

# MONETARY POLICY REVIEW

APRIL 2020



SOUTH AFRICAN RESERVE BANK





© South African Reserve Bank

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without fully acknowledging the *Monetary Policy Review* of the South African Reserve Bank as the source. The contents of this publication are intended for general information only and are not intended to serve as financial or other advice. While every precaution is taken to ensure the accuracy of information, the South African Reserve Bank shall not be liable to any person for inaccurate information or opinions contained in this publication.

Enquiries relating to this *Monetary Policy Review* should be addressed to:

Head: Economic Research Department  
South African Reserve Bank  
P O Box 427  
Pretoria 0001  
Tel. +27 12 313 3668

[www.resbank.co.za](http://www.resbank.co.za)

ISSN: 1609-3194

Produced by the Publishing Section of the South African Reserve Bank



SOUTH AFRICAN RESERVE BANK

**MONETARY POLICY REVIEW** APRIL 2020

# 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 public understanding of the objectives and conduct of monetary policy. The *MPR* covers domestic and international developments that affect the monetary policy stance. In normal circumstances, the *MPR* is presented by senior officials of the SARB at monetary policy forums held in major centres across South Africa. However, this particular *MPR* appears during the national COVID-19 lockdown, which has forced the cancellation of these forums. As an alternative, questions about this document may be directed to Marlene Hugo, at [marlene.hugo@resbank.co.za](mailto:marlene.hugo@resbank.co.za).





# Contents

Executive summary and overview of the policy stance .....	1
Global economy: new decade, new crisis .....	8
Financial market developments: a riskier country in a riskier world .....	12
Real economy: low growth and a new shock .....	17
Price developments: starting at the midpoint, ending at the midpoint.....	26
Summary .....	38
<b>Boxes</b>	
Box 1 COVID-19 and monetary policy.....	3
Box 2 South Africa's term-premium shock.....	16
Box 3 What is different about this downswing? .....	20
Box 4 The fiscal impact on growth.....	24
Box 5 Powerless? Monetary policy and potential growth .....	25
Box 6 Measuring public sector inflation .....	35
Box 7 Unpacking the 2019 inflation forecast errors.....	36
<b>Statements issued by Lesetja Kganyago, Governor of the South African Reserve Bank</b>	
Statement of the Monetary Policy Committee 21 November 2019.....	40
Statement of the Monetary Policy Committee 16 January 2020 .....	44
Statement of the Monetary Policy Committee 19 March 2020 .....	48
Glossary .....	54
Abbreviations .....	56

# Having monetary space, and using it

## Executive summary and overview of the policy stance

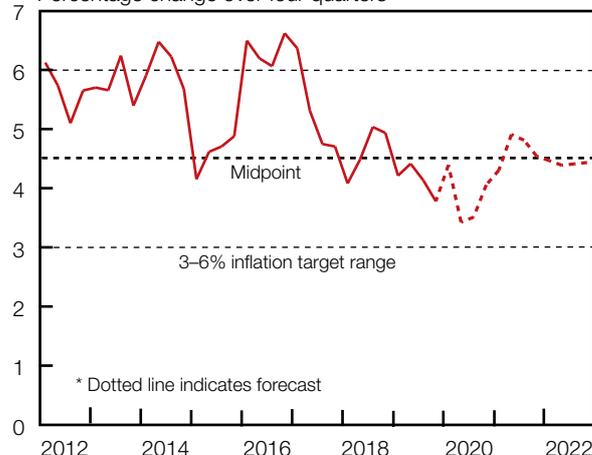
The COVID-19 pandemic is the biggest disruption to the global economy since the bankruptcy of Lehman Brothers in 2008. The South African Reserve Bank has space to respond, given that inflation is projected under 4.5% this year, and is likely to stay well within the target range over the medium term. Accordingly, the Monetary Policy Committee lowered the repurchase rate by a full percentage point in March. Alongside January's quarter-point cut, which predated the outbreak but which was also premised on lower inflation and lower growth, this brings the repurchase rate to a six-year low. Monetary stimulus can help mitigate the economic costs of the COVID-19 shock, by supporting the spending power of firms and households. South Africa, however, suffers from significant, pre-existing growth constraints. Better long-term growth prospects will therefore require a range of interventions, many of them outside the domain of the central bank.

Global growth slowed to a post-crisis low of 3% in 2019, and will decelerate further in 2020. The COVID-19 outbreak has severely reduced output in the first quarter of the year, and the disruption will intensify in the second quarter. After that, the outlook is uncertain, but most analysts expect a rebound which will push up growth by 2021, although more adverse scenarios are conceivable. In China, where the outbreak began, the economy likely contracted in quarter-on-quarter terms at the start of the year, but is now recovering. By contrast, in the euro area and the United States (US) – the other largest blocs in the global economy – the disease effects only became widespread towards the end of the first quarter, with the turning point not yet in sight. A number of other large economies have also locked down, often pre-emptively, which is prudent but will massively reduce economic activity in the short term.

In the major economies, monetary policies have become even more stimulative. In particular, the US Federal Reserve (Fed) has lowered its policy rate to just above 0%, completely unwinding the interest rate normalisation of 2015–2018, and restarted quantitative easing. Similarly, the Bank of England (BoE) has cut interest rates to almost zero, while the European Central Bank (ECB) has expanded its quantitative easing programme and established a new asset-purchase facility. Inflation in these economies is likely to slow further this year, having already been below targets in 2019 (at 1.5% in the US, 1.8% in the United Kingdom (UK), and 1.3% in the euro area). Advanced economy central banks are now once again all encumbered by the zero lower bound, which prevents interest

Headline inflation\*

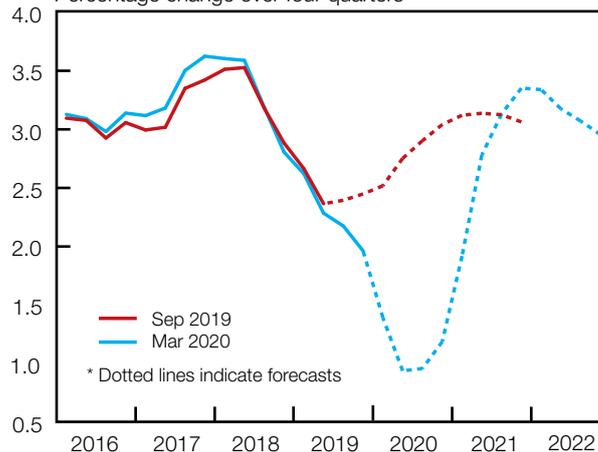
Percentage change over four quarters



Sources: Stats SA and SARB

Growth in South Africa's major trading partners\*

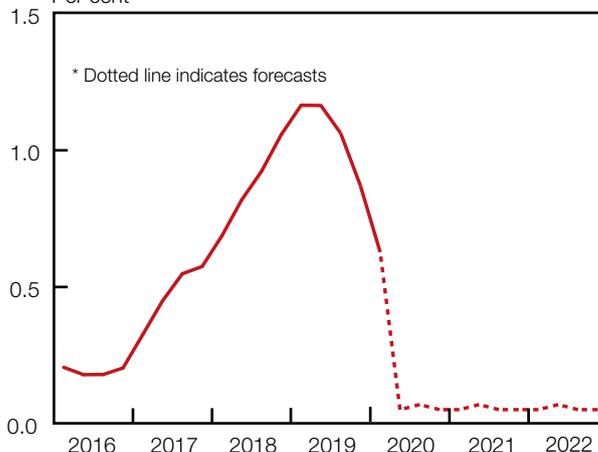
Percentage change over four quarters



Source: SARB

G3 interest rates\*

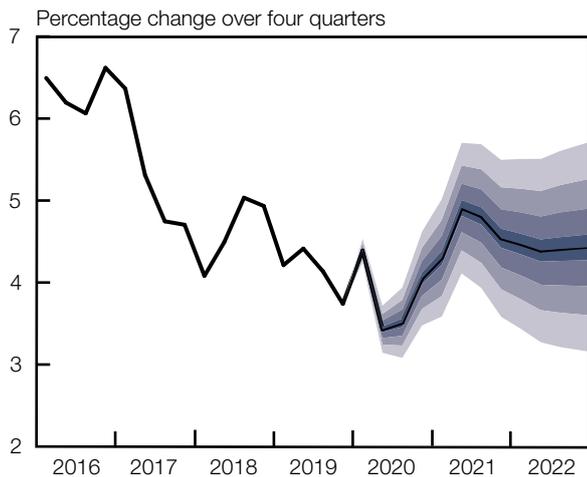
Per cent



Source: SARB

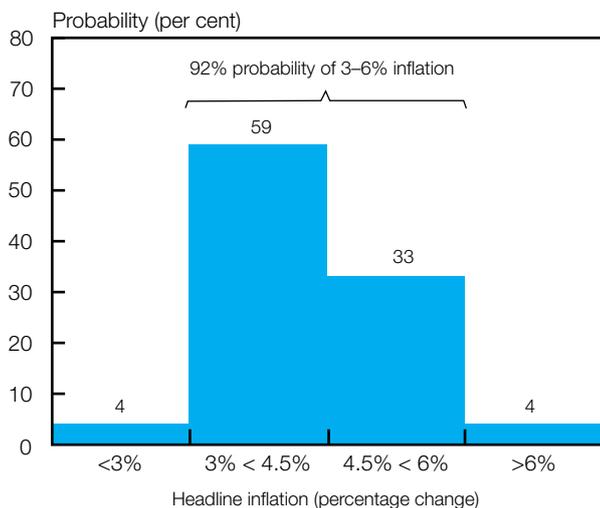


### Headline inflation\*



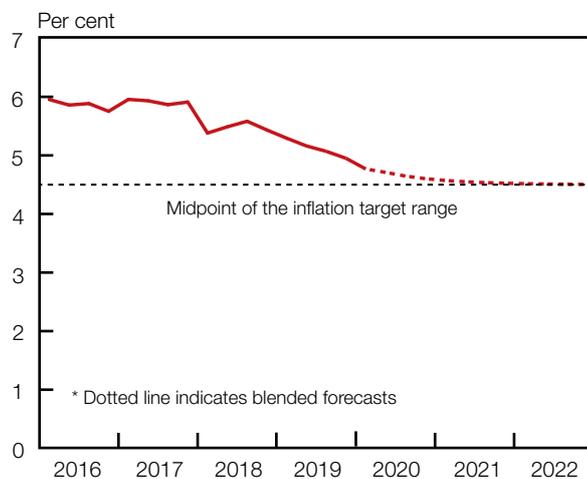
\* The bands around the central projection show confidence intervals of 10%, 30%, 50% and 70%  
 This chart shows seasonally adjusted data, as used in the QPM  
 Sources: Stats SA and SARB

### Inflation forecast probabilities



Source: SARB

### Two-year-ahead inflation expectations\*



Sources: BER and SARB

rates from being lowered too far into negative territory. In the emerging markets, by contrast, interest rates have not dipped to zero and inflation has not persistently undershot targets, leaving these central banks with more policy space.

In South Africa, 2019 inflation came out well below expectations, ultimately averaging 4.1% for the year. This was a rare instance of inflation in the bottom half of the target range: since 2010, monthly inflation has been at or above the 4.5% midpoint of the target range for 77% of the time. Notable contributors to this relatively low inflation rate were food prices, which remained below longer-run averages, as well as housing inflation, which decelerated to an all-time low of 2.2% in December. (See Box 7 on page 36 for a discussion of the 2019 inflation forecast errors.) Inflation picked up temporarily at the end of the year, as anticipated, on base effects from oil price weakness the year before. The most recent inflation prints have been 4.5% for January and 4.6% for February.

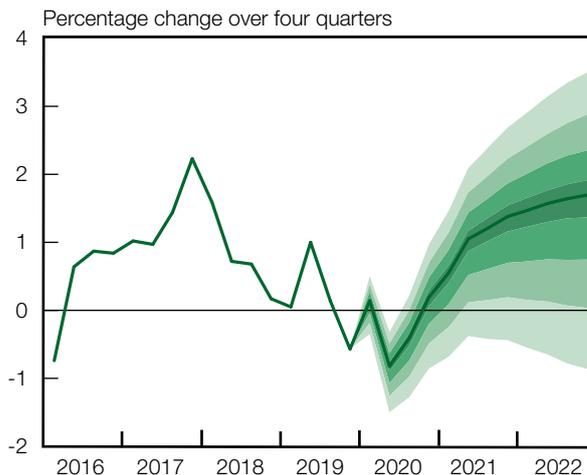
Inflation is expected to remain well contained within the inflation target range across the forecast horizon. The most recent Monetary Policy Committee (MPC) forecasts show inflation in the bottom half of the target range again this year, averaging 3.8%, before recovering to 4.6% in 2021 and 4.4% in 2022. The main driver of low inflation this year is fuel prices, following a collapse in world oil prices. Weaker demand is also exerting downward pressure on inflation, partly offset by the more depreciated exchange rate. The distribution of risks to this forecast, as captured in the inflation fan charts, indicates a high probability that inflation will be within the target range throughout this period, with 92% of the probability distribution between 3% and 6%. The chance of target misses is quite small, with 4% of the distribution above the upper bound and 4% under it, over the forecast period (2020–2022). The chance of a target undershoot is marginally higher in 2020, however, with 5% of the distribution under the lower bound of the target range. (Note that these probabilities refer to quarterly inflation outcomes; the chances of target misses in individual months are higher.)

Inflation expectations are well within the target range, having declined steadily in recent years. The average two-year-ahead expectation measure of the Bureau for Economic Research (BER) is down to 4.8% as of the latest survey, from around 6% in 2016, while current-year expectations have fallen to 4.4%, a 14-year low. The COVID-19 outbreak will provide a test of whether expectations are resistant to shocks, helping reveal how firmly they are anchored. For the time being, however, it is clear that expectations are better positioned than they were historically, because they are no longer close to, or above, the top of the target range. This means the South African Reserve Bank (SARB) has monetary policy space at a moment of crisis, which was a major objective of the strategic initiative, begun in 2017, to anchor expectations closer to 4.5%.

Gross domestic product (GDP) growth has been feeble. Output expanded by just 0.2% last year, the lowest rate of growth since the global financial crisis. The primary and secondary sectors were particularly weak, principally due to inadequate rainfall and electricity shortages. The tertiary sector, by contrast, posted modest gains over the year, expanding by 1.3%. This sustained a pattern that has prevailed since at least 2016, in which the tertiary sector delivers narrowly positive growth, while the other sectors are volatile and drive fluctuations in the headline growth rate.

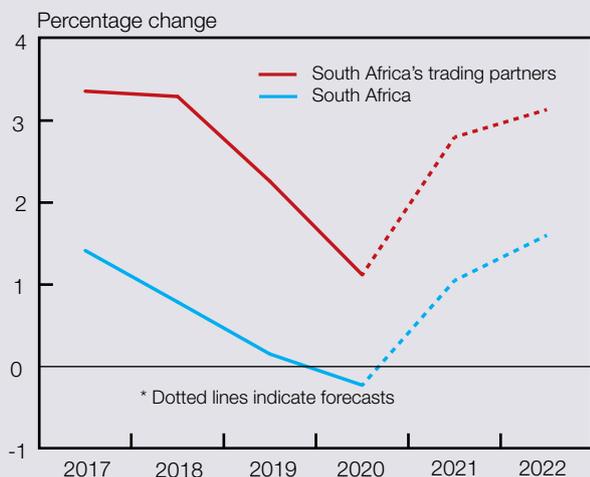
The COVID-19 outbreak will cause the economy to contract this year. The current-year growth forecast was -0.2% as of March, with output declining in the first and the second quarters. This forecast predated government's decision to lock down the economy, meaning it is probably too optimistic. More recent work suggests 2020 growth will be in a range of -2% to -4%, with downside risks should the lockdown be extended, or if the global economy weakens more than currently projected. Further out, there is limited scope for a rebound, but growth is now unlikely to exceed 1% in 2021. South Africa was already in recession prior to the COVID-19 shock, and the situation has become more challenging since. The upside risk to this forecast, however, is that a deeper contraction this year would permit a stronger rebound in 2021.

### Real GDP growth\*



\* The bands around the central projection show confidence intervals of 10%, 30%, 50% and 70%. This chart shows seasonally adjusted data, as used in the QPM. Sources: Stats SA and SARB

### South African versus trading-partner real GDP growth\*



Source: SARB

### Box 1 COVID-19 and monetary policy

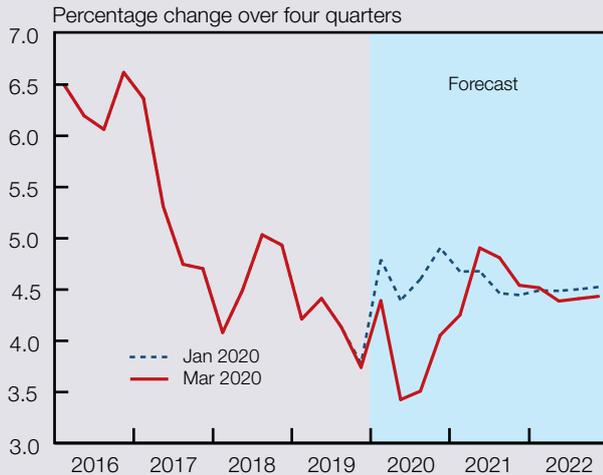
For the March Monetary Policy Committee (MPC) meeting, the South African growth forecast was lowered to -0.2% for 2020, from 1.2% as of the January MPC meeting. Of this revision, approximately half came from COVID-19. In other words, the 2020 growth forecasts would have been lower than they were in January even without the pandemic, mainly due to weak data outcomes over the past two months. The MPC judged that risks to this forecast lay on the downside, an assessment subsequently vindicated by the country-wide lockdown announced the week after the MPC. Updated estimates show the economy contracting by around 2% to 4% in 2020, although these projections are tentative.

The March MPC forecasts marked growth among South Africa's trading partners down to 1.1% for 2020, from 2.7% as of the January MPC meeting. These forecasts predated lockdown measures in the United Kingdom, most euro area countries (except Italy), much of the United States, and also South Africa's regional neighbours. It is now likely trading-partner growth will be around -1% this year. Growth is still expected to rebound to 2.8% next year.

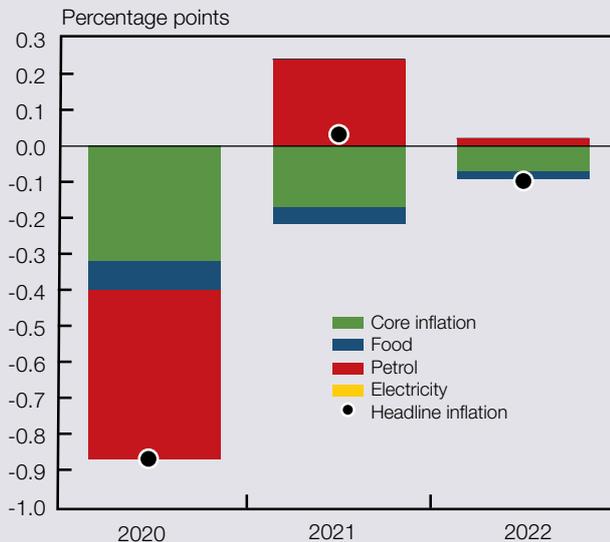
The March MPC had a lower inflation outlook, largely because of the pandemic, although a downside inflation surprise in January also contributed. The headline inflation projections were 3.8%, 4.6% and 4.4% for 2020, 2021 and 2022 respectively, while core was at 3.9%, 4.3% and 4.4% for those three years. These numbers will probably change less than the March MPC growth projections, with some



## Headline inflation



## Changes in the headline inflation forecast between January and March 2020



subsequent developments pushing prices down (oil, the output gap) but others pushing them up again (primarily the exchange rate).

- Fuel prices were the main reason for the lower inflation forecast in March. The oil price assumptions for the forecast were US\$40.4 per barrel for 2020, slowly recovering to US\$45 per barrel by 2021Q2. Cheaper oil implied fuel price deflation of 5.8% in 2020, relative to an increase of 4.2% projected for the January MPC. However, the recovery in oil prices next year creates a temporary uptick in headline inflation in 2020.<sup>1</sup>
- The inflation forecast was also lowered by a more negative output gap. The March forecast had this gap reaching -2.3% of potential gross domestic product this year, which is larger than it was following the global financial crisis. New estimates suggest a more negative gap, even if some of the lockdown losses are deemed permanent, implying lower potential growth.
- The exchange rate is the main source of upward inflation pressure on the forecast. The March projections assumed the exchange rate would average R15.55 per US dollar this year, up from R14.45 per dollar last year, for a rand undervaluation close to 6% for 2020. The undervaluation is now likely to be larger. However, as per the modelling framework and historical experience, the exchange rate is likely to overshoot and then recover over the medium term. Pass-through is lower than it was historically, which mitigates the inflation threat posed by a weaker rand.
- Crucially, with both headline and core inflation projected in the bottom half of the target range this year, there is space to absorb short-term inflationary pressure.

The major central banks have all loosened policy, with the United States Federal Reserve in particular cutting rates back to zero. For a country like South Africa, which is a net borrower from the world, this creates more policy space. Specifically, in the modelling framework, it lowers the neutral rate. There are some offsetting pressures on neutral because of rising South Africa-specific risk, but the overall neutral is still lower by 0.2 percentage points.

The MPC responded to the COVID-19 outbreak by lowering the repurchase rate (repo rate) by 100 basis points. The forecasts described above were premised on a somewhat higher repo rate, with three 25 basis point cuts spread over 2020 and early 2021. This suggests the policy decision internalised some of the downside risks to the growth outlook, many of which have subsequently materialised.

<sup>1</sup> This posed a problem for the Quarterly Projection Model forecast, because the forward-looking repo rule overlooks most of the lower inflation from cheaper fuel, but sees the upward pressure from the base effect. This reduces the repo rate reaction in the model, a consequence that was discussed in the MPC forecast meeting.

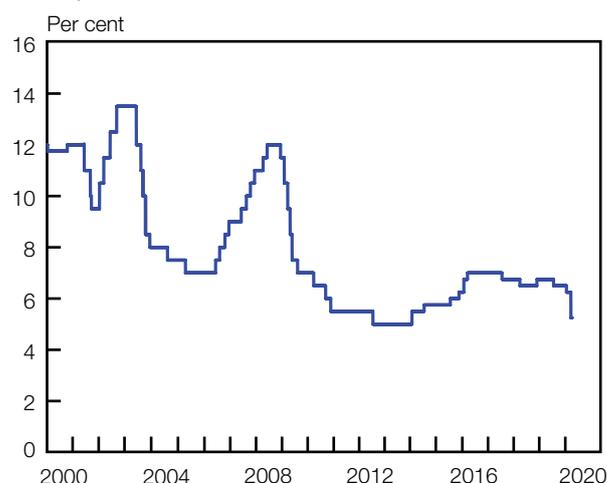
## Overview of the policy stance

This *Monetary Policy Review (MPR)* covers three MPC meetings: in November 2019, January 2020 and March 2020. Over these meetings, the repurchase rate (repo rate) was reduced by 25 basis points at the January meeting and by 100 basis points in March. The repo rate is now at 5.25%, its lowest level since January 2014, when the SARB commenced a hiking cycle. (The all-time repo low is 5%, in force from July 2012 to January 2014.)

The November MPC meeting followed the October release of the *Medium Term Budget Policy Statement (MTBPS)*, which had spelt out a significant deterioration in the fiscal position. National Treasury's projections for the fiscal deficit shifted to around 6% of GDP across the medium term, in contrast to forecasts in the region of 4% in the February 2019 Budget. Although additional burdens on the fiscus had become clear prior to the publication of the *MTBPS*, that document did not announce offsetting measures to stabilise sovereign debt. In response, South Africa's sovereign risk premium spiked higher, and two of the credit rating agencies adopted negative outlooks on the sovereign's rating. In the forecasting framework, these developments fed into the forecast of a higher neutral interest rate, because South Africa had become riskier, as well as a more depreciated exchange rate outlook. However, this upward pressure on rates was mitigated by lower inflation projections as well as a weaker growth forecast, and with it a wider output gap. As a result, the Quarterly Projection Model (QPM) signalled a repo rate cut towards the end of 2020, in contrast to the preceding forecast which had pointed to an unchanged repo rate stance.

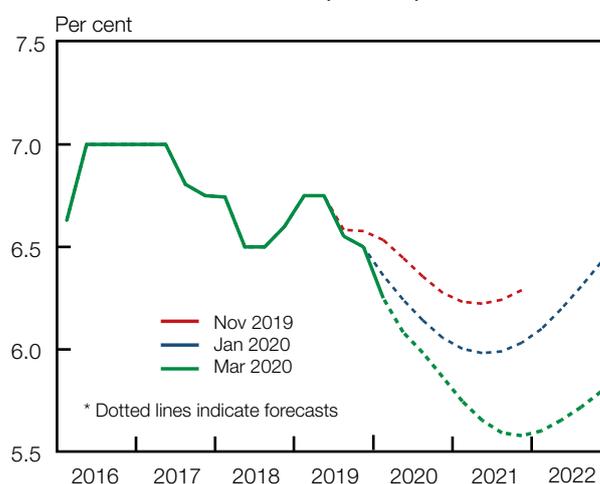
The forecast shifted markedly for the January 2020 MPC meeting, with both growth and inflation data coming in lower than expected. This required downward revisions to the forecast starting point, reducing the 2020 inflation projection from 5.1% to 4.7%, and 2020 GDP growth from 1.4% to 1.2%. Meanwhile, the risk environment shifted in an unexpected direction, with favourable global conditions offsetting South Africa-specific risk factors, allowing the rand to appreciate from around R14.90 to the dollar in November to R14.40 in January. The QPM rate path shifted lower again, with rate cuts in both the first and the fourth quarters of 2020. The MPC chose to reduce rates at this meeting, a move which surprised the majority of analysts and was not fully anticipated by markets (pricing for forward rate agreements (FRAs) indicated approximately a 40% probability of a cut). The rate cut was nonetheless consistent with a standard Taylor-type rule, like that in the QPM, and followed shifts in the data, underscoring the MPC's frequently reiterated data dependence.

Repurchase rate



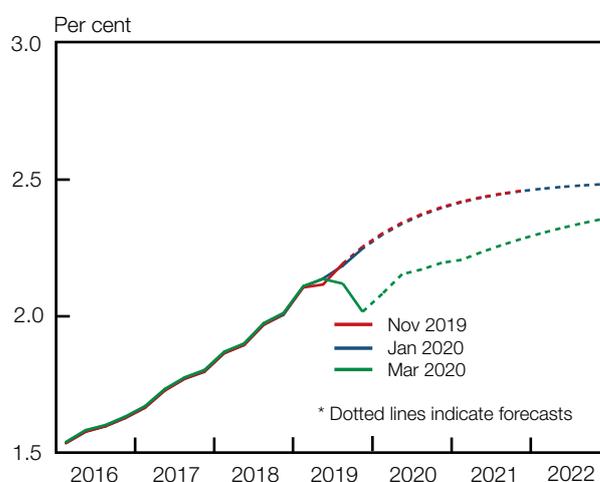
Source: SARB

Evolution of the QPM repo rate path\*



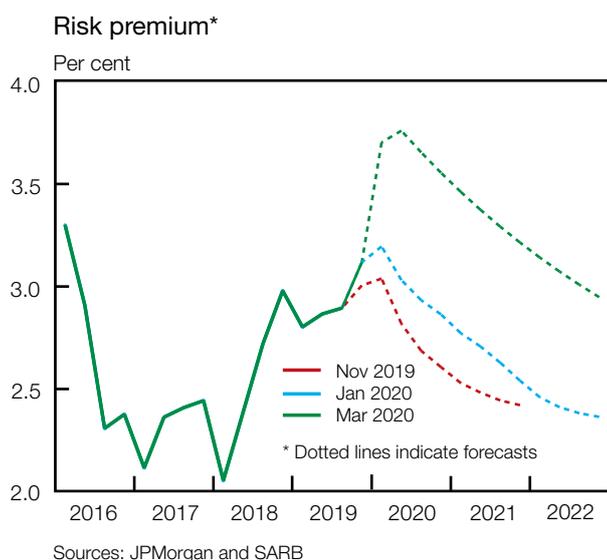
Source: SARB

Real neutral rate\*



Source: SARB





For March, three fundamental changes occurred. The inflation forecast shifted much lower for 2020, well into the bottom half of the 3–6% target range. The growth outlook deteriorated substantially, with the output gap becoming more negative. Finally, global short-term interest rates dropped to zero, pulling down South Africa’s neutral rate (despite a partial offset from higher domestic risk). Most of these changes stemmed from the COVID-19 outbreak, although the effects of this shock were reinforced by new data prints (both GDP and inflation surprised to the downside) as well as a breakdown in cooperation between OPEC<sup>1</sup> and non-OPEC oil producers (which further depressed oil prices).

