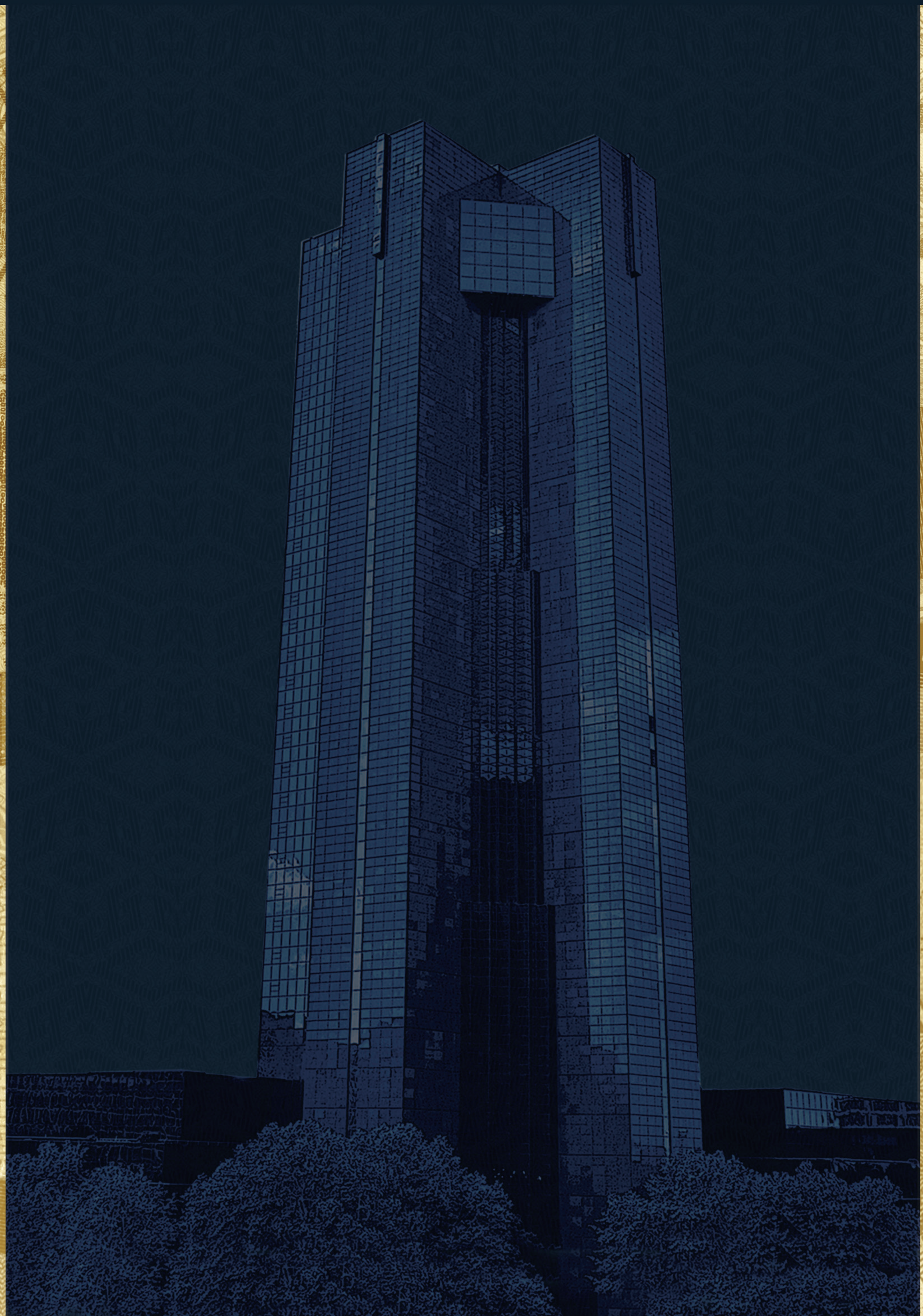
Monetary Policy Review

April 2016



South African Reserve Bank

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Preface

The primary mandate of the South African Reserve Bank (the Bank) is to achieve and maintain price stability in the interest of balanced and sustainable economic growth. Low inflation helps to maintain and improve competitiveness, protects the purchasing power and living standards of all South Africans, and provides a favourable environment for balanced growth, investment and employment creation. In addition, the Bank has a complementary mandate to oversee and maintain financial stability. The Bank's Monetary Policy Committee (MPC) is responsible for monetary policy decisions, and comprises the Governor as Chairperson, the deputy governors and senior officials of the Bank.

Price stability is quantified by the setting of an inflation target range by government after consultation with the Bank. The Bank has instrument independence, with the commitment to pursue a continuous target of 3 to 6 per cent for headline consumer price index inflation. The MPC conducts monetary policy within a flexible inflation-targeting framework that allows inflation to be temporarily outside the target range under certain circumstances.

The MPC takes into account a viable medium-term time horizon for inflation and considers the time lags between policy adjustments and economic effects. This provides for interest rate smoothing over the cycle, and contributes towards more stable economic growth. The repurchase (repo) rate decision reflects the MPC's assessment of the appropriate monetary policy stance.

The decision of the MPC, together with a comprehensive statement, is announced at a media conference at the end of each meeting. This announcement outlines the MPC's assessment of prevailing domestic and global economic conditions, as well as recent outcomes and forecasts for inflation and real economic activity.

The *Monetary Policy Review* (*MPR*) is published twice a year and is aimed at broadening the understanding of the objectives and conduct of monetary policy. The *MPR* covers domestic and international developments that have affected inflation and that impact on the monetary policy stance. It also provides an assessment of the factors determining inflation and the Bank's forecasts of the future path of inflation and economic growth. The *MPR* is presented by the Governor and senior officials of the Bank at monetary policy forums in various centres across South Africa in an effort to develop a better understanding of monetary policy through direct interaction with stakeholders.

Contents

Executive summary

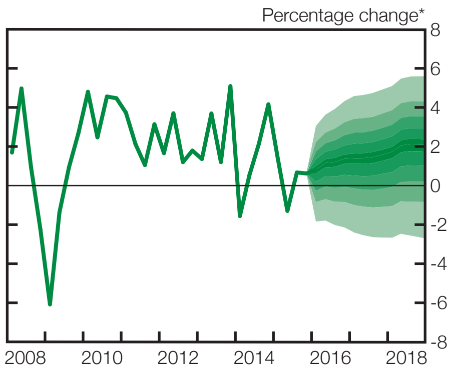
Monetary policy in South Africa confronts the prospect of a prolonged breach of the inflation target, even as growth trends lower. The policy rate has been increased, most recently by a quarter of a percentage point at the March 2016 meeting of the Monetary Policy Committee (MPC). This rate has now been raised by a total of 2 percentage points since January 2014, when forecasts for inflation first began showing significant risks of sustained target breaches. Monetary policy remains in a tightening cycle, although this is subject to data outcomes.

The period since the publication of the previous *Monetary Policy Review* (*MPR*) in November 2015 has been characterised by volatility and uncertainty in financial markets alongside generally disappointing real economy news. Global growth slowed sharply in the final quarter of 2015. Some of this weakness is expected to be temporary, as the United States (US) rebounds from an unusually subdued quarter. But other major economies have underperformed more persistently. The euro area and Japan are barely expanding, while emerging-market performance continues to deteriorate. In China's case this has entailed a shift from rapid to moderate growth. Brazil and Russia, by contrast, are in protracted recessions. In an environment of weak demand, commodity prices have fallen and world trade growth has slumped. Global inflation continues to be unusually low, although some countries, particularly commodity exporters, have experienced rising inflation linked to currency depreciation.

Growth in the South African economy has decelerated markedly since 2011. Output increased by just 1,3 per cent in 2015 and forecasts suggest growth will be less than 1 per cent this year, the slowest pace of expansion since the Great Recession, and before that, the emerging-market crisis year of 1998. In the recent past, disappointing growth outcomes have been traceable to specific shocks, including strikes, electricity shortages and drought. But the outlook now indicates more diffuse sources of weakness. Consumer and business confidence is low in historical perspective. The South African Reserve Bank's (the Bank's) leading indicator of business activity trended lower throughout 2015 and fell further in early 2016. Over the forecast period, growth is expected to be low despite a highly competitive exchange rate, significant public borrowing and a low real policy rate. Net exports face headwinds from declining commodity prices and slowing world trade growth. Government is entering a period of intensified fiscal consolidation. Households remain under pressure, burdened by debt and high levels of unemployment, among other factors. Businesses continue to see limited opportunities for expansion.

Despite slowing gross domestic product (GDP) growth, inflation in South Africa has begun to accelerate again, after a year of relatively moderate price increases. Inflation in 2015 averaged 4,6 per cent, very close to the midpoint of the 3–6 per cent target range, mostly due to sharply lower world oil prices. This positive price shock, however, has had few lasting effects on the longer-term inflation trajectory. Core inflation dipped only marginally over the course of the past year and indicators of longer-run inflation expectations were essentially unmoved. Inflation has since rebounded to 6,2 per cent in January and 7,0 per cent in February, the highest rate in the post-crisis period. It is expected to average well over 6 per cent in both 2016 and 2017.

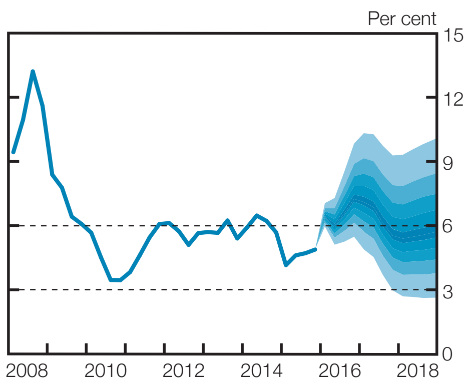
Real GDP growth forecast



* At seasonally adjusted annualised rates

Source: South African Reserve Bank

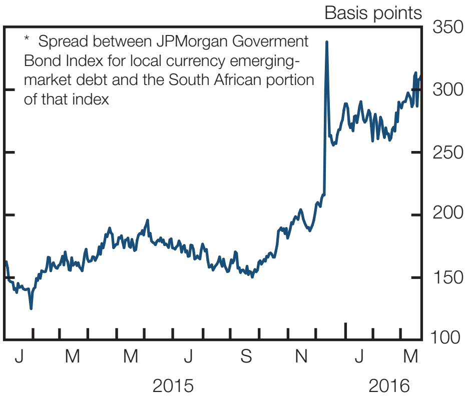
Targeted inflation* forecast



* CPIX for metropolitan and other urban areas until the end of 2008; CPI for all urban areas thereafter

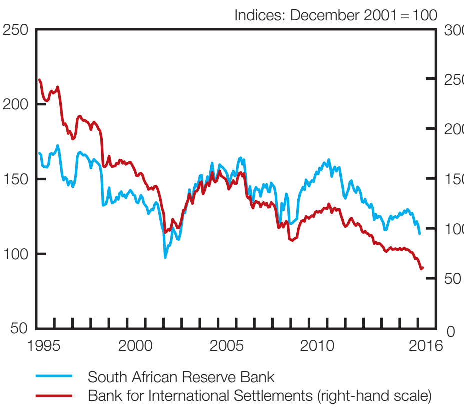
Source: South African Reserve Bank

South African government borrowing costs relative to emerging-market peers*



Sources: JPMorgan and own calculations

Rand real effective exchange rate



Sources: South African Reserve Bank and Bank for International Settlements

The past few months have also seen considerable market volatility from both domestic and foreign sources. In December 2015 the rand exchange rate, equity markets and bond yields all moved abruptly following the removal of Nhlanhla Nene as finance minister. The losses were partially reversed five days later, but a portion of the adjustment was more persistent. The rand, for instance, shifted out of a range between R13 and R14,60 to the US dollar in which it had moved since August, trading at over R15,50 in late December.

In this fevered environment, the US Federal Reserve's (the Fed's) much-discussed lift-off – the first rate increase in the US since 2006 – passed quietly. The timing of the move transfixed markets through large parts of 2015, but clear communications helped to ensure that the final decision was well anticipated, avoiding further turbulence.

In January, however, there was a further spike in market volatility. The proximate cause of this disruption appeared to be developments in China where the Shanghai stock market dropped abruptly and the renminbi was devalued in a repeat of August's turmoil. Apparently in response, most global equity markets traded lower, including in the US, Japan, Europe and many emerging markets. (The total loss in equity value was about half that experienced in the depths of the Great Recession.[1]) Emerging-market currencies sold off – the MSCI Emerging Markets Currency Index fell 3 per cent over the first 20 days of January before rebounding – and the rand shifted to well over R16 to the US dollar. Longer-term borrowing costs also rose in a number of emerging markets, while those for the safest borrowers declined.

Overview of the policy stance

Financial market volatility is frequently a distraction for policymakers. Its causes can be obscure and its effects temporary, without much significance for the real economy. Recent shifts, however, have been sufficiently large and lasting to materially affect South Africa's economic trajectory. Of particular significance for monetary policy, the rand has weakened further. Over the past five years the currency has depreciated quite steadily, but the change in 2015 was the largest yet experienced in this period. The currency began the year at R11,56 to the US dollar and ended at R15,04, a depreciation of 23 per cent. The trade-weighted exchange rate also weakened substantially, by nearly 20 per cent. In real terms, both the trade-weighted exchange rate and the bilateral rand/dollar exchange rate are close to record lows.[2] This persistent and substantial rand depreciation is expected to generate higher inflation over the forecast period.

Pass-through from the exchange rate to inflation has been low in recent years, relative to past experiences. With substantial depreciation, however, even low levels of pass-through still generate meaningful amounts of inflation. South Africa's import requirements have also risen given the drought-induced decline in local food production.

These two factors – the exchange rate and food prices – have caused a marked deterioration in the Bank's inflation forecast. The January 2016 numbers showed a sustained departure from the target range lasting throughout 2016

1 See David Lipton, 'Policy imperatives for boosting global growth and prosperity', 2016, available at http://www.imf.org/external/np/speeches/2016/030816.htm.

2 The measure calculated by the Bank for International Settlements (BIS), based on consumer prices, is at an all-time low, while other measures are close to but still somewhat above the 2001 trough.

and 2017, with a peak of 7,8 per cent around the end of 2016. The prospect of an extended breach prompted an upward adjustment of the repurchase (repo) rate by half a percentage point to 6,75 per cent following the January meeting of the MPC.

The inflation forecast for the March meeting improved somewhat on more favourable assumptions for administered prices and the exchange rate as well as the inclusion of the January repo rate decision. It continued to show inflation above the upper bound of the target range for most of 2016 and 2017, but the averages for those years declined to 6,6 per cent and 6,4 per cent respectively (from 6,8 per cent and 7,0 per cent in January). The forecast was also extended to 2018, which indicated inflation dipping into the upper reaches of the target range – although this projection is subject to substantial forecast error.

