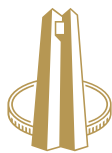


FINANCIAL STABILITY REVIEW

Second edition
2021



SOUTH AFRICAN RESERVE BANK



A purposeful journey



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The data and information used in this *Financial Stability Review* cover the period up to 1 October 2021. Therefore, the majority of quarterly data in this edition end at the second quarter of 2021, the majority of monthly data end at July 2021, and the majority of daily data end at 30 September 2021. Data may include own calculations made specifically for the purposes of this publication. The graph data used in this publication can be downloaded from the SARB website.

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Illustrative summary

South Africa's financial system remains resilient.



The financial stability outlook has improved since the previous *FSR*, in line with a recovering economy.



Recent civil unrest disrupted financial services provision in certain areas, but this was temporary.



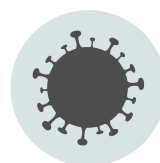
Financial institution profits are recovering following a sharp drop in 2020.



Debt levels and debt-service pressures remain relatively elevated.



Stress tests suggest that the banking sector will remain adequately capitalised in the event of a future shock.



The macro-financial outlook remains challenging and is contingent on the path of COVID-19.

The purpose of the *Financial Stability Review*

The primary objective of the South African Reserve Bank (SARB) is to protect the value of the rand in the interest of balanced and sustainable economic growth in South Africa. In addition to this, the SARB's function and mandate of protecting and enhancing financial stability in the Republic of South Africa is affirmed in the Financial Sector Regulation Act 9 of 2017 (FSR Act).

In pursuit of its financial stability mandate, and to promote a stable financial system, the SARB publishes the *Financial Stability Review (FSR)* twice a year. The publication aims to identify and analyse potential risks to financial system stability, communicate such assessments, and stimulate debate on pertinent issues. The SARB recognises that it is not the sole custodian of financial stability, but that it coordinates and contributes significantly towards a larger effort involving government, other regulators, self-regulatory agencies, organs of state and financial market participants. In line with the requirements of the FSR Act, both the Minister of Finance and the Financial Sector Oversight Committee (FSOC) provide comments on the *FSR* prior to publication.

Defining 'financial stability'

'Financial stability' refers to a financial system that espouses confidence through its resilience to systemic risks and its ability to efficiently intermediate funds.

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



Executive summary

The economy is adjusting to the persistent COVID-19 pandemic, but the spread of the more virulent Delta variant highlighted the ongoing risks posed by the virus.

As the economy has gradually adapted to the pandemic and the associated containment measures, conditions have improved for the financial sector. The value of loans restructured due to COVID-19 peaked at about R613 billion in July 2020, but has moderated to only R60 billion a year later. Conditions in financial markets are broadly stable, and large financial institutions have maintained sizable solvency and liquidity buffers, despite the challenging environment. The support measures in response to the pandemic played an important role in mitigating risks to the financial system. But as support measures are gradually being unwound, the impact of COVID-19 continues to be felt. Lockdown measures have continued intermittently as new variants of the virus emerge and as vaccination rates remain well below what is required to reopen the economy fully.

While the outlook for the financial sector is gradually improving, significant risks remain.

The level of loan defaults appears to have risen sharply in recent months, but the South African Reserve Bank's (SARB) internal modelling suggests that it may not have peaked yet. Looking ahead, various probable events could pose risks to financial stability over the medium term. These include a significant reduction in the fiscal and monetary stimulus provided in response to COVID-19 globally as the world economy recovers, which could translate into higher interest rates and tighter domestic financing conditions, as well as potential further increases in public debt domestically.

A weak economic recovery is weighing on credit growth and profitability in the financial sector.

Given various structural impediments, South Africa's economic recovery is projected to be relatively weak compared to peer countries. In 2021, the unemployment rate continued to rise, fixed investment moderated further (as a share of gross domestic product), and civil unrest caused material damage to property and investor confidence. Partially as a consequence of these pressures, growth in credit extension to the private sector recently turned negative on a year-on-year basis. While measures of profitability among banks and insurers have recovered from their 2020 lows, many remain below pre-pandemic levels. Subdued profitability expectations



will make financial firms reluctant to take on additional risk that is associated with new business growth opportunities.

South Africa's systemically important banks¹ are expected to remain adequately capitalised, even in the face of a severe downside scenario.

In this edition of the *Financial Stability Review (FSR)*, we present the results of solvency and liquidity stress tests undertaken on South Africa's six largest banks. The findings indicate that, even under the adverse scenario of a double-dip recession, these banks are expected to maintain an aggregate level of capitalisation and liquidity above the minimum regulatory requirements.

¹ The SARB Governor has designated six large banking groups as systemically important financial institutions (SIFIs); please refer to the 2019 second edition of the *FSR* for further information.

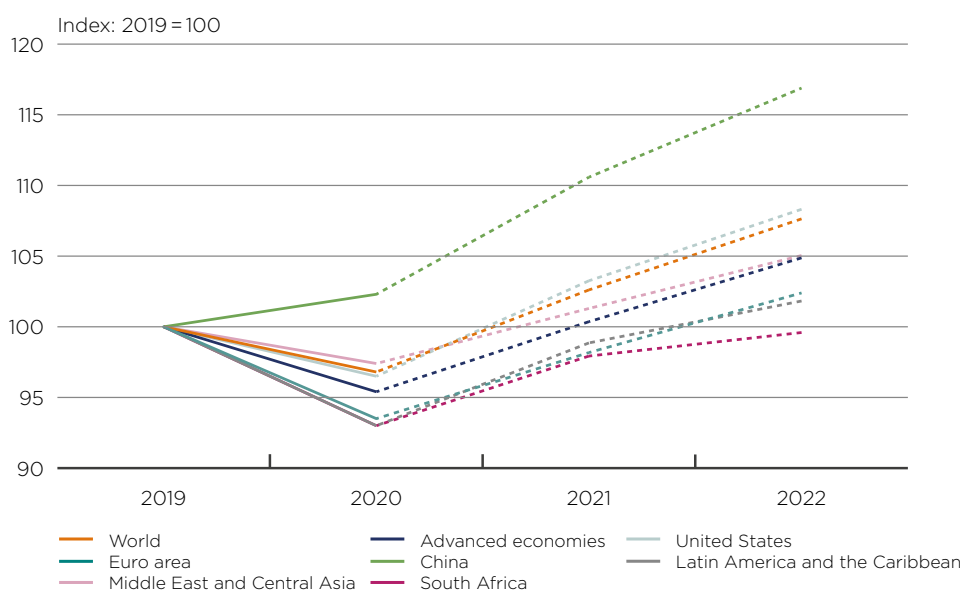


Chapter 1: Financial stability risks and system resilience

Risk assessment

The global economic recovery is uneven across different regions. Short-term financial stability risks have been largely contained, but vulnerabilities are rising and the prospects for a strong recovery in the years ahead remain uncertain.² Economic activity has increased at the global level, driven by the world's two largest economies: the United States (US) and China. Both these economies are already generating more output than they were prior to the advent of COVID-19 (Figure 1). The recovery is occurring more slowly in emerging markets (EMs), excluding China. In South Africa, gross domestic product (GDP) growth has been stronger than expected, benefitting from favourable global and domestic conditions as well as rebasing effects in August 2021. However, global growth concerns alongside domestic structural challenges, such as electricity constraints and high unemployment levels, are expected to negatively affect the domestic recovery.

Figure 1: Nominal GDP levels for various regions and countries



The global economic recovery has been underpinned by a large-scale monetary and fiscal stimulus, resulting in rising public and private debt.

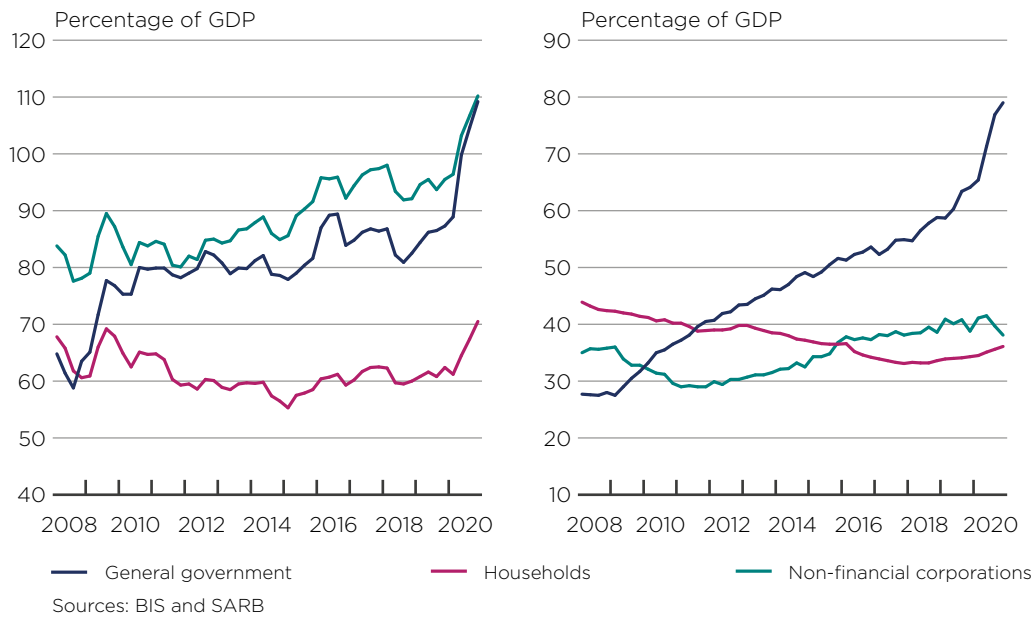
Average public debt at the global level increased to 109% of GDP at the end of 2020, up from 87% only a year earlier.³ This reflects fiscal measures taken to combat the effects of the pandemic as well as declining tax revenues linked to weaker economic outcomes. Meanwhile, low interest rates and pressure on revenue has seen non-financial corporate debt rise sharply over the past year as well (Figure 2). However, the trends in South African debt have been quite different. While government debt has trended higher, the debt of the private sector has remained relatively stable.

² IMF, *Global Financial Stability Review*, October 2021.

³ This is according to data from the Bank for International Settlements (BIS).

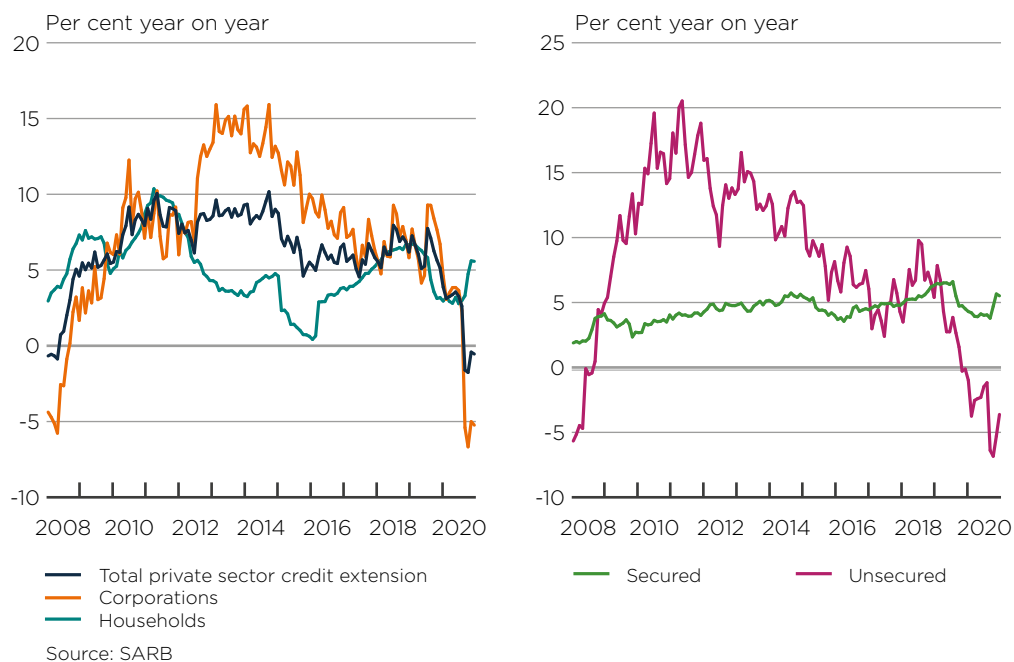


Figure 2: Credit to various sectors of the economy for the world (left) and South Africa (right)



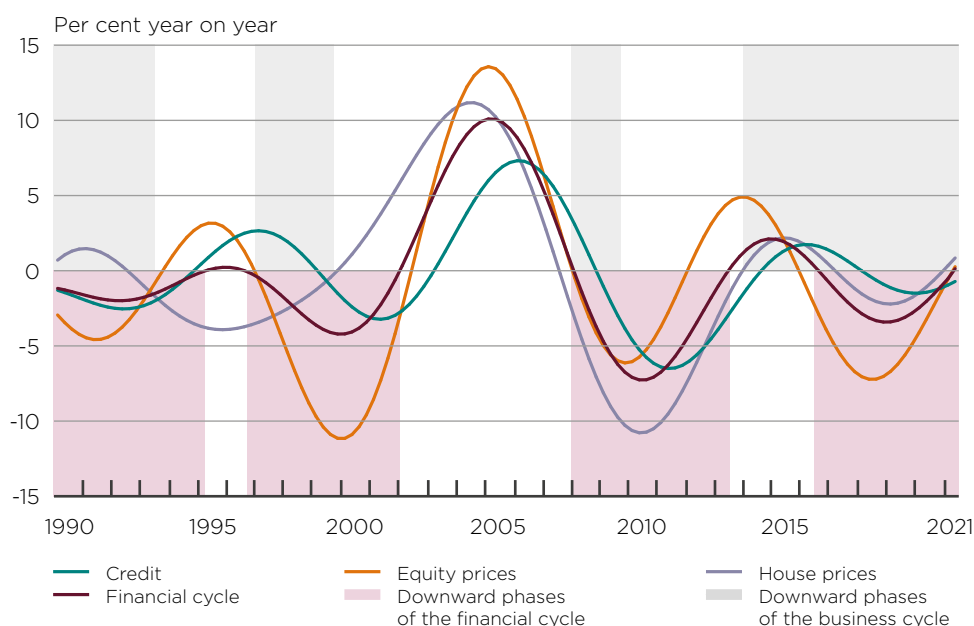
Private sector credit growth in South Africa has slowed since 2020. While household credit growth has remained positive on a year-on-year (y/y) basis and has increased slightly in recent months, corporate credit growth fell to -6.7% y/y in April 2021, the weakest rate in 17 years (Figure 3). It has remained in negative growth territory since. The decline in credit growth has mostly been driven by unsecured categories of credit (such as credit cards and overdrafts), while secured credit growth (mostly mortgages) has remained positive and relatively stable.

Figure 3: Domestic private sector credit extension by borrower type (left) and by secured status (right)



The financial cycle has shifted into an upward phase for the first time in five years. The financial cycle is measured by the co-movement of a set of financial variables, including private sector credit growth, real estate price growth and equity price growth. Both equity and house prices (on a smoothed basis) have moved above their trend levels, which lifted the financial cycle into an upward phase in the second quarter of 2021. However, credit growth remains below the trend, which counteracts the sustainability of the financial cycle upswing. Although the lower turning point of the business cycle has not been determined yet, the economy has possibly entered an upward phase already. However, the recovery remains fragile and uneven, further weighing on future prospects for financial variables.

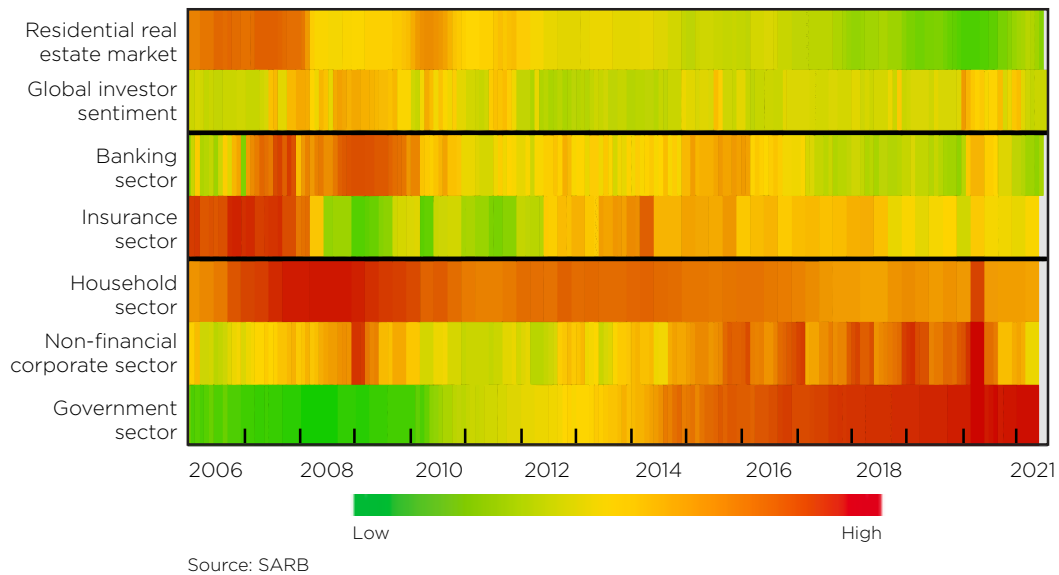
Figure 4: The South African financial cycle



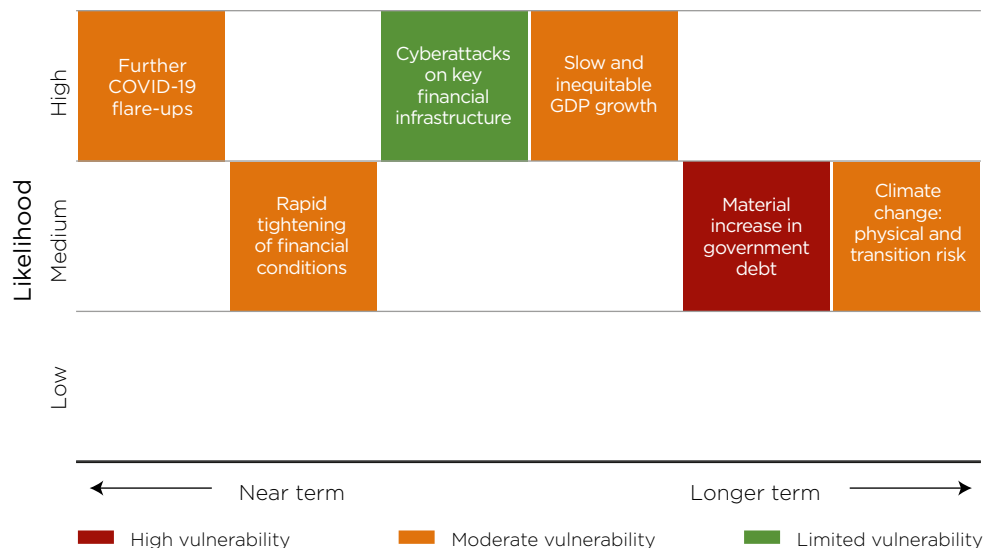
Source: SARB

The financial stability heat map indicates a relatively higher level of stress across the non-financial sector, especially in the government sector. The heat map provides an overview of the evolution of risk over time. Various indicators are used as inputs into each sector's mapping, and the colours reflect current levels of risk relative to a particular indicator's long-term average.⁴ The broader non-financial sector continues to display financial stress, driven by historically high levels of debt relative to income. Levels of stress are lower in the financial sector, owing to large solvency and liquidity buffers. Nevertheless, if the non-financial sector borrowers remain under pressure, this will surely spill over into the financial sector in the form of weaker revenue and higher non-performing loans, among other things.

⁴ For further details on how the heat map is constructed, see the 2020 first edition of the *FSR*.

Figure 5: The financial stability heat map

The SARB's risk and vulnerability matrix (RVM) captures the primary risks to financial stability over a medium-term horizon. These risks are identified using quantitative indicators as well as a qualitative assessment by the South African Reserve Bank (SARB). Figure 6 depicts the RVM, with each block representing a particular risk. The colour of the block represents the vulnerability of the financial system to the risk after taking mitigating factors into consideration. Lower vulnerability risks are ones where the financial system is relatively well-placed to absorb a shock without a broader spillover of distress across the system. Higher vulnerability risks are ones which are more likely to lead to financial instability if no further mitigating actions are taken. The key risks in the RVM are briefly discussed below. Some risks are discussed together, given their interrelated nature.

Figure 6: Risk and vulnerability matrix

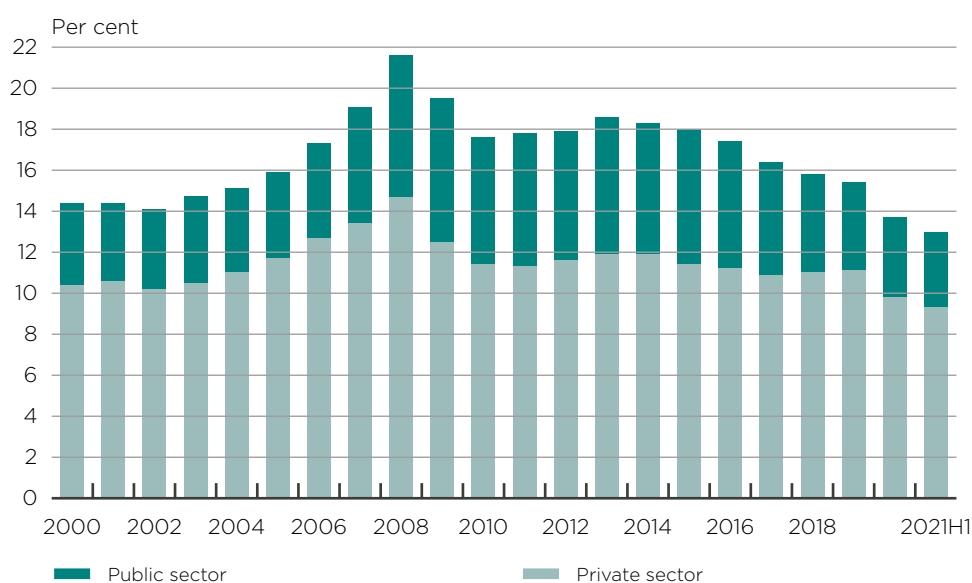
COVID-19 and economic activity in South Africa

The impact of COVID-19 and the measures taken to contain it have exacerbated pre-existing economic and financial vulnerabilities in South Africa. GDP growth was relatively weak in the years leading up to 2020, when COVID-19 struck. Following the impact of the pandemic, growth in real GDP fell by 6.4% in 2020, a considerably larger drop than the EM average of 2.2%, reflecting structural weaknesses in the domestic economy and strict lockdown measures. The impact was to a larger extent felt by lower-income individuals.⁵ The growth forecast over the medium term has been revised up since the release of the previous *Financial Stability Review (FSR)*.