These circumstances prompted an interest rate cut of 100 basis points, the largest repo adjustment since May 2009. This was significantly larger than analyst expectations,<sup>2</sup> and more than the QPM projections envisioned over the entire forecast period. The scale of the move reflected expectations that the COVID-19 pandemic would have large negative effects, concentrated in the near term. As such, delaying stimulus would risk missing the worst of the crisis. (By analogy, firefighters should aim to arrive before the fire gets going, not when it peaks.) In ordinary circumstances, policy can adjust gradually, pausing to incorporate new data, to steer inflation and output back towards equilibrium levels. This is the basic operating procedure of the QPM, which hardwires an incremental policy response through a large smoothing parameter in the Taylor Rule. The COVID-19 shock, however, threatened a sudden downward shift in South Africa’s economic performance, which merited a more forceful response.

As the COVID-19 pandemic intensified, financial conditions became increasingly stressed, with liquidity strains appearing in various markets by mid-March. In response, the SARB followed up the March MPC decision with measures to meet markets’ increased demands for cash (that is, liquidity). These included holding repo auctions on a daily rather than weekly basis, as well as offering repos for longer timeframes than the usual overnight period. The Standing Facility borrowing and lending rates were adjusted lower, to improve the supply of liquidity in interbank markets and discourage cash hoarding by individual banks. Furthermore, the SARB began expanding its monetary policy portfolio by purchasing government bonds on the secondary market, both to stabilise that market and to inject new cash into the financial system.

1 Organization of Petroleum Exporting Countries

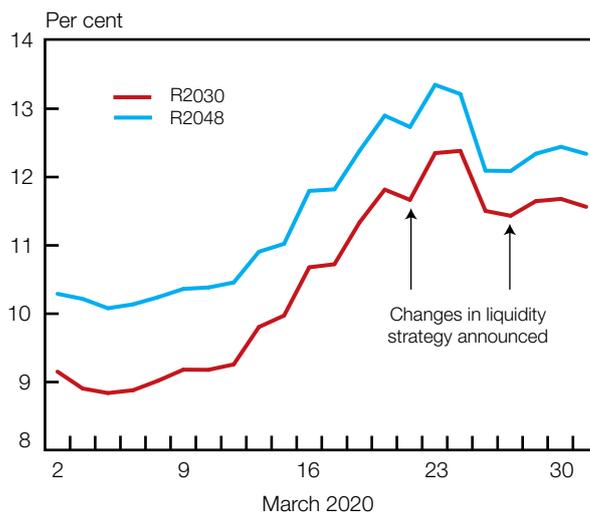
2 Median expectations varied between -25 basis points and -50 basis points, depending on the survey.

This last measure has attracted particular attention because of its resemblance to quantitative easing (QE). It should not be interpreted as QE, however, because: (1) it is not a policy necessitated by the zero lower bound on interest rates, as South Africa's short-term rates are still well above zero; (2) it is not required to prevent deflation, as inflation is unlikely to deviate from the target range over the medium term, let alone fall below zero; and (3) it is not aimed at crowding investors out of the government bond market and into riskier assets, an important QE channel. It should also be remembered that balance sheet expansion in moments of financial stress is a phenomenon dating back hundreds of years, not a 21st century invention.<sup>3</sup>

The interventions described above have improved market functioning, furthering the SARB's financial stability mandate and supporting effective monetary policy transmission. It should be noted, however, that these decisions did not require a meeting of the MPC, and were not intended to replace or amend the policy stance agreed by that Committee.

<sup>3</sup> J Barker, D Bholat and R Thomas, 'Central bank balance sheets: past, present and future', *Bank Underground*, 3 July 2017, available at <https://bankunderground.co.uk/2017/07/03/central-bank-balance-sheets-past-present-and-future/>.

Selected government bond yields



Source: Bloomberg



## Global economy: new decade, new crisis

Global growth reached a decade-low in 2019. A recovery had been anticipated for 2020, but this has been derailed by the COVID-19 outbreak. Although detailed data are not yet available, the global economy is almost certainly in recession already, with China contracting in the first quarter and both the United States and the euro area likely to follow suit in the second. Forecasts at this stage are highly uncertain, but the most likely outcome is that global growth will rebound next year, as the pandemic effects fade. Inflation rates are generally below targets in the advanced economies and well contained in most of the major emerging markets, permitting additional monetary stimulus.

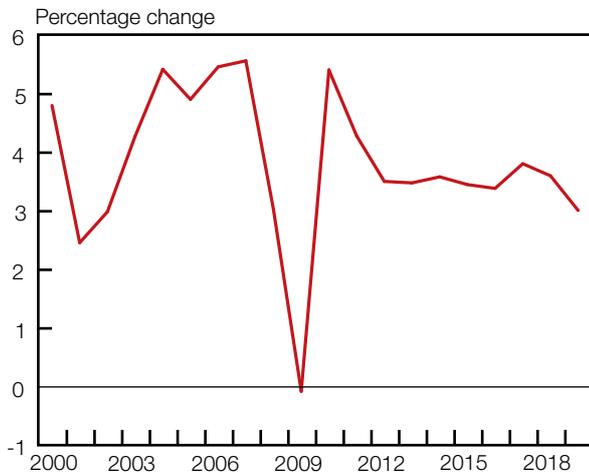
### Global growth and the COVID-19 pandemic

Global growth slowed to just 2.9% in 2019 from 3.6% in 2018, the weakest pace of expansion since the 2008–2009 global financial crisis. The most visible driver of this underperformance was trade policy conflict, particularly between the United States and China: global trade activity contracted by 0.5% in 2019, the worst rate since the 2012 euro area crisis. Manufacturing sectors were harder-hit while the services sectors proved more resilient, which helped to maintain employment growth rates in the advanced economies. Emerging markets, by contrast, continued to underperform, in the context of a persistently strong dollar, heavy debt burdens and a variety of country-specific factors, from financial sector disruptions in India to the after-effects of a sudden stop in Turkey.

By the end of 2019, with the US and China agreeing on a preliminary trade deal – and with some Brexit uncertainty resolved through a decisive UK election – it appeared the global economy was primed for a rebound. The International Monetary Fund’s (IMF) January forecasts looked forward to growth of 3.3% in 2020, followed by 3.4% in 2021. These prospects, however, were destroyed by the COVID-19 outbreak, which began in late 2019 and was a global news story by February 2020. The infographic on the next page sets out the timeline to date, illustrating how rapidly the crisis has escalated.

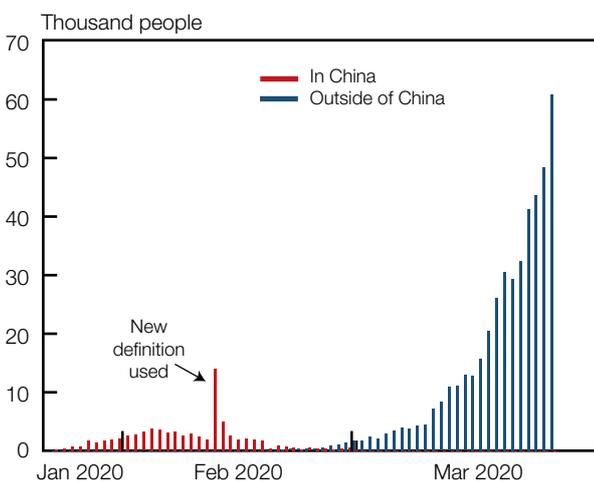
The outbreak originated in China. The number of new cases recorded accelerated from January to mid-February and then began to slow again, fading out almost entirely by early March. Lockdown measures severely interrupted economic activity during the quarter, with the manufacturing Purchasing Managers’ Index (PMI) falling to 40.3 in February (its lowest level on record), industrial production contracting by 13.5% from December, and the official unemployment rate (for urban

#### Global growth



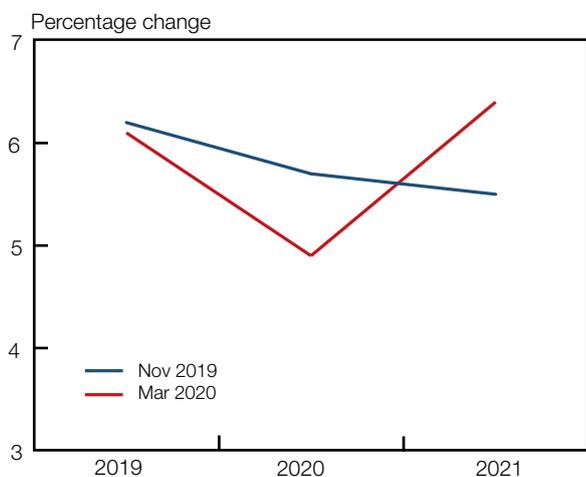
Source: IMF

#### New COVID-19 cases



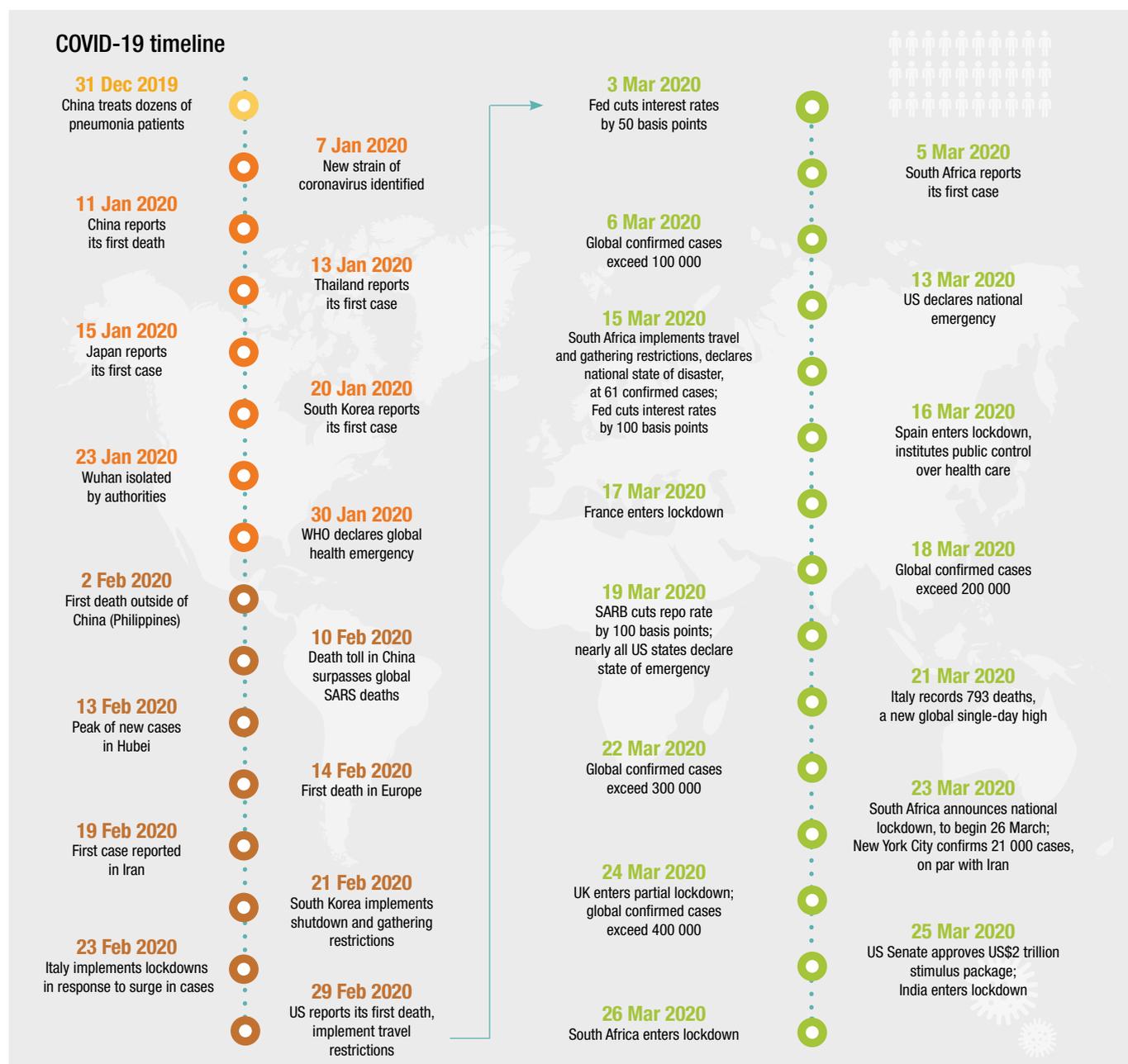
Sources: Johns Hopkins University and SARB

#### Chinese economic growth forecasts



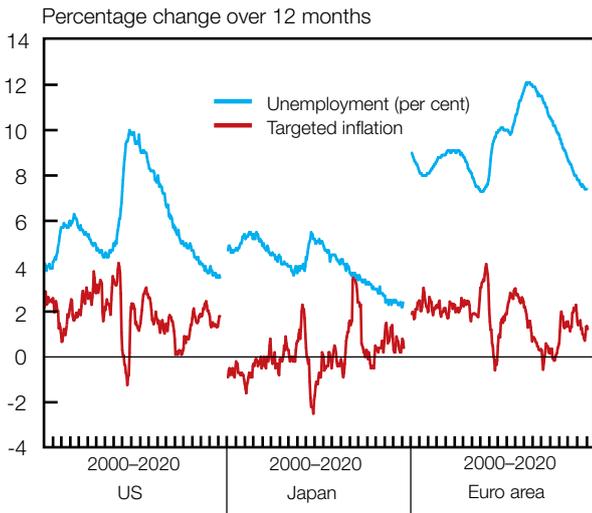
Source: OECD

areas) spiking to 6.2% from 5.3% in January. GDP data are not yet available, but output almost certainly contracted in the first quarter. In sum, China's experience has been one of a large but quite short-lived shock, which is likely to be reversed with the help of policy stimulus – provided the second, global stage of the pandemic does not derail the recovery.



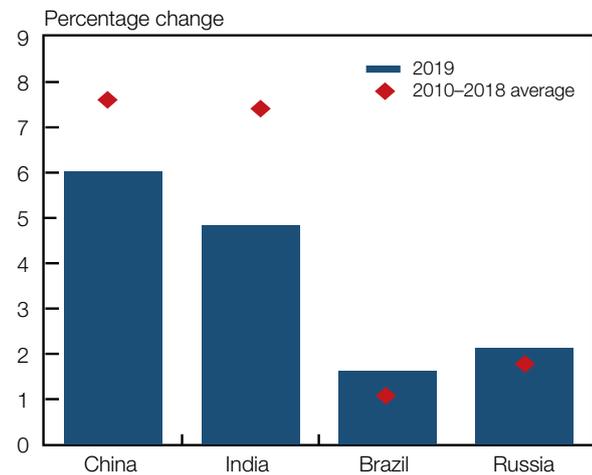
From China, the pandemic spread widely, with Italy and South Korea the next two worst-affected countries as of mid-March. The Italian outbreak necessitated a country-wide lockdown, followed by similar measures in France, more or less guaranteeing that the euro area will suffer a recession. The US, while initially less affected than Asia or Europe, saw infections increase rapidly from mid-February, leading to a restrictions on movement in a number of states. A range of other countries has subsequently adopted partial or complete lockdowns,

### G3 unemployment and inflation



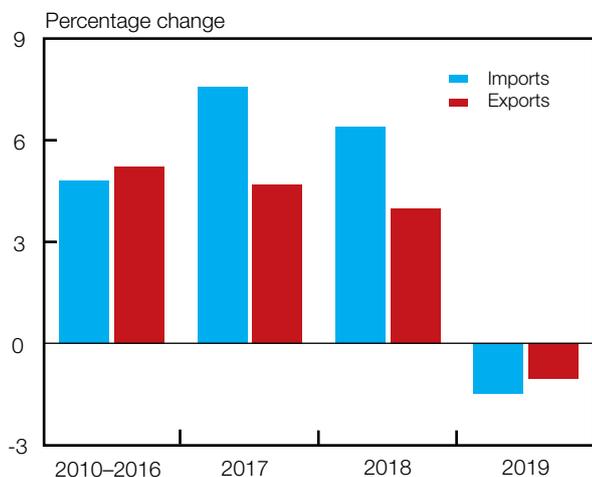
Source: Haver

### Major emerging market growth



Source: Haver

### Trade volumes in emerging markets



Source: CPB Netherlands Bureau for Economic Policy Analysis

with one quarter of the world's population under some form of lockdown by late March. Globally, the worst-affected industries have been those which move or assemble people, particularly airlines, as well as the entertainment, restaurant and tourism sectors. Financial markets have also been highly volatile (as discussed in the following chapter).

## Context

Although the COVID-19 outbreak has imposed a single theme on the global economic narrative, it appeared against a backdrop of diversity, with the US having performed relatively well, the euro area being weaker, and many major emerging markets having already struggled with protracted low growth.

In the US, growth was steady around a trend rate of approximately 2% throughout 2019. US unemployment registered 3.6% in January 2020, a 51-year low, and job growth was unexpectedly robust, with net job gains averaging over 200 000 monthly in the second half of the year and reaching 273 000 jobs added as late as February 2020. By contrast, euro area growth was just 1.2% in 2019, a seven-year low. Japan and the UK also lagged US growth levels, with those economies growing 1% and 1.3% respectively during 2019.

Inflation in the major advanced economies once again fell below central banks' targets in 2019. In the US, targeted inflation averaged 1.4% for the year. It was 1.2% in the euro area and 0.6% in Japan. The UK has had inflation closer to target recently, mainly due to exchange rate depreciation, but the consumer price index (CPI) has nonetheless slowed in 2019, to average 1.8% for the year. Persistently low advanced economy inflation remains an acute challenge to both monetary policy practice and theory, prompting, so far, many hypotheses but as yet no consensus answers.<sup>4</sup>

Emerging market growth disappointed yet again in 2019. India's slowdown intensified, with growth falling to just 4.8% in the year, from 6.8% in 2018. Other major emerging markets, having stagnated through much of the past decade, once again failed to accelerate meaningfully. (For instance, Brazil grew 1.2%, Mexico 0%, and Russia 1.1%.) Meanwhile, China's slowdown persisted, with growth of 6.1% for the year against 6.6% the year before. In this context, and with inflation generally well-behaved, emerging market central banks had been lowering rates, with a total of 53 easing policy during 2019. This trend has since been reinforced by the COVID-19 pandemic, with a new round of easing broadly underway since February.

In sub-Saharan Africa (SSA), some countries grew rapidly, while others continued to struggle with stagnations induced by lower commodity prices and excess debt, among other challenges.

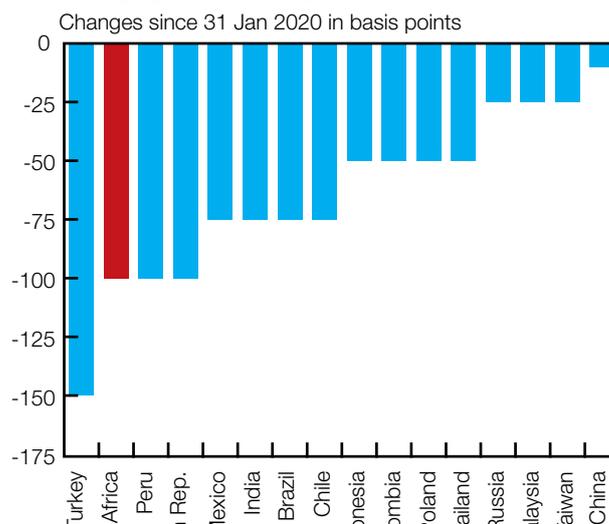
<sup>4</sup> For a review of these hypotheses, see S Belz, D Wessel and J Yellen, 'What's (not) up with inflation?', Hutchins Center on Fiscal and Monetary Policy, The Brookings Institution, January 2020, available at <https://www.brookings.edu/product/explaining-the-inflation-puzzle/>.

The region's three largest economies – South Africa, Nigeria and Angola – all underperformed, with 2019 growth rates of 0.2%, 2.3% and -0.3% respectively. By contrast, the next three biggest economies – Kenya, Ethiopia and Ghana – delivered 2019 growth rates of 5.6%, 7.4% and 7.5% respectively. Strikingly, while growth averages for the SSA region were around 3%, few countries recorded growth around 3%; instead, the distribution was bimodal. South Africa's major regional trade partners have mostly fallen into the worse-performing group, partly because of exposure to South Africa, but also due to domestic factors. Zimbabwe's economy, for instance, contracted by around 7% in 2019, in the context of renewed hyperinflation (official statistics show prices rose 540% for the 12 months following the reintroduction of a domestic fiat currency in February 2019). Meanwhile, Mozambique's growth slowed to a 19-year low of 1.8%, given the shock of two major cyclones in March and April, in addition to ongoing debt troubles. (Mozambique is one of seven countries in the region in debt distress, as classified by the IMF.)

## Conclusion

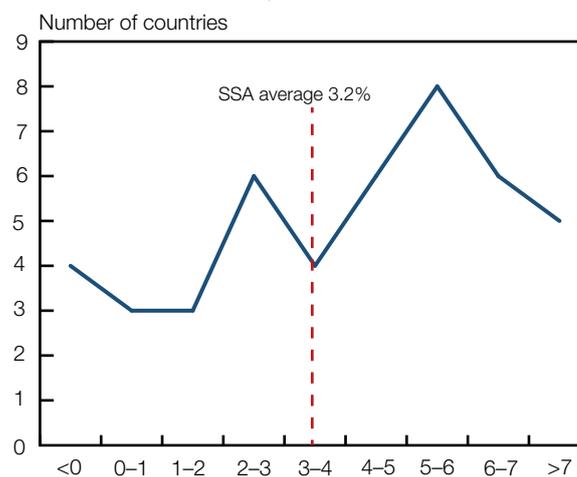
The global economy slowed in 2019, with export-oriented economies generally the hardest-hit. Growth deteriorated further at the start of 2020, mainly due to the COVID-19 outbreak interrupting a global recovery. The baseline forecast assumes this is a temporary shock with a recovery underway from late-2020, helped by fiscal and monetary stimulus. More adverse scenarios are conceivable, however, and the outlook is unusually uncertain. For a range of major emerging markets, including South Africa, this marks yet another delay in a multi-year failure to restart growth – an inauspicious start to a new decade after the serial disappointments of the 2010s.

### Emerging market policy rates



Sources: Haver and SARB

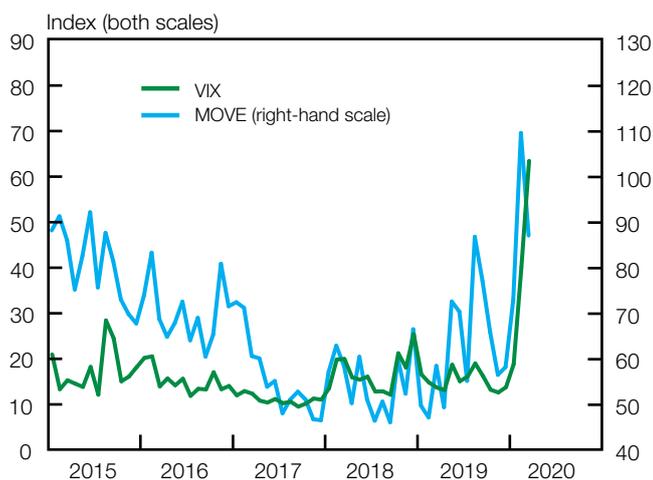
### Distribution of SSA growth for 2019



Sources: IMF and SARB

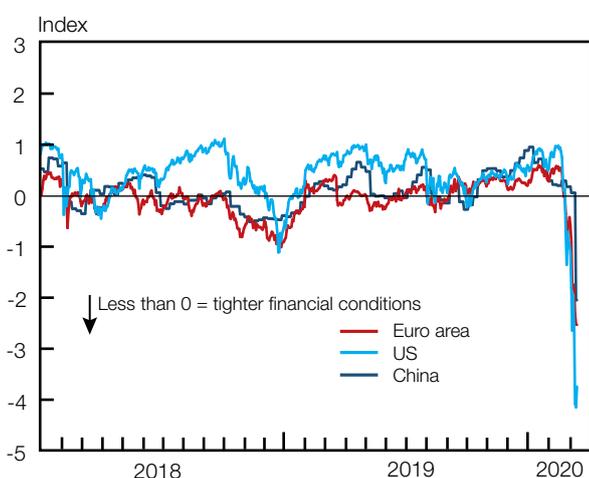


## Volatility indices



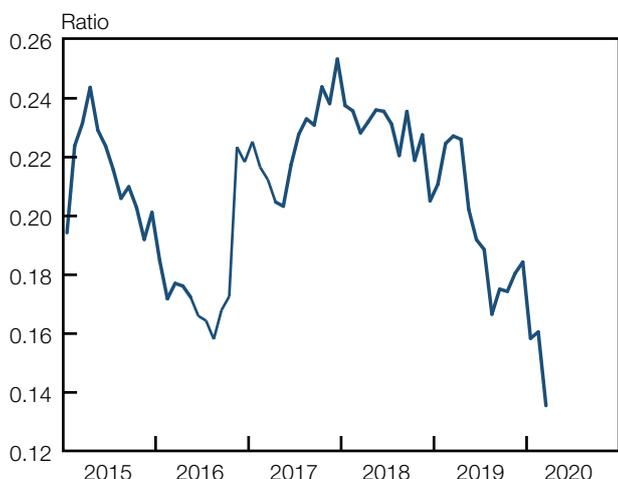
Source: Bloomberg

## Financial conditions



Sources: Bloomberg and SARB

## Copper/gold price ratio



Sources: Bloomberg and SARB

## Financial market developments: a riskier country in a riskier world

The COVID-19 pandemic has caused financial market turmoil on a scale not seen since the 2009 crisis. Risk assets have sold off, while signs of market dislocations have appeared in major financial centres. Central banks in these jurisdictions have implemented massive easing policies, drawing on the tools developed a decade ago. South African assets have followed the global risk-off trend, with the exchange rate falling to record lows, equities declining abruptly, and long-term government interest rates rising. Expectations for short-term rates have fallen, however, consistent with a looser monetary policy stance.

Global asset markets recorded significant gains in 2019, especially in the closing half of the year. The MSCI benchmark for emerging market equities rose 15% during 2019, while developed market equities did even better, returning 25%. (US stocks rose 29%.) Within the fixed-income space, emerging market sovereign bonds outperformed developed market counterparts as risk appetite improved towards the end of the year. The reach for yield also benefitted corporate and high-yield bonds. Most emerging market currencies appreciated versus the US dollar in the final quarter of last year, and the British pound also gained as some Brexit uncertainty lifted.

These trends reversed abruptly in early 2020, as the COVID-19 outbreak spread around the world, followed by an oil price war between OPEC and non-OPEC oil producers. The VIX, a measure of risk aversion, began climbing in February and reached 2008 levels in March, paralleled by the MOVE, which tracks volatility in US Treasury bonds. Safe-haven assets mostly benefitted; the 10- and 30-year US Treasury bond yields, for instance, declined to record lows, with the US Treasury curve entirely below 1% at one point (on 9 March). Core European government bond yields also fell, while spreads between German bond yields and those of riskier euro countries widened. Equities sold off, in both advanced economies and emerging markets, with the MSCI world equity index down almost 30% for the year to date. Similarly, the S&P 500 lost nearly 30% from its February peak, with circuit breakers halting trading on several occasions following falls of 7%, while the MSCI equity index for emerging markets fell over 30% from its January high. February also saw the gold price breach US\$1 600 per fine ounce for the first time since 2013 – a rally which drove the copper-gold ratio to historic lows, reflecting gold's role as a hedge in uncertain times and copper's status as a proxy for real economy activity.