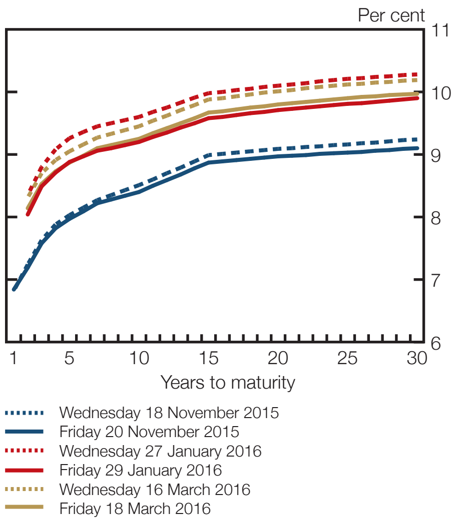
While the March forecast is lower than January's, the change probably does not signal a meaningful improvement in the outlook. The assumptions underlying the shift are quite tenuous, with both oil prices and the exchange rate reverting to less favourable levels in the days leading up to the MPC meeting. Accordingly, the risks to the March forecast were judged to be towards higher inflation. The forecast also continued to show a protracted breach of the inflation target, while longer run inflation expectations remained elevated. In this context, the MPC chose to increase the repo rate by an additional quarter of a percentage point.

As in many other countries, demand pressures appear to be weak and are contributing little to inflation. Yet local prices are rising relatively fast because of currency depreciation as well as shocks such as drought-related food price spikes and regular large increases in electricity prices. These increases come on top of wage and salary cost indexation, driven by skills supply constraints, bargaining arrangements and expected inflation. Monetary policy can do little about supply shocks but it can affect expectations. Accordingly, interest rate changes are aimed at preventing temporary price movements from being incorporated into longer-term expectations and thereby becoming permanent.

The *changes* in monetary policy since January 2014 have followed unfavourable developments in the inflation outlook, but the *level* of the policy rate is still geared to a slow-growth economy. Growth has slowed since the initial phase of the recovery from the global crisis and is likely to slow further in the near term. Alongside sharp declines in US dollar prices for most of South Africa's commodity exports and slower world growth, the major constraints on domestic growth are structural. The result is declining potential growth rates. These problems do not respond directly to monetary policy interventions. Nonetheless, with growth continuing to undershoot potential, monetary policy is still providing stimulus to help absorb spare capacity. The policy interest rate remains low from a historical perspective. In real terms it is still close to zero, and near or below real policy rates in peer countries. The pace of tightening has also been gradual relative to previous hiking cycles.

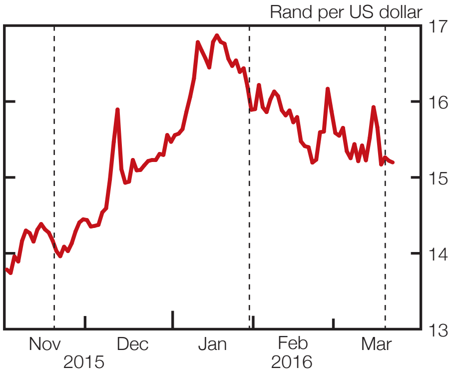
Over the longer run South Africa's growth interests are best served by keeping inflation within the target range, not by looking to exploit a temporary trade-off between growth and inflation. Tolerating additional inflation in the short run could require larger interest rate adjustments later, with proportionally greater costs for the economy. Higher inflation would also have its own economic costs, by damaging competitiveness, eroding

Yield curve before and after interest rate announcements



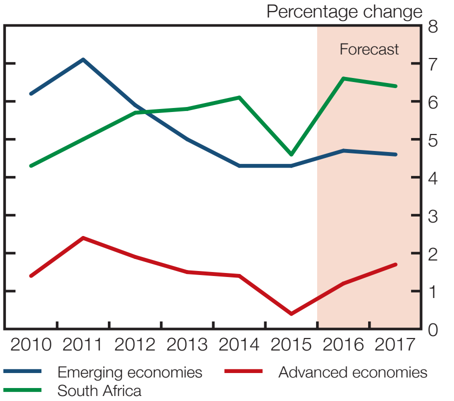
Sources: Bloomberg and own calculations

Exchange rate before and after rate increases



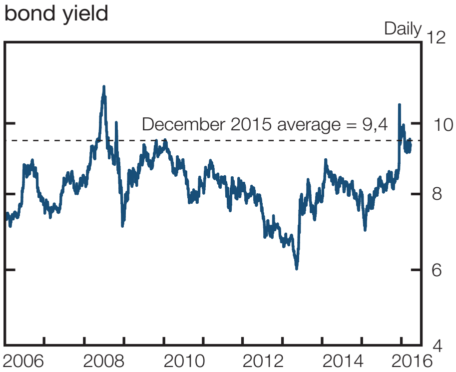
Sources: Bloomberg and South African Reserve Bank

Trade-weighted world inflation



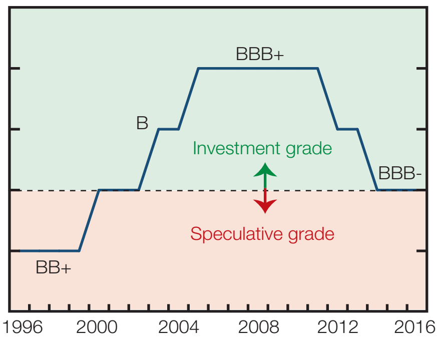
Sources: International Monetary Fund, South African Reserve Bank and own calculations

South Africa's ten-year government bond yield



Source: Bloomberg

South Africa's Standard & Poor's sovereign ratings



Source: Bloomberg

living standards and weakening confidence. There also appear to have been some welcome shorter-run benefits from recent monetary tightening. In response to all three recent hikes (November 2015 as well as January and March 2016), borrowing costs as reflected in government debt shifted lower across most of the yield curve, and the rand also strengthened somewhat.

South African inflation is quite elevated from a world perspective, relative not only to advanced economies that have been confronting deflationary risks, but also to emerging markets. Domestic inflation was higher than the emerging-market median throughout the 2000s and the differential has risen in recent years. The recent deterioration partly reflects currency depreciation from adverse trends in commodity prices. Yet South African inflation is also quite high relative to commodity exporters, including middle-income economies. This weighs against complacency in assessing South African inflation levels.

Box 1 South Africa's sovereign credit rating and downgrade implications

Sovereign credit ratings are third-party assessments of the ability and willingness of governments to repay their debts. Ratings agencies use finely calibrated scales to express risk. Moody's, for instance, has 27 separate ratings, which are further qualified by descriptions of the outlook ('positive', 'stable' or 'negative'). For all this nuance, however, one of the most important verdicts is simply binary: is an entity investment-grade or not? This matters partly because lenders require additional compensation for funding riskier borrowers, and partly because many large financial institutions such as pension funds are obliged to hold only investment-grade assets. As such, investment-grade status is valuable. This box provides some quantification of that value.

South Africa's foreign currency debt is still rated as investment grade by all three major rating agencies. Its ratings from two of the three major agencies, Standard & Poor's (S&P) and Fitch, are just one level above speculative grade ('junk' status). The Moody's rating is two levels above speculative grade. Local currency debt ratings are one notch higher for Fitch and S&P, whereas the Moody's rating is the same for both local and foreign-currency debt. Unsurprisingly, the ratings for different kinds of sovereign debt tend to be closely aligned.

Based on the experiences of a sample of 70 countries for which data are available, it is possible to estimate some of the consequences of a downgrade below investment grade. This exercise focuses on the ratings of one agency (Fitch), and considers only ratings for foreign-currency debt. As would be expected, the evidence confirms that countries with investment-grade ratings have lower borrowing costs than their speculative grade peers. As countries move from the investment grade region into the speculative zone, costs do not rise in a linear trend. Instead, the curve steepens. This indicates that markets attribute less significance to variations within the investment grade space than they do beyond it. Based on these observations, a downgrade below investment grade is likely to increase short-term rates by 80 basis points. Long-term bond yields would be expected to move more, rising by 104 basis points.

Higher long-term borrowing costs would have a variety of negative effects. Government would have to allocate more spending towards debt-service costs. Because corporate borrowing costs are linked to the sovereign rating, the private sector would also be affected, raising the costs of investment. Furthermore, the rand is likely to depreciate against major traded currencies should foreign investors offload their sub-investment-grade holdings. Were this to occur, it would likely exacerbate inflationary pressures in the economy.

Overview of the world economy

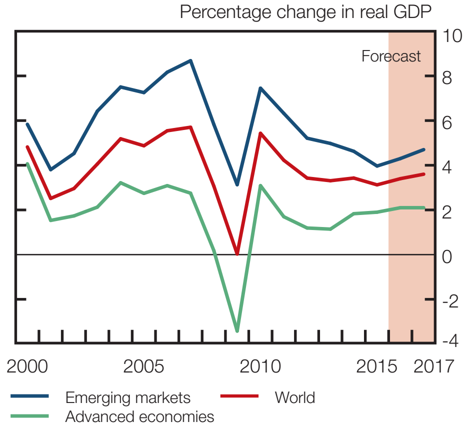
In the final quarter of 2015, the world economy grew at its slowest rate since the Great Recession. This performance reflected weakness in the world's two largest economies, with the US experiencing an unusually slow quarter and Chinese growth edging lower. Meanwhile, many middle-income countries continue to decelerate. Coupled with financial market volatility at the start of 2016, this has intensified pessimism that the global economy is losing momentum and is unusually vulnerable to shocks.

For the past few years, the global economic narrative has contrasted recovery in some advanced economies – principally the US – with stagnation in Europe and Japan and a slowdown in emerging markets. This has shaped the outstanding features of the world economy: policy divergence in advanced economies, dollar strength, commodity price collapses, slowing world trade and moderating world growth. Since the release of the previous *MPR* in November 2015, this account has remained broadly valid. The Fed delivered on its carefully communicated rate hike, lifting the federal funds rate away from zero for the first time since the crisis. By contrast, the Bank of Japan adopted negative interest rates, and the European Central Bank (ECB) lowered some rates further into negative territory while also expanding its asset purchase programme. The US dollar continues to be very strong, having appreciated more in the run-up to this hiking cycle than in any previous upward cycle in recent history. This strong dollar is also contributing to lower commodity prices, exacerbating powerful shifts in commodity market supply and demand dynamics.

On the demand side, weaker world growth is weighing on commodity prices, especially industrial commodities tied to business cycles and industrial development. Meanwhile, the supply side is characterised by significant excess capacity installed during the boom years, which will persist until enough marginal producers suspend production. In this context, commodity prices have been depressed, with the Bloomberg Commodity Index reaching a new low in January 2016 before recovering somewhat in February and March. Theoretically, falling commodity prices should redistribute but not reduce world income. Commodity exporters suffer declining revenues but their loss is an equal gain for importers. However, the growth response in commodity-importing economies appears to have been relatively weak, as consumption remains subdued.

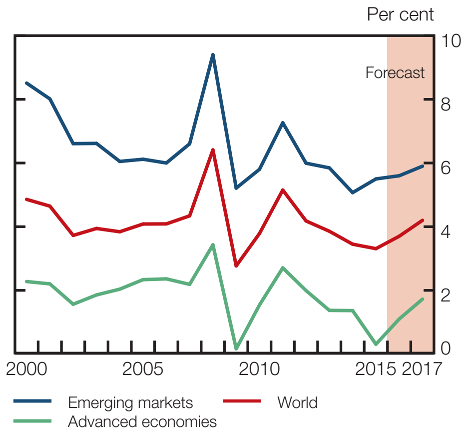
Low commodity prices have also put downward pressure on inflation in most economies, contributing to unusually mild world inflation. The exceptions to this rule tend to be commodity exporters where currency depreciation has in some cases generated higher inflation. Much lower commodity prices have also been an important factor in the slowdown of world trade, now at levels normally seen in global recessions. Global growth forecasts continue to show world growth rebounding over the forecast horizon. Such projections, however, have repeatedly fallen short over the past five years, and there are significant downside risks to growth, particularly from emerging markets.

World GDP growth



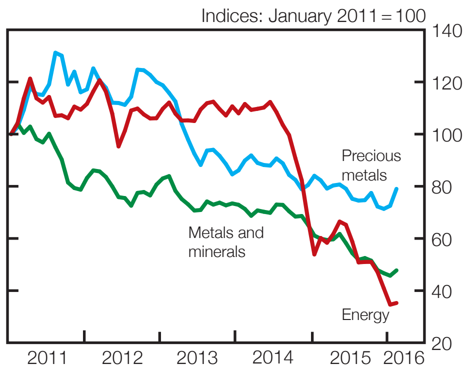
Source: International Monetary Fund

World inflation



Source: International Monetary Fund

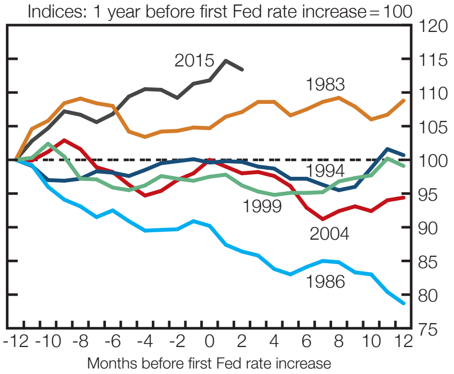
Commodity prices by category



Source: World Bank

Advanced economies

Real effective US dollar during Fed tightening cycles



Sources: Bank for International Settlements and own calculations

The US economy has enjoyed a relatively substantial recovery. Unemployment has fallen from 10 per cent of the workforce to less than 5 per cent, with around 13,5 million net jobs added since 2010. GDP growth has accelerated over the past three years to 2,4 per cent in 2015 and is forecast to continue above 2 per cent in 2016 and 2017. Nonetheless, markets are heavily discounting the Fed's own guidance on its policy rate, anticipating a lower level for the federal funds rate over the next three years than suggested by the most dovish forecast in the Fed's 'dot plot'. Financial conditions have tightened somewhat amid rising corporate spreads and volatility in equity markets. Low energy prices as well as the strength of the US dollar are keeping inflation below the Fed's longer-run 2 per cent goal. US corporate profit growth has stalled, in particular because the appreciated dollar is reducing the domestic value of overseas earnings. Productivity growth has also been weak. The most probable scenario is that the US economy will continue to expand at over 2 per cent annually and unemployment will fall somewhat further below 5 per cent. Nonetheless, analysts have raised their assessments of recession risk.

The euro area appears to have entered a period of expansion following two recessions in close succession. The Centre for Economic Policy Research, which has responsibility for dating European business cycles, recently determined that the euro area had embarked on an upward phase of the business cycle in the first quarter of 2013. This concludes the recession which began in the second half of 2011. The expansion has been underpinned by several factors, including in particular a competitively valued currency and some loosening of financial conditions as the crisis atmosphere lifts and monetary stimulus feeds through the region. Growth is still unusually tepid, however, registering 1,5 per cent in 2015, with European Commission forecasts anticipating a fractional improvement to 1,6 per cent in 2016. Unemployment across the euro zone remains at over 10 per cent, albeit with large country differences (German unemployment is 4,3 per cent; in Spain it is 20,3 per cent and in Greece, 24,6 per cent). According to the latest data, the region as a whole has not yet recovered the levels of output attained in 2008, before the Great Recession, although it is likely to surpass that peak sometime in the first half of this year.

Inflation has been well below the ECB's inflation target of 'below, but close to, 2 per cent' since 2011. The most recent data provide no evidence of inflation rebounding, with prices across the region declining by 0,2 per cent year-on-year in February. The ECB announced a host of additional easing measures in March, cutting its main policy rate to 0 per cent and its deposit rate to -0,4 per cent. Asset purchases were also increased, to €80 billion monthly.

