MONETARY POLICY REVIEW

OCTOBER 2023

SOUTH AFRICAN RESERVE BANK

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Preface

The primary mandate of the South African Reserve Bank (SARB) is to achieve and maintain price stability in the interest of balanced and sustainable economic growth. In addition, the SARB has a complementary mandate to oversee and maintain financial stability.

Price stability helps to protect the purchasing power and living standards of all South Africans. It provides a favourable environment for investment and job creation and supports international competitiveness. The goal of price stability is quantified through an inflation target, which is set in consultation with government. The target is a range of 3–6%, which has been in place since 2000.

The SARB has full operational independence. Monetary policy decisions are made by the SARB's Monetary Policy Committee (MPC), which is chaired by the Governor and includes the deputy governors and other senior officials of the SARB.

The inflation-targeting framework is flexible, meaning that policymakers will seek to look through temporary shocks, thereby avoiding excessive volatility in interest rates and economic output. The MPC takes a forward-looking approach to account for the time lags between policy adjustments and economic effects. MPC decisions are communicated at a press conference at the end of each meeting, accompanied by a comprehensive statement.

The *Monetary Policy Review (MPR)* is published twice a year and is aimed at broadening the public's understanding of the objectives and conduct of monetary policy. The *MPR* covers domestic and international developments that affect the monetary policy stance.

The *MPR* is presented by senior officials of the SARB at Monetary Policy Forum meetings held at major centres across South Africa in an effort to develop a better understanding of monetary policy through direct interactions with stakeholders.

Questions about the publication may be directed to Marlene Hugo at Marlene.Hugo@resbank.co.za.

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A bumpy road to target

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Following a 13-month breach, headline inflation eased back into the 3–6% target range in June 2023, and dropped to just above the target midpoint in August. Core inflation, however, remains high relative to the pre-pandemic trend and risks to both headline and core inflation are elevated. The Monetary Policy Committee (MPC) raised the repurchase (repo) rate by 50 basis points at the May MPC meeting, taking the nominal repo rate to 8.25%, with decisions in July and September to hold rates steady. Despite global headline inflation slowing significantly over the period under review, risks linger, in particular from oil and weather-related food price developments. The enduring stickiness in core inflation, alongside the gradual fragmenting of global trade and finance networks, suggests upward revisions to global neutral interest rates. Monetary policy will remain focused on returning inflation to targeted levels across most economies. The South African economy is now forecast to grow by 0.7% in 2023 due to stronger than expected investment and continued spending. Higher growth and permanently lower inflation could be achieved sooner by implementing energy and logistics sectors reforms, achieving public debt sustainability and aligning administered prices with the inflation target.

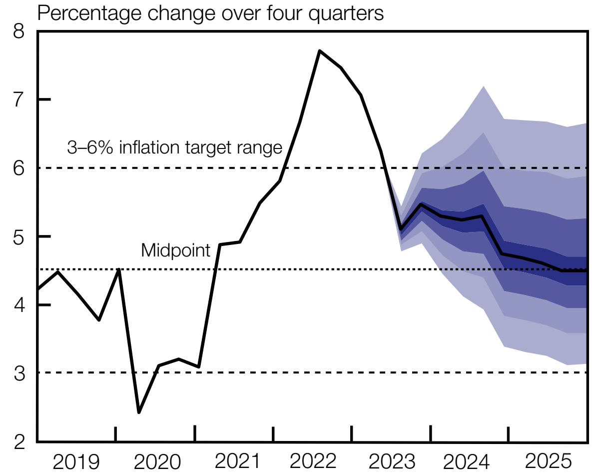
Persistent global inflation

The world economy continues its recovery from the pandemic. Supply pressures have subsided and global inflation eased significantly. Declining food and energy price inflation, with some contribution from cooling demand, has helped bring headline inflation down over the past year.[1] Nevertheless, global inflation remains uncomfortably high at a projected 6.9% in 2023, down from 8.7% in 2022. Forecasts for global inflation in 2024 are improved, at 5.8%.[2] The South African Reserve Bank (SARB) projects inflation in the Group of Three (G3) economies, which soared to a multi-decade high of 7.4% in 2022, to stay elevated at 4.5% in 2023 before softening to 2.4% in 2024.[3]

The monetary policy response to high inflation has been robust. As inflation outcomes exceeded forecasts in 2021, a synchronised global monetary policy hiking cycle materialised and strengthened through 2022, with advanced economies

Targeted inflation forecast*

Percentage change over four quarters

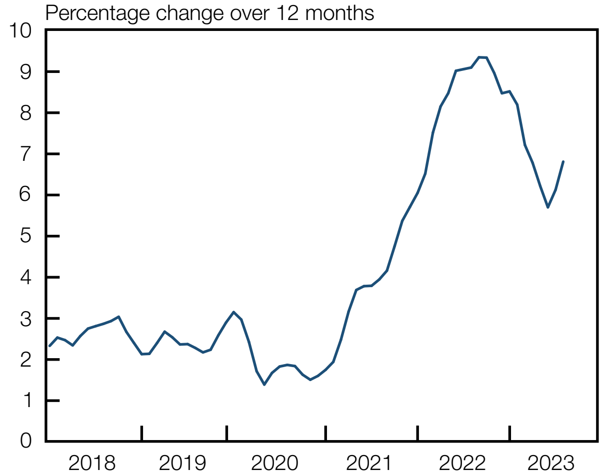


* The bands around the central projection show confidence intervals of 10%, 30%, 50% and 70%.

Sources: Stats SA and SARB

Global inflation

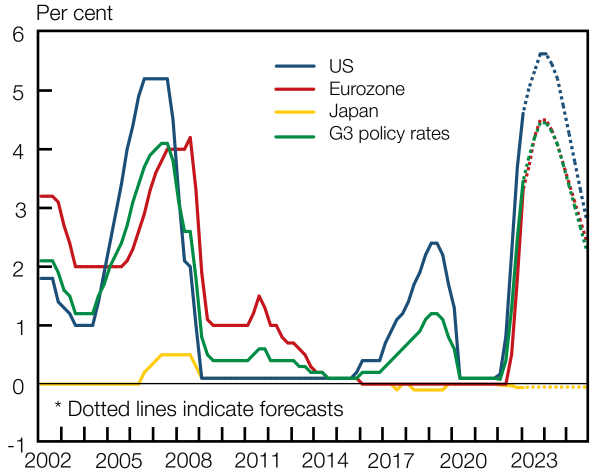
Percentage change over 12 months



Source: Haver

G3 policy rates*

Per cent



Sources: Central banks and SARB

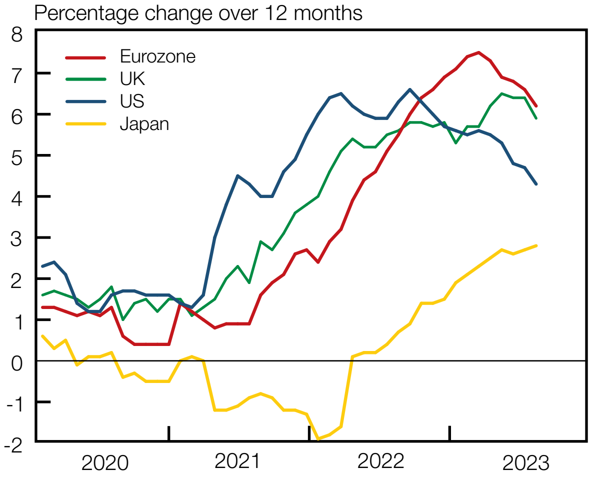
1 Oil prices, however, have risen strongly over the past few months, averaging above US$90 per barrel in September.

2 International Monetary Fund (IMF), *World Economic Outlook (WEO)*, October 2023.

3 The G3 comprises the United States (US), eurozone and Japan.

Core inflation in major advanced economies

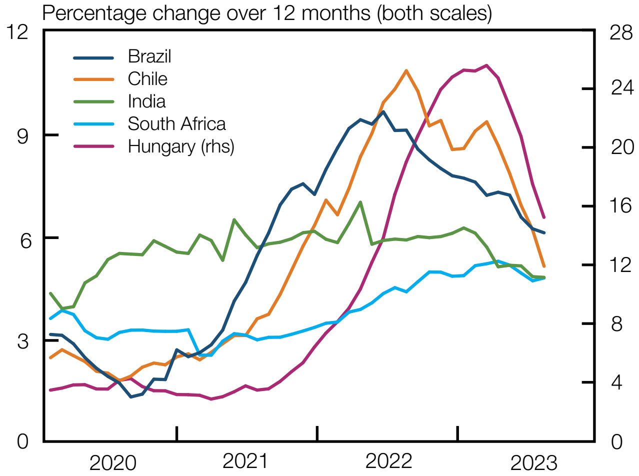
Percentage change over 12 months



Source: Haver

Core inflation in selected emerging markets

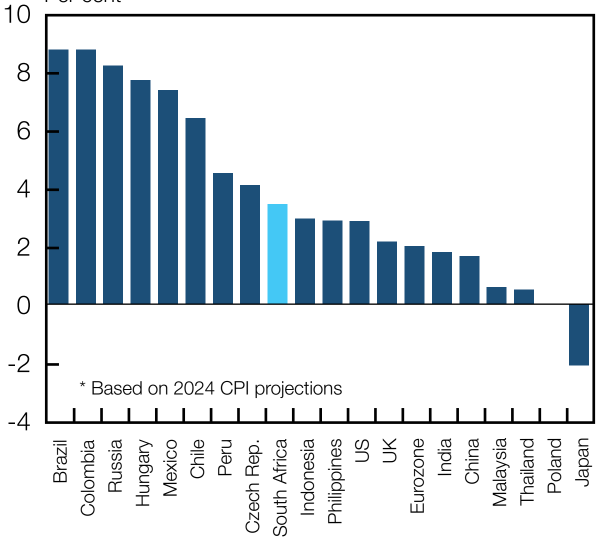
Percentage change over 12 months (both scales)



Sources: Central Statistical Offices

Real policy rates (ex ante)*

Per cent



Sources: Central banks and Consensus Economics

aggressively tightening policy. The United States (US) Federal Reserve (Fed) raised its policy rate sharply in 2022, hiking in successive 75-basis-point steps four times between May and November, contributing to a cumulative 525 basis points increase in the Fed funds rate over the past 18 months. The European Central Bank (ECB) raised its policy rate by a cumulative 450 basis points up to September 2023, marking the highest level of the policy rate since the global financial crisis (GFC). Meanwhile, emerging markets responded early and faster to remove monetary accomodation given relatively less anchored inflation expectations and weaker credibility. Brazil and Chile, for instance, raised their policy rates by a cumulative 1 175 basis points and 1 075 basis points respectively since early 2021 before pausing rate hikes towards the end of 2022. South Africa's policy rate, on the other hand, saw a more modest cumulative 475 basis point increase since normalisation began in November 2021.

Despite the significant moderation in headline inflation, the pace of disinflation has been far slower than anticipated earlier in the hiking cycle, largely because of the challenge of balancing demand with supply. The exceptionally large and sustained aggregate demand responses to the pandemic have only slowly wound down, resulting in sustained high demand for goods and services in advanced economies. Together with low labour force participation rates, labour demand has remained strong. With services price inflation rising, wage growth robust and second-round effects from high energy costs, core inflation in turn accelerated and remained elevated (see Box 1).

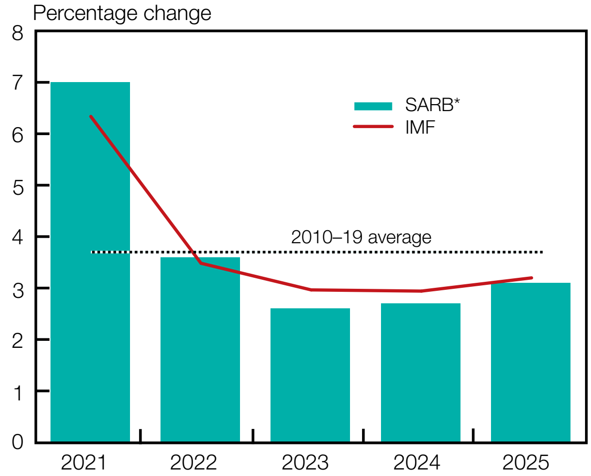
Emerging markets' inflation experiences have been similar in terms of persistence, but with some differences in sources. Although fiscal policies were extended aggressively in the pandemic, transfers to households were more modest and the build-up of savings buffers was accordingly limited, while the post-pandemic labour markets have exhibited less strong wage growth. Consequently, the rise in core inflation in these economies was relatively muted, pushed along more by imported goods prices and currency depreciation than by unit labour costs (ULCs). Taking a wider perspective, the challenge to inflation control in many emerging market economies derives from the much more adverse global environment that puts currencies and borrowing costs under prolonged and sustained pressure.

Disinflation has proceeded at different speeds and central bank policy decisions have consequently become less synchronised this year. Some central banks have paused rate hikes to assess the incoming data and fine-tune policy while those that moved early and more aggressively to hike rates have since been able to ease policy. Less policy synchronisation and changing interest rate differentials between economies are perhaps most evident in the considerable volatility in exchange rates this year.

As policy tightened through 2022 and into 2023, markets came to expect a sharp slowdown in economic activity and a possible recession. Instead, global economic activity has turned out stronger this year, growth forecasts are revised higher and the probability of a recession has receded. Easing global supply chain pressures and the resilience in services demand, large COVID-era savings buffers, still extended fiscal positions and falling inflation together provided a boost to global economic momentum, in particular in the US economy. Helped by a warmer winter and reduced gas demand, the eurozone economy also performed much better than initially expected. This resilience contrasts sharply with the apparent fragility in the Chinese economy, where growth slowed markedly in the second quarter of this year, after a strong rebound in the first quarter.[4]

Despite such divergent growth trends, on balance the world economy is stronger than was anticipated only a few quarters ago. Accordingly, the SARB has revised higher its trading-partner growth to 2.6% in 2023, up from the 2.0% growth projected at the time of the April 2023 *Monetary Policy Review (MPR)*, with modest growth gains over the medium term.

Global growth



* Real GDP growth in SA's major trading-partner countries
Sources: IMF *WEO* (Oct 2023) and SARB

These growth rates, nevertheless, remain well below the pre-pandemic trend and reflect a slow recovery in investment and weak potential growth.[5] This is likely to have far-reaching implications for monetary policy. With low potential, even relatively modest demand growth risks tipping output gaps into positions of excess. While this underscores the importance of complementary fiscal and monetary policy actions to reduce inflation, these complementarities remain under-exploited in most countries, leaving monetary policy to carry most of the burden to lower inflation. As a result, more direct monetary policy communication has had to play an important role in lowering inflation expectations, in large part by committing to do what it takes to hit policy targets over the medium term.

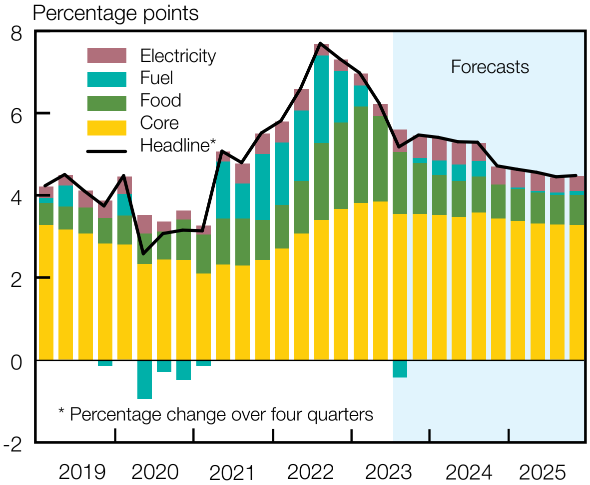
Low growth and extended fiscal positions, rising core inflation and greater currency volatility increase uncertainty about a global economic outlook already stretched by trade and financial fragmentation, El Niño's re-emergence and climate change. Materialisation of the risks carried in these trends can de-anchor expectations and jeopardise the ongoing global disinflation. From a policy perspective, these developments, alongside the stickiness of core inflation, suggest that global neutral interest rates have risen, or will have to rise, above the low levels of the 'great moderation' period. In this context, keeping policy calibrated to low pre-pandemic global neutral interest rate levels increases the possibility of policy error, raising the long-run economic cost of reducing inflation. Accordingly, global policy rates are expected to remain higher for longer, at least until inflation and inflation expectations return sustainably to target.

4 Slower growth in China has material knock-on effects for developing economies, particularly commodity exporters such as South Africa.

5 Slowing investment growth is associated with weaker total factor productivity and subdued labour productivity growth. See World Bank, *Global Economic Prospects,* January 2023, pp 109–112.

Contributions to headline inflation

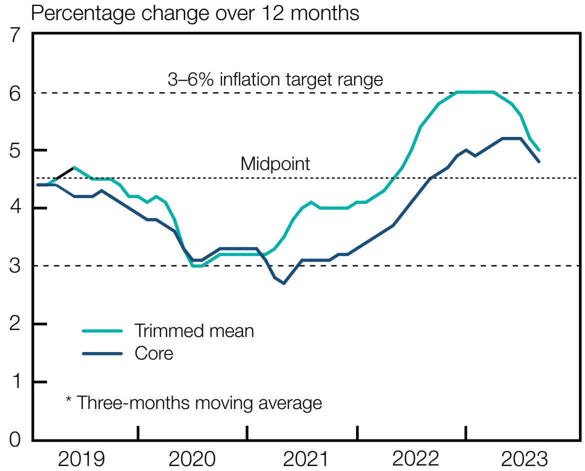
Percentage points



Sources: Stats SA and SARB

Underlying inflation*

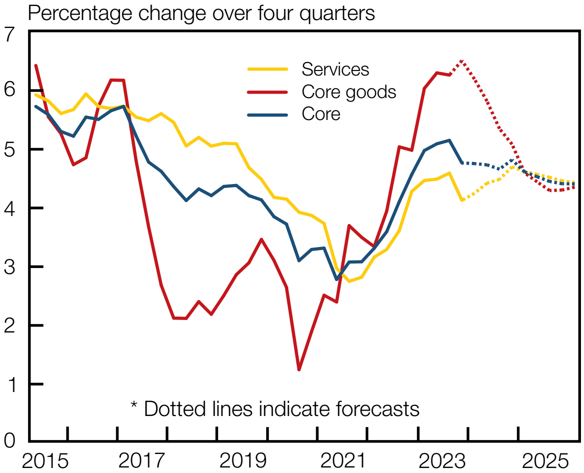
Percentage change over 12 months



Sources: Stats SA and SARB

Core inflation components*

Percentage change over four quarters



Sources: Stats SA and SARB

Domestic economic developments and outlook

South Africa has grappled with persistently high inflation and subdued growth over the review period, mirroring experiences of much of the rest of the world. The headline inflation target breach has been prolonged, remaining above the midpoint of the target range from May 2021, and outside the target range altogether for 13 consecutive months from May 2022 until June 2023. Headline inflation subsequently eased markedly in recent months – back into the 3–6% target range – as fuel and food price inflation slowed and core inflation remained contained.

Over the past year the trajectory of headline inflation was shaped primarily by fuel, food and electricity price inflation, with the former two largely reflecting global developments and currency movements. Headline inflation reached a low of 4.7% year on year in July 2023 before lifting slightly to 4.8% in August. In line with the resurgence in Brent crude oil prices, headline inflation is expected to trend broadly sideways into early 2024 before declining towards the midpoint of the target range as fuel price inflation stabilises. The current forecast is for headline inflation to average 5.9% this year, and to decline to 5.1% in 2024 before settling at the midpoint in 2025.

For much of the period under review, underlying inflation as measured by core and trimmed mean inflation, was wedged in the 5–6% range, primarily reflecting markedly higher global goods inflation, exacerbated in part by the weaker rand exchange rate. Inflationary pressures have also broadened within the core basket, reflecting spillover and second-round effects as well as the pass-through of costs associated with electricity self-generation.[6]

Despite higher core goods price inflation, growth in the overall core measure was softened by subdued housing inflation and a sharp, but likely temporary, dip in transport inflation caused by the earlier decline in fuel prices. This, alongside more muted wage growth, helped keep services inflation lower than expected and slowed the rise in core inflation. Meanwhile, the output gap remained mostly neutral over the review period but has recently shifted from being somewhat disinflationary to modestly inflationary, consistent with the quarter-on-quarter upside surprise in second-quarter gross domestic product (GDP). Although core inflation may have peaked, it is nevertheless expected to remain elevated at 4.9% this year, reflecting still rising underlying components, and to only anchor at the midpoint of the target range by the first quarter of 2025.

6 Evidence suggests that movements in non-core (food, fuel and electricity) inflation cause core inflation to drift towards headline inflation, implying that the effects of changes in non-core inflation are not temporary. See W Simbanegavi and A Palazzi, 'Mind second-round effects! The effects of food and energy inflation on core inflation in South Africa', *South African Reserve Bank Occasional Bulletin of Economic Notes No. OBEN/23/01*, Pretoria: South African Reserve Bank, June 2023.

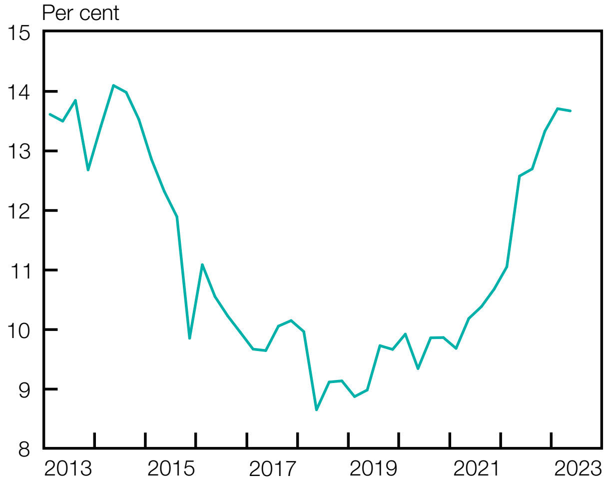
Confidence in the projection for core inflation rests heavily on the post-GFC experience of a more muted exchange rate pass-through to domestic prices. More recent evidence from the post-pandemic period, however, suggests stronger pass-through effects.[7] This rise in pass-through may reflect the sustained weakness of the rand that incentivises importers to anticipate further depreciations and mark up prices faster and more fully. This mark-up behaviour is given further impetus by similar actions by competing firms, particularly in a high inflation environment. In this context, spillovers into core prices are likely.

Several other upside risks have strengthened in recent months, heightening uncertainty about the precise path for inflation. Oil prices have risen sharply recently, jumping from an average of US$80 per barrel in the first half of the year to above US$90 in September. Equally, inflation expectations, although moderating, remain elevated and together with the increased intensity of load-shedding, could feed into wages and prices. South Africa is also likely to experience drier weather conditions this year which could adversely impact domestic food production, particularly the 2023–24 summer harvest, with the effects likely exacerbated by the risks associated with global food markets.

Turning to economic activity and output, the domestic economy has turned out to be relatively resilient over the past three years. After contracting by 6.0% in 2020, output rebounded, growing by 4.7% and 1.9% in 2021 and 2022 respectively. These growth rates were stronger than projected and meant that the return to the pre-pandemic output level was achieved sooner, with the recovery taking the form of a V-shape as opposed to the widely anticipated U-shape.

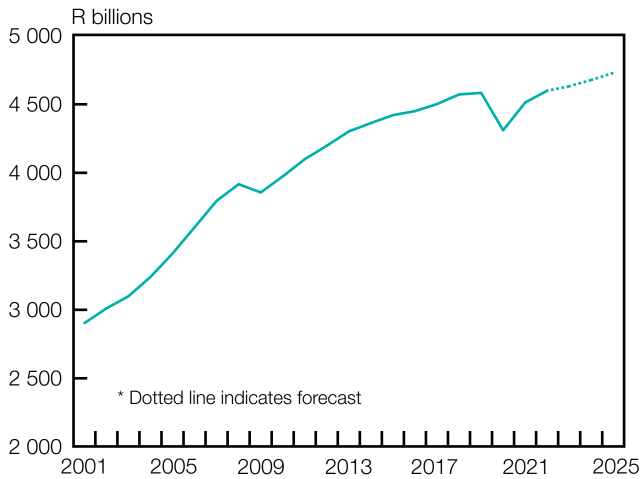
Despite the healthy rebound in activity levels, South Africa's near- and medium-term economic outlook already deteriorated sharply in 2022 as energy availability fell and extensive load-shedding resumed. As power rationing escalated to unprecedented levels in the first half of this year, forecasts for domestic growth in 2023 plummeted to near zero and projections for growth in 2024 were also scaled back. However, higher spending on investment and better sectoral outcomes, especially in the second quarter, have boosted the outlook for the year somewhat. Annual growth this year was revised up to 0.7% as of the September MPC meeting. While better, this growth remains well below the 1.7% achieved over the pre-COVID-19 decade and compares poorly to the projected current year average growth of 4.0% for emerging markets and developing economies.

Exchange rate pass-through estimates



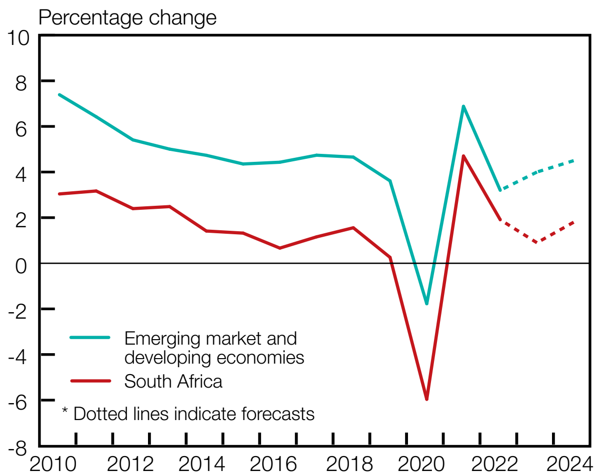
Source: SARB

Real GDP*



Sources: Stats SA and SARB

South Africa versus emerging market GDP growth*

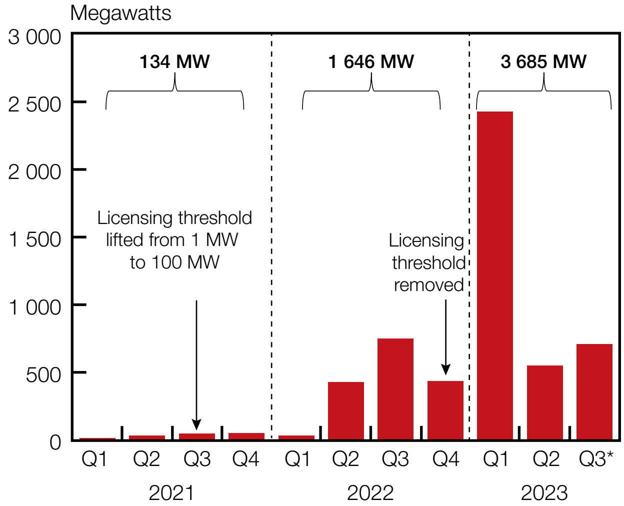


Sources: Haver and IMF

7 Pass-through has risen slightly to about 14.0% over the past few quarters, compared with the 11.0% average over the past decade. See J Rakgalakane and R Steinbach, 'Has exchange rate pass-through picked up?' *South African Reserve Bank Economic Note*, forthcoming.

Self-generation capacity registered with NERSA

Megawatts

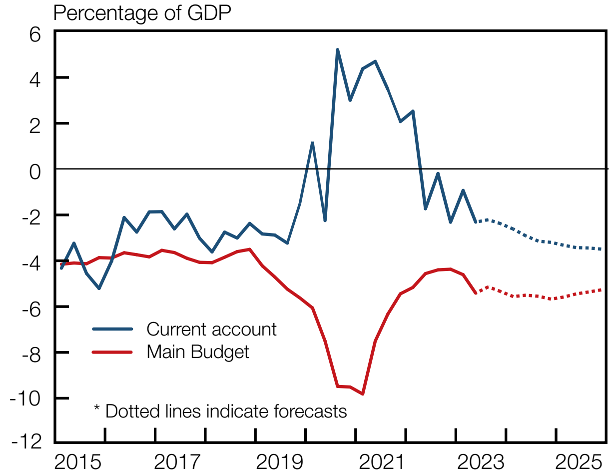


* July–August

Source: NERSA

Macro balances*

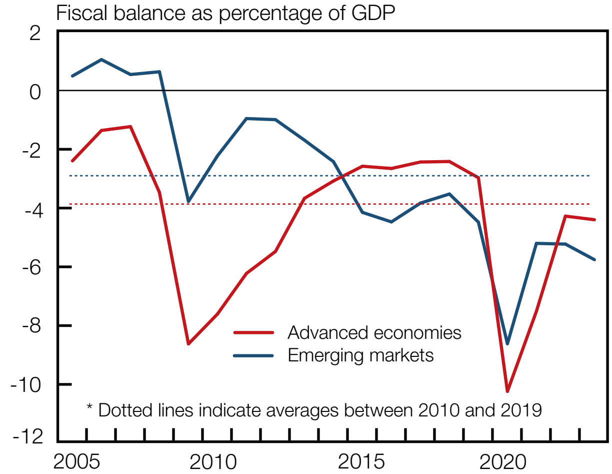
Percentage of GDP



Sources: National Treasury and SARB

Fiscal developments

Fiscal balance as percentage of GDP



Source: IMF

The energy crisis has provided impetus to public sector reform efforts, opening space for large-scale private sector investment in alternative energy generation.[8] While the full benefits of these reforms are likely to materialise over a three-to-five-year time horizon, there has been significant movement in the year to date. Embedded generation projects registered with the National Energy Regulator of South Africa (NERSA) have increased markedly in the first eight months of this year, rising to 3 685 megawatts (MW) compared with 1 646 MW in the whole of 2022.

Such primarily private sector efforts to mitigate load-shedding have provided a boost to fixed capital formation and cushioned business operations from the full impact of power rationing, supporting the resilience of the economy. Household spending also held up, expanding by 0.9% in the first half of the year, despite the elevated inflation and high interest rates. However, its contribution to overall economic growth has moderated and is forecast to remain subdued over the medium term, consistent with a slower rise in household real disposable income amid weak productivity gains, low job creation and a sluggish return of inflation to the midpoint.

Slower domestic growth, alongside the reversal in commodity revenue windfalls, has, however, worsened South Africa's budget deficit and debt-to-GDP ratio. Spending pressures are evident in the larger-than-budgeted wage growth this year and the financial needs of struggling state-owned enterprises, among other factors. Alongside higher investment and sustained spending, the fall in South Africa's terms of trade back to around pre-pandemic levels is reflected in a broad deterioration in the current account, which has now moved firmly back into deficit. The return to twin deficits implies an increased demand for foreign savings in a much more adverse domestic and international environment (Box 5). Global interest rates today are much higher than they were for many years, highlighting the vulnerability of the currency to risk-off episodes and the need to attract foreign savings.

In these conditions, a more rapid return to lower inflation and interest rates would be helpful to growth. With slender margins between sustainable supply and demand caused by weak growth and diminished potential output, fiscal and growth outcomes become more important in achieving lower inflation rates. Sustainable fiscal positions would help to reduce the high interest burdens many economies face, lowering sovereign credit default risk and term premiums. Lower risk premiums, in turn, support continued capital flows into savings-deficit economies, supporting domestic currencies and reducing exchange rate pass-through and inflation.

8 The reforms also touch other areas, including logistics.

Overview of the policy stance

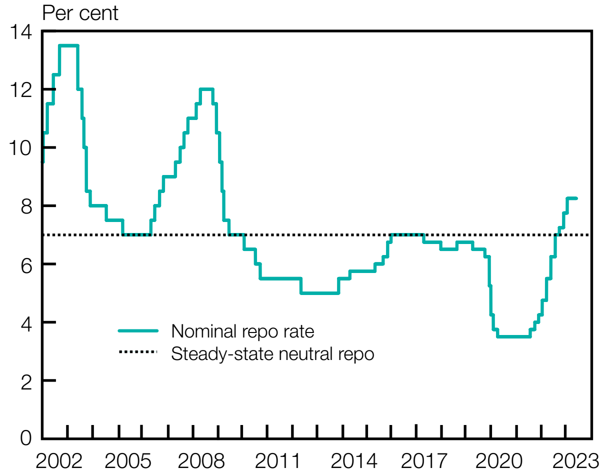
Over the six-month period covered by this *MPR* (April–September 2023), the MPC raised the repo rate by 50 basis points to 8.25%. The repo rate increase occurred at the May meeting, with the MPC opting to pause at the July and September meetings.