While vaccination rates in South Africa are increasing, the global experience with COVID-19 suggests that further waves of infection may occur even when a large share of the population is vaccinated. This implies that firms in sectors hardest hit by the pandemic, such as tourism, leisure and hospitality, could remain under pressure in the near term. As a consequence, insurers may continue to face elevated levels of business interruption claims, and the banking sector may continue to experience higher-than-usual non-performing loans over the coming months.

The recent unrest could also dent the recovery and may further weigh on investment prospects. The domestic economic recovery is being supported by strong commodity exports and commodity prices, and increasing consumption expenditure. However, levels of fixed investment in South Africa have dropped to an 18-year low (Figure 7), which raises questions about the durability of the recovery and the growth potential of the economy over the longer term. Looting during the unrest in July 2021 is estimated to have damaged over 1 200 automated teller machines (ATMs) and 270 bank branches, resulting in temporarily reduced access to financial services in some areas. The unrest has also caused substantial damage to property, which may impact on some firms' ability to generate revenues and service debts, adding to the burden of the ongoing COVID-19 restrictions faced by firms.

Figure 7: Gross fixed capital formation in South Africa as a percentage of GDP



⁵ Spaull et al., National Income Dynamics Study (NIDS) – Coronavirus Rapid Mobile Survey (CRAM), Synthesis Report, NIDS-CRAM Wave 2, 30 September 2020.

The state-owned insurer Sasria SOC Limited (Sasria) is the sole provider of insurance cover against public unrest of the nature seen during July.

Sasria has committed to honouring all legitimate claims, which required government to provide an equity injection of R3.9 billion. The existence of this type of insurance has been an important mitigant against the broader financial impact of the unrest. However, following this event, the future costs of insuring against similar events could rise due to the increasing reinsurance costs faced by Sasria.

The recent unrest dissipated before becoming a direct financial stability threat. However, in the absence of faster and more equitable growth over the medium term, the risk of further unrest could intensify.

Increasing domestic government debt and the financial system

The nexus between the financial sector and the sovereign is likely to remain a key risk to financial stability over the medium term. Based on National Treasury's (NT) Medium Term Budget Policy Statement released in October, public debt was revised downwards from the February 2021 budget and is now projected to grow from 69.9% of GDP in 2021/22 to 77.8% of GDP in 2024/25. The exposure of domestic financial intermediaries to government remains elevated. In the banking sector, very little capital is held against sovereign exposures and there is a high degree of exposure concentration relative to other asset classes, particularly among smaller banks. This could leave banks vulnerable if South Africa's fiscal metrics deteriorated further. The high yield offered by government bonds, and the favourable regulatory treatment thereof, may be supporting the rising exposure of banks to the sovereign over time. For further details on this issue, refer to chapter 2 in the 2021 first edition of the *FSR*.

A rapid tightening of financial conditions

Advanced economies are projected to recover in 2021, broadly reaching pre-pandemic levels of output by the end of this year. The US economy is growing particularly rapidly. Its 2022 level of GDP is projected, by the International Monetary Fund (IMF), to exceed the level forecast prior to the pandemic for that year. As a consequence, a gradual reduction of monetary stimulus is expected to take place in both the US and the eurozone, beginning with a tapering of large-scale asset purchase programmes, followed by rising policy interest rates. If this occurs rapidly or in a fashion which surprises markets, there is a risk of a sharp tightening in global financial conditions. However, improved communication from key central banks would potentially mitigate this vulnerability.

South Africa's financial system is potentially vulnerable to shifts in global financial conditions in various ways. Some open-ended funds undertake significant liquidity transformation – they offer various products which allow investors to redeem funds quickly, but hold assets which are not all highly liquid. Thus, in the event that investors seek to redeem their holdings en masse (perhaps due to heightening risk aversion), it is possible that some investment funds could struggle to meet this redemption demand. Such redemption pressure can spill over into other parts of the financial system, for example leading to rapid sales of more liquid assets like government bonds. Tighter financial conditions also imply higher financing costs (at least in some markets), which may increase



the debt-service burden among highly leveraged or revenue-constrained borrowers. Finally, shifts towards tighter financing conditions globally also tend to cause a depreciation in the value of exchange rates in EMs, including South Africa. This can possibly place pressure on borrowers with unhedged foreign currency debt.

Other risks, relating to cyberattacks and climate change, have been discussed in previous editions of the *FSR* and remain largely unchanged in nature. Box 2 discusses the exploratory approach that the SARB has taken to measuring climate risk through stress-testing.

Resilience statement

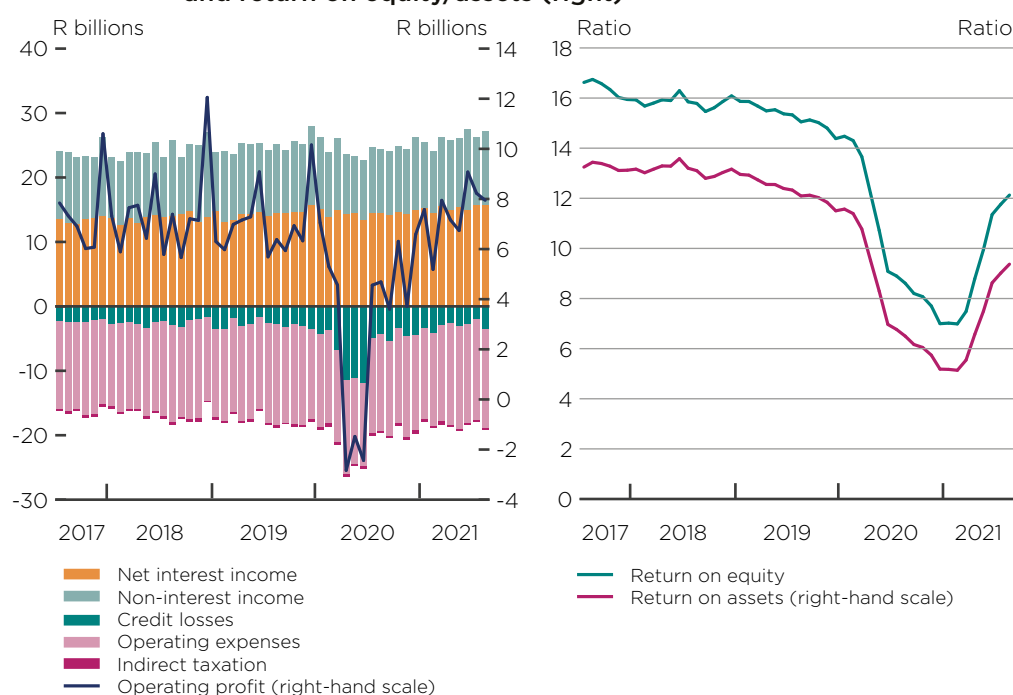
Overall, the South African financial system has displayed a relatively high level of resilience under challenging conditions.

The South African financial markets experienced bouts of volatility and sharp sell-offs in asset prices at times, but have held up relatively well.

This performance has been against a backdrop of several potentially adverse developments, such as an expected tightening in global financial conditions as major economies consider tapering off stimulus and raising interest rates, concerns of a slowdown in Chinese economic growth, and July's domestic civil unrest.

On the banking and insurance side, both sectors have, in aggregate, maintained sizable capital buffers throughout the COVID-19 period, demonstrating a high level of resilience. In recent months, profitability in both the banking and the insurance sectors has begun to recover, but various profitability metrics remain below their longer-term average (Figure 8). Both sectors have maintained adequate aggregate solvency buffers throughout the pandemic. With the rebound in profitability, solvency buffers are likely to be bolstered further.

Figure 8: Banking sector operating profit (left) and return on equity/assets (right)



The banking sector is expected to be resilient to a plausible adverse shock over a medium-term horizon. Chapter 2 of this *FSR* describes the recent solvency and liquidity stress tests undertaken by the SARB to establish whether the systemically important financial institutions (SIFIs) hold sufficient capital to withstand a severe macroeconomic stress event. The SIFIs were found to have sufficient aggregate capital and liquidity for such an eventuality.

Policy actions undertaken to enhance financial stability

The Financial Stability Committee (FSC) of the SARB maintained the countercyclical capital buffer (CCyB) at a level of 0%. The CCyB can be adjusted to increase the level of capital in the banking sector during upswings in the financial cycle (at times when credit growth and risk-taking are outpacing underlying economic conditions). This helps to ensure that banks build additional buffers during an upswing period to absorb losses during a subsequent downswing period. The CCyB also helps to contain excessive growth in broader credit extension. However, as the financial cycle has only recently shifted into an upward phase and credit growth is mild, the FSC has kept the CCyB at 0%.

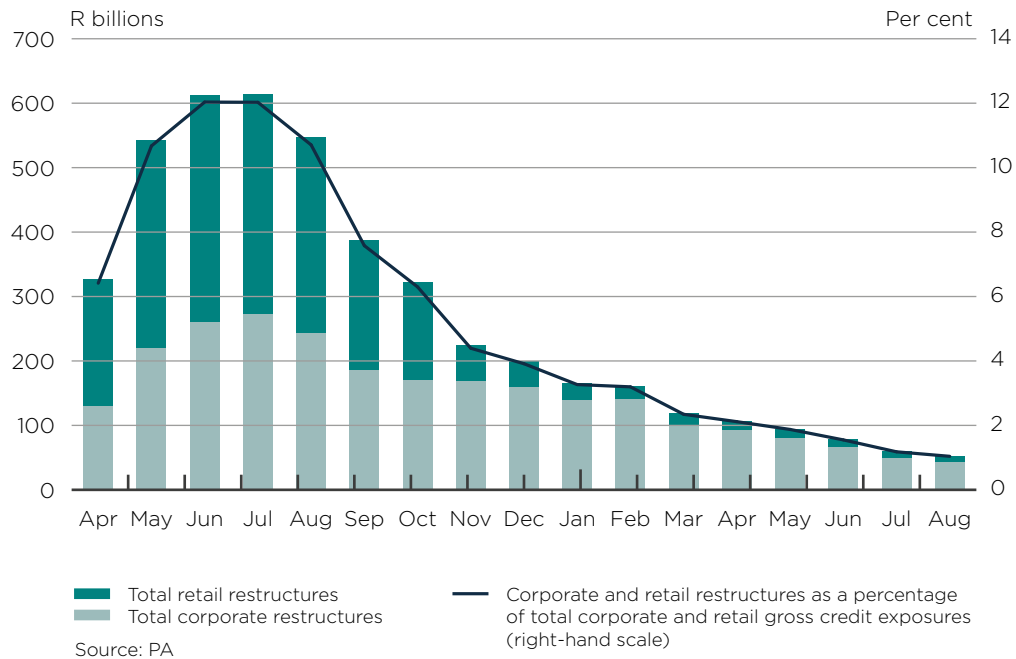
The FSC is currently assessing policy options to address the bank-sovereign nexus. As discussed in the risk assessment section and in the 2021 first edition of the *FSR*, the bank-sovereign nexus is regarded as a potential threat to financial stability. To mitigate this threat over time, the FSC is considering whether the concerns with the nexus require any policy interventions.

The SARB undertook a range of policy interventions to mitigate the financial stability risks associated with the emergence of COVID-19 last year. These interventions were discussed in detail in the previous three editions of the *FSR*. Various policies have been or are in the process of being removed as the economy continues to recover. The policies that remain in place are:

- an easing of the liquidity coverage ratio (LCR) requirement from 100% to 80% for banks; and
- a differentiated regulatory treatment of loans restructured as a result of COVID-19.

The value of credit restructures related to COVID-19 has declined consistently since mid-2020. This now stands at less than 2% of bank credit to the private sector (Figure 9). The decline continued through the second wave of COVID-19 in late 2020/early 2021, suggesting that lockdown restrictions had a more muted impact on debt-servicing capacity than in the first wave. This may reflect the more targeted nature of restrictions in the second and third waves, and that firms have adapted better to the restrictions.



Figure 9: The value of COVID-19 restructured exposures

Chapter 2: Banking sector stress-test results

Summary

Despite the challenges and disruptions posed by the ongoing COVID-19 pandemic, the results of the SARB's 2021 Common Scenario Stress Test (CSST) demonstrate that the South African banking sector is resilient and well-positioned to withstand an unprecedented adverse scenario. Under the adverse scenario, bank solvency positions, measured as the aggregated common equity tier 1 (CET1) ratio, are expected to deteriorate by between 110 and 140 basis points over the stress-test horizon, remaining well above the regulatory requirements. The deterioration is caused primarily by declining profits as credit losses increase in a lower-revenue environment. The liquidity stress test demonstrates that participating banks have sufficient resources to weather liquidity shocks under both the baseline and the adverse scenarios, and across both short- and longer-term horizons.

Purpose and scope

The objective of the stress test is to assess the resilience of the South African banking sector to severe yet plausible macroeconomic scenarios. Maintaining and enhancing financial stability is one of the core objectives and mandates of the SARB. A financial system that is stable and well-functioning is critical for sustainable economic growth and financial intermediation. In pursuit of this mandate, the SARB is empowered to monitor, assess and measure potential vulnerabilities in the financial sector.

The SARB conducted a CSST over the course of 2021, covering the six banks designated as SIFIs. As at the reference date of the exercise, these banks had a combined market share of 92%. In line with previous CSST exercises, only locally originated exposures were included, and the scenarios spanned a three-year forecast horizon.

Stress-test scenarios

The SARB uses a Stress Testing Matrix (STeM) as a formal approach to risk identification and scenario design.⁶ For the 2021 SARB CSST exercise, two scenarios were adopted: a baseline scenario and an adverse scenario. The latter scenario was calibrated to be severe, yet plausible, and economically consistent (see Box 1). The CSST baseline scenario was based on the March 2021 Monetary Policy Committee (MPC) forecast.⁷

The adverse scenario simulated the emergence and proliferation of additional, more infectious COVID-19 variants as well as the exacerbated risk of further waves of global infections, coupled with an ineffective and unequal roll-out of vaccines. The adverse scenario results in a deterioration in global economic growth due to the reinstatement of lockdown restrictions, with particularly negative impacts on EMs. As financial conditions tighten, South Africa experiences an outflow of capital and a depreciation in the

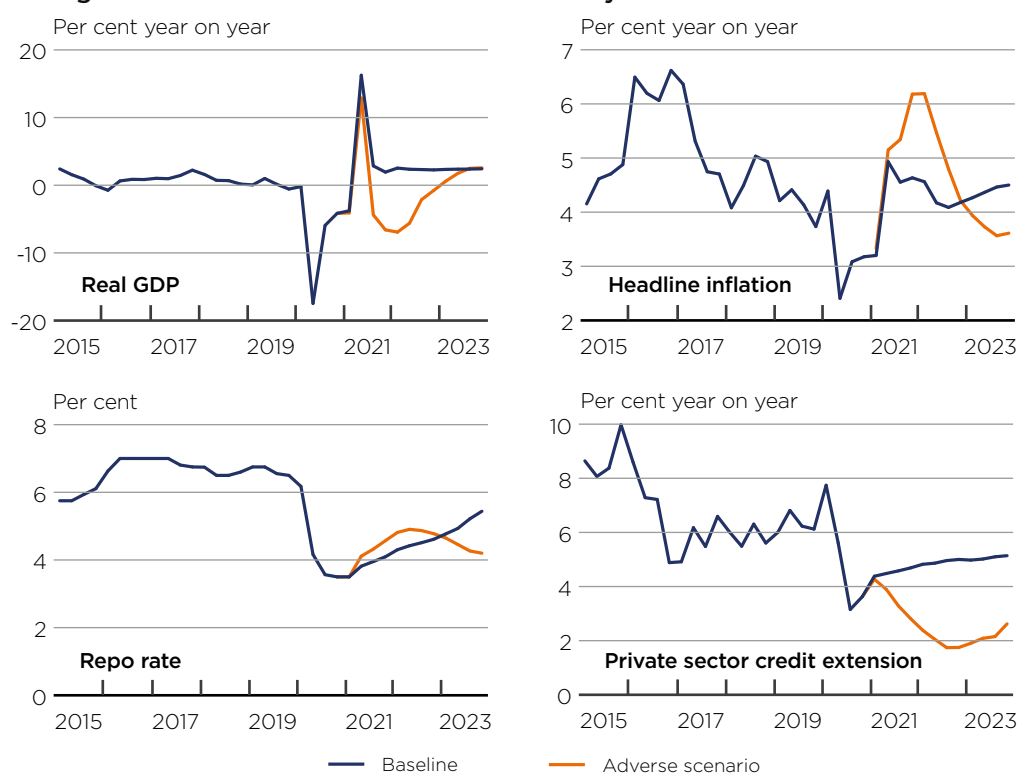
⁶ The STeM is a risk assessment framework (similar to the RVM) that identifies key financial stability risks that can be quantified from a stress-testing perspective.

⁷ SARB, Statement of the Monetary Policy Committee, March 2021. <https://www.resbank.co.za/content/dam/sarb/publications/statements/monetary-policy-statements/2021/statement-of-the-monetary-policy-committee-march-2021/Statement%20of%20the%20Monetary%20Policy%20Committee%2025%20March%202021.pdf>



exchange rate of the rand, with pass-through effects on the inflation trajectory. The consequent slowdown in both economic growth and gross fixed capital formation culminates in rising unemployment that peaks at 37% by the end of 2022. A delay in addressing the long-standing need for structural reforms, an unreliable electricity supply, weak government revenues and the fragile financial position of state-owned enterprises (SOEs) result in further sovereign credit rating downgrades and increases in government bond yields.

Figure 10: CSST scenarios – evolution of key macroeconomic variables



Box 1: The 2021 CSST macroeconomic scenarios

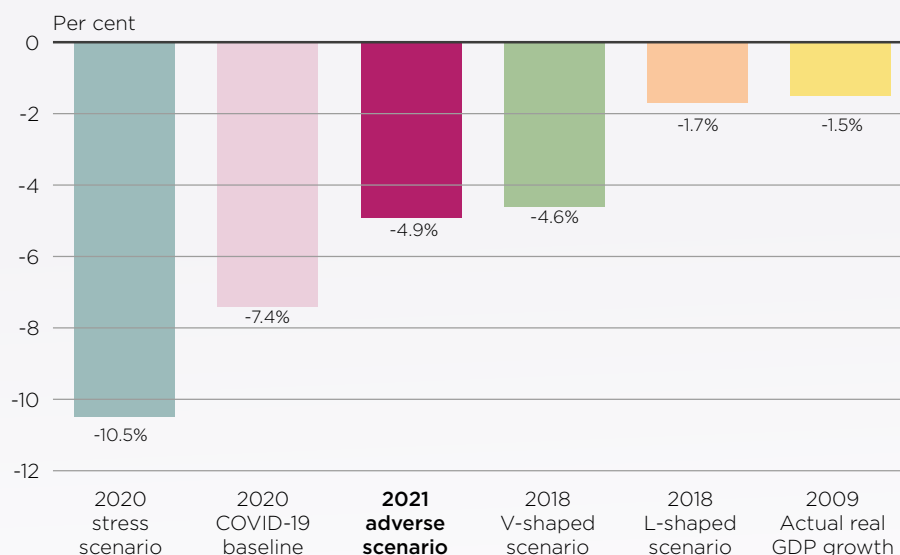
The construction of adverse macroeconomic scenarios entails a balance of credibility while being constructive and insightful.¹

The Basel Committee on Banking Supervision's (BCBS) stress-testing principles note that scenarios should be designed to be 'sufficiently severe but plausible'. In attempting to reach an appropriate balance between these objectives, stress-testing practitioners generally implement either historical simulations (where the scope and severity of the scenario replicate previous crisis periods) or hypothetical/synthetic scenarios (where scenarios are tailored to explain a specific macroeconomic environment of interest). Both approaches are susceptible to subjectivity as expert judgement or 'overlays' influence the scenario design process. To limit the degree of subjective judgement, the South African Reserve Bank (SARB) adopted a statistical approach in its scenario design process, the growth-at-risk (GaR) framework, which projects how financial conditions impact on the possible distribution of future gross domestic product (GDP) growth.² However, shortcomings of such approaches were highlighted by the magnitude of the economic fallout from the impact of COVID-19, which led to short-term output losses far beyond what the model suggested.

Gauging the severity of an adverse scenario relative to previous stress tests and crises has become a standard among central banks.

One way of measuring the severity of a stress scenario is to consider the movement in key macroeconomic variables, in particular real GDP. Figure B1.1 compares the decline in real GDP from the peak (i.e. pre-stress) to the trough in each vintage of the SARB's stress-testing exercises (and relative to crisis-type periods). When considering the depth of contraction, the 2021 adverse scenario appears to be less severe than those of the previous exercises. However, context regarding the pre-stress macroeconomic environment is crucial when assessing the severity of an adverse scenario.³

Figure B1.1: Depth of contraction in real GDP under each crisis and stress-test scenario



Source: SARB

1 L L Ong and A A Jobst, *Stress testing: principles, concepts and frameworks*, Washington DC: International Monetary Fund, 2020.