In exchange rate markets, the US dollar weakened momentarily as the Fed lowered rates, which reduced its interest rate differential with other major currencies. It has since benefitted from its status as the world's reserve currency, however, helping the Bloomberg Dollar Index to an all-time high in mid-March. Few other currencies have been so resilient. The UK pound sank to a 35-year low in March, while emerging market currencies retreated to the lowest levels on record (as per the JPMorgan Emerging Market Currency Index).

Policymakers in the major economies have responded to the crisis with a range of measures, both to stimulate their economies and to keep financial markets functioning. In the US, the Fed reduced its policy rate by 1.5 percentage points in a pair of unscheduled meetings, taking it to around zero, and restarted quantitative easing with US\$700 billion of asset purchases. It also opened a variety of borrowing facilities to improve liquidity in exchange for an expanded range of collateral. In China, policymakers implemented stimulus worth approximately 1.2% of GDP, through liquidity measures, tax cuts and a range of other interventions, supplemented by an interest rate cut in late March.<sup>5</sup> Similarly, the ECB expanded its QE programme as well as two bank lending programmes, and introduced a new €750 billion Pandemic Emergency Purchase Programme for government bonds, while leaving interest rates unchanged (the deposit rate was already negative, at -0.5%). The BoE cut Bank Rate to just above zero, released its countercyclical capital buffer (a macroprudential tool used to manage credit growth), and launched a new bank lending scheme. Together, a network of six major central banks<sup>6</sup> also activated foreign currency swap lines, ensuring they could act as lenders of last resort for their respective financial systems, in foreign as well as domestic currency. These measures were subsequently extended to a wider range of central banks, including some large emerging markets (Mexico, Brazil).

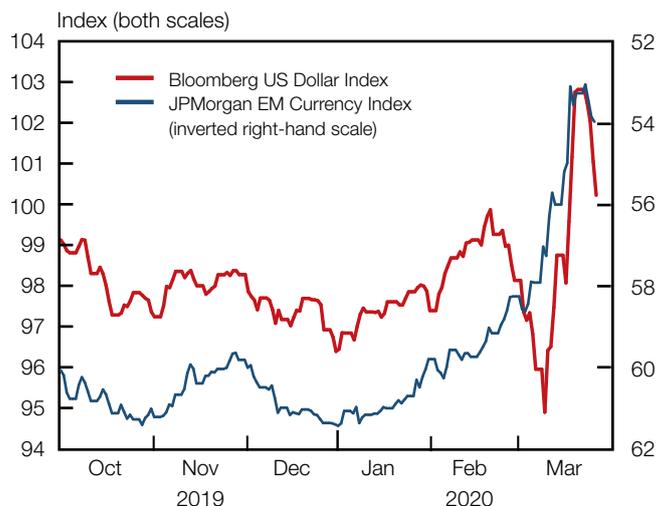
## Domestic financial market developments

The fourth quarter of 2019 delivered a series of domestic disappointments, including renewed electricity load-shedding, a worse fiscal outlook (as announced in the October *MTBPS*), and negative ratings outlooks from Moody's and Standard & Poor's. Despite these factors, the rand outpaced its emerging

5 The 1.2% estimate is drawn from T Wang, N Zhang, J Zhong, A Luo and K Jiang, 3 March 2020, 'Macro keys: how large is China's policy response?', *UBS Global Research*.

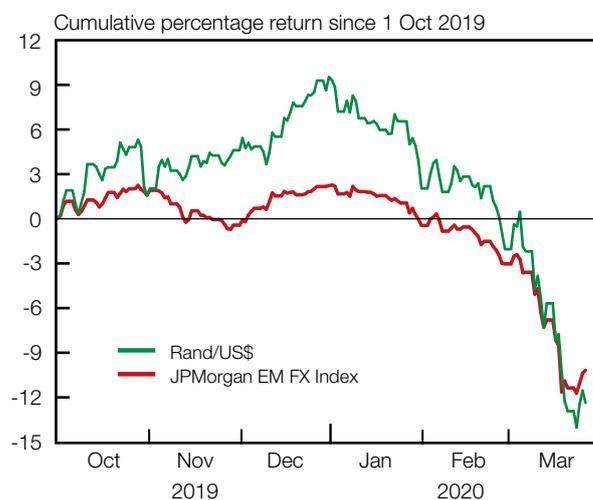
6 The six are as follows: the US Federal Reserve, the ECB, the Bank of Japan, the BoE, the Swiss National Bank and the Bank of Canada.

### US dollar and emerging market exchange rates



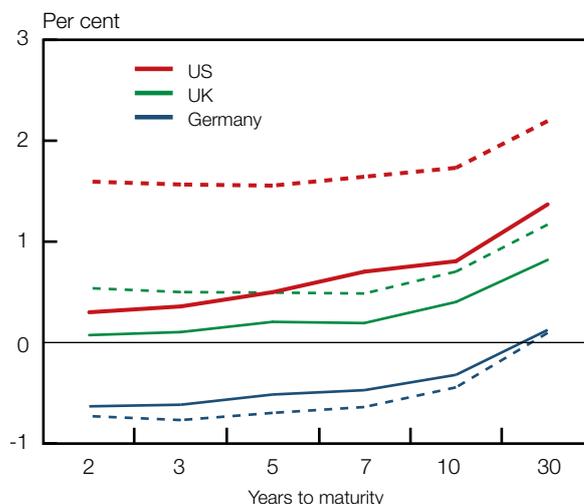
Source: Bloomberg

### Emerging market currencies



Source: Bloomberg

### Developed market bond yield curves\*

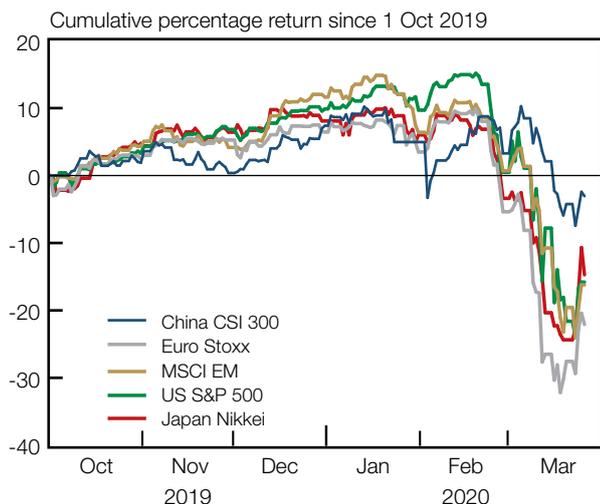


\* Dotted lines reflect October 2019; solid lines reflect 28 March 2020

Source: Bloomberg



### Equity performance



market peers in the fourth quarter, appreciating more than 8% against the dollar, with the bilateral exchange rate nearing R14.00 at some points. On a nominal effective exchange rate (NEER) basis, the rand strengthened over 6% in the fourth quarter of 2019.

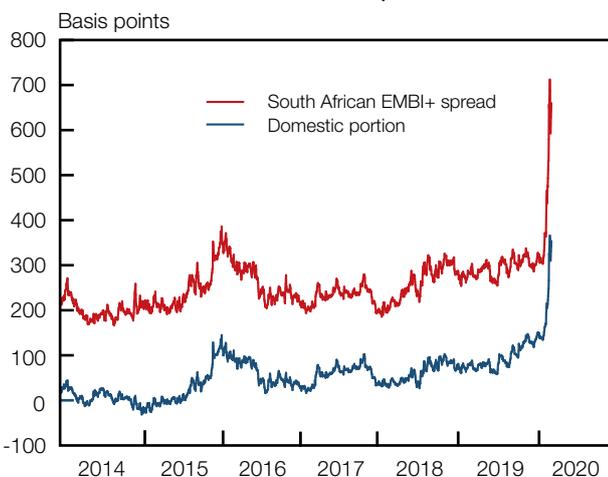
These gains were based on an accommodating global environment rather than domestic strengths, and they evaporated as the global climate changed. With risk aversion spreading in financial markets, the rand depreciated rapidly, passing R17.00 to the dollar in mid-March, and then R18.00 per dollar towards the end of the month, following Moody's downgrade of the sovereign to below investment grade. The local currency's year-to-date performance ranks among the poorest by emerging market standards, with the rand having weakened nearly 22% against the US dollar. (Since the previous *MPR*, the rand has depreciated 14.1%, compared with an emerging market average of 11.1%.)

### Spread: 2-year versus 30-year government bonds



As risk sentiment deteriorated, capital flows out of emerging markets picked up to levels exceeding those seen in 2008, hitting both bond and equity markets. The JSE All-Share Index (Alsi) gave up its late-2019 gains by early February, with losses reaching 30% year-to-date by March. These losses were broad-based across the Alsi sub-indices. Meanwhile, long-term government bond yields rose to over 10%, and the yield curve steepened further. The gap between long-term nominal bond yields and short-term ones is now the widest on record; the 2023 and 2048 bond yields, for instance, are over 500 basis points apart. (On average, the gap between 2- and 30-year bonds has been around 360 basis points over the past five years.)

### South African EMBI+ decomposition



Expectations for short-term interest rates had been shifting lower before the COVID-19 outbreak, and then declined rapidly as the crisis took hold. The November MPC forecast had indicated a repo rate cut in the third quarter of 2020, which FRAs then priced in completely. The January repo rate reduction was only partially priced in, with the FRA market giving the probability as 40%. Following that meeting, markets also began pricing in a second cut in the fourth quarter, in line with the forecast repo rate projection. In February and March, as the pandemic intensified, markets began pricing in a larger pre-emptive cut, nearing 100 basis points by the second quarter of 2020, with short-term rates then expected to rise again by around 25 basis points towards the end of the year. Following the March MPC decision, markets began to anticipate another 50 to 75 basis points of cuts in the second and third quarters, again with some normalisation of rates subsequently.



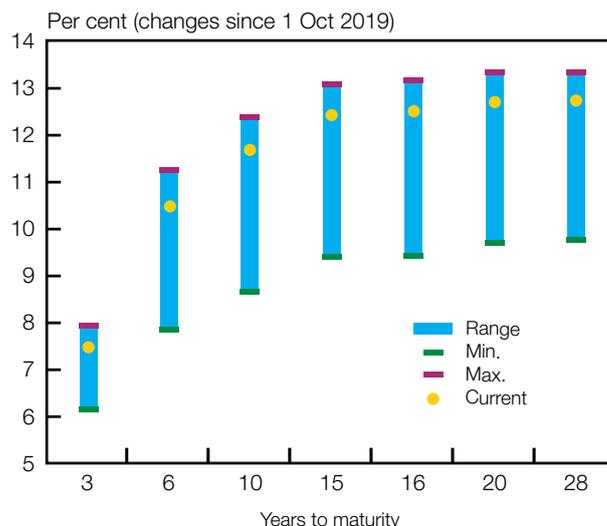
In assessing local asset market developments, it is important to disentangle global factors from local ones. South African assets, especially the rand, are used as proxies for emerging markets more broadly. For this reason, their prices tend to follow and magnify what is happening in wider markets (in financial jargon, they have 'high beta'). But South Africa has idiosyncratic challenges, which also affect market pricing. A decomposition of risk measures (both the EMBI+ and CDS spreads) into these general and idiosyncratic components shows, strikingly, that the South Africa-specific portion had been rising sharply into February, reaching levels last seen during the 'Nenegate' episode of late 2015. The global portion, which attaches to emerging markets in general, then also begins accelerating as the COVID-19 crisis hits. Both the idiosyncratic and the general elements of risk are now unusually elevated.

As the global crisis intensified in mid-March, liquidity strains began to emerge in some domestic funding markets. To facilitate smooth market functioning, the SARB therefore introduced a range of liquidity-enhancing measures, starting the day after the March MPC. These measures have made it easier for banks to get cash, by increasing the number of opportunities to source liquidity from the SARB, and by offering it for longer periods (rather than just overnight). They have also created incentives for banks to lend money on, rather than holding it at the central bank, with a lower and therefore unattractive rate on money deposited back at the SARB. In addition, the SARB has also purchased government bonds in the secondary market, which has expanded liquidity and also moderated abrupt shifts in government bond yields, which appear to have been driven by market malfunctions rather than economic factors. To date, these measures appear to have improved market functioning.

## Conclusion

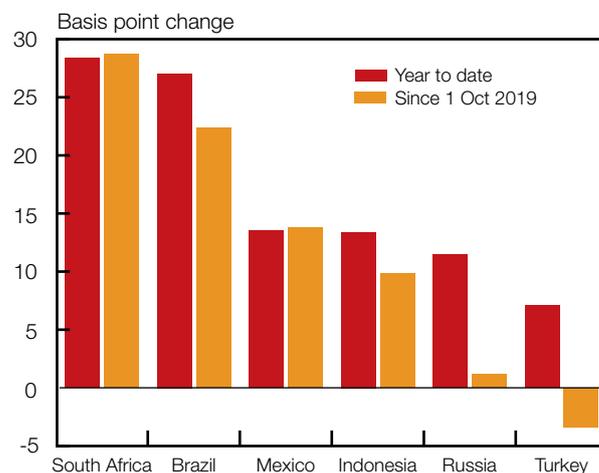
The COVID-19 outbreak has caused turmoil in financial markets, reducing the value of risk assets and driving returns on risk-free assets to new lows. The crisis comes at a moment of vulnerability for South Africa, given a deteriorated fiscal situation and therefore a rising domestic risk profile. Markets have nonetheless understood that the SARB has space to lower interest rates, which has put downward pressure on shorter-term rates even as longer-term borrowing costs have risen.

### Government bond yields



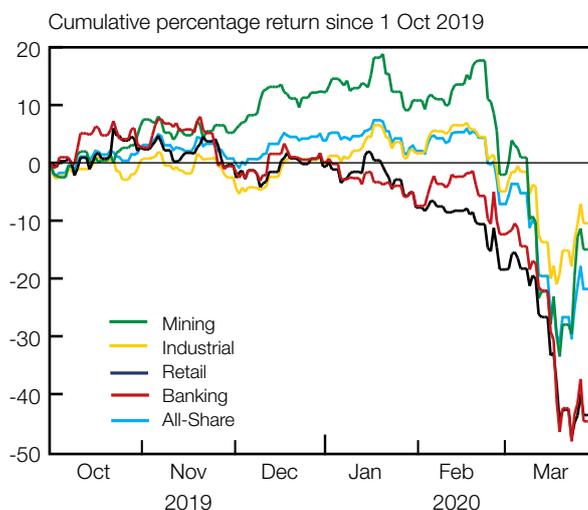
Source: Bloomberg

### 10-year local currency bond yields



Source: Bloomberg

### JSE share prices



Source: Bloomberg



## Box 2 South Africa's term-premium shock

South Africa's long-term borrowing costs have been elevated despite lower inflation expectations and lower short-term interest rates. The benchmark 10-year government bond returned around 9.6% in 2019, compared to an average of 8.7% for the period from the start of 2010 to the end of 2015. As this box demonstrates, upward pressure on long-term rates has been coming from a higher term premium.<sup>1</sup> This likely contributed to disappointing growth outcomes, pre-COVID-19, and will likely remain a challenge when that shock has faded.

A term premium provides compensation for lending long-term instead of short-term. Bond market investors can choose between buying long-dated instruments (like 10-year bonds) and rolling over a series of short-dated instruments (like 3-month Treasury bills) for an equivalent time period. The first approach is riskier because the money is locked in, making the investment less liquid and also leaving it more exposed to inflation surprises and credit risk (meaning a whole or partial default). For this reason, investors typically charge more for long-term funds. By contrast, short-term rates usually follow the central bank's policy rate. The long-term rate can therefore be decomposed into expectations for the short-term rate, over the whole life of a given bond, plus a term premium.

The South African term premium has been rising quite steadily since 2015, with spikes around episodes of heightened risk. (These including 'Nenegate' in late 2015 and the 2017 medium-term budget, which announced a severe fiscal deterioration.) Between 2015 and 2019, it climbed by around 2 percentage points, with an additional increase of roughly half a percentage point in the first quarter of 2020. Taking a longer average, it was 103 basis points higher in 2019 than it was for the 2010–2015 period. Were it not for this term premium, long-term borrowing costs would have been around 8% in 2019, comparable to their lowest ever level, reflecting reduced inflation expectations as well as a repurchase rate well below historical averages.

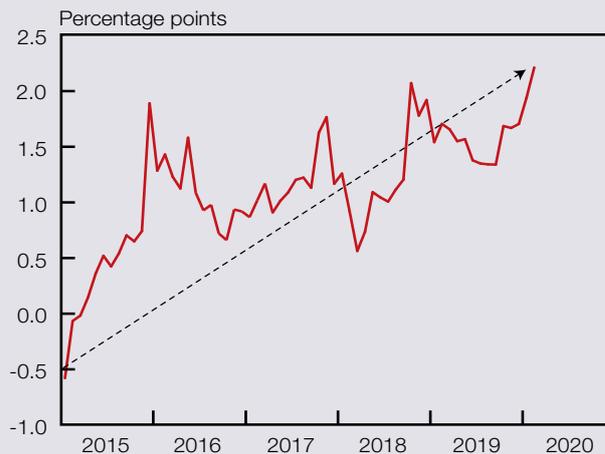
A higher term premium is bad for growth.<sup>2</sup> Econometric estimates by South African Reserve Bank staff indicate that a 100 basis point term-premium shock weakens growth by around 0.6 percentage points at the point of maximum impact, which is about four quarters after the shock. The estimated effect on inflation is more ambiguous, with the disinflationary impact of weaker demand offset by currency depreciation, as risk deters investors.

These estimates cannot be transferred directly to South Africa's experience, which has been about a sustained upward trend in the term premium rather than a one-off shock. Nonetheless, this mechanism helps to explain how sovereign debt accumulation has weakened growth. In addition, it is one of the key channels through which fiscal repairs – as discussed in both the recent State of the Nation Address and the 2020 Budget – could benefit the economy over time.

1 Estimates of the term premium follow the approach by T Adrian, R K Crump and E Moench, 'Pricing the term structure with linear regressions', *Journal of Financial Economics* 110(1), 2013, pp 110–138.

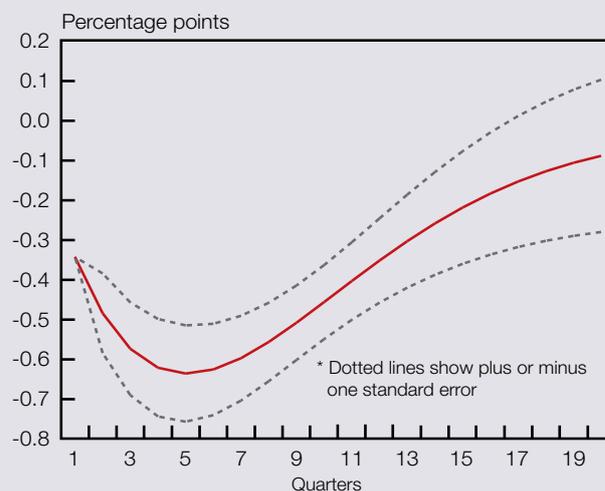
2 G Rudebusch, B P Sack and E Swanson, 'Macroeconomic implications of changes in the term premium', *Federal Reserve Bank of St. Louis Review* 89(4), 2007, available at <https://research.stlouisfed.org/publications/review/07/07/Rudebusch.pdf>.

### Term premium on the South African 10-year bond



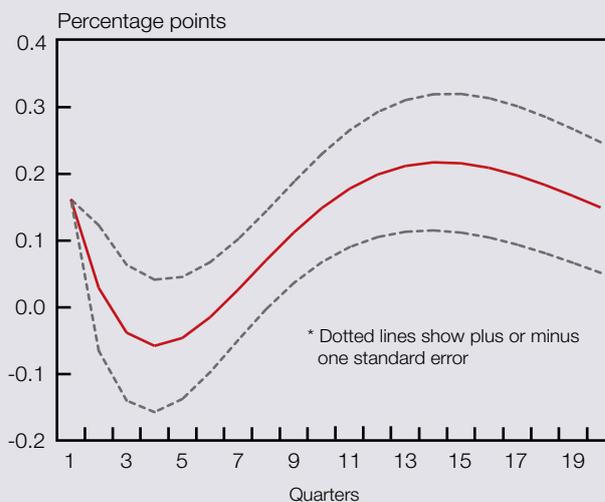
Sources: Bloomberg and SARB

### GDP response\* to a 100 basis point term-premium shock



Sources: Bloomberg and SARB

### Inflation response\* to a 100 basis point term-premium shock



Sources: Bloomberg and SARB



## Real economy: low growth and a new shock

South Africa's growth rate slowed to 0.2% in 2019, the worst performance since the 2009 recession. The forecast indicates output will contract in 2020, based primarily on the COVID-19 outbreak. Other domestic constraints would nonetheless have kept growth near-zero this year, even in the absence of this shock. Accordingly, potential growth is also very low, under 1%. In the outer forecast years, the economy recovers somewhat, to a growth rate a little over 1%, given an assumption that the global economy rebounds and domestic circumstances improve. It is difficult to say whether this projection is optimistic or pessimistic: it is around half of South Africa's longer-run average growth rate, but it is roughly double the average rate of the past four years.

## A bad ending to a lost decade

The final quarter of 2019 yielded another GDP contraction (-1.4% in annualised terms, quarter on quarter). With the -0.8% recorded for the third quarter, this put South Africa in a technical recession, for the second time in two years. It also confirmed that the 2010s were the worst decade for South African growth on record.<sup>7</sup> Total output expanded by only 15.9% between the first quarter of 2010 and the final quarter of 2019, which compares unfavourably with the crisis-ridden 1980s and 1990s, during which GDP grew by a total of 18.9% and 16.7% respectively.<sup>8</sup>

Growth has been unusually volatile in recent years. As noted in previous issues of the *MPPR*, the primary and secondary sectors have moved abruptly in response to shocks. This pattern persisted in 2019, where mining, manufacturing and agriculture all contracted (by 1.9%, 0.8% and 6.9%, deducting 0.1, 0.1 and 0.2 percentage points from 2019 growth respectively). Meanwhile, the rest of the economy posted positive but low growth rates. This 'core' growth was 0.9% over the year, close to its five-year average rate of 1.1%.

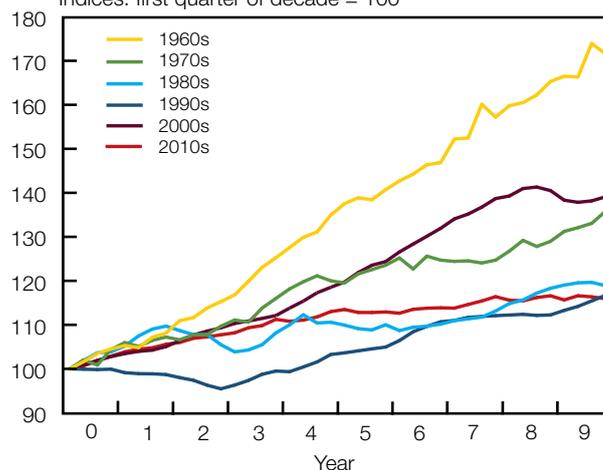
The underperformance of agriculture was primarily due to insufficient rainfall, with a rebound likely this year given better growing conditions and therefore larger crop estimates. By contrast, electricity shortages constituted the major constraint for mining and manufacturing – the two most electricity intensive sectors of the economy. Over the past year, Eskom shed 1352GWh from the system, with the Electricity Availability Factor (EAF) falling to 66.9% – implying that only two-thirds of installed capacity was producing electricity,

7 Quarterly GDP data are available from 1960.

8 These calculations reflect the difference between output in the first quarter of the decade and the final quarter (2010Q1 and 2019Q4). No other quarters are considered.

### Real GDP levels

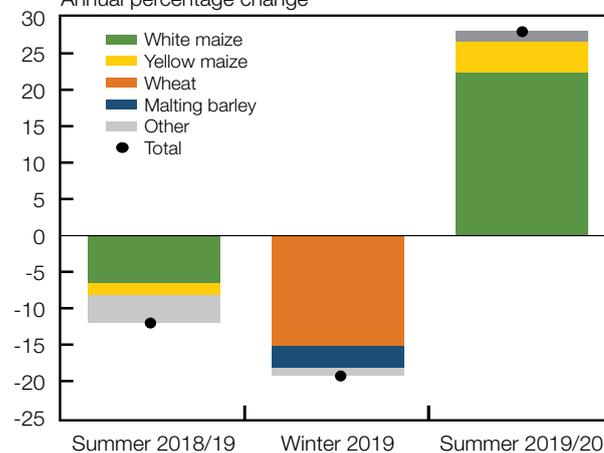
Indices: first quarter of decade = 100



Sources: Stats SA and SARB

### Agricultural crop estimates\*

Annual percentage change

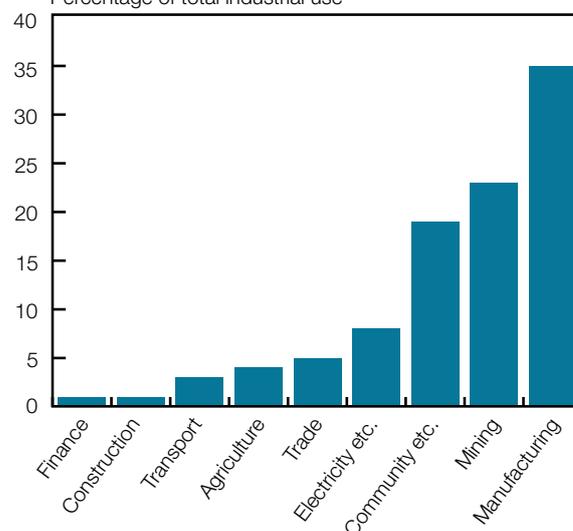


\* Based on tons

Sources: DAFF and SARB

### Electricity use by industry

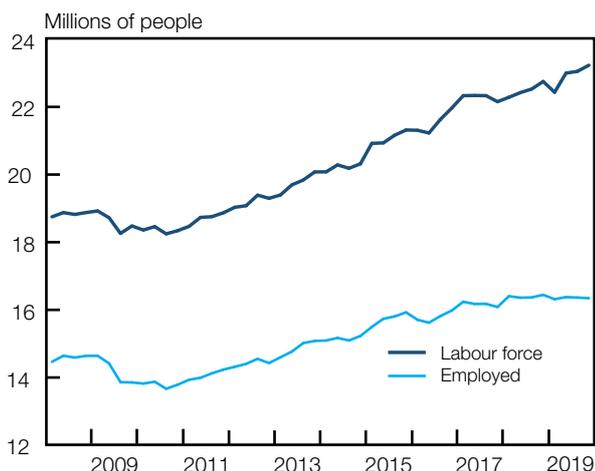
Percentage of total industrial use



Sources: Stats SA and SARB

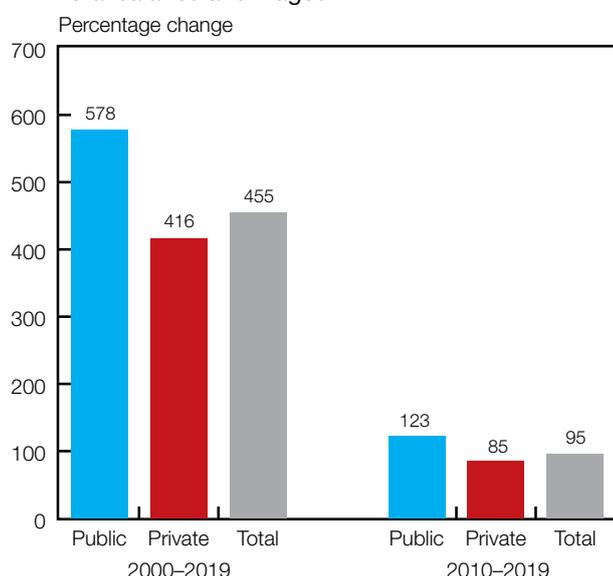


### Labour trends



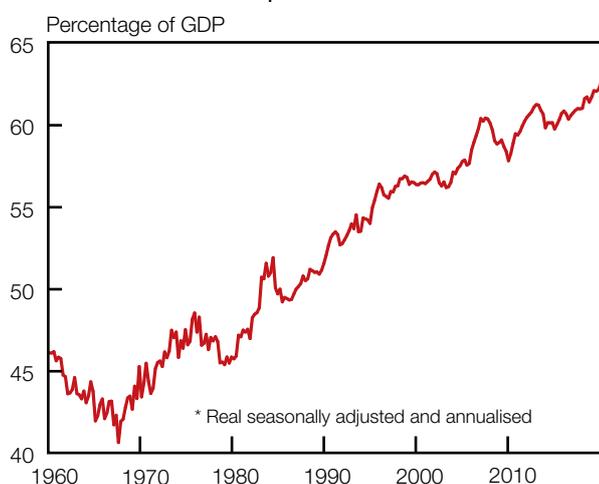
Source: Stats SA

### Total salaries and wages



Sources: QES and SARB

### Household consumption\*



Sources: Stats SA and SARB

an all-time low. As in 2015, the previous most severe episode of load-shedding, electricity shortages have coincided with contractions in both mining and manufacturing. Transport also declined in both instances, plausibly related to offline power stations not needing coal. These sectors are likely to remain under pressure in an environment of ongoing load-shedding; electricity availability has been only around 62% so far this year.