Despite a cumulative 475 basis point repo rate increase since November 2021, for most of the period inflation remained above the policy rate, implying a broadly accommodative stance through the normalisation phase.[9] Policy only moved into clearly restrictive territory following the May 2023 hike. The Quarterly Projection Model (QPM) forecasts indicate that the current level of interest rates will be sufficient to steer inflation back to the midpoint of the 3–6% target range over the medium term. The MPC sets its stance based on the guidance provided by the QPM, the economic assessment of its members, and a robust perspective of current and future risks to the outlook and inflation trajectory. As monetary policy operates with a long and variable lag of between three and eight quarters, incoming data can be assessed and the stance fine-tuned as needed to manage risks and ensure inflation stabilises at the target.

Over the past six months, the outlook for headline inflation shifted on the margin, with non-core (food, fuel and electricity price) inflation underpinning much of the dynamics and the influence of core inflation growing over time. The core inflation trajectory remained broadly unchanged from April 2023, except in the past few months where movements in the core inflation basket became more pronounced.[10] In particular, core goods price inflation increased significantly, reflecting slower deceleration in global goods inflation and more rand depreciation.

Repo rate

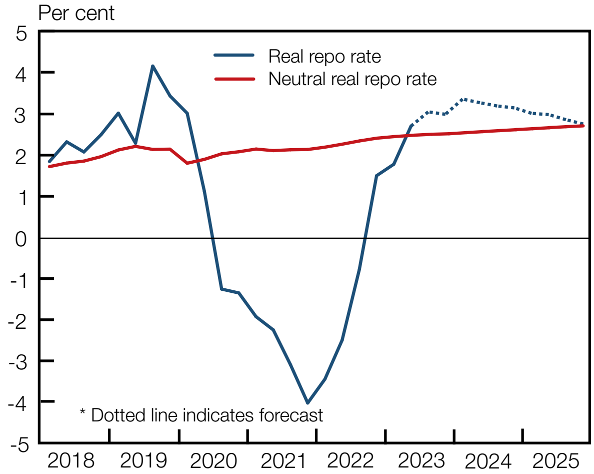
Per cent



Source: SARB

Real and neutral real repo rates*

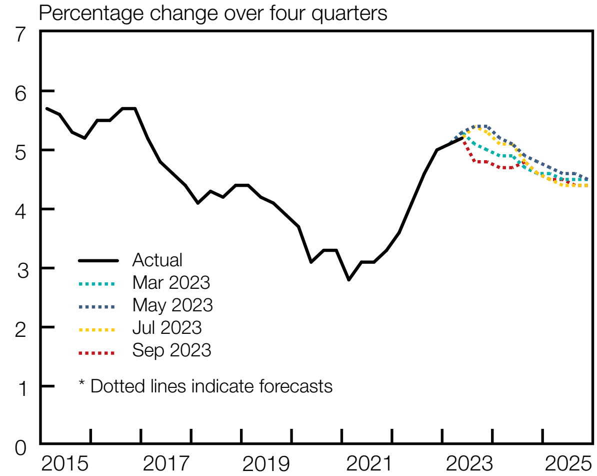
Per cent



Source: SARB

Core inflation*

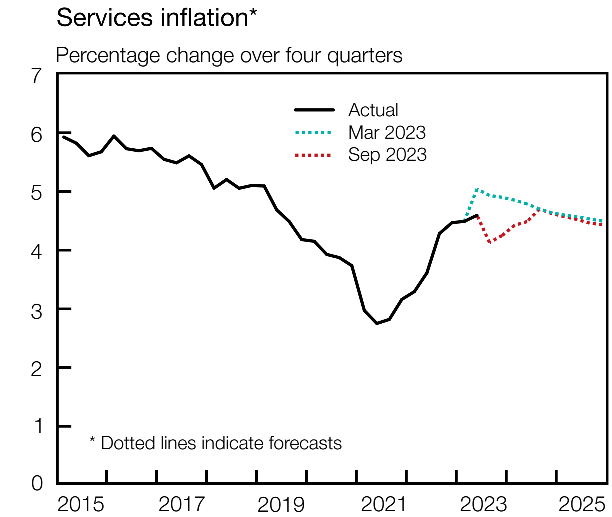
Percentage change over four quarters



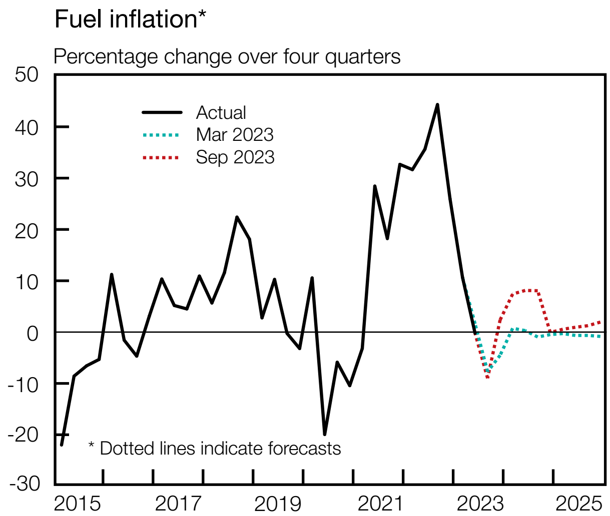
Sources: Stats SA and SARB

9 The sharp reductions in interest rates in early 2020 saw household debt-service costs fall to a record low of 6.7% in the fourth quarter of 2021 compared with the 8.2% average of the past decade, supporting credit extension and consumption demand. These, however, have risen over the past few months in tandem with interest rates and, at 8.8% of real disposable income in the second quarter of this year, are now back to the pre-pandemic averages.

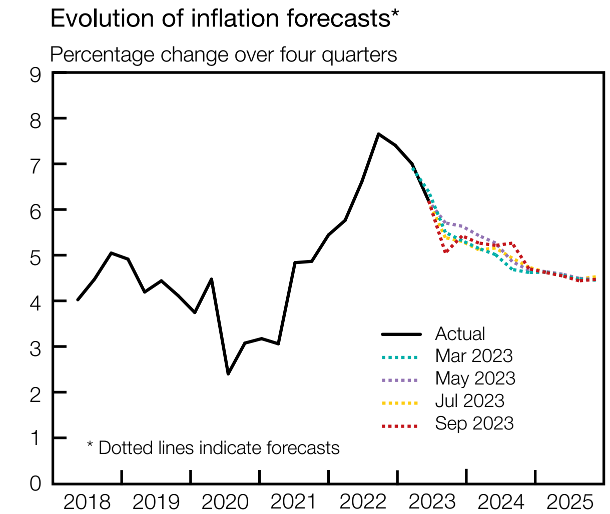
10 For 2023, core inflation was forecast at 5.1% at the time of the April *MPR*, higher at 5.3% in the May MPC meeting, slightly lower at 5.2% in the July meeting and even lower at 4.9% in the September meeting.



Sources: Stats SA and SARB



Sources: Stats SA and SARB



Sources: Stats SA and SARB

Services inflation, on the other hand, came out lower than expected, mostly because of subdued housing inflation and stronger disinflation in some services components, such as restaurants and hotels, and transport. Meanwhile, ULC growth came out lower than projected as nominal wage growth has remained close to headline inflation thus far, implying a less pronounced impact on services inflation. In part because of a lower starting point, the near-term projection for services inflation, at 4.4% in 2023, is substantially below the 4.9% forecast at the time of the April 2023 *MPR*.

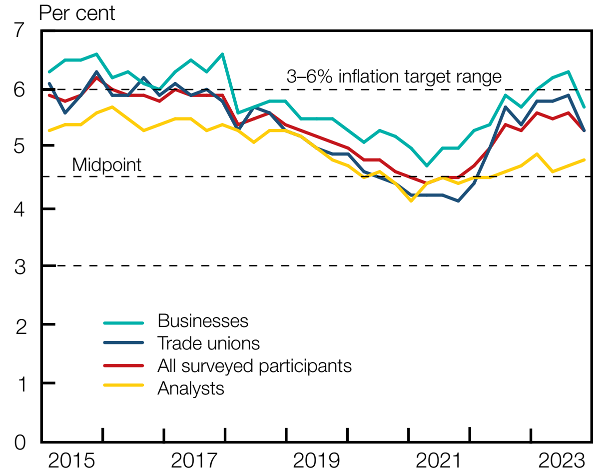
Considering non-core components, both food and fuel inflation are seen higher while electricity inflation is projected lower relative to the forecasts at the time of the April 2023 *MPR*. Food inflation took longer to peak and upon peaking, disinflated at a slower pace than initially expected. The QPM projects somewhat higher fuel inflation over the forecast horizon, reflecting elevated Brent crude oil prices and a depreciated rand exchange rate. Electricity inflation, at 15.3% in August 2023, is marginally lower than the March projection of 17.5%.

Taken together, these shifts resulted in a broadly unchanged trajectory for headline inflation over consecutive MPC meetings. This relative stability in the forecasts and the normalisation of policy up to this point, was reflected in the broadly unchanged QPM-implied repo rate trajectory across the three MPC meetings.

At the May 2023 MPC meeting, the trajectories for both core and headline inflation shifted slightly higher, while food inflation was assessed to be sticky. Risks to domestic inflation were assessed to the upside, with inflation expectations elevated and load-shedding intensified. The rand exchange rate was seen weaker over the forecast period while the pass-through rate was assessed to have risen. The MPC also expressed concern about spillover and second-round effects embedding in core inflation, especially given sticky food inflation and the broader failure to disinflate more fully. Meanwhile, global financial conditions remained tight, presenting depreciation risk for currencies of economies needing foreign capital, such as South Africa. Accordingly, the MPC unanimously raised the repo rate by 50 basis points at this meeting.

The backdrop to the July and September 2023 MPC meetings included headline inflation easing back into the target range and downward revisions to core, fuel and food price inflation projections relative to May, reflecting better monthly inflation outcomes. Headline inflation eased further in July, while inflation expectations slowed somewhat in the third quarter, suggesting that the disinflation could progress. The implied starting point for the rand exchange rate to the US dollar at the July and September meetings was slightly better than at the May meeting, but nonetheless remained undervalued. At the global level, headline inflation continued to moderate, although core inflation showed persistence. With the other risk factors largely unchanged relative to the May meeting, the MPC left the repo rate unchanged at the July and September meetings, with a split decision reflecting the high uncertainty associated with the still-elevated upside inflation risks.

Two-years-ahead inflation expectations



Source: BER

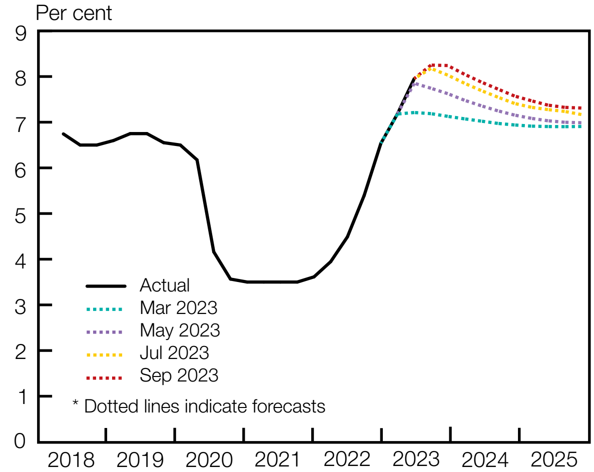
Conclusion

Despite a reduction in the initial post-pandemic inflation surge, the global economic environment has become more adverse. Core inflation is exhibiting unexpected persistence and in tandem with increasing geopolitical transitions, financial fragmentation may generate a prolonged increase in global neutral real interest rates. Capital flows to emerging economies, especially those running current account deficits and expansionary policies, are at risk, potentially leading to unusually weak and volatile currencies.

Although domestic headline inflation has returned to within the target range over the past three months, its stabilisation at the target midpoint is not an accomplished fact. A number of global and domestic risks to the inflation outlook remain elevated and few appear likely to unwind in the near future. The MPC will continue to monitor incoming data and act appropriately to steer inflation back to the midpoint of the 3–6% target over the medium term.

In this context, greater policy complementarities and the speedy implementation of structural reforms to ensure an adequate supply of energy, solve logistics challenges and reduce the impact of administered prices on inflation, would provide significant economic benefits, including a further deceleration of inflation.

Evolution of nominal repo rate forecasts*

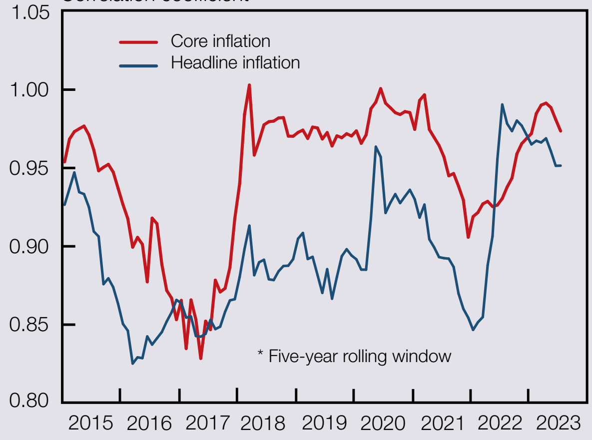


Sources: Stats SA and SARB

Box 1 From extrinsic to intrinsic inflation persistence

First-order autocorrelation coefficient*

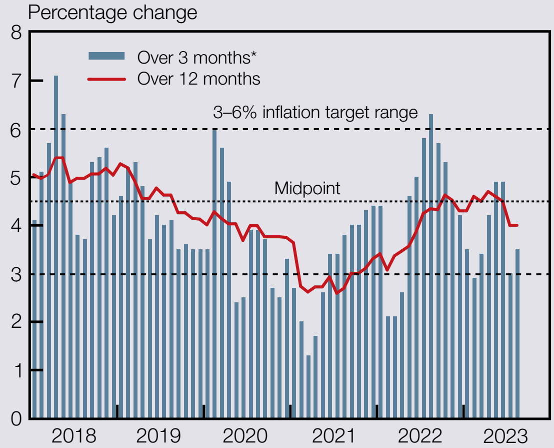
Correlation coefficient



Sources: Stats SA and SARB

Services inflation momentum

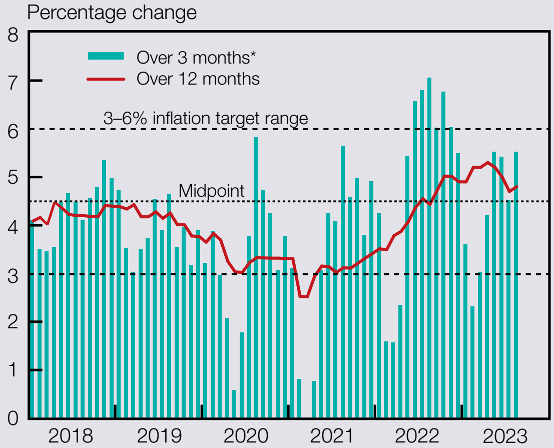
Percentage change



* Seasonally adjusted and annualised
Sources: Stats SA and SARB

Core inflation momentum

Percentage change



* Seasonally adjusted and annualised
Sources: Stats SA and SARB

Despite headline inflation moderating from its peak of 7.8% in July 2022, South Africa's inflation shows signs of persistence.[1, 2] Inflation persistence can be the outcome of two different dynamics, one extrinsic and the other intrinsic.[3] Persistence is extrinsic when a succession of individually transitory inflationary shocks drives inflation away from the target for a sustained period. This form of persistence is, all else being equal, self-correcting: as the sequential shocks disappear, inflation eases. Intrinsic persistence is when changes in underlying economic behaviour generate long-lasting inflationary impacts even after the initial impulse has subsided. Reasons for the change in underlying behaviour can vary, from a slow transmission of upstream supply shocks to prices, to price adjustments driven by idiosyncratic factors.[4] While monetary policy can look through the first-round impact of supply shocks, ignoring the second-round effects from intrinsic persistence leads to policy errors.

As in most other economies, the succession of large global and idiosyncratic inflationary supply shocks since 2021 has generated large spillover and second-round effects, including higher inflation expectations.

Evaluating intrinsic inflation persistence in real time is challenging. In the absence of real-time survey data on firms' near- and medium-term pricing behaviours and strategies, inflation momentum and diffusion indices help gauge underlying inflationary pressures, particularly for core inflation and its components.[5]

Services and core inflation momentum rose sharply in 2022 as headline inflation surged during that period, and again picked up pace in the second quarter of this year. Core inflation momentum remains elevated above the midpoint of the target range, pointing to persistent core price pressures. Services inflation momentum is a key indicator to monitor over the coming months given its outsized share in the core inflation basket (69.0%). While momentum is presently muted, risks to services inflation remain given the high inflation expectations and increased intensity of load-shedding.

---

1 Inflation persistence as measured by the time-varying first-order autocorrelation coefficient of the headline and core inflation series respectively, has edged upwards in recent months, particularly for core inflation.

2 Under the assumptions that inflation is a stationary time series process, which is generally the case for South Africa under inflation targeting, and that it is a first-order autoregressive process, the estimated regression coefficient approximates the first-order autocorrelation coefficient and can serve as a simple measure of inflation persistence. See J C Fuhrer, 'Inflation persistence', *Federal Reserve Bank of Boston Working Papers No. 09-14*, Boston: Federal Reserve Bank of Boston, November 2009, for more details on different measures of persistence.

3 H Pill, 'Inflation persistence and monetary policy', *Bank of England: ICMB Lecture, Graduate Institute, Geneva*, April 2023.

4 Reasons for staggered price setting can range from such considerations as the timing of restocking, contractual obligations, or strategic behaviour. See for instance W De Vijlder, 'Why inflation persistence matters'. Eco week 22–17, 25 April 2022. BNP Paribas; and G A Calvo, 'Staggered prices in a utility-maximizing framework', *Journal of Monetary Economics* 12(3), 1983, pp 383–398.

5 Momentum here is measured by the percentage change over three months, seasonally adjusted and annualised, which shows the pace at which prices are rising over the most recent three months. A key advantage is that this method strips out base effects likely to be reflected in year-on-year numbers. Diffusion indices show the proportion of items in a given inflation basket (e.g. services inflation) with prices rising above a predetermined inflation threshold (e.g. 4.5%). Considering a threshold of 4.5%, a diffusion index above 50.0% indicates more broad-based inflationary pressures and vice versa.

Box 2 Enhancing time consistency in monetary policy

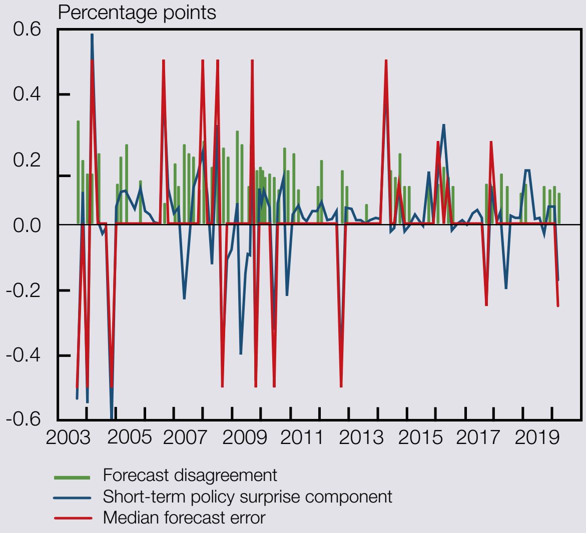
In theory, monetary policy is measured by its ability to smooth business cycle fluctuations and the inflation associated with them. The conventional interest rate channel of monetary policy in South Africa operates as effectively as it does in developed economies. Adjustments of the short-term interest rate lead to changes in the supply of credit, asset prices, economic activity and ultimately inflation.

In the real world, policy also needs to address a range of shocks and uncertainties that impact on long-term economic stability and which play themselves out over long time frames.[1, 2] Hence, complexity arises where local and international economic shocks are frequent and significant and the policy framework is less clear. In such conditions, markets are less able to predict changes in the policy rate, in part due to uncertainty about the state of the economy and the role of external shocks in the inflation forecast and policy response. From 2014, median forecast errors in the market and a measure of short-term policy surprise decreased, suggesting that the market better understood the Monetary Policy Committee's (MPC) interest rate decisions.[3]

What kind of information is conveyed by monetary policy decisions and its clarity are important for market responses. Where policy decisions emphasise long-run macroeconomic stability, favourable adjustments in the country risk premium that reinforce the workings of the interest rate channel of monetary policy ensue. Thus, while South African monetary policy has never formally used 'forward guidance' in its formulation, policy decisions have influenced the economy through a more accurate expected future path of the policy rate and changes in the country risk premium.

To sum up, communication that clarifies how monetary policy responds to global and domestic events and promotes long-term macroeconomic stability helps to ensure that policy is effective in reaching its objectives.

Forecast uncertainty, forecast errors and short-term policy surprises



Sources: Bloomberg, Pirozhkova et al. (forthcoming) and SARB

1 See E Pirozhkova, G Ricco, C van Schoor and N Viegi, 'Trouble every day: monetary policy in emerging economies, a study of South Africa', *South African Reserve Bank Working Paper Series*, forthcoming.

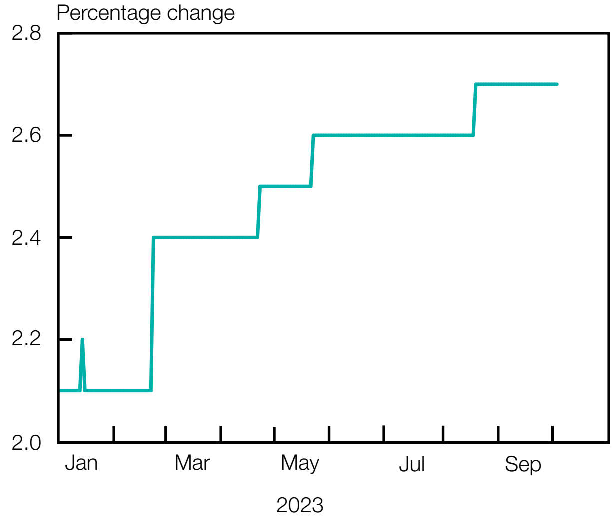
2 In the context of this box, long-term macroeconomic stability refers to monetary conditions that underpin stable economic growth (for example, the MPC's commitment to keep inflation at its target level in the long run).

3 This may be due to a change in the communication of the SARB, possibly related to the introduction of the QPM (and the publication of the projected repurchase (repo) rate path) in 2017 as well as the MPC's stated preference for inflation to stabilise closer to the midpoint of the target range.

Resilience and divergence in the global economy

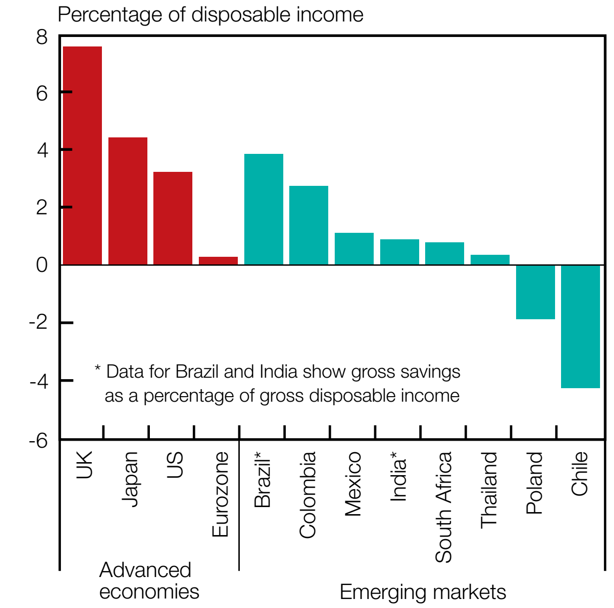
Global economic activity remained resilient in the first half of 2023, while inflation fell off its 2022 highs, raising the odds of a soft landing for the global economy. Across countries, growth has become increasingly divergent, with the US economy showing significant strength, and economic activity slowing in the eurozone and China. The outlook for global growth, however, is laden with risks. Stubbornly high core inflation in major advanced economies driven by services prices, together with tight labour markets and the recent surge in Brent crude oil prices, could keep inflation and ultimately interest rates higher for longer. Meanwhile, the ongoing challenges in China's property sector, alongside weakening consumption trends, weigh on global sentiment.

Evolution of 2023 global growth forecasts



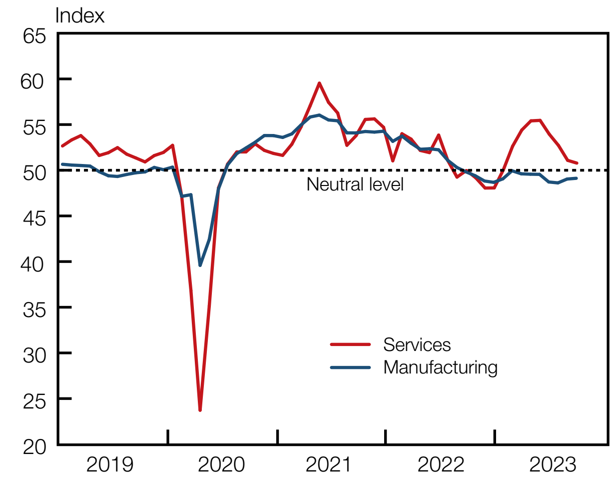
Source: Bloomberg

Household savings



Sources: Haver and OECD

Global PMIs



Sources: JPMorgan and S&P Global

Diverging growth trends

The world economy has remained resilient amid sharply higher global interest rates and elevated inflation, defying expectations of more subdued growth this year. Forecasts for real global growth this year were revised somewhat higher, and the world economy looks set to achieve 3.0% growth in 2023.[11] World growth is projected to trough at 2.9% in 2024, before edging up slightly over the medium term. Strong household demand, underpinned by large savings buffers and pent-up demand from the pandemic era buttressed the global economic strength. Resilience has been further supported by the rotation of demand from goods back to services, shown in more robust services activity and considerably weaker manufacturing activity and global trade in goods.

The outlook for global economic activity, however, has become more uncertain as countries put in place restrictions to cross-border finance and trade. Reshoring and friend-shoring are likely to lower productivity growth and raise the costs of supply, slowing both economic growth and the global disinflation currently underway.

Advanced economies are expected to grow by 1.5% this year and by 1.4% next year, slower than last year's robust 2.6% expansion. Real GDP growth forecasts for the G3 economies were revised higher for this year, but economic performance looks increasingly divergent across countries.[12] While a US recession in 2023 now looks less likely, whether a soft landing (an appreciable fall in inflation without a marked increase in unemployment) can be achieved remains unclear. Much of the resilience in the US economy can be attributed to robust consumer demand supported by the still strong household

11 All forecasts are based on the IMF's *WEO*, October 2023.

12 Between the April and October 2023 *WEO*, the 2023 real GDP growth forecasts were revised higher by 0.5 percentage points for the US, -0.1 percentage points for the eurozone and 0.7 percentage points for Japan.

balance sheets and firm labour markets as well as strong fiscal stimulus.[13]

Alongside the US, Japan's economy also recorded strong growth in the first half of this year, with growth for the year projected at 2.0%, up from 1.0% in 2022. Domestic consumption, however, contracted in the second quarter, suggesting that pent-up demand has peaked. Growth momentum has faded in the eurozone, with the IMF projecting growth to be only 0.7% this year. Country experiences have also diverged somewhat across the eurozone. Countries with larger services sectors, such as France and Spain, continued to expand at a healthier pace, while economies more exposed to manufacturing and trade activities, such as Germany, experienced sharply weaker growth, if not outright contractions.

At a projected 4.0% growth this year, emerging market economies will expand at a rate significantly below the pre-COVID-19 average. This subdued growth reflects both slower projected growth for China this year and the resulting diminished spillover benefits to the rest of the world, especially commodity exporters. The apparent slowdown in China's economy, following a brief acceleration of 9.1% quarter-on-quarter, seasonally adjusted and annualised rate in the first quarter of this year, suggests the boost from the country's reopening was short-lived.[14] The softer-than-expected economic data prompted Chinese authorities to provide some modest monetary stimulus to boost consumption and investment, with its main refinancing interest rate lowered by 20 basis points since the start of the year. However, the stimuli have yet to reflect in aggregate consumption demand. China's property sector remains a drag on economic activity, with home sales falling sharply this year. Financial stress also continues to build in the sector, following defaults by two large property developers, namely Evergrande and Country Garden.

Emerging market Asian economies (excluding China) are expected to grow more strongly this year and the next. Among the larger emerging market economies, India shows the most resilience, with growth projected at 6.3% this year, after expanding by 7.2% in 2022. Meanwhile, many Latin American and emerging Europe economies are forecast to slow sharply this year as higher interest rates take their toll on household spending.[15] Growth in sub-Saharan Africa is seen moderating slightly this year due to a combination of tighter domestic financial conditions, less favourable terms of trade

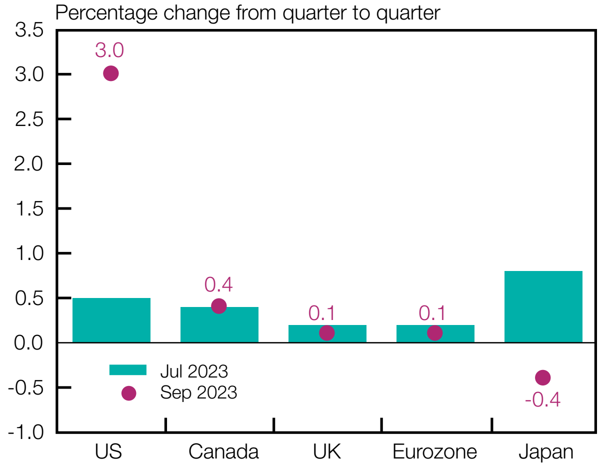
13 The US Inflation Reduction Act of 2022 and the US$1.2 trillion Infrastructure Investment and Jobs Act have boosted corporate investment spending in the US.

14 Real GDP growth slowed to 3.2% in the second quarter. Consensus Economics projects the economy to grow at 5.0% this year and 4.5% in 2024.

15 Fiscal transfers were limited in emerging markets and thus households did not accumulate large savings buffers, while the labour market recovery has not been as strong as in advanced economies.