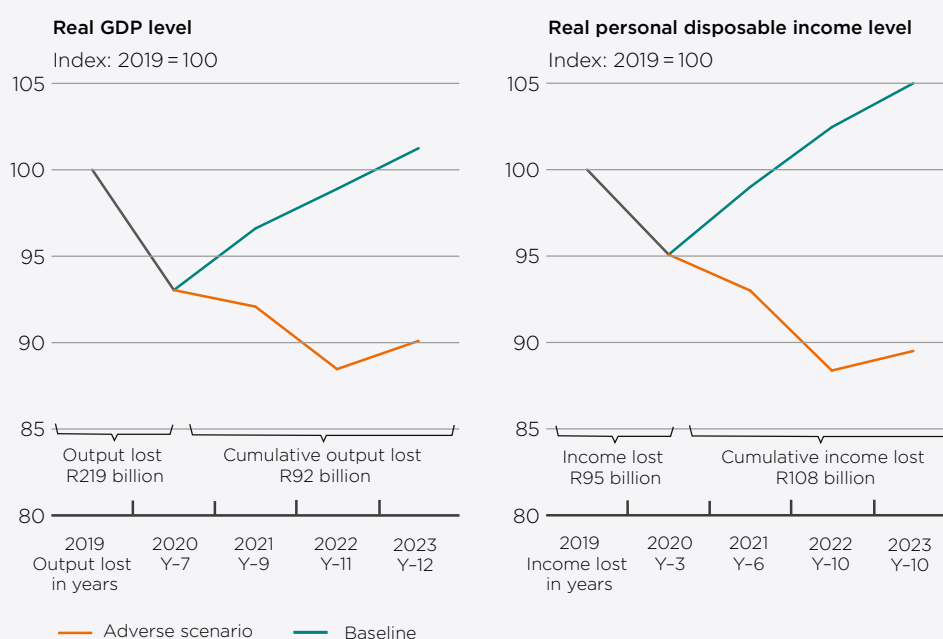
2 SARB, *Financial Stability Review*, second edition 2019, 'Box 1: Downside risks to growth: growth-at-risk estimates for South Africa'. <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2019/9606>

3 European Systemic Risk Board, 2021 EU-wide stress test - Macroeconomic scenario. https://www.esrb.europa.eu/sites/default/documents/files/document_library/Risk%20Analysis%20and%20Data/EU-wide%20Stress%20Testing/2021/Launch%20of%20the%20ST/962564/2021%20EU-wide%20stress%20test%20-%20Macroeconomic%20scenario.pdf



Against the backdrop of the devastating impact of the COVID-19 pandemic on the South African economy, the 2021 SARB CSST provided for further losses in output and income over the stress horizon. After the extensive loss of economic output over the course of 2020 of approximately R219 billion⁴, equivalent to roughly the last seven years' worth of real economic growth and the erosion of around three years of personal disposable income, the 'initial conditions' of the stress-testing exercise were significantly worse than the pre-stress levels of all SARB stress-testing exercises to date.

Figure B1.2: Level of real GDP and household disposable income



The severity of the adverse scenario could be demonstrated by the additional cumulative loss in economic output and household personal disposable income over the stress horizon. As illustrated above, by the end of the adverse scenario, the cumulative output lost over the three-year stress horizon was R92 billion, translating into an additional five years of foregone economic growth, reaching real economic output levels last experienced 12 years earlier (2011). Real household disposable income diminishes by an additional R108 billion, which results in real income levels last recorded roughly 10 years prior (2013).

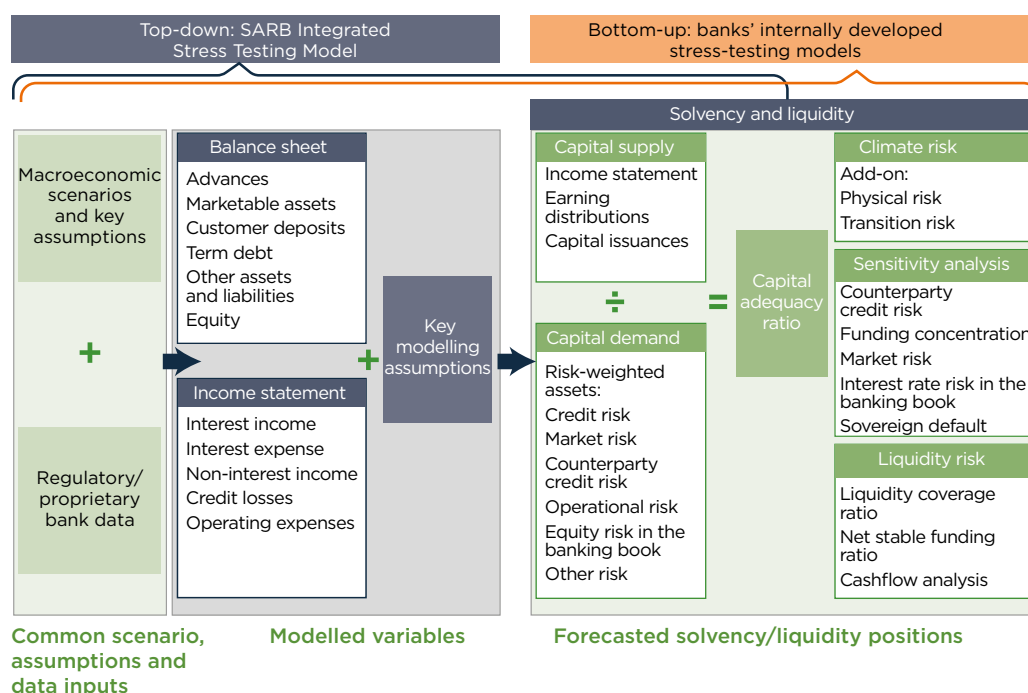
As the first CSST was conducted during a crisis period, the adverse macroeconomic scenario represented an unprecedented 'tail of the tail' scenario. To achieve the delicate balance between severity and plausibility, the SARB had to take a holistic view on scenario design and give greater consideration to the pre-stress environment than had been done in the past, to deliver a CSST that provides value to all stakeholders.

⁴ Measured at constant 2010 prices.

Methodology

The SARB CSST framework was developed from a macroprudential perspective to assess the resilience of the banking sector. The framework incorporates both top-down (TD) and bottom-up (BU) approaches. These corresponding outcomes were subsequently captured in forecasts of the respective banks' financial statements and cashflow positions. Similarly, for the TD analysis, the SARB's Integrated Stress Testing Model (ISM) was employed, which is an internally developed proprietary tool, used to model the impact of different macroeconomic scenarios on the solvency positions of banks (Figure 11).⁸

Figure 11: The 2021 CSST framework



⁸ Top-down (TD) bank stress-testing refers to a process where the SARB uses internally developed models to apply a set of macroeconomic stress scenarios to regulatory data in a consistent manner across all banks, whereas a bottom-up (BU) exercise is an exercise wherein the scenarios are designed by the SARB but implemented by individual banks with their own respective models.

Table 1 contains a high-level summary of the key assumptions used in the 2021 CSST. Design elements such as these are essential to create a 'level playing field' for participants and assist in a consistent interpretation of the results.

Table 1: Key assumptions of 2021 CSST

Item	Description
Balance sheet growth	Balance sheets are estimated to increase at the same pace as the annual growth rate in nominal private sector credit extension.
Operating expenses	These are assumed to grow by at least consumer price inflation.
Credit risk	- Perfect foresight on macroeconomic projections is assumed. - Impairments will be raised in line with the classification criteria of IFRS 9 models. - No curing of exposures that have defaulted was allowed.
Profits	- Dividends were paid, where profits were realised, in line with banks' publicly disclosed payout ranges. - The balance of unappropriated profits at the reference date was excluded from the results of the stress test. - All residual profits (after the payout of dividends) were appropriated to capital.
Management actions	No management action from or on behalf of the respective banks was factored into the results.

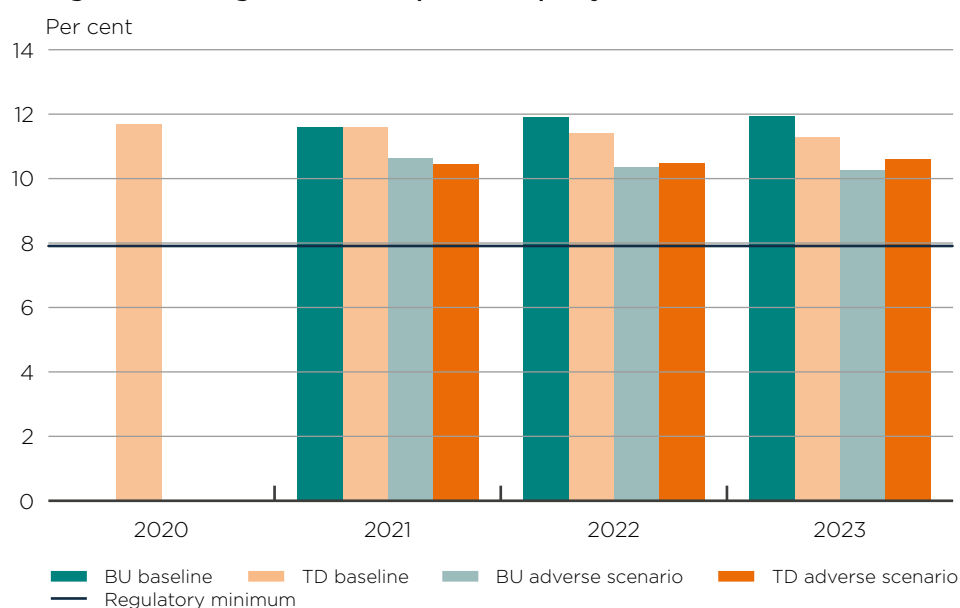
Results

Solvency

The 2021 CSST results indicate that banks are adequately capitalised and able to withstand the protracted economic disruptions contained in the adverse scenario. Banks' capital adequacy ratios (CARs) deteriorated in the adverse scenario, but remained well above the prudential minimum.⁹ The aggregated CET1 ratios from the BU and TD results are depicted in Figure 12, which shows a deterioration from 11.7% to 10.3% under adverse conditions for the BU exercise. In line with the CSST assumptions, the results do not include unappropriated profits, which would have improved banks' capital positions at the reference date by 52 basis points. At an aggregate level, unappropriated profits across the participants amounted to R15.2 billion at the inception of the exercise.

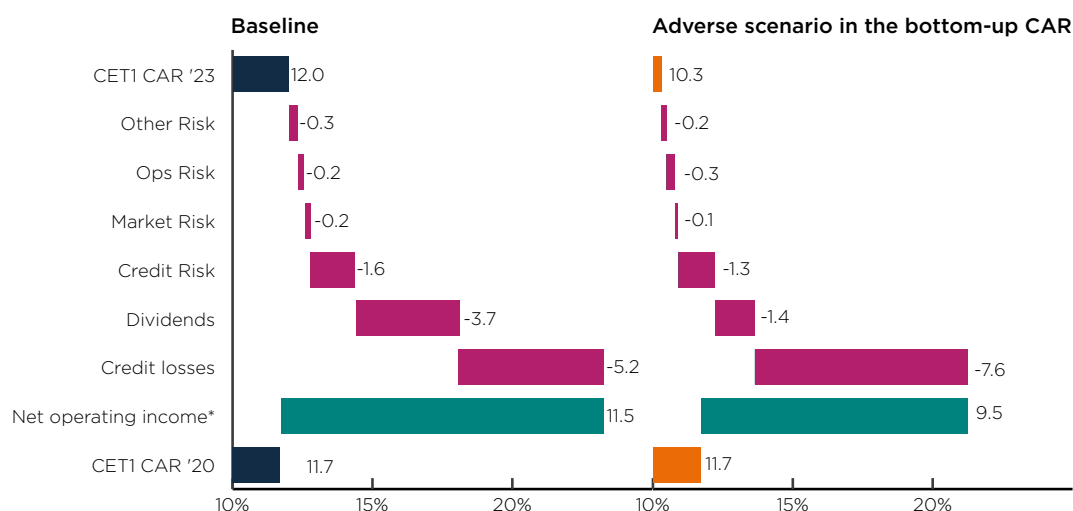
⁹ The regulatory minimum did not include the reinstatement of the 0.5% Pillar 2A buffer, scheduled for 2022. See PA Directive D5/2021: <https://www.resbank.co.za/content/dam/sarb/publications/prudential-authority/pa-deposit-takers/banks-directives/2021/D5%20-%202021%20-%20Capital%20Framework%20for%20South%20Africa%20based%20on%20the%20Basel%20III%20framework.pdf>



Figure 12: Weighted CET1 capital adequacy ratios¹⁰

Source: SARB

The deterioration in capital adequacy is primarily driven by a combination of higher credit losses, lower net operating income and concurrent increases in capital demand across most risk types (Figure 13).

Figure 13: Decomposition of the movements in CAR

* Net operating income is calculated as the sum of net interest income and non-interest revenue, less operating and other expenses as well as taxation.

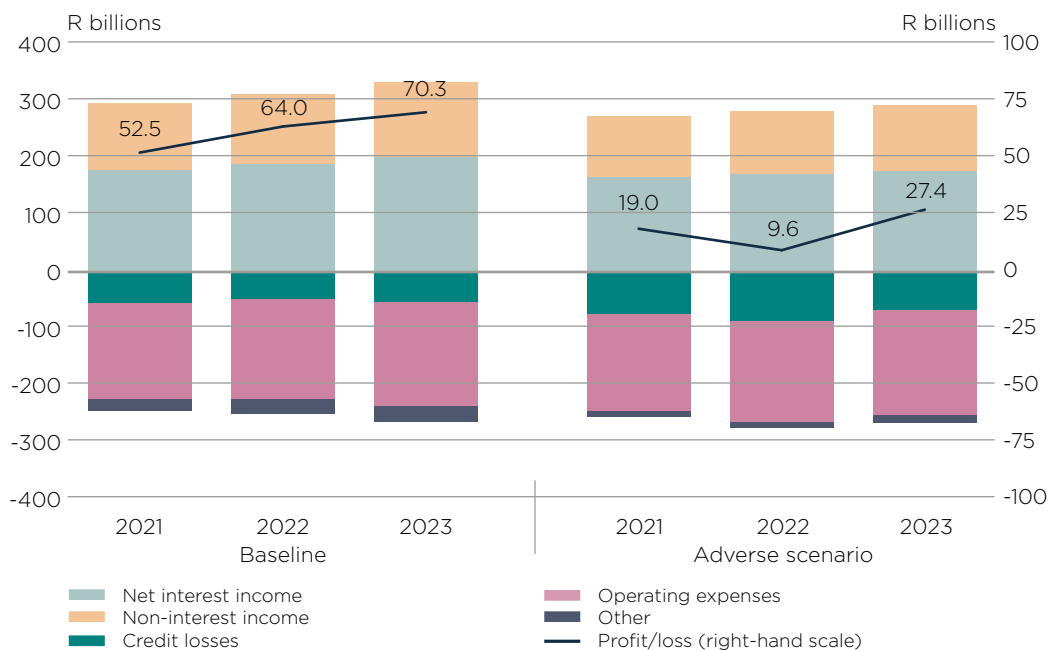
Source: SARB

¹⁰ The capital adequacy ratio (CAR) is the ratio of an institution's capital over its risk-weighted assets (RWAs). As a result, capital supply can move the CAR via realised losses, net income etc., while changes in asset values and the riskiness of those assets can impact the CAR via RWAs. The CAR is the ratio of an institution's capital over its RWAs. The CAR can change as a result of both changes in capital supply (emanating from, for example, realised losses and their impact on net income) and changes in capital requirements (emanating from changes in asset values and the riskiness of those assets).

Banks' profitability deteriorated significantly under the adverse scenario relative to the baseline.

This was driven primarily by increased credit losses, and notably lower net interest income and non-interest revenue (Figure 14). The decline in net interest income was due to lower lending margins, muted growth in loans and advances, and increased transition rates of credit exposures to higher risk buckets. Furthermore, banks recognised lower non-interest income due to lower business activity under the adverse scenario, resulting in a significant reduction of net profits. The worst reduction was recorded in 2022, followed by a moderate recovery in 2023. Ultimately, the reduction in profits resulted in a slower increase in capital supply in the adverse scenario relative to the baseline scenario.

Figure 14: Drivers of profitability



Source: SARB

Credit risk accounts for approximately 70% of banks' risk-weighted assets (RWAs).

During periods of stress, the likelihood of counterparties defaulting on their credit obligations increases significantly, ultimately resulting in banks recognising increased migrations of accounts to higher risk buckets. In line with this expectation, credit losses, credit risk weights and non-performing loans (NPLs) increased to reflect the deterioration in the credit risk profiles of the banks.

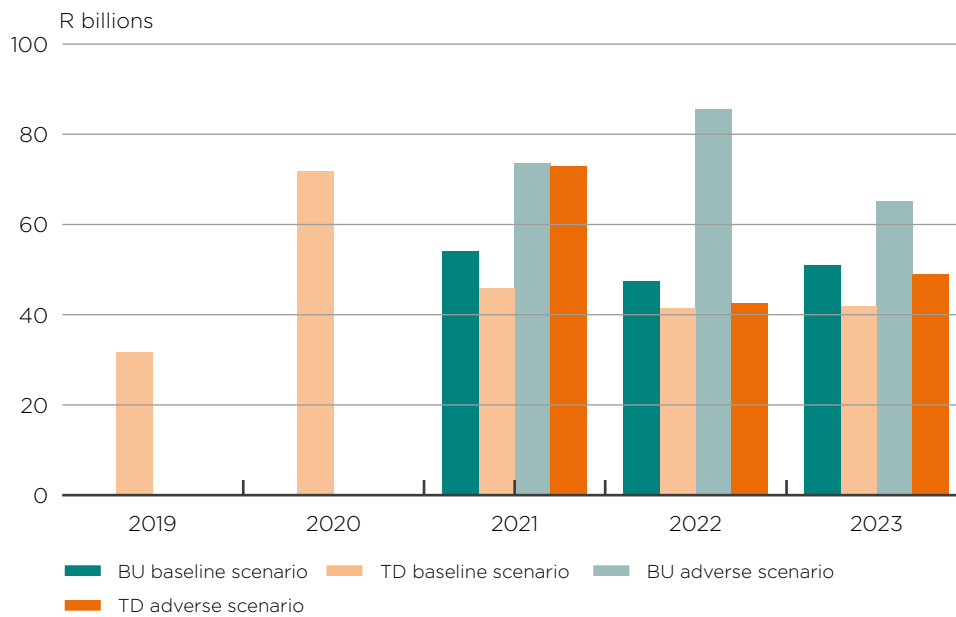
Figure 15 exhibits the observed trends in credit losses for both the BU and the TD exercises.

For the BU exercise, credit losses increased rapidly during the period of stress relative to the baseline, peaking at an aggregate of R85.4 billion in 2022, whereas the TD results have credit losses peaking in 2021.¹¹ This incongruity is, in part, due to differences in the write-off assumptions employed by the respective models as well as the application of perfect foresight (see Box 5 of the 2020 second edition of the *FSR*¹²). Nevertheless, both exercises show that credit losses are not expected to return to pre-COVID-19 pandemic levels across the forecast horizon in either scenario.

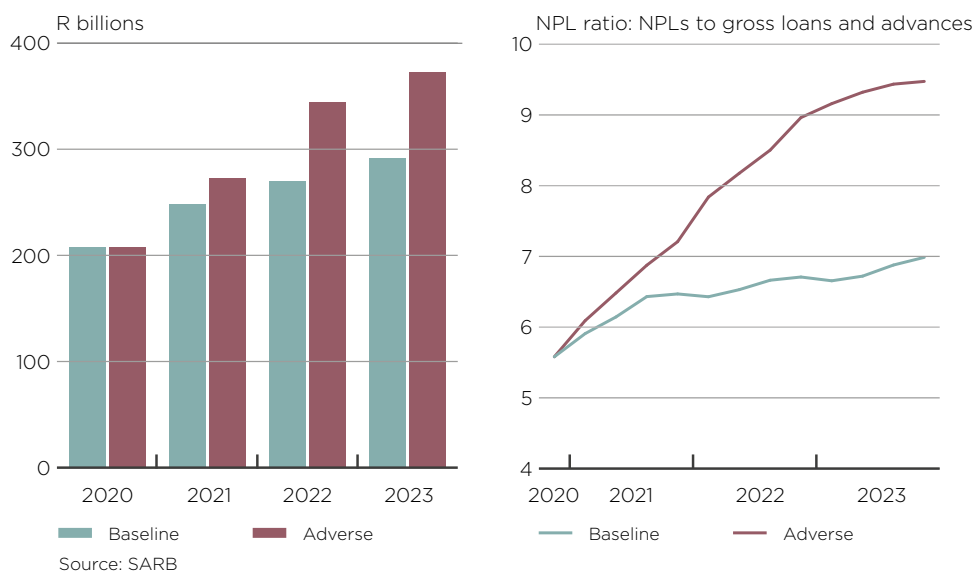
¹¹ The assumption that banks cannot 'cure' non-performing exposures from default to performing has an aggravating impact on credit losses.

¹² SARB, *Financial Stability Review*, second edition 2020. https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2020/Second_edition_Financial_Stability_Review



Figure 15: Aggregated credit losses

The stock of NPLs as well as the ratio of NPLs to gross loans and advances increased notably during the adverse scenario, reflecting the expected deterioration in credit quality. Within the BU exercise, aggregate NPLs and the corresponding ratio increased from R207.3 billion to R372.9 billion and from 4.8% to 8.6% respectively between 2020 and the end of 2023. Banks were required to assume that NPLs could not be cured to performing status. This assumption, in the absence of aggressive write-off policies, resulted in the accumulation of NPLs, which is clearly evident in Figure 16. Meanwhile, the increasing trend in NPLs in the first year of the baseline scenario suggests that the full impact of the 2020 lockdown measures has yet to be felt across the sector.