In these difficult economic circumstances, unemployment has risen. Job growth stalled in 2019, with the total number of employed people declining from 16.44 million at the end of 2018 to 16.34 million at the end of 2019 (using seasonally adjusted data). Meanwhile, the labour force continued to expand, with a net increase of 481 000 people during 2019. Over the past decade as a whole, the total increase in the workforce has been 4.87 million people, compared with an employment increase of 2.52 million.

Wage growth has also slowed markedly, in stark contrast to the situation a decade ago, when pay boomed even as the economy shed jobs. Formal sector wages, as measured by the *Quarterly Employment Statistics (QES)* survey, declined by 0.7% in the first three quarters of 2019, extending a downward trend in wage growth which began around 2015. Bonus and overtime pay appears to have slowed more than base pay, although the available data only start in 2018, so it is difficult to establish a trend. According to the Andrew Levy survey, wage growth in sectors with collective bargaining arrangements has also decelerated, although in this case increases have maintained a fairly constant margin over inflation, generating constant real gains. There is also some evidence of slowing growth in public sector wages in 2019, after an extended period of growth above private sector rates. (For instance, public wages have outpaced private wages over both the 2000-date and the 2010-date periods.)

## Shifts in the composition of GDP

Despite this pressure on households, household consumption has trended steadily higher over the past decade as a share of total demand, reaching an all-time high in 2019, at just over 62% of GDP (based on inflation-adjusted data). By definition, this means other components of GDP have been growing more slowly. Investment has held up better than is usually understood, at levels narrowly below 20% of GDP, compared with a longer-term average of 16.9%. Public sector investment has weakened sharply in recent years, but private sector investment has been more resilient, which has supported aggregate investment at levels that are better than historical norms (although still lower than desirable). Government consumption has also been elevated, above 20% of GDP. By contrast, net exports have been unusually depressed for most of the decade. Imports, which detract from net exports, have held up surprisingly well for an economy suffering from weak demand. Meanwhile, exports have stagnated, despite



unusually favourable commodity prices, especially in rand terms. (Mining export prices were on average 40% higher in the 2010s than they were in the 2000s; export volumes grew only 5.5%.) In sum, the composition of GDP has shifted such that the economy has become excessively reliant on internal demand, a growth model that has generated substantial fiscal and current account deficits, as well as poor overall economic performance.

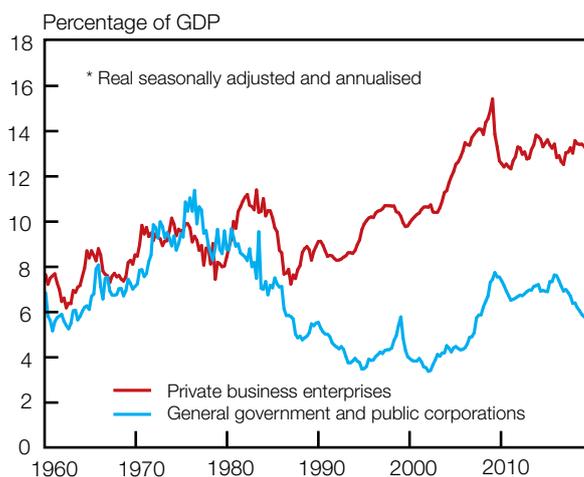
## Credit growth

This analysis also helps to cast some light on an emerging household credit puzzle. Over much of the past decade, households sought to repair the excesses of the 2000s housing boom by deleveraging. As a result, the household debt-to-income ratio declined from 85.7% in 2008 to 72.0% in 2018. While there were some bursts of credit activity during this period, particularly the unsecured lending boom of 2012–2013, household credit growth was generally low. This prompted debate over the relative contributions of different factors, including new regulations (Basel III), weak growth prospects, cautious lending practices and policy settings. More recently, household credit has been growing again, led by unsecured lending but with a supporting contribution from mortgages – a development that has been attributed to a range of factors, including banks competing for market share, technological improvements making credit more convenient, and consumers borrowing to compensate for declining incomes.

The puzzle is whether this is desirable. For a central bank aiming to close a negative output gap with a lower interest rate, credit growth is an important part of the policy transmission mechanism. However, where that central bank also has a financial stability mandate, credit growth in excess of income growth or overall GDP growth is a risk warning.

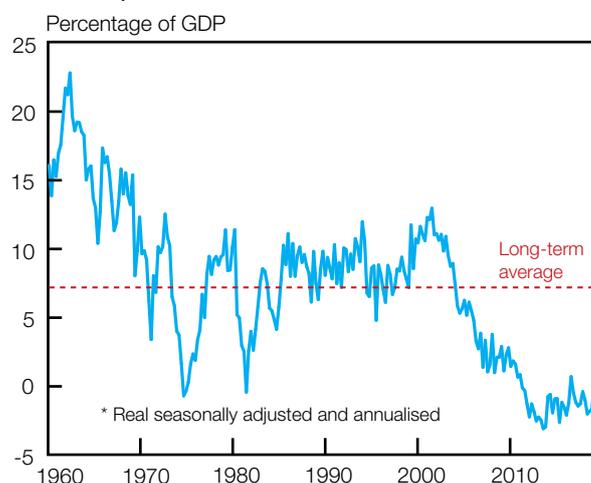
Reflecting on the changing composition of GDP, it becomes clearer that pushing consumption still higher, using either household or government debt, will likely not permit higher overall growth. In the short term, it may provide useful support to an economy under demand stress. The longer-term policy challenge, however, is finding tools to achieve higher-quality demand rather than just more demand. South Africa's consumption-focused growth model appears to have passed its limits.

### Gross fixed capital formation\*



Sources: Stats SA and SARB

### Net exports\*



Sources: Stats SA and SARB

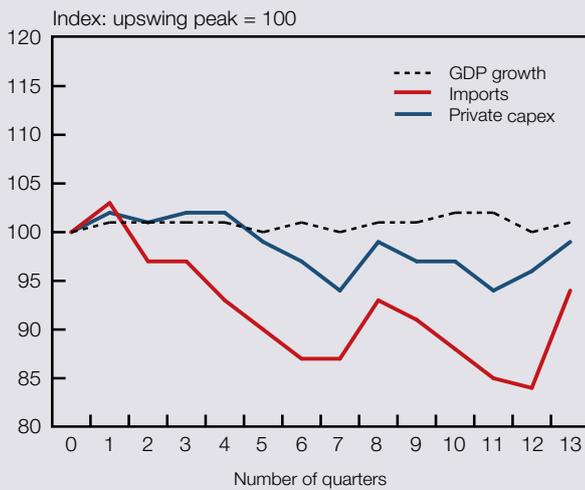
### Household credit extension



Sources: Stats SA and SARB

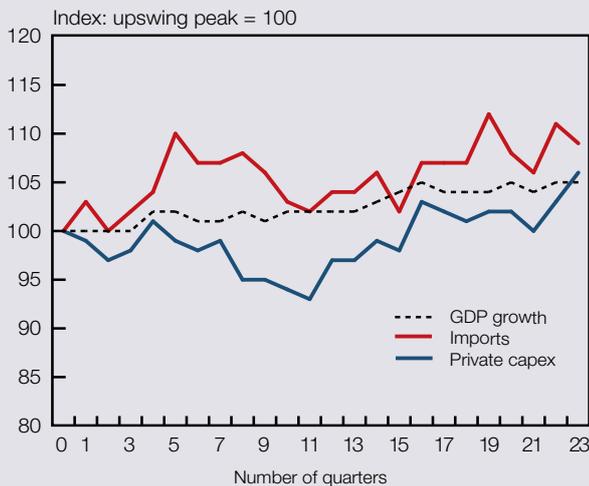


**GDP, private capex and imports: average past downswings since 1960 (excluding current downswing)**



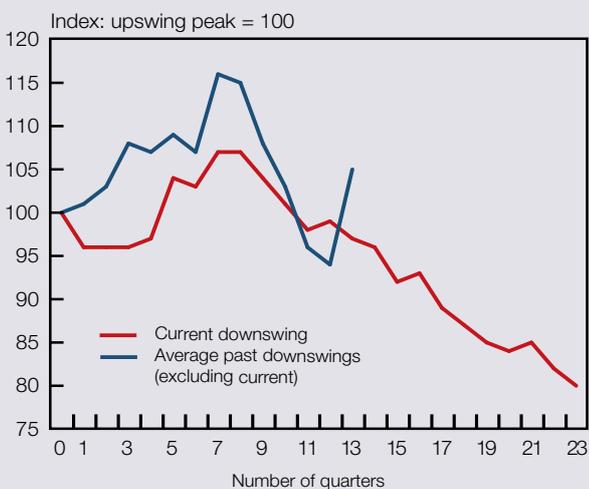
Sources: Stats SA and SARB

**GDP, private capex and imports: current downswing up to 2019Q2**



Sources: Stats SA and SARB

**Public capex: current downswing versus average past downswings since 1960**



Sources: Stats SA and SARB

**Box 3 What is different about this downswing?**

South Africa is in the midst of the longest business cycle downswing in its history. Historically, downswings have lasted on average 20 months. The current downswing has so far extended for 74 months,<sup>1</sup> beating out the slump of March 1989 to May 1993, which lasted 51 months. This box explores the behaviour of the different components of gross domestic product (GDP) during this and past downswings, to better understand its unusual character. Two major differences stand out. First, imports have been unusually buoyant. Second, public sector investment has fallen much more than normal.

Most downswings are concluded after about three years. On average, the level of GDP moves marginally higher over this period, reflecting the fact that downswings are periods of poorer economic performance, not necessarily output contractions. Exports, household consumption and government consumption all grow faster than GDP, while private sector investment and imports contract. These last two components are then also the items that expand the most in the upswing phase. Public sector investment normally holds up better during the initial phase of a downswing but weakens later, perhaps reflecting the pressure a weak economy puts on government finances over time.

In the current downswing, the trio of exports, household consumption and government consumption has followed the average downswing pattern fairly closely. Exports are moderately weaker than usual, especially towards the end of the sample, while household consumption has been stronger. Government consumption was initially somewhat weaker than average, but it has picked up recently. The standout differences, however, relate to imports and public sector investment. Imports normally end a downswing around 5% below their level when the downswing commenced. In this case, imports are currently around 10% above their starting point. (After three years, when most downswings are concluded, imports were about 5% above their starting point – still a significant difference.) Inversely, public sector investment is now around 20% below its starting point, where, for the average downswing, the trough is approximately -5%.

This weakness in public sector investment helps to explain the disappointing total investment numbers. While overall investment is lower than it was at the start of the downswing, private sector investment has risen. Over the first three years of the downswing, private sector investment followed its usual pattern, declining by around 5%. It has since recovered, however, to a level around 5% higher than the 2013 starting point (as of the third quarter of 2019). This suggests that firms are maintaining their capital stock and some are implementing new projects, contrary to the ‘investment strike’ hypothesis which has been mooted in the press.

Ongoing import strength may reflect a combination of supply-side weakness (including electricity shortages and policy uncertainty) alongside significant demand support (large fiscal deficits and relatively low short-term interest rates). Although fair-value estimates show the exchange rate has been undervalued through most of the downswing period, strong imports suggest it may have been overvalued. Another hypothesis is that South Africa has become more integrated into the global economy, although if this were the case, then exports should also have benefited.

<sup>1</sup> This calculation assumes an upswing had not begun as of February 2020.

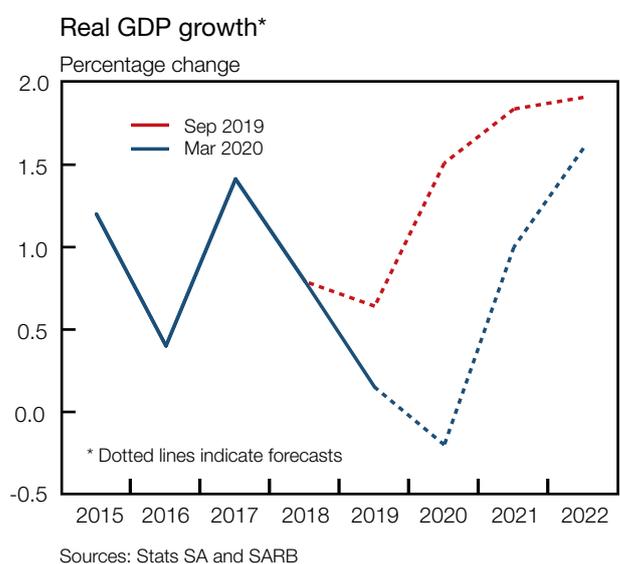
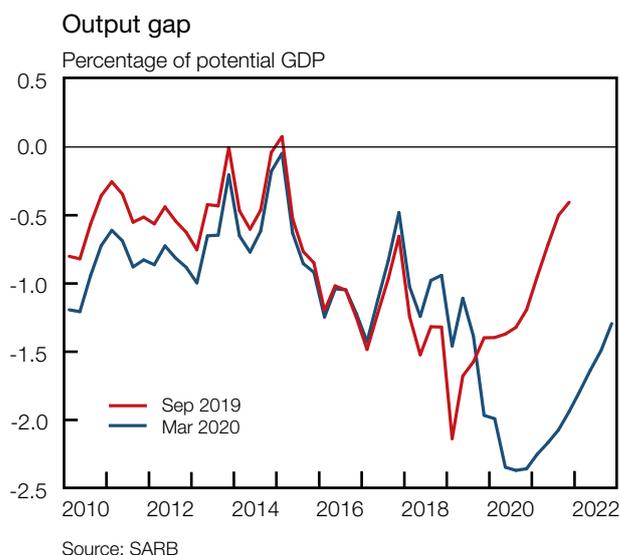
## Growth outlook

The 2020 growth forecast has been revised down substantially since the start of the year, from 1.2% as of the January meeting of the MPC to -0.2% in March. More recent estimates are lower still, suggesting a range of -2% to -4% is now likely. Potential growth for 2020 was estimated at 0.8% for the March MPC, but this will likely fall further in new forecasts: the lockdown means some growth now becomes irrecoverable. The output gap is nonetheless likely to be even more negative than the March projections (-2.2% of potential GDP), because the COVID-19 effect also has demand-shock characteristics, with much of the supply side of the economy likely to emerge from the lockdown with capacity intact but demand missing.

As of the March MPC, the COVID-19 shock was not yet visible in most sources of real economy data. International passenger arrivals through airports fell in February, and there was abundant anecdotal evidence of cancelled tourist bookings and corporate events. The overall growth outlook was highly uncertain, however, with clear downside risks. The post-MPC announcement of a country-wide lockdown made it clear far larger swathes of the economy would be affected. Based on the number of working days lost to the lockdown, and differences in the extent to which sectors are likely to be affected, recent SARB calculations suggest the 21-day shutdown will reduce 2020 growth by 2.6 percentage points. But the indirect effects are less easily estimated. Most data, including those for trade and retail sales, are only available with a two-month lag, so it will be some time before we achieve precision about even the near-term impact of this unusual shock.

In 2009, the previous instance of a major crisis, the economy contracted by 1.5% for the year, with the primary and secondary sectors deeply negative (-4.4% and -6.4% respectively) and the tertiary sector slightly positive (+0.7%). Within the tertiary sector, however, hotels and restaurants fell 3.9%. Vehicles and finance were both down 3.6%. In that year, business travel also declined by over a third. The comparison with 2009 has limitations, however, with the starting point having been significantly more favourable, given a fast-growing economy and a more robust fiscal position when that crisis hit. The nature of South Africa's current lockdown also suggests the tertiary sector will be the main drag on growth this year, in contrast to its normal role as a relatively stable demand component.

Over the medium term, the SARB forecasts continue to project a mild recovery, to around 1.0% in 2021 and 1.6% in 2022. This expectation of moderately stronger growth in the outer years has been the norm for recent forecasts, to their detriment: they later had to be revised down. Nonetheless, this forecast feature has been maintained for the latest projections. This choice is based on two reasons.



## GDP growth, potential GDP and output gap (March 2020 forecasts)

Annual percentage change, September 2019 forecasts in brackets

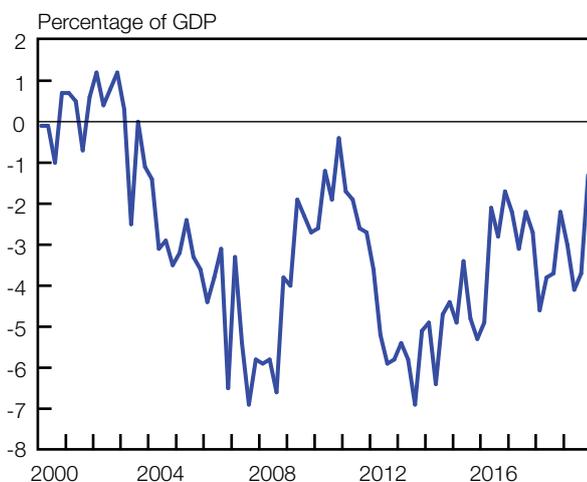
	Actual				Forecast		
	2016	2017	2018	2019	2020	2021	2022
Potential growth .....	0.9	1.2	0.9	0.6	0.6	0.9	1.0
				(1.0)	(1.1)	(1.2)	
Output gap (percentage of potential GDP)....	-1.1	-1.0	-1.0	-1.5	-2.3	-2.1	-1.6
				(-1.7)	(-1.3)	(-0.6)	
GDP growth .....	0.4	1.4	0.8	0.2	-0.2	1.0	1.6
				(0.6)	(1.5)	(1.8)	

Sources: Stats SA and SARB

First, in the structure of the QPM, the growth outlook is shaped by the output gap, which the model aims to close over the medium term (around three years). The growth forecast is therefore largely determined by whatever is required to close the output gap. Because this gap measures the difference between actual and potential output, it can be eliminated by lowering potential output. But the potential output estimates have already been revised down substantially. Various measures of slack suggest this economy is not operating at full capacity, and the COVID-19 pandemic is doing more damage to the demand side of the economy than the supply side. (Although both demand and supply have been deliberately turned off for the duration of the March–April lockdown, the supply side will still have capacity to meet demand afterwards.) This suggests the output gap should be negative and potential growth should not be marked down to the point that the output gap disappears. (See Box 5.) But this then implies stronger catch-up growth over the forecast period. To mitigate this problem, the QPM results have been adjusted by the forecasting team so that the gap closes more slowly than the model would normally allow. It therefore remains slightly negative in 2022, the last year of the forecast period, at -1.5% of potential GDP.

Second, there are plausible reasons why growth might improve somewhat over the medium term. The starting point is now extremely low, given a year-on-year contraction in 2020. Electricity load-shedding will persist throughout 2020 and into 2021, but power stations are being taken offline to create time for maintenance, which will ultimately improve the quality of supply. New initiatives to allow large users to generate their own power should also help to ease constraints on some businesses. In addition, government has tabled a range of structural reforms designed to raise growth. Finally, the COVID-19 pandemic will likely dissipate this year, permitting a global recovery. Together, these considerations suggest growth could restart next year, even if it does not return to longer-run averages (around 2.5%) over the medium term.

## Current account balance



## Current account

South Africa's current account deficit averaged 3.0% of GDP in 2019. This outcome marked a deterioration from 2017, when it had moderated to 2.5%, mainly due to import compression. (The smallest quarterly deficit recorded was 1.7% of GDP in the fourth quarter of 2016.) However, the current account narrowed sharply in the fourth quarter of 2019, to just 1.2% of GDP. About half of this adjustment came from the trade balance, which moved by 1.1 percentage points of GDP, mostly (0.9 percentage points) on account of lower imports. The other half was due to a recovery in net dividend payments, following an unusually large corporate transaction in the third quarter.

The current account deficit typically fluctuates with swings in the trade balance, which tend to follow movements in the business cycle. Meanwhile, the Services, Income and current Transfers (SIT) account contributes steady deficits, in the region of 3–4% of GDP, which ensures the overall current account remains consistently in deficit. This item also explains why

South Africa typically has one of the largest current account deficits among the large- and medium-sized economies, even when the economy is weak, imports are subdued, and the trade balance is in surplus.

Given the more subdued growth outlook, the current account forecast has been revised down, so that deficits now average around 3% of GDP for the medium term. This implies persistent trade surpluses. It is difficult to narrow the current account deficit much further, however, as foreigners have been major purchasers of government debt, producing a large stream of outgoing interest payments (1.4% of GDP in 2018, for example). Unlike dividends, interest costs are not responsive to local business conditions, so they do not help the current account rebalance when growth is slow.

## Fiscal accounts

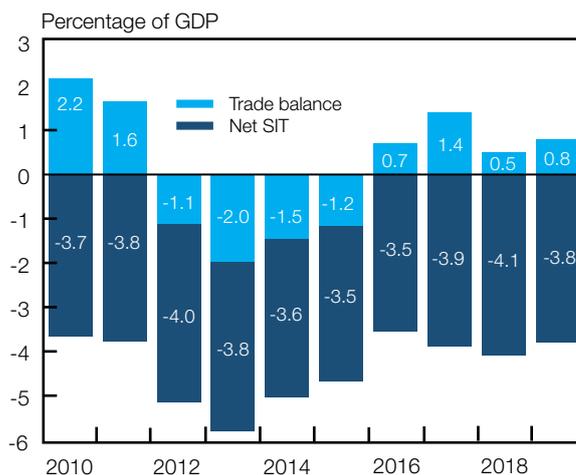
The 2020 Budget envisioned similar fiscal deficits to those outlined in the 2019 *MTBPS*, which was discussed in the previous *MPR*. (The *MTBPS* had -6.5% of GDP for 2020/21 and -6.2% for 2021/22; the 2020 Budget has -6.8% and -6.2% for those fiscal years respectively.) The debt trajectories in the two documents were also comparable, passing 60% of GDP in 2019/20 and exceeding 70% by 2022/23. However, the Budget was better received than the *MTBPS*, mainly because it included significant reductions to the wage bill, over three years, for total savings of around R160 billion. These cuts were offset by a weaker growth outlook as well as additional spending on bailouts, which explains why the deficit figures were similar.

The COVID-19 shock will dramatically expand the 2020 budget deficit, simply by depriving the government of revenue. It will also require additional spending, especially if infections are not contained by the lockdown, and many more South Africans – especially those served by the public sector – require medical attention. The outlook is highly uncertain, but it is plausible the deficit will exceed 10% of GDP this year, rivalling historical records. (The largest deficit in South African history is 11.6% of GDP in 1914; the next largest is 10.4% in 1940, which underlines the relevance of the war-time parallel invoked in some COVID-19 analysis.)<sup>9</sup>

## Conclusion

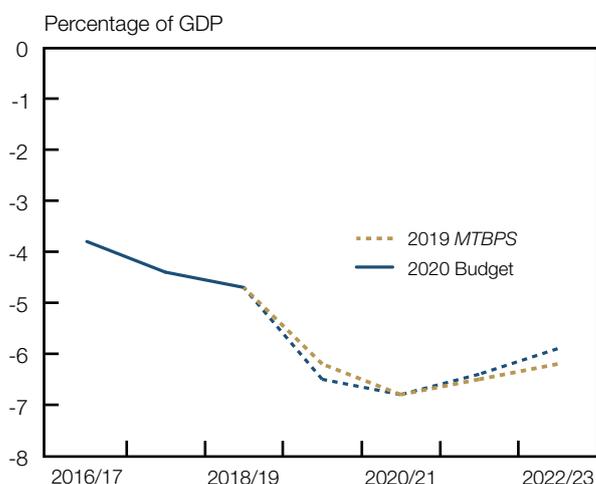
South Africa has entered a period of a global crisis encumbered by a very low growth rate, a problematic composition of growth, and little or no fiscal space. The SARB forecasts indicate an economic contraction this year, followed by a limited recovery in 2021 and 2022 as the global economy revives and some of South Africa's domestic constraints, such as electricity shortages, ease. Monetary policy provides a boost to demand, but the reach of these measures is limited by weak economic fundamentals and the scale of the COVID-19 shock.

## Current account decomposition



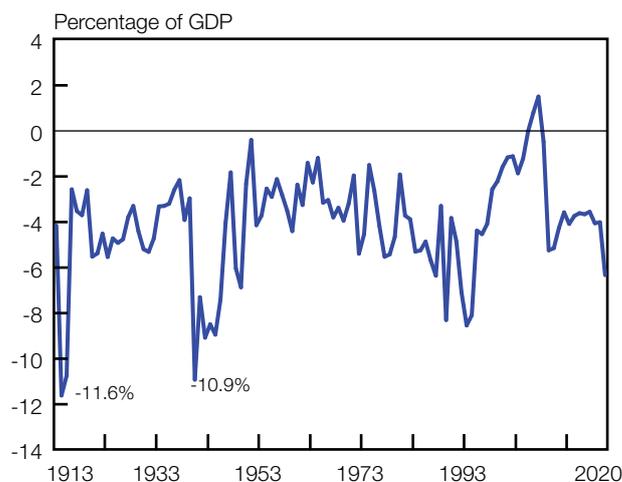
Source: SARB

## Main budget deficit



Source: National Treasury

## Fiscal deficit



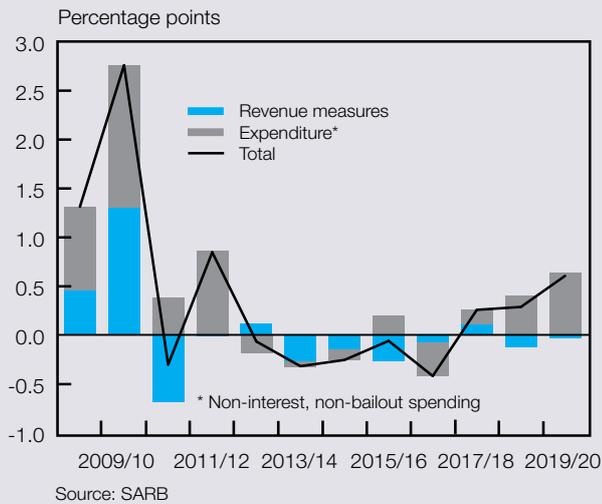
Sources: Mauro et al. (2013) and National Treasury

9 See P Mauro, R Romeu, A Binder and A Zaman, 'A modern history of fiscal prudence and profligacy', *International Monetary Fund Working Paper No. 13/5*, 2013. Data available at [https://www.imf.org/~media/Websites/IMF/imported-datasets/external/pubs/ft/wp/2013/Data/\\_wp1305.ashx](https://www.imf.org/~media/Websites/IMF/imported-datasets/external/pubs/ft/wp/2013/Data/_wp1305.ashx).



## Box 4 The fiscal impact on growth

### Fiscal impact measure



Fiscal policy has loosened recently, with more spending and smaller tax increases. As this box shows, the estimated fiscal impact on growth was around +0.6 percentage points in 2019. This estimate excludes interest spending as well as bailouts for state-owned enterprises. The fact that growth slowed to a post-crisis low, despite the larger fiscal impact, suggests either that other factors offset the stimulus, or that the negative, indirect effects of a deteriorated fiscal position cancelled out the positive, direct effects.