2023Q3 real GDP growth forecasts

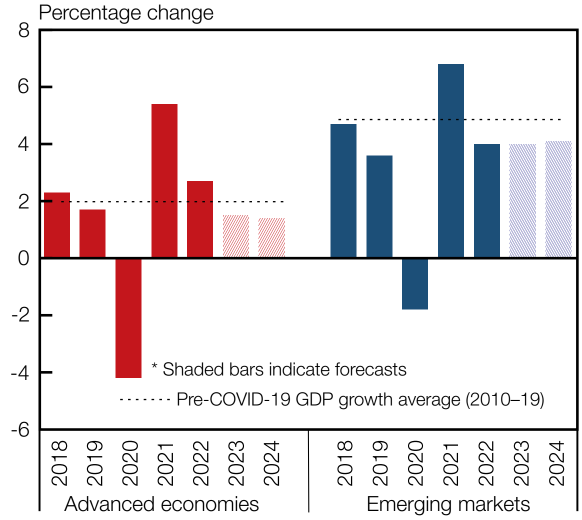
Percentage change from quarter to quarter



Source: Bloomberg

Real GDP growth in advanced economies and emerging markets*

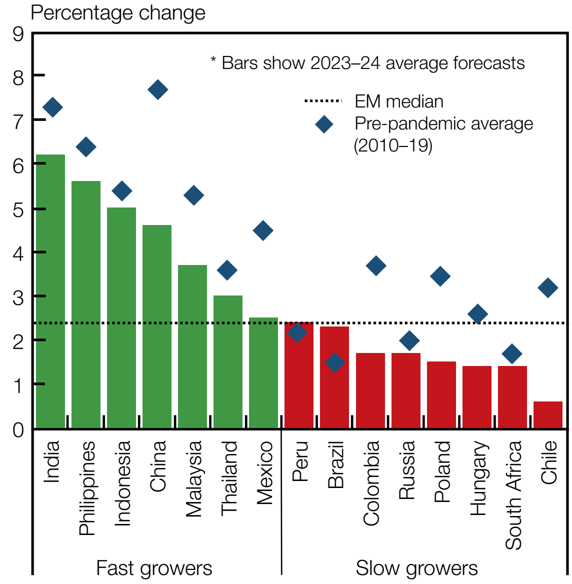
Percentage change



Source: IMF

Real GDP growth in selected emerging markets (2023–24)*

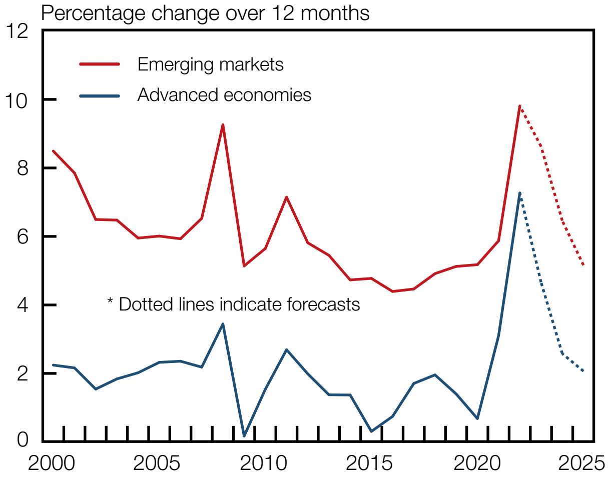
Percentage change



Source: IMF

Headline inflation*

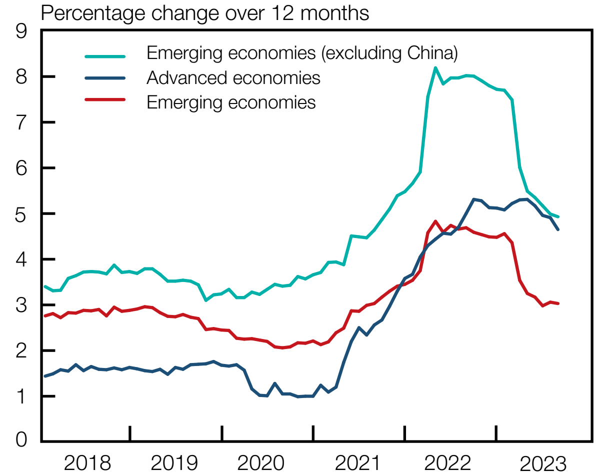
Percentage change over 12 months



Source: IMF

Core inflation

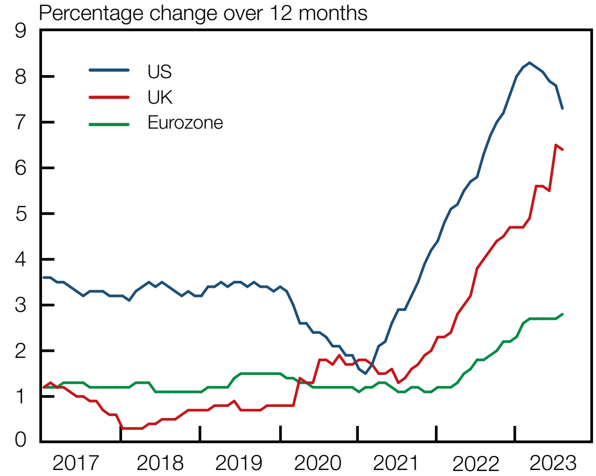
Percentage change over 12 months



Sources: Haver and SARB

Rental inflation in major advanced economies

Percentage change over 12 months



Source: Haver

and elevated inflation.[16] The region's two largest economies, Nigeria and South Africa, are forecast to grow at 2.9% and 0.9% respectively this year, leaving the smaller, non-commodity-dependent economies to underpin the region's growth.

While fears of a global recession have receded (for the moment), risks to the global growth outlook remain to the downside. Elevated interest rates could weigh on household consumption spending as savings buffers decline or trigger financial stress. Meanwhile, high debt levels and tighter global financing conditions could create serious balance of payments and debt distress challenges for emerging market and developing economies, with the effects exacerbated by the financial and trade fragmentations currently underway. Geopolitical tensions and natural disasters stemming from climate change present further downside risks.

Inflation declines steadily, but risks remain

Inflation has slowed significantly over the past year but remains well above central bank targets in most economies. Global headline inflation has fallen from a peak of 9.2% in the third quarter of 2022 to 6.2% in the second quarter of 2023, reflecting a combination of base effects, easing supply chain pressures, lower commodity prices and tighter monetary policy.[17] The IMF projects global inflation to fall to 6.9% in 2023 from last year's 8.7%, and to decline to 5.8% in 2024.[18] However, the recent sharp rise in Brent crude oil prices, where prices touched US$97 per barrel around late September 2023, up from the mid-US$70s per barrel in early July, pose a grave risk to the current disinflation process.

While headline inflation eased appreciably over the past year in advanced economies, underlying inflation as measured by core inflation, remained persistently high. High and sticky services price inflation largely explains the inflation persistence in these economies, reflecting strong services demand and the large weight of services in inflation baskets. Housing inflation, for instance, has been a major contributor to the persistence in US core inflation and continuing pressures in this market could further slow the disinflationary trend across major economies (Box 3). Unusually tight labour markets in advanced economies will keep core inflation elevated through their effects on ULCs. Meanwhile, core inflation has fallen relatively faster in emerging markets, mostly due to the earlier and stronger tightening of monetary policy, fewer excess savings to support demand and (in some cases) a recovery of currencies against the US dollar.

16 The region is now projected to grow at 3.3% this year, compared with 3.6% at the time of the April 2023 *MPR*, before accelerating to 4.0% in 2024.

17 Average global inflation is based on a measure from Haver.

18 Concensus forecasts, however, see global inflation averaging 6.0% this year and slowing to 4.3% in 2024.

With inflation elevated and more persistent, major global central banks have remained steadfast in their determination to rein inflation in. Central banks have adopted a more data-dependent approach, raising interest rates (at times with large steps) as incoming data pointed to inflation becoming more entrenched. Communications by global central banks have emphasised the need to stay the course, implying policy rates could remain higher for longer. Meanwhile, the era of synchronised monetary policy has ended, with some emerging markets such as Brazil and Chile easing policy to stem further rises in real rates amid faster declines in inflation. Nonetheless, this is unlikely to change the theme of 'higher for longer' policy rates in emerging markets.

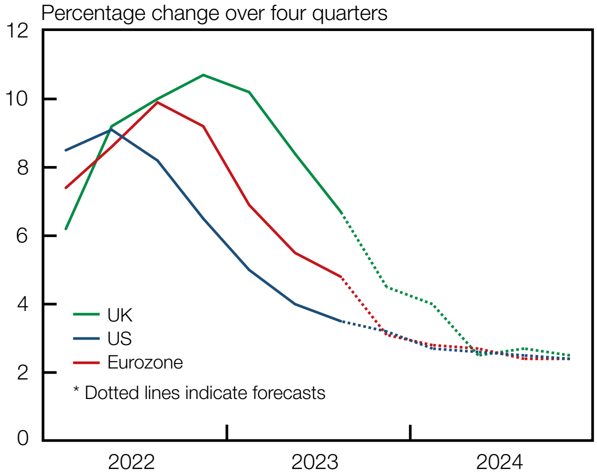
The broad consensus that global neutral rates would remain around their pre-COVID-19 levels appears to have shifted. Instead, elevated uncertainty regarding the path for neutral rates, especially in the short to medium term, has emerged, in part spurred by the ongoing fragmentation in global finance and trade as well as the many upside risks to inflation that characterise the global economy, as discussed in the Executive Summary.[19] A rise in the global neutral rates would require policy rates to either increase further or remain higher for longer, particularly in emerging markets.

Conclusion

The world economy looks set to achieve moderate growth and somewhat lower inflation in 2023. While the odds of a global recession have diminished somewhat, diverging economic outcomes contribute to uncertainty and market volatility. Inflation remains a major policy concern globally. Although goods price inflation has eased in much of the world, services inflation remains elevated, keeping core inflation and ultimately headline inflation from falling more sharply and threatening to de-anchor inflation expectations. Persistent inflation and elevated inflation risks will keep global interest rates higher for longer, presenting challenges to emerging markets that require global savings inflows and threatening currency stability, with knock-on effects to domestic inflation.

Inflation in advanced economies*

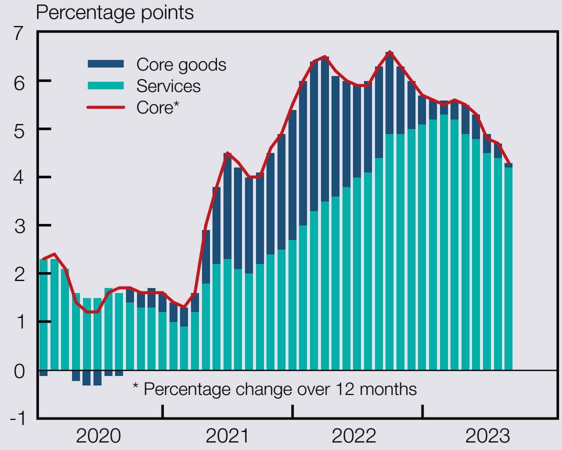
Percentage change over four quarters



Source: Bloomberg Consensus

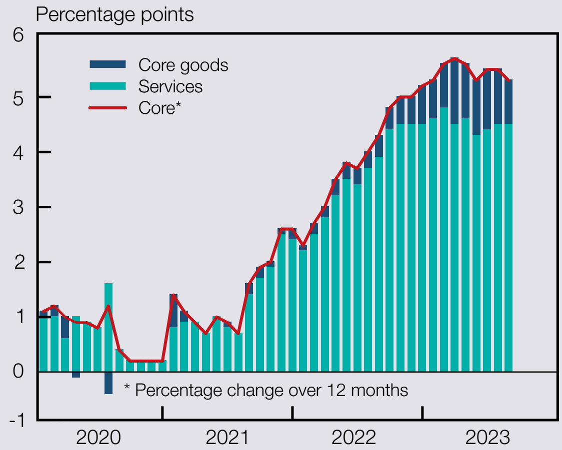
19 Whereas some institutions (authors) contend that neutral rates will return to their pre-pandemic levels once the multiple shocks of the past three years have washed off, others argue that the new equilibriums would require a higher r-star. See for instance, IMF *WEO*, Chapter 2, April 2023: The natural rate of interest – drivers and implications for policy; Riksbank, 'Are low global real interest rates set to continue?', 25 November 2021; Megan Green, 'Central banks shouldn't relax about R-star just yet', *Financial Times*, 3 July 2023.

Contributions to US core inflation



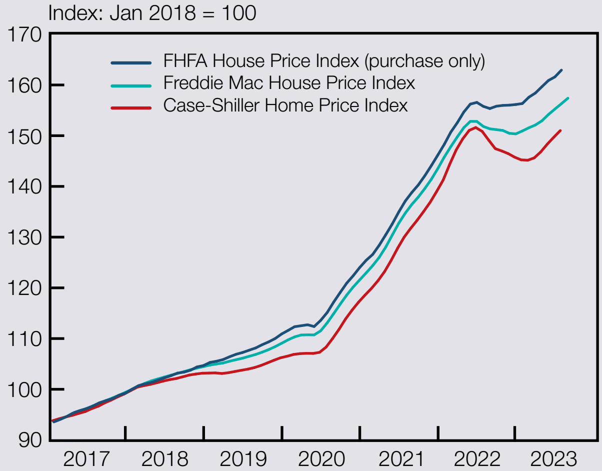
Source: Bureau of Labor Statistics

Contributions to eurozone core inflation



Source: Eurostat

US house prices



Source: Haver

Box 3 A sticky services story

Core inflation, which excludes the volatile components of food and fuel, has generally remained sticky across advanced economies. Core goods inflation has eased markedly in the United States (US) but remains high in Europe from the pass-through of higher energy prices. Services inflation, in contrast, remains acutely elevated, with housing inflation especially shaping the trajectory of core inflation.

Housing/rental inflation[1]

Sharply higher housing inflation is an outcome of the interplay between property market conditions and contractionary monetary policy that influences housing prices, home ownership costs and rental prices.[2] In the US, rental inflation surged to 8.3% in March 2023 before easing slightly to 7.3% in August. Owners' equivalent rent (OER), which gauges the implicit rental payments for owner-occupied houses, shows a similar trend. The slight moderation in rental inflation in recent months is due to the increased supply of rental properties over the past year and is expected to persist over the next few quarters.[3]

The US housing market, however, remains relatively tight, with house prices showing strong gains lately and construction slowing as reflected in falling housing permits and completions.[4] This combination presents upside risks to rental inflation as rising house prices and interest rates push more people to rent while the supply of rental properties is slow to increase.[5]

In contrast to the US, house prices in the eurozone and United Kingdom (UK) are projected to continue lower and weaken further in accordance with a sharp decline in household demand for loans. Recent research suggests that Europe's housing market trough might not be reached until at least mid-2024, which should favour a sharper moderation in housing inflation.[6]

1 Housing inflation in advanced economies forms a large part of the inflation basket. In the US it is about 35.0% of the consumer price index (CPI) basket. In the eurozone and the UK housing inflation accounts for 15.0% and 12.9% respectively.

2 D A Dias and J B Duarte, 'Monetary policy, housing rents and inflation dynamics', *International Finance Discussion Papers No. 1248*, May 2019.

3 See 'Why rent prices dropped for the third straight month' by Creconsult, 28 March 2023. The CPI rent component lags measures of market rents by approximately a year, according to the Federal Reserve Bank of Dallas.

4 Zillow has been consistently raising its projections for the national Zillow Home Value Index (ZHVI) in recent months, now projecting a 5.5% increase over the next year. The number of available listings for sale has fallen notably. The main factor behind this upward adjustment was the constrained inventory conditions.

5 E Zentner and J Egan, 'Navigating a different housing cycle: housing market summary – US & Canada', *Morgan Stanley Research: Global Insight*, 17 July 2023.

6 J Eisenschmidt, J-F Ouvrard and B Skarica, 'Navigating a different housing cycle: housing market summary – Europe'. *Morgan Stanley Research: Global Insight*, 17 July 2023.

Non-housing services inflation

Excluding housing, services inflation also remains high in advanced economies, underpinned by strong activity in recreation, travel, transportation and restaurants. The release of pent-up consumer demand when businesses have struggled with labour shortages, has driven and sustained inflation for this category.[7] Real wage growth in the non-housing sector has remained elevated and above productivity growth in the US.[8] Europe exhibits similar labour market dynamics, with wage growth picking up significantly in recent quarters and correlating highly with non-housing services inflation.

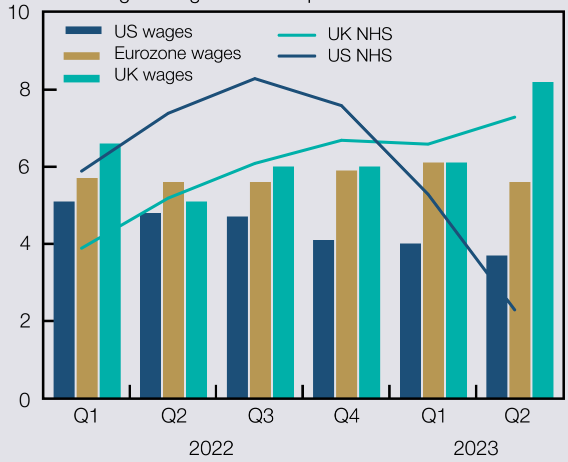
High services inflation and tight labour markets in most advanced economies present ongoing risks to core inflation.

7 Non-housing services (NHS) inflation is more important to core inflation in the eurozone and UK than in the US. NHS inflation in the US contributed 1.2% to core inflation in July (compared to 3.2% from housing). It is more pronounced in the euro area and UK, contributing 5.2% and 5.8% to core inflation respectively.

8 The Federal Reserve Bank of Chicago shows that unit labour cost (ULC) growth in the NHS has exceeded pre-pandemic levels over the past year. See G Barlevy and L Hu, 'Unit labour costs and inflation in the non-housing service sector', Federal Reserve Bank of Chicago, March 2023.

Wages and non-housing services inflation

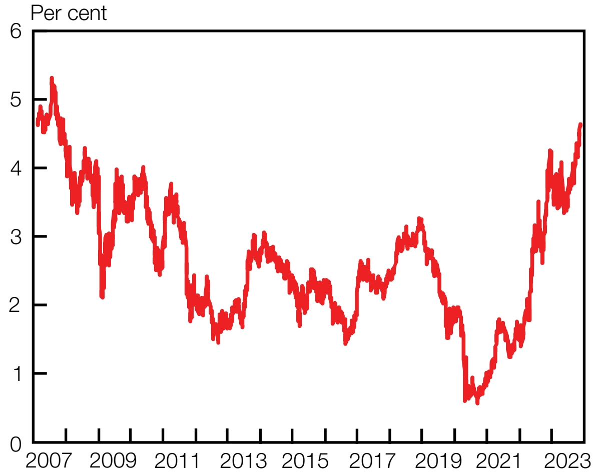
Percentage change over four quarters



Sources: Haver and OECD

Global financial markets developments: higher, longer

US government bond 10-year yield



Source: Bloomberg

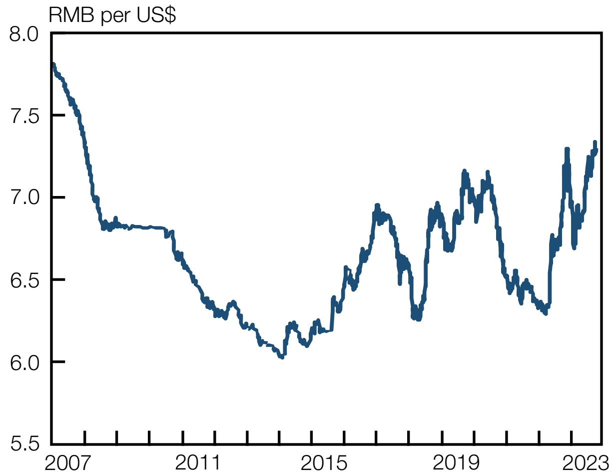
While synchronised policy rate increases by central banks appear to have ended, market attention has turned to long-term rates and their prospects. In the US, long-term rates are at 16-year highs. The US dollar has gained against most currencies recently, after trending weaker for much of the past year; the Chinese yuan has depreciated markedly. In South Africa, markets anticipate the policy rate to be near its peak, with cuts likely late in 2024. Meanwhile, fiscal dynamics have exerted further upward pressure on the longer end of the yield curve.

The past six months have seen two remarkable shifts in global financial markets. Returns on 10-year US government bonds have climbed to around 4.6%, yields last seen in 2007. At the same time, the renminbi exchange rate has weakened past 7 to the US dollar, also the highest rate since 2007. Both events point to deep structural changes.

In the US, higher long-term borrowing costs reflect greater demands on resources – not least through large fiscal deficits and elevated debt levels – as well as modestly higher inflation expectations.[20] The prospect of 'secular stagnation', which shaped interest rates over much of the past 10 years, now appears remote.

Despite higher longer-term rates, the US yield curve remains inverted, reflecting cyclically high policy rates aimed at stabilising inflation. This inversion has now also lasted longer than any previous such episode. Markets assess that the Fed's hiking cycle is complete or nearly complete, with the Fed Funds rate likely to be somewhat lower next year. A resilient US economy has nonetheless supported a consensus that rates will remain at relatively high levels for an extended period. In turn, this has helped the dollar strengthen again recently, after weakening over much of the past 12 months.

Chinese renminbi exchange rate



Source: Bloomberg

To some extent, developments in China are the mirror image of those in the US. COVID-19 restrictions were lifted later in China than in most other economies, and the growth rebound from reopening has been weaker than expected. While much of the world has been struggling with high inflation, in China inflation is sharply lower, with consumer prices falling in July. Policymakers have implemented moderate rate cuts and a gradual, controlled depreciation of the renminbi. The structural shift is nonetheless clear, with the onshore exchange rate about 15.0% weaker in September 2023 than it was at the start of 2022.

20 S Arslanalp and B Eichengreen, 'Living with high public debt'. August 2023. p 25. https://www.kansascityfed.org/Jackson%20Hole/documents/9749/Living_With_High_Public_SA_Sep_2_2023.pdf

For emerging markets, a general implication of these developments is likely to be higher average interest rates for many countries. The upward shift in the US yield curve obliges other borrowers to pay more for funding as they must compete with this global benchmark rate. At the same time, slower growth in China weakens a source of export demand, with consequences for exchange rates as well as risk premiums – particularly in commodity exporters. This helps explain the 'higher for longer' theme for emerging market rates, even as central banks with high real rates adjust rates down where possible.

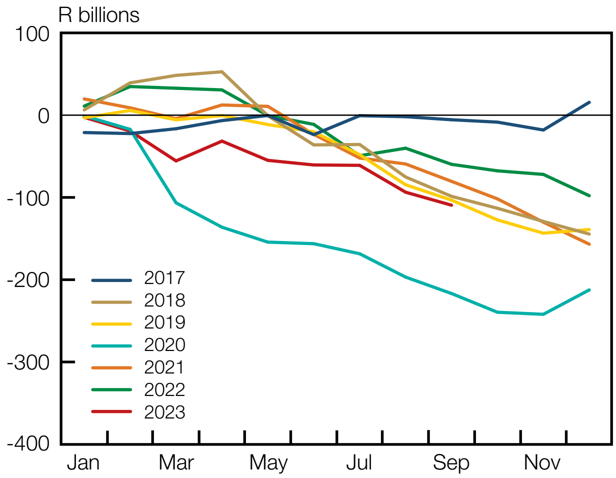
South African financial market developments

South Africa experienced heavy non-resident capital outflows during the first half of the year, resulting in the rand reaching its lowest-ever nominal exchange rate to the US dollar, at R19.80, on 25 May. The drivers of these outflows were primarily local, including geopolitical factors (particularly the Lady R controversy) and intensified load-shedding. The broad emerging market grouping saw better performances. Around the middle of the year, inflows to South Africa resumed, bringing the year-to-date experience more in line with recent averages.

Despite sustained outflows, South African equities have largely tracked the performance of peer markets during the year. The MSCI South Africa Index nonetheless dipped sharply in the third quarter of 2023, losing close to 5.0% compared with losses of just under 2.0% for the broad MSCI Emerging Market (EM) benchmark.

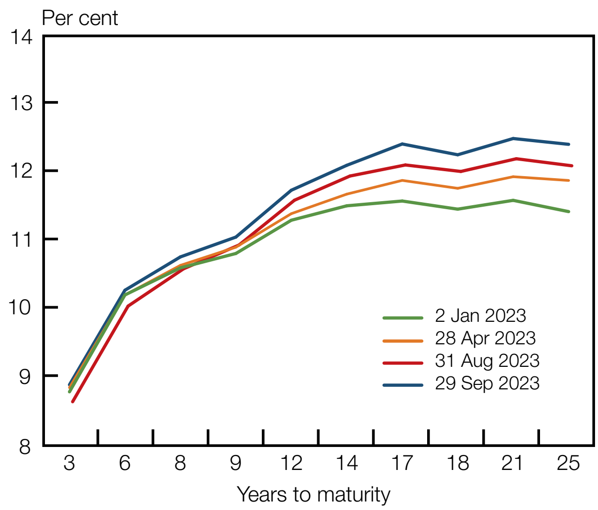
The government bond yield curve has steepened further during the year, despite higher short-term rates. Typically, curves are flattest (or even inverted) at the peak of a hiking cycle as markets expect short rates to be lower, on average, in future, with those lower rates then factored into longer-term yields. Market expectations currently indicate that the repo rate is near its peak, at 8.25%, with one more 25-basis-point hike possible and rates then somewhat lower by late 2024. Nonetheless, the longer end of the curve has risen further during 2023. For instance, the R2030 yield has gained over 100 basis points to 11.0%, while the R2044 has climbed around 170 basis points to 13.1%.

Cumulative portfolio flows



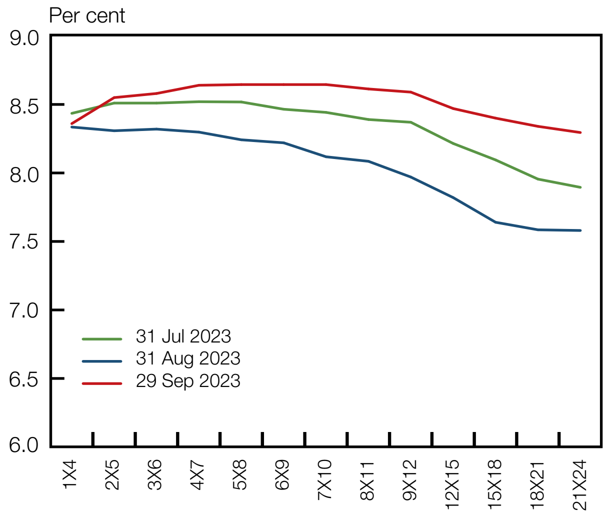
Source: SARB

Government bond yield curve



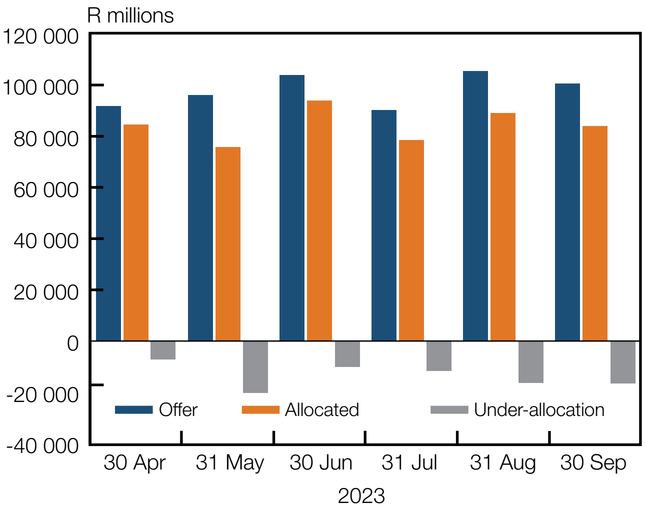
Source: Bloomberg

Forward rate agreements



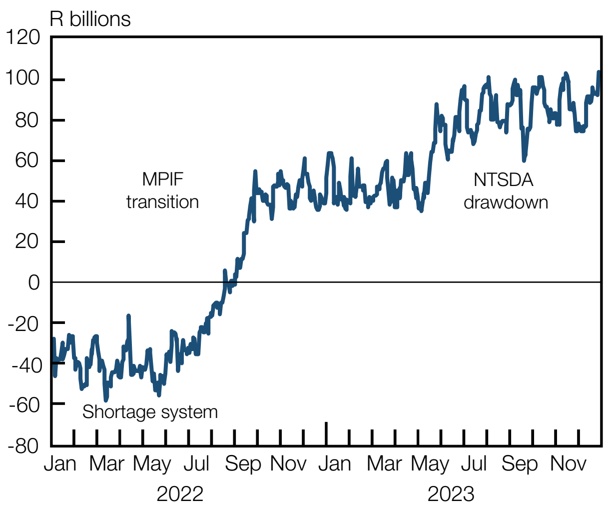
Source: Bloomberg

Monthly bond issuance



Source: SARB

Liquidity requirement



Source: SARB

These pressures mainly reflect fiscal strains. Tax revenues have disappointed, in line with declining commodity prices, while an uptake of floating-rate notes and non-competitive tenders (non-comps) has also fallen short.[21] To help meet funding needs, issuance of Treasury bills was increased in August, from R12.45 billion to R14.8 billion.

Since late July, there has also been a marked decline in spread of the benchmark 3-month Johannesburg Interbank Average Rate (Jibar) rate over the policy rate. For the first six months of 2023, this rate averaged 25 basis points above repo; that spread has subsequently narrowed to around 9 basis points.

This compression commenced with the 'unchanged' decision at the July MPC meeting. In part, the compression in the spread is consistent with the market conviction that the repo rate will not rise much further, if at all.

A smaller Jibar-repo spread is also likely related to the new surplus-based monetary policy implementation framework (MPIF). In theory, short-term rates should be nearly flat at the policy rate, out to the next MPC meeting.[22] This reflects low risk in money markets as well as minimal term premiums over short durations.

Domestic monetary operations

The surplus-based MPIF has now been in operation for just over a year. As discussed in the previous *MPR*, the liquidity surplus has been built up to around R80 billion, from an initial average surplus of about R50 billion, following the drawdown of the National Treasury Sterilisation Deposit Account (NTSDA). This process was completed in March 2023. Subsequently, the supply of excess reserves has been permitted to fluctuate in a wide range – between R60 billion and R100 billion – with the liquidity position on any given day mainly determined by routine monthly fluctuations in demand for notes and coin.

In the interbank market, a gap has developed between unsecured and secured rates, with unsecured rates below secured rates. Although secured borrowing is typically cheaper, given that the borrower provides security and is therefore less risky, the large exposures framework (LEX) introduced shortly before the MPIF reform, has increased banks' demand for

21 Non-comps provide primary dealers with an option to acquire bonds, on Thursdays, at the yields from the Tuesday auctions. If prices rise between Tuesday and Thursday, the option is in the money and primary dealers will generally exercise it. The opposite is true if prices fall between Tuesday and Thursday. This system provides an incentive for banks to function as primary dealers, making a market in government bonds.

22 For example, see Bank of England, 'The Bank of England's Sterling Monetary Framework', June 2015. p 4. https://www.bankofengland.co.uk/-/media/boe/files/freedom-of-information/2016/sterling%20monetary%20framework%20june%202015.pdf

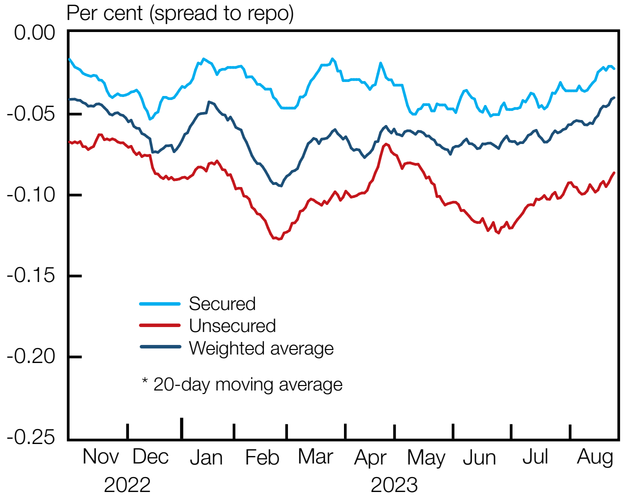
secured lending.[23] Unsecured trading volumes, which were approximately equal to secured volumes during 2022, have declined to just under a third of secured trading volumes. Rates on unsecured overnight lending have averaged around repo less 10 basis points. By contrast, secured rates appear to have settled closer to repo – averaging repo less 2 basis points, for instance, in recent months. These outcomes are consistent with prior expectations, before the MPIF reform, that a tiered-floor system would see interbank rates at modestly negative margins to repo.[24]

One year since the reform, there is now adequate data to consider the distribution of reserves. In choosing a new MPIF, the SARB opted for a tiered-floor system where banks can earn the policy rate on deposits at the SARB up to certain limits, instead of a pure floor without such limits. The tiered system was chosen to prevent excess reserves from becoming concentrated in a few banks, by incentivising those with large reserve surpluses to lend those in the interbank market. This incentive is created through the SARB paying a lower rate (repo less 100 basis points) on reserves in excess of quotas.

The data show the distribution of reserves has become less concentrated since the MPIF reform. The share of reserves held by the big five banks has moderated slightly, and that of smaller banks, including both domestic and international banks, has risen.

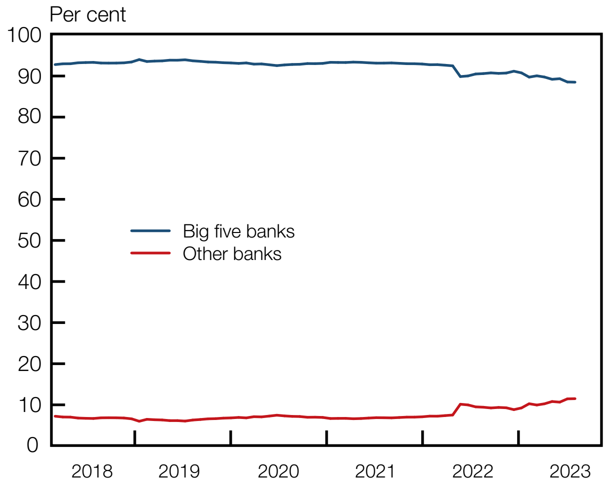
Overall, beyond enhancing the transmission of monetary policy, the new MPIF has allowed the SARB to manage its liabilities more effectively: the stock of foreign exchange (FX) swaps accumulated in 2020 has been matured and the FX-implied rates have converged on the policy rate, as have general repo rates. The NTSDA drawdown was also completed without disrupting markets.