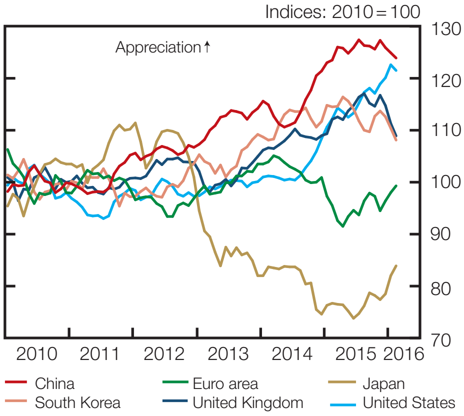
Japan is similar to the euro area in that it is achieving very little growth with stubbornly low inflation. The economy contracted by 1,4 per cent in the second quarter of 2015 but avoided a technical recession when data revisions changed the third-quarter growth rate from -0,8 per cent to 1,4 per cent. Output declined in the fourth quarter, however, by a worse-than-expected 1,1 per cent, bringing total growth for the year to just 0,5 per cent. Inflation in January was 0 per cent, with core measures slightly positive but still well below the 2 per cent inflation target. In this environment, the Bank of Japan adopted a negative interest rate on excess reserves held at the central bank. Although Japan's economic performance has been very subdued, this must be understood in the context of demographic decline. Unemployment is barely over 3 per cent, a two-decade low, and output per capita continues to rise, which does not suggest a cyclical downturn. Like the euro area, however, Japan is contributing essentially nothing to world growth despite its substantial share in world output (around 4 per cent of the total in purchasing power parity (PPP) terms; the euro area is close to 12 per cent).

Emerging-market economies

For the past half-decade, Chinese growth has been slowing as that economy matures into middle-income status. Policymakers have aimed to rebalance the composition of GDP away from investment and exports and towards more domestic consumption. They have also pursued liberalisation, permitting greater scope for market forces in allocative decisions. This reform process has been through a turbulent phase in recent months. In particular, exchange rate and equity market developments have affected financial markets worldwide and fuelled speculation of deeper underlying weakness in the Chinese economy.

Exchange rate policy has been an especially difficult challenge. The renminbi has long followed the US dollar, with dollar strength tending to appreciate the renminbi. Over the past year or so, however, economic conditions in China have diverged strongly from those in the US. For this reason, the renminbi exchange rate should not necessarily be moving in the same direction as the US dollar. Yet sensitivities about renminbi volatility due to China's importance in regional and global trade suggest that adopting a more freely floating currency might be disruptive. Instead, the authorities have preferred a gradual approach. They recently announced a new reference basket for the exchange rate, which includes 12 other important trading-partner currencies such as the yen, euro and rouble alongside the dollar. (Had the renminbi followed this basket since 2010, it would now be about 20 per cent cheaper against the dollar.) China has also permitted two quite small devaluations, of around 2 per cent in August 2015 and another 1,2 per cent in January 2016. These repeated small adjustments, however, have fuelled expectations of additional depreciation rather than fostering stability. This has created perverse incentives for speculators to short-sell the renminbi and for firms with dollar-denominated debt to repay it quickly. (The Bank for International Settlements (BIS) estimates foreign currency-denominated debt in China at about US$1 trillion.) The result has been substantial capital outflows, requiring offsetting sales of foreign-exchange reserves to maintain the targeted exchange rate. Accordingly, China's reserves have fallen from a peak of over US$4 trillion in 2014 to around US$3,2 trillion, with reserve sales running at around US$100 billion in December 2015 and January 2016 before moderating to about US$29 billion in February.

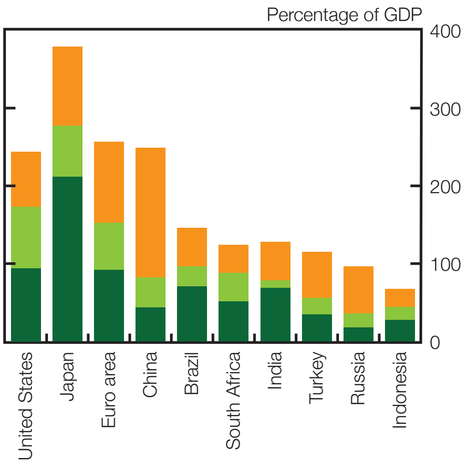
Nominal effective exchange rates for China and major partners



Source: Bank for International Settlements

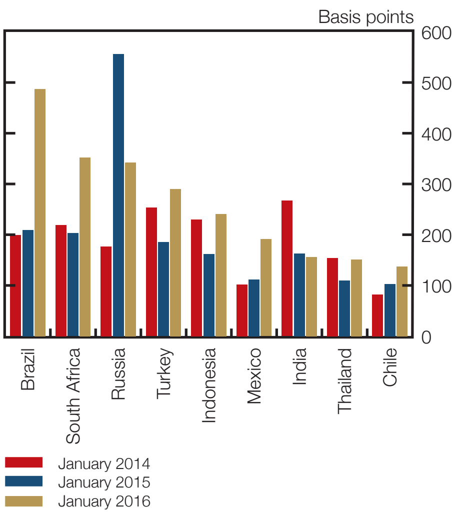
The Shanghai Stock Exchange Index gained value very rapidly in the first half of 2015 before reversing course as abruptly in August. In response, the authorities implemented circuit breakers to cut off trading after sharp market falls as well as restrictions on the sale of certain stock holdings for a period of six months. In January 2016 the index fell sharply, apparently on expectations of mass sales once these restrictions were lifted, and therefore sure losses. The declines in the index triggered the circuit breakers, so markets were open only briefly for some days in early January.

Non-financial sector debt as of 2015 Q3



Source: Bank for International Settlements

Emerging-market five-year credit default swaps



Source: Bloomberg

In the absence of deeper questions about the health of the Chinese economy, these events would likely have had limited repercussions. But GDP growth slowed to just below the 7 per cent growth target in 2015, its lowest rate since 1990, amid speculation that the data may be overstating the true growth numbers by several percentage points. China's recently adopted five-year plan mandates growth above 6,5 per cent until 2020, a rate which would double GDP from 2010 levels. Achieving this goal will require more credit growth. Yet borrowing has already expanded very rapidly since the crisis, with combined public and private non-financial sector debt expected to exceed 250 per cent of GDP this year – a level well above the emerging-market average and close to advanced-economy norms. Debt accumulation has been concentrated in the corporate sector, with state-owned enterprises particularly exposed. This leverage has contributed to excess capacity in major industrial sectors, such as steel manufacturing, where falling prices will make debt repayment more difficult. It has also funded large investments in real estate, a sector in which prices have been falling. Government debt levels remain low and most borrowing has been financed with domestic savings, suggesting financial stability will be maintained. China could avoid a crisis, however, and still suffer stagnation, as Japan did after the stock market bubble burst in the late 1980s. Given that China has been a major contributor to world growth, both directly through its own rapid expansion and indirectly as the end-market for many other countries' exports, this scenario poses a major risk for the world economy.

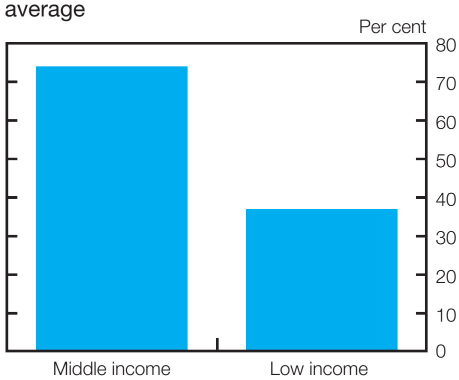
Although China's deceleration is the most important aspect of the emerging-market slowdown, its growth is still so rapid that the performance of the emerging-markets category is distinctly worse with China excluded. Two of China's major emerging-market peers, Brazil and Russia, are in recessions which have become deeper and more protracted than previously anticipated. Russia's economy declined by nearly 4 per cent in 2015 and is expected to contract by another 1 per cent this year. Brazilian output shrunk by 3,8 per cent in 2015 and the latest forecasts suggest 2016 will be similar. The International Monetary Fund (IMF) now expects -3,5 per cent growth, from a forecast of -1,0 per cent as recently as October 2015, which would make this Brazil's deepest recession on record (including the Great Depression). Both Brazil and Russia face fiscal squeezes as well as high inflation rates, which have required monetary and fiscal tightening. The costs of insuring these countries' debts have risen sharply and sovereign credit ratings have been downgraded. Moody's and Standard & Poor's (S&P) both cut Russia below investment grade in early 2015, although Fitch has kept it at the lowest investment-grade level (citing Russia's low debt levels and net foreign creditor status). S&P downgraded Brazil to sub-investment grade in September 2015, followed by Fitch in December and Moody's in February 2016.

Developments in Russia, Brazil and China parallel those of their respective regions, namely emerging Europe, Latin America and emerging Asia. Economic output in the first two regions contracted in 2015, while emerging Asia slowed. In Latin America, most economies have been under pressure from lower commodity prices. Venezuela and Argentina have experienced severe downturns and opposition parties have won elections in both countries. According to the IMF, inflation in Argentina is running at around 30 per cent, whereas Venezuela's has soared to over 100 per cent and may reach 720 per cent this year. Growth in Argentina is expected to be narrowly negative in 2016, while Venezuela is in the midst of a deep downturn, with real output falling about 10 per cent last year and no respite visible in medium-term forecasts. In the major Latin American economies with more robust macroeconomic frameworks – Chile, Colombia, Mexico and Peru – growth has slowed and inflation has accelerated, with central banks in all four countries tightening policy in defence of their inflation targets. None of these economies are contracting, however, and inflation remains in single digits.

In emerging Asia, commodity exporters replicate this familiar story of currency depreciation and inflation, with Indonesia the major example. Commodity importers, however, join advanced economies in having unusually low inflation, which is also being fuelled by industrial overcapacity. Thailand experienced deflation in 2015, and major peers, including Malaysia, the Philippines and Vietnam, saw only small price increases. Although growth in the region has cooled off somewhat in recent years, reflecting exposure to Chinese demand, it continues to be the most rapid of any region in the world economy.

Emerging Europe is more complex and diverse. The economies most closely connected to the euro area, such as Poland and the Baltic states, also reflect its problems, with very low inflation and tepid growth. Turkey is quite an unusual case, a commodity importer grappling with elevated inflation and a large current-account deficit alongside slowing growth. Ukraine is experiencing a difficult transition period following intense geopolitical conflict. Growth is expected to turn slightly positive this year following two years of contraction, while inflation should subside to about 15 per cent from last year's spike of close to 50 per cent.

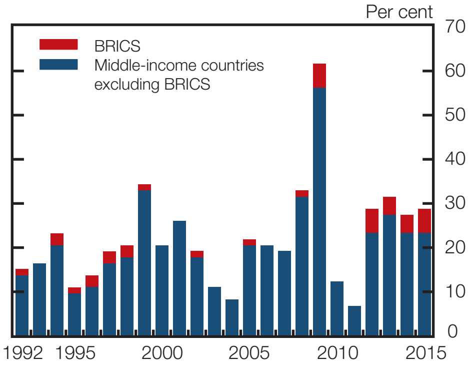
Share of developing countries with slower growth in 2015 relative to their 1990–2008 average



Sources: World Bank and own calculations

Low-income countries have been a rare bright spot in the world economy. The emerging-market slowdown has been primarily a middle-income phenomenon; the majority of low-income countries has been growing above their longer-run average rates in recent years. India is the most prominent example. Growth should reach 7,5 per cent in 2016 and 2017, up from 5 per cent in 2012, as the economy benefits from cheap oil and pro-growth economic reforms, including the adoption of inflation targeting. Sub-Saharan Africa, a region dominated by low-income countries, is a more complicated case. The majority of countries in the region is sustaining relatively high levels of growth. Commodity importers in particular are achieving high growth rates: Ethiopia, for instance, is expanding at around 10 per cent and Kenyan growth is close to 5,5 per cent. As a result, sub-Saharan Africa continues to be the fastest-growing region in the world after emerging Asia. A number of countries are, however, struggling with adverse commodity price shocks. In some cases these are being compounded by large fiscal and current-account deficits as well as recently acquired foreign currency liabilities, which have become much more expensive as local currencies have depreciated. Even here the risks to growth are to the downside.

Share of middle-income countries experiencing three consecutive years of declining growth



Sources: World Bank and own calculations

Conclusion

Eight years on from the crisis, the recovery in global growth continues to disappoint. The emerging-market growth story has faded. China's economy has slowed and commodity exporters have decelerated, with some emerging markets falling into recession. Among advanced economies, the US has achieved a relatively robust recovery. By contrast, the euro area and Japan have stagnated. World inflation is at long-term lows, with only a subset of emerging markets troubled by excessively high inflation.

South Africa is part of the rising inflation group, reflecting currency depreciation in the context of price rigidities, among other factors. It has also joined in the middle-income country slowdown. Weaker world growth diminishes prospects for South Africa to expand off foreign demand. Meanwhile, the sense that emerging markets are vulnerable, and that more middle-income countries are likely to join Brazil and Russia in recession, makes it more difficult for South Africa to go on being a large net borrower in world financial markets. The global environment is therefore quite unfavourable.

Overview of the domestic economy

South Africa's economy is characterised by slowing growth, stubborn inflation and macroeconomic imbalances. The current-account deficit has averaged about 5 per cent of GDP over the past four years, and the fiscal deficit has averaged around 4 per cent over the same period. GDP growth, meanwhile, has deteriorated from over 3 per cent in 2011 to 1,3 per cent in 2015, with further deceleration anticipated in 2016. This combination is unsustainable and inflationary, progressively weakening growth prospects.

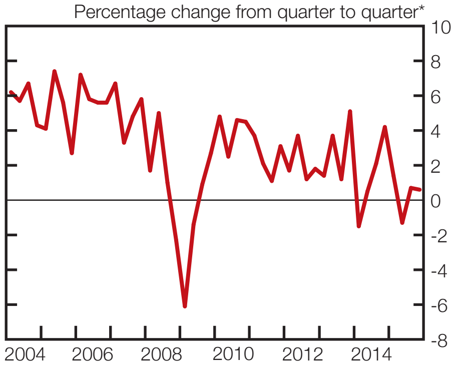
South African output growth has been slowing steadily. The most recent forecast suggests GDP growth of 0,8 per cent for 2016, down from 1,5 per cent as projected in November 2015 and 2,9 per cent a year before that. Forecasts for 2017 have also declined, with the latest number indicating 1,4 per cent growth next year and 1,8 per cent in 2018. By way of comparison, South Africa's annual growth since 1994 has averaged 3 per cent.

Why has growth weakened, and why are the forecasts still deteriorating? The slowdown has had a number of causes, some temporary and some more durable. Households acquired substantial debt burdens in the pre-crisis period and have since been slowly deleveraging, reducing the scope for credit-fuelled expansion. Electricity shortages have hampered production and disincentivised investment. There has been no load-shedding in recent quarters, but this is partly a consequence of feeble electricity demand in the context of subdued growth. Meanwhile, the global economic environment has been relatively unfavourable. World growth weighted by South Africa's trading partners has slowed from over 5 per cent in 2010 to nearly 3 per cent last year (a similar pattern holds for PPP-weighted world growth). Traditional trading partners in Europe have struggled with prolonged recessions. China's growth moderation and rebalancing has severely depressed commodity prices. This has limited the contribution of net exports to growth.