The fiscal impact measure (FIM) described here is based on the methodology developed by the Brookings Institution's Hutchins Center.<sup>1</sup> Its core intuition is counterfactual, where taxes and spending just follow the economy's potential growth rate<sup>2</sup> plus inflation.<sup>3</sup> Government is providing stimulus if it is growing spending faster than this counterfactual, neutral rate. Similarly, it is also providing stimulus if it takes in less tax than it would in this counterfactual scenario, leaving more money in the hands of firms and households.<sup>4</sup>

Looking at the results, the fiscal response to the global financial crisis stands out as a major stimulus. In subsequent years, as the fiscal authorities attempted fiscal consolidation, the stance becomes marginally contractionary. The revenue contributions are more negative than those for spending, showing that National Treasury leaned more heavily on tax increases than spending cuts. The fiscal impact becomes positive again in 2017/18 and peaks in 2019/20, with more spending and less downward pressure from taxation. The counterfactual slows more than actual spending and taxation in this period, consistent with Treasury forecasts overestimating potential growth and inflation.

The FIM is not a comprehensive measure of the fiscal policy stance. First, it excludes all indirect effects. This means it ignores offsetting factors such as higher interest rates that might follow from extra government borrowing. It also ignores productivity; a rand of expenditure is deemed the same whether it pays for new infrastructure or is lost to corruption. Second, it focuses purely on the change in the fiscal stance. If policymakers implement a massive stimulus and then do not expand that stimulus further in the following year, by at least potential growth plus inflation, the fiscal impulse will become contractionary – even if the fiscal stance is looser than it was before the initial stimulus.

Given these considerations, FIMs should be consulted alongside other indicators, such as cyclically adjusted budget balances and fiscal multipliers. Taken together, the range of indicators available makes it clear that the aggregate fiscal stance has been loose recently. It is less obvious, however, that this benefitted growth, with both the efficiency and the sustainability of spending in question.

1 See L Sheiner and S Belz, *The Hutchins Center's Fiscal Impact Measure*, 26 July 2019, available at <https://www.brookings.edu/research/the-hutchins-centers-fiscal-impact-measure/>. The estimate for South Africa reported here excludes interest payments and bailouts for state-owned enterprises, in contrast to the Brookings Institution's estimates for the United States. Detailed calculations will be available in T Radebe (forthcoming, 2020).

2 For the calculations reported here, potential growth is the estimate used for the Monetary Policy Committee forecasts.

3 Measured as the change in the consumer price index.

4 Tax changes are discounted for the marginal propensity to consume, given that tax adjustments do not typically move demand precisely R1 for R1. Consistent with the South African Reserve Bank's Core Macroeconometric Model, households' marginal propensity to consume is 0.4% and corporates' is 0.8%. For other direct taxes, it is 0.6% (the average of the two). The revenue estimates also adjust for transfers to households.

## Box 5 Powerless? Monetary policy and potential growth

How fast can South Africa grow, over the medium term? The question matters both because growth has slumped – even before the COVID-19 shock – and because constraints on growth have tightened (such as persistent electricity shortages). For monetary policy, it is not enough to know that growth is low. The crucial question is whether growth is below potential. If growth is undershooting the economy’s capacity, then lower interest rates can help by boosting demand. If not, then stimulus just prompts more inflation and more imports.

Potential growth cannot be observed, and therefore has to be estimated. Given South Africa’s growth challenges, staff at the South African Reserve Bank (SARB) have recently re-estimated potential growth using a range of different methods, to better assess spare capacity. The major takeaways are as follows.

- Potential growth estimates, and therefore output gaps, should be used with caution. This is because they are often revised substantially when new data become available.<sup>1</sup> For instance, in 2013, South Africa’s output gap appeared to be large and negative, at -3.2% of potential gross domestic product (GDP); current estimates suggest it was much smaller (-0.4% of potential GDP).
- All available estimates agree that potential growth is lower than its longer-run average, of around 2.5%, but they also all agree that the output gap is negative (even before the COVID-19 shock). The Hodrick-Prescott filter identifies a positive output gap for the final quarter of 2017; the Composite Activity Index<sup>2</sup> has a positive gap for three quarters in 2018. Otherwise, all measures have negative output gaps for every quarter since at least 2016. The estimates for the 2019 output gap range in size from -2% of potential GDP to -0.1% of potential GDP, with an average of -0.6%.
- Some output gap estimates are negative over long time periods. This conflicts with the textbook deviation of an output gap as reflecting temporary deviations from a trend. Purely statistical methods do not have this feature. However, there is an argument in the literature that output gaps may have negative means owing to rigidities in wages. This causes employers to shed labour in downturns more than they raise employment in upturns, meaning that labour resources are usually underemployed.<sup>3</sup>
- South Africa’s electricity shortages are clearly a constraint on growth, but they affect some sectors more directly than others. In broad terms, mining and manufacturing are the heaviest users. One implication of this is that other, less electricity-intensive sectors can still grow, even with scarce electricity. Another is that the balance of payments is likely to become a constraint on growth, as the tradeables sector is most exposed to electricity shortages.

1 A Kangur, K Kirabaeva, J Natal and S Voigts, ‘How informative are real-time output gap estimates in Europe?’, *International Monetary Fund Working Paper No. 19/200*, 2019, available at <https://www.imf.org/en/Publications/WP/Issues/2019/09/20/How-Informative-Are-Real-Time-Output-Gap-Estimates-in-Europe-48645>.

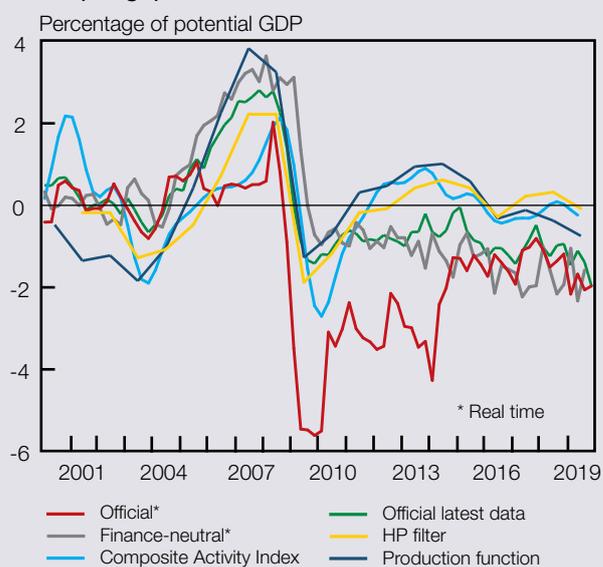
2 Based on the measure calculated for the US by J H Stock and M W Watson, ‘Slack and cyclically sensitive inflation’, *National Bureau of Economic Research Working Paper No. 25987*, June 2019, available at <https://www.nber.org/papers/w25987>.

3 S Aiyar and S Voigts. ‘The negative mean output gap’. *International Monetary Fund Working Paper No. 19/183*, 2019, available at <https://www.imf.org/en/Publications/WP/Issues/2019/08/23/The-Negative-Mean-Output-Gap-48605>.

- Lower inflation helps. Having inflation close to or below 4.5% reduce the risks of a policy mistake, because there is less chance of missing the target even if the potential growth estimate is significantly wrong. Inflation also has the advantage of being observable, so it is easier to recognise mistakes timeously.

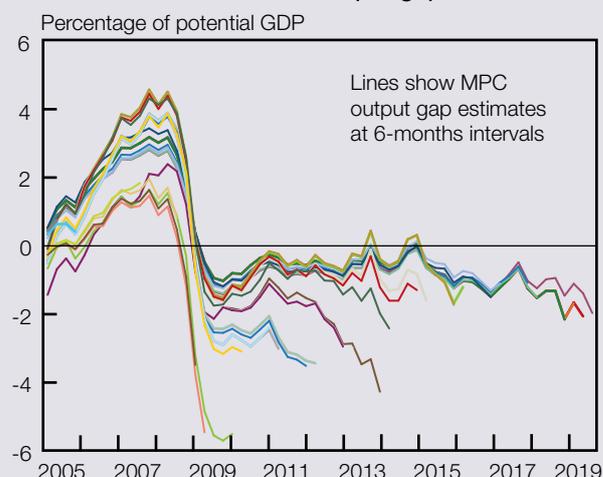
In sum, South Africa’s slowdown up to 2019 has been mostly structural, linked to problems larger than monetary policy. However, growth has undershot even this low trend rate, resulting in a negative output gap. This verdict is premised on imperfect estimation methods, but it is robust to a range of different tests. The COVID-19 pandemic will widen this gap substantially, as it represents a significant demand shock to South Africa, although it also poses some supply-side challenges.

### Output gap estimates



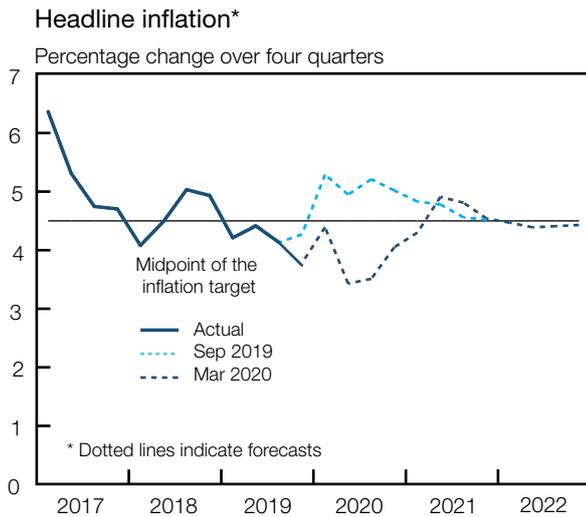
Source: SARB

### Evolution of the SARB’s output gap estimates

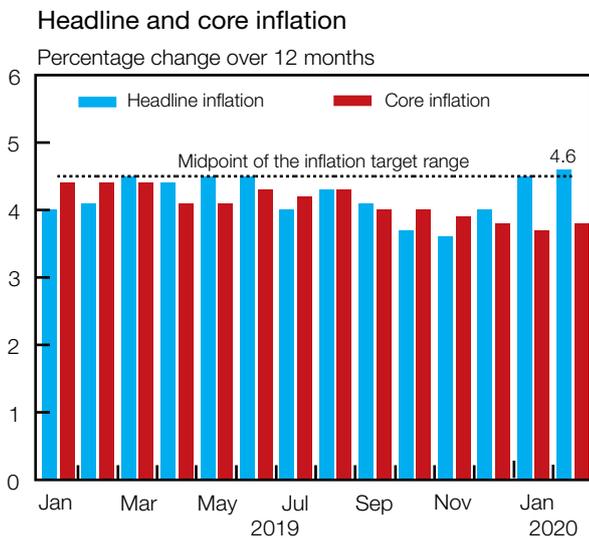


Source: SARB



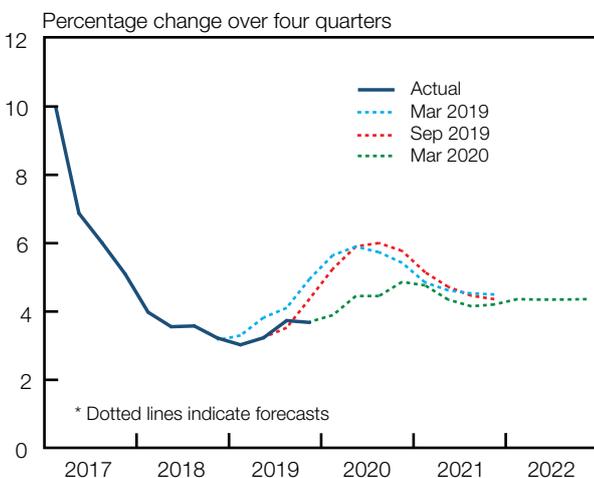


Sources: Stats SA and SARB



Sources: Stats SA and SARB

### Food and non-alcoholic beverages inflation forecasts\*



Sources: Stats SA and SARB

## Price developments: starting at the midpoint, ending at the midpoint

Inflation dipped below the target midpoint in 2019, averaging 4.1% for the year. It returned to 4.5% at the start of 2020, but is expected to fall sharply in the near term on lower fuel prices, before recovering next year. Headline inflation is therefore expected to average 3.8%, 4.6% and 4.4% through 2020, 2021 and 2022 respectively.

### Starting point

South African inflation reached a nine-year low in November, at 3.6%, before rebounding to 4.5% in January and 4.6% in February. This uptick in inflation reflected a base effect in fuel prices, which was anticipated. Underlying inflation has softened, however, with core inflation at its lowest levels since October 2011 (at 3.8% as of the February CPI release). These developments alone would have justified reducing the 2020 inflation outlook to around 4.2% for 2019. However, they have been compounded by a collapse in world oil prices and a substantially more negative output gap due to the COVID-19 shock. Accordingly, the 2019 inflation forecast has been revised down to just 3.8%, which, if realised, would be a 14-year low.

It is possible COVID-19 will interrupt publication of the CPI. Statistics South Africa (Stats SA), however, had already completed surveys for March before the lockdown was announced. (Early indications are that an April figure will also be published, although it may be based on more limited surveys.) This means the first-quarter CPI numbers will not feature significant COVID-19 effects.

One reason this matters is that there is a seasonal pattern in the CPI, with price changes concentrated in January, February and March. The fact that the first quarter is already fixed puts a floor under the 2020 inflation outcome: even if there are no price changes for anything from April onwards – except in July, when electricity and other administered price adjustments occur – the annual inflation outcome would still be 3.4%. Fuel price deflation will of course lower this number, but it is probably unrealistic to expect no other price increases, economy-wide, for the remainder of the year. It is therefore unlikely inflation will undershoot the 3–6% target range for 2020 as a whole, although there may be target misses in specific months.

### Food and non-alcoholic beverages

Food inflation has averaged 3.5% over the past 24 months, well below its longer-run average of 5.9% (for 2010–2019). During the past 12 months, food inflation has bottomed out, at 2.9% early in 2019, and has since trended higher, nearing

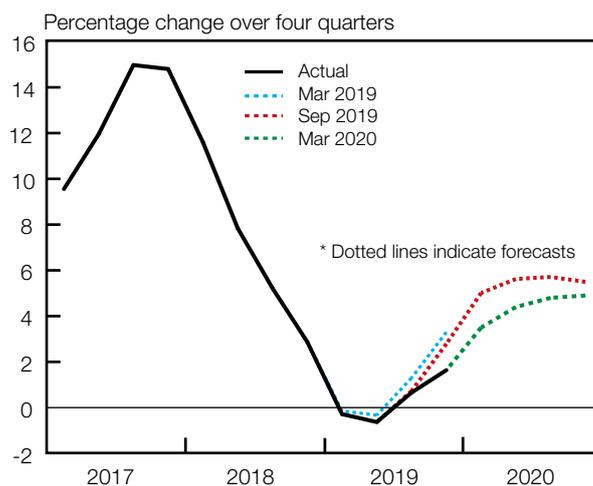
4.0% during 2019 (the peak was 3.9%). It is expected to climb further during 2020, to a high of 4.9% in the fourth quarter of this year, before easing again to average 4.4% in both 2021 and 2022.

Historically, food price inflation has on average been higher than 4.4%. However, long-term averages are no longer reliable guides to future inflation rates, because the overall level of inflation in the economy has fallen. Since 2010, the gap between CPI and food inflation has been around 0.7 percentage points. Were the forecasts to continue using long-term food inflation averages, the implied gap would rise to around 1.5% annually, implying a substantial increase in food prices relative to other items in the CPI. It is therefore important to avoid relying on historical averages for food price forecasts, although this simplifying assumption is often employed in forecasts.

The main surprise in food inflation last year came from meat. An outbreak of foot-and-mouth disease closed export markets from January 2019, increasing the supply available domestically and thereby suppressing prices. In these circumstances, meat prices deflated for four months in the first half of the year and remained subdued thereafter, for a 2019 inflation average of 0.3%.

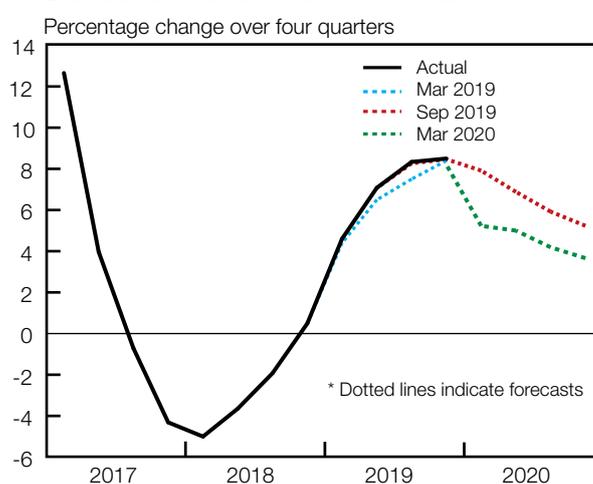
Given meat's large weight in the food basket – nearly a third – this shock was sufficient to offset higher bread and cereals inflation, which had been better anticipated. The inflation trough for this category occurred in 2018, as a base effect from the 2016/17 drought, and prices accelerated afterwards, to a peak of 8.6% in August 2019, more or less in line with expectations. Bread and cereals inflation is projected to slow to around 3% by the end of 2020, in the context of a favourable production outlook. Crop estimates for maize, for instance, point to a harvest of 14.6 million tons for the 2019/20 season, up from 11.3 million tons for 2018/19.

### Meat inflation forecasts\*



Sources: Stats SA and SARB

### Bread and cereals inflation forecasts\*



Sources: Stats SA and SARB

### Consumer food price inflation (March 2020 forecasts)

Percentage change over four quarters, September 2019 forecasts in brackets

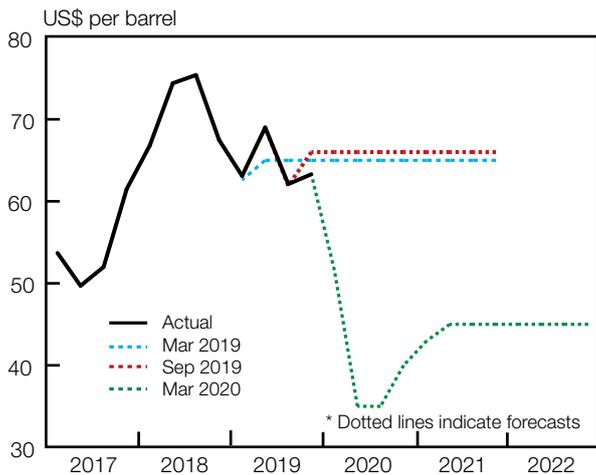
	Weight	Actual		Forecast	Actual		Forecast			
		2009–2019*	2019*	2020*	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4
Food and non-alcoholic beverages	17.24	5.9	3.4 (3.6)	4.4 (5.7)	3.7 (3.5)	3.7 (4.4)	3.9 (5.2)	4.5 (5.9)	4.5	4.9
Bread and cereals.....	3.21	5.4	7.0 (7.1)	4.5 (5.3)	8.3 (8.3)	8.2 (8.5)	5.2 (7.9)	5.0 (6.9)	4.2	3.7
Meat .....	5.46	6.1	0.3 (0.6)	4.4 (5.1)	0.7 (0.7)	1.6 (2.8)	3.5 (5.0)	4.4 (5.6)	4.8	4.9
Beef.....	1.44	6.4	-1.3 (-1.1)	4.4 (7.5)	-0.8 (-1.0)	-0.2 (1.1)	3.8 (5.7)	4.6 (6.3)	4.4	4.7
Poultry.....	2.12	5.8	1.0 (0.8)	4.6 (7.5)	1.4 (1.2)	4.6 (4.1)	4.9 (6.0)	5.0 (5.8)	4.6	4.1
Vegetables .....	1.30	5.9	6.3 (6.2)	3.8 (6.0)	4.7 (4.4)	2.9 (2.9)	1.9 (3.4)	3.5 (5.9)	4.4	5.7

\* Annual average percentage change

Sources: Stats SA and SARB

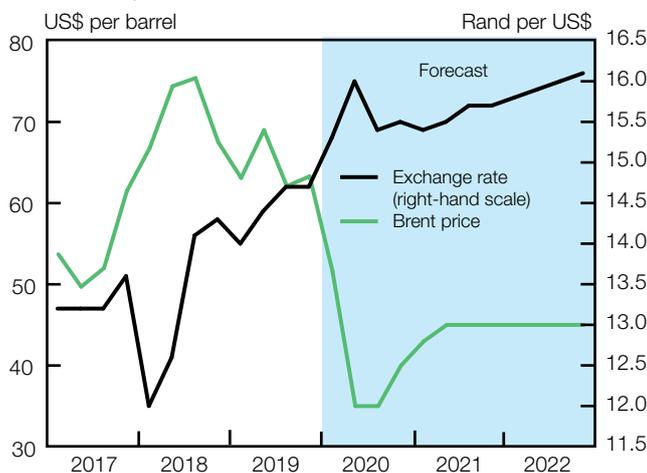


### Evolution of crude oil price forecasts\*



Source: SARB

### Exchange rate and oil



Sources: Bloomberg and SARB

## Fuel

The main fuel price development of the past six months has been a substantial slide in oil prices, which started with the COVID-19 outbreak in China and intensified when the major oil-producing countries failed to agree on production cuts and started a price war instead. From a high of US\$67 in December, the Brent crude benchmark fell to US\$56 in February and then to under US\$30 per barrel in late March, its lowest level since 2016. This development has prompted downward revisions to the oil price assumptions, to US\$40 per barrel for 2020, US\$44 per barrel for 2021, and US\$45 per barrel for 2022. The lowest quarterly assumptions are US\$35 per barrel for the second and third quarters of 2020, with the price edging higher in each subsequent quarter.

Over the course of 2019, domestic fuel price inflation benefitted from the relatively elevated 2018 starting point. The end of 2018, in particular, was marked by higher oil prices as well as a more depreciated exchange rate, lifting the petrol price (for example) to R17.4 per litre. As oil prices moderated again in 2019, and the rand recovered some ground, the petrol price recovered, averaging R16.0 per litre for 2019. As a result, fuel price inflation was muted during the year, averaging 2.2%, and even deflating in some months. The effect was most marked in October and November, driving the dip in headline CPI to 3.7% and 3.6% respectively. Fuel price inflation then leapt to 13.7% in January 2020, as the flattering base effect disappeared.

Over the forecast period, fuel price inflation is expected to average -5.8%, 8.7% and 3.9% for 2020, 2021 and 2022 respectively. Fuel taxes will rise 25c this year, as announced in the 2020 Budget Speech, and subsequent increases are projected to be of comparable magnitudes.

## Electricity

Electricity inflation averaged 9.6% in 2019, up from 5.2% in 2018 but close to its 10.8% average for the past decade. It is expected to accelerate somewhat in 2020, to 10.4%, before moderating again to 7.5% and 6.0% in 2021 and 2022 respectively. The lower outlook for electricity price inflation in the outer years of the forecast is consistent with the National Energy Regulator of South Africa (NERSA)-approved increases: 9.4% for 2019/20, 8.1% for 2020/21, and 5.2% for 2021/22. (Note that these are not calendar-year increments; they cover the period July through to June of the following year.) There are, however, upside risks to these numbers, based on Eskom court action to recoup costs that Eskom claims should have been reimbursed during the previous Regulatory Clearing Account process.



## Core inflation

Core inflation, which as recently as 2016 was at 5.6%, has moderated substantially. It has been in the bottom half of the target range since April 2018, averaged 4.1% in 2019, and declined further to 3.8% as of February 2020. Over the forecast period, it is expected to average 3.9%, 4.3% and 4.4% in 2020, 2021 and 2022 respectively.

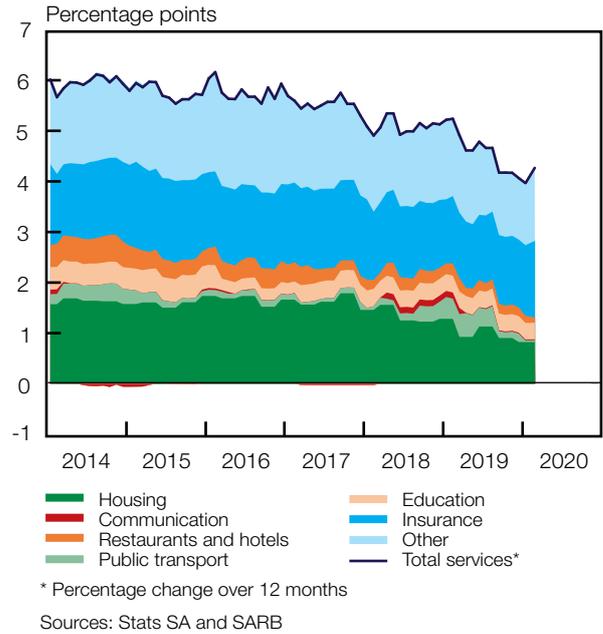
Perhaps the biggest surprise in the recent inflation data has been the sustained slowdown in service price inflation. Having long been stuck close to 6%, inflation for this category began decelerating in 2017 and slowed markedly in 2019. Specifically, services inflation started the year at 5.2% and finished at 4.1%, the largest decline in this series since 2011.

The moderation in services inflation has been broad-based. The single most important contributor to lower services inflation, however, has been housing, which is also the largest single item in the CPI basket, at 17% (and around a third of services). Housing alone explains the bulk of the 2019 forecast errors for the services category.

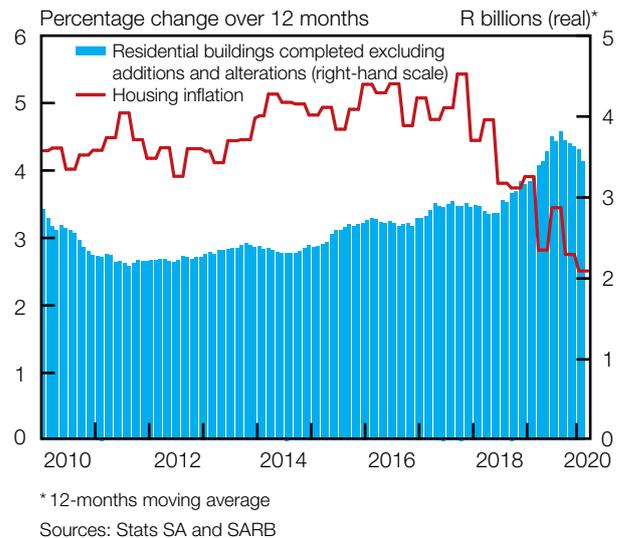
For this category, unusually low inflation reflects a mix of higher supply and falling demand. The demand-side problems are well known: households' economic prospects have deteriorated, reducing their willingness and capacity to make major purchases. This is evident in the Lightstone Property transfers series, which has been trending lower in recent years, as well as in First National Bank's (FNB) property barometer survey, which has shown a marked uptick in the proportion of respondents downscaling for financial reasons. (It also shows a corresponding decline in the share of respondents upscaling for the same reason.) Meanwhile, on the supply side of the market, there has been an ill-timed expansion of the housing stock. In inflation-adjusted terms, the value of new residential housing coming on-stream reached a post-crisis high in 2019, primarily due to rapid growth in the supply of urban apartments. Combined, these two factors have pushed housing inflation to an all-time low, of 2.5% in December 2019.

While services inflation has been slowing, core goods inflation has mostly been rising over the past two years: it averaged 2.3% in 2018 and 3.1% in 2019. Despite this upward trend, core goods inflation has come in lower than expected through much of the past year. The previous *MPR*, for instance, anticipated core goods inflation of 3.3% in 2019, a miss of 0.2 percentage points.