Interbank rates*



Sources: Strate and SARB

Distribution of reserves

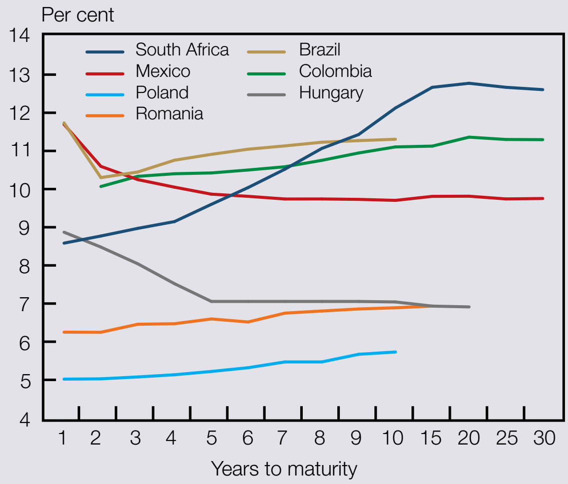


Source: SARB

23 The LEX limits exposures of banks to any individual counterparty to a fixed percentage of capital. The Prudential Authority (PA) directive introducing LEX, published in April 2022 specifically identified South Africa's concentrated interbank market as a risk. See *Prudential Authority, Direct 3/2022*, especially section 2, available at: https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2022/D3-2022-Directive-Large-exposure-requirements

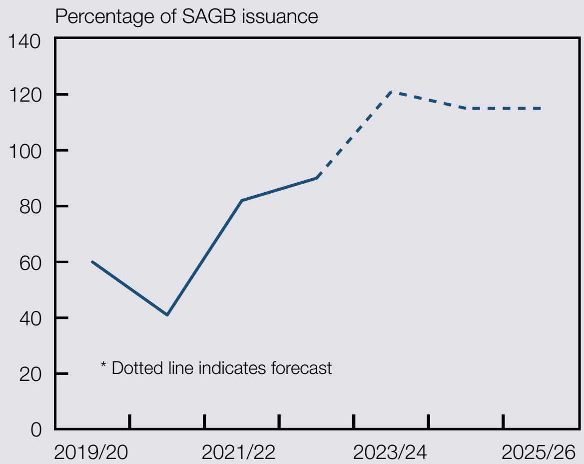
24 Banks with spare quota capacity were expected to require an incentive to take funds from banks with excess liquidity. Given that SARB quotas pay repo, a bank paying repo on the interbank market and receiving repo on quota would make no profit for its trouble. In the secured market, most trades have occurred at repo recently, with some trades at repo less 10 basis points.

Emerging market yield curves



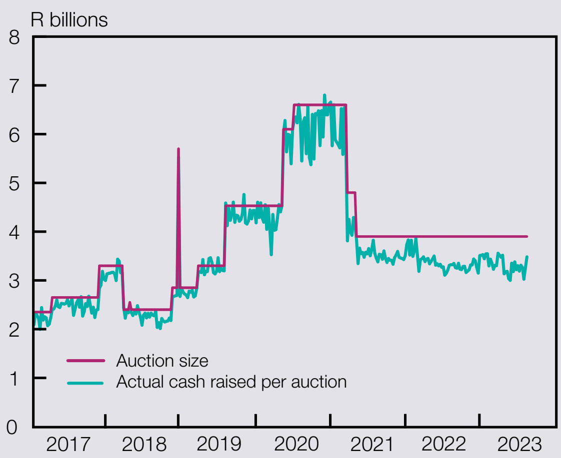
Source: Bloomberg

Debt-service cost*



Sources: National Treasury and SARB

Funding raised in weekly auctions



Source: SARB

Box 4 Sovereign bond markets: more supply than demand

Over the past six months, capital flows to emerging markets have dried up in response to heightened risk aversion linked to geopolitical concerns, financial and trade fragmentation and generally weak economic growth. Funding conditions for sovereign borrowers have deteriorated. In South Africa idiosyncratic factors such as declining terms of trade and tax revenue under-shooting, the greylisting by the Financial Action Task Force (FATF) and aggravated load-shedding have made funding conditions even more challenging. This is evidenced by South Africa's elevated long-term bond yields as well as by the underperformance of some debt financing instruments.

Public borrowing requirements are mostly met through South African government bond (SAGB) issuances to resident and non-resident investors. South Africa's funding costs rose sharply in recent times and the sovereign yield curve steepened, as shown in the 10-year and 25-year SAGB yields rising by 57 basis points and 121 basis points respectively. New bonds (R2053 and I2031) have also been issued at higher coupon rates compared with previous years, reflecting a rising supply and softening demand. In addition, less cash is raised from issuances compared to prior year averages.

In the current fiscal year, cash raised at the weekly fixed-rate bond auction is equivalent to about 84.0% of the auction size, compared with an average of 95.0% in prior years. Although inflation-linked bonds have performed relatively well so far this year, non-competitive tenders (non-comps) and the floating rate note (FRN) have fallen short.[1] Appetite for the FRN appears to have waned, with allocations reaching only 48.0% of what was targeted in the auctions. About 90.0% of the funding raised through government bonds in the 2022/23 fiscal year was used to cover debt-service cost, estimated in the 2023 Budget to reach R397 billion in the 2025/26 fiscal year (and almost double the R204 billion incurred in the 2019/20 fiscal year).

In the wake of the pandemic, the small underperformance in bond issuance of the past two fiscal years was easily made up in revenue overruns. In an environment where capital flows are harder to attract and greater discrimination among sovereigns is in play, the 'higher for longer' theme for global interest rates and the increased sensitivity of portfolio flows to risk-adjusted real interest rate differentials present challenges to policymaking in emerging markets.

1 The takeup of non-comps, at 40.0% average of available non-comps in the current fiscal year, is broadly in line with the pattern observed in the past two years but remains below the averages for 2019 and 2020.

Real economy: a modest upside surprise, challenges remain

The first half of 2023 saw real GDP growth outpace very low expectations. The modest upside surprise reflects higher investment and a somewhat better-than-anticipated response to load-shedding. Nevertheless, growth remains very weak, with the economy expected to expand by just 0.7% this year and rising to 1.1% over the medium term, significantly less than the pre-COVID-19 decade's average rate of 1.7%. These subdued growth rates indicate the ongoing constraints such as inadequate electricity and logistics supply that have eroded the economy's productive potential.

Recent economic developments

Despite unprecedented rolling blackouts in the first half of this year, the domestic economy grew by 0.9% year on year in the first six months of 2023. The first quarter outcome of 0.4% quarter on quarter was slightly better than the SARB projection and Reuters' median forecast.[25] This was followed by another above-expectation outturn of 0.6% in the second quarter. The rebound in activity in the first quarter of 2023 was more broad-based than in the second quarter, when four out of 10 sectors subtracted from total output. The better performance in the first two quarters saw the SARB revise higher its growth forecast for the year to 0.7%, from 0.2% at the time of the April 2023 *MPR*.

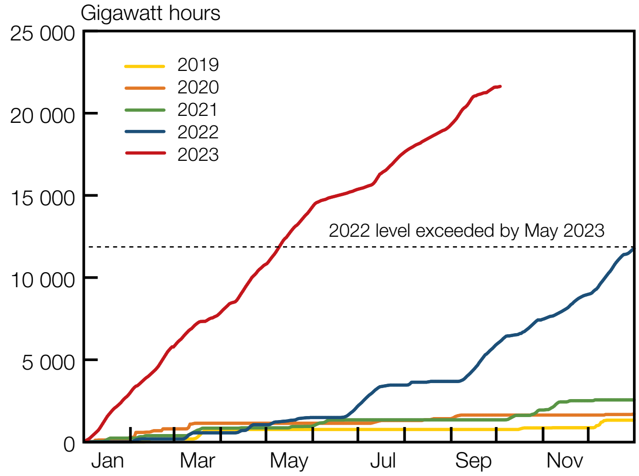
Strong performances by the agriculture, transport and construction sectors, that advanced at 8.2%, 5.9% and 4.0% respectively on a year-on-year basis in the first half of 2023, underpinned growth.[26] As in the past two years, agriculture benefitted from yet another favourable rain season, with 2023 marking the second-highest crop harvest in recorded history. Domestic travel and freight transport expanded over the period, while the construction sector received a boost from the energy-related investments by firms and households.

25 The SARB expected growth of 0.2% and the Reuters median -0.2% in the first quarter.

26 Growth has been volatile on a quarter-on-quarter basis. Agriculture contracted by 11.9% in the first quarter of this year but expanded by 4.2% in the second quarter. The transport and construction sectors both posted positive growth of 1.1% in the first quarter but contracted by 1.9% and by 0.4% respectively in the second quarter.

Cumulative load-shedding

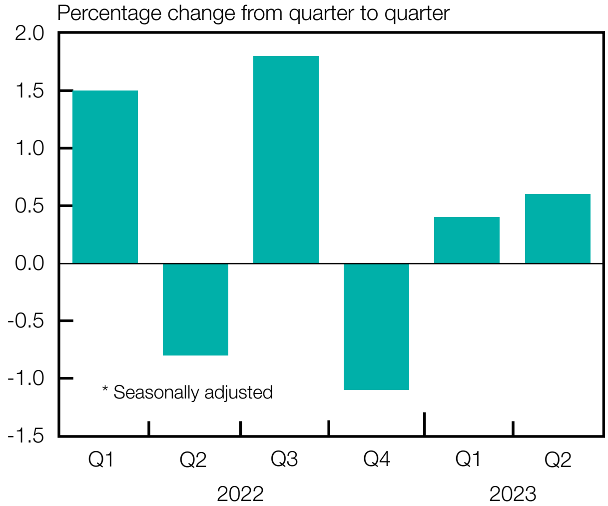
Gigawatt hours



Sources: ESP (app), Eskom X (formerly Twitter) account and SARB

Gross domestic product*

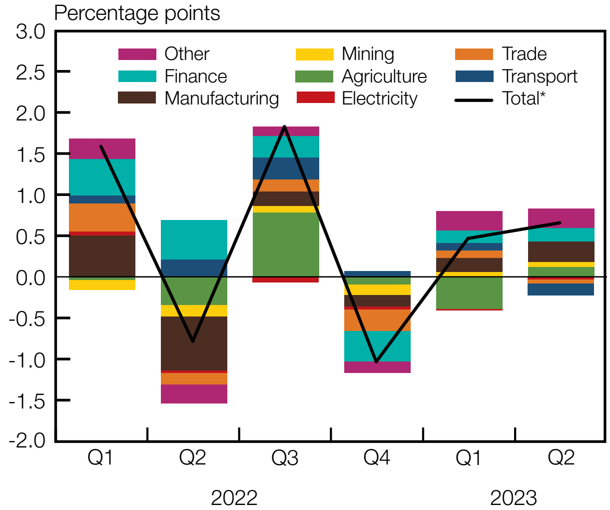
Percentage change from quarter to quarter



Source: Stats SA

Contributions to GVA

Percentage points

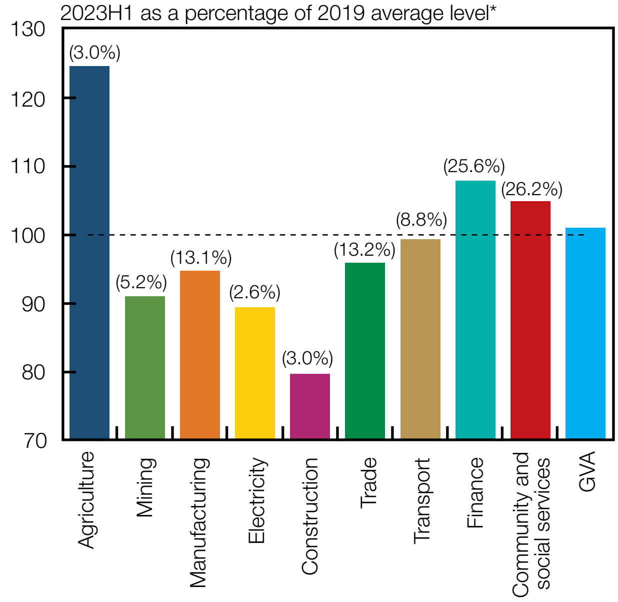


* Percentage change from quarter to quarter

Source: Stats SA

Gross value added by industry

2023H1 as a percentage of 2019 average level*

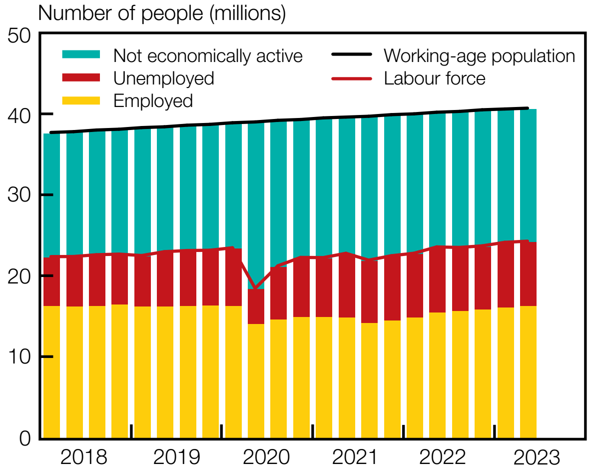


* Weights in brackets

Source: Stats SA

Working-age population

Number of people (millions)



Source: Stats SA

The modest growth in manufacturing (0.9% year on year) reflects the combination of declining energy supply and base effects from the flood-afflicted performance of the sector in 2022.[27] Mining also disappointed, contracting by 1.0% in the first half of the year, weighed down by the ongoing electricity supply challenges, the sharp moderation in commodity prices as well as sharply weakened logistics capacity.[28] Unsurprisingly, the electricity sector performed the worst (-6.6% year on year), in line with the record-high load-shedding over the period.

While mining and manufacturing are energy intensive and were hard hit in the plunge into heavy load-shedding late in 2022 and the first two quarters of this year, they may nonetheless have become somewhat more resilient to load-shedding, especially during the lower stages. Load curtailment for some high-intensity energy users, which is predictable for users, could also help explain their better performance over the past six months.[29] It is notable, however, that much of the surprise GDP performance in the first half of this year reflects stronger growth in the less-energy-intensive services sectors such as finance and community services. These sectors, alongside agriculture, have also underpinned the faster return of aggregate output to its pre-pandemic level. However, with six of the 10 sectors still below their pre-pandemic activity levels, held back largely by the energy and logistics supply constraints, GDP has struggled to rise much above the 2019 output level.

Despite growth remaining subdued, the labour market has realised job gains, with over a million additional people employed in the first half of 2023 compared with the same period in 2022.[30] Employment now has, by and large, recovered to pre-crisis levels.[31] The utilities and construction sectors have experienced relatively stronger employment gains, rising by 30.9% and 9.3% year on year respectively in the first half of this year, likely reflecting the increased activity in the alternative energy space. Although it ticked slightly lower, the unemployment rate remains elevated at 32.6% in the second quarter of 2023.

27 The sector has performed significantly better on a quarter-on-quarter basis, with growth rates of 1.5% in the first quarter and of 2.2% in the second quarter.

28 On a quarter-on-quarter basis, mining expanded by 1.4% and by 1.3% in the first and second quarter respectively. Nonetheless, mining remains 9.0% below its 2019 output level.

29 Load curtailment is load reduction obtained from customers on instruction from the Eskom System Operator. Most of the customers on curtailment are classified as Key Industrial Customers (>100GWh/annum) and fall within the industrial (40.0%) and mining (50.0%) sectors. They constitute 30–40% of Eskom sales.

30 On a quarter-on-quarter basis, employment increased by 1.6% in the first quarter and by 1.0% in the second quarter.

31 According to the Quarterly Labour Force Survey, as of the second quarter of this year, employment has recovered to the level achieved in the first quarter of 2020. The Quarterly Employment Statistics data suggest formal employment is still about 2.0% below pre-pandemic levels.

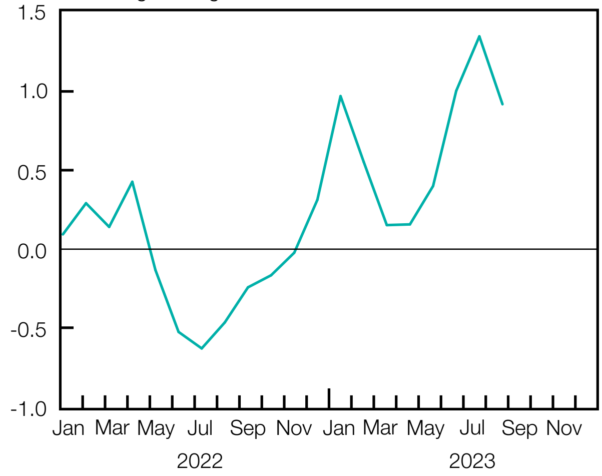
Even with the job gains, real total compensation declined by 1.8% year on year in the first half of 2023 as high inflation eroded the compensation gains.[32] Similarly, real disposable income declined slightly in both the first and second quarters of this year. Nevertheless, household consumption expenditure, spurred by credit demand and savings drawdowns, expanded by 0.9%.

On a quarter-on-quarter basis, household consumption declined in the second quarter, with contractions in all spending categories except for services. The decline was led by lower spending on food, beverages and tobacco, followed by fuel and power, reflecting the pressure on households from elevated food and energy prices. Low-income households, for whom these two categories constitute the bulk of their total outlay, remain particularly vulnerable. Meanwhile, spending on services, which comprise more than 50.0% of total outlays by households, was fuelled in part by higher domestic travel and tourism. This, in turn, has supported spending in the restaurants and hotels subcategory, which recorded consistent positive growth over the past four quarters. Further impetus has come as an unintended consequence of load-shedding, where restaurant dining and take-aways serve as convenient substitutes to home-cooked meals during power outages.

Turning to investment, gross fixed capital formation grew at a robust 6.0% year on year in the first half of 2023, driven by private sector spending on machinery and equipment. Investments in energy self-generation have helped to mitigate production losses from power outages. Alongside private investment, public sector capital spending has also supported gross fixed capital formation in recent quarters. This trend is expected to continue, as reflected in the Nedbank capital expenditure report for the first half of 2023 that shows that the community, social and personal services sector holds the lion's share (R45.3 billion of the total R86.58 billion, annualised) of the announced investment projects so far this year.[33]

Real credit extended to households

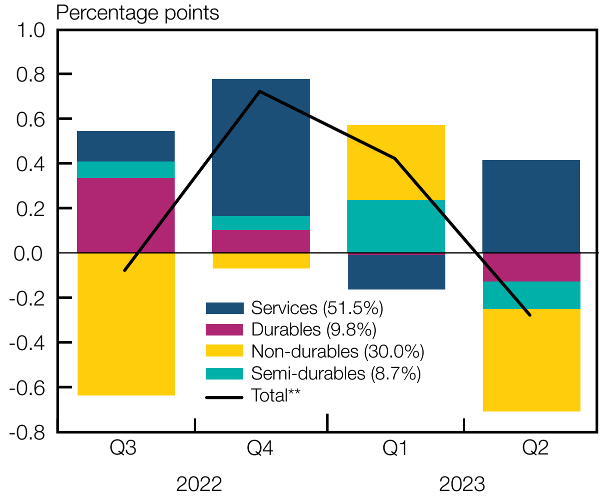
Percentage change over 12 months



Source: SARB

Contributions to personal consumption expenditure*

Percentage points



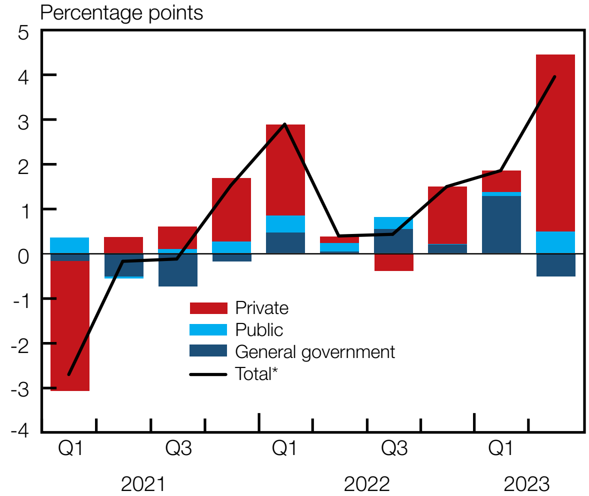
* Weights in brackets

** Percentage change from quarter to quarter

Source: Stats SA

Contributions to gross fixed capital formation

Percentage points



* Percentage change from quarter to quarter

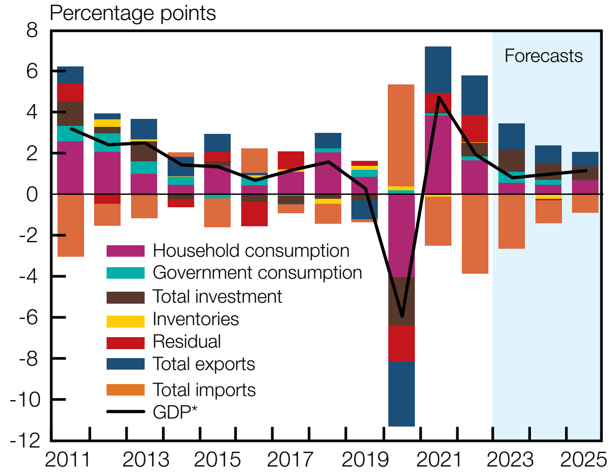
Sources: Stats SA and SARB

32 Nominal total compensation grew by 4.6% in the first half of the year. On a quarter-on-quarter basis, it grew by 3.7% in the first quarter and by 0.6% in the second quarter.

33 The Nedbank Capital Expenditure Project Listing H1 2023.

Contributions to GDE

Percentage points

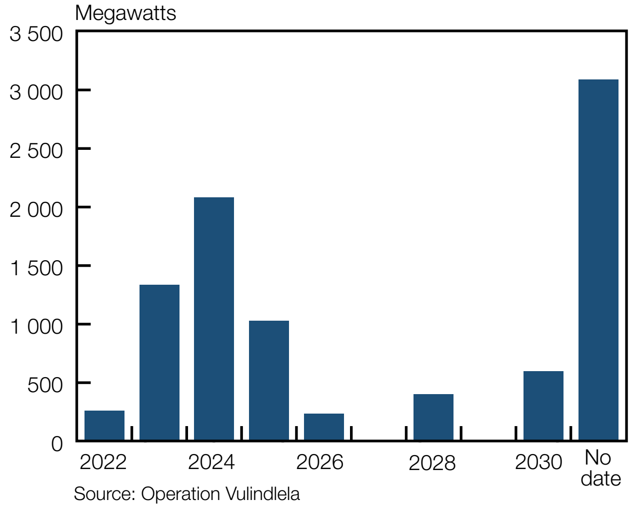


* Percentage change

Sources: Stats SA and SARB

Embedded generation projects

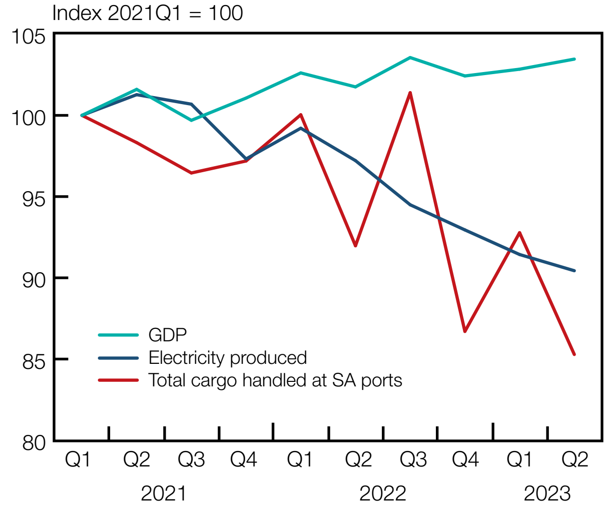
Megawatts



Source: Operation Vulindlela

GDP and structural constraints

Index 2021Q1 = 100



Sources: Stats SA and Transnet National Port Authority

Growth outlook

Shifts in the intensity of load-shedding present one major risk to the growth outlook, but there are others. Beyond electricity outages, economic activity will continue to be underpinned by household consumption spending – the largest component of gross domestic expenditure (GDE) – as well as investment. Although household spending is likely to remain subdued due to higher economic uncertainty, continued moderation in inflation should lift real disposable income and, alongside credit extension, aid household consumption.[34] Accordingly, real spending by households is forecast to grow by 0.7% and by 1.0% in 2024 and 2025 respectively.

Investment growth over the medium term will be supported by both the private and public sectors. In the private sector, much of the boost to investment is expected to come through the renewable energy investment activities. The cumulative capacity of projects registered with Operation Vulindlela has risen from around 4 000 MW in March 2022 to over 10 000 MW so far this year. These projects are at various stages of development, implying a sustained flow of investment spending over the coming years. With respect to the public sector, the 2023 Budget allocated R903 billion for infrastructure investment, with more than 70.0% of this amount earmarked for transport and logistics, energy as well as water and sanitation. However, the historical trend of the public sector underspending on capital budgets remains a key downside risk, while rising debt-service costs could reduce resources available for government infrastructure projects.[35]

The SARB projects total investment to rise by 7.7% in the current year and to average 4.8% over the medium term, contributing 1.1 percentage points to GDP growth in 2023 and an average of 0.7 percentage points in the outer years of the forecast horizon.

While much focus has been directed at electricity supply inadequacies, logistical bottlenecks are also a serious drag on growth. Logistical challenges continue to strain the country's export performance, especially for mining, and potentially raise the cost of imports, adding to domestic inflation and reducing export competitiveness for manufactured goods. Increased investment, more competition and improved security for the sector can enhance efficiencies and raise productivity. In this regard, the recent constitution of a National Logistics Crisis Committee is a welcome first step.

34 Consumers have the capacity to absorb more credit as household debt as a proportion of disposable income, at 62.1% in the second quarter of 2023, remains below its long-term average of 68.3%.

35 Underspending on government capital budgets is approximately R184 billion over the past five fiscal years. See 2023 *Budget Review*.

At a more fundamental level, growth over the medium term will be determined by the extent to which the electricity supply constraint is relaxed. This, in turn, will depend on the speed with which Eskom can sustainably improve the energy availability factor (EAF) from its own plants, the pace at which renewable energy projects are connected onto the national grid as well as the uptake of smaller-scale self-generation from households and businesses. As and when more of these structural energy solutions materialise, South Africa's energy supply constraint will progressively become less of an obstacle to economic activity. In the meantime, the SARB's assumptions on load-shedding over the medium term remain unchanged relative to the April 2023 *MPR*. Accordingly, the projected growth in GDP and potential output remain unchanged at 1.0% and 1.1% in 2024 and 2025 respectively for the former and 0.8% and 1.0% respectively for the latter.

Meanwhile, the contribution of growth to inflation has increased, albeit marginally, with the output gap shifting from being neutral to being slightly inflationary over the forecast horizon. That demand has become inflationary at growth rates around 1.0% starkly shows the extent to which structural bottlenecks are constraining monetary policy's role in the economy.

Macro balances

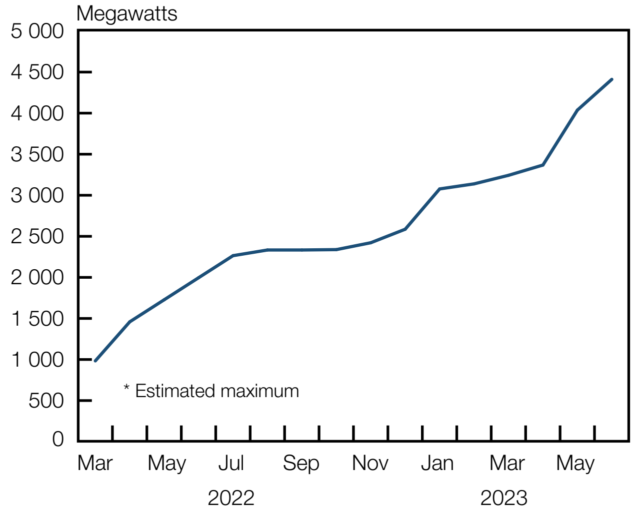
Current account and its drivers

South Africa's current account balance is now firmly within pre-pandemic norms, with the second quarter of 2023 marking five consecutive quarters of deficit. The current account balance averaged -1.6% of GDP in the first half of this year, compared with 0.4% in the same period last year. The deterioration in the current account balance mostly reflects the weakening in the trade balance on the back of falling commodity export prices, and is despite the marked improvement in the services, income and transfer (SIT) account, which has normalised closer to its longer-term average of around -3.4% of GDP in the first half of 2023.[36] The current account deficit is expected to widen to 2.0% of GDP this year and to deteriorate further to 3.4% by 2025.

The trade balance recorded an average surplus of 1.0% of GDP in the first half of 2023, a sharp decrease from the 4.8% surplus of the same period in 2022. The decline reflects smaller surpluses in the mining sector and wider manufacturing sector trade deficits. The continued normalisation of South Africa's

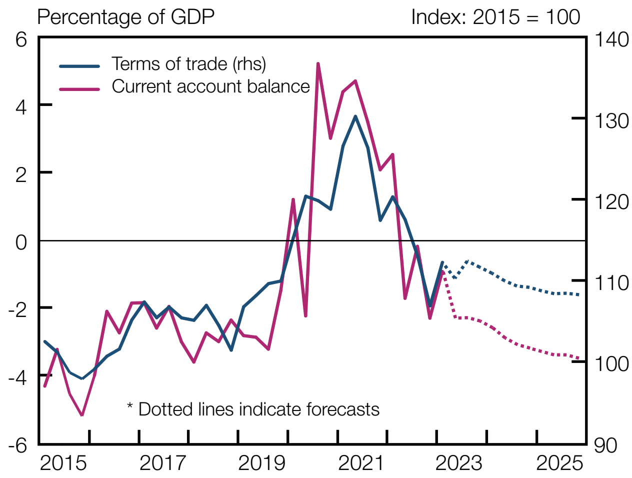
36 The improvements recorded in the first half of 2023 compared with the first half of 2022 reflect an improvement in net income receipts from -2.7% of GDP to -1.2% of GDP, due mainly to an improvement in net dividend receipts.

Installed rooftop solar*



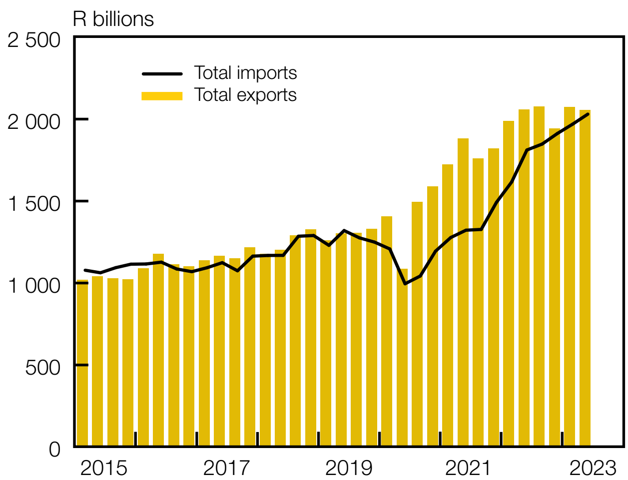
Source: Eskom

Current account and terms of trade*



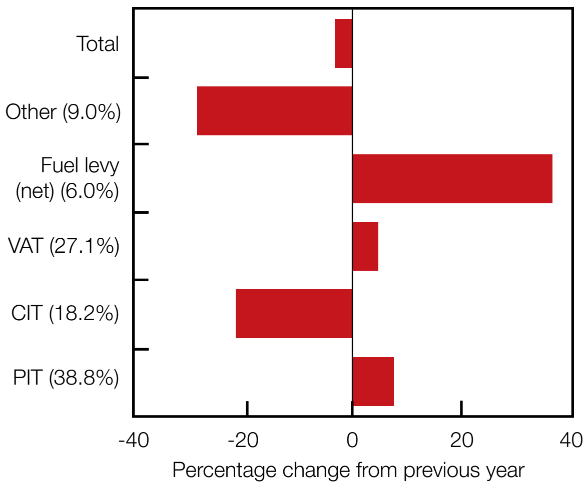
Source: SARB

Trade account



Source: SARB

Tax revenue 2023/24 (Q1)*

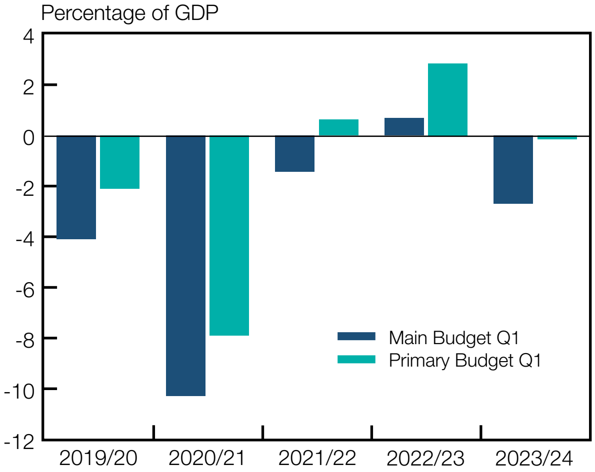


* Relative weights in brackets

Source: SARS

Budget balances

Percentage of GDP



Source: National Treasury

commodity export prices, alongside logistical constraints that limit export volumes, has reduced the net export receipts for the sector, while the manufacturing sector trade deficit has been driven by net imports of machinery and equipment as well as vehicles. The result has been a marked deterioration in the terms of trade over the past eight quarters.[37]

Fiscal balances

While tax revenues have come under strain due to the reversal in the commodity revenue windfalls of the past two fiscal years, spending has been maintained.[38] Additional spending pressures have strengthened as public sector compensation increased more than expected and debt-service costs jumped by 19.3% year on year in the first four months of the fiscal year.