Figure 16: Non-performing loans

Box 2: Climate change risk add-on

As part of the 2021 Common Scenario Stress Test (CSST), the South African Reserve Bank (SARB) piloted a bottom-up (BU) climate change risk add-on. This focused mainly on the physical risks emanating from climate change as a result of a drought scenario. Banks were requested to quantitatively simulate the solvency impact of the drought scenario over the three-year stress horizon, with the impact incorporated into the already stressed solvency positions from the CSST adverse scenario. This was complemented by qualitative assessments of the impact of transition risks and the materiality of environmental risks to different economic sectors.

Aiming to assess the impact on drought-sensitive sectors, the SARB leveraged data from the South African Weather Service to design a historically consistent drought scenario. Banks were requested to estimate the impact of the identified drought scenario on their credit exposures per sector and report the impact on variables of concern such as probability of default (PD) and non-performing loans (NPLs). The exercise also required participants to assess the impact on the creditworthiness of the sovereign, as government may be expected to offer relief measures to the sectors affected by droughts. The ultimate impact of the drought add-on scenario on the common equity tier 1 (CET1) capital adequacy ratio (CAR) was a deterioration of roughly 30 basis points.¹

For transition risks, participants completed a qualitative assessment of the foreseeable impact of climate transition risks on their respective financial and risk positions. The qualitative assessment required banks to provide an assessment of their vulnerabilities in the medium to long term, given the current composition of their balance sheets and their strategic direction. The assessment was facilitated by a set of questions aimed at assessing each bank's understanding of transition risks and opportunities, as well as the drivers thereof. On aggregate, participating banks reported drivers of transition risk based on concerns about changes in policy and legislation, changes in technology, shifts in demand and supply as a result of changing consumer preferences, and reputational risk. Moreover, banks reported that they had already initiated green financing opportunities ranging from eco home loans in the South African residential property market and green commercial buildings, through off-grid renewable energy and agriculture, to telecommunications and media as well as mass-transit infrastructure.

The climate change risk add-on also included a qualitative assessment of the materiality of environmental risks to identified sectors. Credit quality and the nominal exposure of a sector to respective environmental risks were considered. The environmental risks assessed were air pollution, soil and water pollution, land use restrictions, chronic changes in climate, and hazards.² Banks used a qualitative heat map approach to rate the impact of these environmental risks on the various sectors.

The SARB is actively investigating improvements in its methodology for assessing climate change risks in the financial sector. Future climate change stress tests will likely be based on multi-year scenarios and conducted on a biennial basis. The SARB also intends to leverage on the scenarios and guidance provided by the Network for Greening the Financial System (NGFS) and lessons learned from the experience of other jurisdictions.

¹ Relative to the adverse scenario.

² Hazards refer to low-probability, high-severity weather events such as tropical cyclones and floods. While the occurrence of a singular, isolated event may not be the direct result of climate change, the probability and frequency of such shocks will increase at higher temperatures and/or greater extremes in temperatures and precipitation.



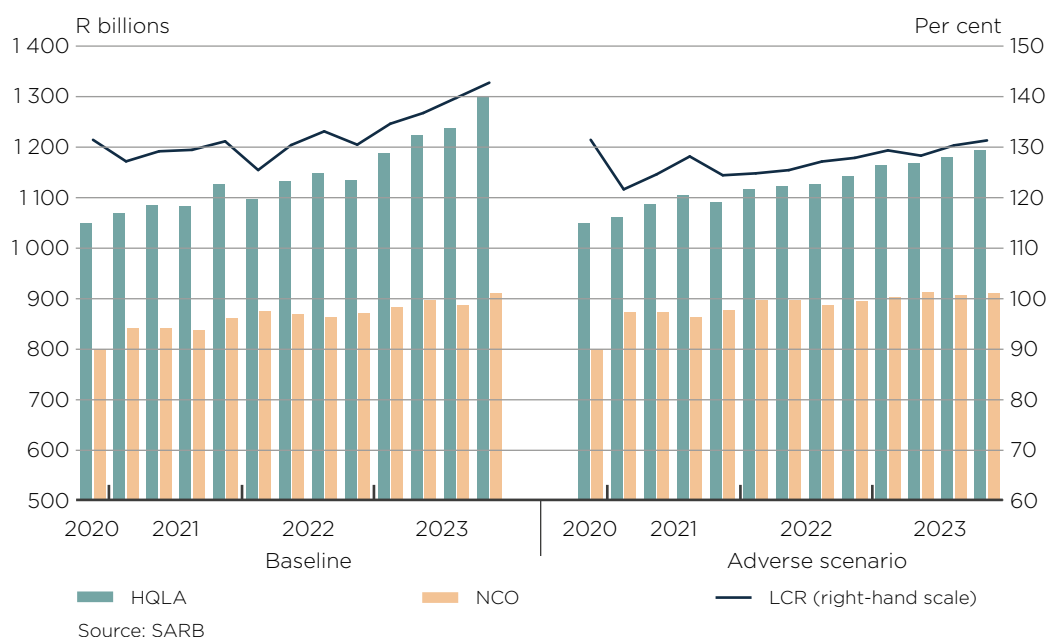
Liquidity

The liquidity stress test demonstrates that participating banks have sufficient resources to weather liquidity shocks under both the baseline and the adverse scenarios, and across both short- and longer-term horizons.

Results from the exercise should be viewed within the context of the South African funding market, where domestic banks rely heavily on unsecured short-term¹³ wholesale funding, which is typically considered more volatile than retail deposits.¹⁴ However, wholesale funding in South Africa is judged to be more stable than in many other jurisdictions, due to various regulatory and economic barriers that prevent funds from flowing from domestic banks into offshore accounts.¹⁵ These barriers include the current exchange control regime, prudential requirements on financial corporates and limited reliance on foreign exchange funding by South African banks.

Liquidity risk was assessed by considering the impact of the adverse scenario on the stock of high-quality liquid assets (HQLA), cash inflows, cash outflows and banks' stable funding components.¹⁶ The LCR is used to promote the short-term resilience of a bank's liquidity risk profile by ensuring the availability of adequate stocks of unencumbered HQLAs to meet expected net cash outflows (NCOs) and liquidity needs over a 30-day period, given a significant stress scenario.¹⁷ For the CSST, LCR metrics were calculated across a three-year horizon given the aforementioned scenarios. Overall, the stock of unencumbered HQLAs was found to be adequate to counterbalance the simulated NCOs (Figure 17).

Figure 17: Aggregated liquidity coverage ratio



¹³ Short-term funding has a residual maturity of less than six months.

¹⁴ At the reference date of the exercise, retail and wholesale deposits accounted for approximately 19% and 54% of aggregate funding respectively, while the remaining funding primarily consists of secured funding and funding derived from off-balance sheet exposures.

¹⁵ See PA Directive D8/2017: <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2017/8161>

¹⁶ All liquidity forecasts were performed in line with regulation 26 of the Banks Act 94 of 1990 (Banks Act) and the BA 300 form.

¹⁷ The LCR is typically calculated given prescribed stress factors which simulate specific haircuts to HQLAs, run-offs of funding and restricted inflows. See the Banks Act 94 of 1990: Regulation 26.



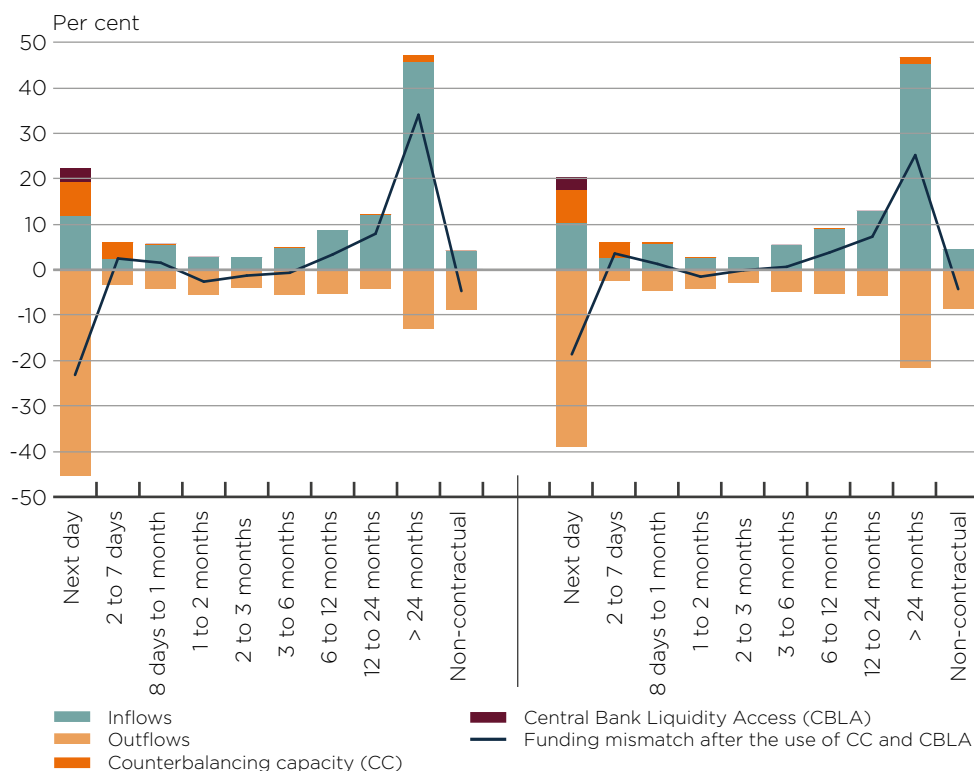
A cashflow-based analysis assessed the stock of banks' asset and liability balances according to maturity.

For the CSST, banks' positions were considered as at the reference date (31 December 2020) and against projected positions as at 31 December 2021¹⁸. Figure 18 presents the cashflow positions of the sector as a percentage of total assets for each scenario. The maturity profile of cash outflows for the banking sector is front-loaded, with banks highly reliant on overnight funding. This is primarily due to the transactional nature of retail and unsecured wholesale deposits. Despite the preponderance of short-term funding, banks' internal models estimate that, on average, 70% of overnight deposits are unlikely to be withdrawn under an adverse scenario.

The cashflow positions of banks are considered resilient to an adverse event with adequate mitigating measures in place.

The longer-term nature of banks' assets means that expected cash inflows are generally skewed towards longer maturities. However, these longer-term assets include significant sovereign investments, which are considered to be easily convertible into cash at short notice, with minimal losses. Banks' high reliance on unsecured wholesale funding is partly due to a preference by South African households and firms to channel their savings through contractual contributions to non-deposit products such as insurance, pension funds and mutual funds. Funds held by households and corporates with non-bank financial institutions return to banks as wholesale funding.

Figure 18: Cashflows as a percentage of total assets



Source: SARB

18 This point was identified as a significant point of macroeconomic stress in the adverse scenario.



To promote funding stability and resilience over a one-year horizon, banks are required to maintain a minimum specified amount of stable funding in relation to their liquidity needs. The net stable funding ratio (NSFR) is used to measure longer-term liquidity needs by measuring the amount of available stable funding (ASF) in the form of capital and liabilities relative to the amount of required stable funding (RSF) – which is based on banks' behaviour, liquidity value, asset tenor and asset value – over a one-year horizon. This is used to determine a potential maturity mismatch on bank balance sheets. Participating banks maintained an average NSFR in excess of the minimum required level (of 100%) across the full duration of the three-year period under consideration.

Conclusion

The results of the CSST confirm that the six SIFI banks have sufficient capital buffers to withstand the severe, yet plausible, macroeconomic shocks contained in the adverse scenario. Considering that the majority of bank solvency risk is associated with credit risk, it is unsurprising that the largest impact stemmed from degrading credit asset quality. Nonetheless, banks remained resilient across both BU and TD assessments. These results present a conservative estimate of banks' solvency positions during stress, considering the exclusion of unappropriated profits which would provide an additional layer of resources to mitigate the adverse outcome. Banks' liquidity profiles were able to endure liquidity shocks under both baseline and adverse scenarios, and to continue meeting both the LCR and the NSFR requirements.



Box 3: Exploratory stress-testing of the insurance industry

As part of assessing systemic risks and vulnerabilities in the financial sector, the South African Reserve Bank (SARB) recently extended its stress-testing framework to cover the insurance industry. Previously, macroprudential stress tests focused on the banking sector in the form of biennial common scenario stress tests (CSSTs), while insurance stress tests were only conducted by individual insurers as part of the own risk and solvency assessments (ORSAs), which are overseen by the Prudential Authority (PA). In 2020/21, the SARB took another step towards expanding the macroprudential monitoring framework for system-wide vulnerability assessments and undertook an exploratory bottom-up (BU) sensitivity stress test of the South African insurance industry. The exercise design, developed in consultation with the industry, provided insights into the impact of identified stresses on the solvency position of selected insurers and an approximation of the impact on the wider insurance industry. In addition to the standard risk types, this exploratory exercise also partially assessed the interconnectedness between the banking and insurance industries.

Eleven non-life and eight life insurers participated in the exercise. These insurers represent 64% of the non-life sector (as measured by total gross premiums) and 69% of the life sector (in terms of total assets). The risk types covered in the exercise were market risk and underwriting risk. For life insurers, the exercise encompassed shocks of mass lapse, mortality and catastrophe risks. For non-life insurers, the parameters covered increases in claim ratios and claim amounts, large losses and the default of major reinsurers. The same stress parameters were applied to the market risk faced by both life and non-life insurers, simulating adverse shocks to equity prices and volatility, spread and counterparty default, as well as the nominal yield curve. The exercise was conducted on a solo-entity basis,¹ with identified stress parameters treated as instantaneous shocks.

Overall, the insurance industry was found to be largely resilient to the identified shocks. However, as Table B3.1 highlights, pockets of vulnerabilities were identified, particularly in the non-life sector, which was assessed to be highly sensitive to increases in claims. In terms of the parameters for market risk, counterparty defaults had a material impact on the solvency positions of both life and non-life insurers. This was particularly true when considering bank counterparties, suggesting that counterparty risk linkages with large banks could play a significant role in the potential transmission of shocks. In terms of underwriting risk, the increase in the mortality stress parameter had the largest impact on life insurers while the large claims stress parameter impacted non-life insurers severely.

Table B3.1: Sensitivity stress test - impact on insurers

Stress parameters	Life insurers	Non-life insurers
Equity risk		
Spread and counterparty default		
Yield curve		
Underwriting risk		

Higher vulnerability  **Lower vulnerability**

Source: SARB

Going forward, the SARB will continue engaging with the insurance industry with the aim of developing more comprehensive stress tests. Future macroprudential stress-test exercises of the insurance industry are envisaged to include forward-looking scenarios and incorporate elements of climate change risks, and may exclusively cover domestic systemically important insurers (DSIIs) once these have been designated in terms of the Financial Sector Regulation Act 9 of 2017 (FSR Act).

¹ Solo-entity basis refers to all underwriting business originated in South Africa.



Chapter 3: Sectoral overview

Banking sector

Given the stressed economic climate, a significant risk facing the banking sector is the potential for bad debts to remain at elevated levels. Credit risk¹⁹ can result from both expected losses (e.g. where the lenders had reasons to believe that the borrowers would have difficulty repaying their loans) and unexpected losses (e.g. those that arise from a shock, such as the July 2021 civil unrest).

There is a risk of debt overhang arising from the substantial support that the sector provided to corporates and households as a result of COVID-19. However, this risk is mitigated by the requirement that relief was limited to borrowers in good standing before the onset of COVID-19 as well as relief that has been unwound since 2020 peaks. Nevertheless, businesses focused on tourism, hospitality, entertainment, leisure as well as related corporate real estate continue to be significantly affected by COVID-19 restrictions.

The resilience of the sector to credit risk is based on the measures in place to address expected and unexpected losses. The sector's vulnerability to expected losses is mitigated by South Africa's accounting reporting framework, which requires that significant increases in expected credit losses be provided for in line with International Financial Reporting Standard (IFRS) 9. The sector's vulnerability to unexpected losses is mitigated as a result of South Africa's adoption of Basel III,²⁰ in terms of which banks are required to ensure they hold sufficient regulatory capital for unexpected losses.

Although the sector's credit risk has been increasing, related credit provisions are increasing to offset this risk. Since the onset of COVID-19 in 2020, NPLs²¹ increased and have since stabilised at relatively elevated levels (Figure 19). The sector's coverage ratios²² for both the corporate and the retail asset classes have also increased to higher levels, indicating that provisioning levels have broadly kept pace with increased credit risk.

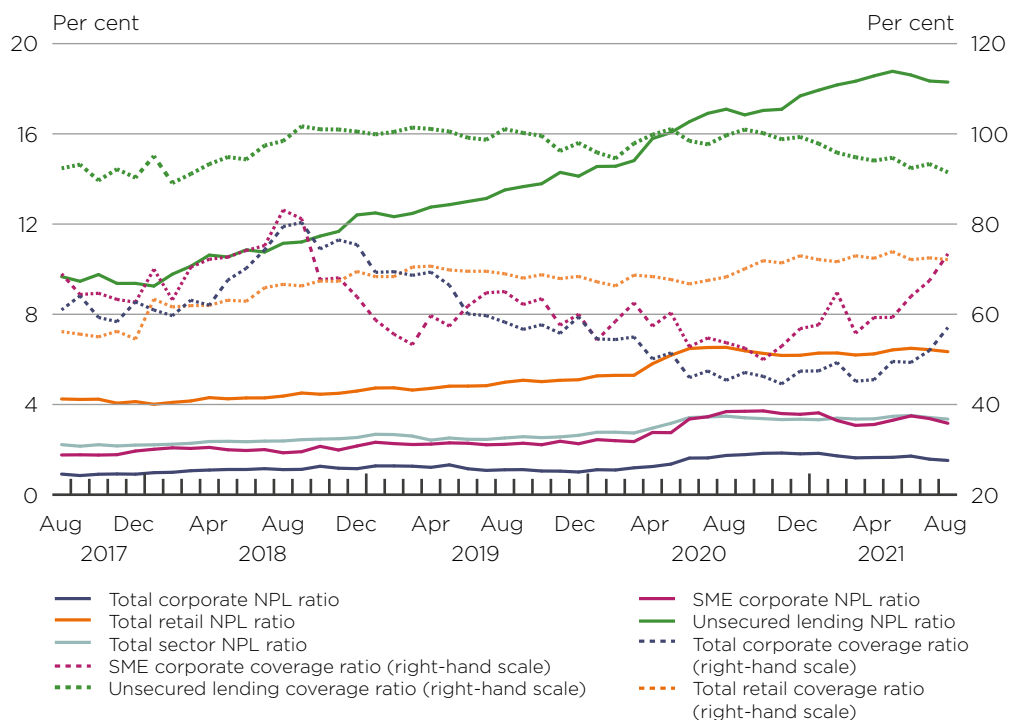
19 For the purposes of this discussion, credit risk is the risk of obligators not meeting their loan commitments as they fall due in normal circumstances.

20 See the BCBS Basel III reforms, available at <https://www.bis.org/bcbs/basel3.htm>

21 For the purposes of this note, NPLs are indicated by the ratio of unpaid loans greater than 90 days to total loans for the respective asset category or impaired advances as a percentage of on-balance sheet loans and advances.

22 Coverage ratios are an indicator of the level of provisions held for a given level of bad debt. Coverage ratios are specific provisions as a percentage of loans overdue for more than 90 days. A ratio of 100% indicates that the whole loan balance that is overdue for more than 90 days is fully provided for.



Figure 19: Indicators of credit risk and provisioning in the banking sector

Source: PA

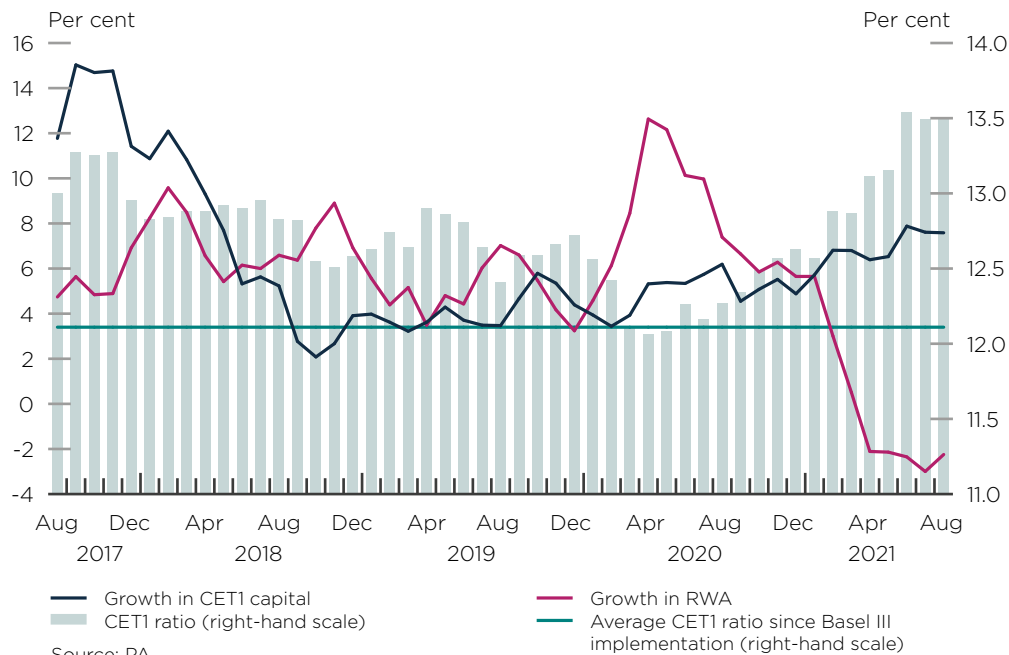
Following the onset of COVID-19, the sector's capital buffers declined as credit losses increased, but have subsequently recovered. A key mitigant against unexpected losses is the amount and quality of the sector's regulatory capital buffers. The sector's CET1 capital ratio²³ declined between March and May of 2020 following the highest level of restrictions implemented in response to the initial COVID-19 outbreak and a resulting increase in credit losses (Figure 20). Subsequently, the sector's regulatory capital buffers improved and have recently exceeded pre-COVID-19 levels, largely as a result of declining RWAs²⁴ as well as increased retained earnings.