These three relatively persistent problems – household debt, electricity supplies and the world economic environment – have been exacerbated by shorter-lived shocks. Strikes have temporarily depressed growth, for instance in the third quarter of 2013 (in which motor manufacturing suffered labour disruptions) and in the first half of 2014 (which experienced the most concentrated effects of the prolonged platinum-sector strike). The drought conditions in 2015 also sharply reduced output in the agricultural sector, which contracted 8,4 per cent year-on-year. Such shocks are hard to forecast. Their effects should also be transitory. However, repeated negative shocks might have longer-term consequences, for instance by consolidating a slow-growth narrative for South Africa and thereby damaging confidence.

In this context, judging the economy's level of unused capacity is a difficult task. Estimates of potential growth have been lowered yet again, reaching 1,5 per cent for 2016 and 1,6 per cent for 2017. As actual growth is expected to undershoot these estimates slightly, the output gap deteriorates. Point estimates of the gap show that it is negative at around 2 per cent of potential GDP, but the uncertainty around this is substantial. More likely than not, it is in a range between 0 and -3 per cent of GDP, with a small chance of it being positive. Given growth under 1 per cent this year, it is very likely moving lower. Over the longer run, South Africa's economy should be capable of stronger

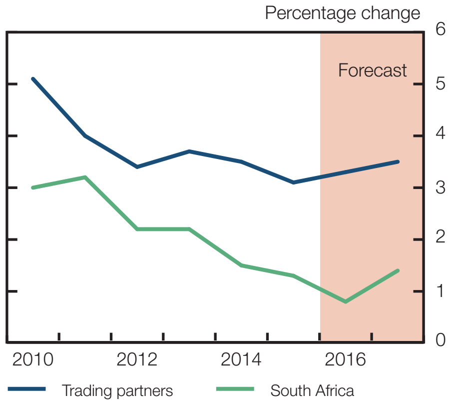
South African real GDP growth



* At seasonally adjusted annualised rates

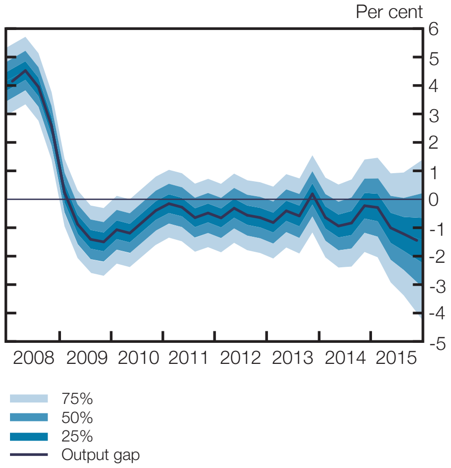
Source: South African Reserve Bank

Trade-weighted GDP growth



Sources: International Monetary Fund, South African Reserve Bank and own calculations expansion, and as such the goal of raising potential growth is a priority. Monetary policy, however, can add relatively little to potential growth except indirectly via long-term borrowing costs and the real effective exchange rate.

Output gap uncertainty



Source: South African Reserve Bank

Box 2 Output gap uncertainty

The output gap is an important concept for monetary policy, indicating the degree of demand pressure in an economy. It is calculated as the accumulated difference between an economy's potential growth rate and its actual growth rate. However, potential growth is difficult to estimate with precision. For this reason, it is important to consider the uncertainties around output gap estimates. There are three distinct sources of uncertainty, namely (i) those related to the method used to estimate the gap, (ii) changes when new data become available, and (iii) occasional revisions of the historical data. This box details the impact of each of these uncertainties on the Bank's measure of the output gap.

Estimation uncertainty can be thought of as 'model uncertainty'. There are different methods for estimating the output gap which tend to give different answers.[1] It is never possible to deliver a final verdict on the output gap, even with hindsight, because it is unobservable. (By contrast, it is possible to compare inflation forecasts with actual numbers from the Statistics South Africa (Stats SA) survey, which measures the tangible phenomenon of price increases for goods and services in consumer baskets.) Given these difficulties, the standard error around the point estimate of the output gap is 1,7 percentage points. Approximately a third of that reflects the inadequacy of the models, and the rest stems from the output gap's unobservable nature.

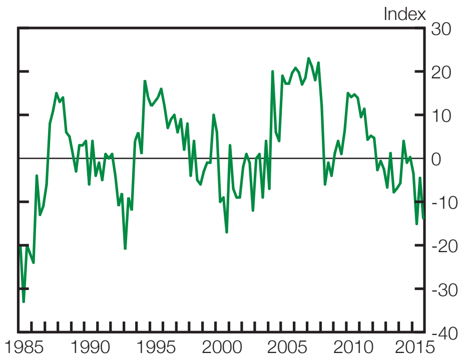
Updating uncertainty occurs when a previous quarter's estimated figure is updated with recently released data. The additional data provide supplementary information that is then used to improve the distinction between the cyclical and potential components of gross domestic product. The result is that the output gap estimate will change as additional data are released. Based on historical data, updating is likely to cause the current output gap estimate to change by approximately 0,7 percentage points after two quarters and by 1 percentage point beyond four quarters of new data.

New data points are of course not the only source of new information. As more comprehensive data become available, Stats SA occasionally revise their estimates of GDP, which may cause revision uncertainty. The question here is, 'To what extent could the current estimate of the output gap change if the underlying data is revised?' The answer, historically, has been that the output gap changes by about 0,1 percentage points after one quarter and 0,3 percentage points after three years.

Policymakers must make choices in real time, using the best information available. Where that information is flawed, the imperfections need to be communicated and the material appropriately discounted. How reliable is the output gap measure in real time? The Bank's real-time estimate has the same sign as the final estimate about 90 per cent of the time, with both revision and uncertainty changes stabilising after three years. Whether the model is accurate in itself is another problem, but it is an unchanging one: the uncertainty is the same in real time as it is three years later. Given these limits to the output gap, it is prudent to view it as one input among many in the policymaking process.

1 For a review of output gap measures and their varying results, see *South African Reserve Bank Working Paper* 16/02 by Johannes Fedderke and Daniel Mengisteab titled 'Estimating South Africa's output gap and potential growth rate', available at http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/7191/WP1602.pdf.

FNB/BER Consumer Confidence



Source: Bureau for Economic Research

Looking forward, it is difficult to see which sectors could generate significantly more output in 2016. Household consumption constitutes the largest proportion of GDP at around 60 per cent, and has also been the main source of growth in the economy since the crisis. Households, however, are increasingly constrained. Rising inflation is eroding buying power. Debt levels remain high and households have actually reduced net savings in recent years. Spending now exceeds incomes by around 2 per cent, from a position of balance in 2009. Employment growth has slowed since the crisis and unemployment may increase slightly as government implements a hiring freeze and the mining sector sheds jobs. In this environment, household sentiment is pessimistic. The First National Bank/Bureau for Economic Research (FNB/BER) Consumer Confidence Index fell to a 15-year low in the middle of 2015, a level last achieved at the end of 2001. (Previous lows were experienced in 1993 and during the debt standstill of 1985.)

The business sector is also characterised by low levels of confidence. The Rand Merchant Bank (RMB)/BER Business Confidence Index is at a post-crisis low, while the South African Chamber of Commerce and Industry (SACCI) Index has fallen to levels last seen in 1993, suggesting a low likelihood of expanded corporate investment. Investment by this sector has in fact been one of the chief disappointments of the post-crisis period (although there have been notable exceptions, particularly in renewable energy). Private investment, which accounts for about two-thirds of overall investment, has grown at just over 2 per cent on average since the recession. This is significantly below pre-crisis levels (9 per cent between 2000 and 2008) and comes despite favourable interest rate settings. Investment as a share of GDP has slipped to about 20 per cent, down from the 2008 peak of 23 per cent and well below the National Development Plan goal of 30 per cent.

Net exports have made positive contributions to GDP growth in each of the past three years. The forecast, however, shows net exports will detract slightly from growth this year and make no contribution in 2017, before returning to positive territory in 2018. The current-account deficit expands slightly over the forecast period, approaching 5 per cent of GDP in the outer year.

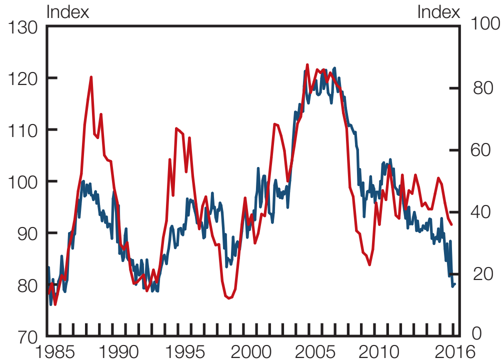
The outlook for the current account deficit mainly reflects changes to South Africa's terms of trade. These have weakened by about 8 per cent from their peak in 2011 and are expected to fall further, although the extent of the likely change is difficult to judge. The January MPC forecast was premised on a relatively adverse outlook for the terms of trade, taking the current-account deficit beyond 5 per cent of GDP in 2016 and 2017, from 4,4 per cent in 2015. The latest forecast uses a slightly more favourable scenario, given cheaper oil as well as improved prices for export commodities. As a result, the deficit is now forecast at 4,6 per cent this year, 4,7 per cent in 2017 and 4,9 per cent in 2018. There is a risk of a worse outcome, however, should South Africa's terms of trade revert to longer-run historical averages, around 14 per cent below current levels.

Table 1: Prices of major South African export commodities during previous episodes of oil prices around US$30 per barrel

US dollar per unit (averages)	Brent crude oil	South African coal	Iron ore	Gold	Platinum
1979...............................	32		24	307	443
1982–2003.....................	22	30	29	356	442
Jan–Feb 2016	32	51	45	1 149	887

Source: World Bank

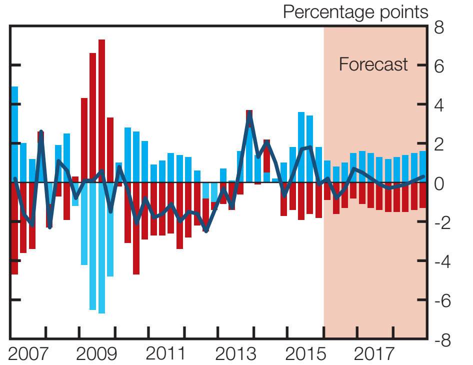
Business confidence



SACCI Business Confidence Index
RMB/BER Business Confidence Index (right-hand scale)

Sources: South African Chamber of Commerce and Industry and the Bureau for Economic Research

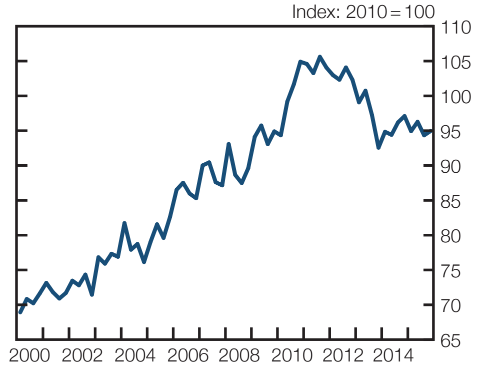
Contribution of net exports to GDP growth



Imports of goods and services
Exports of goods and services
Net exports

Source: South African Reserve Bank

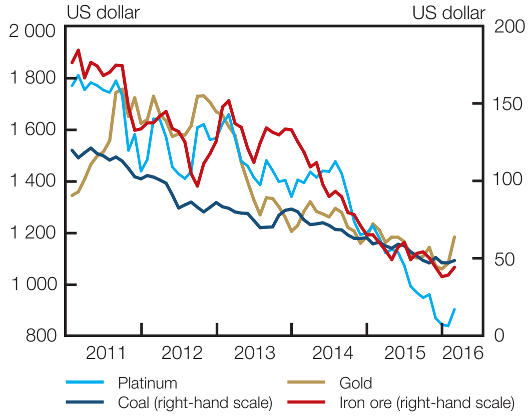
Terms of trade*



* Including gold

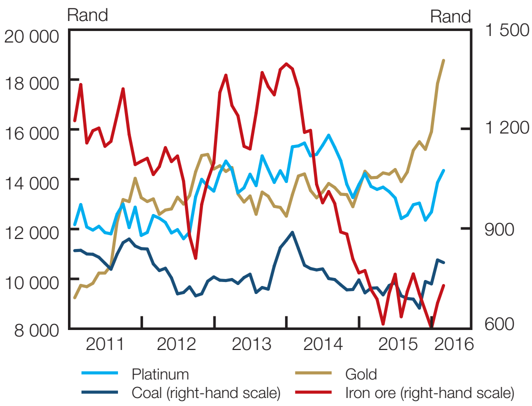
Source: South African Reserve Bank

US dollar prices of South Africa's main export commodities



Source: World Bank

Rand prices of South Africa's main export commodities



Sources: World Bank, South African Reserve Bank and own calculations

International commodity prices have an important effect on South Africa's export performance. As these prices have declined from their peak in 2011, the share of major mining exports in GDP has fallen from over 9,5 per cent to 7,2 per cent. The full force of the price shock has been cushioned by rand depreciation, however, which has supported the value of domestic producers' export earnings relative to their domestic costs. Where world prices have held up, as in the case of gold, rand prices have been unusually favourable: in nominal rand terms, the gold price reached an all-time high in early March. Other major export commodities, including coal and platinum, have been fairly flat in rand terms. Iron ore, however, has seen such large price movements that its value has declined even in nominal rands.

Table 2: Exports and imports of major mining commodities

Percentage of GDP

	Coal exports	Gold exports	Platinum group metals exports	Iron ore exports	Major mining commodity exports (total)	Oil imports
2005..........	1,27	1,79	1,48	0,38	5,59	2,91
2006..........	1,15	1,94	1,84	0,41	6,14	4,47
2007..........	1,14	1,89	1,81	0,56	6,41	4,72
2008..........	1,66	2,05	2,14	0,88	8,42	6,41
2009..........	1,43	2,11	1,77	1,06	7,37	4,30
2010..........	1,47	2,17	1,77	1,47	8,08	3,87
2011..........	1,81	2,49	1,89	2,19	9,57	4,76
2012..........	1,69	2,18	1,51	2,06	8,40	5,45
2013..........	1,59	1,81	1,73	2,42	8,68	5,79
2014..........	1,48	1,35	1,33	2,04	7,43	6,30
2015..........	1,33	1,62	1,49	1,43	7,20	3,96

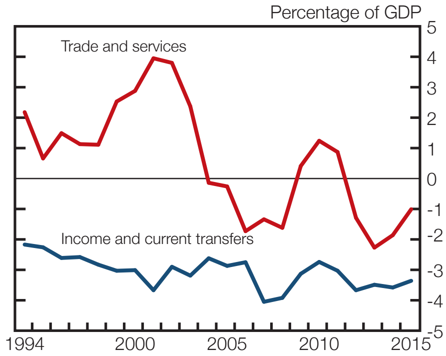
Sources: South African Reserve Bank and IHS Global Insight

On the import side, rand depreciation has partially offset the recent declines in world oil prices. It has also pushed up the rand costs of other imports, including food needed to counter drought-induced shortfalls in local production. This is contributing to some import growth over the forecast period – adding to what are already elevated import levels. From the trough of the recession in 2009 goods imports have grown by 48 per cent, versus GDP growth of just under 15 per cent and export growth of 33 per cent. This import resilience, despite slowing growth and currency depreciation, helps to explain why the current-account deficit remains persistently and substantially negative.