These revenue and spending dynamics have resulted in a main budget balance of -2.7% and a primary balance of -0.1% for the first quarter of the 2023/24 fiscal year, a turnaround from the primary budget surplus recorded in the first quarter of 2022/23. For the full fiscal year, the SARB projects the primary balance to deteriorate to -0.7% of GDP before improving slightly to -0.3% in 2024/25 and further to 0.3% in 2025/26.

While the 2023 Budget projected debt to stabilise at 73.6% of GDP in 2024/25, several risks have materialised since the tabling of the Budget. An additional R37.4 billion is required to finance the new wage agreement in 2023/24, and this will form part of the baseline to be caried forward in subsequent years of the medium term and beyond. Other risks include weaker GDP growth than was expected at the time of the Budget and commodity prices that have fallen more steeply than was anticipated, both of which adversely impact revenues.

Conclusion

While domestic economic growth has been better than expected, confidence and output in the economy remain anaemic, with the economy expected to expand by just 0.7% in 2023, rising to 1.1% by 2025. The trajectory of GDP growth (and potential growth) going forward will be determined largely by the pace at which structural reforms in the energy and logistics sectors materialise. Reforms in other sectors, including product and labour markets, would further buoy potential growth, bringing South Africa in line with peers.

37 The slight improvement in the first quarter of 2023 happened on the back of declining oil prices and deflationary international wholesale prices, but this reprieve was short-lived.

38 The SARB Index of Commodity Prices fell for the seventh consecutive month in July (-36.0% year on year) reflecting the persistent global economic uncertainty, sufficient coal stockpiles in Europe and slower-than-expected economic recovery in China.

Box 5 The slope fails to yield

South Africa's sovereign yield curve has steepened sharply over the past decade, with medium- to longer-term bond yields on average rising from 8.0% to 11.0%, despite lower inflation. This atypical outcome can be attributed to a public debt level that has increased steadily in a deteriorating global environment for capital. The ratio of debt to gross domestic product (GDP) reached 71.4% in fiscal year 2022/23, from just 26.0% in 2008/09.[1, 2]

The marked rise in South Africa's debt has seen debt-service costs soar to 15.4% of total government spending in 2022/23, from just 8.6% in 2008/09. Debt sustainability concerns have manifested in lenders demanding increased risk compensation (i.e. higher risk premiums) for holding long maturity sovereign bonds. In 2023 alone, South Africa's debt has increased by about 11 percentage points, while long bond yields have risen by 100 basis points, consistent with the empirical evidence from simple regressions of yields on fiscal metrics.[3]

Further evidence on the cost-raising effect of worsening fiscal metrics is provided by Bayesian vector autoregression (BVAR) estimates that show long-term bond yields rising by between 9 and 12 basis points for every percentage point increase in fiscal deficits.[4] The impulse response functions from the BVAR show that an increase in the debt-to-GDP ratio results in an initial slowdown in growth that worsens the fiscal position further. The rand depreciates because growth weakens and as the risk premium and inflation expectations rise. These dynamics highlight the way in which fiscal policy can impact negatively on price stability.

As long bond yields increase and become more sensitive to fiscal developments, they become less responsive to monetary policy. Rising short-term interest rates and declining inflation should flatten the yield curve by lowering the long end, reflecting the expected lower short-term interest rates in the future. This, however, has not been the experience for South Africa.[5] Reducing public debt to sustainable levels can deliver a triple dividend, namely lower cost of capital, reduced debt-service costs and lower inflation.

1 See J W Fedderke, 'The South African-United States sovereign bond spread and its association with macroeconomic fundamentals', *South African Reserve Bank Working Paper Series No. WP/20/09*, Pretoria: South African Reserve Bank, July 2020.

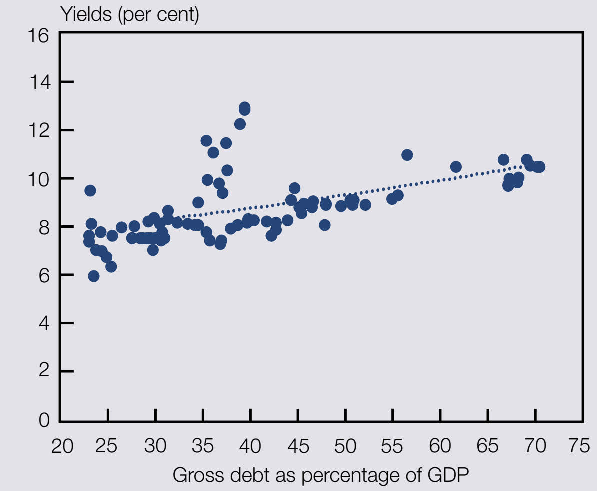
2 Fiscal dynamics affect long-term interest rates through their impacts on expected future short-term rates, inflation expectations and risk premiums. See V Tanzi and M Lutz, 1991. *'Interest rates and government debt'*, *Finance and Development*, December 1991 and L Soobyah and D Steenkamp, 'Term premium and rate expectation estimates from the South African yield curve', *South African Reserve Bank Working Paper Series No. WP/20/03*, Pretoria: South African Reserve Bank, June 2020.

3 Simple regressions reveal that a one percentage point deterioration in fiscal balances or increase in the debt ratio pushes yields up by around 6 to 10 basis points. These estimates are in the same range as those found for emerging economies. See, for instance, S Ardagna, F Caselli and T Lane, 'Fiscal discipline and the cost of public debt service: some estimates for OECD countries', The *BE Journal of Macroeconomics, 2007*; S Zhou and D McMillan, 'Macroeconomic determinants of long-term sovereign bond yields in South Africa', Cogent *Economics and Finance* 9(1), January 2021.

4 The rise in bond yields varies from the 10-year bond to the 30-year bond, within the 9 to 12 basis point range.

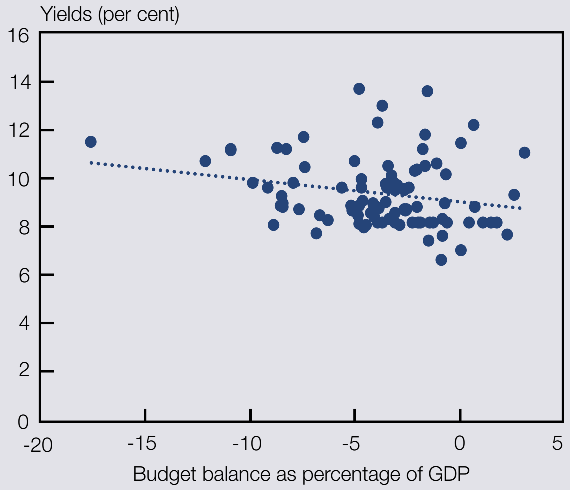
5 See L Soobyah and N Viegi, 'Can National Treasury do contractionary monetary policy?', *South African Reserve Bank Working Paper Series No. WP/22/10*, Pretoria: South African Reserve Bank, August 2022.

Long-bond yield and debt



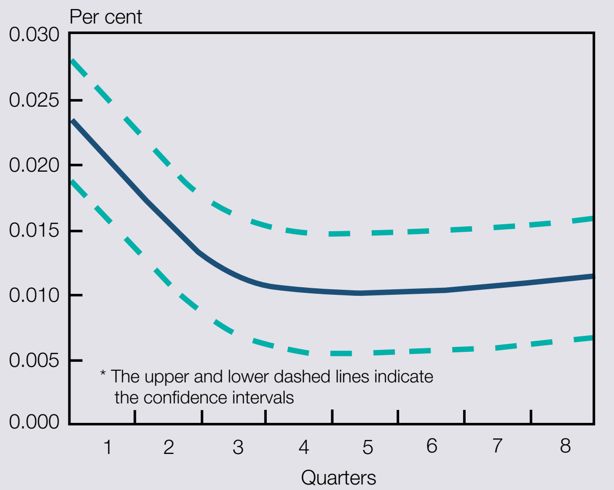
Sources: Bloomberg and SARB

Long-bond yield and fiscal balance



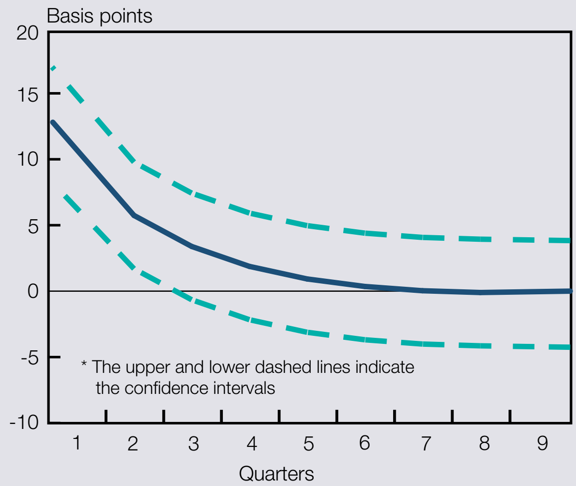
Sources: Bloomberg and SARB

Response of inflation expectations to a fiscal shock*



Source: SARB

Response of bond yields to a fiscal shock*



Source: SARB

Price developments: a trickier landing

Headline inflation returned to the SARB's 3–6% target range in June 2023 before easing further to 4.7% in July 2023, its lowest level in two years. Deflating fuel and decelerating food price inflation, together with the cumulative repo rate increases, have underpinned the decline in headline inflation. Despite the strong disinflation over the past few months, stabilisation at the midpoint of the target range will likely be slower due to relatively sticky core inflation, elevated inflation expectations and emerging inertia in non-core inflation. Headline inflation is forecast to average 5.9% in 2023 and to settle at the 4.5% midpoint from the second quarter of 2025. Risks, however, remain tilted to the upside amid rising Brent crude oil prices, a weaker rand exchange rate and drier weather conditions this year.

Domestic headline inflation improved over the past six months. In June 2023, headline inflation fell below 6.0% for the first time since April 2022, and declined further to 4.7% in July before edging slightly higher to 4.8% in August 2023. The deceleration in headline inflation was due mainly to a marked slowdown in goods price inflation which was supported by lower outcomes in fuel-, and more recently, food inflation. Goods inflation, which averaged 9.9% in 2022, slowed from the second quarter of the past year, and is now forecast to average 7.3% in 2023. Within the goods basket, fuel has been in deflation since June 2023, reflecting a combination of lower Brent crude oil prices in the first half of the year and base effects, while food inflation has also moderated markedly, benefitting from softer global food prices as well as base effects. However, oil prices have climbed strongly in recent months, slowing the fuel price deflation. Meanwhile, food inflation is forecast to remain elevated at 10.4% this year, adding to the expectation of headline inflation's gradual return to the 4.5% midpoint.

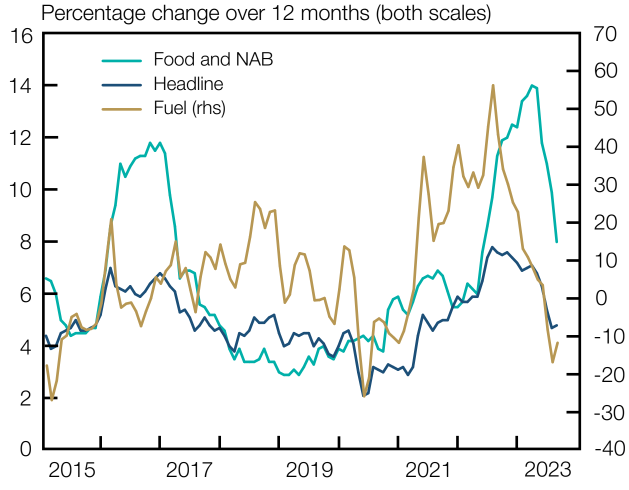
Core inflation has remained generally sticky, hovering around 5.0% for several months before easing slightly in recent months. While it is projected to peak this year, consistent with the decline in the percentage of core items inflating at rates above the 4.5% midpoint, core inflation is expected to disinflate rather slowly, with the trajectory mostly shaped by core goods inflation. As a result, headline inflation's sustained return to the midpoint of the target range is projected to take some time.

Oil prices and fuel inflation

Oil price dynamics over the past few quarters explain most of the disinflation in headline inflation thus far. The moderation in Brent crude oil prices, which started from the second half of 2022, continued into 2023, albeit at a slower pace. Brent crude oil prices averaged around US$80 per barrel in the first half of this year but have paced higher in recent months, averaging above US$90 per barrel in September. The SARB expects oil prices to average US$82 per barrel in both 2023

Components of headline inflation

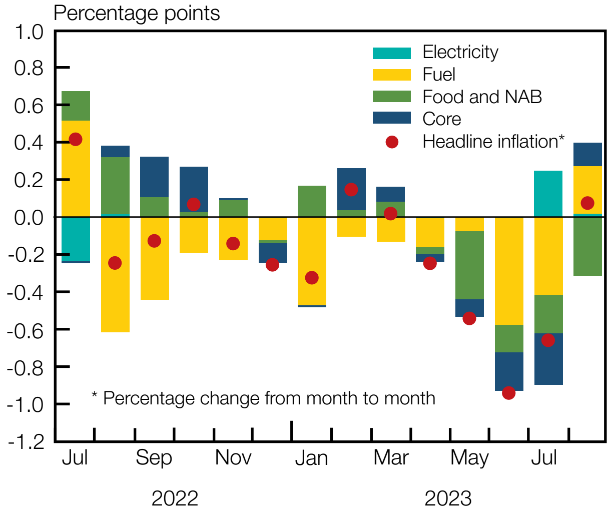
Percentage change over 12 months (both scales)



Source: Stats SA

Contributions to change in headline inflation

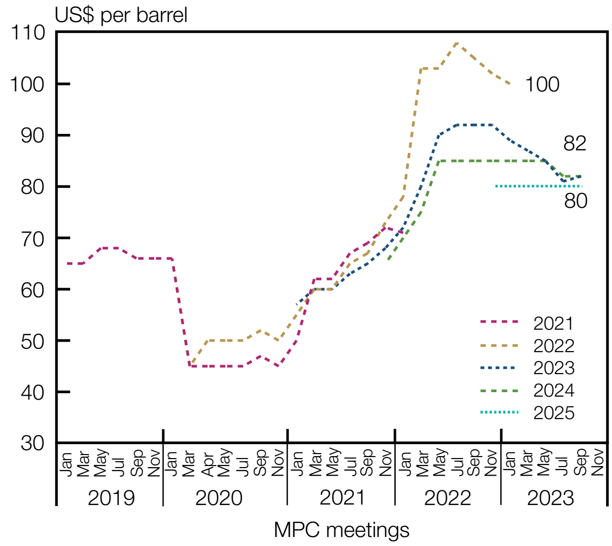
Percentage points



Sources: Stats SA and SARB

Evolution of oil price forecasts

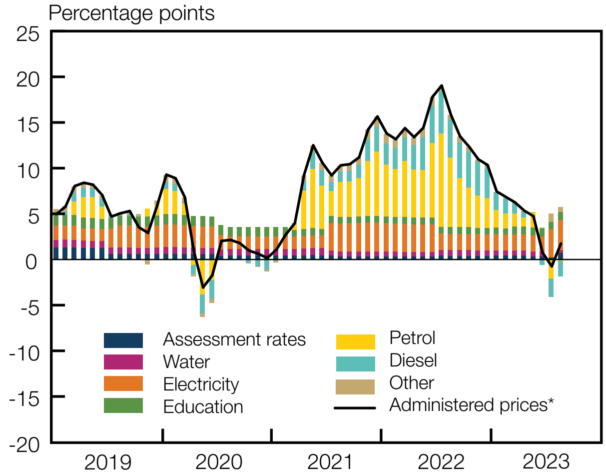
US$ per barrel



Source: SARB

Contributions to administered price inflation

Percentage points

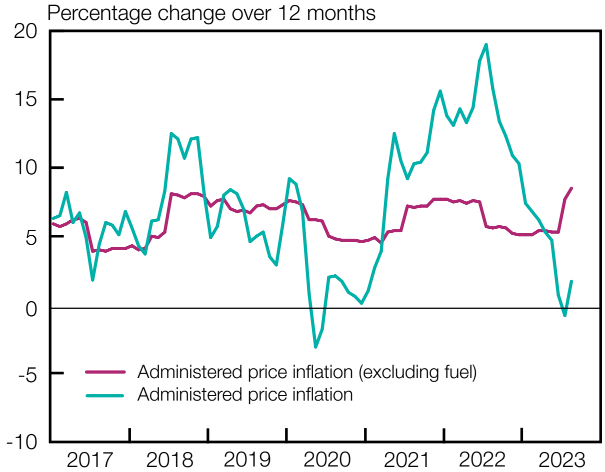


* Percentage change over 12 months

Sources: Stats SA and SARB

Administered price inflation

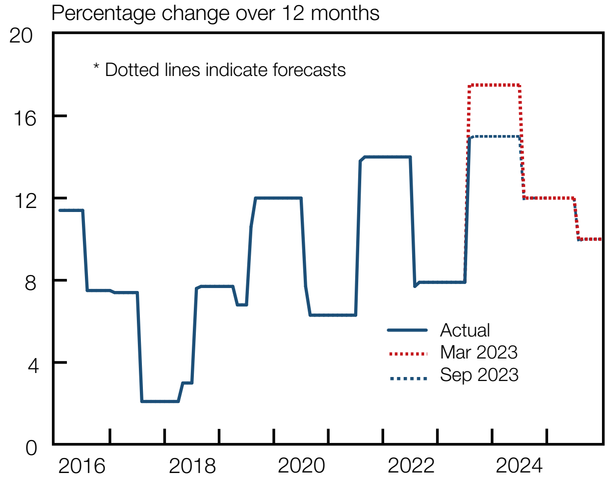
Percentage change over 12 months



Sources: Stats SA and SARB

Electricity prices*

Percentage change over 12 months



Sources: Stats SA and SARB

and 2024, mostly on tighter supply amid output cuts by the Organization of the Petroleum Exporting Countries (OPEC) and its allies. Rising global oil prices feed directly into domestic fuel inflation, with the impact intermediated by movements in the rand exchange rate. With the global economy more resilient than previously forecast and geopolitical tensions persisting, risks to oil prices are assessed to the upside.

Administered price inflation

Administered price inflation averaged below the midpoint of the target range at 3.9% year to date, down from 14.0% in 2022. However, this marked slowdown in administered price inflation does not represent a structural shift in its drivers, but rather is mostly due to sharply lower fuel inflation (currently in deflation). After peaking at 56.2% in July 2022 and contributing 14.8 percentage points to administered price inflation in that month, fuel inflation has decelerated acutely, reaching -11.7% in August 2023. Administered price inflation is expected to average 4.6% and 4.2% in 2023 and 2024 respectively.

The headline administered price inflation measure is distorted by the fuel component which incorporates the impact of global oil prices as well as movements in the rand exchange rate, both of which are volatile and not regulated. A better measure of administered fuel inflation should strip out the basic fuel price (BFP) – the component directly impacted by global oil prices and the rand exchange rate. SARB computations suggest that administered price inflation excluding the BFP (i.e. the regulated components, namely fuel taxes, levies and margins) has averaged 5.9% year to date and is forecast to average 6.5% over the medium term.

An important component of administered prices, electricity price inflation, about doubled this year, increasing to 15.3% in August 2023, from 7.9% in August 2022. This continues a trend where the electricity price index has more than quadrupled since 2009 compared with a doubling in the headline consumer price index (CPI) over the same period.[39] Part of the sharp increases reflects the attempt to move to a more cost-reflective electricity tariff regime after decades of uneconomically low electricity prices. The trend of above-inflation electricity price rises is expected to continue over the medium term. The SARB projects increases of 13.4% and 10.9% in 2024 and 2025 respectively. Risks to electricity price inflation are to the upside, particularly considering that Eskom has been running its diesel generators well above the NERSA-approved load factor.

39 See Box 2 in the April 2023 *MPR*.

Inflation for other administered components, including water tariffs and property rates, also increased at rates above the upper limit of the inflation target range, coming in at respectively 9.6% and 8.4% in August 2023 (from respectively 8.1% and 4.3% a year earlier) as higher electricity price increases have spilled over, increasing the costs of some municipal services. High wage costs may also explain the sharp increase in administered prices. The inflation rates for electricity and water will remain in force until June 2024.

Food and non-alcoholic beverages inflation

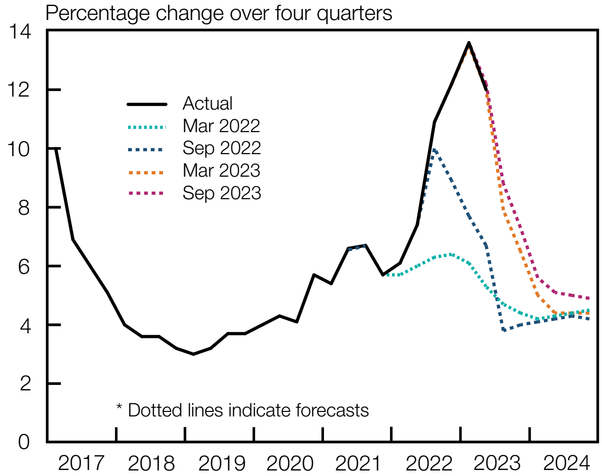
After peaking in March 2023, food and non-alcoholic beverages (NAB) price inflation moderated to below double digits in July 2023, the first time since July 2022. Food and NAB inflation eased to 9.9% in July before slowing further to 8.0% in August, marking five consecutive months of deceleration in inflation for this component. The slowdown in domestic food price increases is due to favourable global and domestic factors. Global agricultural commodity prices have softened markedly, reflecting lower fertilizer prices and improved supply, along with base effects. On the domestic front, lower input costs and more favourable weather conditions have helped to ease price pressures, particularly for vegetables and root crops. Although the expectation is for food and NAB inflation to continue to moderate through the second half of 2023, it will likely remain elevated due to domestic idiosyncrasies such as load-shedding and rand weakness as well as the recent pickup in global oil prices.

The recent easing in food price pressures has generally been broad-based, but the slowdown stemmed largely from softer bread and cereals as well as meat inflation.[40] Although still elevated closer to 10.0%, bread and cereals inflation has moderated strongly since the start of the year, declining from 21.8% in January 2023 to 9.9% in August as base effects and the lagged impact of softer global commodity prices started to filter through to the domestic market. Favourable domestic production conditions have contributed to a bumper crop, easing price pressures somewhat. The domestic price impacts of bumper harvests, however, tend to be tempered by the shifts from import parity to export parity pricing and vice versa, given South Africa's strong integration into global agricultural markets. Meanwhile, geopolitical tensions, the increasing likelihood of drier, El Niño-induced weather conditions and grains export restrictions by major producers such as India could see bread and cereal inflation remain higher for longer or even rise further. The SARB's forecast is for bread and cereals inflation to average at 14.0% in 2023 and to ease into the target range in the first quarter of 2024.

40 These two components have a collective weight of 50.1% in the food and NAB basket.

Food and NAB inflation*

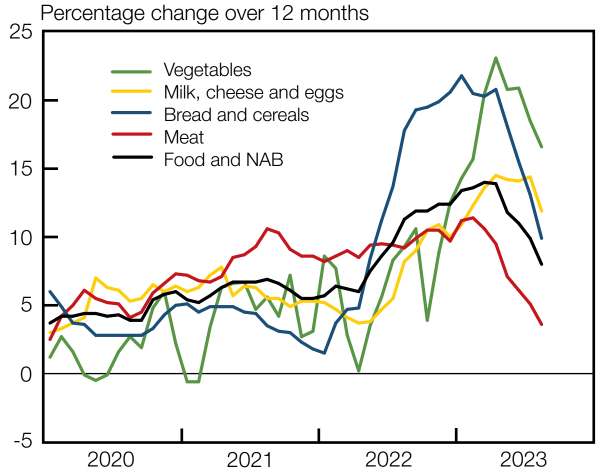
Percentage change over four quarters



Sources: Stats SA and SARB

Large-weight food components

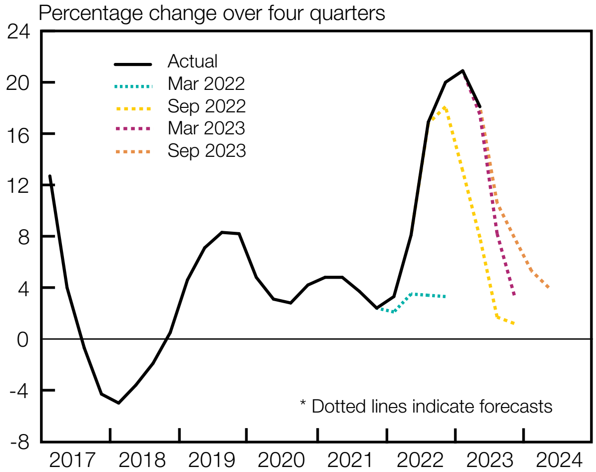
Percentage change over 12 months



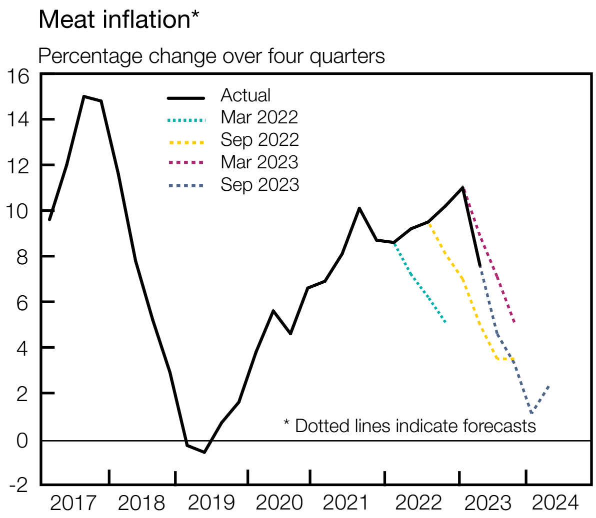
Source: Stats SA

Bread and cereals inflation*

Percentage change over four quarters



Sources: Stats SA and SARB



Sources: Stats SA and SARB

Price inflation for meat has slowed markedly since it peaked at 11.4% in February 2023. Meat inflation eased back into the target range in July before declining sharply to 3.6% in August, underpinned by beef and poultry disinflation, reflecting somewhat softer farm-level price increases as well as reduced demand for prime cuts of meat in colder months. Beef inflation has moderated more than poultry inflation, indicating the differing price drivers across these subsectors. For instance, consumption patterns vary across the subsectors, and so do production systems and processes as well as the impact of trade policies.[41] Meat inflation is expected to average 6.5% in 2023.

Vegetables inflation rose sharply over the past year as excessive rains and load-shedding adversely impacted yields. After peaking at 23.1% in April this year, inflation for this category remains elevated at 16.6% in August and is projected to average 16.7% this year. Risks at the farm level, including the impact of load-shedding on irrigation and refrigeration as well as poor road infrastructure, have kept inflation for this category high. The SARB expects vegetables inflation to decelerate markedly, returning to the target range by the first quarter of 2024.

Looking ahead, food and NAB inflation is expected to average 10.4% in 2023 before easing to 5.2% in 2024. However, El Niño-related weather conditions and persistent load-shedding present material upside risks to the food inflation outlook.

41 The anti-dumping duties on chicken imports have been reinstated after a year-long reprieve and are expected to add to poultry inflation in the near term.

Consumer food price inflation (September 2023 forecasts)

Percentage change over four quarters, March 2023 forecasts in brackets

	Actual			Forecast	Actual		Forecast			
	Weight	2012–22*	2022*	2023*	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2
Food and non-alcoholic beverages	17.14	6.4	9.2	10.4	13.6	12.2	8.8	7.3	5.6	5.1
				(9.9)	(13.5)	(12.0)	(7.9)	(6.5)		
Bread and cereals	3.16	6.2	12.1	14.0	20.9	18.1	10.6	7.9	5.3	4.0
				(12.1)	(20.9)	(17.5)	(8.2)	(3.4)		
Meat	5.42	6.6	9.4	6.5	11.0	7.6	4.6	3.3	1.1	2.2
				(8.0)	(11.1)	(8.9)	(7.1)	(5.1)		
Beef..................................	1.42	7.2	10.5	3.6	11.0	4.2	0.4	-1.1	-2.1	1.1
				(7.5)	(11.2)	(7.3)	(6.1)	(5.3)		
Poultry	2.09	7.0	10.2	9.3	11.9	10.0	8.1	7.3	3.7	3.0
				(9.1)	(11.8)	(9.4)	(8.6)	(6.6)		
Vegetables	1.27	6.0	6.8	16.7	16.8	21.6	16.0	12.6	5.6	1.8
				(15.6)	(15.9)	(17.4)	(15.3)	(13.6)		

* Annual average percentage change

Sources: Stats SA and SARB

Core inflation

The dynamics of core inflation over the past year have been shaped mostly by the developments in core goods prices. Elevated global goods inflation, alongside a depreciated rand exchange rate, has kept inflation in exchange rate-sensitive core goods above the 6.0% upper limit of the inflation target range, exerting upward pressure to core goods inflation and core inflation. Although services inflation has also risen, the climb was less pronounced, helping to slow the rise in core inflation. The QPM forecasts core inflation to rise to 4.9% in the current year before gradually sliding back to the midpoint of the target range by 2025.

Services inflation has surprised to the downside, averaging 4.4% year to date with the same outturn projected for the year, up from 3.9% in 2022. While some components of the services basket, such as medical insurance, have inflated at rates well above the 4.5% midpoint, the subdued housing inflation has moderated the increase in overall services inflation.[42] Services inflation has also benefitted from real ULCs that have remained subdued thus far and the sharp drop in transport inflation in recent months. Risks, however, remain to the upside amid a tightening rental market, rising global oil prices and still elevated inflation expectations. Services inflation is forecast to average 4.6% in 2024 and to anchor at the midpoint of the target range in 2025.

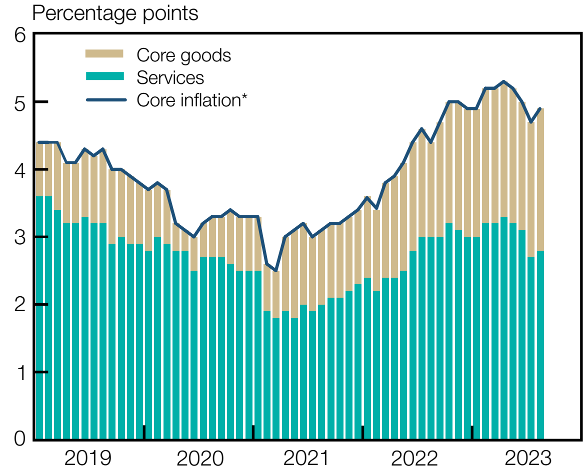
After averaging at 5.0% in 2022, core goods inflation is projected higher at 6.3% this year. This is almost double its five-year average of 3.2%. As alluded to earlier, this sharp increase reflects the effects of a weaker rand exchange rate together with generally elevated global goods prices. In particular, the domestic prices of large-weight exchange rate-sensitive core goods such as alcoholic beverages and tobacco as well as vehicles have shown persistent inflation.[43]

However, global goods price inflation has eased somewhat as supply chains have normalised. The benefits of declining global goods inflation are expected to filter through to the domestic market over the coming months, more so if the rand exchange rate stabilises. The SARB projects core goods inflation to ease to 5.2% in 2024 and to end the forecast period slightly below the midpoint.

42 Medical insurance has averaged 7.7% year to date, up from 4.3% in 2022. Medical schemes have applied steeper price increases in 2023 on the back of increasing cost of care and the return of medical claims to pre-pandemic levels.

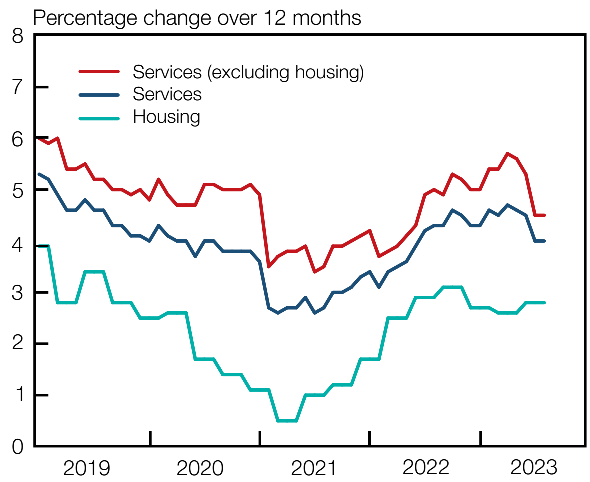
43 These two account for nearly 53.0% of the weight in the core goods inflation basket.