²³ The CET1 ratio consists largely of paid-in equity and retained earnings and, as such, is a measure of a bank's ability to absorb unexpected losses during stressful periods.

²⁴ The declining RWAs suggest that the sector is repositioning assets from higher risk portfolios (such as unsecured lending) to lower risk assets (such as secured lending and government debt).



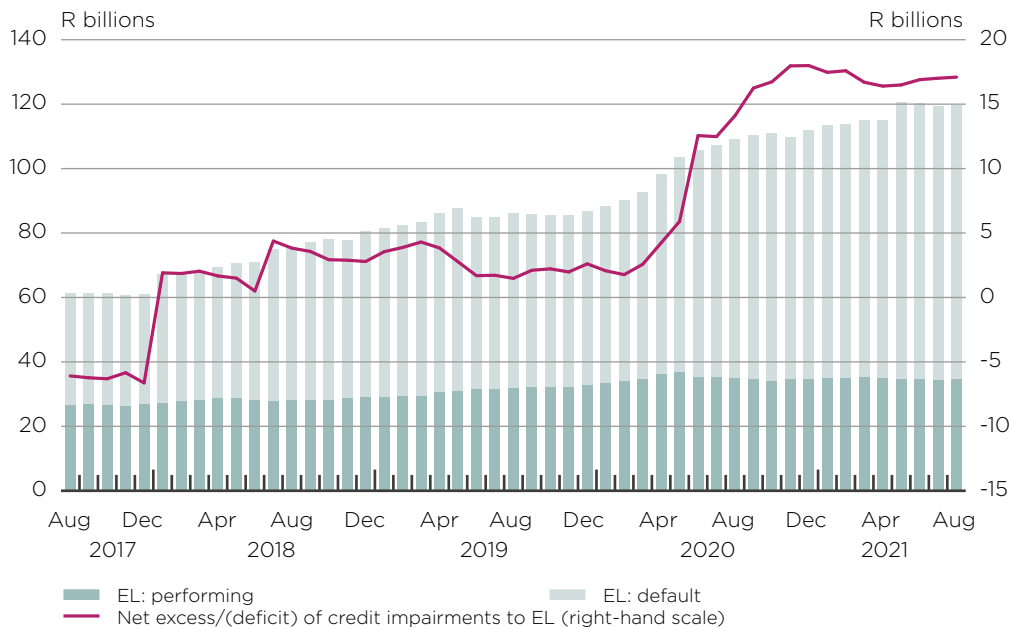
Figure 20: Common equity tier 1 ratio, growth in risk-weighted assets and growth in regulatory capital



Banks' expected losses²⁵ (ELs) increased by more than 50% following the COVID-19 shock. The significant increase in ELs occurred as banks adjusted their 12-month forward-looking probability of default (PD) upwards as expectations for credit losses increased. Banks reacted to a rise in ELs by increasing their provisioning (Figure 21) in line with the sector's forward-looking accounting models used for calculating and reporting credit impairments in terms of IFRS 9. The increased provisioning has been sufficient to mitigate increased credit risk.

²⁵ Expected losses (EL) are an indication of what banks expect to lose taking into account the 12-month forward-looking probability of default (PD) expectations for their loan portfolios and, if the loss were to occur, how much that loss would be after considering any collateral held (also known as loss given default). The formula for calculating ELs, as per the Basel framework, is PDs x LGDs x EAD (exposure at default). ELs are reported for internal portfolios. Most of the systemically important financial institutions (SIFIs) have supervisory approval to report loan portfolios using their internal ratings-based models.

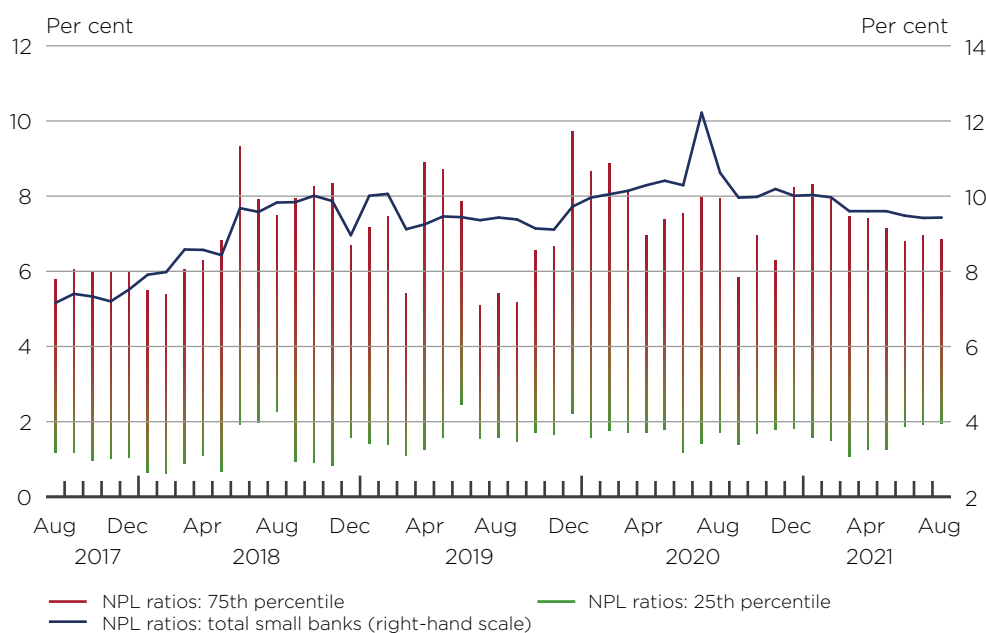
Figure 21: An increase in banks' expected losses was mitigated by an increase in provisions



Smaller banks continue to have significantly higher NPL ratios than the large banks. Smaller banks²⁶ have traditionally had higher NPL ratios because of their less diversified business models and because they tend to focus on niche sectors of the economy that have higher credit risk, for example lending to small and medium enterprises (SMEs) (Figure 22). In July 2021, the aggregate NPL ratio for smaller banks was 9.4%,²⁷ which was almost twice the total sector NPL of 5%. However, there is a wide dispersion between different smaller banks' NPL ratios. The total sector NPL ratio is skewed toward the upper end because there are a small number of banks that report the highest amounts of NPLs. However, greater credit risk is mitigated to some extent by the higher regulatory capital ratios that smaller banks are required to hold as well as their increasing coverage ratios. The average coverage ratio for this group since February 2020 was 58% compared to 54% for the corresponding period before COVID-19.).

²⁶ For the purposes of this discussion, 'smaller banks' refers to non-SIFIs.

²⁷ For the purposes of this discussion, non-SIFI and total sector NPL ratios were adjusted for the 'bad' book of African Bank Investments Limited.

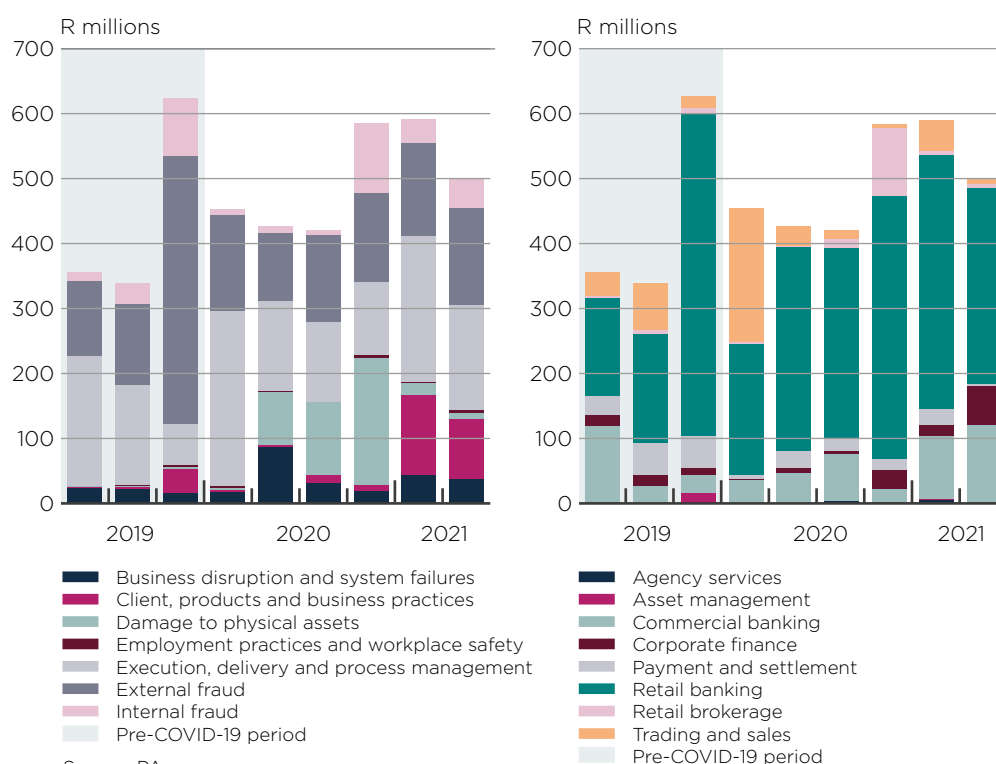
Figure 22: NPL ratios for smaller banks*

Banks' operational risk has shifted and increased as a result of remote working and the threat of cyberattacks on the sector.

Prior to the COVID-19 pandemic, common operational risks included the risk of incorrect execution or delivery of services, system failures, poor business practices, illegal and/or unethical employment practices, dangerous workplaces as well as both internal and external fraud. The operational models of banks changed with the onset of COVID-19, with some operational risks increasing (such as information technology and system risk) and others reducing (such as workplace safety). The average net loss amount associated with operational risks has increased since the outbreak of COVID-19, with an increase in average losses from execution, delivery and process management events as well as business disruption and system failure events. Most of these loss events occurred in banks' retail banking business units (Figure 23).²⁸

²⁸ The data used for the analysis exclude the losses incurred from the July 2021 civil unrest domestic shock. Refer to Box 4 for more information.

Figure 23: Operational risk net loss pre- and post-COVID-19 by type (left) and business unit (right)



Box 4: The effect of the July 2021 civil unrest on the banking sector

During August 2021, the Prudential Authority (PA) surveyed 12 banks that, based on the geographic location of their businesses, were most likely to be impacted by the civil unrest. No bank employees were hurt or injured during the unrest. The banks were still assessing the effect on their clients' businesses at the time of the survey, and any relief to clients was being processed on a case-by-case basis.

In terms of physical damage, banks estimated the following losses:

- more than R700 million worth of damage to buildings and branches;
- R480 million worth of damage to automated teller machines (ATMs), with more than 1 200 ATMs affected; and
- R29 million worth of damage to point-of-sale (POS) systems, with more than 5 500 POSs affected.

The majority of the physical damage was insured. However, not all the ATMs will be replaced and the industry estimates rebuilding 200 branches over the medium term.¹ In addition to the physical damage, more than R300 million was lost due to the theft of cash, branch assets and other goods. Not all of the stolen banknotes were dye-stained (i.e. deemed to be proceeds of crime and have no value), resulting in a high risk of the proceeds of crime being laundered back into the financial system.² Immediately following the unrest, the operational capacity of branches and ATMs in Gauteng was estimated to be between 80% and 100%, whereas operational capacity in KwaZulu-Natal ranged between 60% and 100% for the banks surveyed.

1 See the Banking Association of South Africa press release of 7 August 2021 for further details: <https://www.banking.org.za>

2 See the South African Banking Risk Information Centre press release for further details: <https://www.sabric.co.za/media-and-news/press-releases/civil-unrest-banking-infrastructure-damage/>



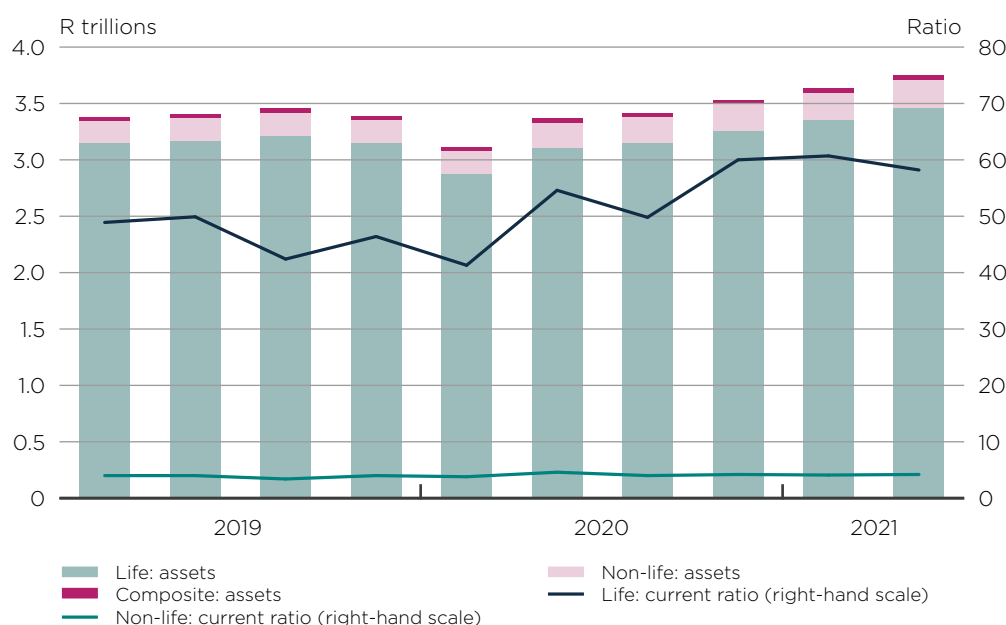
Non-bank financial institutions

In this edition, the *FSR* will cover the following non-bank financial institution sectors: insurance, collective investment schemes (CISs) and financial market infrastructures (FMIs).

Insurance sector

Double-digit y/y growth in insurance assets was recorded across all insurer classes for the second quarter of 2021. Total assets increased by 11.5% y/y to R3.8 trillion in the second quarter of 2021, partly boosted by low base effects during the height of the lockdowns in the second quarter of 2020. The assets of life insurers grew by 11.3% y/y to R3.5 trillion, while non-life insurance assets grew by 12.4% y/y to R248.7 billion (Figure 24). However, concentration in the sector remains high, as over 90% of assets are held by life insurers, reflecting their relatively larger investment portfolios. Among the life insurers, over 70% of assets are held by the top five insurers. The insurance sector remains highly liquid, with current ratios of 58.2 and 4.2 for life and non-life respectively.²⁹

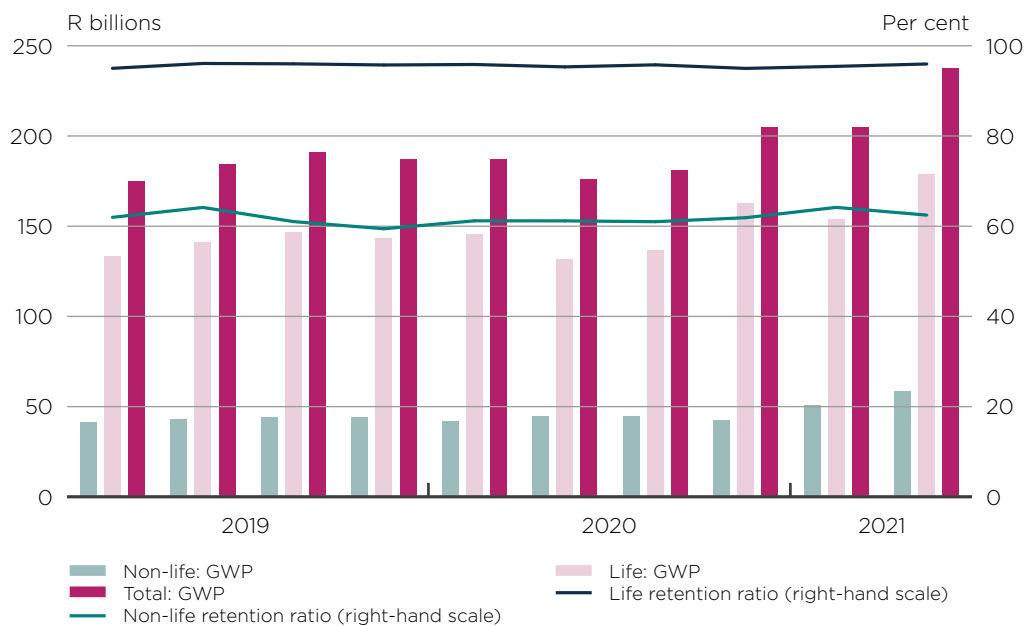
Figure 24: Insurance sector assets



Source: PA

Insurance sector gross written premiums (GWPs) grew significantly despite a challenging economic environment. Total GWPs increased by 34.7% y/y to R237.3 billion in the second quarter of 2021. This was largely due to low base effects and significant growth in life and non-life insurance operations (Figure 25). Life insurance GWPs increased by 31.4% y/y to R178.8 billion, and non-life premiums increased by 35.9% to R58.5 billion. While GWPs increased, lacklustre economic growth remains a concern for the sector as it has the potential to negatively impact on the future demand for insurance products. Nonetheless, retention rates for all insurers have remained relatively stable over time.

²⁹ Life insurance refers to insurance that pays out a lump sum of money either on the death of the insured person or after a set period of time for investment policies. Non-life insurance refers to short-term insurance that focuses on offering financial cover for anything other than life cover.

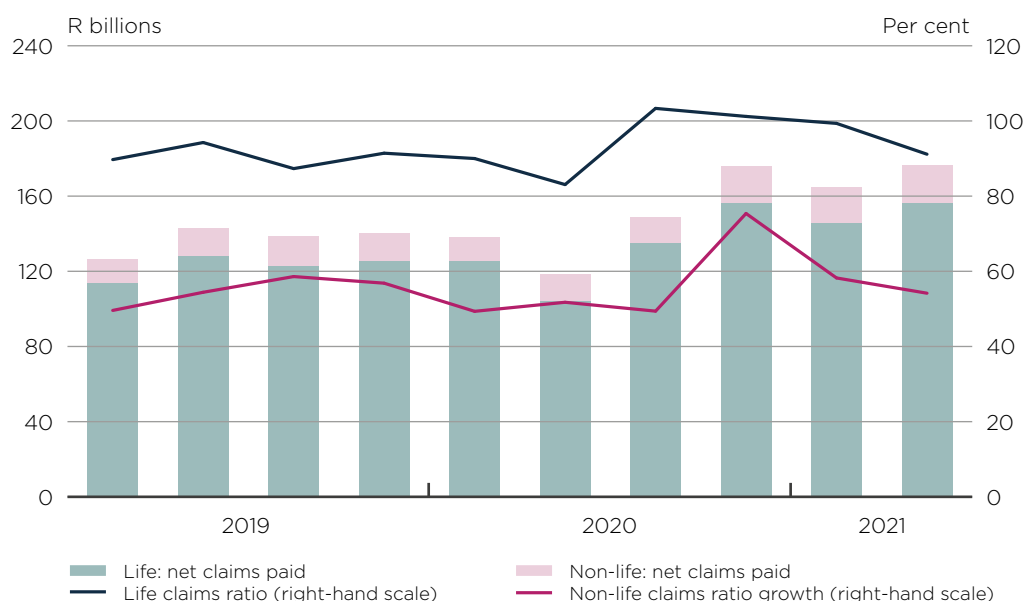
Figure 25: Insurance sector gross written premiums

Source: PA

Insurance sector net claims remained elevated for both insurer types. Life insurance net claims increased by 50.1% y/y and by 7.4% quarter on quarter in the second quarter of 2021. This increase captures the impact of the lockdown measures associated with the two waves of the pandemic experienced between 1 July 2020 and 30 June 2021. Furthermore, insurance claims are expected to remain elevated, following the country technically entering the third wave on 10 June 2021. In addition, an alarming increase in fraudulent and dishonest claims in the life insurance business poses an earnings risk to the sector. The Association for Savings and Investment South Africa (ASISA) reported an increase of 12% to R587 million in these types of claims for 2020 compared to 2019.³⁰

Non-life insurance claims increased by 40.4% y/y and by 4.1% quarter on quarter in the second quarter of 2021. The increase was largely due to increases in motor insurance claims. Non-life insurance claims are expected to increase further in the third quarter of 2021, following the unrest that resulted in looting and damage to property. While net claims increased, it is encouraging to see the ratio of net claims paid to net premiums received trending downwards from the high observed during the latter half of 2020.