The current-account deficit, however, is not simply a consequence of South Africa's overall trade in goods. One important additional factor is the services account. This has closed quite sharply over the past few years, from -0,93 per cent of GDP in 2010 to -0,15 per cent in 2015. The adjustment in this account is partly explained by rising tourism receipts, which tend to react quite quickly to exchange rate depreciation. The total number of tourists visiting South Africa declined in 2015, but this is likely explained by changes in visa regulations. As these measures are refined, there may be scope for growing tourism further given an even more attractive exchange rate for most foreigners.

The other crucial determinant of the overall current-account balance is the income and current-transfer account. This has shown a chronic deficit in the region of 3 per cent of GDP, ensuring that South Africa maintains a substantial current-account deficit even when the goods and services accounts are balanced. This large deficit mainly reflects South Africa's shortfall of domestic savings and therefore a need to borrow savings from the rest of the world. The absolute size of this component has increased over time, in line with the shift to fiscal deficits following the global recession. Some narrowing in the income and current-transfers account can be expected, however, as the fiscal deficit contracts.

Current-account components



Sources: South African Reserve Bank and own calculations

The fiscal authorities have accelerated the consolidation programme under increased pressure from rising debt levels and higher interest costs. The 2016 budget sets out a more rapid adjustment trajectory than envisioned in previous policy announcements, including most recently the 2015 *Medium Term Budget Policy Statement* (*MTBPS*).

Table 3: Comparison of National Treasury forecasts

Percentage of GDP

	2016/17	2017/18	2018/19
2015 *MTBPS* deficit forecast	3,3	3,2	3,0
2016 *Budget* deficit forecast	3,2	2,8	2,4
	2016	2017	2018
2015 *MTBPS* growth forecast	1,7	2,6	2,8
2016 *Budget* growth forecast...........	0,9	1,7	2,4

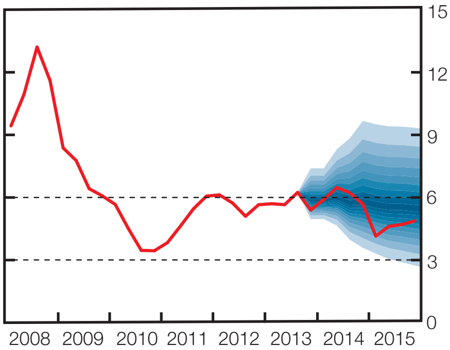
Source: National Treasury

With slower growth, achieving faster consolidation requires larger spending cuts and more revenue collection. To this end, there have been a number of tax adjustments, including to personal income tax and fuel levies. Spending is reduced, notably on public salaries, with vacant posts being frozen as a prelude to recalibrating personnel requirements. Government consumption growth should slow to below GDP growth over the forecast period, averaging about 1,2 per cent (versus 1,3 per cent on average for growth).

South Africa's slowing growth is therefore affected by all the main categories of GDP: constrained household and government consumption, weak investment and negative net exports. Escaping these forces is not straightforward. Faster consumption growth is unlikely to be sustainable, both because of its import intensity and the stresses it would impose on already-strained household and government balance sheets. But net export growth is a difficult task when commodities dominate the export basket and commodity prices are weakening. Greater investment would boost the economy's long-run potential, so although it would entail higher capital goods imports which might exacerbate the current-account deficit, it would at the same time help to generate the resources to repay those debts. Higher growth driven by investment would also improve South Africa's growth narrative, helping to attract foreign savings. Investment is unlikely to rebound, however, as long as private-sector confidence is subdued. The most plausible path towards sustainability is therefore likely to include a stretch of disappointingly slow growth, during which time domestic savings should rise and the world environment might become less adverse.

The MPC continues to see growth risks to the downside, despite very low levels of expected growth. In this context, public attention has understandably focused on whether the economy will fall into recession, usually defined by the conceptually simple (if theoretically unfounded) rubric of two consecutive quarters of negative growth. Based on the probabilities in the fan chart, the likelihood of this occurring never exceeds 9 per cent, meaning the economy will most likely avoid a recession. With population growth of around 1,6 per cent, however, living standards will decline at current growth rates.

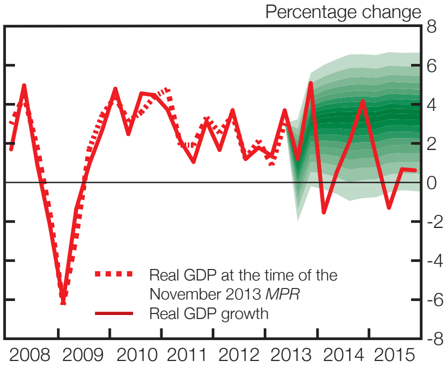
Target inflation outcomes and projection* from the November 2013 *MPR*



- - - - Inflation target range
* CPI inflation trajectory nine quarters ahead

Source: South African Reserve Bank

Real GDP growth outcomes* and projection** from the November 2013 *MPR*



* Real GDP growth outcomes differ from real GDP at the time the forecasts were made as the data have subsequently been revised.

** Real GDP growth trajectory ten quarters ahead

Source: South African Reserve Bank

Box 3 Forecast accuracy and the economy's performance relative to the MPC's November 2013 forecasts

Monetary policy affects the economy with a lag, with the largest impacts occurring after one to two years. For this reason, forecasts are a crucial input into the decision-making process. Indeed, so central are forecasts to inflation targeting that Lars Svensson, a pioneer of the approach, prefers to call it 'inflation forecast targeting'.[1] Forecasting, however, is an inexact science. It is therefore important both to test the accuracy of the forecasts against measured outcomes and to communicate the limits of forecasting. This box examines the Bank's growth and inflation forecasts against outcomes and against private forecasts.

Actual data for growth and inflation are now available for both 2014 and 2015. Forecasts for these years first appeared in the November 2013 *MPR*. Comparing those forecasts with the outcomes shows that the inflation forecast performed better than the growth forecast, with growth coming in well below the Bank's central projection. The large miss on the growth forecasts reflects a number of shocks, including electricity shortages, lower commodity prices, strikes and drought. Inflation also diverged from the central projection of the forecast for 2015, mainly due to the unexpected collapse in oil prices.

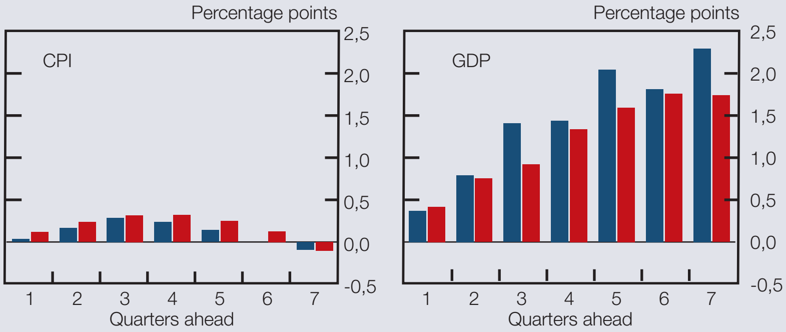
Compared to Reuters' average forecasts, the Bank's inflation forecasts again proved more accurate than the growth forecasts. Two statistical techniques are used for the comparison: the average forecast error and the root mean square error (RMSE). The average forecast error measures projection bias in terms of systematic over- or underestimation. The RMSE reveals the standard deviation or magnitude of the errors. Outcomes for inflation and real GDP growth are subtracted from their projections and the two error statistics are calculated. The period under review covers the entire post-crisis period, from the fourth quarter of 2009 until the fourth quarter of 2015.

The results show that the Bank and Reuters' average errors are slightly positive for most of the consumer price index (CPI) inflation projections and highly positive for all the GDP projections. This shows that forecasts were biased upwards, on average, for most of the post-crisis period for inflation and for all of this period for GDP.

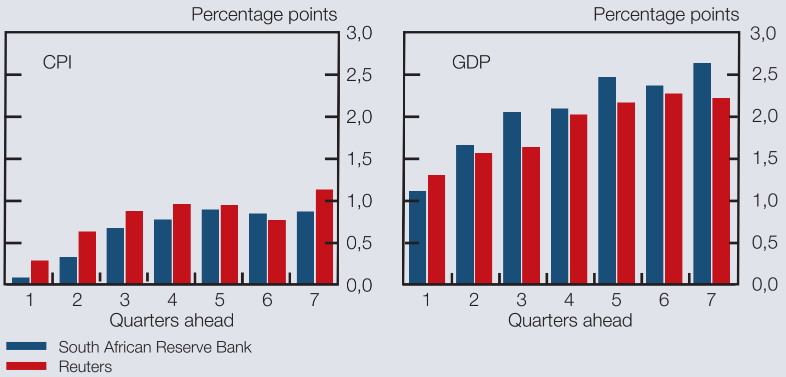
The RMSE shows that the Bank's CPI inflation forecast has been marginally more accurate than the Reuters mean for all but one of the seven forecast quarters. By contrast, the Reuters GDP forecast is more accurate than the Bank's in every quarter except the first. Four-quarters-ahead RMSE measures of inflation are substantially lower than the corresponding measures of GDP. The Bank and Reuters' four-quarters-ahead CPI RMSEs measure 0,8 and 1,0 percentage points respectively, while their GDP RMSEs measure 2,1 and 2,0 percentage points respectively. This shows that the growth forecasts have been generally less accurate than the inflation forecasts. The implication may be that economists' models are better-suited to forecasting inflation than growth. Alternatively, growth may be behaving more abnormally than inflation at present.

1 See Lars Svensson, 'Inflation forecast targeting – implementing and monitoring inflation targets', *European Economic Review* 41, 1997, pp 1111–1146.

Average forecast error

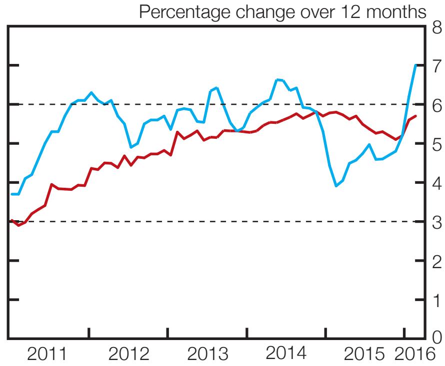


Root mean square error



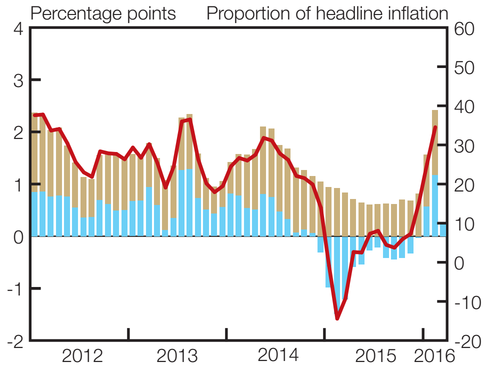
Sources: Reuters and own calculations

Headline and core inflation



Source: Statistics South Africa

Contribution of petrol and food prices to headline inflation*



* Petrol and food prices have a combined weight of almost 20 per cent in the basket and therefore have a significant effect on headline inflation.

Sources: Statistics South Africa, Department of Energy and own calculations

Inflation developments and outlook

Exchange rate and food price shocks have pushed the headline inflation forecast above 6 per cent for 2016 and most of 2017. The March 2016 forecast for headline inflation has improved somewhat on January's, given the rate increase at the start of the year as well as a partial rand recovery and a more favourable trajectory for administered prices. Nonetheless, the breach of the target is still expected to last into late 2017, and the inflation risks are to the upside.

Headline inflation moved above the upper end of the target range in January 2016, to 6,2 per cent, increasing by a full percentage point relative to the previous month. In February it accelerated further, to 7,0 per cent, the highest rate in almost seven years. Inflation is forecast to remain above the upper end of the target range for 2016 and most of 2017, averaging 6,6 per cent and 6,4 per cent respectively. The main drivers of this elevated forecast are the direct and indirect effects of both higher food prices and exchange rate depreciation.

Between the January and March MPC meetings, the rand regained some ground in foreign-exchange markets, suggesting some overshooting in December and January. The oil price assumption was lowered in line with falling world prices, and the electricity price forecast was also adjusted downward following the National Energy Regulator's (NERSA's) price ruling on 1 March 2016. These factors produced some moderation of the inflation forecast relative to January's outlook, which had indicated inflation at 6,8 per cent for 2016 and 7 per cent for 2017.

Much of the envisioned respite is uncertain, however, as evidenced by recent exchange rate volatility and a rebound in world oil prices. Furthermore, despite the slight improvement to the outlook, inflation is still elevated. Core inflation, which excludes the more volatile components of the consumer basket, is forecast at 6,2 per cent for this year and at 5,7 per cent for next year. Inflation expectations over the longer run are at or above the top end of the inflation target range. Although the recent acceleration in inflation is mostly explained by supply shocks, these are exacerbating already high levels of underlying inflation.

Table 4: Inflation forecasts at 2016 MPC meetings

Per cent

	January MPC meeting		March MPC meeting	
	Headline inflation	Core inflation	Headline inflation	Core inflation
2016...............................	6,8	6,0	6,6	6,2
2017...............................	7,0	5,9	6,4	5,7
2018...............................			5,5	5,2

Source: South African Reserve Bank

Food prices

South Africa is in the midst of its worst drought in over 20 years. For most of 2015, this drought was expected to raise food prices, but these higher prices failed to materialise. This was partly because the drought led farmers to reduce their livestock holdings, which suppressed meat prices. A contemporaneous decline in oil prices also reduced production costs. But now food price inflation is accelerating rapidly, proving the original forecasts not wrong but premature. From a trough of 4,2 per cent in June 2015, food price inflation overtook headline in October and reached 7 per cent in January 2016. It is expected to average 9,4 per cent for 2016 and 7,8 per cent for 2017, up from 5,1 per cent in 2015.

The largest single contribution to the recent uptick in food price inflation came from vegetables. These have relatively short growing seasons, so the drought effects on prices are expected to be quite short-lived. The prospects for meat and cereals prices, however, are more unfavourable, and price developments in these categories are expected to shape food prices over the forecast period. Cereals can only be planted at certain times, and for recent crops rain arrived too late. For this reason, to use maize as an example, the 2014/15 harvest of 9,9 million tons was 4 million tons lower than the robust 2013/14 harvest. In addition, the drought has led to expectations of an even lower maize harvest in the current 2015/16 growing season. Cereals imports are rising to meet demand, and higher prices will boost food price inflation. Meat prices are likely to follow a similar trend, climbing as farmers rebuild herds. The upward trend for meat may well outlast that for cereals.

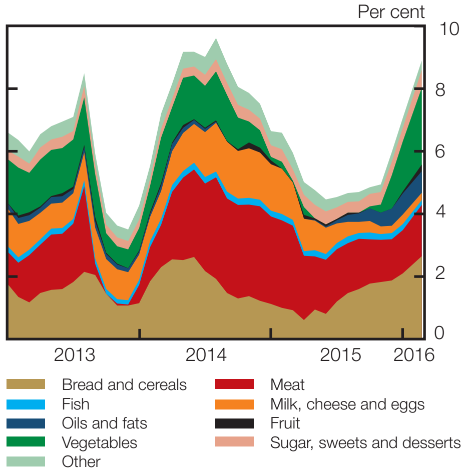
In contrast to domestic prices, international food prices have been shifting lower. The United Nations Food and Agricultural Organization (FAO) Food Price Index entered deflation territory in mid-2013, reflecting US dollar strength as well as good harvests in some countries, among other factors. In South Africa, cheaper world food prices have been curtailed by currency depreciation. This has limited the benefits for consumers. For those domestic producers with goods to sell, however, currency depreciation has provided some protection from lower world food prices.