Contributions to core inflation



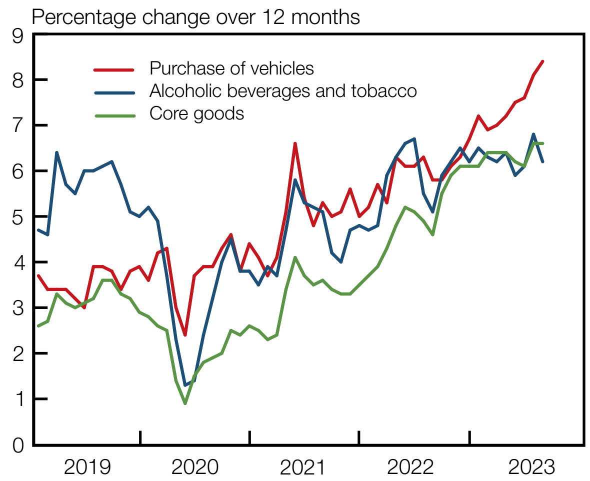
* Percentage change over 12 months
Sources: Stats SA and SARB

Services inflation



Sources: Stats SA and SARB

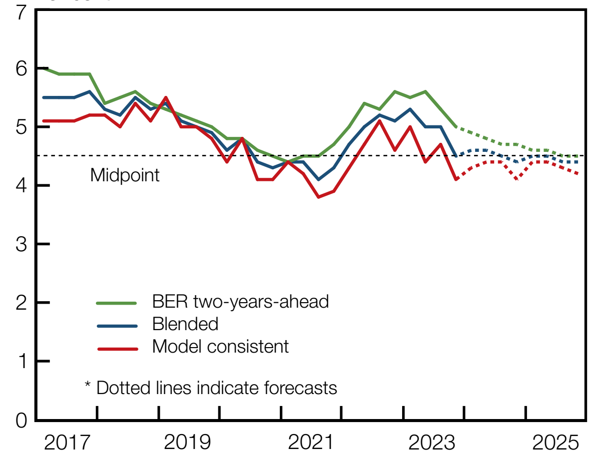
Large-weight core goods components



Source: Stats SA

Inflation expectations*

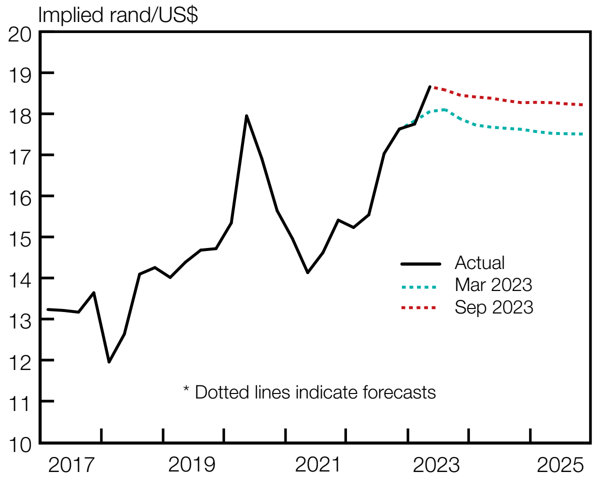
Per cent



Sources: BER and SARB

Exchange rate forecasts*

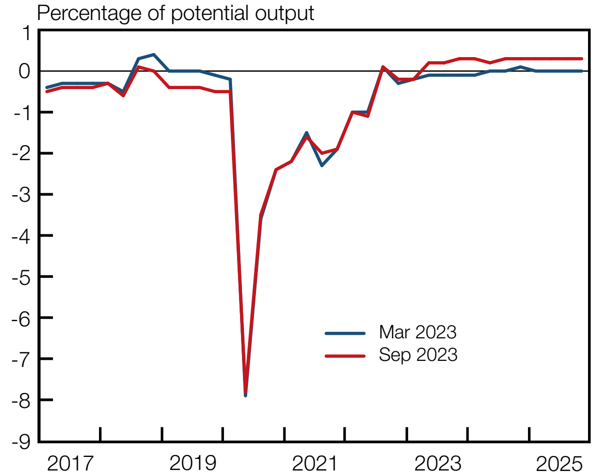
Implied rand/US$



Source: SARB

Output gap estimates

Percentage of potential output



Source: SARB

Medium-term inflation outlook

Within the QPM, the medium-term path of inflation reflects the dynamics of its underlying drivers, namely inflation expectations, the real effective exchange rate of the rand, the output gap and ULCs. These underlying determinants are key to closing the gap between projected inflation and the preferred 4.5% midpoint of the target range.

Inflation expectations are a key determinant of the future path of inflation and serve as a guide for price and wage setters in the economy (Box 6). Since the April 2023 *MPR,* the Bureau for Economic Research (BER) inflation expectations have drifted sideways, with the two-years-ahead inflation expectations ticking up to 5.6% in the second quarter of 2023 from 5.5% in the first quarter, but declining to 5.3% in the third quarter. The rise in inflation expectations was likely due to higher food inflation and the increased intensity of load-shedding, while the recent decline may reflect the sharp moderation in headline inflation over the past few months. Elevated inflation expectations pose a risk to services- and thus core inflation, and ultimately headline inflation. The SARB's QPM projects (blended) inflation expectations to decline to the midpoint over the forecast period.[44]

Medium-term inflation dynamics are also influenced by movements in the rand exchange rate, which can worsen or lessen the impact of imported inflation. The rand has remained volatile since the April 2023 *MPR*, reflecting various global and domestic factors.[45] The starting point for the rand per US dollar exchange rate at the September MPC meeting was R18.45 (R17.82 at the March MPC meeting). The rand is, however, projected to appreciate marginally to R18.22 over the forecast period.[46] In real terms, a rand exchange rate undervaluation of 6.9% is forecast in 2023. The real rand is projected to appreciate over the outlook period, mainly underpinned by declining domestic inflation, leaving it undervalued by just 1.2% in 2025. The rand exchange rate remains inflationary throughout the forecast period.

The output gap captures the impact of demand pressures on headline inflation. A negative output gap is disinflationary (demand falls short of supply) while a positive output gap is inflationary. The expansionary monetary and fiscal policy stances since the COVID-19 pandemic have helped to stabilise

44 The blended model is calculated using a combination of the QPM's model consistent expectations and surveyed expectations. Blended inflation expectations are more forward-looking and consistent with the model's inflation target.

45 These include global markets volatility, marked softening in commodity export prices, global economic surprises, load-shedding, policy uncertainty and the fiscal stance.

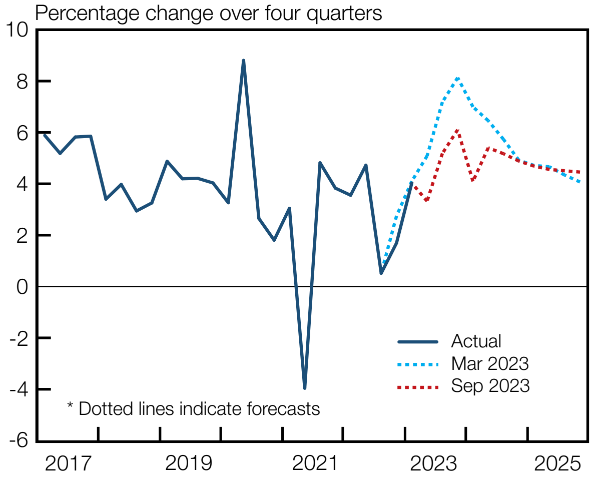
46 The key driver of the exchange rate within the model is the interest rate differential between South Africa and the G3 economies with the domestic interest rate adjusted for country risk premium. To this end, the elevated level of the risk premium limits the extent to which the currency could benefit from the prevailing interest rate differentials.

the economy by bolstering demand, thereby limiting scarring in the economy. More recently, however, amid more binding supply constraints due mainly to load-shedding and relatively strong demand, the SARB has normalised monetary policy to limit the extent of build-up of demand pressures. The QPM indicates that demand and supply conditions over the forecast horizon are broadly balanced, albeit slightly inflationary. The output gap is expected to average 0.2% in 2023, and to average 0.3% in both 2024 and 2025.

The enhanced QPM assesses inflationary pressures from the labour market by using a combination of the real ULC gap (deviations of the productivity-adjusted real wage from its equilibrium level) and nominal ULC growth, which indicates whether inflationary pressures are the result of wage increases or productivity declines.[47] Wages are forecast to rise this year and over the medium term at rates above the average level observed since 2018, mainly reflecting indexation to higher inflation outcomes in 2022 and the staggered real wage clawback.[48] In real terms, wages are expected to increase by 0.4% over the

Unit labour cost forecasts*

Percentage change over four quarters



Source: SARB

Headline inflation (September 2023 forecasts)

Percentage change over four quarters, March 2023 forecasts in brackets

	Actual			Forecast	Actual		Forecast			
	Weight	2011–22*	2022*	2023*	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2
Headline inflation	100.00	5.2	6.9	5.9	7.0	6.2	5.1	5.4	5.3	5.2
				(6.0)	(6.9)	(6.4)	(5.5)	(5.3)		
Core inflation**	74.4	4.5	4.3	4.9	5.1	5.2	4.8	4.8	4.7	4.7
				(5.1)	(5.1)	(5.3)	(5.1)	(5.0)		
Rentals***	16.49	3.8	2.6	3.0	2.7	2.7	2.9	3.5	4.2	4.5
				(3.3)	(2.9)	(3.2)	(3.4)	(3.8)		
Insurance	9.89	6.8	4.0	6.2	5.6	6.6	6.2	6.2	8.1	7.9
				(6.5)	(5.9)	(6.8)	(6.8)	(6.7)		
Education	2.62	7.1	4.3	5.5	4.9	5.7	5.7	5.7	5.8	5.8
				(6.2)	(5.1)	(6.5)	(6.5)	(6.5)		
Vehicles	5.91	3.7	6.0	7.6	7.0	7.4	8.3	7.7	7.1	5.7
				(6.8)	(7.1)	(7.1)	(6.8)	(6.2)		
Fuel	4.82	9.7	34.3	0.4	10.6	-0.2	-9.0	2.4	7.4	8.1
				(-0.6)	(10.6)	(1.6)	(-7.7)	(-4.5)		
Electricity	3.63	9.6	10.7	11.6	7.9	7.9	15.0	15.0	15.0	15.0
				(12.9)	(7.9)	(7.9)	(17.5)	(17.5)		

* Annual average percentage change
** CPI excluding food, non-alcoholic beverages, fuel and electricity
*** Combines actual rentals and owners' equivalent rent

Sources: Stats SA and SARB

47 A measure of the extent to which the cost of labour per unit of output exceeds productivity.

48 The SARB forecasts nominal salaries to increase by 5.4%, 5.9% and 5.4% in 2023, 2024 and 2025 respectively.

forecast period, which is low by historical standards.[49] However, with GDP growth projected to remain sharply lower over the forecast period, productivity growth is seen markedly weaker, pushing ULCs slightly higher.[50] Nevertheless, the real ULC gap does not close, implying the labour market will remain mildly disinflationary, in turn helping to keep services inflation muted.

Conclusion

Headline CPI inflation has moderated since the April 2023 *MPR*, benefitting from strong goods disinflation, especially fuel and food disinflation, as well as tighter monetary policy. The further deceleration towards the 4.5% midpoint of the target range is, however, likely to be slow due to the fading base effects and somewhat sticky core inflation. Upside pressures to core inflation are reflected in still elevated survey-based inflation expectations and a weak rand, with further risks emanating from load-shedding. The recent pickup in global oil prices and expected drier weather conditions add to inflation risks. Headline inflation is projected to average 5.9% in 2023, down from 6.9% in 2022, and to only settle at the midpoint of the target range in the second quarter of 2025.

49 Real wages are forecast to grow by -0.5%, 0.7% and 0.8% in 2023, 2024 and 2025 respectively.

50 Productivity growth is forecast to average 0.7% in 2023, and 1.0% and 0.8% in 2024 and 2025 respectively, while ULC growth is projected at 4.7%, 4.9% and 4.6% in 2023, 2024 and 2025 respectively.

Box 6 Do expectations add up to persistence?

Inflation expectations summarise economic agents' beliefs about the likely future trajectory of inflation and they often act on those beliefs when setting prices or wages. As a result, central banks accord an important role to inflation expectations in their assessment of underlying inflation pressures. An important source of inflation expectations data for South Africa is the Bureau for Economic Research's (BER) inflation expectations survey.[1]

Inflation expectations data, however, typically display some degree of bias, which may be a result of respondents relying on their own personal experiences of rising prices rather than the information from movements in the generalised price level to form their expectations about future inflation.[2] Understanding the extent to which inflation expectations are 'rational' (forward-looking) versus 'adaptive' provides insight into the dynamics of inflation, in particular, its persistence.[3]

Although both the BER business sector and financial analysts inflation expectations have, on average, tended to overestimate inflation (thereby causing inflation persistence), analysts have tended to be closer to actual inflation outcomes.[4, 5] Combining business, analysts, (and union) inflation expectations alongside model consistent expectations as is done in the SARB's Quarterly Projection Model (QPM), should moderate the impact of the persistence embodied in inflation expectations on inflation forecasts.

When forecasting inflation, financial analysts and business are sensitive to different types of economic shocks, with the former influenced mainly by external crisis events, while business is more responsive to domestic developments.[6, 7] Over the past decade, the precision of inflation forecasts of both financial analysts and business has risen, perhaps reflecting the generally low and stable inflation over this period. Understanding the sources of the forecasting errors can help improve the targeting of central bank communication and ultimately increase the rationality of inflation forecasts.

1 The BER-surveyed inflation expectations are the most comprehensive expectations data in South Africa, covering business, labour and financial analysts.

2 Inflation expectations are considered biased if they systematically either underestimate or overestimate actual inflation.

3 In this box 'rational' should be interpreted to mean that decision-makers are able to use all the available and relevant information efficiently and are therefore able to make accurate forecasts. Early attempts to include expectations in models (adaptive expectations) relied on updating inflation forecasts based on historical inflation and historical forecast errors. Rational expectations assume that decision-makers make use of all available information and that this makes their expectations forward-looking. Today, rational expectations have evolved to include various reasons for imperfect adjustment, but the assertion is still that these agents are forward-looking to some extent.

4 They both overestimated current year, one-year-ahead and two-year-ahead inflation roughly two-thirds of the time since 2000, and for five-year-ahead average inflation almost 90.0% of the time from 2011 to 2017 (the period over which this data were collected).

5 The mean and standard deviations of forecast errors have tended to be lower for financial analysts compared with those for business. See M Reid and P Siklos, 'Rationality and biases: insights from disaggregated firm-level inflation expectations data', *South African Reserve Bank Working Paper Series No. WP /23/07*, Pretoria: South African Reserve Bank, August 2023.

6 This is in line with the international literature on subjective expectations, which finds that people are more reliant on their own experience of price changes than aggregate measures when reporting their inflation expectations. See for instance, M Weber, F D'Acunto, Y Gorodnichenko and O Coibion, 'The subjective inflation expectations of households and firms: measurement, determinants, and implications', *Journal of Economic Perspectives* 36(3), 2022, pp 157–184.

7 Over the period analysed (2000–22), when forecasting inflation at the one-year horizon, financial analysts fail the rationality test most clearly in 2008–09 and 2011–13 (aligning with the global financial crisis and eurozone sovereign debt crises), whereas for business this occured in 2014 (at the time of the platinum mining sector wage strikes) and 2018 (the land expropriation without compensation debate).

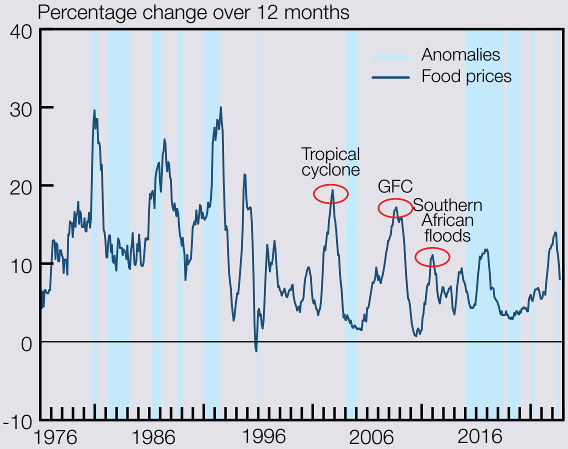
Box 7 El Niño resurfaces

Domestic food and non-alcoholic beverages (NAB) inflation has finally passed its peak, having reached a high of 14.0% in March 2023 before easing to 8.0% in August. However, the onset of El Niño weather conditions as of May 2023, for which the world's major climate models indicate a more than 95.0% chance of persisting through year-end, puts South Africa at a high risk of a drought later this year, jeopardising the expected food price disinflation.[1]

The impacts on output and inflation are potentially large and highly uncertain, with a wide range of plausible outcomes.[2] To better appreciate the risks to inflation from a severe El Niño event, the South African Reserve Bank (SARB) modelled two drought scenarios. These are a 1-in-20-year drought similar to the 2015–16 drought, the most severe drought in 23 years; and a 1-in-100-year event such as in 1991–92, the most severe drought in the country's recorded history.[3]

Model simulations show inflationary pressures that start to build up from April next year when the 2023–24 summer crop is harvested.[4] Specifically, a drought of the same magnitude as the 2015–16 drought adds up to 10 percentage points to food inflation (3 percentage points for headline inflation). A more severe drought such as the 1991–92 event could see food inflation surge by up to 28 percentage points (8 percentage points for headline inflation). The orders of magnitude reflect the sensitivity to drought of prices in the agrifood system as well as their strong pass-through to other

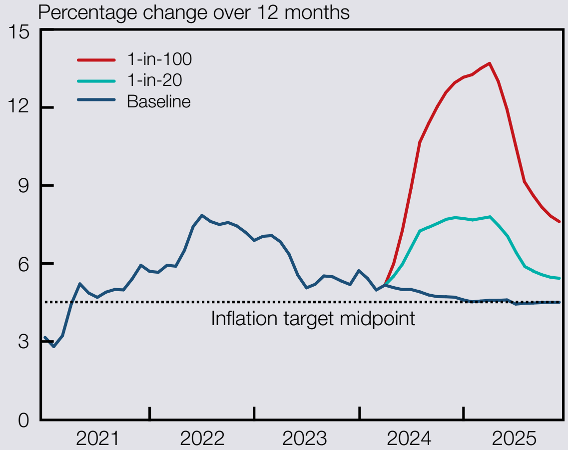
Food and NAB inflation*



* Events in red denote non-drought-related anomalies.

Sources: EM-DAT and SARB

Headline inflation



Sources: Stats SA and SARB

1 E Becker, 'June 2023 ENSO update: El Niño is here', ENSO blog, 8 June 2023. https://www.climate.gov/news-features/blogs/enso/june-2023-enso-update-el-nino-here; Australian Government: Bureau of Meteorology, Climate Driver Update: El Niño conditions are present. http://www.bom.gov.au/climate/enso/index.shtml#tabs=Pacific-Ocean.

2 The full impact of El Niño usually takes up to a year to crystalise and feed through to both domestic and global food prices. European Central Bank (ECB) analysis suggests that a 1.0°C temperature increase during El Niño historically raised global food prices by more than 6.0% after one year. See I Schnabel, 'The risks of stubborn inflation'. Speech by Isabel Schnabel, Member of the Executive Board of the ECB, at the Euro50 Group conference on New challenges for the Economic and Monetary Union in the post-crisis environment, 19 June 2023. https://www.ecb.europa.eu/press/key/date/2023/html/ecb.sp230619_1~2c0bdf2422.en.html

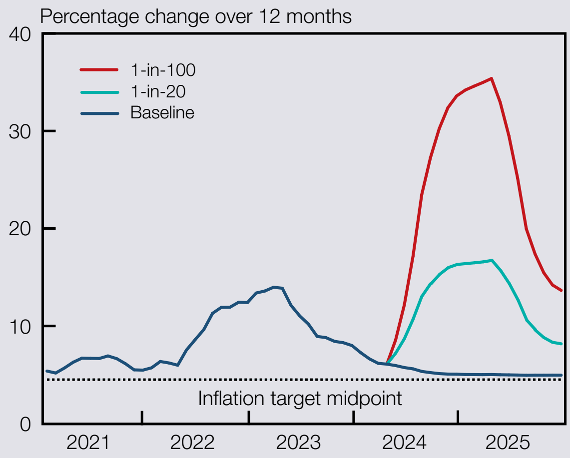
3 The 2015–16 drought was similar to the one that occurred in 1997–98 where the impacts of El Niño were mostly localised. The country's most severe recorded drought happened in 1991–92, with similar impacts to the multi-year droughts of 1982–83 and 1985–97 where the severe impacts of El Niño were felt with cascading consequences across the globe.

4 South Africa's latest crop estimates are pointing to a bumper summer grains and oilseed harvest for the 2022–23 season (16.4 million tonnes or the second-largest harvest on record) thanks to the favourable rains we have seen over the past three La Niña years. This year's winter crop, although revised down marginally, mostly reflects the impact of load-shedding. The big risk is the impact of El Niño on the plantings for the 2023–24 summer crop, but materiality will only crystalise as we approach the summer months and harvest.

prices.[5] However, El Niño risks for now lie outside of the SARB's baseline view.

While El Niño raises the likelihood of a drought and thus upside risks to food inflation, drought is not a fait accompli. South Africa could still achieve a decent summer harvest because of the pre-existing soil moisture following three consecutive years of wetter-than-usual La Niña.[6] This, however, would require that the summer rains fall within the critical periods that coincide with the essential seed germination and pollination stages.[7, 8] Even so, geopolitical tensions and export restrictions by major grain producers could reverse the strong disinflation in global grain and vegetable oil prices that has facilitated the current moderation in domestic food prices. Risks to food inflation remain to the upside.

Food and non-alcoholic beverages



Sources: Stats SA and SARB

5 Rangasamy estimates that a one percentage point increase in food inflation results in non-food inflation increasing by roughly 0.5 percentage points on average, with coefficients that are largest at the 12 to 18-month lag. See L Rangasamy 'Food inflation in South Africa: some implications for economic policy, *South African Journal of Economics* 79(2), June 2011, pp 184–201.

6 The International Grains Council (IGC) forecasts South Africa's 2023–24 maize production at 15.6 million tonnes, marginally down from the current crop of 16.4 million tonnes. The Agricultural Business Chamber, however, is more sanguine and sees a 13–14 million tonnes harvest as more likely. This should be sufficient to meet the domestic demand of approximately 11.4 million tonnes. W Sihlobo, 'Some observations as we approach South Africa's 2023/24 summer crop season', *Agricultural Business Chamber SA Weekly Agricultural Viewpoint*, 31 July 2023. https://agbiz.co.za/content/open/31-july-2023-agri-market-viewpoint-177.

7 It would not be South Africa's first time in such a fortunate position. The summer of 2018–19 had an El Niño weather event. Still, the rains fell in critical periods and South Africa attained a decent crop harvest. See W Sihlobo; ibid.

8 The South African Weather Service forecasts above-average rainfall for most of the country during September to December 2023. This coincides with the planting and germination stages of the 2023–24 summer production season which starts in October. South African Weather Service, '*Seasonal Climate Watch: September 2023 to January 2024*', 28 August 2023. https://www.weathersa.co.za/Documents/SeasonalForecast/SCOLF202308_29082023091515.pdf

Conclusion

Global inflation has subsided over the past year, underpinned by easing supply chain pressures and falling food and energy price inflation. The decline in inflation has also reflected tighter monetary policy and more credible policy communications. Inflation, however, remains well above central bank targets. This is despite the sharp and synchronised acceleration in the interest rate response over the past 18 months that saw forecasts for global growth shift to project an acute slowdown in 2023. Softer economic activity was, in turn, expected to rapidly lower inflation.

The slower-than-expected pace of disinflation reflects the enduring effects of the COVID-19-induced generous fiscal transfers that increased savings in advanced economies. Strong demand and tight labour markets have seen core inflation, especially its services component, rise sharply and remain persistent, exacerbated by the rotation of demand from goods to services and second-round effects from higher energy and food costs. Inflation also remains elevated in most emerging market economies, despite a less pronounced build-up of savings buffers and relative slackness in labour markets.

The resilience in services demand explains much of the upside surprises in the global economic performance over the review period. The SARB forecasts trading-partner growth at 2.6% this year, rising to 3.1% in 2025, but still well below the pre-pandemic trend. The somewhat better trading-partner growth projection, however, masks the divergent trend across countries, with the services-intensive economies such as the US showing marked strength and the manufacturing- and export-dependent economies such as Germany and China experiencing deeper growth slowdowns.

The somewhat stronger moderation in headline inflation in recent months has prompted some central banks to pause rate hikes, in large part to assess the incoming data and fine-tune policy. Meanwhile, emerging markets that moved early to hike rates, or hiked more steeply, have begun easing policy as real rates are in danger of passively tightening. However, with elevated inflation risks and stubborn core inflation, alongside heightened uncertainty around the path for global neutral interest rates, policy rates are expected to remain higher for longer.

Like most economies, South Africa has grappled with stagflationary conditions over the review period. Encouragingly, headline inflation has eased markedly over the past three months and returned to the 3–6% target range, underpinned by decelerations in food and fuel price inflation, while core inflation has been sticky at about 5.0%. Inflation, nevertheless, remains above the SARB's preferred midpoint of the target range and is projected to trend broadly sideways into early 2024 before stabilising around the 4.5% target from the second quarter of 2025.

The relative stickiness in core inflation reflects various dynamics – initially markedly higher global goods inflation, alongside a sharply depreciated rand, but later spillover and second-round effects as well as pass-through of costs associated with electricity self-generation. Declining global goods inflation, alongside tighter monetary policy, should help contain further increases in domestic core goods inflation. Meanwhile, subdued housing inflation, together with lower wage growth, kept services inflation lower than expected and slowed the rise in core inflation. Although core inflation may have peaked, it is expected to decline only gradually as core goods inflation remains elevated.

With inflation showing signs of persistence amid heightened risks, the MPC raised the repo rate by a further 50 basis points at the May 2023 meeting before holding off at the July and September meetings. The May increase brought the nominal repo rate to 8.25% – a level at which monetary policy is now judged to be restrictive. The QPM forecasts indicate that the current level of interest rates will be adequate to steer inflation back to the midpoint of the 3–6% target range over the medium term. The MPC will continue to assess incoming data and fine-tune the stance as needed to manage risks and ensure that inflation stabilises at the target.

Turning to domestic economic activity, growth has weakened significantly this year and over the medium term as the energy supply constraint has become more binding. The economy is projected to expand by just 0.7% this year, rising to 1.1% by 2025. While not in the SARB's current baseline, expectations are for the ongoing reforms in the energy and logistics sectors, alongside the private sector's robust response to the energy crisis, to eventually lift both GDP and potential growth in the long run.

Despite the subdued activity levels, the contribution of economic growth to inflation has increased but remains muted. That the output gap has begun exerting inflationary pressures at a growth rate of just 0.7% shows starkly the extent to which the supply side of the economy is constraining monetary policy's role in the economy. The implementation of structural reforms to ensure an adequate supply of energy, enhance efficiencies in logistics, improve dynamism in product and labour markets and reduce the impact of administered prices on inflation should raise both GDP and potential growth, while enhancing monetary policy's role in keeping economic activity buoyant closer to the new and higher potential level.

Statement of the Monetary Policy Committee

25 May 2023

Issued by Lesetja Kganyago, Governor of the South African Reserve Bank, at a meeting of the Monetary Policy Committee in Pretoria

As we approach the midpoint of the year, persistent inflation and elevated financial stability risks continue to mark a somewhat improved global growth outlook. South Africa's economic conditions, however, remain poor.

Growth prospects in Asia and Europe, while improved, remain negatively affected by Russia's war in Ukraine and heightened geopolitical tensions. The United States continues to exhibit economic resilience but also specific financial fragilities. More recent data suggests China's growth performance will remain relatively modest, with little benefit to commodity prices.[1] In the developing world, many economies face high debt levels, weaker economic growth and prolonged adverse financing conditions.

While goods price inflation has eased in much of the world, core inflation continues to rise, keeping consumer price inflation from falling more sharply. We expect global financial markets to remain volatile and policy rates elevated.

Taking these and other factors into account, the SARB's forecast for global growth in 2023 and 2024 is revised higher to 2.4% (from 2.0%) and to 2.7% (from 2.5%) respectively.[2] The April *World Economic Outlook* of the International Monetary Fund (IMF) forecasts global growth at 2.8% and 3.0% for 2023 and 2024 respectively.

For 2023, the SARB's forecast for GDP growth is slightly higher than in March, at 0.3%. Energy and logistical constraints remain binding on South Africa's growth outlook, limiting economic activity and increasing costs. We estimate load-shedding alone to deduct two percentage points from growth this year.

Household spending is expected to grow very modestly in real terms, in line with a positive but weak rise in real disposable income. Investment by the private sector remains positive, in part reflecting efforts to overcome constraints in energy and transport supply.[3]

Our GDP growth forecast for 2024 and 2025 is unchanged from the previous meeting, at 1.0% and 1.1% respectively.[4]

Economic growth has been volatile for some time and prospects for growth remain uncertain. An improvement in logistics and a sustained reduction in load-shedding, or increased energy supply from alternative sources, would significantly raise growth. The rand's weakness provides some short-term benefit to the tradable sector. Conversely, alongside more modest global growth rates and lower terms of trade, higher import prices and headline inflation create downside risks to growth. Overall, domestic and global prospects appear to be highly sensitive to new shocks.

At present, we assess the risks to the medium-term domestic growth outlook to be balanced.

Turning to inflation prospects, our current growth forecast leaves the output gap around zero over the next three years. This implies very modest positive pressures on inflation from the forecast growth rate.[5]

South Africa's external financing needs, however, are expected to rise. Despite broadly stable oil prices, import price inflation is higher. Falling export commodity prices and weaker growth in export volumes are expected to increase the current account deficit to 2.5% of GDP this year, before expanding it further to 3.1% and 3.6% of GDP respectively in 2024 and 2025.[6]

With reduced tax revenue, higher public sector compensation and state-owned enterprise financial needs will put additional pressure on financing conditions for rand-denominated bonds. The risk premium charged on rand-denominated borrowing has increased sharply. Ten-year bond yields reached a high of 13.78% on 23 May, and currently trade at about 12.3%, despite the expected moderation of inflation over the forecast period.

The rand has weakened over the past year, with further sharp depreciation in recent weeks. The implied starting point for the rand forecast is R18.68 (2023Q2) to the US dollar, compared with R17.80 at the time of the previous meeting. Currency markets are expected to remain volatile and sensitive to idiosyncratic shocks.

1 Commodity export prices in USD terms fell by 0.9% in 2022. South Africa's commodity export price index is forecast to *decline* by 23.7% this year, a further 10.5% in 2024 and an additional 5.4% in 2025.

2 Global growth in the Quarterly Projection Model (QPM) is a trade-weighted average of South Africa's trading partners.

3 The number of days of expected load-shedding in 2023 is higher at 280 days and decline to 150 days and 100 days respectively in 2024 and 2025. Estimates of the average stages of load-shedding are multiplied by the number of days and then multiplied by the cost to GDP per stage-day. The cost per stage has been revised lower for stages 1 and 2. In nominal terms, these costs vary between R0 and R1.2 million for stages 1 and 2 and up to between R204 million and R899 million for stages 3 to 6 when continued on a 24-hour basis on weekdays.

4 The growth forecast includes expected changes in the policy rate as given by the QPM.

5 Potential growth is unchanged at -0.2% for 2023, 0.8% for 2024 and 1.0% for 2025.

6 In March, a current account balance of about -2.7% of GDP was expected for the forecast period. Exports are forecast to grow in real terms by only 1.8% this year and 2.4% in 2024. Our oil price forecast is also slightly lower than in March, averaging US$85 per barrel in 2023, and unchanged at US$85 for 2024 and US$80 for 2025.

At the global level, consumer price inflation in 2023 is forecast to be 7.0%, compared to 8.7% in 2022.[7] In the Group of Three (G3) economies, despite an easing in headline inflation, price pressures remain clearly evident in measures of core inflation, services and wages.[8] Our estimate for inflation in the G3 in 2023 is higher at 4.3% (up from 4.2%) and is unchanged at 2.1% in 2024 and 2025.[9]

The rise in South Africa's headline inflation rate has been shaped primarily by fuel, electricity and food price inflation. Compared to the previous meeting, fuel and electricity price inflation is somewhat lower and food price inflation higher.

