, falling corporate profits, high and rising household debt levels and financing costs thereof, and elevated credit risk of financial and non-financial sectors
Spillovers from excessive volatility and risk aversion in global financial markets	
High	Medium
• Gradual tightening and market uncertainty about path of US monetary policy • Continued monetary policy easing in euro area and Japan • Very accommodative financial conditions in advanced economies • Bouts of financial market volatility amid concerns about EME growth prospects • Spillover from European banking crisis • Volatility in Chinese financial markets • Tighter financial conditions in EMEs • South African political risk leading to severe financial market volatility	• Capital outflows could trigger a disorderly adjustment in the current-account deficit, especially if accompanied by credit rating downgrades and spillovers to the financial system • Exchange rate depreciation, sell-off in financial markets, higher inflation, increase in interest rates, slow credit growth, falling economic growth, higher unemployment and deteriorating asset quality

53 The FSI is a single aggregate indicator that is constructed from 17 variables, covering the five main sectors to measure vulnerability in the South African financial system. The variables that were employed were from the real estate, credit, foreign exchange, equity, and funding markets.

54 'High': almost certain to occur; 'medium': possible; 'low': unlikely to occur (a tail risk).

Table 11 Risk assessment matrix (continued)

Risk and probability	Expected impact
Protracted period of slow economic growth in China, the euro area and spillback to the US economy	
Medium	**High**
• Modest and uneven recovery in advanced economies • Lower growth in China (an engine of global growth) - slowdown in exports and imports due to weaker investment and manufacturing activity - rebalancing away from investment and manufacturing towards services and consumption - spillover to other economies through trade and lower commodity prices • Generalised slowdown in EMEs due to lower commodity prices • Subdued global demand and investment, notably in extractive industries • Broad-based declines in imports weighing heavily on global trade • Lower oil prices straining fiscal positions of oil exporters, weighing on their growth prospects	• Lower domestic output growth, higher unemployment hamper debt repayment, weak fundamentals weigh on sovereign credit rating, increasing funding costs and credit risk of financial and non-financial sectors
Low domestic economic growth	
High	**Medium**
• Lower external demand emanating from lower global growth and low commodity prices • Sporadic supply and higher cost of electricity and labour • Mining sector, battered by low commodity prices, is likely to cut down on jobs • Deteriorating inflation outlook (6,6 per cent forecast for 2016) mainly due to the impact of drought on food prices and rand weakness • Increasing cost of living, property prices and mortgage loan costs, with knock-on effects on first-time buyers • Revisions to 2016 economic growth forecasts (IMF 0,7 per cent; the Bank 0,8 per cent)	• Higher unemployment, low levels of credit growth, spillover to the financial sector through increasing impairments
Fragility of global banks	
Low to medium	**High**
• Quantitative easing and negative interest rates impact on profitability • Equity prices decreasing • Concerns about the adequacy and health of banks' capital and liquity positions • Banks have not fully recovered from effects of the global financial crisis • Banks have not yet fully implemented additional regulatory requirements (Basel III)	• Eroded profitability • Contagion effect of equity price slump • Credit intermediation role under threat • Capital base deteriorates • Balance sheets deteriorate

Explanatory notes to the risk assessment matrix

Sovereign downgrade to non-investment grade

For more than a year credit rating agencies have been concerned about South Africa's rating. Persistent weak economic fundamentals, the current-account deficit, budget deficit and other structural constraints led to a downgrade in the economic outlook for the country to negative. Although the 2016 Budget Speech ensured the continuation of fiscal discipline, rating agencies are still concerned about the implementation of the measures outlined in the speech. Rating agencies will closely monitor other factors, including economic growth.

The impact of a further ratings downgrade on the South African economy and financial system could manifest in the form of capital outflows; potential spillovers to rand-denominated South African government debt; higher cost of, and reduced access to, funding; reduced credit to the private sector; increasing CDS spreads; receding business confidence; falling corporate profits; high and rising household debt levels and financing costs thereof; and elevated credit risk of financial and non-financial sectors.[55]

Spillovers from excessive volatility and risk aversion in global financial markets

The volatility in global financial markets is by and large caused by asynchronous monetary policies in different jurisdictions. While the US has started to increase interest rates, there is continued monetary policy easing in the euro area and in Japan. Financial conditions in advanced countries remain very accommodative while EMEs are experiencing tighter financial conditions and bouts of financial market volatility amid concerns about their economic growth prospects. Political risk in South Africa has recently led to significant financial market volatility.

If the risk materialises, capital outflows could trigger a disorderly adjustment in the current-account deficit, especially if accompanied by credit rating downgrades and spillovers to the financial system. Other effects include exchange rate depreciation, sell-off in financial markets, inflation, an increase in interest rates, slow credit growth, falling economic growth, unemployment and deteriorating asset quality.