³⁰ <https://www.asisa.org.za/media-releases/life-insurers-report-significant-increases-in-funeral-insurance-fraud-for-2020/>

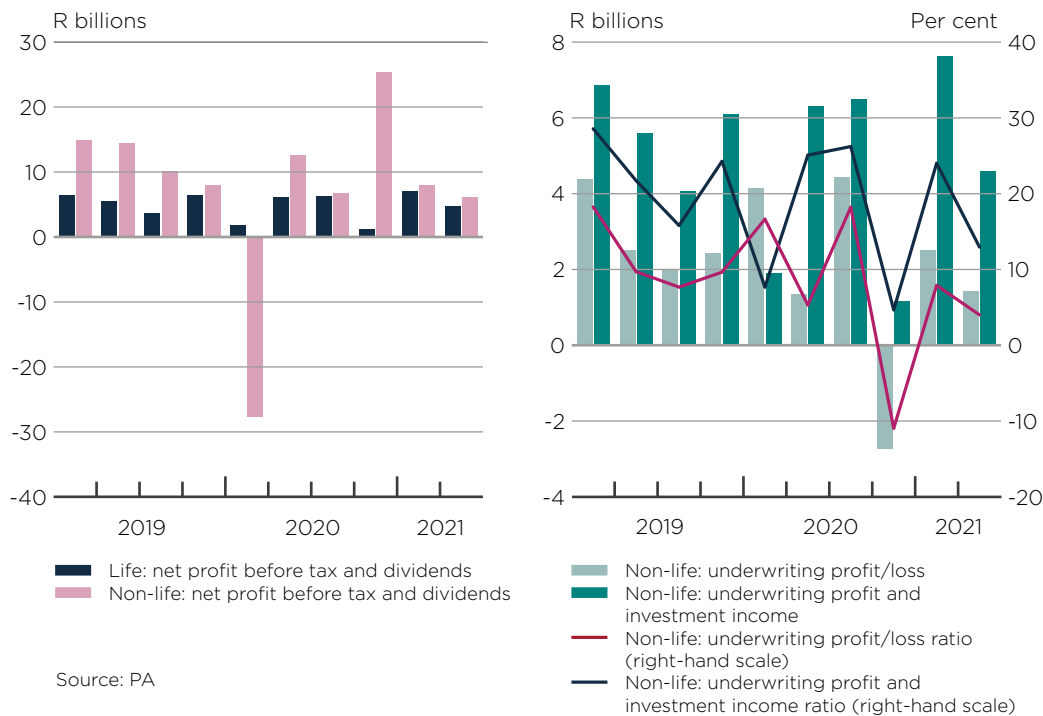
Figure 26: Insurance sector net claims paid

Source: PA

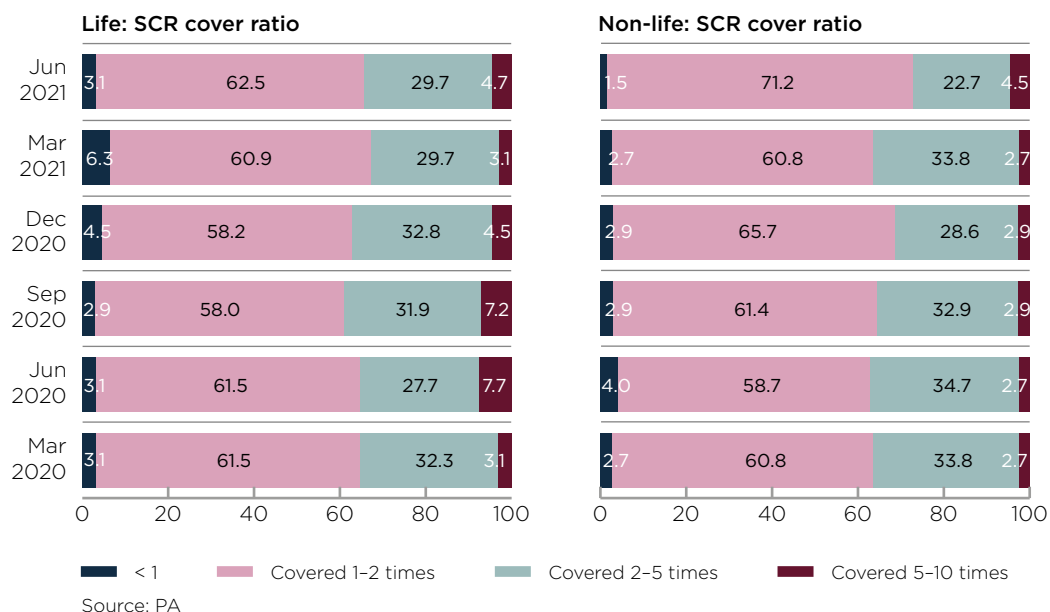
The state-owned insurer Sasria³¹ was responsible for the payout of most claims for damage to property during the social unrest. Sasria entered the civil unrest period in a sound financial position. It registered a profit in 2020 following an increase in GWPs and a decrease in claims from the previous year. However, the unrest had a material adverse impact on Sasria as it grappled with its highest claims to date. At the beginning of August 2021, Sasria reported claims of R18.3 billion, of which R685.2 million had been paid out. The insurer estimates that the total claims related to the July 2021 unrest will amount to approximately R20 billion. Reinsurers are set to pay R7 billion of the claims while government has set aside a R3.9 billion cash injection to assist Sasria. The unrest not only poses financial risks to Sasria and indirectly to government (as its owner), but may also increase the cost of insurance against future bouts of unrest.

The profitability of the insurance sector decreased in the second quarter of 2021 amid a challenging economic environment. The sector's net profit before tax was weighed down by a reduction in investment income coupled with an increase in claims. Life insurers' net profit before tax moderated to R6.1 billion in June 2021 from R7.9 billion in March 2021, while profit among non-life insurers fell to R4.7 billion from R6.9 billion over the same time frame (Figure 27). Non-life insurance underwriting income remains volatile and is largely influenced by investment income and claims associated with periodic events that cause significant losses to segments of their clients.

³¹ The South African Special Risk Insurance Association (Sasria) is a registered non-life insurer that is wholly owned by the South African government. Sasria is mandated to provide insurance for damage to property as a result of political acts, riots, strikes and terrorism. This is achieved by entering into agreements with non-life insurance agencies and brokers to offer solutions on its behalf. Sasria covers are up to R500 million of coverage, with an option to buy up to R1 billion.

Figure 27: Life and non-life insurance profits

The insurance sector remains adequately capitalised, with aggregate capital levels above the solvency capital requirement (SCR). For the period under review, only 3% of life insurers and 2% of non-life insurers had SCR cover ratios below the minimum requirement. The sector, however, remains vulnerable to further COVID-19 flare-ups. In addition, a resurgence in civil unrest that damaged property and disrupted supply chains poses a risk to the sector.

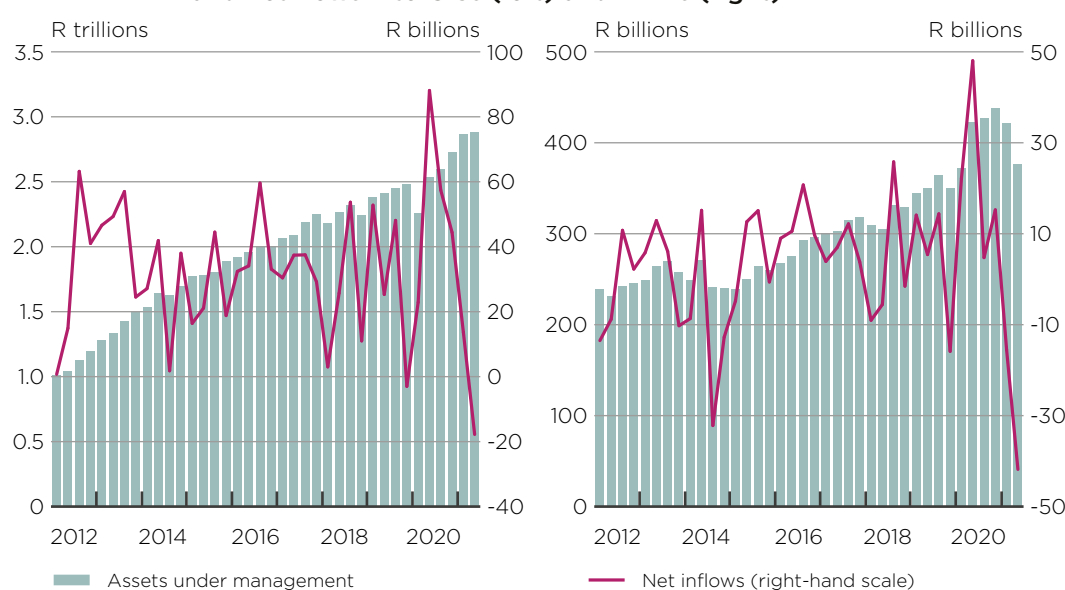
Figure 28: The distribution of SCR cover ratios for insurance entities

Collective investment schemes

The assets under management (AUM) of CISs continue to grow steadily.

CISs' AUM has doubled over the past eight years (in nominal terms), reaching R2.9 trillion in June 2021. AUM growth was attributable to a combination of net inflows into the sector until the first quarter of 2021 and valuation effects across various asset classes. The net outflows recorded in the second quarter of 2021 reflect the closure of the Absa Money Market Fund³² (MMF), South Africa's largest MMF. According to ASISA, the CIS industry would have posted net inflows of R33 billion if the impact of the Absa MMF closure was excluded.³³

Figure 29: Assets under management and net flows into CISs (left) and MMFs (right)



Source: ASISA

MMFs face vulnerabilities when the broader financial system is under stress.

MMFs are a type of CIS that holds short-term, relatively liquid assets. Although these types of assets have relatively lower credit and market risk in normal circumstances, MMFs nevertheless face vulnerabilities that stem from the role that they play in clients' cash management practices and the liquidity transformation³⁴ that they engage in. MMFs are susceptible to sudden increases in redemptions that would be similar to a run on a bank. Although they theoretically have low-risk assets available to enable them to meet this increased demand for cash, it may be difficult to liquidate these assets if market conditions become illiquid in periods of systemic stress.

³² The Absa Money Market Fund (MMF) with an R80 billion AUM announced its closure on 7 April 2021. Clients had until the start of July 2021 to redeem their funds.

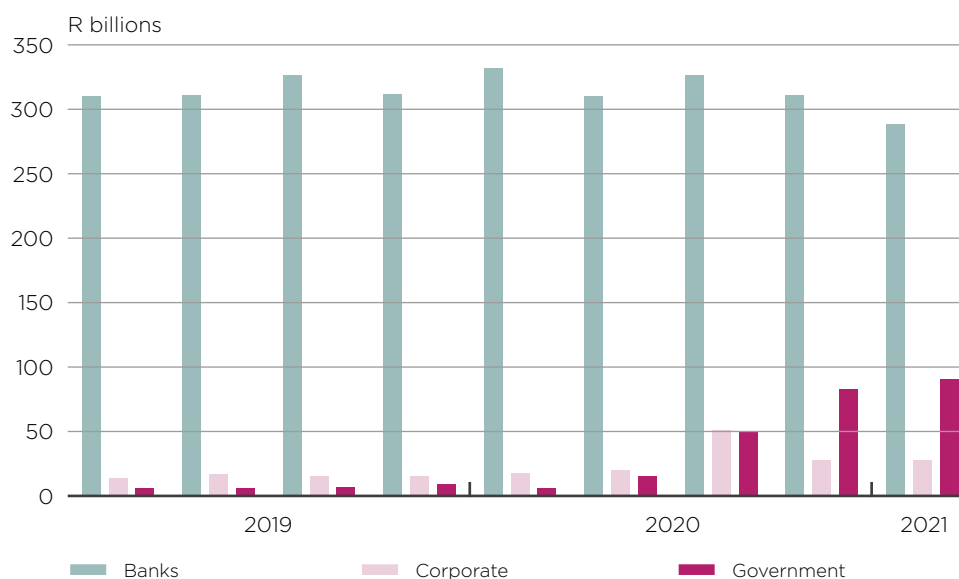
³³ https://www.asisa.org.za/media/fnsdp5co/20210818_cis-assets-under-management-fast-approaching-the-r3-trillion-threshold.pdf.

³⁴ Liquidity transformation means that MMFs offer investors the opportunity to withdraw funds on demand, but hold assets which can at times be difficult to sell on demand. Thus, there is a mismatch between the redemption period offered and the underlying liquidity of the assets held within the MMF.



MMFs in South Africa are highly interconnected with domestic banks and are an important source of short-term funding for banks. Therefore, if MMFs experience large and unexpected redemptions, they may be forced to make unexpectedly large withdrawals of their bank deposits, which can translate into liquidity pressure on individual banks. Over the past year, MMFs have reduced their exposures to banks, while exposures to government-issued debt have increased (Figure 30).³⁵

Figure 30: MMF exposure



Sources: ASISA and SARB

Financial market infrastructures

Following the onset of the COVID-19 pandemic, domestic supervisors of the FMI sector instituted a close monitoring and reporting regime. The Prudential Authority (PA), the Financial Sector Conduct Authority (FSCA) and the National Payment System Department (NPSD) of the SARB jointly supervise the FMI sector.³⁶ There has been an increased focus on the operational resilience of the broader FMI sector and this has ensured that risks introduced by participants and counterparties are adequately managed. South African FMIs have successfully adapted to large numbers of staff working from home and have kept the lines of communication open with regulators and policymakers. Despite challenging conditions brought about by the onset of the pandemic, FMIs have remained resilient and continued to perform their critical functions in the financial system and broader economy.

³⁵ Ultimately, these funds remain in the banking sector as a whole, but the composition, term and counterparties of bank deposits change, and in the transition period some banks may experience temporary liquidity pressures.

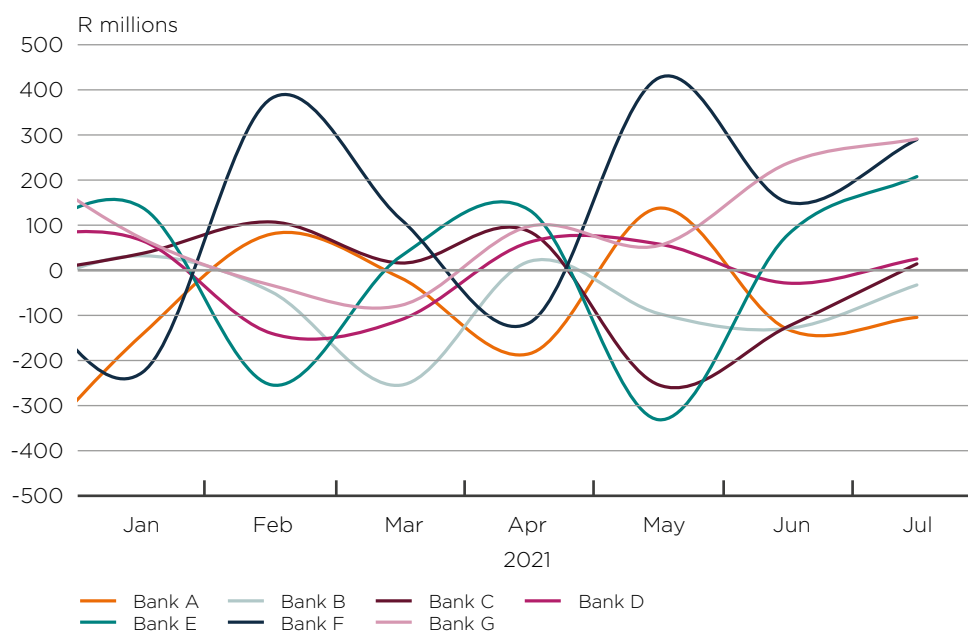
³⁶ FMIs supervised by the SARB, the PA and the FSCA include the South African Multiple Option Settlement System (SAMOS), Strate, Bankserv Africa, JSE Limited, JSE Clear and A2X Markets.



Margining requirements protect a central counterparty (CCP) and its users against potential losses generated by the default of any of its members. According to the Principles for Financial Market Infrastructures (PFMIs)³⁷, margining arrangements are maintained to enable a CCP to cover its counterparty credit risk exposures. An effective margining system is risk-based and regularly reviewed.³⁸ Margin obligations at JSE Clear (JSEC) are processed as part of JSEC's mark-to-market (MtM) settlement cycles. JSEC must perform at least one MtM settlement cycle per business day for each product cleared. Based on the monitoring framework in place to track failed margin placements, no clearing member had issues in placing the required margin in time when called upon to do so by the JSEC.

Figure 31 provides a snapshot of the monthly margin calls per clearing member at the JSEC.

Figure 31: Monthly margin calls per JSE Clearing member



To provide settlement assurance for central book trades, the JSE Limited (JSE) employs margining as one of a range of settlement risk mitigation measures. Members are required to deposit settlement margins with the JSE for all transactions that they have introduced to the market. The margin requirement comprises two components:

- MtM: a revaluation of the transaction to the current market value as at the end of the day on T + 1; and
- risk margin: potential future losses calculated using a parametric value-at-risk (VaR) model.³⁹

³⁷ Committee on Payment and Settlement Systems, 'Disclosure framework for financial market infrastructures', April 2012. <https://www.bis.org/cpmi/publ/d106.pdf>.

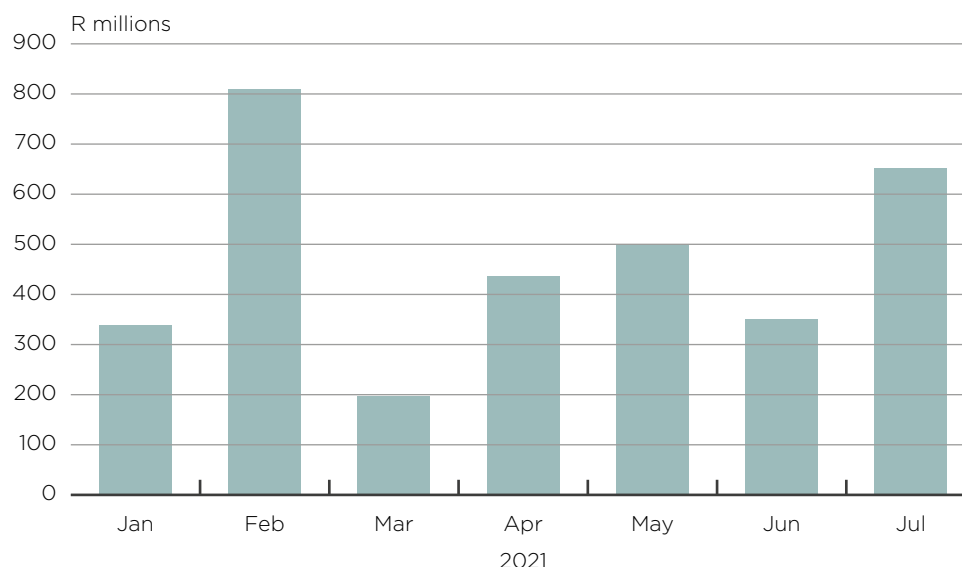
³⁸ Margining systems have several components, one of them being the initial margin requirement, which is typically calculated using a market risk model to estimate the potential future exposure of each member's portfolio.

³⁹ JSE, 'Equity market risk management', 2021. <https://www.jse.co.za/Risk-Management/equity-market-risk-management-0>



For the period under review, there has not been any significant counterparty credit risk resulting from the operation of margining arrangements in the relevant domestic markets, nor any negative market externalities from inadequate margining practices, as all parties/clearing members were able to meet their margin obligations timeously.

Figure 32: Monthly margin calls – cash equities market

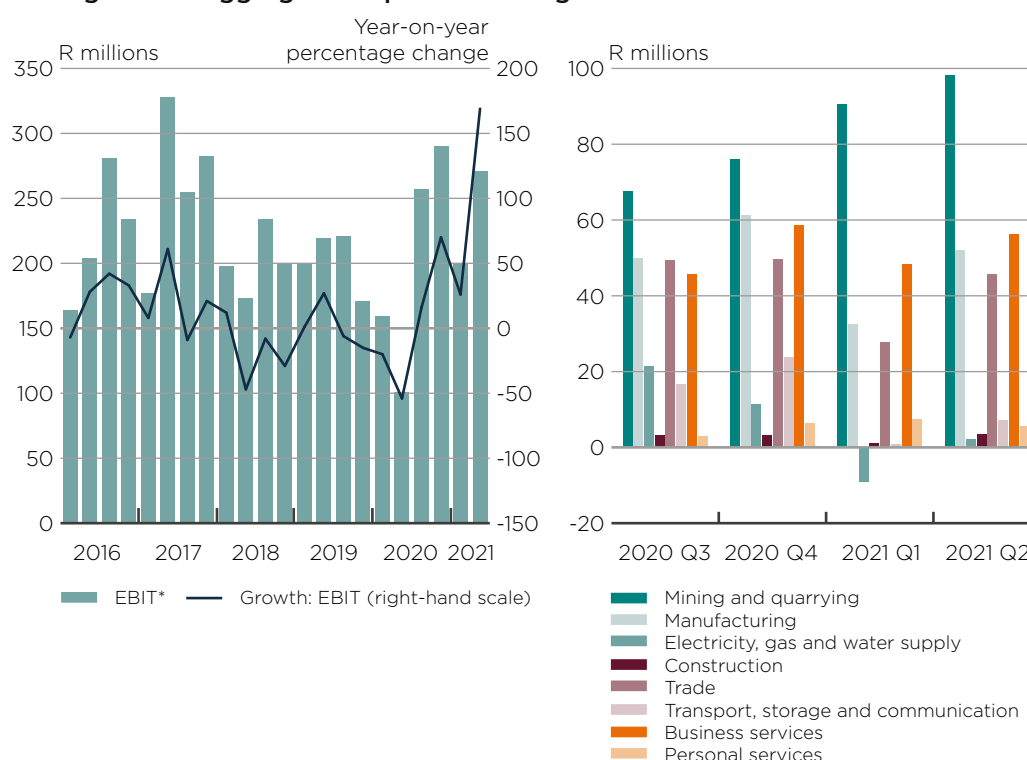


Source: PA

Non-financial corporates

Non-financial corporate earnings improved significantly despite ongoing COVID-19 restrictions. Earnings growth has accelerated in recent quarters (Figure 33), largely driven by the mining and quarrying industry as it continues to benefit from higher commodity prices. Earnings growth has also become more broad-based since the start of 2021. Despite this improvement, the transport, storage and communications industry⁴⁰ has lagged other industries as restrictions on travel continue to impact on its performance.

⁴⁰ The slowdown in this industry is largely driven by the transport sector.