Fuel price inflation is expected to be -2.0% in 2023 (down from -0.6%). The electricity price forecast is also lower at 11.6% this year, 13.4% in 2024 and unchanged at 10.9% in 2025.

Local food price inflation is revised up again, in part due to the lagged impact of the weaker exchange rate and despite global food prices falling in dollar terms.[10] Food price inflation is now expected to be 10.8% in 2023 (up from 9.9%) and 5.0% in 2024 (up from 4.5%).

Our forecast for core inflation is revised up to 5.3% in 2023 (previously 5.1%), 5.0% (from 4.8%) and 4.6% (from 4.5%) in 2024 and 2025 respectively. Services price inflation in 2023 is expected to come in at 4.9%, unchanged from the previous meeting. Core goods inflation, however, is higher for this year at 6.3% (up from 5.9%).[11] Growth in average salaries and unit labour costs is higher in 2023 and 2024 and slightly lower in 2025.[12]

With core goods and food higher in the near term, headline inflation for 2023 is revised up to 6.2% (from 6.0%). Headline inflation for 2024 also increases to 5.1%, before moderating to 4.5% in 2025 on the back of easing food and fuel inflation.

Risks to the inflation outlook are assessed to the upside. Despite an easing of producer price and food inflation, global price inflation remains high. Global oil markets are expected to remain tight, with upside risk to prices. Electricity prices and other administered prices continue to present clear short- and medium-term risks. Domestic food price inflation continues to be elevated and the risk of drier weather conditions in coming months has increased. Load-shedding may additionally have broader price effects on the cost of doing business and the cost of living, in particular as diesel consumption increases. Given sticky petrol and food price inflation, considerable risk still attaches to the forecast for average salaries.

Average interest rate levels in major economies are higher than were projected in March.[13] Tighter global financial conditions raise the risk profiles of economies needing foreign capital, leading generally to weaker currencies. Given upside inflation risks, larger domestic and external financing needs, and load-shedding, further currency weakness appears likely.

Higher inflation outcomes have resulted in elevated inflation expectations.[14] Expectations for inflation in 2023 based on market surveys are 5.9%.[15] Long-term inflation expectations derived from the five-year break-even rates in the bond market have sharply increased to about 6.5% (up from 5.3%).[16]

Headline inflation is forecast to remain above the upper end of the inflation target range until the third quarter of this year and will only sustainably revert to the midpoint of the target range by the second quarter of 2025. The forecast takes into account the policy rate trajectory indicated by the SARB's Quarterly Projection Model (QPM).

Against this backdrop, the MPC decided to increase the repurchase (repo) rate by 50 basis points to 8.25% per year, with effect from 26 May 2023. The decision was unanimous.

At the current repo rate level, policy is restrictive, consistent with elevated inflation and risks. The policy stance aims to anchor inflation expectations more firmly around the midpoint of the target band and to increase confidence of attaining the inflation target sustainably over time.[17]

Guiding inflation back towards the midpoint of the target band can reduce the economic costs of high inflation

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7 IMF, *World Economic Outlook*, April 2023.

8 The G3 comprises the United States, the eurozone and Japan. In the G3 economies, consumer prices rose by 7.4% in 2022.

9 The latest CPI inflation in the G3 sits at 4.9%, 7.0% and 3.5% respectively.

10 This year, global food inflation is expected to be in deflation of -9.9% (down from -8.7% in March) and after registering 14.3% inflation in 2022.

11 Core goods refer to total CPI goods excluding food and non-alcoholic beverages (NAB), fuel and electricity, whereas services include all surveyed services within the CPI basket. Core goods inflation is expected to be 5.2% in 2024 and 4.5% in 2025.

12 Average salaries are expected to rise by 6.8% in 2023, 6.5% in 2024 and 4.9% in 2025, compared to 6.4%, 6.2% and 5.0% at the time of the March meeting respectively. Unit labour costs are forecast to rise by 6.9%, 6.1% and 4.3% respectively in 2023, 2024 and 2025.

13 G3 interest rates are forecast to average 3.8% in 2023, 3.6% in 2024 and 2.5% in 2025.

14 The Q2 survey will be released in July. The BER Q1 2023 survey of inflation expectations indicated inflation at 6.3% in 2023 (up from 6.1% in Q4), 5.8% for 2024 (up from 5.6% in Q4) and 5.5% in 2025.

15 At the median, market analysts (Reuters Econometer) in May expect inflation to be higher at 5.9% (from 5.8% in March) in 2023, 4.9% in 2024 (up from 4.7%) and 4.6% in 2025 (down from 4.7%).

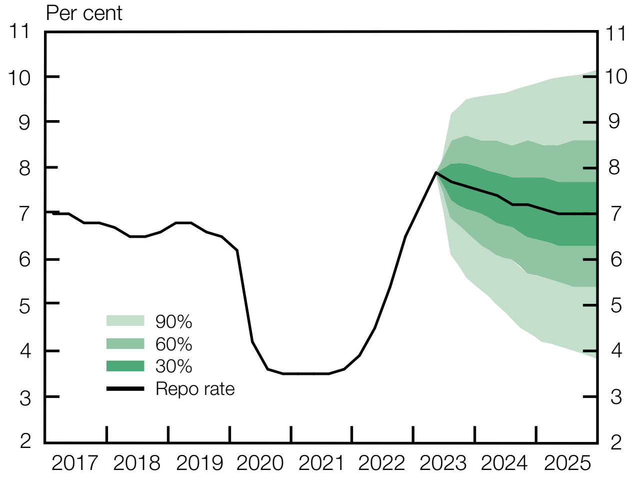
16 Market-based rates are calculated from the break-even inflation rate, which is the yield differential between conventional and inflation-linked bonds. These now sit at about 6.24% for the 5-year and 7.0% on the 10-year break-even, while the 15-year break-even inflation sits at 7.76%.

17 The forecasted trajectory for the repurchase (repo) rate implies a rise in the inflation-adjusted repo rate from -2.1% in 2022 to 1.8% in 2023 and 2.4% in 2024. The real repo level for 2025 is expected to be 2.5%. The real repo rates calculated here are based on the one-quarter-ahead inflation forecast and are annual average rates.

and achieve lower interest rates in the future. Reaching a prudent public debt level, increasing the supply of energy, moderating administered price inflation and keeping wage growth in line with productivity gains would enhance the effectiveness of monetary policy and its transmission to the broader economy.

As usual, the repo rate projection from the QPM remains a broad policy guide, changing from meeting to meeting in response to new data and risks. Economic and financial conditions are expected to remain more volatile for the foreseeable future. In this uncertain environment, monetary policy decisions will continue to be data dependent and sensitive to the balance of risks to the outlook. The MPC will seek to look through temporary price shocks and focus on potential second-round effects and the risks of de-anchoring inflation expectations. The Bank will continue to closely monitor funding markets for stress.

Repurchase rate forecast (May 2023)*



* The uncertainty bands for the repo rate are based on historical forecasting experience and stochastic simulations in the QPM. The bands are symmetric and do not reflect any assessment of upside or downside risk.

Source: SARB

Summary of assumptions: Monetary Policy Committee meeting on 25 May 2023*

1. Foreign sector assumptions

	Actual			Forecast		
	2020	2021	2022	2023	2024	2025
1. Real GDP growth in South Africa's major trading-partner countries	-2.5%	7.0%	3.6%	2.4%	2.7%	3.1%
	(-2.5%)	(7.0%)	(3.5%)	(2.0%)	(2.5%)	(3.1%)
2. Output gap in South Africa's major trading-partner countries (ratio to potential GDP)	-2.7%	-0.9%	0.0%	-0.2%	-0.2%	0.4%
	(-2.7%)	(-0.9%)	(0.0%)	(-0.5%)	(-0.3%)	(0.5%)
3. Change in international commodity prices in US$ (excluding oil)	22.7%	46.0%	-0.9%	-23.7%	-10.5%	-5.4%
	(25.5%)	(45.6%)	(1.4%)	(-20.4%)	(-11.7%)	(-1.5%)
4. Brent crude (US$/barrel)	41.8	70.7	100.4	85.0	85.0	80.0
	(41.8)	(70.7)	(100.4)	(87.0)	(85.0)	(80.0)
5. Change in world food prices (US$)	3.2%	28.1%	14.2%	-9.9%	1.1%	3.2%
	(3.2%)	(28.1%)	(14.2%)	(-8.7%)	(1.0%)	(3.2%)
6. Change in international consumer prices	0.7%	3.3%	7.5%	4.3%	2.1%	2.0%
	(0.7%)	(3.3%)	(7.5%)	(4.2%)	(2.1%)	(2.0%)
7. International policy interest rate	0.2%	0.1%	1.1%	3.8%	3.6%	2.5%
	(0.2%)	(0.1%)	(1.1%)	(3.8%)	(3.5%)	(2.4%)

2. Domestic sector assumptions

	Actual			Forecast		
	2020	2021	2022	2023	2024	2025
1. Change in electricity price	9.1%	10.2%	10.7%	11.6%	13.4%	10.9%
	(9.1%)	(10.2%)	(10.7%)	(12.9%)	(14.5%)	(10.9%)
2. Change in fuel taxes and levies	5.7%	6.1%	2.9%	1.3%	2.2%	4.6%
	(5.7%)	(6.1%)	(2.9%)	(2.3%)	(2.6%)	(4.6%)
3. Potential growth	-3.1%	3.4%	0.6%	-0.2%	0.8%	1.0%
	(-3.1%)	(3.4%)	(0.6%)	(-0.2%)	(0.8%)	(1.0%)
4. Inflation target midpoint	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
	(4.5%)	(4.5%)	(4.5%)	(4.5%)	(4.5%)	(4.5%)
5. Neutral real interest rate	2.0%	2.0%	2.3%	2.4%	2.4%	2.5%
	(2.0%)	(2.0%)	(2.3%)	(2.4%)	(2.4%)	(2.5%)

Notes

a. Shaded areas indicate forecast assumptions.
b. The figures in brackets represent the previous assumptions of the Monetary Policy Committee.

* For an explanation of foreign sector assumptions and domestic sector assumptions, see pages 58 and 59.

Summary of selected forecast results: Monetary Policy Committee meeting on 25 May 2023

Selected forecast results (quarterly)

Year-on-year percentage change

	2022				2023				2024				2025				Steady state
	6.9 (6.9)				6.2 (6.0)				5.1 (4.9)				4.5 (4.5)				
1. Headline inflation	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	5.7	6.6	7.6	7.4	7.0	6.4	5.7	5.6	5.4	5.3	4.9	4.7	4.6	4.6	4.5	4.5	4.5
	(5.7)	(6.6)	(7.6)	(7.4)	(6.9)	(6.4)	(5.5)	(5.3)	(5.1)	(5.0)	(4.7)	(4.6)	(4.6)	(4.6)	(4.5)	(4.5)	
	2022				2023				2024				2025				
	4.3 (4.3)				5.3 (5.1)				5.0 (4.8)				4.6 (4.5)				
2. Core inflation	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	3.6	4.1	4.6	5.0	5.1	5.3	5.4	5.4	5.2	5.1	4.9	4.8	4.7	4.6	4.6	4.5	4.5
	(3.6)	(4.1)	(4.6)	(5.0)	(5.1)	(5.3)	(5.1)	(5.0)	(4.9)	(4.9)	(4.7)	(4.6)	(4.6)	(4.5)	(4.5)	(4.5)	

Notes

a. Shaded areas indicate the forecasts of the Monetary Policy Committee.
b. The figures in brackets represent the previous forecasts of the Monetary Policy Committee.

Selected forecast results (annual)

	Actual			Forecast			Steady state
	2020	2021	2022	2023	2024	2025	
1. GDP growth	-6.3%	4.9%	2.0%	0.3%	1.0%	1.1%	2.5%
	(-6.3%)	(4.9%)	(2.0%)	(0.2%)	(1.0%)	(1.1%)	
2. Output gap (ratio to potential GDP)	-3.5%	-2.0%	-0.6%	-0.1%	0.0%	0.0%	0.0%
	(-3.5%)	(-2.0%)	(-0.6%)	(-0.2%)	(0.0%)	(0.0%)	
3. Change in nominal effective exchange rate	-12.8%	9.9%	-2.3%	-11.0%	1.3%	1.2%	2.5%
	(-12.8%)	(9.9%)	(-2.3%)	(-8.6%)	(1.7%)	(0.8%)	
4. Change in real effective exchange rate	-10.6%	11.1%	-3.2%	-9.4%	4.3%	3.7%	0.0%
	(-10.6%)	(11.1%)	(-3.2%)	(-7.0%)	(4.4%)	(3.3%)	
5. Real exchange rate gap	-10.9%	0.0%	-3.1%	-12.9%	-8.7%	-5.1%	0.0%
	(-10.9%)	(0.0%)	(-3.1%)	(-10.1%)	(-5.8%)	(-2.6%)	
6. Repurchase rate (end of period)	3.50%	3.61%	6.54%	7.63%	7.16%	6.99%	7.00%
	(3.50%)	(3.61%)	(6.54%)	(7.13%)	(6.94%)	(6.91%)	
7. Current account balance (ratio to GDP)	2.0%	3.7%	-0.5%	-2.5%	-3.1%	-3.6%	
	(2.0%)	(3.7%)	(-0.5%)	(-2.4%)	(-2.7%)	(-2.9%)	

Notes

a. The nominal effective exchange rate (NEER) is based on the bilateral exchange rates of South Africa's three largest trading partners (the eurozone, the US and Japan). The bilateral exchange rates are weighted by export trade weights.
b. The nominal exchange rate steady state is estimated using the Purchasing Power Parity (PPP) condition, which links the depreciation of the nominal exchange rate to the inflation differential between South Africa and abroad. Given that the real effective exchange rate (REER) depreciation is zero at steady state, the nominal exchange rate will therefore depreciate by 2.5% per year in steady state, reflecting the inflation (target) differential between domestic (4.5%) and foreign (2.0%) inflation.
c. The REER is the NEER deflated by the consumer price differential between South Africa and the trade-weighted CPI of the eurozone, the US and Japan.
d. The real exchange rate gap signifies the extent to which the real exchange rate deviates from its estimated equilibrium level. A positive gap shows an overvaluation of the currency, and vice versa.
e. The repo rate at the end of the period refers to the average for the last quarter of the year. The nominal repo rate steady state is calculated as the sum of South Africa's inflation target (4.5%) and the steady state neutral real interest rate (2.5%).
f. The steady state is the long run value in the model. While model equilibriums can have different values over the medium term, as conditions change, all equilibriums eventually reach a steady state, where they stabilise. For more details on the estimation of steady states, see B Botha, S de Jager, F Ruch and R Steinbach, 'The Quarterly Projection Model of the SARB', *South African Reserve Bank Working Paper Series No. WP/17/01*, Pretoria: South African Reserve Bank, September 2017.
g. The forecast of the current account balance is obtained from the SARB's Core Macroeconometric Model.
h. Shaded areas indicate the forecasts of the Monetary Policy Committee.
i. The figures in brackets represent the previous forecasts of the Monetary Policy Committee.

Statement of the Monetary Policy Committee

20 July 2023

Issued by Lesetja Kganyago, Governor of the South African Reserve Bank, at a meeting of the Monetary Policy Committee in Pretoria

As we enter the second half of 2023, near-term prospects for the global economy are broadly unchanged, with inflation easing and growth forecasts stable. The longer-term economic outlook, however, remains clouded by risks to the inflation trajectory, ongoing geopolitical tensions and the effects of climate change. China's growth performance is expected to remain modest, with little benefit to commodity prices.[1] In the developing world, many economies face high debt levels, weaker economic growth and prolonged adverse financing conditions. As a result, sub-Saharan Africa's growth prospects remain muted.

While goods price inflation has eased in much of the world, core inflation remains elevated, keeping consumer price inflation from falling more sharply. Globally, monetary policy is likely to remain focused on ensuring inflation continues to retreat, implying policy rates will stay higher. We expect markets in major financial centres to remain volatile.

Taking these and other factors into account, the SARB's forecast for global growth in 2023 is revised marginally higher to 2.5% (from 2.4%) and remains unchanged at 2.7% in 2024.[2]

While South Africa's economic conditions appear to have improved, the longer-term outlook mirrors the uncertainty of the global environment. Prices for commodity exports continue to weaken. In addition, energy supply remains unreliable and stronger El Niño conditions threaten the agricultural outlook.

For 2023, the SARB's forecast for South Africa's GDP growth is slightly higher than in May, at 0.4% (from 0.3%). Energy and logistical constraints remain binding on the growth outlook, limiting economic activity and increasing costs.[3]

From a demand perspective, spending by firms, households, public corporations and general government remains positive in real terms. Disposable income of households continues to grow, albeit slowly. Investment by the private and public sectors is revised up and the terms of trade have remained more beneficial than previously forecast. Debt-service costs of households have increased to 8.4% of disposable income and now sit at around the average for the past decade.[4] Although credit growth to households and corporates has slowed in recent months, it has increased in real terms compared to last year.

Our GDP growth forecast for 2024 and 2025 is unchanged from the previous meeting, at 1.0% and 1.1% respectively.[5]

While households and firms exhibit resilience, economic growth has been volatile for some time and highly sensitive to new shocks. An improvement in logistics and a sustained reduction in load-shedding, or greater energy supply from alternative sources, would significantly increase growth.

At present, we assess the risks to the medium-term domestic growth outlook to be balanced.

Turning to inflation prospects, our current growth forecast leaves the output gap around zero over the next three years, implying little positive or negative pressure on inflation from GDP growth.[6]

South Africa's external financing needs are expected to rise due to an expansion in the current account deficit. Despite somewhat lower oil prices, falling export commodity prices are forecast to result in a current account deficit of 1.9% of GDP this year (down from 2.5%), and 2.9% and 3.3% of GDP in 2024 and 2025 respectively.[7]

Sharply lower tax revenue, higher employee compensation and the ongoing financing needs of state-owned enterprises are likely to keep the long-term cost of borrowing elevated. Despite the expected moderation of inflation over the forecast period, long-term bond yields currently trade at about 11.6%.

1 Commodity export prices in USD terms fell by 0.9% in 2022. South Africa's commodity export price index is forecast to decline by 27.6% this year, a further 11.5% in 2024 and an additional 5.4% in 2025.

2 Global growth in the QPM model is a trade-weighted average of South Africa's trading partners.

3 The number of days of expected load-shedding is 280 days in 2023, decreasing to 150 days and 100 days respectively in 2024 and 2025. Estimates of the average stages of load-shedding are multiplied by the number of days and then multiplied by the cost to GDP per stage-day. The cost per stage has been revised lower for stages 1 and 2. In nominal terms, these costs vary between R0 and R1.2 million for stages 1 and 2 and up to between R204 million and R899 million for stages 3 to 6, when continued on a 24-hour basis on weekdays.

4 Debt-service costs are the product of prevailing interest rates and debt volumes. The average from 1994 to 2019 was 8.8%. From the beginning of the pandemic until March 2023, the average was 7.4%. In the last quarter of 2022, the average was 7.9%.

5 The growth forecast includes expected changes in the policy rate as given by the QPM.

6 Potential growth is revised marginally to -0.1% in 2023 (up from -0.2%) and is unchanged at 0.8% for 2024 and 1.0% for 2025.

7 In May, a current account balance of -2.5% of GDP was expected for the forecast period. Exports are forecast to grow in real terms by 6.2% this year (from 1.8%) and 3.4% in 2024. Our oil price forecast is also slightly lower than in May, averaging US$81 per barrel in 2023 (US$85 in May), US$82 for 2024 (US$85) and unchanged at US$80 for 2025.

The rand has generally weakened since the beginning of the year, depreciating by about 5% year to date against the US dollar, and showing high volatility in response to risk-on and risk-off episodes. The implied starting point for the rand forecast is R18.52 (2023Q3) to the US dollar, compared with R18.73 at the time of the previous meeting.

The trajectory of South Africa's headline inflation rate has been shaped primarily by fuel, electricity and food price inflation. Compared to the previous meeting, fuel price inflation is lower at -3.1% in 2023 (from -2.0%). The electricity price forecast is unchanged at 11.6% this year, 13.4% in 2024 and 10.9% in 2025. Our food price inflation forecast for 2023 remains high but is revised lower in this meeting to 10.3% (from 10.8%), and up slightly to 5.2% in 2024 (from 5.0%).

Better monthly outcomes have led to a downward revision in our forecast for core inflation to 5.2% in 2023 (previously 5.3%), 4.9% (from 5.0%) and 4.5% (from 4.6%) in 2024 and 2025 respectively. Services price inflation in 2023 is expected to come in at 4.8% (down from 4.9%). Core goods inflation, while still elevated, is also revised slightly lower for this year at 6.2% (from 6.3%).[8] Growth in average salaries and unit labour costs is lower in 2023 and 2024 and slightly higher in 2025.

With core goods and food inflation lower in the near term, headline inflation for 2023 is revised down to 6.0% (from 6.2%). The headline inflation forecast for 2024 also decreases to 5.0%, before stabilising at 4.5% in 2025.[9]

Risks to the inflation outlook are assessed to the upside. Headline inflation at a global level continues to moderate, but food price inflation remains high and oil markets remain tight. Despite the recent easing in some food price components, domestic food price inflation is still elevated at 11% in June and the risk of drier weather conditions in coming months has increased. In the absence of sustained and consistent increases in energy supply, electricity prices continue to present clear inflation risks. Load-shedding and logistics constraints may also have broader effects on the cost of doing business and the cost of living. Given uncertain fuel and food price inflation, considerable risk still attaches to the forecast for average salaries.

Sticky inflation in major economies suggests that average interest rates in these economies will remain high.[10] As a result, tighter global financial conditions are likely to persist, raising the risk profile of economies needing foreign capital.

Higher inflation outcomes have generally resulted in elevated inflation expectations across businesses and households, while market-based expectations have eased recently. The Bureau for Economic Research survey released in July shows average inflation expectations of 6.5% for 2023 (from 6.3% in the first quarter).[11] Expectations for inflation in 2023 based on market surveys are currently 5.9%, and near-term break-even rates have decreased to around 4.5%.[12] Longer-term expectations remain elevated.

Headline inflation returned to the upper end of the inflation target range in June and is forecast to sustainably revert to the midpoint of the target range by the third quarter of 2025. The forecast takes into account the policy rate trajectory indicated by the Bank's Quarterly Projection Model (QPM).

Against this backdrop, the MPC decided to keep the repurchase (repo) rate at its current level of 8.25% per year. Three members of the Committee preferred to keep rates on hold and two preferred an increase of 25 basis points.

At the current repo rate level, policy is restrictive, consistent with elevated inflation expectations and the inflation outlook. Serious upside risks to the inflation outlook remain. In light of these risks, the Committee remains vigilant and decisions will continue to be data dependent and sensitive to the balance of risks to the outlook.

The policy stance aims to anchor inflation expectations more firmly around the midpoint of the target band and to increase confidence of attaining the inflation target sustainably over time.[13] The MPC will seek to look through temporary price shocks and focus on potential second-round effects and the risks of de-anchoring inflation expectations.

Guiding inflation back towards the midpoint of the target band reduces the economic costs of high inflation and will achieve lower interest rates in the future. Since early 2020, the Committee has recommended additional and

8 Core goods refer to total CPI goods excluding food and non-alcoholic beverages (NAB), fuel and electricity, whereas services include all surveyed services within the CPI basket. Core goods inflation is expected to be 5.1% in 2024 and 4.3% in 2025.

9 Average salaries are expected to rise by 6.6% in 2023, 6.1% in 2024 and 5.2% in 2025, compared to 6.8%, 6.5%, and 4.9% at the time of the May meeting respectively. Unit labour costs are forecast to rise by 6.0%, 5.3% and 4.6% respectively in 2023, 2024 and 2025.

10 G3 interest rates are forecast to average 4.0% in 2023, 3.9% in 2024 and 2.6% in 2025.

11 The BER Q2 2023 survey of inflation expectations indicated inflation at 5.9% for 2024 (up from 5.8% in Q1) and 5.6% in 2025

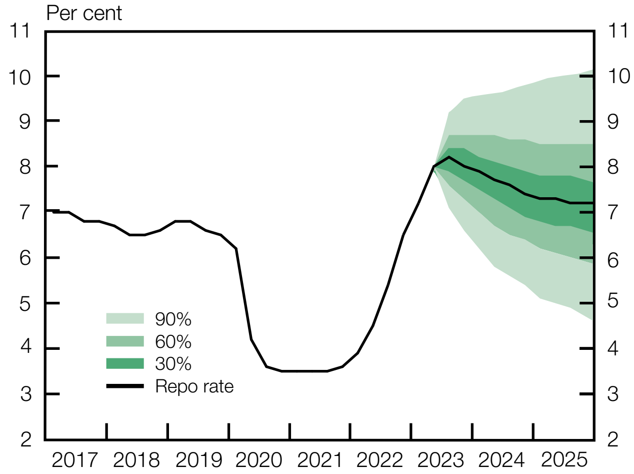
12 At the median, market analysts (Reuters Econometer) in July expect inflation to remain at 5.9% in 2023, 4.9% in 2024 and 4.4% in 2025 (from 4.6%). Market-based rates are calculated from the break-even inflation rate, which is the yield differential between conventional and inflation-linked bonds. The 10-year break-even now sits at about 6.1%, while the 15-year break-even inflation rate sits at 7.3%.

13 The forecasted trajectory for the repurchase (repo) rate implies a rise in the inflation-adjusted repo rate from -1.4% in 2022 to 2.7% in 2023 and 3.0% in 2024. The real repo level for 2025 is expected to be 2.7%. The real repo rates calculated here are based on the three-quarter-ahead inflation forecast and are annual average rates.

indirect means of lowering inflation that are within the reach of the public sector, including achieving a prudent public debt level, increasing the supply of energy, moderating administered price inflation and keeping wage growth in line with productivity gains. Such steps would strengthen monetary policy effectiveness and its transmission to the broader economy.

The repo rate projection from the updated QPM remains a broad policy guide, changing from meeting to meeting in response to new data and risks.

Repurchase rate forecast (July 2023)*



* The uncertainty bands for the repo rate are based on historical forecasting experience and stochastic simulations in the QPM. The bands are symmetric and do not reflect any assessment of upside or downside risk.

Source: SARB

Summary of assumptions: Monetary Policy Committee meeting on 20 July 2023*

1. Foreign sector assumptions

	Actual			Forecast		
	2020	2021	2022	2023	2024	2025
1. Real GDP growth in South Africa's major trading-partner countries	-2.5%	7.0%	3.6%	2.5%	2.7%	3.1%
	(-2.5%)	(7.0%)	(3.6%)	(2.4%)	(2.7%)	(3.1%)
2. Output gap in South Africa's major trading-partner countries (ratio to potential GDP)	-2.7%	-0.9%	0.1%	-0.1%	-0.1%	0.5%
	(-2.7%)	(-0.9%)	(0.0%)	(-0.2%)	(-0.2%)	(0.4%)
3. Change in international commodity prices in US$ (excluding oil)	22.7%	46.0%	-0.9%	-27.6%	-11.5%	-5.4%
	(22.7%)	(46.0%)	(-0.9%)	(-23.7%)	(-10.5%)	(-5.4%)
4. Brent crude (US$/barrel)	41.8	70.7	100.4	81.0	82.0	80.0
	(41.8)	(70.7)	(100.4)	(85.0)	(85.0)	(80.0)
5. Change in world food prices (US$)	3.2%	28.1%	14.2%	-12.2%	1.5%	3.2%
	(3.2%)	(28.1%)	(14.2%)	(-9.9%)	(1.1%)	(3.2%)
6. Change in international consumer prices	0.7%	3.3%	7.4%	4.4%	2.3%	2.1%
	(0.7%)	(3.3%)	(7.4%)	(4.3%)	(2.1%)	(2.0%)
7. International policy interest rate	0.2%	0.1%	1.1%	4.0%	3.9%	2.6%
	(0.2%)	(0.1%)	(1.1%)	(3.8%)	(3.6%)	(2.5%)

2. Domestic sector assumptions

	Actual			Forecast		
	2020	2021	2022	2023	2024	2025
1. Change in electricity price	9.1%	10.2%	10.7%	11.6%	13.4%	10.9%
	(9.1%)	(10.2%)	(10.7%)	(11.6%)	(13.4%)	(10.9%)
2. Change in fuel taxes and levies	5.7%	6.1%	2.9%	1.9%	2.4%	4.6%
	(5.7%)	(6.1%)	(2.9%)	(1.3%)	(2.2%)	(4.6%)
3. Potential growth	-3.2%	3.2%	0.5%	-0.1%	0.8%	1.0%
	(-3.1%)	(3.4%)	(0.6%)	(-0.2%)	(0.8%)	(1.0%)
4. Inflation target midpoint	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
	(4.5%)	(4.5%)	(4.5%)	(4.5%)	(4.5%)	(4.5%)

Notes

a. Shaded areas indicate forecast assumptions.
b. The figures in brackets represent the previous assumptions of the Monetary Policy Committee.

* For an explanation of foreign sector assumptions and domestic sector assumptions, see pages 58 and 59.

Summary of selected forecast results: Monetary Policy Committee meeting on 20 July 2023

Selected forecast results (quarterly)

Year-on-year percentage change

	2022				2023				2024				2025				Steady state
	6.9 (6.9)				6.0 (6.2)				5.0 (5.1)				4.5 (4.5)				
1. Headline inflation	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	5.7	6.6	7.6	7.4	7.0	6.2	5.4	5.3	5.1	5.2	4.9	4.7	4.6	4.6	4.5	4.5	4.5
	(5.7)	(6.6)	(7.6)	(7.4)	(7.0)	(6.4)	(5.7)	(5.6)	(5.4)	(5.3)	(4.9)	(4.7)	(4.6)	(4.6)	(4.5)	(4.5)	
	2022				2023				2024				2025				
	4.3 (4.3)				5.2 (5.3)				4.9 (5.0)				4.5 (4.6)				
2. Core inflation	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	3.6	4.1	4.6	5.0	5.1	5.2	5.4	5.3	5.1	5.1	4.8	4.6	4.5	4.4	4.4	4.4	4.5
	(3.6)	(4.1)	(4.6)	(5.0)	(5.1)	(5.3)	(5.4)	(5.4)	(5.2)	(5.1)	(4.9)	(4.8)	(4.7)	(4.6)	(4.6)	(4.5)	

Notes

a. Shaded areas indicate the forecasts of the Monetary Policy Committee.
b. The figures in brackets represent the previous forecasts of the Monetary Policy Committee.