Protracted period of slow growth in China and the euro area, and spillback to the US economy

The year 2015 was characterised by modest and uneven recovery in advanced economies. China, an engine of global growth in the past few years, experienced lower growth compared to double-digit growth rates it enjoyed previously. This was mainly due to a slowdown in exports and imports as a result of weaker investment and manufacturing activity, and attempts to rebalance the economy away from investment and manufacturing towards services and consumption. The slowdown in China had a broad-based impact on the world economy through trade and lower commodity prices, especially in commodity exporting EMEs. Lower commodity prices also resulted in subdued global demand and investment, notably in extractive industries. Lower oil prices have strained the fiscal positions of oil exporters, weighing on their growth prospects.

The possible impact of these risks will manifest in lower domestic output growth, higher unemployment resulting in weak debt repayment capability, weak fundamentals weighing on sovereign credit rating, increasing funding costs and credit risk of financial and non-financial sectors.

Low domestic economic growth

The South African economy is experiencing lower external demand due to lower global growth and low commodity prices. The mining sector has been impacted by low commodity prices and is likely to cut down on jobs. The inflation outlook has deteriorated (6,6 per cent forecast for 2016) mainly due to the impact of drought on food prices and rand weakness. There have been increases in the cost of living and interest rates. Economic growth forecasts for 2016 have been revised downwards to 0,7 per cent by the IMF and 0,8 per cent by the Bank. Low economic growth could result in higher unemployment, low levels of credit growth, and spillover to the financial sector through increasing impairments.

55 Also see page 4 of the Bank's *Monetary Policy Review*, April 2016 for a discussion of implications for South Africa.

Fragility of global banks

Although post-crisis bank reforms and balance-sheet repair have made banking sectors more resilient to financial shocks, bank equity prices have declined further and current price-to-book values indicate that expected returns could be below the cost of equity. According to this measure, banks in the euro area and the US are trading at levels comparable to previous crisis periods. Several factors contribute to weakening bank profitability, which in turn may reduce the incentive for banks to play their key role in credit intermediation to the real economy. Extraordinary monetary policy, mainly quantitative easing and low and negative interest rates are eroding banks' profitability through reduced net interest margins. Banks are unwilling to pass on negative interest rates to depositors fearing a run on deposits. Concerns about global banks' capital and liquidity positions caused increases in the CDS spreads of global systemically important banks in Europe and the US. Banks are facing serious headwinds and have not recovered from the effects of the global financial crisis.

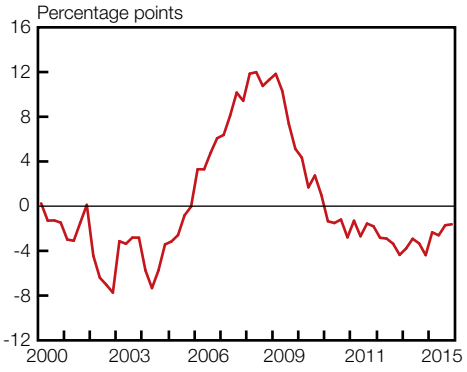
Macroprudential policy regulation

Assessing the application of the countercyclical capital buffer for banks

The FSC of the Bank is responsible for setting the countercyclical capital buffer (CCB) rate.[56] The CCB forms an integral part of the internationally agreed standards for risk-based capital requirements, and has been phased-in in South Africa since 1 January 2016.[57]

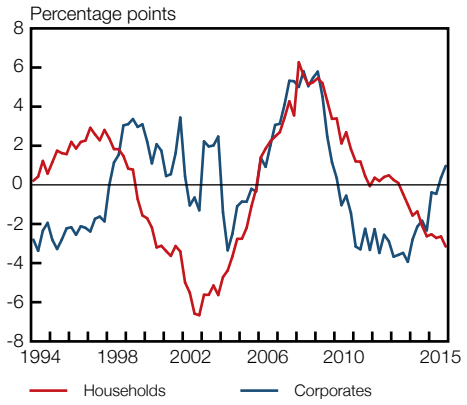
The credit-to-GDP gap[58] is the main indicator informing the activation of the CCB in South Africa, although other indicators are also taken into consideration. The private sector credit to GDP ratio for South Africa and its long-term trend (the zero line) is shown in Figure 44. After turning negative in 2010, the gap narrowed persistently in 2015; however, the credit-to-GDP ratio remains below its long-term trend.

Figure 44 Private sector credit-to-GDP gap



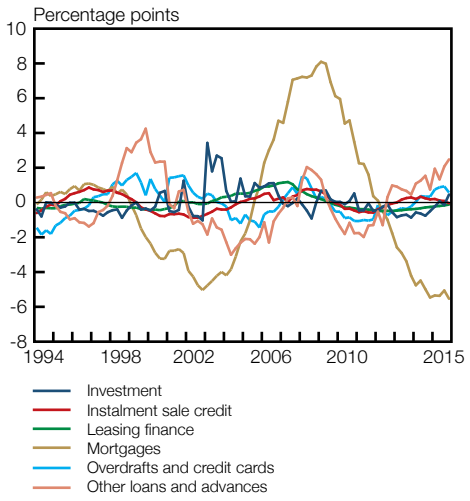
It can be seen in Figure 45 that the narrowing of the gap is driven by the rate of credit granted to corporates. Credit extension by banks to corporates has been growing at a firm pace while the growth in credit extended to households has remained relatively subdued.