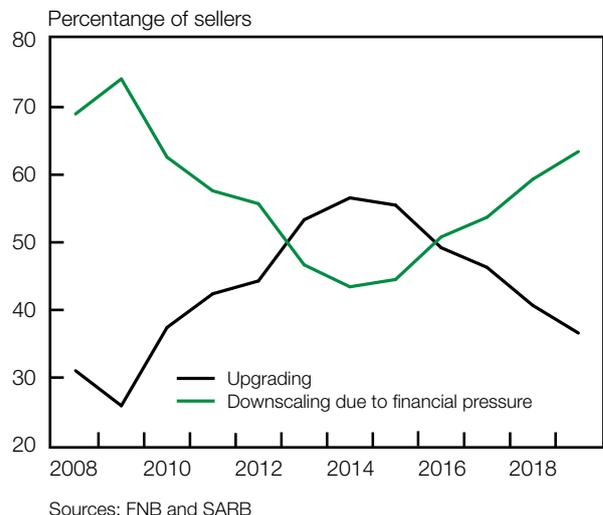
### Contributions to services inflation



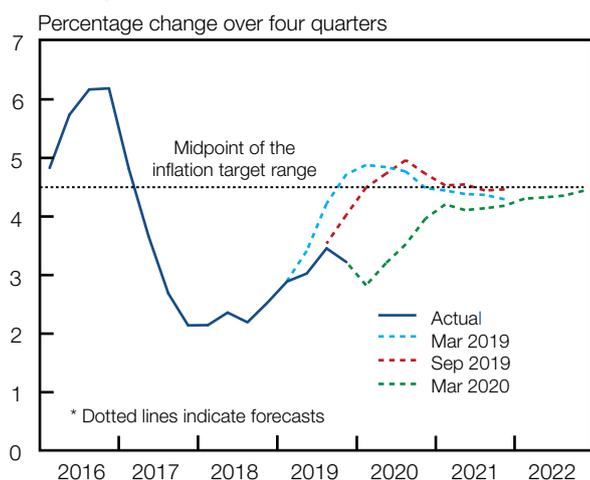
### Supply of residential housing and housing inflation



### Reasons for selling houses



### Core goods inflation forecasts\*



Source: SARB

The three most important components of core goods are vehicles, clothing, and alcohol and tobacco, which together account for more than two-thirds of the core goods basket. Of these, alcohol and tobacco products have the highest inflation, by a significant margin: the 2019 outcome, for instance, was 5.6%. The relatively high inflation for this category is due to sin taxes, which have been rising by around 7% annually. (See also Box 6.)

Vehicles inflation hit a high of 7.6% in 2016 and then moderated sharply afterwards, reflecting both an exchange rate recovery and a base effect. From a trough of 3.1% in 2018, inflation for this category has now picked up somewhat, averaging 3.6% for 2019, which makes it the second-largest contributor to core goods inflation. This peak, trough and recovery pattern in vehicles inflation is also the main reason why inflation for the broader core goods category has been accelerating over the past two years.

In clothing, by contrast, inflation has averaged just above 2% for the past three years. Retail sales growth has been slowing, averaging 1.3% in inflation-adjusted terms in 2019, down from 2.4% in 2018. Meanwhile, retail competition has intensified, with new market entrants challenging established players, reducing their pricing power. Both factors have favoured lower inflation. Import prices have also been falling, as discussed below.

### Headline inflation (March 2020 forecasts)

Percentage change over four quarters, September 2019 forecasts in brackets

	Weight	Actual		Forecast	Actual		Forecast			
		2010–2019*	2019*	2020*	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4
Headline inflation .....	100.00	5.2	4.1	3.8	4.1	3.7	4.4	3.4	3.5	4.1
			(4.2)	(5.1)	(4.1)	(4.3)	(5.3)	(4.9)		
Core inflation** .....	74.43	4.7	4.1	3.9	4.1	3.9	3.8	3.9	4.0	4.2
			(4.3)	(4.7)	(4.2)	(4.3)	(4.6)	(4.8)		
Rentals*** .....	16.84	4.4	3.1	3.0	3.2	2.7	2.7	3.0	2.9	3.2
			(3.3)	(4.0)	(3.3)	(3.2)	(3.5)	(3.7)		
Insurance .....	10.06	7.4	6.7	7.1	6.9	6.9	7.1	7.1	6.9	7.0
			(6.7)	(6.9)	(6.9)	(6.9)	(6.9)	(6.8)		
Education .....	2.53	7.9	6.7	6.8	6.7	6.7	6.7	6.9	6.9	6.9
			(6.7)	(6.8)	(6.7)	(6.7)	(6.7)	(6.9)		
Vehicles .....	6.12	3.1	3.6	4.2	3.8	3.7	4.0	4.4	4.2	4.1
			(3.5)	(3.7)	(3.9)	(3.4)	(3.4)	(3.6)		
Fuel .....	4.58	8.3	2.2	-5.8	-0.3	-3.2	10.5	-13.5	-12.1	-6.1
			(2.4)	(4.2)	(-0.1)	(-2.6)	(11.8)	(-0.7)		
Electricity .....	3.75	10.8	9.6	10.4	11.5	12.0	12.0	12.0	9.0	9.0
			(9.0)	(9.8)	(10.6)	(10.6)	(10.6)	(10.6)		

\* 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



## Medium-term outlook

In the QPM, the longer-term forecast is based on four major variables: the exchange rate, wages and productivity, the output gap, and inflation expectations. By design, the QPM delivers inflation in line with its programmed inflation target (set at 4.5%) over the medium term, which it does by moving a fifth variable: the repo rate. As in the previous *MPR*, inflation stabilises at 4.5% in the final quarter of 2021.

## Wages and unit labour costs

South African wage growth has trended steadily lower in recent years. Labour productivity has, however, also declined, in the context of a weak economy. These two developments have offsetting inflationary consequences: lower wages reduce inflationary pressure, but reduced productivity means that wages are higher per unit of output.

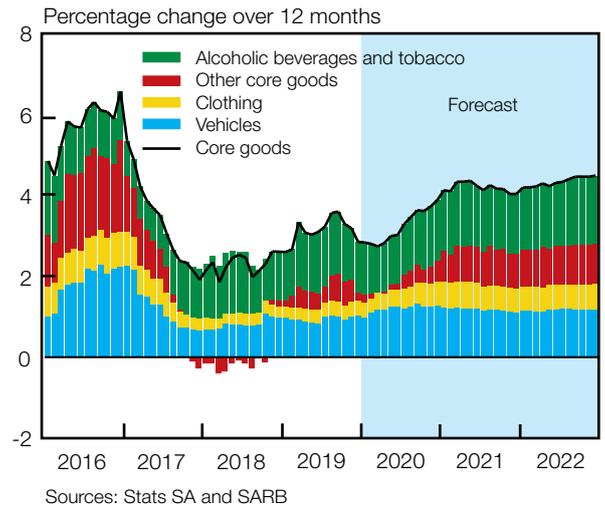
To capture this dynamic in full, the QPM relies on unit labour costs (ULC), a measure of wages adjusted for output. Given the reduced wage growth, the QPM measure of ULC growth has moderated recently, to 3.6%. This is significantly lower than the ULC growth levels of around 6.2% recorded for the period 2010 to 2017, a period of higher wage growth. A positive ULC gap, with wage growth in excess of productivity growth, nonetheless generates some inflation pressure. Over the forecast period, this pressure is expected to fade, based on wage growth staying low but productivity recovering. This permits the ULC gap to reach zero by the end of the forecast period, at which point it becomes neutral for prices.

## Exchange rate

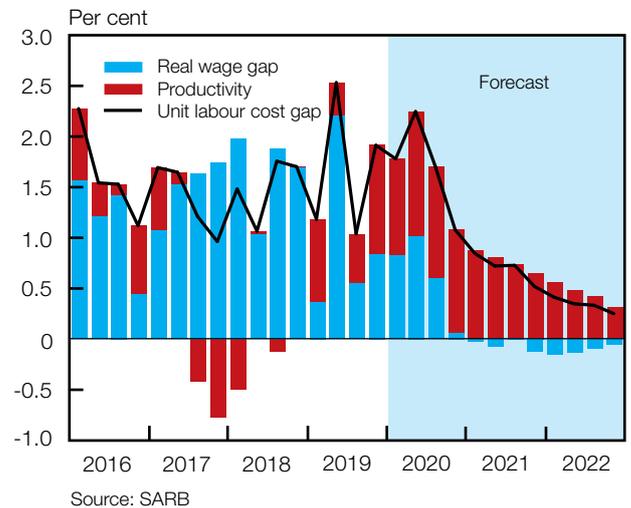
In the QPM, the exchange rate affects some prices directly (such as those for fuel) and other components indirectly (such as those for services or core goods). The direct effects are relatively straightforward to model, using only the projected rand/dollar exchange rate. For the rest, however, the QPM uses a real exchange rate gap, which is the difference between an estimated equilibrium real exchange rate, based on economic fundamentals, and the projected real exchange rate.

This measure shows that the real exchange rate gap is currently negative, meaning the exchange rate is undervalued and therefore generating upward pressure on inflation. The implied fair-value rand/dollar exchange rate is around R14.20 presently, compared with an average outcome of R15.30 for the first quarter of 2020 and a projected R16.00 for the second quarter (a number that will likely have to be revised up in future forecasts, to over R17.00). The model treats the current rand sell-off as an exchange rate overshoot, so the real

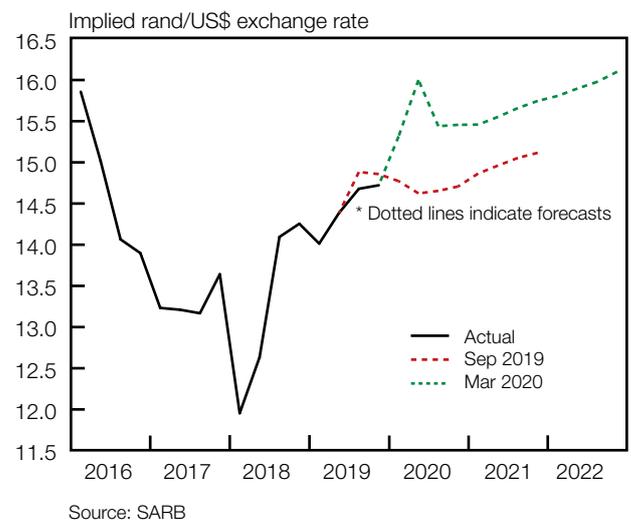
### Contributions to core goods inflation



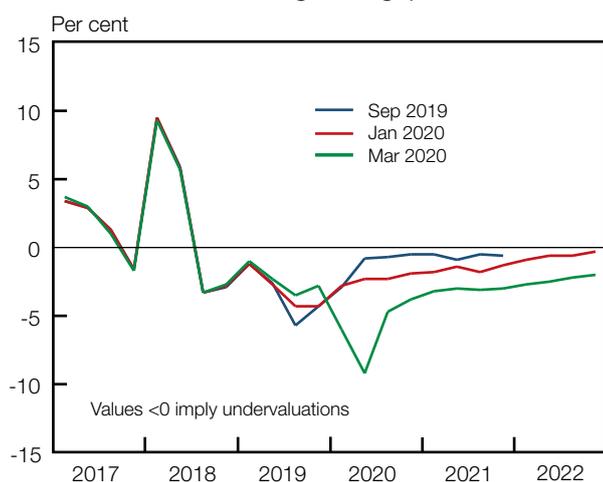
### Contributions to unit labour cost gap



### Exchange rate\*

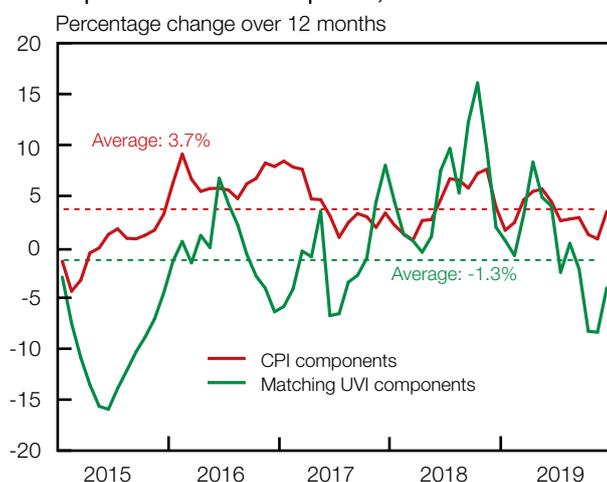


### Real effective exchange rate gap forecasts



Source: SARB

### Import and consumer prices, matched items



Sources: Stats SA and SARB

exchange rate gap narrows over the forecast period, to restore equilibrium. The Moody's downgrade nonetheless suggests the equilibrium will be more depreciated than it used to be; the implied rand/dollar exchange rate for the March MPC was R15.30 by the end of 2022, but an updated estimate puts that figure at R16.40.

In unpacking the recent inflation surprises, many analysts have focused on the possibility of lower exchange rate pass-through. This concept captures the degree to which inflation changes in response to a movement in the exchange rate. In the QPM, the pass-through estimate is 0.13 for the peak change in inflation following an exchange rate shock, which is lower than the 0.2 rule of thumb used prior to the introduction of the QPM. It may be that pass-through has declined further, possibly to less than 0.1. However, there are at least two alternative explanations available.

The first is that pass-through has seemed low because of a period of relative stability in the exchange rate trend. Although the rand/dollar exchange rate was volatile over the 2016 to 2019 period, it appreciated on a net basis, and was almost unchanged over the course of 2019. Accordingly, pass-through may have seemed low because importers were not actually facing a trend depreciation. The test for this hypothesis will be whether prices (particularly of core goods) start to move higher following a persistent exchange rate shock.

The second explanation is that exchange rate effects have been offset by low import prices. Evidence from Stats SA's Unit Value Index (UVI) for imports suggests that import prices have been in deflation over the past half-decade (in rand terms). The drawback with this measure is that it does not match the CPI closely, because it includes items that are not purchased by households (such as mining equipment). However, it is possible to match specific UVI subcategories to CPI subcategories, such as clothing and vehicles. This exercise shows substantial gaps between import prices and related CPI categories. For instance, while clothing and footwear CPI inflation has averaged 2.4% since 2017, the UVI for this category has *deflated* by 3.8% annually. Vehicles CPI has risen by 3.8% on average over the past three years; the vehicle UVI has gained only 1% annually. These dynamics should have helped to moderate inflation, separate from any lower pass-through effect.

## Output gap

South Africa's output gap had already widened to 2% of potential GDP, a 26-year low, before the COVID-19 pandemic began affecting demand. The March MPC forecast anticipated a decline in output in 2020, widening the output gap to -2.3% of potential GDP by 2020Q3. (This number is now likely to be nearer -4% of potential GDP.) Weak demand is therefore expected to exert downward pressure on prices.

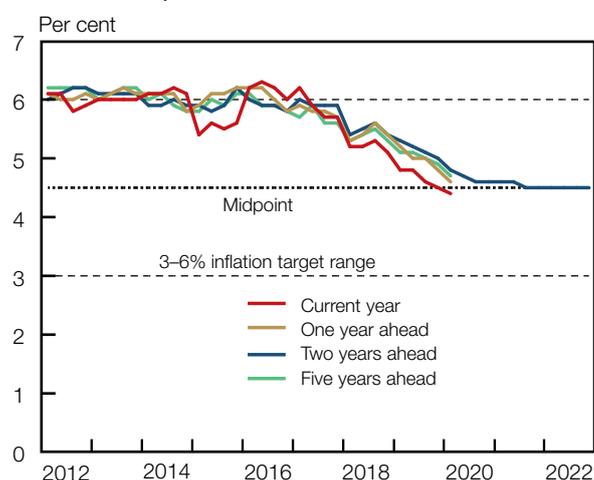


The relationship between inflation and demand, however, is not straightforward. Historically, there has been little or no connection between inflation and growth in South Africa.<sup>10</sup> More recently, however, slowing growth has coincided with disinflation. These two contrasting facts may prompt either an overstatement or an understatement of the price effects of a negative output gap. Empirical estimates, however, show that approximately 30–40% of the South African inflation basket responds to demand pressures, which is comparable to rates estimated for other economies.<sup>11</sup> The demand-sensitive items tend to be non-tradable, such as housing, which helps explain why they are most strongly affected by local business conditions. The output gap is therefore neither the overriding determinant of inflation outcomes, nor is it irrelevant. It has been the one factor among several that has reduced inflation in recent years, and it is likely to support further disinflation this year, while moderating the inflation rebound of 2021 and 2022.

## Inflation expectations

Through much of the past decade, South African inflation expectations have moved in a narrow band around the 6% upper bound of the SARB's inflation target range. From 2017, the SARB began offering explicit guidance on where in the target range it wanted inflation to stabilise, and therefore where inflation expectations should ultimately settle. Rather than a de facto target of around 6%, policymakers instead emphasised the 4.5% midpoint of the target range. Over the subsequent three years or so, inflation expectations moderated in line with this guidance. Progress on lowering expectations has been significant, sustained, and visible across all available measures of inflation expectations. As of the latest available data, the BER survey average shows inflation expectations at 4.8% for two years ahead and at 4.7% over the next five years (which is the lowest reading on record for this question). This survey also shows current-year inflation at 4.4%, which is the first time in 13 years that the survey has reported a sub-4.5% average response for any of its questions. Market-based measures, using the break-even method, have also trended lower, although the latest data points have been compromised by volatility in bond markets and should therefore be interpreted with caution.

Inflation expectations



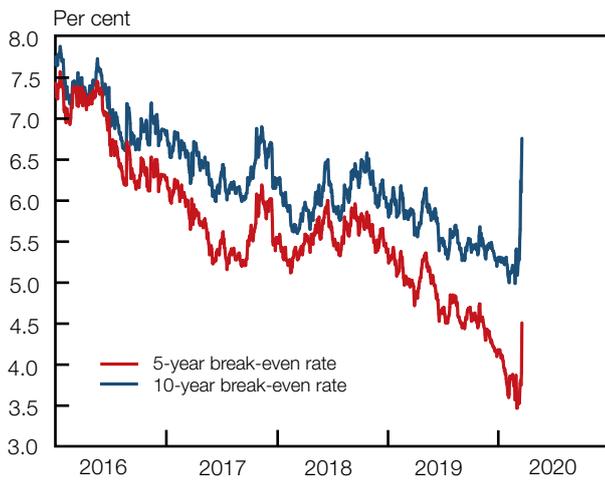
Sources: BER and SARB

10 J Fedderke and Y Liu, 'Inflation in South Africa: an assessment of alternative inflation models', *South African Reserve Bank Working Paper No. 16/03*, May 2016, available at <http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/7275/WP603.pdf>.

11 Based on the methods discussed in J H Stock and M W Watson, 'Slack and cyclically sensitive inflation', *National Bureau of Economic Research Working Paper No. 25987*, June 2019, available at <https://www.nber.org/papers/w25987> and T Mahedy and A Shapiro, 'What's down with inflation?', *Federal Reserve Bank of San Francisco Economic Letter 2017-35*, November 2017, available at <https://www.frbsf.org/economic-research/publications/economic-letter/2017/november/contribution-to-low-pce-inflation-from-healthcare/>. See also Box 6 on p. 34 of the April 2019 *Monetary Policy Review*.



## Break-even inflation rates



Source: Bloomberg

Given the inflation outlook and the SARB's continued communication around the midpoint of the target range, the forecast assumes that longer-term inflation expectations will settle at 4.5% during 2021, thereby helping inflation itself to stabilise at that level. Inflation expectations are comfortably on track to reach this level, although volatile economic conditions will test whether they anchor at that point.

## Conclusion

Throughout 2019, the SARB's inflation forecasts looked forward to inflation converging on 4.5% by the end of 2021. However, they also had inflation temporarily above 4.5% for 2020 and part of 2021. This near-term increase in inflation has now been turned inside out, based on a massive oil price shock as well as downside surprises to core. As a result, inflation is likely to average just 3.8% this year, before returning to around the middle of the target range in 2021 and 2022.

The risks to this forecast, in the MPC's assessment, are balanced. This does not mean the risks are small, but rather that there are risks of roughly equivalent magnitude on both sides. These include the possibility of more substantial and persistent currency depreciation (on the upside) and further intensifications of the COVID-19 outbreak (on the downside, a risk which transpired with the lockdown announced the week after the MPC meeting). As usual, as new information appears the forecast will shift lower or higher in the near term, while permitting the repo rate to adjust in order to return inflation to 4.5% over the medium term.

## Box 6 Measuring public sector inflation

Most components of the consumer price index (CPI) have shown lower inflation over the past three years, and the headline inflation rate has duly slowed to about the middle of the target range. (The average inflation rate for this period is 4.6%.) However, a number of price categories have shown stubbornly high inflation. On closer inspection, it transpires that most of these prices are either set or strongly influenced by government. (The only substantial exception to this rule is medical insurance.) Formalising this insight with a public sector CPI measure shows that public sector inflation is running over 6% while private sector inflation is around 3.5%. This shows that the public sector is an important source of inflation pressure in this economy.

The standard measure of government prices is the administered price index published by Statistics South Africa. However, this index omits some prices that are shaped by public sector decisions. It is also excessively responsive to international oil prices, given the inclusion of fuel as an administered price.

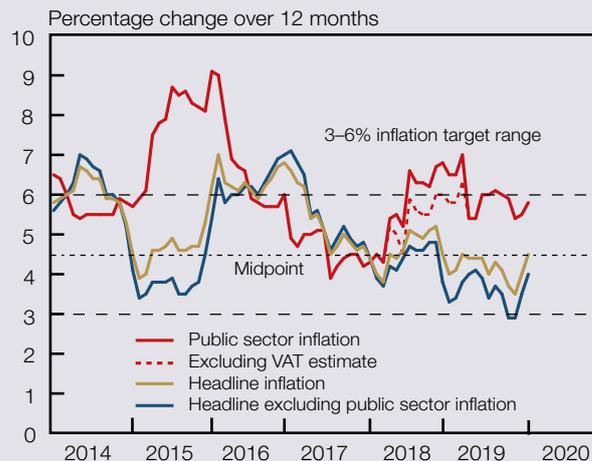
The alternative measure shown here differs from the administered price series in three respects. First, it uses only the tax portion of the fuel price, and excludes the underlying cost of fuel, which is shaped by the exchange rate and the international oil market, neither of which are controlled by government.<sup>1</sup> Second, it includes prices which are unregulated but strongly influenced by the public sector. Of these, the most significant category is alcohol and tobacco, which attracts sin taxes.<sup>2</sup> Third, this measure includes two tax increases, the April 2018 value-added tax adjustment and the new sugar tax, both of which exerted upward pressure on consumer prices.

Contrasting the public and private sector CPI measures shows that private sector inflation has decelerated steadily since 2017, and is now close to the bottom of the target range. Public sector CPI is more volatile. Strikingly, it moderated to around 4.5% during 2017, when the economy began disinflating, mainly because of unusually low electricity and education inflation. It has picked up again over the past two years, however, averaging around 6%.

For monetary policy, high inflation in one part of the CPI requires lower inflation in other parts, to ensure the headline figure is consistent with the inflation target. It is not appropriate to simply 'look through' public sector inflation and target only private sector inflation, as public sector prices are then likely to accelerate further to maintain the same real increases (unless public sector price-setters suffer from money illusion). However, given that the public sector also incurs costs from higher CPI inflation, mainly through wage increases for employees as well as CPI-indexed interest payments on government debt, it may be that high public sector inflation is suboptimal even for the public sector itself. A clearer understanding of the public sector's contribution to inflation may ultimately promote more efficient price-setting choices, with benefits including lower inflation.

- 1 Taxes now represent 60% of pump prices, up from 40% as of 2013.
- 2 Sin tax inflation has been 7.9% over the past nine years, compared with inflation of 4.1% for the ex-tax portion of these goods. Without sin taxes, alcohol and tobacco inflation would be below 4.5% rather than above.

## Public and private sector inflation



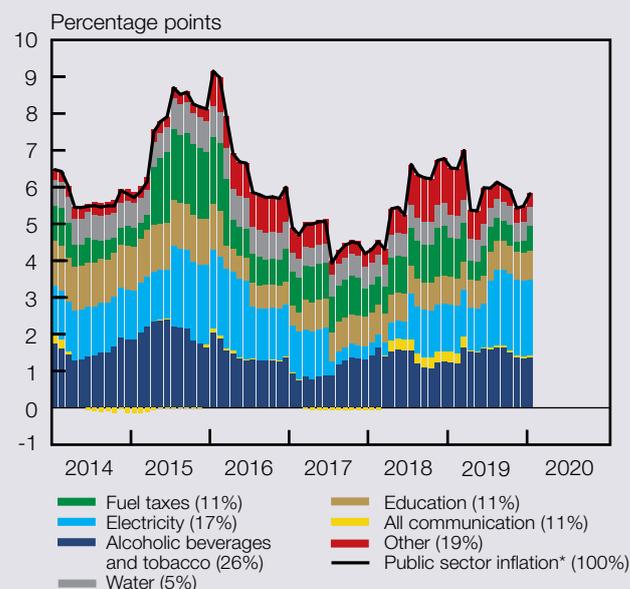
Sources: Stats SA and SARB

## Administered versus public sector inflation



Sources: Stats SA and SARB

## Contributions to public sector inflation



\* Percentage change over 12 months

Figures in brackets indicate weight in public sector inflation basket

Sources: Stats SA and SARB

## Box 7 Unpacking the 2019 inflation forecast errors

South African inflation averaged 4.1% in 2019. This outcome was well below most forecasts, including the South African Reserve Bank's (SARB). The April 2019 *Monetary Policy Review (MPR)*, for instance, showed 2019 inflation at 4.8%. The October 2018 *MPR* projected 5.7%. This box unpacks the SARB's forecast errors, compares the accuracy of the SARB forecasts with those from other analysts, and offers some lessons to improve the forecasts in future.

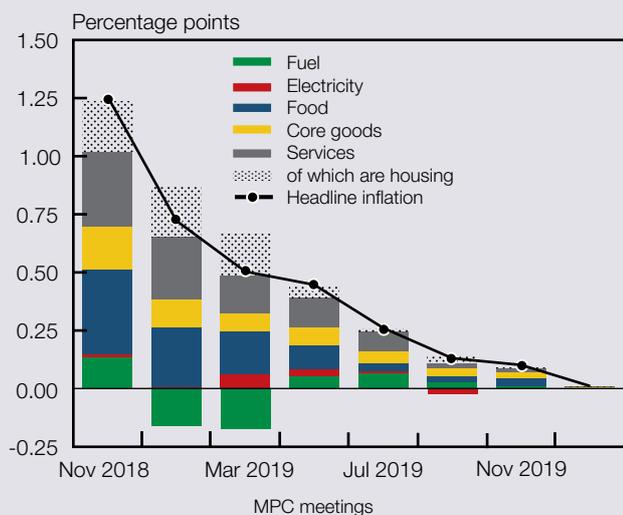
The Monetary Policy Committee (MPC) meets six times a year, and new forecasts are prepared for each meeting. These forecasts combine near-term numbers from a disaggregated model, which relies on statistical trends, with those from the Quarterly Projection Model (QPM), which takes a more theoretically grounded approach. Typically, the first quarter of the forecast is drawn from the disaggregated model, with the QPM taking over for the rest of the forecast period.

The disaggregated model produces forecasts for all the main components of the inflation basket. An error decomposition using these different items shows substantial errors on food, especially in late 2018 and early 2019, mainly due to unexpected meat price deflation. Housing inflation also shows up as a major contributor to forecast mistakes. (Both these factors are discussed in the prices chapter of this *MPR*.) Together, food and housing explain roughly half of the forecast error. However, there were also errors across other components, and almost all these mistakes were skewed to the upside. (The main exception was fuel, which had higher inflation than projected in the January and March 2019 forecasts.) A general explanation for this pattern is that this model was drawing on too long a period of inflation history. Arguably, South Africa's inflation history is no longer a good guide to future inflation, as the economy appears to have disinflated from a 'normal' level close to 6% to one nearer 4.5%. By following longer-term average inflation patterns, the disaggregated model overstated 2019 inflation.

The QPM generates separate forecasts for fuel, electricity, food and core inflation.<sup>1</sup> Drawing on this decomposition, a variety of errors is visible in late 2018 and early 2019. The exchange rate projections were too depreciated, in the context of an emerging market sell-off towards the end of 2018. (Argentina and Turkey experienced currency crises, but the exchange rates for other emerging markets recovered.) Inflation expectations were too high, as the MPC had at the time framed the 4.5% objective only as a longer-term aspiration rather than a live policy objective: model expectations were therefore set to prevailing levels, at 5.5% rather than 4.5%. The output gap estimate was insufficiently negative, with the growth forecasts well above the 0.2% outcome. The food projections were also too high, as discussed above.