Selected forecast results (annual)

	Actual			Forecast			Steady state
	2020	2021	2022	2023	2024	2025	
1. GDP growth	-6.0%	4.7%	1.9%	0.4%	1.0%	1.1%	2.5%
	(-6.3%)	(4.9%)	(2.0%)	(0.3%)	(1.0%)	(1.1%)	
2. Output gap (ratio to potential GDP)	-3.5%	-1.9%	-0.5%	-0.1%	0.0%	0.0%	0.0%
	(-3.5%)	(-2.0%)	(-0.6%)	(-0.1%)	(0.0%)	(0.0%)	
3. Change in nominal effective exchange rate	-12.8%	9.9%	-2.3%	-12.0%	1.6%	-0.8%	2.5%
	(-12.8%)	(9.9%)	(-2.3%)	(-11.0%)	(1.3%)	(1.2%)	
4. Change in real effective exchange rate	-10.6%	11.1%	-3.2%	-10.5%	4.7%	1.6%	0.0%
	(-10.6%)	(11.1%)	(-3.2%)	(-9.4%)	(4.3%)	(3.7%)	
5. Real exchange rate gap	-6.6%	5.4%	2.9%	-7.2%	-2.7%	-1.1%	0.0%
	(-10.9%)	(0.0%)	(-3.1%)	(-12.9%)	(-8.7%)	(-5.1%)	
6. Repurchase rate (end of period)	3.50%	3.61%	6.54%	8.03%	7.41%	7.17%	7.00%
	(3.50%)	(3.61%)	(6.54%)	(7.63%)	(7.16%)	(6.99%)	
7. Neutral real interest rate	1.9%	2.1%	2.3%	2.5%	2.6%	2.7%	2.5%
	(2.0%)	(2.0%)	(2.3%)	(2.4%)	(2.4%)	(2.5%)	
7. Current account balance (ratio to GDP)	1.9%	3.7%	-0.5%	-1.9%	-2.9%	-3.3%	
	(2.0%)	(3.7%)	(-0.5%)	(-2.5%)	(-3.1%)	(-3.6%)	

Notes

a. The July MPC forecast was generated using the updated QPM. The May forecast used the previous version of the QPM. For more details on the updated QPM, see E Pirozhkova, J Rakgalakane, L Soobyah and R Steinbach, 'Enhancing the Quarterly Projection Model', *South African Reserve Bank Working Paper Series No. WP/23/05,* Pretoria: South African Reserve Bank, June 2023.

b. The nominal effective exchange rate (NEER) is based on the bilateral exchange rates of South Africa's three largest trading partners (the eurozone, the US and Japan). The bilateral exchange rates are weighted by export trade weights.

c. The nominal exchange rate steady state is estimated using the Purchasing Power Parity (PPP) condition, which links the depreciation of the nominal exchange rate to the inflation differential between South Africa and abroad. Given that the real effective exchange rate (REER) depreciation is zero at steady state, the nominal exchange rate will therefore depreciate by 2.5% per year in steady state, reflecting the inflation (target) differential between domestic (4.5%) and foreign (2.0%) inflation.

d. The REER is the NEER deflated by the consumer price differential between South Africa and the trade-weighted CPI of the eurozone, the US and Japan.

e. The real exchange rate gap signifies the extent to which the real exchange rate deviates from its estimated equilibrium level. A positive gap shows an overvaluation of the currency, and vice versa.

f. The repo rate at the end of the period refers to the average for the last quarter of the year. The nominal repo rate steady state is calculated as the sum of South Africa's inflation target (4.5%) and the steady state neutral real interest rate (2.5%).

g. The neutral real interest rate (NRIR) is the policy rate, minus inflation, which prevails when the economy is fully in balance, with inflation at target and output at potential. The policy stance is measured as either tight or loose based on whether actual rates are above or below this neutral rate respectively. The steady state NRIR is calculated as the sum of the respective steady states for the G3 NRIR (0.5%), South Africa's risk premium (2.0%) and the change in the REER (0.0%). Before the steady state is reached it is possible for the REER equilibrium to appreciate or depreciate, so this value can have a non-zero value over the medium term. It is nonetheless always zero in the long run.

h. The steady state is the long run value in the model. While model equilibriums can have different values over the medium term, as conditions change, all equilibriums eventually reach a steady state, where they stabilise.

i. The forecast of the current account balance is obtained from the SARB's Core Macroeconometric Model.

j. Shaded areas indicate the forecasts of the Monetary Policy Committee.

k. The figures in brackets represent the previous forecasts of the Monetary Policy Committee.

Statement of the Monetary Policy Committee

21 September 2023

Issued by Lesetja Kganyago, Governor of the South African Reserve Bank, at a meeting of the Monetary Policy Committee in Pretoria

Since our last meeting, near-term prospects for the global economy are broadly unchanged. Inflation has eased over the course of the year but a further slowdown in inflation looks less certain. Growth forecasts remain muted. The longer-term economic outlook is, however, clouded by persistent risks to the inflation trajectory, the negative effects of climate change and ongoing geopolitical tensions. In the developing world, financing conditions are expected to remain tight and growth modest.

While goods price inflation has eased in much of the world, core inflation remains elevated and oil prices have increased significantly, keeping consumer price inflation from falling further. Globally, monetary policy is likely to remain focused on ensuring inflation continues to retreat. We expect markets in major financial centres to remain volatile.

Across major advanced economies, growth remains stronger in the United States (US) than in Europe. Higher-for-longer policy rates and extended fiscal positions are expected to weigh on growth prospects for some time. China's growth performance is expected to remain modest, with little benefit to commodity prices.[1] Taking these and other factors into account, the SARB's forecast for global growth in 2023 is broadly unchanged at 2.6% (from 2.5%) and remains at 2.7% in 2024.[2]

Despite considerable reprieve in the winter months, South Africa's electricity load-shedding has increased and prices for commodity exports continue to weaken. In the near term, stronger El Niño conditions threaten the agricultural outlook, while global climatic events present additional risks. Energy and logistical constraints remain binding on the growth outlook, limiting economic activity and increasing costs.[3]

From a demand perspective, spending by firms, households, public corporations and general government remains positive in real terms, on an annual basis. Disposable income of households continues to grow in the forecast, albeit slowly. Debt-service costs of households have increased to about 8.4% of disposable income, close to the average for the past decade.[4] Although credit growth to households and corporates has slowed in recent months, it has increased in real terms compared to last year. The forecast for investment for the year is revised up to 7.7% (from 4.4%).

These supply and demand trends enabled an upward revision to the SARB's forecast for GDP growth to 0.7%, from the July figure of 0.4%. Our GDP growth forecast for 2024 and 2025 is unchanged from the previous meeting, at 1.0% and 1.1% respectively.[5]

While households and firms exhibit some resilience, economic growth has been volatile and highly sensitive to new shocks. An improvement in logistics and a sustained reduction in load-shedding, or greater energy supply from alternative sources, would significantly increase growth.

At present, we assess the risks to the medium-term domestic growth outlook to be balanced.

Turning to inflation prospects, our current growth forecast leaves the output gap marginally positive, implying little pressure on inflation from GDP growth.[6]

Oil prices have increased in recent months and commodity export prices have moderated further. South Africa's external financing needs will increase as the current account deficit expands from a forecasted 2.0% of GDP this year (from 1.9%), to 3.0% of GDP in 2024 and 3.4% of GDP in 2025.[7]

Sharply lower tax revenue, higher employee compensation and ongoing financing needs of state-owned enterprises are expected to keep the long-term cost of borrowing elevated. Despite the forecasted moderation of inflation, long-term bond yields currently trade around 12.6%.

The rand has weakened over the past year, depreciating by about 10% year to date against the US dollar, and is showing high volatility in response to risk-on and risk-off

1 Commodity export prices in USD terms fell by 0.9% in 2022. South Africa's commodity export index is forecast to decline by 28.4% this year, a further 12.0% in 2024 and an additional 5.1% in 2025.

2 Global growth in the Quarterly Projection Model (QPM) is a trade-weighted average of SA's trading partners.

3 The number of days of expected load-shedding is 310 in 2023, decreasing to 150 days and 100 days respectively in 2024 and 2025. Estimates of the average stages of load-shedding are multiplied by the number of days and then multiplied by the cost to GDP per stage-day. The cost per stage was revised lower in the March 2023 Monetary Policy Committee (MPC) meeting. In nominal terms, these costs vary between R0 and R1.2 million for stages 1 and 2 and up to between R204 million and R899 million for stages 3 to 6, when continued on a 24-hour basis on weekdays. This will be assessed further as new data and information is received.

4 Debt-service costs are the product of prevailing interest rates and debt volumes as a percentage of disposable income. The average from 1994 to 2019 was 8.7%. From the beginning of the pandemic until March 2023, the average was 7.4%. In the first quarter of 2023, the average was 8.4%.

5 The growth forecast includes expected changes in the policy rate as given by the QPM.

6 Potential growth is 0.0% in 2023 (up from -0.1%) and unchanged at 0.8% for 2024 and 1.0% for 2025.

7 Exports are forecast to grow in real terms by 4.5% this year (from 6.2%) and 3.0% in 2024. Our oil price forecast is also slightly higher than in July, averaging US$82 per barrel in 2023, and unchanged at US$82 for 2024 and US$80 for 2025.

episodes. The implied starting point for the rand forecast is R18.45 (2023Q4) to the US dollar compared with R18.13 at the time of the previous meeting.

The trajectory of South Africa's headline inflation rate has been shaped primarily by fuel and food prices. Compared to the previous meeting, fuel price inflation is significantly higher at 0.4% in 2023 (from -3.1%), rising to 5.8% in 2024. Our food price inflation forecast for 2023 remains high and largely unchanged at 10.4% (from 10.3%). The forecast for 2024 also remains unchanged at 5.2%.

Better monthly outcomes have led to a downward revision in our forecast for core inflation to 4.9% in 2023 (previously 5.2%) and to 4.7% in 2024 (from 4.9%). The core inflation forecast for 2025 remains at 4.5%. Services inflation in 2023 is expected to come in at 4.4% (down from 4.8%), primarily as a result of lower public transport inflation outcomes. Core goods inflation remains elevated and is revised slightly up for this year to 6.3% (from 6.2%).[8] Growth in average salaries and unit labour costs is lower in 2023 and 2024. In 2025, salaries are slightly higher.[9]

With services inflation lower in the near term, headline inflation for 2023 is revised down to 5.9% (from 6.0%). The headline inflation forecast for 2024 increases slightly to 5.1%, before stabilising at 4.5% in 2025.

Risks to the inflation outlook are assessed to the upside. At a global level, headline inflation continues to moderate, but food price inflation remains high, oil markets have tightened significantly and core inflation looks sticky. Despite the recent easing in some food price components, domestic food price inflation was still elevated at 8% in August and the risk of drier weather conditions in coming months has increased. We expect food price inflation to moderate further in the near term, but with high risk that it picks up later in 2024. In the absence of sustained increases in energy supply, electricity prices continue to present clear inflation risks. Load-shedding and logistics constraints may also have broader effects on the cost of doing business and the cost of living. Given uncertain fuel and food price inflation, considerable risk still attaches to the forecast for average salaries.

Sticky inflation implies that average interest rates in major economies will remain high.[10] As a result, tighter global financial conditions are likely to persist, raising the risk profile of economies needing foreign capital.

Higher inflation has generally resulted in elevated inflation expectations across businesses and households. The Bureau for Economic Research survey released in September shows average inflation expectations lower at 6.1% for 2023. The Committee, however, would prefer to see expectations anchored at the midpoint of the target band.[11] Expectations for inflation in 2023 based on market surveys are currently 5.8%, and near-term break-even rates have increased to around 5.1%.[12] Longer-term market expectations for inflation remain elevated.

Headline inflation returned to below the upper end of the inflation target range in June. In coming months, we expect headline inflation to rise somewhat, before sustainably reverting to the midpoint of the target range in 2025.

Against this backdrop, the MPC decided to keep the repurchase (repo) rate at its current level of 8.25% per year. Three members of the Committee preferred to keep rates on hold and two preferred an increase of 25 basis points.

At the current repo rate level, policy is restrictive, consistent with the inflation outlook and elevated inflation expectations. Serious upside risks to the inflation outlook remain. In light of these risks, the Committee remains vigilant and stands ready to act should risks begin to materialise. Decisions will continue to be data dependent and sensitive to the balance of risks to the outlook. The inflation and repo rate projections from the updated Quarterly Projection Model (QPM) remain a broad policy guide, changing from meeting to meeting in response to new data and risks.

The policy stance aims to anchor inflation expectations more firmly around the midpoint of the target band and to increase confidence of attaining the inflation target sustainably over time.[13] The MPC will seek to look through temporary price shocks and focus on potential second-round effects and the risks of de-anchoring inflation expectations.

8 Core goods refer to total CPI goods excluding food and non-alcoholic beverages (NAB), fuel and electricity, whereas services include all surveyed services within the CPI basket. Core goods inflation is expected to be 5.2% in 2024 and 4.4% in 2025.

9 Average salaries are expected to rise by 5.4% in 2023, 5.9% in 2024 and by 5.4% in 2025, compared to 6.6%, 6.1% and 5.2% respectively at the time of the July meeting. Unit labour costs are forecast to rise by 4.7%, 4.9% and 4.6% respectively in 2023, 2024 and 2025.

10 G3 interest rates average 4.0% in 2023, 4.1% in 2024 and 2.8% in 2025.

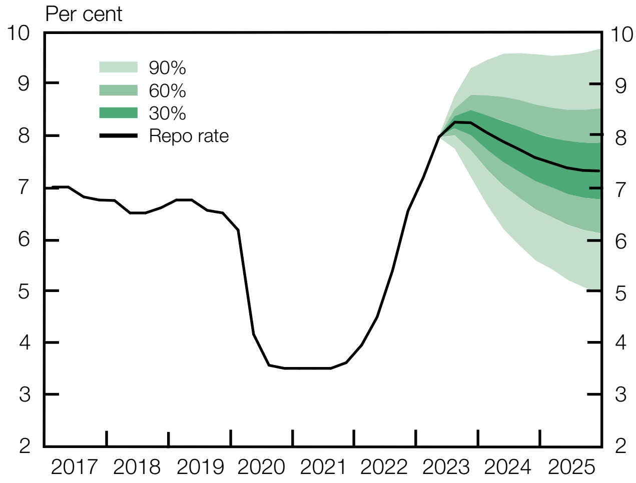
11 The BER Q3 2023 survey of inflation expectations indicated inflation at 6.1% in 2023 (from 6.5% in Q2) and 5.5% for 2024 (from 5.9% in Q2) and 5.3% in 2025.

12 At the median, market analysts (Reuters Econometer) in September expect inflation to average 5.8% in 2023, remain at 4.9% in 2024 and 4.5% in 2025 (from 4.6%). Market-based rates are calculated from the break-even inflation rate, which is the yield differential between conventional and inflation-linked bonds. The 10-year break-even now sits at about 6.9%. The 15-year break-even inflation rate sits at 7.4%.

13 The forecasted trajectory for the repurchase (repo) rate implies a rise in the inflation-adjusted repo rate from -1.3% in 2022 to 2.6% in 2023 and 3.2% in 2024. The real repo level for 2025 is expected to be 2.9%. The real repo rates calculated here are based on the three-quarter-ahead inflation forecast and are annual average rates.

Guiding inflation back towards the midpoint of the target band reduces the economic costs of high inflation and will achieve lower interest rates in the future. Since early 2020, the Committee has recommended additional means of lowering inflation that are within the reach of the public sector, including achieving a prudent public debt level, increasing the supply of energy, moderating administered price inflation and keeping real wage growth in line with productivity gains. Such steps would strengthen monetary policy effectiveness and its transmission to the broader economy.

Repurchase rate forecast (September 2023)*



* The uncertainty bands for the repo rate are based on historical forecasting experience and stochastic simulations in the QPM. The bands are symmetric and do not reflect any assessment of upside or downside risk.

Source: SARB

Summary of assumptions: Monetary Policy Committee meeting on 21 September 2023*

1. Foreign sector assumptions

	Actual			Forecast		
	2020	2021	2022	2023	2024	2025
1. Real GDP growth in South Africa's major trading-partner countries	-2.5%	7.0%	3.6%	2.6%	2.7%	3.1%
	(-2.5%)	(7.0%)	(3.6%)	(2.5%)	(2.7%)	(3.1%)
2. Output gap in South Africa's major trading-partner countries (ratio to potential GDP)	-3.1%	-0.9%	0.0%	-0.2%	-0.2%	0.4%
	(-2.7%)	(-0.9%)	(0.1%)	(-0.1%)	(-0.1%)	(0.5%)
3. Change in international commodity prices in US$ (excluding oil)	22.7%	46.0%	-0.9%	-28.4%	-12.0%	-5.1%
	(22.7%)	(46.0%)	(-0.9%)	(-27.6%)	(-11.5%)	(-5.4%)
4. Brent crude (US$/barrel)	41.8	70.7	100.4	82.0	82.0	80.0
	(41.8)	(70.7)	(100.4)	(81.0)	(82.0)	(80.0)
5. Change in world food prices (US$)	3.2%	28.1%	14.2%	-12.2%	1.7%	3.2%
	(3.2%)	(28.1%)	(14.2%)	(-12.2%)	(1.5%)	(3.2%)
6. Change in international consumer prices	0.7%	3.3%	7.4%	4.5%	2.4%	2.1%
	(0.7%)	(3.3%)	(7.4%)	(4.4%)	(2.3%)	(2.1%)
7. International policy interest rate	0.2%	0.1%	1.1%	4.0%	4.1%	2.8%
	(0.2%)	(0.1%)	(1.1%)	(4.0%)	(3.9%)	(2.6%)

2. Domestic sector assumptions

	Actual			Forecast		
	2020	2021	2022	2023	2024	2025
1. Change in electricity price	9.1%	10.2%	10.7%	11.6%	13.4%	10.9%
	(9.1%)	(10.2%)	(10.7%)	(11.6%)	(13.4%)	(10.9%)
2. Change in fuel taxes and levies	5.7%	6.1%	2.9%	1.8%	2.0%	4.6%
	(5.7%)	(6.1%)	(2.9%)	(1.9%)	(2.4%)	(4.6%)
3. Potential growth	-3.2%	3.2%	0.5%	0.0%	0.8%	1.0%
	(-3.2%)	(3.2%)	(0.5%)	(-0.1%)	(0.8%)	(1.0%)
4. Inflation target midpoint	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
	(4.5%)	(4.5%)	(4.5%)	(4.5%)	(4.5%)	(4.5%)

Notes

a. Shaded areas indicate forecast assumptions.
b. The figures in brackets represent the previous assumptions of the Monetary Policy Committee.

* For an explanation of foreign sector assumptions and domestic sector assumptions, see pages 58 and 59.

Summary of selected forecast results: Monetary Policy Committee meeting on 21 September 2023

Selected forecast results (quarterly)

Year-on-year percentage change

	2022				2023				2024				2025				Steady state
	6.9 (6.9)				5.9 (6.0)				5.1 (5.0)				4.5 (4.5)				
1. Headline inflation	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	5.7	6.6	7.6	7.4	7.0	6.2	5.1	5.4	5.3	5.2	5.3	4.7	4.6	4.5	4.4	4.5	4.5
	(5.7)	(6.6)	(7.6)	(7.4)	(7.0)	(6.2)	(5.4)	(5.3)	(5.1)	(5.2)	(4.9)	(4.7)	(4.6)	(4.6)	(4.5)	(4.5)	
	2022				2023				2024				2025				
	4.3 (4.3)				4.9 (5.2)				4.7 (4.9)				4.5 (4.5)				
2. Core inflation	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	3.6	4.1	4.6	5.0	5.1	5.2	4.8	4.8	4.7	4.7	4.8	4.6	4.5	4.5	4.4	4.4	4.5
	(3.6)	(4.1)	(4.6)	(5.0)	(5.1)	(5.2)	(5.4)	(5.3)	(5.1)	(5.1)	(4.8)	(4.6)	(4.5)	(4.4)	(4.4)	(4.4)	

Notes

a. Shaded areas indicate the forecasts of the Monetary Policy Committee.
b. The figures in brackets represent the previous forecasts of the Monetary Policy Committee.

Selected forecast results (annual)

	Actual			Forecast			Steady state
	2020	2021	2022	2023	2024	2025	
1. GDP growth	-6.0%	4.7%	1.9%	0.7%	1.0%	1.1%	2.5%
	(-6.0%)	(4.7%)	(1.9%)	(0.4%)	(1.0%)	(1.1%)	
2. Output gap (ratio to potential GDP)	-3.5%	-1.9%	-0.5%	0.2%	0.3%	0.3%	0.0%
	(-3.5%)	(-1.9%)	(-0.5%)	(-0.1%)	(0.0%)	(0.0%)	
3. Change in nominal effective exchange rate	-12.8%	9.9%	-2.3%	-11.4%	0.2%	0.5%	2.5%
	(-12.8%)	(9.9%)	(-2.3%)	(-12.0%)	(1.6%)	(-0.8%)	
4. Change in real effective exchange rate	-10.6%	11.1%	-3.2%	-10.2%	2.8%	2.9%	0.0%
	(-10.6%)	(11.1%)	(-3.2%)	(-10.5%)	(4.7%)	(1.6%)	
5. Real exchange rate gap	-6.6%	5.4%	2.9%	-6.9%	-4.1%	-1.2%	0.0%
	(-6.6%)	(5.4%)	(2.9%)	(-7.2%)	(-2.7%)	(-1.1%)	
6. Repurchase rate (end of period)	3.50%	3.61%	6.54%	8.24%	7.57%	7.31%	7.00%
	(3.50%)	(3.61%)	(6.54%)	(8.03%)	(7.41%)	(7.17%)	
7. Neutral real interest rate	1.9%	2.1%	2.3%	2.5%	2.6%	2.7%	2.5%
	(1.9%)	(2.1%)	(2.3%)	(2.5%)	(2.6%)	(2.7%)	
7. Current account balance (ratio to GDP)	1.9%	3.7%	-0.5%	-2.0%	-3.0%	-3.4%	
	(1.9%)	(3.7%)	(-0.5%)	(-1.9%)	(-2.9%)	(-3.3%)	

Notes

a. The September MPC forecast was generated using the updated QPM. For more details on the updated QPM, see E Pirozhkova, J Rakgalakane, L Soobyah and R Steinbach, 'Enhancing the Quarterly Projection Model', *South African Reserve Bank Working Paper Series No. WP/23/05,* Pretoria: South African Reserve Bank, June 2023.

b. The nominal effective exchange rate (NEER) is based on the bilateral exchange rates of South Africa's three largest trading partners (the eurozone, the US and Japan). The bilateral exchange rates are weighted by export trade weights.

c. The nominal exchange rate steady state is estimated using the Purchasing Power Parity (PPP) condition, which links the depreciation of the nominal exchange rate to the inflation differential between South Africa and abroad. Given that the real effective exchange rate (REER) depreciation is zero at steady state, the nominal exchange rate will therefore depreciate by 2.5% per year in steady state, reflecting the inflation (target) differential between domestic (4.5%) and foreign (2.0%) inflation.

d. The REER is the NEER deflated by the consumer price differential between South Africa and the trade-weighted CPI of the eurozone, the US and Japan.

e. The real exchange rate gap signifies the extent to which the real exchange rate deviates from its estimated equilibrium level. A positive gap shows an overvaluation of the currency, and vice versa.

f. The repo rate at the end of the period refers to the average for the last quarter of the year. The nominal repo rate steady state is calculated as the sum of South Africa's inflation target (4.5%) and the steady state neutral real interest rate (2.5%).

g. The neutral real interest rate (NRIR) is the policy rate, minus inflation, which prevails when the economy is fully in balance, with inflation at target and output at potential. The policy stance is measured as either tight or loose based on whether actual rates are above or below this neutral rate respectively. The steady state NRIR is calculated as the sum of the respective steady states for the G3 NRIR (0.5%), South Africa's risk premium (2.0%) and the change in the REER (0.0%). Before the steady state is reached it is possible for the REER equilibrium to appreciate or depreciate, so this value can have a non-zero value over the medium term. It is nonetheless always zero in the long run.

h. The steady state is the long run value in the model. While model equilibriums can have different values over the medium term, as conditions change, all equilibriums eventually reach a steady state, where they stabilise.

i. The forecast of the current account balance is obtained from the SARB's Core Macroeconometric Model.

j. Shaded areas indicate the forecasts of the Monetary Policy Committee.

k. The figures in brackets represent the previous forecasts of the Monetary Policy Committee.

Foreign sector assumptions

1. **Trading-partner gross domestic product (GDP) growth** is broadly determined using the Global Projection Model (GPM), which is adjusted to aggregate the GDP growth rates of South Africa's major trading partners on a trade-weighted basis. Individual projections are done for the six largest trading partners, namely the eurozone, the United States (US), the United Kingdom (UK), Japan, China and India. Other countries considered, although with small weights, are Brazil, Mexico and Russia. The remaining trading partners are grouped into the 'Rest of Countries' bloc. Since sub-Saharan Africa is also a major trading region for South Africa (but does not have a bloc in the GPM), it is modelled separately and then combined with the aggregate of all the countries in the GPM to make up total trading-partner growth.

2. As with GDP growth, the **output gap** is determined using the GPM and is adjusted in a similar way. The output gap is driven by a combination of country-specific domestic factors, external factors and financial-real linkages (beyond interest rate and exchange rate effects). Domestic factors include expectations of future demand and medium-term interest rates. External factors include exchange rate impacts on demand, direct spillovers through trade with trading-partner countries and foreign demand.

3. The **commodity price index** is a weighted aggregate price index of the major South African export commodities.

4. The **Brent crude oil price** is expressed in US dollars per barrel. The assumption incorporates supply and demand dynamics as well as oil inventories (of all grades). The assumption is also informed by projections from the US Energy Information Administration, the Organization of the Petroleum Exporting Countries (OPEC) and Reuters.

5. **World food prices** is the composite food price index of the United Nations (UN) Food and Agriculture Organization (FAO) in US dollars. It is weighted using average export shares and represents the monthly change in the international prices of a basket of five food commodity price indices (cereals, vegetable oil, dairy, meat and sugar). World food price prospects incorporate selected global institution forecasts for food prices and imbalances from the anticipated trend in international food supplies relative to expected food demand pressures.

6. **International consumer prices** are also broadly determined using the GPM. The index is an aggregate of the consumer price indices of the eurozone, the US and Japan, weighted by their relative trade shares. Consumer prices are determined for each of these economies by accounting for inflation expectations, demand pressures and pass-through from changes in the relevant exchange rate. Other institutional forecasts for international consumer prices are also considered.

7. **International policy interest rates** are again broadly determined using the GPM. Interest rates are a weighted average of the policy rates of the eurozone, the US and Japan. They are individually determined by a 'Taylor-type' monetary policy rule. The communications of the relevant central banks and other institutional forecasts are also considered.

Domestic sector assumptions

1. The electricity price is an administered price measured at the municipal level with a weight of 3.63% in the headline consumer price index (CPI) basket. Electricity price adjustments generally take place in the months of July and August of each year, and the assumed pace of increase over the forecast period reflects the multi-year price determination agreement between Eskom and the National Energy Regulator of South Africa (NERSA), with a slight adjustment for measurement at the municipal level.

2. Fuel taxes and levies are the total domestic taxes and costs included in the price of fuel paid at the pump. They include the Road Accident Fund (RAF) levy, the fuel levy, retail and wholesale margins, the slate levy and other minor levies. The two major taxes, which are set by the Minister of Finance in the annual National Budget, are the RAF levy and the fuel levy. The income generated by the RAF levy is utilised to compensate third-party victims of motor vehicle accidents, while the fuel levy is used to provide funding for road infrastructure.

3. Potential growth is derived from the South African Reserve Bank's (SARB) semi-structural potential output model. The measurement accounts for the impact of the financial cycle on real economic activity, and introduces economic structure via the relationship between potential output and capacity utilisation in the manufacturing sector (*SARB Working Paper Series No. WP/18/02*).

4. The midpoint of the inflation target range is 4.5%. The official inflation target range is 3–6%.

5. The neutral real interest rate (NRIR) is the interest rate consistent with stable inflation and output in line with the economy's potential. This variable is the basis for judging whether a given policy stance is expansionary, contractionary or neutral.

Glossary

Advanced economies: Advanced economies are countries with high gross domestic product (GDP) per capita, diversified exports and close integration into the global financial system.

Balance of payments: This is a record of transactions between the home country and the rest of the world over a specific period of time. It includes the current and financial accounts. See also 'Current account' below.

Brent crude: Brent crude is a light and sweet blend of oil from five different fields in the North Sea. The price of Brent crude is one of the benchmark oil prices in international markets.

Budget deficit: A budget deficit indicates the extent to which government expenditure exceeds government revenue.

Business and consumer confidence: These are economic indicators that measure the level of optimism about the economy and its prospects among business managers and consumers.

Commodities: Commodities can refer to energy, agriculture, metals and minerals. Major South African-produced commodities include platinum and gold.

Consumer price index (CPI): The CPI provides an indication of aggregate price changes in the domestic economy. The index is calculated using a number of categories forming a representative set of goods and services bought by consumers.

Core inflation: Core generally refers to underlying inflation, excluding the volatile elements (e.g. food and energy prices). The SARB's forecasts and discussions refer to headline CPI excluding food, non-alcoholic beverages (NAB), fuel and electricity prices.

Crude oil price: This is the United States (US) dollar price per barrel of unrefined oil. See also 'Brent crude' above.

Current account: The current account of the balance of payments consists of net exports (exports less imports) in the trade account as well as the services, income and current transfers.

Emerging markets: Emerging markets are countries with low to middle income per capita. They are advancing rapidly and are integrating with global (product and capital) markets.

Exchange rate depreciation (appreciation): Exchange rate depreciation (appreciation) refers to a decrease (increase) in the value of a currency relative to another currency.

Exchange rate pass-through: This is the effect of exchange rate changes on domestic inflation (i.e. the percentage change in domestic CPI due to a change in the exchange rate). Changes in the exchange rate affect import prices, which in turn affect domestic consumer prices and inflation.

Forecast horizon: This is the future period over which the SARB generates its forecasts, typically between two and three years.

Gross domestic product (GDP): GDP is the total market value of all the goods and services produced in a country. It includes total consumption expenditure, capital formation, government consumption expenditure and the value of exports less the value of imports.

Gross fixed capital formation (investment): The value of acquisitions of capital goods (e.g. machinery, equipment and buildings) by firms, adjusted for disposals, constitutes gross fixed capital formation.

Headline consumer price index (CPI): Headline CPI refers to CPI for all urban areas, as measured on a monthly basis by Statistics South Africa (Stats SA). Headline CPI is a measure of price levels in all urban areas. The 12-month percentage change in headline CPI is referred to as 'headline CPI inflation' and reflects changes in the cost of living. This is the official inflation measure for South Africa.

Household consumption: This is the amount of money spent by households on consumer goods and services.

Inflation (growth) outlook: This outlook refers to the evolution of future inflation (growth) over the forecast horizon.

Inflation targeting: This is a monetary policy framework used by central banks to steer actual inflation towards an inflation target level or range.

Monetary policy normalisation: This refers to the unwinding of an unusually accommodative monetary policy. It could also mean adjusting the economy's policy rate towards its real neutral policy rate.

Neutral real interest rate (NRIR): The NRIR is the level at which the real interest rate will settle once the output gap is closed and inflation is stable.

Nominal effective exchange rate (NEER): The NEER is an index that expresses the value of a country's currency relative to a basket of other (trading-partner) currencies. An increase (decrease) in the NEER indicates a strengthening (weakening) of the domestic currency with respect to the selected basket of currencies. The weighted average exchange rate of the rand is calculated against 20 currencies. The weights of the five major currencies are as follows: the euro (30.68%), the Chinese yuan (24.53%), the US dollar (10.56%), the Japanese yen (4.95%) and the Indian rupee (4.85%). Index: 2015 = 100. See also ‘Real effective exchange rate’ below.

Output gap/potential growth: Potential growth is the rate of GDP growth that could theoretically be achieved if all the productive assets in the economy were employed in a stable inflation environment. The output gap is the difference between actual growth and potential growth, which accumulates over time. If this is negative, then the economy is viewed to be underperforming and demand pressures on inflation are low. If the output gap is positive, the economy is viewed to be overheating and demand pressures are inflationary.

Policy rate: A policy rate is the interest rate used by a central bank to implement monetary policy.

Productivity: Productivity indicates the amount of goods and services produced in relation to the resources utilised in the form of labour and capital.

Real effective exchange rate (REER): The REER is the NEER adjusted for inflation differentials between South Africa and its main trading partners. See also ‘Nominal effective exchange rate’ above.

Repurchase (repo) rate: This is the policy rate that is set by the Monetary Policy Committee (MPC). It is the rate that commercial banks pay to borrow money from the SARB.

Real repo rate: This is the nominal repo rate, as set by the MPC, adjusted for expected inflation.

Terms of trade: This refers to the ratio of export prices to import prices.

Unit labour cost (ULC): A ULC is the labour cost to produce one ‘unit’ of output. This is calculated as the total wages and salaries in the non-agricultural sector divided by the real value added at basic prices in the non-agricultural sector of the economy.

Abbreviations

BER	Bureau for Economic Research
BFP	basic fuel price
BVAR	Bayesian vector autoregression
CIT	corporate income tax
CPI	consumer price index
EAF	energy availability factor
EBB	Energy Bounce-Back (Loan Guarantee scheme)
ECB	European Central Bank
FATF	Financial Action Task Force
Fed	Federal Reserve
FRN	floating rate note
FX	foreign exchange
G3	Group of Three
GDE	gross domestic expenditure
GDP	gross domestic product
GFC	global financial crisis
GVA	gross value added
IGC	International Grains Council
IMF	International Monetary Fund
Jibar	Johannesburg Interbank Average Rate
LEX	large exposures framework
MPC	Monetary Policy Committee
MPIF	monetary policy implementation framework
MPR	*Monetary Policy Review*
MW	megawatt
NAB	non-alcoholic beverages
NERSA	National Energy Regulator of South Africa
NHS	non-housing services
non-comps	non-competitive tenders
NTSDA	National Treasury Sterilisation Deposit Account
OCGT	open cycle gas turbine
OER	owners' equivalent rent
OPEC	Organization of the Petroleum Exporting Countries
PA	Prudential Authority
PIT	personal income tax
QPM	Quarterly Projection Model
repo	repurchase (rate)
SAGB	South African government bond
SARB	South African Reserve Bank
SIT	services, income and transfer (account)
SST	sea surface temperature
Stats SA	Statistics South Africa
WEO	*World Economic Outlook*
UK	United Kingdom
ULC	unit labour cost
US	United States
VAT	value-added tax