Petrol prices

Domestic petrol prices rose by 10 per cent in January compared to prices one year earlier, concluding a 13 month period of petrol deflation. US dollar-denominated oil prices have actually fallen further in 2016, relative to 2015 levels. Yet the domestic benefits of this decline have been offset by the exceptionally weak rand. Between September and late March, Brent crude oil prices dropped by about US$10 (19 per cent), whereas the domestic petrol price fell by 7 per cent (R0,83) in total.

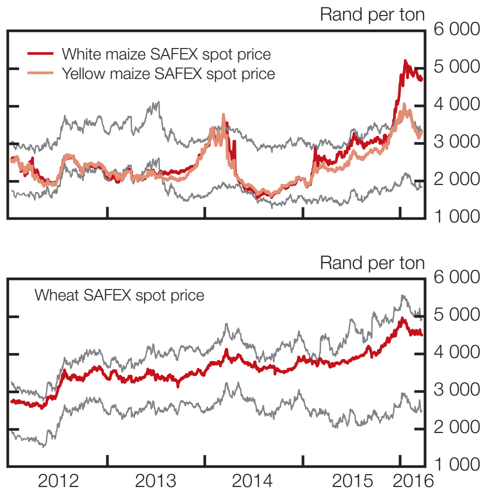
The collapse in world oil prices reflects a mix of supply and demand factors, with supply-side dynamics most important in explaining recent price movements. During 2015, members of the Organization of the Petroleum Exporting Countries (OPEC) increased oil supply, hoping to force US shale producers out of the market. US producers nonetheless managed to cut costs, maintaining production at lower oil prices than previously thought possible. This left world markets oversupplied and posed major financial challenges for both OPEC and US producers. In February, Saudi Arabia and Russia announced plans to cap OPEC production at January levels – a move that is

Contributions to food inflation



Sources: Statistics South Africa and own calculations

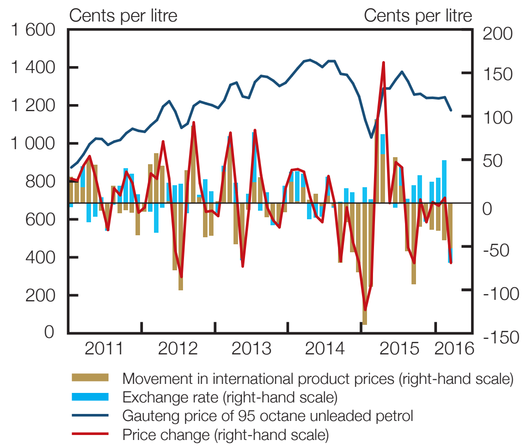
Maize and wheat prices



* The top grey line is the import parity price and the bottom grey line is the export parity price. These prices are the theoretical upper and lower bound prices for commodities.

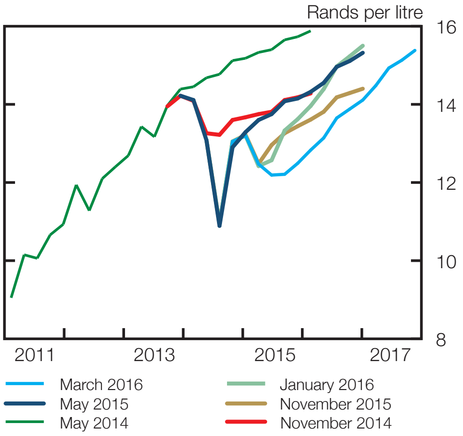
Source: Grain South Africa

South African petrol price and contributions to changes in the basic fuel price



Source: Department of Energy

Evolution of petrol price forecasts



Source: South African Reserve Bank

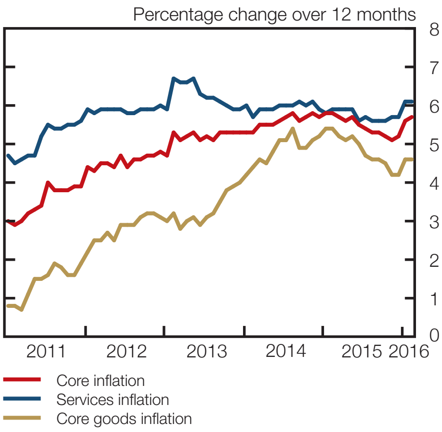
expected to stabilise oil prices if it gains the support of other members. But achieving this consensus could be difficult. OPEC members are reluctant to reduce production if that means ceding market share to shale oil competitors. Furthermore, Iran is resuming exports following the lifting of sanctions and intends to regain market share. An OPEC meeting in April should bring clarity on the likelihood of a production freeze.

The international oil market has experienced a structural transformation over the past few years, leading to much uncertainty over the 'equilibrium' oil price. What consensus exists points to oil becoming more expensive over the next few years, but remaining well below the triple-figure prices which seemed normal as recently as 2014. For instance, the US Energy Information Administration forecasts a move towards US$50 in the medium term. Prices are unlikely to stay much lower than this threshold as few countries can sustainably produce oil for less. Demand is also expected to rebound, especially from emerging markets. Yet price increases much beyond that point are likely to be capped by the recent, dramatic expansion in world supply, particularly from shale energy.

At the March MPC meeting, Brent crude prices were assumed to average US$37 for 2016 and US$45 for 2017 (below their 2015 average of US$53). Petrol price inflation is expected at 0 per cent this year, suppressing inflation in the broader category of administered prices, and 10 per cent in 2017. Compared to January, the rand's partial recovery has suppressed petrol price inflation, which was then expected at 8 per cent for 2016 and 12 per cent for 2017. Petrol price inflation, alongside food, will thus add to inflationary pressure in 2017.

Core inflation

Core inflation and components



Sources: Statistics South Africa and own calculations

Core inflation is expected to average 6,2 per cent in 2016 before declining somewhat to 5,7 per cent in 2017. This is a significant increase from the 2015 average of 5,5 per cent. The rise in core inflation in the near term reflects some idiosyncratic and probably temporary shocks alongside more durable inflationary pressures. The story of core, however, is not simply about its rise but also about its persistence; it has been above 5 per cent for the past three years. At such elevated levels, even small shocks can shift this broad measure of prices beyond 6 per cent, a threat of which the MPC has been warning for some time.

The recent upward shift in core has several components. One important factor is rising vehicle price inflation, very likely related to currency depreciation. This may also explain some of the increase in insurance; medical aid costs, for instance, have exchange-rate exposure, principally through equipment and drugs. Alcohol and tobacco is quite a volatile category which is now making an unexpectedly large contribution to core. More unexpected still, Lotto tickets increased markedly in January, adding 0,2 per cent to the overall core measure. As some of these adjustments are likely to be once-off shocks, core should adjust lower on base effects after a year. For this reason, the core forecast moderates in 2017. Core inflation is nonetheless a category that normally changes course slowly, suggesting a risk that it will stay higher for longer.

Inflation expectations

For some time, the MPC has expressed concern over inflation expectations clustering at around the 6 per cent level. These expectations may become self-fulfilling prophecies: inflation persists at 6 per cent because wage and price setters plan on 6 per cent increases simply to maintain real incomes. With 'normal' inflation already at the top end of the target range, additional shocks also risk sustained departures from the target. Since the last *MPR*, expectations have deteriorated, exacerbating this problem.

Inflation in 2015 was close to the midpoint of the target range. Despite this, inflation expectations as measured by the BER survey barely dipped below 6 per cent, except for the current year. By the fourth quarter of the year, overall expectations for one, two and five years had all shifted above 6 per cent, a finding replicated in the survey published in March 2016. Reuters' survey of analysts, which closely mirrors the BER's analysts subcategory, now also shows inflation expectations for both 2016 and 2017 above 6 per cent, having moved from 6 per cent in January to 6,4 per cent in February. Expectations for 2017 moved above 6 per cent in January 2016 following the rand's abrupt depreciation, and increased marginally to 6,1 per cent in February.

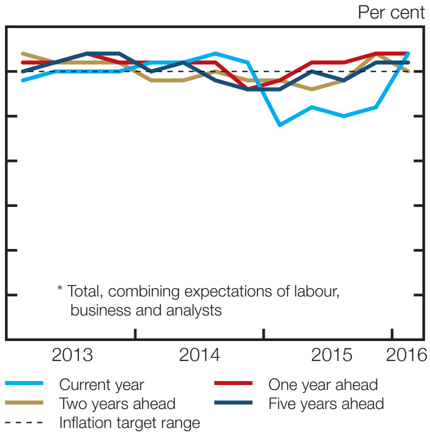
The deterioration in break-even inflation rates was more dramatic. These are market-based measures of expectations over the longer run, with data available for five- and ten-year terms. Both spiked close to 8 per cent in December 2015, but have retraced since mid-January and are now at around 7 per cent.[3] This is significantly above the 2015 averages of 6,2 per cent and 6,4 per cent for five- and ten-year measures respectively. Break-evens are not precisely comparable to surveys of inflation expectations. In particular, they reflect not just a market forecast for inflation but also a premium for the risk of additional inflation. These risks are also of interest to the monetary policy authorities, especially when the premiums are substantial and the risks apply to longer time frames over which shocks should have, on balance, insignificant effects.

Wages and unit labour costs

Supply shocks, such as the exchange rate and food price increases now buffeting the economy, have consequences for wages and salaries. Fundamentally, South Africans become poorer when export commodities are worth less abroad and local food production declines. Incomes should therefore moderate in real terms. This process might itself subdue inflation as consumers reduce spending elsewhere. However, if wages and salaries are adjusted upwards to compensate for these losses, the costs must go elsewhere. One option is that unemployment will rise. In this case, although average pay rises, fewer people are employed and total remuneration is unchanged. Another option is that inflation rises, setting off a series of competitive wage and price increases and ultimately penalising those without the power to maintain their incomes. One objective of the inflation-targeting framework is to ensure that supply shocks do not have such cascading impacts on inflation.

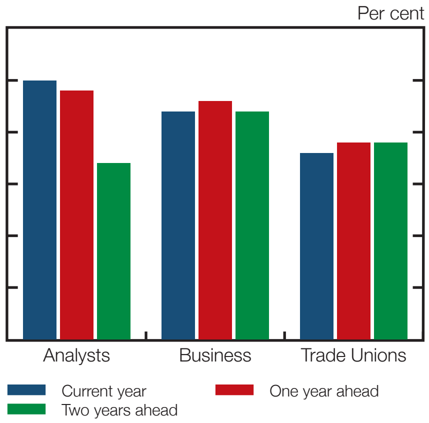
3 These break-even inflation rates are based on generic Bloomberg series which are calculated as the difference between maturity-matched sovereign fixed-income and sovereign inflation-linked bonds. In theory, the level of the rates should reflect inflation expectations as well as the inflation risk premium. Market imperfections make the interpretation of break-even rates more challenging. Inflation-linked bonds are not traded as intensively as fixed-income instruments. Participants in the two markets also tend to have different characteristics.

Survey-based inflation expectations*



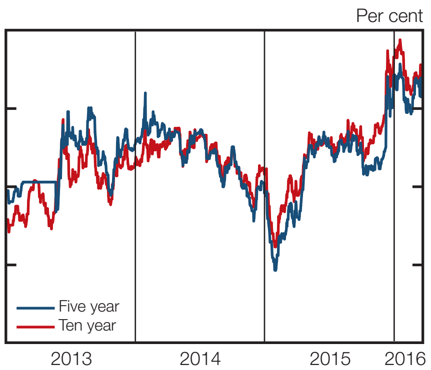
Source: Bureau for Economic Research

Inflation expectations (2016 Q1 survey)



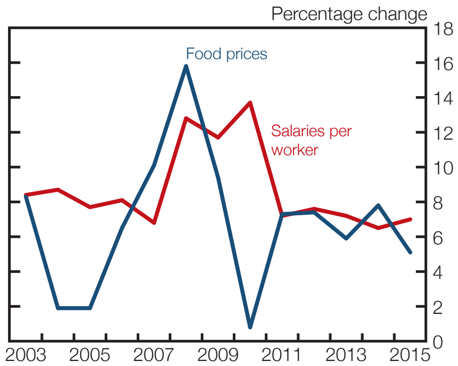
Source: Bureau for Economic Research

Break-even inflation rates



Source: Bloomberg

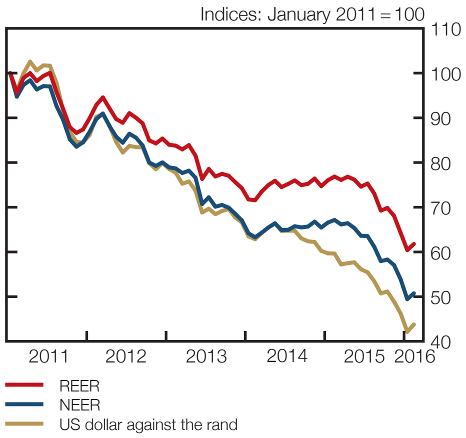
Salaries per worker and food inflation



Sources: Statistics South Africa and South African Reserve Bank

Over the past three years, unit labour cost (ULC) growth has gradually moderated from the 2009/10 excesses. These, in turn, were related to the large food and energy price shocks of 2008/09. The risk is that the current round of shocks will have similar consequences. Wage and salary agreements in South Africa tend to be inflation-linked, so higher headline inflation now may well generate higher ULC growth in a year. In fact, after the extreme food and petrol price shocks of 2008, salaries per worker accelerated up to 2010. Furthermore, the pressure from ULCs may be more intense as growth slows, because output will be expanding less rapidly than remuneration.

South African exchange rate measures



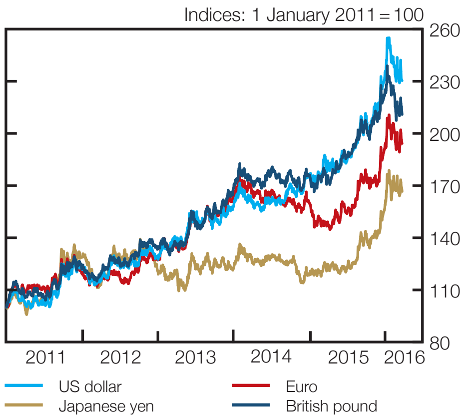
Sources: Bloomberg, Bank for International Settlements and South African Reserve Bank

The exchange rate

Exchange rate depreciation has been persistent over the past five years. Since January 2011, the rand has depreciated by 50 per cent against the currencies of trading partners. After adjusting for inflation differentials, the change is 40 per cent. Against the US dollar, in which a disproportionate share of world trade is invoiced, the adjustment is larger still.

As discussed in the previous *MPR*, there are two types of medium-run shocks which have been driving depreciation: a demand shock as the commodity supercycle ends and a portfolio shock as the Fed begins tightening and capital returns to the US from riskier investment destinations abroad. In addition, in December 2015 South Africa experienced a large, idiosyncratic exchange rate shock. This was exacerbated in the first quarter of 2016 by market volatility emanating from China as well as ongoing domestic disruptions.