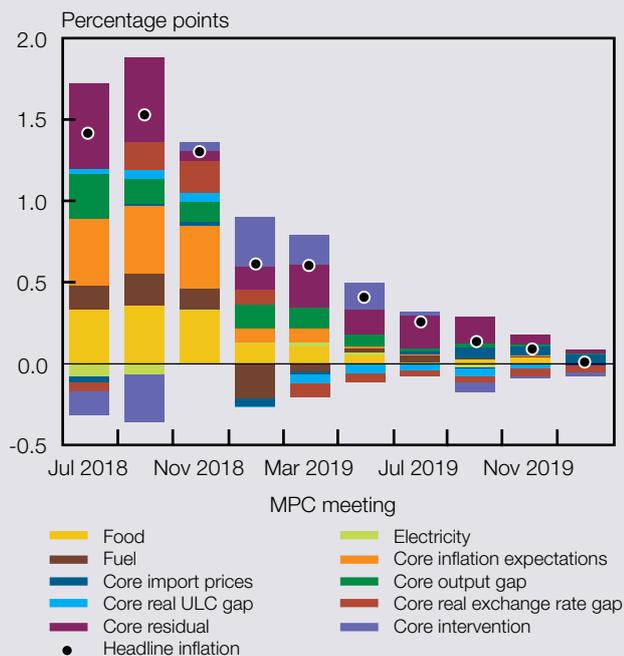
The November 2018 interest rate increase revealed a clearer preference by policymakers to achieve the 4.5% objective sooner rather than later. This prompted adjustments to the model to allow inflation expectations to converge on that target within a reasonable time frame (around three years), and to allow inflation to reach 4.5% by the end of the forecast period, with the endogenous repurchase

### Contributions to 2019 forecast errors



Sources: Stats SA and SARB

### Contributions to 2019 inflation errors



Sources: Stats SA and SARB

<sup>1</sup> The core forecasts are actually broken down into separate projections for core goods and services, but these subcomponents are combined here to simplify the error analysis charts.

rate adjusting to get it there.<sup>2</sup> These steps reduced the size of the inflation expectations error. However, through the first six months of 2019 staff applied judgement to raise the forecast, offsetting some of this decline in expectations. This was done partly because the QPM's disinflation trajectory appeared implausibly rapid, and partly because of a desire to avoid abrupt changes in the forecast. Unfortunately, in this instance, a naïve model forecast would have been more accurate.

Towards the end of the year, the size of the errors naturally declined. The statistical residual remaining at this stage reflects the portion of inflation unexplained by the model, which largely defies economic explanation, although some of it may be capturing housing disinflation.

One lesson of this experience is that disinflationary periods present difficult forecast challenges, because the old statistical patterns in the data are beginning to break down but new relationships are still unclear. In these circumstances, staff judgement is especially important, to bridge the gap between where the data have been and where they are going. However, in this case, that judgement missed a variety of disinflationary shocks, which moved inflation down faster than anticipated.

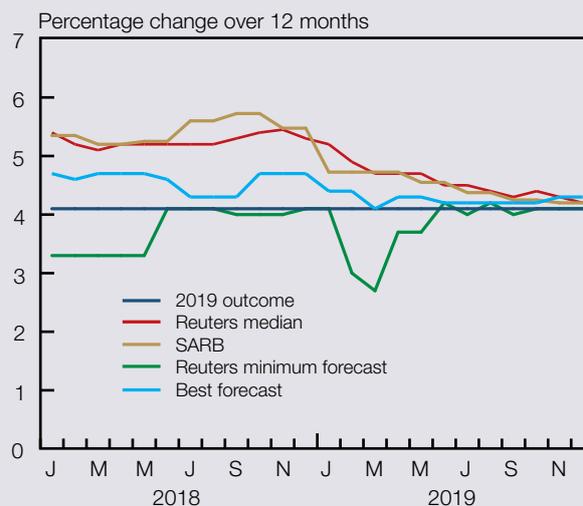
This experience also demonstrates the difficulty of making abrupt forecast changes, especially for a central bank, and particularly when new projections would mark a large departure from consensus. To announce in 2018 that inflation would average 4.1% in 2019, even had that been anticipated, would have made the SARB a major outlier. It may even have jeopardised disinflation, had the SARB been perceived as complacent. But forecasters should be wary of prioritising consistency over accuracy in developing new projections.

The issue of forecast outliers raises the additional question of whether any analysts correctly anticipated 2019 inflation. The SARB forecasts for 2019 were generally close to the Reuters median, showing that the forecast miss was a general rather than a SARB-specific surprise. That said, there were two individual firms with forecasts consistently, and substantially, below this median.<sup>3</sup> Of these, one was also below the actual outcome for most of 2019 (falling as low as 2.7% at one stage). It was also too low for previous years, suggesting either a persistent downside bias or mistakes in data capturing. The other forecast (from Capital Economics) was more impressive. It first moved away from the Reuters median in late 2017 and stayed well below it, but relatively close to the actual outcome, through 2018 and 2019 (averaging 4.6% and 4.3% in those years respectively). The relative accuracy of this forecast cannot be attributed to a lower, more realistic view of growth: the corresponding growth projections were close to the Reuters median throughout. This firm had also not been an outlier previously, having been close to the Reuters median forecasts for 2016, 2017 and 2018 – which suggests it was not a 'stopped clock' forecast that eventually coincided with the facts. A conclusion is that, while a number of analysts have reported anticipating lower inflation in 2019, better than the SARB, at least one has a valid claim.

2 These adjustments actually permitted lower repo rate forecasts, as inflation did not remain stubbornly above the Taylor Rule's 4.5% target over the medium term. This is the main reason why the early QPM forecasts envisioned substantial rate increases, which disappeared in later forecasts.

3 There were also some analysts who at times had lower forecasts, but they all revised their forecasts up to around the median subsequently, implying they had lost faith in their original projections. A number of them did not enter the survey consistently.

## 2019 CPI inflation forecasts

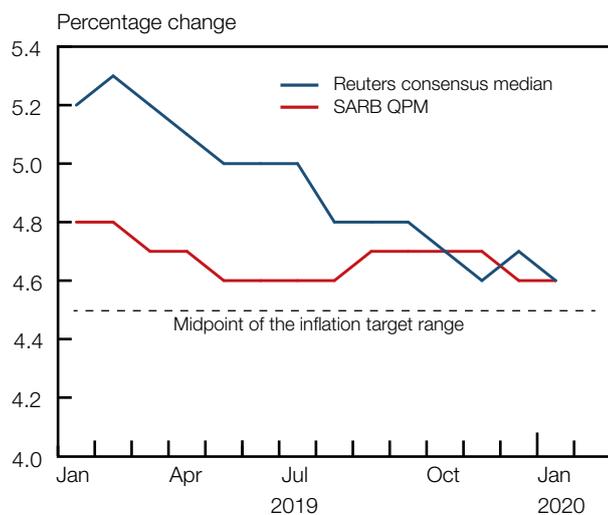


Sources: Reuters and SARB



## Summary

Evolution of the 2021 headline inflation forecast



What will inflation be over the medium term – the next two to three years? One test of a central bank’s success is whether the most likely outcome is the inflation target. Inevitably, shocks will arise that push inflation above or below that target. If these are just temporary surprises, however, then they will fade with time, leaving the inflation target as the best guide to future inflation. This is one important sense in which inflation expectations become well-anchored.

One year ago, the SARB began publishing an inflation forecast in which inflation converged on 4.5%, the midpoint of the 3–6% range, over the medium term (defined as the end of the forecast, which was then the fourth quarter of 2021). To achieve this outcome, the forecast required a specific path for the repo rate, which was also published. At the time, no analysts expected inflation to reach 4.5% by the end of 2021, and neither analysts nor market-based measures matched the SARB’s repo rate projections either.

One year later, much has changed. Analysts’ medium-term forecasts have moderated towards the SARB’s projections. The SARB forecasts continue to show inflation at 4.5% by the end of 2021, and the latest forecasts, which include 2022, have inflation at 4.5% by the end of that year. The average of the Reuters analyst survey indicates inflation of 4.6% in 2021 and 4.5% in 2022. This suggests an emerging consensus that inflation is likely to be close to the middle of the SARB’s target range over the medium term.

With inflation well-behaved, the SARB has had space to lower interest rates. Up to January 2019, this meant incremental movements to adjust for changes in data. When the COVID-19 pandemic appeared, the SARB changed tactics, providing substantial, pre-emptive support to mitigate a major demand shock. In both cases, the SARB has had monetary policy space to cut rates.

This situation contrasts with much of the historical record, in which South Africa regularly suffered from stagflation – a combination of low growth and higher inflation – and typically had to respond to exchange rate collapses with higher interest rates, even where that exacerbated growth weakness. By enhancing clarity around the target and anchoring expectations near 4.5%, stagflation risks have been significantly reduced. This leaves policymakers with a better choice than tolerating higher inflation for the sake of short-term growth. Indeed, recent MPC forecasts have shown that a lower repo rate path was required to prevent inflation from undershooting the 4.5% model objective over the medium term. As the SARB has repeatedly communicated, lower inflation leads to lower interest rates.

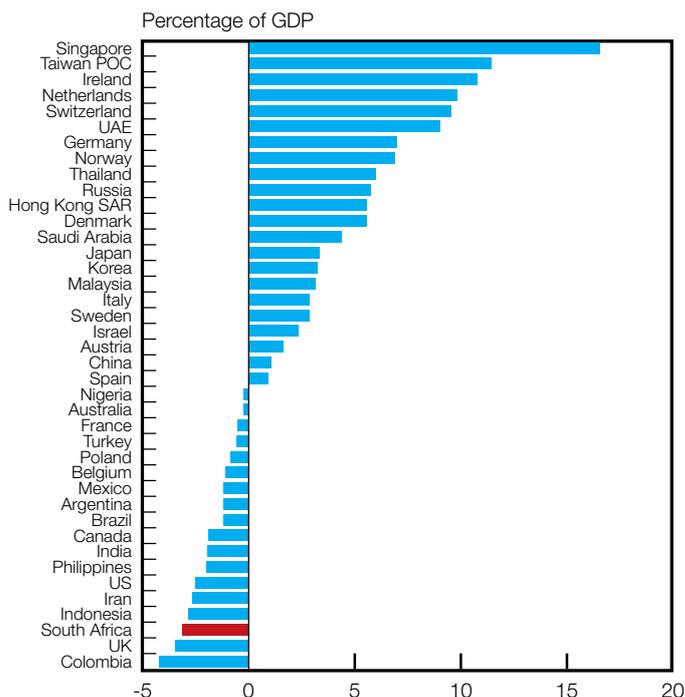


Unfortunately, South Africa's sovereign risk premium remains a source of upward pressure on interest rates, in large because of a deteriorated fiscal position. South Africa is a major borrower from the world, with one of the largest current account deficits of any sizeable economy. Openness to the world makes capital cheaper, as South Africa benefits from access to abundant foreign savings. But openness also means that domestic borrowing costs will be affected by changes in world interest rates and perceptions of South African risk, rather than purely domestic factors such as potential growth.

The COVID-19 outbreak has prompted a sudden rise in global risk aversion, pushing up rates for riskier borrowers in general. These global effects are likely to be temporary, as they were in 2009–2010. But the South Africa-specific component of risk will be more persistent, given problematic domestic fundamentals. For this reason, efforts to de-risk the local economy are important, over time, for South Africa to enjoy more of the benefits of ultra-low global rates.

In the near term, the COVID-19 shock has put large portions of the economy into a policy-induced coma. This is a supply shock, in the sense that no amount of demand can be satisfied if industries are closed. As the supply side of the economy reawakens after the lockdown, however, the demand-side aspects of COVID-19 will become more pressing. Preliminary estimates suggest South Africa could lose about 370 000 jobs this year, on a net basis, with business insolvencies increasing by roughly 1 600 firms as the economy contracts. The core macroeconomic problem, therefore, is how best to support the economy, to mitigate these losses, while remaining cognisant of South Africa's pre-existing macroeconomic vulnerabilities, which make it unrealistic to implement stimulus on the scale seen in the strongest advanced economies.

Current account balance of 40 largest\* countries



\* In 2019, as measured in US dollars using current exchange rates

Sources: IMF and SARB



# Statement of the Monetary Policy Committee

21 November 2019

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

Since the September meeting of the Monetary Policy Committee (MPC), global economic indicators have remained weak and global inflation low. Central banks in advanced economies provided more monetary accommodation, helping to ease global financing conditions, but further easing appears less likely. Downside risks from heightened trade tensions and geopolitical developments remain.

Despite a rebound in local gross domestic product (GDP) in the second quarter of this year, indicators suggest that economic activity will remain weak for the rest of the year. Recent monthly inflation has been lower than the midpoint of the inflation target range, as owners' equivalent rent, food and services inflation remain subdued.

The year-on-year inflation rate, as measured by the consumer price index (CPI) for all urban areas, was 3.7% in October (down from 4.1% in September). Goods price inflation in October was 3.1% (down from 4.0% in September), while services price inflation remained at 4.2%. Food and non-alcoholic beverage (NAB) price inflation slowed to 3.6% (down from 3.9%). The South African Reserve Bank's (SARB) measure of core inflation, which excludes food, fuel and electricity, remains unchanged at 4.0%. Producer price inflation for final manufactured goods decreased to 4.1% in September (compared to 4.5% in August).

The medium-term inflation outlook has remained largely unchanged since September. The inflation forecast generated by the SARB's Quarterly Projection Model (QPM) is unchanged compared to September, averaging 4.2% in 2019, 5.1% for 2020 and 4.7% for 2021. Headline CPI inflation is expected to peak at 5.3% in the first quarter of 2020 and settle at 4.5% in the last quarter of 2021. The forecast for core inflation is lower at 4.2% in 2019 (down from 4.3%) and at 4.5% in 2020 (down from 4.7%), and remains steady at 4.6% in 2021. Food price inflation continues to surprise to the downside on a monthly basis, and is expected to peak at about 6.1% in the third quarter of 2020.

Inflation expectations have continued to moderate gradually. According to the Bureau for Economic Research (BER) third-quarter survey, expectations for headline inflation are down slightly for 2019 to 4.6% (from 4.8%). Expectations for 2020 remain unchanged at 5.0% and have eased from 5.2% to 5.1% for 2021, reaching the lowest levels since 2007. Five-year-ahead inflation expectations also declined to 5.0% (from 5.1%).

The inflation expectations of market analysts in the November 2019 Reuters Econometer survey remain unchanged at 4.3% for 2019, revised lower to 4.7% (from 4.9%) for 2020, and are unchanged at 4.8% for 2021.

Market-based expectations implicit in the break-even inflation rates (the yield differential between conventional and inflation-linked bonds) have moderated somewhat since the previous MPC. Five-year break-even inflation rates are currently about 4.5% and ten-year break-even rates are at 5.4%.

Global GDP is expected to average 3.0% in 2019, rising to about 3.4% in 2020. While trade and manufacturing indicators continue to be weak, services have remained more resilient, keeping overall global growth rates up. However, services have shown weakness in some regions and a range of downside risks to growth remains. These include geopolitical developments, trade tensions, further oil price shocks, and high levels of corporate and sovereign debt. Across most countries, there is limited policy space to respond to shocks.

Inflation outcomes and inflation expectations in most advanced economies remain below targeted levels. Barring significant shocks, monetary policy in major advanced economies will remain accommodative over the medium term. While global financial market sentiment has turned more positive in recent weeks, the risk of renewed market volatility remains high.

Since the September MPC, the rand has depreciated slightly by 0.6% against the United States (US) dollar and by 0.8% against the euro. The implied starting point for the rand is R14.94 against the US dollar, compared with R14.88 at the time of the previous meeting. While the rand has benefitted from improvements in global sentiment, investors remain concerned about domestic growth prospects and fiscal risks.

Although GDP growth rebounded to 3.1% in the second quarter, longer-term weakness in most sectors remains a serious concern. Based on recent short-term economic indicators for the mining and manufacturing sectors, the third-quarter GDP outcome is expected to be weak. Public sector investment has declined and export growth remains low, whereas government and household consumption continue to grow, albeit modestly.

Business confidence remains weak. The Rand Merchant Bank (RMB)/BER Business Confidence Index fell to



21 points (from 28), while the Absa Purchasing Managers' Index (PMI) rose to 48.1 points in October (from 45.1). The SARB's composite leading business cycle indicator also continued to trend lower, and the coincident indicator decreased month on month while remaining positive on a year-on-year basis.

The forecast of GDP growth for 2019 is revised lower at 0.5% (from 0.6%). The forecasts for 2020 and 2021 have decreased to 1.4% (from 1.5%) and 1.7% (from 1.8%) respectively, due to lower growth than previously expected in the third and fourth quarters and downward revisions to global growth.

The MPC assesses the risks to the growth forecast to be to the downside. Escalation in global trade tensions, geopolitical risks, further domestic supply constraints and/or sustained higher oil prices could generate headwinds to growth. Public sector financing needs have risen, raising the prospect of further pressure on the currency and pushing the borrowing costs for the broader economy higher. Implementation of prudent macroeconomic policies and structural reforms that lower costs and increase investment, potential growth and job creation, remains urgent.

The overall risks to the inflation outlook are assessed to be balanced, but uncertainty about inflation risks is unusually high. Demand-side pressures remain subdued and house rental prices are expected to increase at only moderate rates. Global inflation should also remain low. Food price inflation has continued to surprise to the downside, but rising imported food prices and uncertain domestic weather patterns raise uncertainty about the future price trajectory. Further upside risks to the inflation outlook include wage growth and fuel, electricity and water prices. The risk of further capital flow volatility has also increased, which could put pressure on the exchange rate.

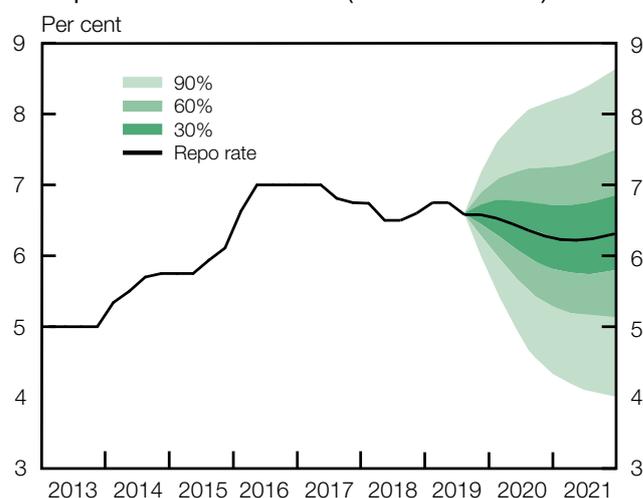
The MPC welcomes the sustained moderation in inflation outcomes and inflation expectations, and would like to see inflation expectations anchored closer to the midpoint of the inflation target range on a sustained basis.

Against this backdrop, the MPC decided to keep the repurchase rate (repo rate) unchanged at 6.5% per annum. Three members preferred to keep interest rates on hold and two members preferred a cut of 25 basis points.

Monetary policy actions will continue to focus on anchoring inflation expectations near the midpoint of the inflation target range in the interest of balanced and sustainable growth. In this persistently uncertain environment, future policy decisions will continue to be highly data-dependent, sensitive to the balance of risks to the outlook, and will seek to look through temporary price shocks.

The implied path of policy rates over the forecast period generated by the QPM indicated one repo cut of 25 basis points in the third quarter of 2020. This remains a broad policy guide which could change in either direction from meeting to meeting in response to new developments and changing data and risks.

Repurchase rate forecast (November 2019)



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 November 2019\*

### 1. Foreign sector assumptions

	Actual			Forecast		
	2016	2017	2018	2019	2020	2021
1. Real GDP growth in South Africa's major trading-partner countries .....	3.0%	3.3%	3.2%	2.4%	2.7%	3.1%
	(3.0%)	(3.2%)	(3.3%)	(2.5%)	(2.8%)	(3.1%)
2. Output gap in South Africa's major trading-partner countries (ratio to potential GDP).....	-0.6%	-0.1%	0.2%	-0.1%	-0.1%	-0.0%
	(-0.4%)	(0.0%)	(0.1%)	(-0.1%)	(-0.2%)	(-0.1%)
3. Change in international commodity prices in US\$ (excluding oil).....	4.4%	18.2%	11.0%	-2.5%	1.0%	2.0%
	(4.4%)	(18.2%)	(11.0%)	(-3.0%)	(0.0%)	(1.0%)
4. Brent crude (US\$/barrel) .....	43.6	54.2	71.0	64.4	66.0	66.0
	(43.6)	(54.2)	(71.0)	(65.0)	(66.0)	(66.0)
5. Change in world food prices (US\$) .....	-1.5%	8.1%	-3.5%	0.8%	1.5%	1.0%
	(-1.5%)	(8.1%)	(-3.5%)	(0.8%)	(1.5%)	(1.0%)
6. Change in international consumer prices .....	0.6%	1.8%	1.9%	1.4%	1.8%	1.6%
	(0.6%)	(1.8%)	(1.9%)	(1.5%)	(1.8%)	(1.8%)
7. International policy interest rate.....	0.2%	0.5%	0.9%	1.1%	0.8%	0.8%
	(0.2%)	(0.5%)	(0.9%)	(1.1%)	(0.9%)	(1.0%)

### 2. Domestic sector assumptions

	Actual			Forecast		
	2016	2017	2018	2019	2020	2021
1. Change in electricity price .....	9.3%	4.7%	5.2%	9.6%	10.4%	7.4%
	(9.3%)	(4.7%)	(5.2%)	(9.0%)	(9.7%)	(7.4%)
2. Change in fuel taxes and levies.....	9.0%	8.3%	8.9%	5.8%	5.5%	5.6%
	(9.0%)	(8.3%)	(8.9%)	(5.3%)	(5.9%)	(5.6%)
3. Potential growth .....	1.0%	1.4%	1.1%	1.0%	1.1%	1.2%
	(1.0%)	(1.4%)	(1.1%)	(1.0%)	(1.1%)	(1.2%)
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.....	1.6%	1.7%	1.9%	2.2%	2.4%	2.4%
	(1.6%)	(1.7%)	(1.9%)	(2.2%)	(2.4%)	(2.4%)

#### Notes

1. Shaded areas indicate forecast assumptions.
  2. 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 52 and 53.

# Summary of selected forecast results: Monetary Policy Committee meeting on 21 November 2019\*

## Selected forecast results (quarterly)

### Year-on-year percentage change

	2017	2018				2019				2020				2021			
	5.3 (5.3)	4.6 (4.6)				4.2 (4.2)				5.1 (5.1)				4.7 (4.7)			
1. Headline inflation		Q1	Q2	Q3	Q4												
		4.1	4.5	5.0	4.8	4.2	4.4	4.1	4.1	5.3	5.0	5.2	5.1	4.8	4.8	4.6	4.5
		(4.1)	(4.5)	(5.0)	(4.8)	(4.2)	(4.4)	(4.1)	(4.3)	(5.3)	(4.9)	(5.2)	(5.0)	(4.8)	(4.8)	(4.6)	(4.5)
2. Core inflation		Q1	Q2	Q3	Q4												
		4.1	4.4	4.2	4.4	4.4	4.2	4.1	4.1	4.3	4.5	4.6	4.6	4.7	4.6	4.5	4.5
		(4.1)	(4.4)	(4.2)	(4.4)	(4.4)	(4.2)	(4.2)	(4.3)	(4.6)	(4.8)	(4.8)	(4.8)	(4.6)	(4.6)	(4.5)	(4.5)

### Notes

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

## Selected forecast results (annual)

	Forecast					
	2016	2017	2018	2019	2020	2021
1. GDP growth .....	0.4%	1.4%	0.8%	0.5%	1.4%	1.7%
	(0.4%)	(1.4%)	(0.8%)	(0.6%)	(1.5%)	(1.8%)
2. Output gap (ratio to potential GDP) .....	-1.1%	-1.1%	-1.4%	-1.8%	-1.6%	-1.1%
	(-1.1%)	(-1.1%)	(-1.4%)	(-1.7%)	(-1.3%)	(-0.6%)
3. Change in nominal effective exchange rate .....	-14.8%	9.9%	-1.1%	-7.2%	-2.3%	-1.7%
	(-14.8%)	(9.9%)	(-1.1%)	(-7.5%)	(-0.8%)	(-2.1%)
4. Change in real effective exchange rate .....	-9.7%	13.6%	1.5%	-4.7%	0.9%	1.3%
	(-9.7%)	(13.6%)	(1.5%)	(-4.9%)	(2.4%)	(0.7%)
5. Real exchange rate gap .....	-11.7%	1.5%	2.3%	-3.1%	-2.5%	-1.3%
	(-11.7%)	(1.5%)	(2.3%)	(-3.4%)	(-1.3%)	(-0.6%)
6. Repurchase rate (end of period) .....	7.0%	6.8%	6.6%	6.6%	6.3%	6.3%
	(7.0%)	(6.8%)	(6.6%)	(6.6%)	(6.4%)	(6.5%)
7. Current account balance (ratio to GDP) .....	-2.9%	-2.5%	-3.6%	-3.4%	-3.6%	-3.8%
	(-2.9%)	(-2.5%)	(-3.6%)	(-3.5%)	(-3.7%)	(-3.8%)

### Notes

1. The nominal effective exchange rate (NEER) is based on the bilateral exchange rates of South Africa's three largest trading partners (the euro area, the US and Japan). The bilateral exchange rates are weighted by export trade weights.
2. The real effective exchange rate (REER) is the NEER deflated by the consumer price differential (between South Africa and the trade-weighted CPI of the euro area, the US and Japan).
3. 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.
4. The forecast of the current account balance is obtained from the SARB's Core Macroeconometric Model.
5. Shaded areas indicate the forecasts of the Monetary Policy Committee.
6. The figures in brackets represent the previous forecasts of the Monetary Policy Committee.



# Statement of the Monetary Policy Committee

16 January 2020

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

Since the November meeting of the Monetary Policy Committee (MPC), global economic indicators have improved somewhat and global inflation has remained low. Central banks in advanced economies provided more monetary accommodation, helping to ease global financing conditions, but further easing appears less likely. While downside risks from trade tensions and geopolitical developments remain, the global slowdown appears to be bottoming out.

The domestic economic outlook remains fragile. Despite a rebound in local gross domestic product (GDP) in the second quarter of 2019, GDP contracted in the third quarter. The fourth quarter is expected to show some positive growth.

Recent monthly inflation has been lower than the midpoint of the inflation target range. The year-on-year inflation rate, as measured by the headline consumer price index (CPI), was 3.6% in November (down from 3.7% in October). Goods price inflation in November was 2.8% (down from 3.1% in October), while services price inflation remained at 4.2%. Food and non-alcoholic beverage (NAB) price inflation was stable at 3.5% (down from 3.6%). The South African Reserve Bank's (SARB) measure of core inflation, which excludes food, fuel and electricity, decreased slightly to 3.9% (from 4.0% in October). Producer price inflation for final manufactured goods decreased to 2.3% in November (from 3.0% in October).

The medium-term inflation outlook has been revised significantly lower compared to the November forecast. The inflation forecast generated by the SARB's Quarterly Projection Model (QPM) averages 4.1% in 2019 (down from 4.2%), 4.7% for 2020 (down from 5.1%) and 4.6% for 2021 (down from 4.7%). The SARB's forecast for headline CPI inflation for 2022 is 4.5%. Headline CPI inflation is now expected to peak at 4.9% in the final quarter of 2020 and settle at 4.5% in the third quarter of 2021 (one quarter earlier). The forecast for core inflation for 2019 is unchanged at 4.2%, 4.3% in 2020 (down from 4.5%) and 4.4% in 2021 (down from 4.6%). The SARB's forecast for core inflation for 2022 is 4.5%. Food price inflation continues to surprise to the downside on a monthly basis, and has been revised from 5.8% to 4.7% for 2020.