Figure 33: Aggregate corporate earnings⁴¹

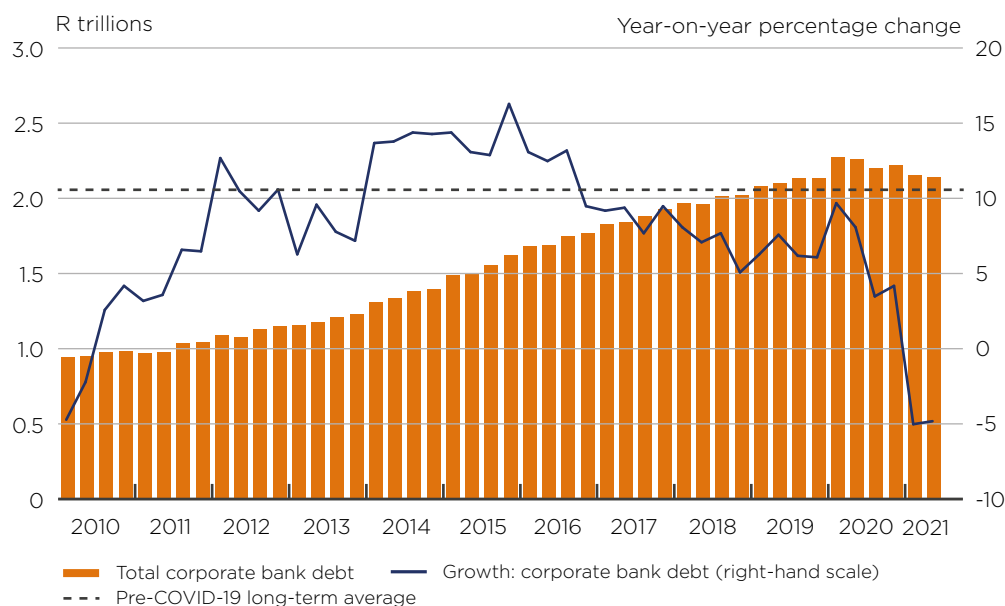
* EBIT is 'earnings before interest and taxes', and is used as a proxy for corporate earnings.

Sources: Stats SA and SARB

Credit provision to non-financial corporates was muted in the period under review. Growth in credit extension to non-financial corporates has been slowing since the last quarter of 2016 and turned negative in 2021 (Figure 34). While it is important to limit excessive leverage by non-financial firms, protracted weakness in funding could weigh on the country's recovery and indirectly impact on their performance and eventually their ability to service outstanding debt.



⁴¹ Earnings before interest and taxes (EBIT) is used as a proxy for corporate earnings.

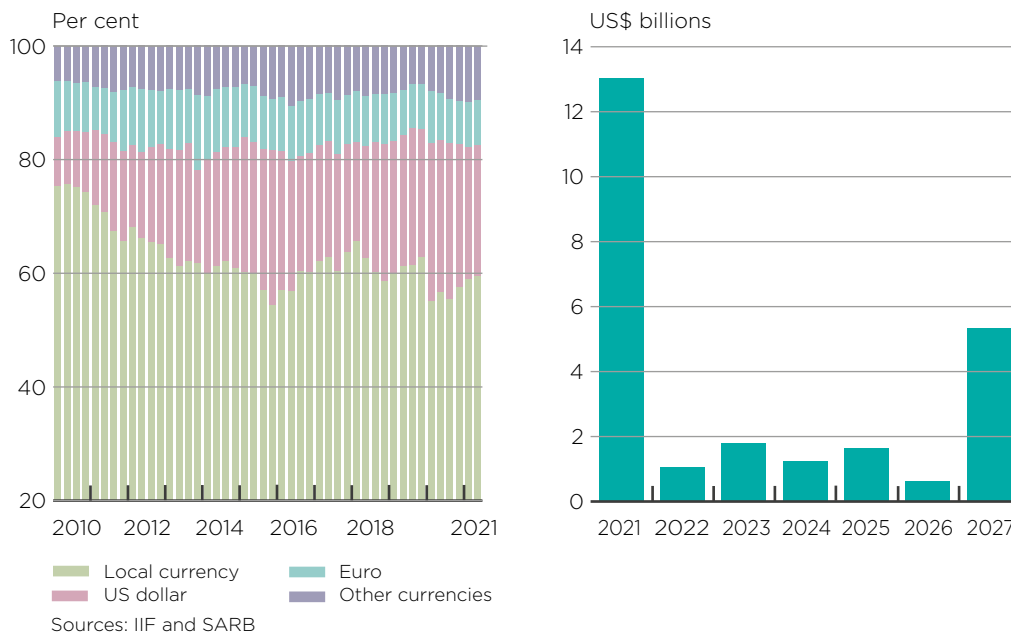
Figure 34: Non-financial corporate bank credit extension

Sources: BIS, IIF and JSE

The corporate sector faces risks relating to the currency composition and maturity profile of its debt; however, firms are able to meet their debt obligations. The sector's share of South Africa's foreign currency debt was recorded at 40.5% in the second quarter of 2021 (Figure 35, left panel). This is lower than the 41.1% observed in the first quarter of 2021, but remains above the long-term average of 35% and raises concerns about the currency mismatches that could materialise on non-financial corporate balance sheets. These concerns are exacerbated by potential interest rate and currency fluctuations. Almost half of the sector's foreign currency debt is maturing in 2021 (Figure 35, right panel). Refinancing this debt could prove more difficult or costly should interest rates begin to rise globally and financing conditions tighten.



Figure 35: Currency composition⁴² (left) and maturity profile (right) of foreign currency non-financial corporate debt⁴³



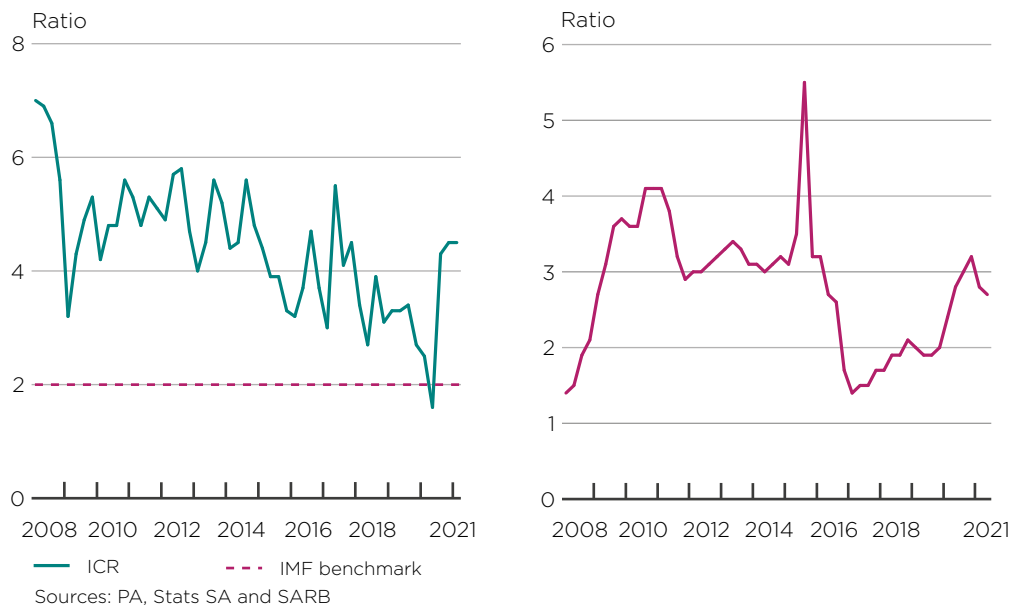
Non-financial corporate debt-servicing capacity is improving, as the sector's default ratio trends downwards. The sector's debt-servicing capacity, as indicated by the interest coverage ratio (ICR)⁴⁴, deteriorated at the height of the initial COVID-19 lockdown (Figure 36). However, the ICR continued to recover, recording a ratio of 4.5 in the first quarter of 2021 (from 4.4 in the fourth quarter of 2020). This suggests that, overall, firms have generated more than sufficient earnings to service their debt obligations. The improvement in the sector's debt-servicing capacity can be attributed to higher earnings as economic activity started to normalise. In line with the improvement in debt-servicing capacity, the default ratio declined from 2.8% in the first quarter of 2021 to 2.7% in the second quarter after peaking above 3% in late 2020. Although the COVID-19 pandemic has severely impacted on firms' finances, the default ratio has remained well below the levels observed during the global financial crisis.

⁴² The currency breakdown of corporate debt data is sourced from the Institute of International Finance (IIF). It is estimated using data from national sources on domestic bank lending and the BIS's debt securities and cross-border bank lending data. Furthermore, the data incorporate the IIF's assumptions and estimations.

⁴³ Debt maturing in 2021 includes short-term maturities which have original maturity of less than one year (e.g. trade finance). These liabilities are mostly rolled over, renegotiated or replaced with new facilities.

⁴⁴ The ICR estimates a firm's ability to generate enough cash flow to finance its interest expenses on outstanding debt by *dividing* a firm's earnings before interest and taxes (EBIT) by its annual interest expenses. A conservative IMF benchmark identifies firms with income that covers interest expenses by less than two times as 'weak'. According to the IMF, an ICR below 1 is defined as a 'technical default'. In such a situation, many of these firms can survive for some time by selling assets to meet their debt obligations, but if their ICRs remain below 1 for a sustained period, they could eventually run out of assets and default on their debt obligations.

Figure 36: Non-financial corporate interest coverage ratio (left) and default ratio (right)



Households

Household finances remain under significant pressure, but have improved in recent months owing to rising income and net wealth levels. Real household disposable income remained below pre-COVID-19 levels in mid-2021, despite having grown strongly from the lows of mid-2020 (Figure 37). Income from compensation has been constrained by an increasing unemployment rate in 2021. However, the real value of household assets has increased in recent quarters to exceed pre-COVID-19 levels as equity and house prices have risen. As a consequence, growth in household net wealth was strong in the first half of 2021 (Figure 38). Improved net wealth has bolstered the financial resilience of households, but the weakness of disposable income remains a risk, particularly to lower-income households (which hold fewer financial assets) that have debt obligations to the financial sector.



**Figure 37: The unemployment rate (left)
and household disposable income (right)**

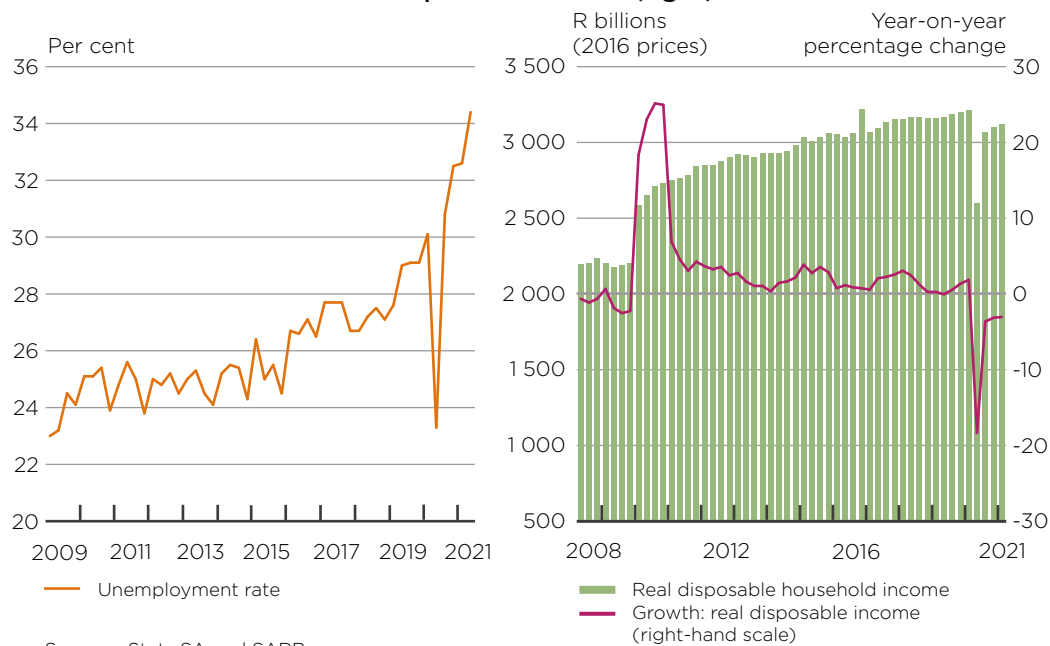
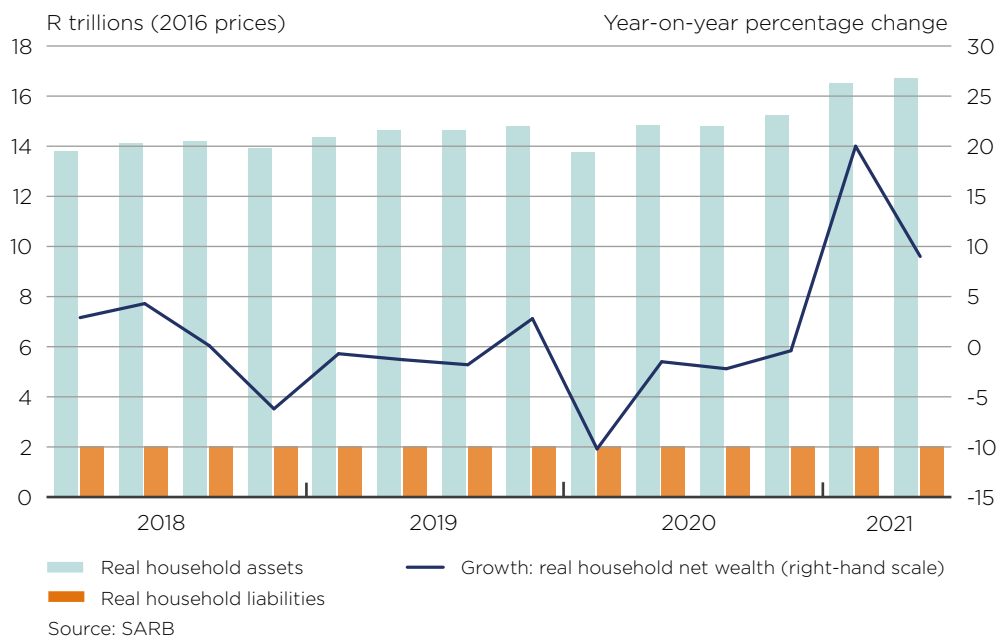


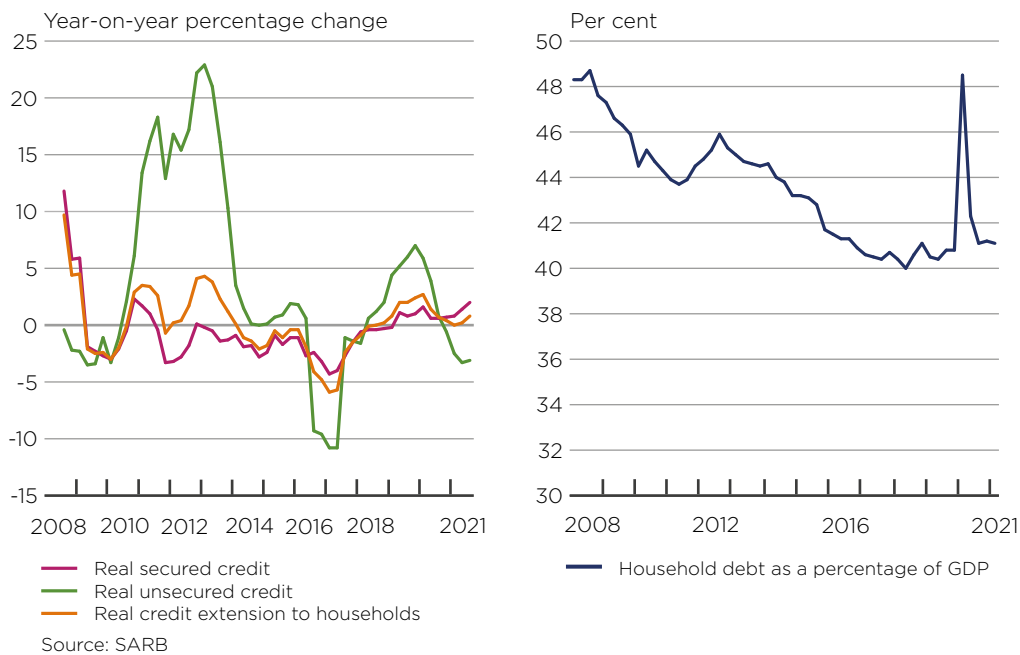
Figure 38: Household net wealth



Household indebtedness remained near pre-COVID-19 levels in mid-2021.

The sector's debt relative to GDP spiked in mid-2020, reflecting the temporary sharp decline in GDP. As GDP recovered, the debt-to-GDP ratio stabilised at around 41%. The moderation in the household-debt-to-GDP ratio since the global financial crisis has helped to reduce the vulnerability of households to an adverse income shock (Figure 39).



Figure 39: Household credit extension (left) and debt levels (right)

The default ratio for retail loans plateaued in the first half of 2021. Despite the moderation in the level of household debt, the default ratio for bank retail portfolios reached a level close to that during the global financial crisis. Encouragingly, this ratio appears to have stabilised since the start of 2021, albeit at an elevated level of approximately 7.7% (Figure 40). It remains too early to confirm whether retail defaults have peaked. Much depends on the path of COVID-19 and the pace of economic recovery in South Africa.

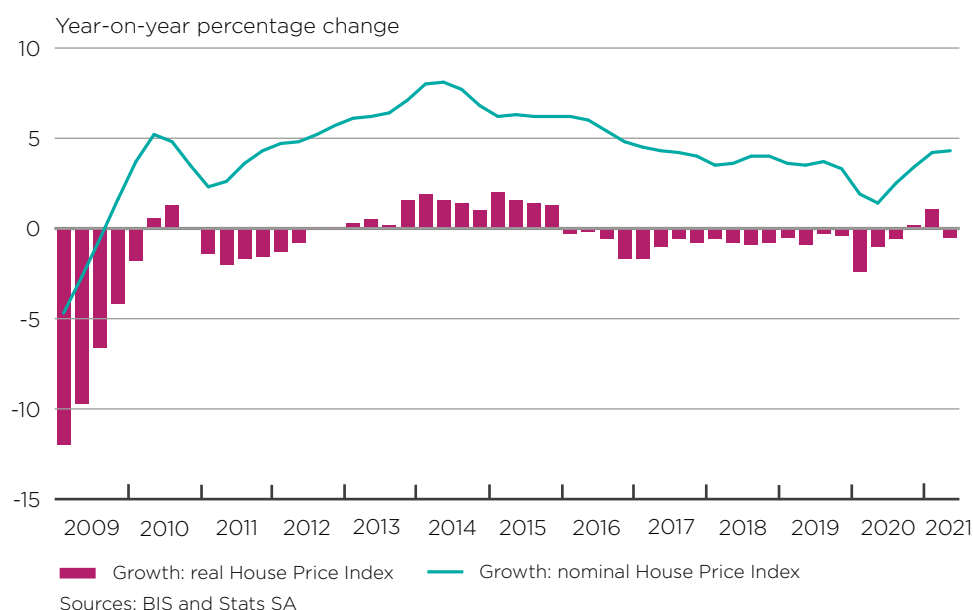
Figure 40: The default ratio for the banking sector's retail portfolio

Residential real estate

House price growth remains marginally above pre-COVID-19 levels.

House prices have continued their upward trajectory, growing 4.3% y/y in the second quarter of 2021 (in nominal terms), which is a slight acceleration from the first quarter of the year (Figure 41). However, in real terms, house prices decreased slightly in the past two quarters as inflation increased at a faster pace. Housing market activity has been supported by the historically low interest rate environment as well as changes in housing needs induced by the impact of COVID-19 on working conditions.

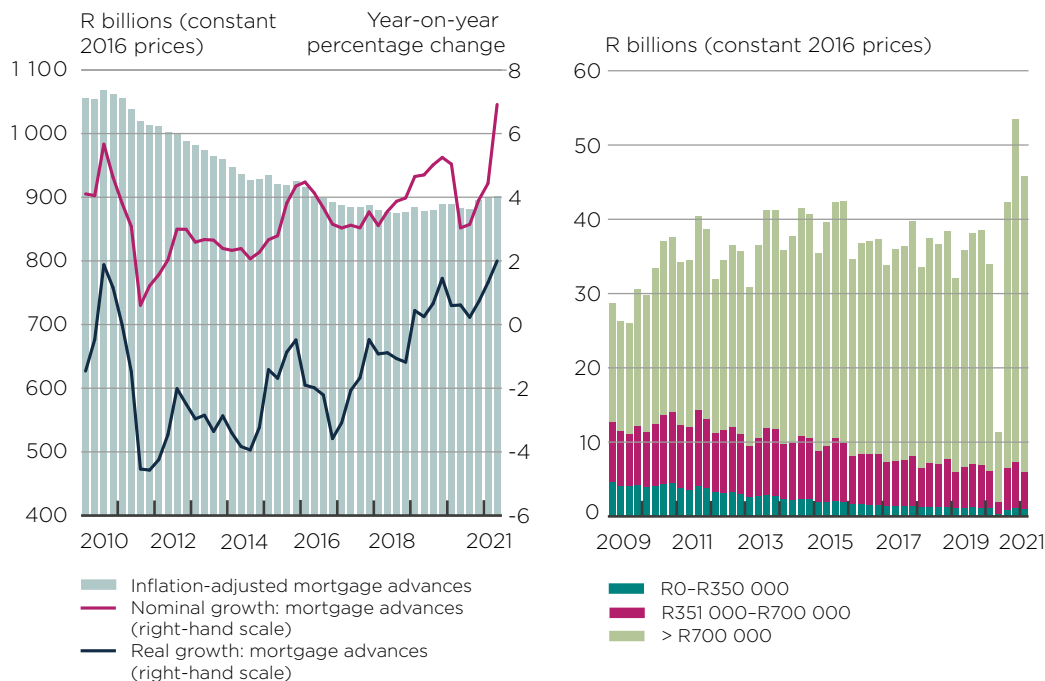
Figure 41: Nominal house prices



Growth in residential mortgage advances increased to a 12-year peak in the second quarter of 2021.