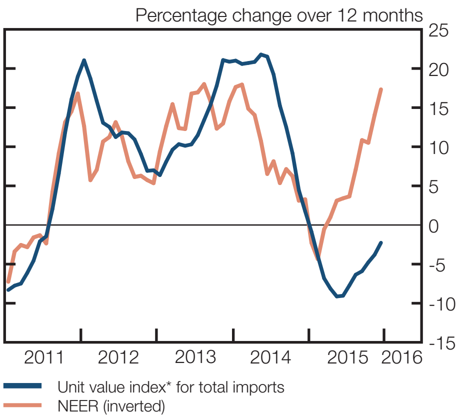
Exchange rate of the rand against major currencies



Source: Bloomberg

The inflationary impact of these shifts has been limited by lower exchange rate pass-through to inflation, relative to historical experience. One direct explanation for this outcome is that weak domestic demand has left firms reluctant to pass cost increases on to consumers. There is also evidence that inflation targeting reduces pass-through, possibly by giving wage and price setters an alternative to the exchange rate as an anchor for their expectations.[4] Nonetheless, there is a persistent risk of pass-through reverting to more historically normal levels, perhaps as the currency passes certain thresholds. Relatedly, higher pass-through may be triggered if the credibility of the inflation target appears to weaken. Yet even if these risks are controlled, exchange rate depreciation still poses an inflation problem. The currency has weakened significantly – over 20 per cent against the US dollar in 2015 alone – such that even with low levels of pass-through the total effect on prices is substantial.

Imported PPI inflation and NEER changes



* Import unit value indices measure inflation in imported commodities using customs-level data from the South African Revenue Service. They are not comparable to the discontinued PPI series for imports.

Sources: South African Reserve Bank and Statistics South Africa

Credit and asset prices

Credit growth has remained relatively weak since the crisis. General lending to households, fuelled mainly by unsecured loans, grew rapidly up to mid-2013 but then decelerated. Growth in total credit to households averaged around 4 per cent in 2014 and 2015, and has therefore been negative in real terms. Households are still rebuilding their balance sheets and banks are adjusting to post-crisis regulatory changes as well as to the decrease in profitability from a sustained period of low interest rates. Corporate credit growth strengthened from 2014 to average 14 per cent in 2015. However, this appears to have been offset by a decline in corporate bond issuance.

4 See for instance *South African Reserve Bank Working Paper 12/08* by Janine Aron, Greg Farrell, John Muellbauer and Peter Sinclair, 'Exchange rate pass-through to import prices, and monetary policy in South Africa', available at http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/5152/WP1208.pdf.

As with credit, asset prices have not supported stronger household consumption recently, particularly when adjusted for inflation or currency depreciation. In real terms, the All-Share Price Index has been flat for the past two years and is below its pre-crisis peak. House price growth has also been close to inflation. Given these factors, credit extension and asset prices are not at present contributing to inflationary pressures in the economy.

Risks to the forecast

Between November 2015 and January 2016 the inflation forecast deteriorated significantly, from 6 per cent to 6,8 per cent for 2016 and 5,8 per cent to 7 per cent for 2017. This deterioration was not altogether surprising. Some of the risks had been visible at the time of the November meeting, and the decision to hike rates by a quarter of a percentage point at that time reflected the risks as much as the forecast itself.

In January, the visible risks were more closely incorporated into the baseline forecast. For this reason, for the first time in a year, the risks around the forecast were deemed to be balanced. Uncertainties remained, but these did not skew disproportionately to higher or lower inflation.

In March, the forecast for inflation declined marginally, but this improvement depended heavily on exchange rate and oil price developments. Before the MPC meeting, both variables had moved in more favourable directions, but these shifts were reversing even as the MPC met – suggesting the moderation of the outlook was less signal than noise. Accordingly, the balance of risks for the March forecast was once again assessed to be towards higher inflation.

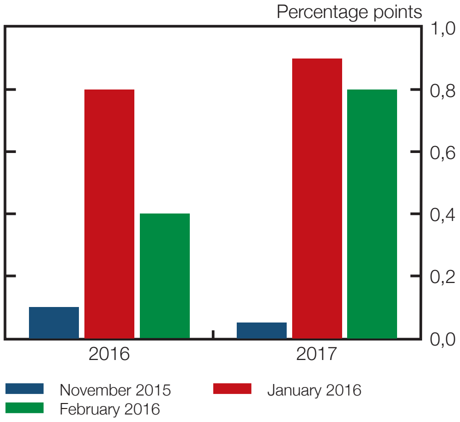
Box 4 The Bank's CPI inflation forecast revisions for 2016 and 2017

Between the November 2015 and January 2016 Monetary Policy Committee (MPC) meetings, the Bank revised its 2016 and 2017 inflation forecasts sharply higher. These adjustments were larger than those made by private-sector forecasters, producing a sizeable gap between the Bank and private forecasters. Although in general these two sets of forecasts are well aligned, in truth they serve different purposes. The Bank's forecasts estimate inflation outcomes to assess whether policy intervention is necessary. By contrast, private-sector inflation forecasts estimate inflation outcomes, including their expectations of policy changes. This is not the only methodological difference between the two types of forecasts but it is conceptually important. As a result, the two should be expected to diverge at times. It appears that private-sector forecasts for 2016 were updated after January, bringing them closer to the Bank's forecasts. For 2017, much of the discrepancy remains, likely reflecting methodological differences between the two types of forecasts.

There are two major methodological differences between the Bank's inflation forecasts and those of private analysts. First, the Bank's forecasts use a constant real exchange rate. As a result, all the depreciation in December and January remains in the forecast, keeping the rand at real lows across 2016 and 2017. Private forecasters, by contrast, appear to anticipate some rand recovery. This would particularly affect the petrol price assumption, which was an important driver of the deterioration between the Bank's November and January forecasts. Private forecasters may also be expecting lower oil prices, which (alongside the improved currency) would result in lower petrol price inflation.

Second, the Bank's forecasts use a constant nominal interest rate assumption. The rationale for this is that the forecasts are used to make policy decisions and should not, therefore, assume or predict what policy decisions will be made. The result, however, is that while private-sector forecasters include anticipated interest rate adjustments, the Bank's

Difference between the Bank and Reuters inflation forecasts



Sources: South African Reserve Bank and Reuters

forecasts do not. This keeps the Bank's forecasts higher, especially in the outer year of the forecast period as food and exchange rate shocks generate second-round effects.[1]

Rate hikes, as at the January and March MPC meetings, are aimed at suppressing these effects. Wages respond to the experience of higher inflation and so unit labour costs (ULCs) pick up; for this reason, ULCs were revised upwards by 0,5 percentage points (2016) and 1 percentage point (2017) from the November forecast. The forecast for core inflation rose by 0,5 percentage points in both years, strongly influenced by ULCs. This change is probably responsible for much of the divergence between the Bank and Reuters' median forecasts for 2017. Of course, if the Bank succeeds in its policy response, these effects will be more muted and the forecast will be inaccurate. But that forecast is helpful in identifying the problem that policy needs to address.

1 Note also that policy decisions by the MPC would be premised particularly on the outer year, as monetary policy works with a lag of between 18 and 24 months.

Conclusion

Over the past half-dozen years, hopes for a rebound in world growth have been disappointed. Instead, global economic growth has decelerated steadily. Among the major advanced economies, the US has experienced a fairly robust recovery, but the euro area and Japan have achieved little or no real growth. The performance of emerging markets has deteriorated, particularly that of middle-income countries. China has slowed; Brazil and Russia are in recession. Emerging markets are still contributing the majority of world growth, but that contribution has fallen steadily every year since 2011.

In an atmosphere of heightened risk aversion, emerging markets have experienced persistent capital outflows. Markets are highly attentive to differences in country risk profiles, and specific countries have experienced sharply higher borrowing costs and currency depreciation as a consequence. These circumstances make it expensive for South Africa to sustain large current-account and fiscal deficits. Compounding these difficulties, the domestic economy is barely growing, while inflation is outside the target range.

South Africa's macroeconomic settings provide a robust response to these challenges. Fiscal policy must navigate higher borrowing costs alongside diminished revenue prospects. Accordingly, National Treasury has set out a path of more rapid fiscal consolidation. To make this adjustment as growth-friendly as possible, public-sector cuts are focused on administrative spending. To the extent possible, frontline service providers are shielded from cuts, as is investment. Tax increases have been moderate and progressive.

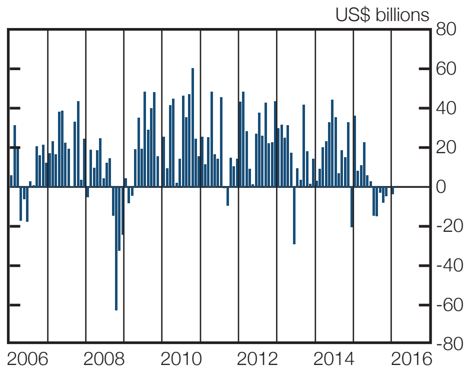
Monetary policy's contribution has several dimensions. Interest rates remain quite low, both in historical terms and compared to peer countries. Much of South Africa's growth slowdown is structural but at least some portion is probably cyclical. Low interest rates help to close the gap between what the economy is capable of achieving and actual output.

The Bank's mandate, however, is for maintaining price stability, and so interest rates have been adjusted to be less stimulatory. Inflation is currently outside the inflation target range and the latest forecasts suggest it will only return to target late in 2017. The sources of higher inflation are supply-side shocks, principally from the exchange rate and food prices. These will naturally make specific goods and services more expensive. The policy goal is to prevent these shocks from spreading into prices more generally. Monetary policy can accommodate temporary shocks that cause target breaches but should respond if those shocks risk leaving inflation permanently higher, beyond the target range. To avert this outcome, price and wage setters need to be confident that the Bank will deliver on its mandate. Both rate increases and the Bank's broader communications strategy serve to maintain this credibility.

The exchange rate plays an important role in the macroeconomic framework. When the economy suffers shocks, for instance to commodity prices, rand depreciation helps to absorb the impact. A weaker rand improves the local currency earnings of exporters and raises the competitiveness of import-competing firms, making it a form of monetary stimulus. If currency depreciation generates much higher inflation, these advantages will be eroded. But as long as inflation expectations remain anchored in line with the monetary policy target, rand depreciation will facilitate rebalancing. The alternative – to try and fix the exchange rate and thereby subsidise net imports – is undesirable and also likely to be unsustainable.

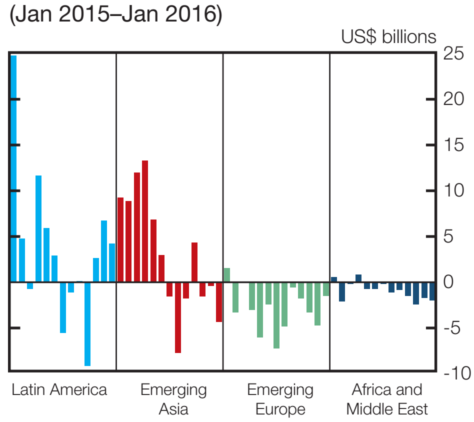
These policy responses will help the economy move towards sustainability and renewed growth. South Africa's long-run interests are well served by controlling inflation and other macroeconomic risks now. In the short term, the fact that South Africa has a consolidated, robust macroeconomic framework will help to mitigate adjustment costs.

Total portfolio flows into emerging markets



Source: Institute of International Finance

Portfolio flows into emerging-market regions (Jan 2015–Jan 2016)



Source: Institute of International Finance

Statement of the Monetary Policy Committee

28 January 2016

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

Since the previous meeting of the Monetary Policy Committee (MPC), the inflation outlook has deteriorated significantly, mainly due to exchange rate and food price developments. The rand has depreciated considerably in response to domestic and external developments, while the impact of the worsening drought on food prices is becoming increasingly evident. The inflation outlook is complicated by the fact that the domestic growth outlook has weakened further. The global backdrop has also become more challenging, particularly for emerging markets, and downside risks to the sustainability of the recovery in the advanced economies have increased.

The year-on-year inflation rate, as measured by the consumer price index (CPI) for all urban areas, stood at 5,2 per cent in December, up from 4,8 per cent in November. This increase was broadly in line with both market and the Bank's expectations, and reflected in part the delayed response of food price inflation to the impact of the drought on agricultural prices. Food and non-alcoholic beverages inflation accelerated to 5,9 per cent, up from 4,8 per cent previously, and contributed 0,9 percentage points to the overall CPI outcome. Goods price inflation increased to 4,6 per cent from 3,8 per cent previously, mainly due to higher petrol and food prices, while services price inflation remained unchanged at 5,7 per cent. The Bank's measure of core inflation – which excludes food, petrol and electricity – remained relatively stable at 5,2 per cent, up from 5,1 per cent in November.

Producer price index (PPI) inflation for final manufactured goods increased from 4,3 per cent in November to 4,8 per cent in December. The category of food, beverages and tobacco products contributed 2,1 percentage points to the December outcome.

The latest inflation forecast of the Bank shows a marked deterioration. Having averaged 4,6 per cent in 2015, inflation is now expected to average 6,8 per cent in 2016 and 7,0 per cent in 2017. This compares with the previous forecast of 6,0 per cent and 5,8 per cent for these years. Inflation is still expected to breach the upper end of the target range in the first quarter of 2016, but is now expected to remain outside the target range for the entire forecast period. A peak of 7,8 per cent is expected in the fourth quarter of 2016 and in the first quarter of 2017, followed by a moderation to 6,2 per cent in the final quarter of that year (5,7 per cent previously). The changes in the forecast are mainly due to a significantly more depreciated real exchange rate assumption and higher-than-expected food price inflation. These upward revisions more than offset the impact of the lower international oil price assumption. The electricity price assumption remains unchanged from the previous meeting.

The forecast for core inflation has also deteriorated, although to a lesser degree than that for headline inflation. Core inflation is expected to breach the upper end of the target range for four consecutive quarters from the third quarter of 2016, with a peak of 6,4 per cent in the final quarter of 2016 and in the first quarter of 2017. This measure is expected to average 6,0 per cent in 2016 and 5,9 per cent in 2017, moderating to 5,5 per cent by the final quarter of next year. The deterioration in this forecast is mainly due to the significantly more depreciated real exchange rate assumption and expected higher unit labour costs.

Inflation expectations, as reflected in the survey conducted by the Bureau for Economic Research (BER), show a marginal upward movement for 2016 but a more pronounced deterioration for 2017, with average inflation expectations increasing from 5,9 per cent to 6,2 per cent, mainly due to changes in the expectations of trade union officials. Five-year inflation expectations edged up to 6,1 per cent, also mainly due to changes in the expectations of trade union officials. This survey was concluded prior to the depreciation of the rand in December, so the outcome of the next survey will be closely monitored.

The impact of the rand exchange rate weakness on market forecasts is evident in the changes to the Reuters Econometer survey between December and January. Median inflation expectations were stable in November and December, at 5,9 per cent and 5,8 per cent for 2016 and 2017, but increased in January to 6,0 per cent and 6,1 per cent. The median forecast for 2018 is 5,7 per cent. Break-even inflation rates also increased significantly across all maturities, with the five-year maturities rising to current levels of around 7,3 per cent.

The global growth outlook appears to have worsened somewhat in recent weeks, contributing to a correction in global equity markets. Although most of the downward revisions to global growth have been due to the deteriorating prognosis for emerging markets, more recently the risks of a slowdown in the United States (US) have increased, amid declining consumer expenditure and the impact of low oil prices and a strengthening dollar on business investment. However, despite the fourth-quarter slowdown, growth of around trend is still generally expected. While the recovery in the euro area remains modest, the growth forecasts for the United Kingdom and Japan have generally been revised down.