Figure 45 Private sector credit-to-GDP gaps: households and corporates



Credit extended in different credit categories continued to exhibit different and, in some cases, divergent growth trends. It is evident in Figure 46 that the growth in other loans and advances has been playing a role in the general narrowing of the total private sector credit-to-GDP gap since 2011. The credit-to-GDP gap for mortgage advances not only remained well below its long-term trend, but declined even further, possibly also displaying generally weak confidence and economic outlook levels.

Figure 46 Selected private sector credit-to-GDP gaps according to asset class



Policy consideration for the activation of the countercyclical capital buffer for banks

According to the arrangements for the minimum requirements of Basel III, the CCB could be applied to banks from 2016 if required. However, at a recent meeting of the FSC it was decided, after taking all relevant information into account, not to activate the CCB add-on for banks at this stage and to keep the rate at 0 per cent.

56 Pursuant to the requirements specified in regulations 38(8)(e)(v) and 38(8)(g) of the Regulations relating to Banks, read with the provisions of Directive 5/2013 issued in terms of section 6(6) of the Banks Act 94 of 1990 and Circular 8/2015 issued in terms of section 6(4) of the Banks Act 94 of 1990.

57 The CCB regime is being phased-in between 1 January 2016 and the end of 2018, becoming fully effective on 1 January 2019. This means that, if activated, a buffer of 0–0,625 per cent of RWA may be set from 1 January 2016 and the maximum rate will increase each subsequent year by an additional 0,625 percentage points, to reach its final value of 2,5 per cent of RWA on 1 January 2019.

58 As set out in the Basel Committee's *Guidance for national authorities operating the countercyclical capital buffer*, available online at: https://www.bis.org/publ/bcbs187.htm.

Abbreviations

AGR	augmented Guidotti ratio
AML	anti-money laundering
Banks Act	Banks Act 94 of 1990
BASA	Banking Association South Africa
BAGL	Barclays Africa Group Limited
BCBS	Basel Committee on Banking Supervision
BDI	business debt index
BER	Bureau for Economic Research
BETI	BankservAfrica Economic Transaction Index
Board	Board of Directors
BRICS	Brazil, Russia, India, China and South Africa
BU	bottom-up (stress testing)
CAR	capital adequacy ratio
CCB	countercyclical capital buffer
CCI	consumer confidence index
CCP	central counterparties
CBR	Conduct of Business Return
CDS	credit default swap
CET1	common equity tier 1
CFT	combating the financing of terrorism
CFVI	Consumer Financial Vulnerability Index
CoCos	contingent convertible capital instruments
CoFI	Conduct of Financial Institutions
CPI	consumer price index
dti	Department of Trade and Industry
EBIT	earnings before interest and taxes
ECB	European Central Bank
EDF	expected default frequency
EME	emerging-market economy
ES	expected shortfall
FAO	Food and Agricultural Organization
FATF	Financial Action Task Force
FMA	Financial Markets Act 19 of 2012
FMI	financial market infrastructures
FNB	First National Bank
FSB	Financial Services Board
FSC	Financial Stability Committee
FSI	Financial Stress Index
FSRB	Financial Sector Regulation Bill
G-20	Group of Twenty
GDP	gross domestic product
GR	Guidotti ratio
G-SIB	global systemically important bank
H-index	Herfindahl–Hirschman Index
HSBC	Hongkong and Shanghai Banking Corporation
ICR	interest coverage ratio
IOSCO	International Organization of Securities Commissions
IT	information technology
IIF	Institute of International Finance
IMF	International Monetary Fund
Libor	London Interbank Offered Rate
MMF	money-market fund
MREL	minimum requirement for own funds and eligible liabilities
NT	National Treasury
ODP	over-the-counter derivative provider
OFI	other financial intermediary
OTC	over the counter

OMEM	Old Mutual Emerging Markets
OMW	Old Mutual Wealth
OMAM	Old Mutual Asset Management
PMI	Purchasing Managers' Index
QIS	quantitative impact study
RAM	Risk Assessment Matrix
RDR	Retail Distribution Review
repo	repurchase
ROE	return on equity
RWA	risk-weighted asset
TCF	Treating Customers Fairly
TLAC	total loss-absorbing capacity
TD	top-down (stress testing)
S&P	Standard & Poor's
SAM	Solvency Assessment and Management
the Bank	South African Reserve Bank
TR	trade repository
UK	United Kingdom
UNSCR	United Nations Security Council Resolution
US	United States
VaR	value-at-risk