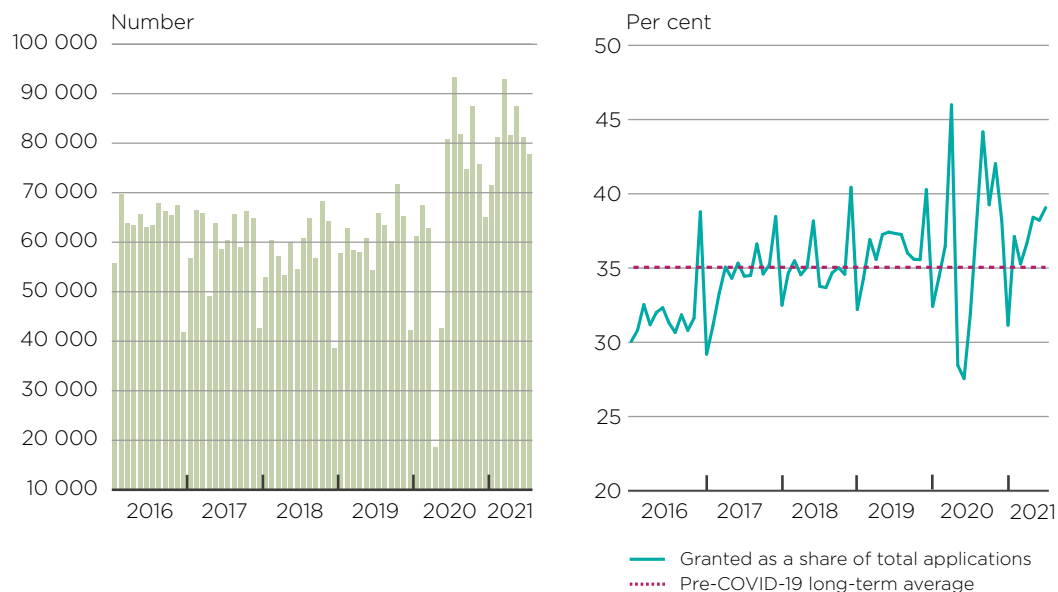
Mortgage advances growth has trended upwards since mid-2020, reaching 6.9% y/y in the second quarter of 2021, the fastest growth rate recorded since the global financial crisis (Figure 42, left panel). As at the second quarter of 2021, the total outstanding value of household mortgage debt was nearly R1.1 trillion. However, in real terms, the outstanding value of mortgage advances remains well below the levels of the early 2010s even after the positive growth of the past year. The size of mortgage loans has increased beyond historical levels over recent quarters (Figure 42, right panel). Loans with a value exceeding R700 000 have accounted for all the additional growth in mortgage advances since the onset of COVID-19. This suggests that the rise in mortgage advances is mainly driven by demand from middle- to upper-income households.

Figure 42: Aggregate residential mortgage advances (left) and new mortgage loans by size (right)



Residential mortgage demand has moderated from previous highs, but remains above pre-COVID-19 levels. Over 77 000 mortgage credit applications were recorded in July 2021, lower than the previous two months, but well above the levels seen between 2016 and 2020 (Figure 43). The share of mortgage applications granted has picked up consistently since the start of 2021, increasing to 39.1% of total applications in July 2021. This is above the pre-COVID-19 long-term average of approximately 35% and suggests that banks' appetite for mortgage credit has increased.

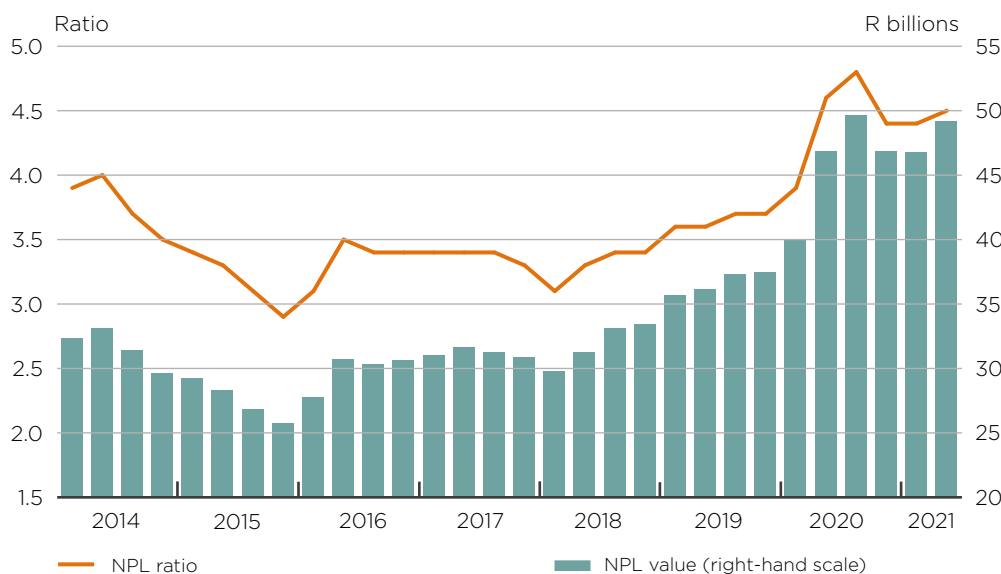
Figure 43: Mortgage credit applications (left) and share of mortgage credit applications granted (right)



Mortgage defaults remain elevated as the economic effects of COVID-19 linger.

While the mortgage NPL ratio⁴⁵ had been edging higher since early 2018, it had not deviated far from its long-term average⁴⁶ of 3.4% prior to the onset of the pandemic (Figure 44). However, by mid-2020, the ratio breached 4% as incomes and debt-service capacity were impacted by pandemic-induced economic restrictions. After peaking at 4.8% of mortgage exposures in the third quarter of 2020, the NPL ratio declined in the fourth quarter of 2020 and the first quarter of 2021, following the resumption of economic activity and the relaxation of restrictions. However, the NPL ratio increased anew in the second quarter of 2021, to 4.5%. The third wave of COVID-19 infections and tighter lockdown measures taken to contain the virus likely contributed to the renewed increase in NPLs.

Figure 44: Residential non-performing mortgage loans



Source: PA

Government

The COVID-19 crisis exacerbated an already weak domestic fiscal position.

According to the IMF,⁴⁷ South Africa's fiscal support was 5.9% of GDP and above the EM average of 4.1% of GDP (Figure 45, left panel). Fiscal support measures, alongside reduced tax revenues, have deepened pre-existing fiscal vulnerabilities, with the IMF⁴⁸ estimating that the domestic government debt-to-GDP ratio will rise to 77.5% in 2021, placing it among the highest of large EMs (Figure 45, right panel). Notwithstanding the rebasing of South Africa's GDP in August 2021, which has lowered the gross debt-to-GDP ratio, rising debt remains a concern.

⁴⁵ Defined as payments that are 90 days overdue, and calculated as the rand value of NPLs *divided by* on-balance sheet exposures.

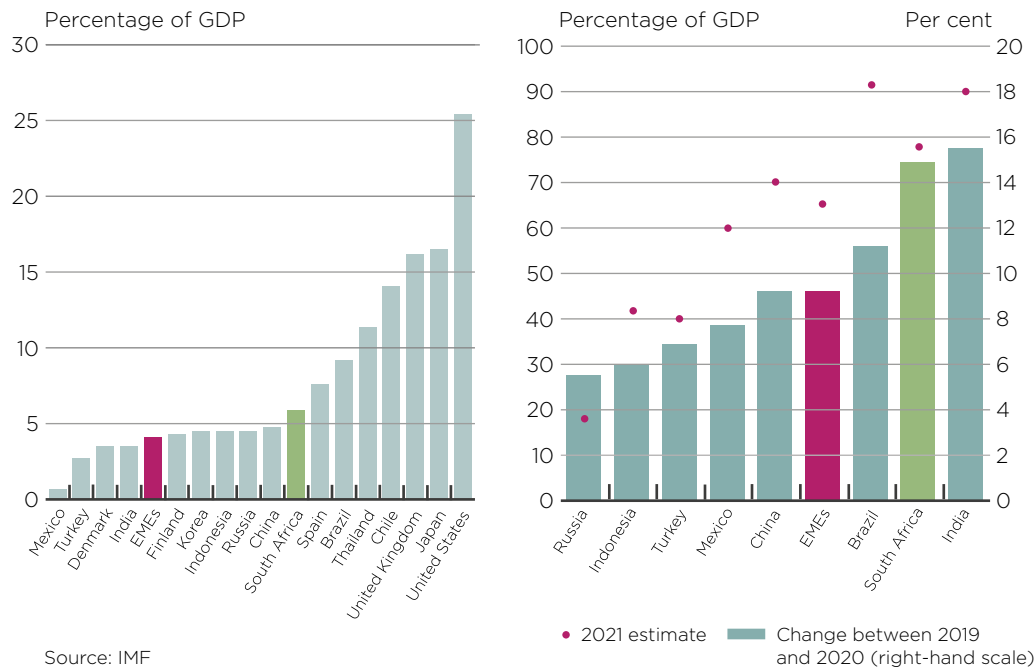
⁴⁶ Pre-COVID-19 long-term average, averaged up to the end of 2019.

⁴⁷ IMF, *Fiscal Monitor*, April 2021.

⁴⁸ IMF, *World Economic Outlook Update*, July 2021.

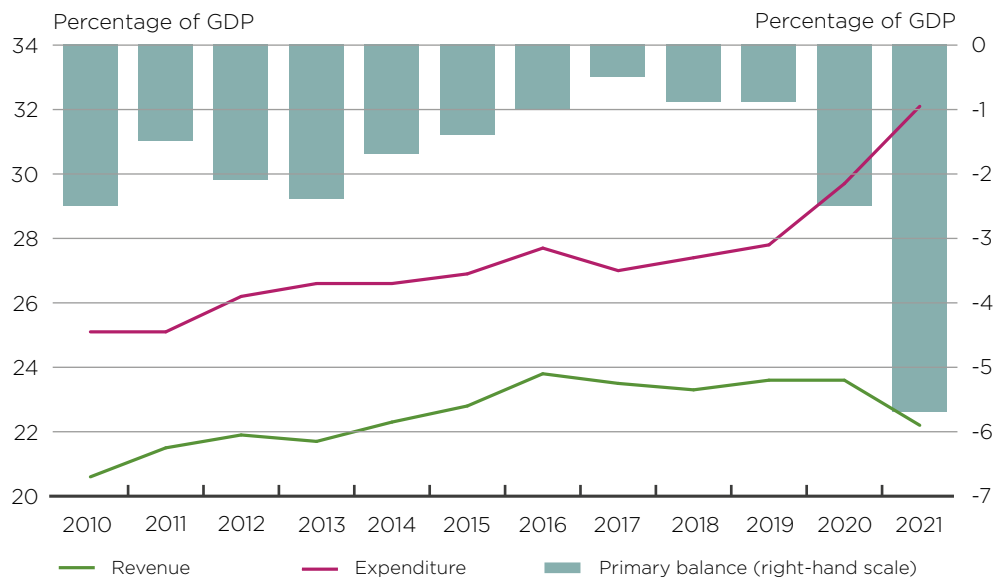


Figure 45: Discretionary fiscal responses to the COVID-19 crisis in select countries (left) and gross government debt in select countries (right)



Source: IMF

The fiscal position has recently been supported by improving economic activity and stronger commodity prices. This has resulted in better-than-expected total revenue inflows for national government. Revenue grew to R722 billion in the first six months of the 2021/22 fiscal year, 41.4% more than in the same period of the previous fiscal year. Some fiscal space was created, allowing National Treasury (NT) to support the economic recovery and provide relief to poor households and Sasria in the wake of the July violent unrest without the need for additional debt issuance. The increased revenue has also provided fiscal space to fund the recently announced 1.5% increase in public wages. Government expenditure increased by 5.4% y/y in the first five months of the 2021/22 fiscal year. As a result, the primary budget deficit widened to -5.7% of GDP in the current fiscal year from -2.7% in the 2020/21 fiscal year (Figure 46).

Figure 46: Government revenue, expenditure and primary balance

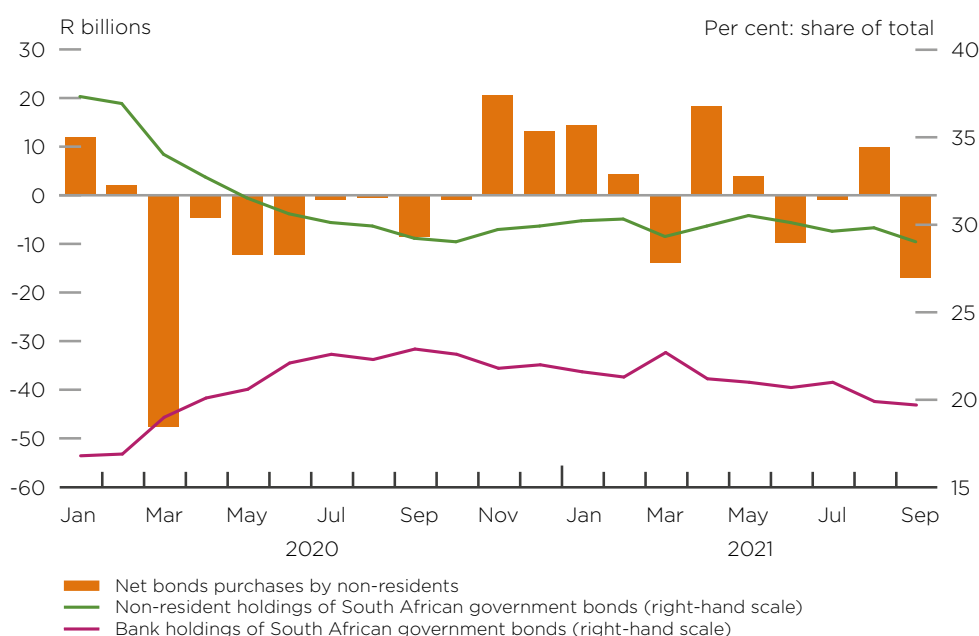
The recent better-than-expected revenue collection has contributed to government bond issuance exceeding NT's domestic funding requirements, creating scope to reduce debt issuance (Figure 47). In the first six months of the 2021/22 fiscal year, debt-service costs increased by 12.0% y/y, largely driven by the higher stock of debt. Debt-service costs remain relatively high, crowding out expenditure to other priority areas. Fiscal sustainability remains at risk, even under the current benign financing conditions. A sudden tightening of financial conditions, or a worse-than-expected economic growth outcome, could result in worsening debt-service costs and debt rollover risk while raising the adjustment needed to stabilise government debt.

Figure 47: Rolling issuance amounts

The high level of public debt issuance and weak demand for debt from abroad have increased government's reliance on the domestic financial sector for financing.

Non-resident investors reduced their share of bond holdings to 29.0% in September 2021 from 37.3% at the start of 2020 (Figure 48).⁴⁹ Consequently, reliance on the domestic financial sector for funding has mostly increased. Additionally, government has drawn down its cash deposits held with the SARB, increased short-term borrowing (Treasury bills and bridging finance from the Corporation for Public Deposits (CPD)), and obtained loans from international organisations such as the IMF. The increased exposure of domestic institutions to the sovereign at a time of rising public debt poses potential financial stability risks. However, the composition of government debt (being largely local currency-denominated) and its long average maturity are mitigating repayment risks.

Figure 48: South African net bond purchases and holdings of government bonds



Sources: JSE and National Treasury

Despite the improving cyclical dynamics, longer-term fiscal risks remain.

These risks include the economic impact of further COVID-19 flare-ups, which may weigh on government tax revenues and induce further fiscal support for the economy. A relatively muted economic outlook increases the potential for further financial support to SOEs with weak balance sheets. Uncertainty about the key wage component within fiscal spending lingers, given that the current public sector wage agreement is only for one year. Failure to implement fiscal consolidation measures that raise market confidence in government's ability to stabilise fiscal public debt over the medium term could result in further credit rating downgrades. The civil unrest in July 2021 highlighted the tail risks to social and political stability, which could weigh on fiscal policy in the medium to long term.

⁴⁹ Domestic banks reduced their holdings of domestic government bonds to 19.9% in August 2021 from 22.9% in September 2020.

Appendix: Banking and insurance sector indicators

Banking sector indicators

	2018	2019	2020	August 2021
Market share in terms of assets (five largest banks)	90	90	90	90
Gini concentration index	83	83	83	83
Herfindahl-Hirschman Index (HH-index)	0.2	0.2	0.2	0.2
Banks' share prices (year-on-year percentage change)	22	-2	-36	33
Total assets (R billions)	5 311	5 769	6 457	6 505
- Year-on-year percentage change	6.1	8.6	11.9	1.5
Total loans and advances (R billions)	3 945	4 249	4 542	4 594
- Year-on-year percentage change	4.0	7.8	6.9	1.4
Total capital adequacy ratio	16.4	16.5	16.2	17.3
Tier 1 capital adequacy ratio	13.3	13.5	13.1	14.2
Common equity tier 1 capital adequacy ratio	12.8	12.7	12.3	13.1
Impaired advances (R billions)*	137	162	212	235
Impaired advances to gross loans and advances	3.5	3.8	4.7	5.1
Specific credit impairments (R billions)	61	74	92	106
Specific credit impairments to impaired advances	44.3	45.5	43.6	45.0
Specific credit impairments to gross loans and advances	1.5	1.7	2.0	2.3
Return on assets (smoothed)	1.31	1.2	0.8	0.7
Return on equity (smoothed)	15.84	15.3	10.2	9.4
Interest margin to gross income (smoothed)	56.74	56.8	58.2	58.8
Operating expenses to gross income (smoothed)	57.19	58.2	58.3	58.9
Liquid assets to total assets (liquid asset ratio)	10.23	11.1	12.2	13.1
Liquid assets to short-term liabilities	20.49	22.4	24.1	23.8
Liquidity coverage ratio	125.13	146.9	142.2	143.9

* Impaired advances are advances in respect of which a bank has raised a specific impairment, and includes any advance or restructured credit exposure subject to amended terms, conditions and/or concessions that are not formalised in writing.

All data are averaged for the year shown and reported in percentages, unless stated otherwise.

Source: SARB



Insurance sector indicators

	2016	2017	2018	2019	2020	June 2021
Market share in terms of assets (five largest life insurers)	74	73	73	74	73	72
Market share in terms of GWPs (five largest non-life insurers)	48	47	46	48	47	46

Balance sheet

Total assets: life insurers (R billions)	2 672	2 929	3 011	3 144	3 255	3 454
Total assets: non-life insurers (R billions)	149	161	197	207	239	249
Total liabilities: life insurers (R billions)	2 514	2 769	2 638	2 761	2 910	3 440
Total liabilities: non-life insurers (R billions)	91	98	115	117	141	149

Profitability

GWPs: life insurers (R billions)	499	486	530	551	564	326
Net profit before tax and dividends: life insurers (R billions)*			45	45	12	16
Individual lapse ratio: life insurers	56	63	61	91	66	59
GWPs: non-life insurers (R billions)	127	137	144	160	159	103
Combined ratio: non-life insurers	87	77	97	97	113	96
Operating profit ratio: non-life insurers	21	22	15	23	16	18

Solvency and capital*

Solvency capital requirement cover ratio (median): life insurers			1.9	2.0	1.9	1.8
Minimum capital requirement cover ratio (median): life insurers			4.3	4.2	4.3	4.5
Solvency capital requirement cover ratio (median): non-life insurers			1.8	1.8	1.9	1.7
Minimum capital requirement cover ratio (median): non-life insurers			3.9	4.0	4.4	4.0

* These returns are only available from 2018 due to changes in reporting requirements.

Source: SARB



Abbreviations

ASF	available stable funding
ASISA	Association for Savings and Investment South Africa
ATM	automated teller machine
AUM	assets under management
BCBS	Basel Committee for Banking Supervision
BIS	Bank for International Settlements
BU	bottom-up
CAR	capital adequacy ratio
CCP	central counterparty
CCyB	countercyclical capital buffer
CET1	common equity tier 1
CIS	collective investment scheme
CPD	Corporation for Public Deposits
CSST	Common Scenario Stress Test
DSII	domestic systemically important insurer
EBIT	earnings before interest and taxes
EL	expected loss
EM	emerging market
FMI	financial market infrastructure
FSC	Financial Stability Committee
FSCA	Financial Sector Conduct Authority
<i>FSR</i>	<i>Financkial Stability Review</i>
FSR Act	Financial Sector Regulation Act 9 of 2017
GaR	growth at risk
GDP	gross domestic product
GWP	gross written premium
HQLA	high-quality liquid asset
ICR	interest coverage ratio
IFRS	International Financial Reporting Standard
IIF	Institute of International Finance
IMF	International Monetary Fund
ISM	Integrated Stress Testing Model
JSE	JSE Limited
JSEC	JSE Clear
LCR	liquidity coverage ratio
LGD	loss given default
MMF	money market fund
MPC	Monetary Policy Committee
MtM	mark-to-market
NCO	net cash outflow
NGFS	Network for Greening the Financial System
NIDS CRAM	National Income Dynamics Study - Coronavirus Rapid Mobile Survey
NPL	non-performing loan
NPSD	National Payment System Department
NSFR	net stable funding ratio
NT	National Treasury
ORSA	own risk and solvency assessment
PA	Prudential Authority
PD	probability of default
PFMI	Principles for Financial Market Infrastructures



POS	point of sale
RSF	required stable funding
RVM	Risk and Vulnerability Matrix
RWA	risk-weighted asset
SARB	South African Reserve Bank
Sasria	South African Special Risk Insurance Association
SCR	solvency capital requirement
SIFI	systemically important financial institution
SME	small and medium enterprise
SOE	state-owned enterprise
Stats SA	Statistics South Africa
STeM	Stress Testing Matrix
TD	top-down
US	United States
VaR	value-at-risk
y/y	year on year