Inflation expectations have continued to moderate gradually. According to the Bureau for Economic Research (BER) fourth-quarter survey, expectations for headline inflation are down slightly for 2019 to 4.5% (from 4.6%). Expectations for 2020 have declined to 4.8% (from 5.0%), and to 5.0% (from 5.1%) for 2021. Five-year-ahead inflation expectations have also eased, to 4.9% (from 5.0%).

The inflation expectations of market analysts in the December 2019 Reuters Econometer survey are generally lower, at 4.2% (from 4.3%) for 2019, 4.6% (from 4.7%) for 2020 and 4.7% (from 4.8%) for 2021.

Market-based expectations implicit in break-even inflation rates (the yield differential between conventional and inflation-linked bonds) have moderated somewhat since the previous MPC meeting. The five-year break-even rates are currently about 4.1% and the ten-year break-even rates are 5.3%.

Global GDP is expected to average 3.0% in 2019, rising to about 3.4% in 2020. In recent months, global trade and manufacturing indicators have exhibited signs of stabilisation and, alongside resilient services, suggest that global growth rates will hold up. However, a range of downside risks to growth remains. These include geopolitical developments, trade tensions, further oil price shocks, and high levels of corporate and sovereign debt.

Inflation outcomes and inflation expectations in most advanced economies remain below target levels. Barring significant shocks, monetary policy in major advanced economies will remain accommodative over the medium term.

Since the November MPC, the rand has appreciated by 2.6% against the United States (US) dollar and by 1.8% against the euro. The implied starting point for the rand is R14.60 against the US dollar, compared with R14.94 at the time of the previous meeting. While the rand has benefitted from improvements in global sentiment, high long-term bond yields reflect concerns about domestic growth prospects and fiscal risks.

The GDP growth outcome for the third quarter confirmed that the economy remains weak and vulnerable to idiosyncratic shocks and poor sectoral performances. While growth in the fourth quarter is expected to have picked up, electricity supply constraints will likely keep economic activity muted in the near term. Public sector investment continues to be weak and export growth remains lacklustre despite strong terms of trade. Government and household consumption, and private investment, continue to grow, albeit modestly.

Business confidence remains weak. The Rand Merchant Bank (RMB)/BER Business Confidence Index improved to 26 points (from 21), while the Absa Purchasing Managers' Index (PMI) fell to 47.1 points in December (from 47.7). The SARB's composite leading business cycle indicator also continued to trend lower, while the coincident indicator increased marginally month on month.



The forecast of GDP growth for 2019 is revised lower to 0.4% (from 0.5%). The forecasts for 2020 and 2021 have also decreased to 1.2% (from 1.4%) and 1.6% (from 1.7%) respectively, due to lower growth than previously expected in the third and fourth quarters. The GDP forecast for 2022 is 1.9%.

The MPC assesses the risks to the growth forecast to be to the downside. Escalation in global trade tensions, geopolitical risks, further domestic supply constraints and/or sustained higher oil prices could generate headwinds to growth. Public sector financing needs have risen, increasing risk premiums and pushing borrowing costs for the broader economy higher. Implementation of prudent macroeconomic policies and structural reforms that lower costs and increase investment, potential growth and job creation, remains urgent.

The overall risks to the inflation outlook are assessed to be balanced. Demand-side pressures remain subdued and house rental prices are expected to increase at only moderate rates. Global inflation should also remain low. Food price inflation has continued to surprise to the downside, although rising imported food prices create some caution about the future price trajectory. While the currency has strengthened relative to the November meeting, the risk remains that domestic shocks might generate more capital flow volatility and put pressure on the exchange rate and inflation. Other upside risks to the inflation outlook remain, including from fuel, electricity and water prices, and from nominal wage growth.

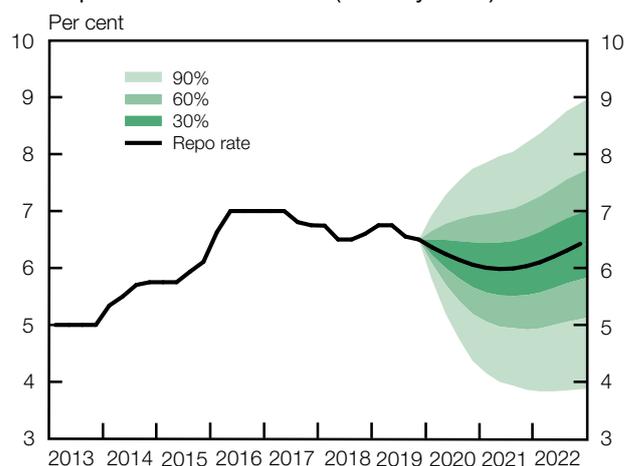
The MPC welcomes the lower inflation outcomes and the continued moderation in inflation expectations. While the MPC would like to see inflation expectations anchored closer to the midpoint of the inflation target range on a sustained basis, the lower inflation forecast and improved risk profile opens some space to provide further policy accommodation to the economy.

Against this backdrop, the MPC decided to reduce the repurchase rate (repo rate) by 25 basis points. The decision was unanimous.

Monetary policy actions will continue to focus on anchoring inflation expectations near the midpoint of the inflation target range in the interest of balanced and sustainable growth. In this persistently uncertain environment, future policy decisions will continue to be highly data-dependent, sensitive to the balance of risks to the outlook, and will seek to look through temporary price shocks.

The implied path of policy rates over the forecast period generated by the QPM indicated two repo rate cuts of 25 basis points each in the first and fourth quarters of 2020. This remains a broad policy guide which could change in either direction from meeting to meeting in response to new developments and changing data and risks.

Repurchase rate forecast (January 2020)



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 16 January 2020\*

### 1. Foreign sector assumptions

	Actual		Forecast			
	2017	2018	2019	2020	2021	2022
1. Real GDP growth in South Africa's major trading-partner countries .....	3.2%	3.3%	2.4%	2.7%	3.1%	3.1%
	(3.3%)	(3.2%)	(2.4%)	(2.7%)	(3.1%)	
2. Output gap in South Africa's major trading-partner countries (ratio to potential GDP).....	-0.1%	0.1%	-0.1%	-0.1%	0.0%	0.2%
	(-0.1%)	(0.2%)	(-0.1%)	(-0.1%)	(0.0%)	
3. Change in international commodity prices in US\$ (excluding oil).....	18.2%	11.0%	-2.3%	2.0%	2.1%	2.5%
	(18.2%)	11.0%	(-2.5%)	(1.0%)	(2.0%)	
4. Brent crude (US\$/barrel) .....	54.2	71.0	64.4	66.5	66.0	66.0
	(54.2)	(71.0)	(64.4)	(66.0)	(66.0)	
5. Change in world food prices (US\$).....	8.1%	3.5%	1.6%	2.0%	1.0%	1.5%
	(8.1%)	(-3.5%)	(0.8%)	(1.5%)	(1.0%)	
6. Change in international consumer prices .....	(1.8%)	1.9%	1.4%	1.8%	1.6%	1.9%
	(1.8%)	(1.9%)	(1.4%)	(1.8%)	(1.6%)	
7. International policy interest rate.....	0.5%	0.9%	1.1%	0.9%	0.9%	1.1%
	(0.5%)	(0.9%)	(1.1%)	(0.8%)	(0.8%)	

### 2. Domestic sector assumptions

	Actual		Forecast			
	2017	2018	2019	2020	2021	2022
1. Change in electricity price .....	4.7%	5.2%	9.6%	10.4%	7.4%	6.0%
	(4.7%)	(5.2%)	(9.6%)	(10.4%)	(7.4%)	
2. Change in fuel taxes and levies.....	8.3%	8.9%	5.8%	6.1%	5.6%	5.3%
	(8.3%)	(8.9%)	(5.8%)	(5.5%)	(5.6%)	
3. Potential growth.....	1.4%	1.1%	1.0%	1.1%	1.2%	1.2%
	(1.4%)	(1.1%)	(1.0%)	(1.1%)	(1.2%)	
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%)	
5. Neutral real interest rate.....	1.7%	1.9%	2.2%	2.4%	2.4%	2.5%
	(1.7%)	(1.9%)	(2.2%)	(2.4%)	(2.4%)	

#### Notes

1. Shaded areas indicate forecast assumptions.
  2. 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 52 and 53.



# Summary of selected forecast results: Monetary Policy Committee meeting on 16 January 2020\*

## Selected forecast results (quarterly)

### Year-on-year percentage change

	2018 4.6 (4.6)	2019 4.1 (4.2)				2020 4.7 (5.1)				2021 4.6 (4.7)				2022 4.5			
1. Headline inflation		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		4.2	4.4	4.1	3.8	4.8	4.4	4.6	4.9	4.7	4.7	4.5	4.4	4.5	4.5	4.5	4.5
		(4.2)	(4.4)	(4.1)	(4.1)	(5.3)	(5.0)	(5.2)	(5.1)	(4.8)	(4.8)	(4.6)	(4.5)				
2. Core inflation	2018 4.3 (4.3)	2019 4.2 (4.2)				2020 4.3 (4.5)				2021 4.4 (4.6)				2022 4.5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		4.4	4.2	4.1	3.9	4.2	4.2	4.4	4.5	4.4	4.5	4.4	4.4	4.5	4.5	4.5	4.5
		(4.4)	(4.2)	(4.1)	(4.1)	(4.3)	(4.5)	(4.6)	(4.6)	(4.7)	(4.6)	(4.5)	(4.5)				

### Notes

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

## Selected forecast results (annual)

	Actual		Forecast			
	2017	2018	2019	2020	2021	2022
1. GDP growth .....	1.4%	0.8%	0.4%	1.2%	1.6%	1.9%
	(1.4%)	(0.8%)	(0.5%)	(1.4%)	(1.7%)	
2. Output gap (ratio to potential GDP) .....	-1.1%	-1.4%	-1.9%	-1.9%	-1.4%	-0.7%
	(-1.1%)	(-1.4%)	(-1.8%)	(-1.6%)	(-1.1%)	
3. Change in nominal effective exchange rate .....	9.9%	-1.1%	-7.1%	-1.6%	-2.1%	-1.5%
	(9.9%)	(-1.1%)	(-7.2%)	(-2.3%)	(-1.7%)	
4. Change in real effective exchange rate .....	13.6%	1.5%	-4.5%	1.2%	0.8%	1.0%
	(13.6%)	(1.5%)	(-4.7%)	(0.9%)	(1.3%)	
5. Real exchange rate gap .....	1.5%	2.3%	-3.1%	-2.3%	-1.6%	-0.6%
	(1.5%)	(2.3%)	(-3.1%)	(-2.5%)	(-1.3%)	
6. Repurchase rate (end of period) .....	6.8%	6.6%	6.5%	6.1%	6.0%	6.4%
	(6.8%)	(6.6%)	(6.6%)	(6.3%)	(6.3%)	
7. Current account balance (ratio to GDP) .....	-2.5%	-3.6%	-3.5%	-3.5%	-3.7%	-3.7%
	(-2.5%)	(-3.6%)	(-3.4%)	(-3.6%)	(-3.8%)	

### Notes

1. The nominal effective exchange rate (NEER) is based on the bilateral exchange rates of South Africa's three largest trading partners (the euro area, the US and Japan). The bilateral exchange rates are weighted by export trade weights.
2. The real effective exchange rate (REER) is the NEER deflated by the consumer price differential (between South Africa and the trade-weighted CPI of the euro area, the US and Japan).
3. 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.
4. The forecast of the current account balance is obtained from the SARB's Core Macroeconometric Model.
5. Shaded areas indicate the forecasts of the Monetary Policy Committee.
6. The figures in brackets represent the previous forecasts of the Monetary Policy Committee.



# Statement of the Monetary Policy Committee

19 March 2020

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

Since the January meeting of the Monetary Policy Committee (MPC), the South African Reserve Bank's (SARB) forecast for inflation has continued to moderate, in line with monthly inflation data and recent lower oil prices. Globally, a once-healthy economic growth outlook has been revised down sharply due to the outbreak and spread of COVID-19. This coronavirus will negatively affect global and domestic economic growth through the first half of 2020 and potentially longer, depending on steps taken to limit its spread.

The COVID-19 outbreak will have a major health and social impact, and forecasting global and domestic activity presents significant uncertainty. The Chinese economy, where the virus originated, is expected to contract by 1% in the first half of 2020. Economic activity is likely to contract in the United States (US) and Europe, as governments there take actions to contain the spread of the virus.

In financial markets, the sustained global bull market in equities and corporate bonds also ended dramatically last week, with extensive and deep repricing. Prices for emerging market sovereign debt and other risky assets also fell sharply. This will have repercussions for household wealth and income, impacting further on global economic growth.

In response to all these developments, the US Federal Reserve (Fed), alongside other central banks, took various steps to provide further monetary accommodation. Additional steps have also been taken to provide liquidity and ensure the smooth functioning of markets. Some governments have taken fiscal measures to mitigate the economic effects of the virus.

In light of these considerations, we have marked down global growth to 1.1% for 2020, rising to around 2.8% in 2021. While a deeper or longer global and domestic contraction is not in our baseline, the MPC did consider a scenario featuring that possibility.

Prices for some commodities have fallen as a result of weaker demand globally, with copper and oil being particularly hard-hit. The spot price for Brent crude oil is currently around US\$30 per barrel but is expected to bounce back to higher levels. For our forecast, the Brent crude oil price is expected to average US\$40.4 per barrel in 2020 and US\$44.5 per barrel in 2021, well below previous assumptions.

The domestic economic outlook remains fragile. At this point, COVID-19 is likely to result in weaker demand for

exports as well as domestic goods and services, but its impact on the economy could be partly offset by lower oil prices. We also expect disruptions to supply chains and to normal business operations. The SARB now expects the economy to contract by 0.2% in 2020. Gross domestic product (GDP) growth is expected to rise to 1.0% in 2021 and to 1.6% in 2022.

Apart from the COVID-19 global pandemic, electricity supply constraints and other sources of uncertainty are expected to keep economic activity muted. Public sector investment has declined, and job creation has slowed. Business and household confidence has weakened further. Government and household consumption, and private investment, however, continue to grow, albeit modestly. While export growth is expected to decelerate further in the near term, prices remain high for some export commodities and could be supported by an early resumption in China's economic activity.

The technical recession of the latter half of 2019 has contributed to a lower economic growth forecast. In addition, COVID-19 and existing constraints such as load-shedding, imply significant downside risk to the forecast.<sup>1</sup>

With persistently low inflation, and the coronavirus now hitting economic activity, monetary policy in major advanced economies and China will likely remain accommodative over the medium term. Easy global financing conditions have previously supported the value of the local currency, but financial volatility and a sharp rise in perceived risk have caused the rand to depreciate by 17.2% against the US dollar since January. The implied starting point for the rand forecast is R15.30 to the US dollar, compared with R14.90 at the time of the previous meeting. The forecast shows the currency strengthening over time, recovering towards its longer-run equilibrium level.

The SARB's headline consumer price inflation forecast averages 3.8% for 2020, 4.6% for 2021, and 4.4% in 2022. The forecast for core inflation is lower at 3.9% in 2020, 4.3% in 2021, and 4.4% in 2022.

With the downward revision to the forecast, the overall risks to the inflation outlook at this time appear to be balanced. Electricity pricing remains an immediate concern, and there is likely to be higher volatility in prices of other goods and services as a result of sharp changes in demand and supply. Risks to inflation from recent currency depreciation are expected to be muted as pass-through is slow and could be

<sup>1</sup> The forecast deducts 0.5 percentage points from 2020 GDP for load-shedding at stage 2.

offset by a wider output gap. Food price inflation is expected to remain low, in part due to better weather conditions.

Expectations of future inflation have moderated further, on the back of lower services prices, modest food price inflation, and slower-growing nominal wages. Across the different surveys we look at, inflation expectations currently average 4.4% for 2020, 4.6% for 2021, and 4.7% for 2025.<sup>2</sup> Market-based expectations have also moderated, with five-year break-even rates currently at about 3.90%.<sup>3</sup>

Heightened risk sentiment in global markets has amplified domestic and fiscal risks. This has pushed South Africa's sovereign bond yields sharply higher and weakened the domestic currency, increasing risks to monetary policy. The steep drop in global real interest rates implemented by advanced economies in recent days has partly offset those risks.<sup>4</sup>

Despite the general rise in risk, the significantly lower forecast for headline inflation has created space for monetary policy to respond to the rapid deterioration in economic conditions. Barring severe and persistent currency and oil shocks, inflation is expected to be well-contained, remaining below the midpoint of the target range in 2020 and close to the midpoint in 2021.

Against this backdrop, the MPC decided to cut the repurchase rate (repo rate) by 100 basis points. This takes the repo rate to 5.25% per annum, with effect from 20 March 2020. The decision was unanimous.

The implied path of policy rates over the forecast period generated by the Quarterly Projection Model (QPM) indicated three repo rate cuts of 25 basis points each in the second and fourth quarters of 2020, as well as in the third quarter of 2021.

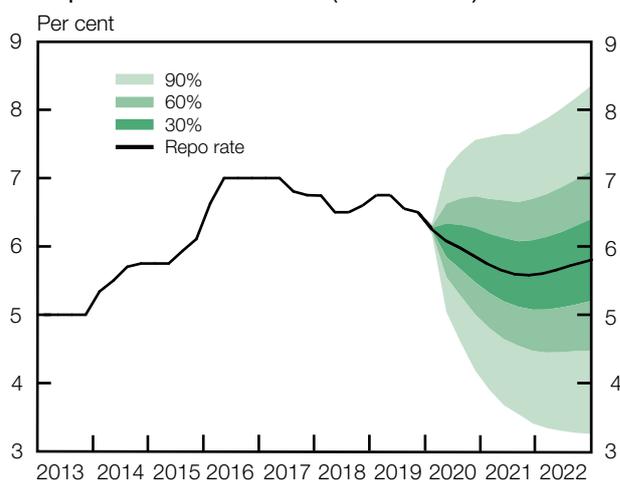
Monetary policy can ease financial conditions and improve the resilience of households and firms to the short-term economic implications of COVID-19. Our decision and its magnitude seeks to do this in the near term.

Monetary policy, however, cannot on its own improve the potential growth rate of the economy or reduce fiscal risks. Current economic conditions underscore the importance of implementing prudent macroeconomic policies and structural reforms that lower costs generally, and increase investment opportunities, potential growth and job creation.

Global economic and financial conditions are expected to remain highly volatile for the foreseeable future. The MPC will continue to assess risks to inflation, including from weaker economic growth and those arising from wage and price pressures, as well as currency depreciation.

As usual, the repo rate projection from the QPM remains a broad policy guide which can change from meeting to meeting in response to changing data and risks.

Repurchase rate forecast (March 2020)



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

<sup>2</sup> The latest Bureau for Economic Research (BER) survey has expectations for 2020 down by 0.4 percentage points to 4.4% and to 4.6% (from 5.0%) for 2021. Five-year-ahead inflation expectations also eased to 4.7% (from 4.9%). Market analysts (Reuters Econometer) expect inflation to be 4.2% (from 4.4%) for 2020, 4.6% (from 4.7%) in 2021 and 4.5% (from 4.6%) for 2022.

<sup>3</sup> Calculated from the break-even inflation rate, which is the yield differential between conventional and inflation-linked bonds.

<sup>4</sup> The risk premium starting point increased from 3.2% to 3.8% since January, driving up the neutral real rate by 20 basis points and currency contribution to the neutral by 10 basis points. The weighted global neutral real rate estimated in the QPM fell by 50 basis points, resulting in an overall decline in the neutral by 20 basis points.



## Summary of assumptions: Monetary Policy Committee meeting on 19 March 2020\*

### 1. Foreign sector assumptions

	Actual			Forecast		
	2017	2018	2019	2020	2021	2022
1. Real GDP growth in South Africa's major trading-partner countries .....	3.4%	3.3%	2.3%	1.1%	2.8%	3.1%
	(3.2%)	(3.3%)	(2.4%)	(2.7%)	(3.1%)	(3.1%)
2. Output gap in South Africa's major trading-partner countries (ratio to potential GDP).....	0.0%	0.1%	-0.1%	-1.4%	-0.8%	-0.4%
	(-0.1%)	(0.1%)	(-0.1%)	(-0.1%)	(0.0%)	(0.2%)
3. Change in international commodity prices in US\$ (excluding oil).....	18.2%	11.2%	-0.9%	-0.6%	-7.0%	3.4%
	(18.2%)	(11.0%)	(-2.3%)	(2.0%)	(2.1%)	(2.5%)
4. Brent crude (US\$/barrel) .....	54.2	71.0	64.4	40.4	44.5	45.0
	(54.2)	(71.0)	(64.4)	(66.5)	(66.0)	(66.0)
5. Change in world food prices (US\$) .....	8.1%	-3.5%	1.8%	2.5%	1.5%	1.5%
	(8.1%)	(-3.5%)	(1.6%)	(2.0%)	(1.0%)	(1.5%)
6. Change in international consumer prices .....	1.8%	1.9%	1.4%	0.5%	1.3%	1.4%
	(1.8%)	(1.9%)	(1.4%)	(1.8%)	(1.6%)	(1.9%)
7. International policy interest rate.....	0.5%	0.9%	1.1%	0.2%	0.1%	0.1%
	(0.5%)	(0.9%)	(1.1%)	(0.9%)	(0.9%)	(1.1%)

### 2. Domestic sector assumptions

	Actual			Forecast		
	2017	2018	2019	2020	2021	2022
1. Change in electricity price .....	4.7%	5.2%	9.6%	10.4%	7.4%	6.0%
	(4.7%)	(5.2%)	(9.6%)	(10.4%)	(7.4%)	(6.0%)
2. Change in fuel taxes and levies.....	8.3%	8.9%	5.8%	5.3%	4.6%	4.4%
	(8.3%)	(8.9%)	(5.8%)	(6.1%)	(5.6%)	(5.3%)
3. Potential growth .....	1.2%	0.9%	0.6%	0.6%	0.9%	1.0%
	(1.4%)	(1.1%)	(1.0%)	(1.1%)	(1.2%)	(1.2%)
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.....	1.7%	1.9%	2.1%	2.2%	2.2%	2.3%
	(1.7%)	(1.9%)	(2.2%)	(2.4%)	(2.4%)	(2.5%)

#### Notes

1. Shaded areas indicate forecast assumptions.
2. 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 52 and 53.

# Summary of selected forecast results: Monetary Policy Committee meeting on 19 March 2020\*

## Selected forecast results (quarterly)

### Year-on-year percentage change

	2018	2019				2020				2021				2022			
	4.6 (4.6)	4.1 (4.1)				3.8 (4.7)				4.6 (4.6)				4.4 (4.5)			
1. Headline inflation		Q1	Q2	Q3	Q4												
		4.2	4.4	4.1	3.7	4.4	3.4	3.5	4.1	4.3	4.9	4.8	4.5	4.5	4.4	4.4	4.4
		(4.2)	(4.4)	(4.1)	(3.8)	(4.8)	(4.4)	(4.6)	(4.9)	(4.7)	(4.7)	(4.5)	(4.4)	(4.5)	(4.5)	(4.5)	(4.5)
2. Core inflation		Q1	Q2	Q3	Q4												
		4.4	4.2	4.1	3.9	3.8	3.9	4.0	4.2	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.4
		(4.4)	(4.2)	(4.1)	(3.9)	(4.2)	(4.2)	(4.4)	(4.5)	(4.4)	(4.5)	(4.4)	(4.4)	(4.5)	(4.5)	(4.5)	(4.5)

### Notes

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

## Selected forecast results (annual)

				Forecast		
	2017	2018	2019	2020	2021	2022
1. GDP growth.....	1.4%	0.8%	0.2%	-0.2%	1.0%	1.6%
	(1.4%)	(0.8%)	(0.4%)	(1.2%)	(1.6%)	(1.9%)
2. Output gap (ratio to potential GDP).....	-1.0%	-1.0%	-1.5%	-2.3%	-2.1%	-1.6%
	(-1.1%)	(-1.4%)	(-1.9%)	(-1.9%)	(-1.4%)	(-0.7%)
3. Change in nominal effective exchange rate.....	9.9%	-1.1%	-7.1%	-6.6%	-0.4%	-2.1%
	(9.9%)	(-1.1%)	(-7.1%)	(-1.6%)	(-2.1%)	(-1.5%)
4. Change in real effective exchange rate.....	13.6%	1.5%	-4.5%	-3.5%	2.9%	0.7%
	(13.6%)	(1.5%)	(-4.5%)	(1.2%)	(0.8%)	(1.0%)
5. Real exchange rate gap.....	1.5%	2.2%	-2.4%	-5.9%	-3.1%	-2.3%
	(1.5%)	(2.3%)	(-3.1%)	(-2.3%)	(-1.6%)	(-0.6%)
6. Repurchase rate (end of period).....	6.8%	6.6%	6.5%	5.9%	5.6%	5.8%
	(6.8%)	(6.6%)	(6.5%)	(6.1%)	(6.0%)	(6.4%)
7. Current account balance (ratio to GDP).....	-2.5%	-3.6%	-3.0%	-2.4%	-3.4%	-3.7%
	(-2.5%)	(-3.6%)	(-3.5%)	(-3.5%)	(-3.7%)	(-3.7%)

### Notes

1. The nominal effective exchange rate (NEER) is based on the bilateral exchange rates of South Africa's three largest trading partners (the euro area, the US and Japan). The bilateral exchange rates are weighted by export trade weights.
2. The real effective exchange rate (REER) is the NEER deflated by the consumer price differential (between South Africa and the trade-weighted CPI of the euro area, the US and Japan).
3. 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.
4. The forecast of the current account balance is obtained from the SARB's Core Macroeconometric Model.
5. Shaded areas indicate the forecasts of the Monetary Policy Committee.
6. 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 euro area, 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 euro area, 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 euro area, 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 3.75% 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/14/08*).
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 South African Reserve Bank's (SARB) 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 (29.26%), the Chinese yuan (20.54%), the US dollar (13.72%), the Japanese yen (6.03%), and the British pound (5.82%). Index: 2010 = 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 rate (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

Alsi	All-Share Index	NRIR	neutral real interest rate
BER	Bureau for Economic Research	OECD	Organisation for Economic Co-operation and Development
BoE	Bank of England	OPEC	Organization of the Petroleum Exporting Countries
Capex	capital expenditure	PMI	Purchasing Managers' Index
CDS	credit default swap	POC	Province of China
CPB	Centraal Planbureau (Netherlands Bureau for Economic Policy Analysis)	QE	quantitative easing
CPI	consumer price index	QES	<i>Quarterly Employment Statistics</i>
CSI	composite slack index	QPM	Quarterly Projection Model
DAFF	Department of Agriculture, Forestry and Fisheries	RAF	Road Accident Fund
EAF	Energy Availability Factor	REER	real effective exchange rate
ECB	European Central Bank	repo rate	repurchase rate
EM	Emerging Market	RMB	Rand Merchant Bank
EMBI+	Emerging Market Bond Index plus	SAR	Special Administrative Region
FAO	Food and Agriculture Organization	SARB	South African Reserve Bank
Fed	Federal Reserve	SARS	South African Revenue Service
FIM	fiscal impulse measure	SIT	services, income and current transfers
FNB	First National Bank	S&P	Standard & Poor's Global Ratings
FRA	forward rate agreement	SSA	sub-Saharan Africa
FTSE	Financial Times Stock Exchange	Stats SA	Statistics South Africa
FX	foreign exchange	UAE	United Arab Emirates
G3	Group of Three (United States, euro area, Japan)	UK	United Kingdom
GDP	gross domestic product	ULC	unit labour cost
GPM	Global Projection Model	UN	United Nations
GVA	gross value added	US	United States
Haver	Haver Analytics	UVI	Unit Value Index
HP	Hodrick-Prescott filter	VAT	value-added tax
IMF	International Monetary Fund	VIX	Chicago Board Options Exchange Volatility Index
JSE	JSE Limited	WHO	World Health Organization
Moody's	Moody's Corporation		
MPC	Monetary Policy Committee		
<i>MPR</i>	<i>Monetary Policy Review</i>		
<i>MTBPS</i>	<i>Medium Term Budget Policy Statement</i>		
NAB	non-alcoholic beverages		
NEER	nominal effective exchange rate		
NERSA	National Energy Regulator of South Africa		