Emerging market growth prospects, particularly for commodity-producing countries, remain constrained amid persistent capital outflows. The outlook is heavily influenced by the slowing Chinese economy, but there are conflicting views as to whether a hard landing can be expected. There is also uncertainty regarding the efficacy of policy reforms that have been undertaken. Perceptions of the modifications to the renminbi exchange rate regime as well as equity market volatility have added to this uncertainty.

Global inflation pressures remain benign, reinforced by a further decline in international oil prices, but there have been upward revisions in some emerging markets. Monetary policies in most advanced economies are expected to remain accommodative. The slow pace of normalisation in the US is expected to continue, but further easing is expected in Japan and the euro area, while the Bank of England has indicated that monetary policy tightening is still some way off. Divergent monetary policy paths are also expected in the emerging markets. Commodity importers with sound macroeconomic fundamentals have scope for further easing, while some commodity producers, particularly those experiencing exchange rate-induced inflationary pressures, have been in a tightening mode despite slowing growth.

The exchange rate of the rand has depreciated markedly since the previous meeting of the MPC, contributing significantly to the deterioration in the inflation forecast. Since the previous meeting, the rand has depreciated by 13,5 per cent against the US dollar, by 15,2 per cent against the euro, and by 12,9 per cent on a trade-weighted basis. The muted reaction of the exchange rate to the start of US Fed normalisation suggests that this move was more or less priced in, but this was overshadowed by the impact of domestic developments on the exchange rate earlier in the month.

In early January, the rand reacted further to growing concerns about the outlook for the Chinese economy. While most emerging-market currencies were affected, since the previous meeting of the MPC, the rand's depreciation has been in excess of most of its emerging-market peers. Other indicators, such as widening credit spreads and the sharp increase in domestic bond yields, point to a higher risk premium attached to South African assets.

Although the rand may appear to be undervalued at current levels, divergences from equilibrium can persist for some time. Furthermore, the current-account adjustment remains slow, with the deficit expected to widen further in the face of continued weakness in commodity prices and higher, drought-induced agricultural imports. The financing of the deficit will also be more challenging in an environment of persistent capital outflows from emerging markets. Since the previous MPC meeting, non-residents have been net sellers of South African bonds and equities.

From a monetary policy perspective, a key risk to the inflation outlook is not only the possibility of further depreciation, but also the extent to which there is a change in the pass-through dynamics, which have been relatively muted in recent years.

The domestic economic growth outlook remains weak, with further downward revisions to the Bank's forecast. Growth in 2015 is estimated to have averaged around 1,3 per cent and is expected to moderate to 0,9 per cent in 2016 before accelerating to 1,6 per cent in 2017. This compares with the previous forecast of 1,5 per cent and 2,1 per cent for 2016 and 2017.

The Bank's estimate of potential output growth was revised down from 1,9 per cent to 1,5 per cent for 2016, and from 2,1 per cent to 1,6 per cent for 2017. Although there was a marginal increase in the Bank's leading business cycle indicator in November, the trend remains negative, consistent with the subdued outlook. The RMB/BER business confidence index declined further in the fourth quarter of 2015, to its lowest level in five years.

High-frequency data indicate that the mining sector remains under pressure in the face of declining commodity prices and weak demand. Despite a recovery in the third quarter, the manufacturing sector outlook remains negative. Capacity utilisation has declined further, and the Barclays Purchasing Managers' Index (PMI), which has remained well below the neutral level for some months, is consistent with a contraction in the fourth quarter. The continuing drought means that near-term respite for the agricultural sector is unlikely.

Underlying this growth outlook is the continued low growth in gross fixed capital formation, with private sector investment contracting in the third quarter. The prospects for formal-sector employment growth therefore remain bleak: the Quarterly Employment Statistics survey of Statistics South Africa reports static employment levels over the four quarters to the third quarter of 2015.

Growth in consumption expenditure by households moderated in the third quarter, with contractions in spending on both durable and non-durable goods. Domestic motor vehicle sales reflected this weakness, although recent retail sales data, particularly with respect to semi-durable goods, suggest there may have been a modest improvement in the final quarter of last year. However, the decline in the FNB/BER consumer confidence index in the fourth quarter of 2015 to a 14-year low suggests that household consumption expenditure is likely to remain constrained.

Credit extension to households has increased marginally recently, particularly with respect to mortgage and general loans. However, these increases remain low and credit growth remains negative in real terms while instalment sale credit continues to slow. Tighter National Credit Act Regulations related to affordability assessments became effective from September and are expected to constrain credit to households further.

While credit extension to corporates remains robust, it is relatively narrow-based and reflects, in part, increased demand for mortgage loans by property funds.

Wage and salary trends continue to contribute to the persistence of inflation at higher levels. Year-on-year growth in nominal salaries and wages, while lower in the third quarter of last year, was still above the upper end of the inflation target range. After adjusting for labour productivity increases, growth in total unit labour costs slowed marginally to 5,0 per cent in the third quarter. Andrew Levy Employment Publications reported an average wage settlement rate in collective bargaining agreements of 7,7 per cent in 2015.

Food prices remain a significant risk to the inflation outlook. The surge in agricultural commodity prices since early 2015 is beginning to impact on consumer food price inflation, and these pressures are likely to increase in light of the persistent drought and the weaker exchange rate – despite continued moderation in global food prices. Although previous forecasts had incorporated an expectation of higher food price inflation, recent adverse developments have resulted in a further deterioration of the Bank's food price forecast, which is now expected to peak at around 11 per cent in the fourth quarter of this year.

International oil prices have declined to multi-year lows since the previous MPC meeting. The global oversupply and consequent low prices are expected to persist in the short term, particularly following the lifting of sanctions against Iran. But with marginal producers expected to reduce production or even shut down, prices are expected to follow a moderate upward trend over the forecast period. The impact of this upward trend on domestic petrol prices has contributed to the higher inflation forecast for 2017 in particular. The potentially favourable impact of the international oil price decline on domestic petrol prices has been more or less offset by the depreciation of the rand. Petrol prices have declined only marginally since November, and the current under-recovery suggests a possible increase of around 7 cents per litre in February.

Previously, the Committee expressed concerns about the growing risks to the inflation outlook, mainly due to exchange rate and food price risks. These risks appear to be materialising and have contributed to the significant deterioration of the inflation forecast. The intensity of the drought has brought about a sizeable revision to the Bank's food price outlook, while the exchange rate has depreciated significantly more than expected. While oil prices have a moderating impact on the inflation outlook in the near term, base effects and the assumed upward trajectory contribute to the adverse inflation outlook for 2017. The forecast also incorporates changes in administered prices, in particular for water, while an upside risk remains regarding electricity tariff increases.

The MPC assesses the risks to the inflation outlook to be relatively balanced. While there may be potential for further rand weakness in the short term given the negative outlook for emerging markets in general as well as domestic factors, the lower observed exchange rate pass-through remains a mitigating factor. However, there is still uncertainty as to the sustainability of this low pass-through, particularly in the face of large nominal exchange rate movements as recently experienced. The upside risk from the exchange rate is more or less offset by the downside risks from the international oil price assumptions and projected food price inflation.

Demand pressures remain constrained, and the focus of the MPC will therefore be on the evolution of inflation expectations and indications of second-round effects of the exogenous shocks to the inflation outlook. There are some indications that inflation expectations may have deteriorated, but the extent of this will become more evident in the coming surveys. The trend in core inflation provides some indication of the possible emergence of second-round effects. Although core inflation has remained relatively contained in recent months, it is expected to accelerate and to exceed the upper end of the inflation target range for some time in response to exchange rate and wage pressures.

The Committee faced the continuing dilemma of a deteriorating inflation environment and a worsening growth outlook. The risks to the growth outlook are assessed to be on the downside, despite the downward revision to the forecast.

Given the deterioration in the inflation outlook, the MPC has decided to increase the repurchase rate by 50 basis points to 6,75 per cent per annum, effective from 29 January 2016. Three MPC members supported a 50 basis point increase, two members preferred a 25 basis point increase; while one member preferred no change.

The MPC still views the stance of monetary policy to be accommodative. Despite the rate increase, the real repurchase rate remains low given the higher-than-expected inflation over the period.

The MPC will remain focused on its core mandate of containing inflation within a flexible inflation-targeting framework. As noted on a number of occasions in the past, the MPC is of the view that the growth constraints facing the economy are primarily of a structural nature and cannot be solved solely by monetary policy. Nevertheless, the MPC remains sensitive, to the extent possible, to the possible negative impact of monetary policy actions on cyclical growth. As before, future moves will be highly data-dependent.

Summary of assumptions: Monetary Policy Commitee meeting on 28 January 2016*

1. Foreign-sector assumptions

Percentage changes (unless otherwise indicated)	Actual		Forecast		
	2013	2014	2015	2016	2017
1. Real GDP growth in South Africa's major trading-partner countries	3,0%	3,1%	2,8%	2,9%	3,3%
	(3,0%)	(3,1%)	(2,8%)	(3,1%)	(3,3%)
2. International commodity prices in US$ (excluding oil)	-6,4%	-9,8%	-19,3%	-15,0%	1,0%
			(-18,2%)	(-7,0%)	(0,5%)
3. Brent crude (US$/barrel)	108,8	99,2	52,5	41,0	50,0
			(54,9)	(56,0)	(60,0)
4. World food prices (US$)	-1,6%	-3,8%	-18,5%	-2,8%	2,7%
			(-18,0%)	(-2,8%)	(2,7%)
5. International wholesale prices	0,3%	-0,1%	-3,4%	-1,0%	1,0%
			(-3,2%)	(0,2%)	(0,8%)
6. Real effective exchange rate of the rand (index 2010 = 100)	81,91	79,17	80,06	70,45	70,45
			(80,41)	(77,00)	(77,00)
7. Real effective exchange rate of the rand	-10,1%	-3,3%	1,1%	-12,0%	0,0%
			(1,6%)	(-4,2%)	(0,0%)

2. Domestic-sector assumptions

Percentage changes (unless otherwise indicated)	Actual		Forecast		
	2013	2014	2015	2016	2017
1. Real government consumption expenditure	3,3%	1,9%	0,3%	1,5%	1,5%
			(0,5%)	(1,5%)	(1,5%)
2. Administered prices	8,7%	6,7%	1,7%	8,0%	9,9%
			(1,7%)	(7,7%)	(8,1%)
– Petrol price	11,8%	7,2%	-10,7%	7,9%	12,4%
			(-10,6%)	(7,2%)	(6,4%)
– Electricity price	8,7%	7,2%	9,4%	12,2%	13,0%
			(9,4%)	(12,2%)	(13,0%)
3. Potential growth	2,1%	1,8%	1,6%	1,5%	1,6%
	(2,1%)	(1,9%)	(1,8%)	(1,9%)	(2,1%)
4. Repurchase rate (per cent)	5,00	5,57	5,89	6,25	6,25
			(5,86)	(6,00)	(6,00)

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 38 and 39.

Selected forecast results: Monetary Policy Committee meeting on 28 January 2016

Selected forecast results (quarterly)

Year-on-year percentage change	Actual								Forecast											
	1	2	3	4	2014	1	2	3	4	2015	1	2	3	4	2016	1	2	3	4	2017
1. Headline inflation............................	5,9	6,5	6,2	5,7	6,1	4,2	4,6	4,7	4,9	4,6	6,2	6,1	7,0	7,8	6,8	7,8	7,3	6,7	6,2	7,0
								(4,7)	(5,0)	(4,6)	(6,4)	(5,6)	(5,7)	(6,1)	(6,0)	(5,9)	(5,8)	(5,8)	(5,7)	(5,8)
2. Core inflation..................................	5,4	5,6	5,7	5,7	5,6	5,7	5,6	5,3	5,2	5,5	5,4	5,9	6,3	6,4	6,0	6,4	6,1	5,7	5,5	5,9
								(5,3)	(5,3)	(5,5)	(5,5)	(5,5)	(5,5)	(5,6)	(5,5)	(5,4)	(5,4)	(5,3)	(5,3)	(5,4)

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

Selected forecast results (annual)

Per cent	Actual		Forecast		
	2013	2014	2015	2016	2017
1. Real gross domestic product (GDP) growth	2,2%	1,5%	1,3%	0,9%	1,6%
			(1,4%)	(1,5%)	(2,1%)
2. Current account as a ratio to nominal GDP.............................	-5,8	-5,4	-4,2	-5,2	-5,3
			(-4,2)	(-4,6)	(-4,6)

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

Statement of the Monetary Policy Committee

17 March 2016

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

Since the previous meeting of the Monetary Policy Committee (MPC), headline inflation has exceeded the upper end of the target range as pressures from higher food prices in particular have intensified. Although the longer-term inflation outlook has improved somewhat, inflation is still expected to remain outside the target range for an extended period, and upside risks remain. The domestic economic growth prospects remain fragile following a fairly broad-based weakening in the final quarter of last year, while global economic prospects remain uncertain.

The year-on-year inflation rate as measured by the consumer price index (CPI) for all urban areas increased markedly in January to 6,2 per cent, up from 5,2 per cent in December. Food price pressures intensified, with food and non-alcoholic beverages inflation accelerating to 6,9 per cent, up from 5,9 per cent previously. Goods price inflation increased from 4,6 per cent to 6,5 per cent, mainly due to higher food prices and base effects of petrol prices, while services price inflation increased from 5,7 per cent to 6,0 per cent. The Bank's measure of core inflation, which excludes food, fuel and electricity, which had been relatively stable for some time, increased from 5,2 per cent in December to 5,6 per cent in January. Part of this may reflect some evidence of higher exchange rate pass-through.

Producer price inflation for final manufactured goods was also indicative of increased cost pressures, having increased from 4,8 per cent in December 2015 to 7,6 per cent in January. The main contributor to this acceleration was the category of food, beverages and tobacco products which contributed 2,8 percentage points to the January outcome.

The latest inflation forecast of the Bank has improved somewhat but, nevertheless, the protracted, albeit lower, breach remains a serious concern. Inflation is now expected to average 6,6 per cent and 6,4 per cent in 2016 and 2017 respectively, compared with 6,8 per cent and 7,0 per cent previously. The forecast period has been extended to the end of 2018, and the forecast average for that year is 5,5 per cent. Inflation is expected to peak at 7,3 per cent in the fourth quarter of 2016, down from 7,8 per cent previously, and to return to within the target range, to 5,5 per cent, during the fourth quarter of 2017. Inflation is then expected to remain within the target range for the rest of the forecast period. These changes are due in part to the higher interest rate assumption following the increase in the repurchase (repo) rate at the previous meeting, a slightly less depreciated exchange rate assumption, and downward revisions to the international oil price and electricity tariff assumptions. The latter follows the National Energy Regulator of South Africa's (NERSA) decision to grant a lower-than-expected tariff adjustment of 9,4 per cent to Eskom. These pressures are counteracted to some extent by a higher food price forecast.

The forecast for core inflation reflects a marginal near-term deterioration, reflecting expected exchange rate and wage cost pressures, but is slightly improved for 2017. Core inflation is expected to breach the upper end of the target range in the second quarter of 2016 for four consecutive quarters, with a peak at 6,5 per cent in the third and fourth quarters of 2016. This measure is expected to average 6,2 per cent in 2016, and 5,7 per cent and 5,2 per cent in the subsequent two years.

The survey of inflation expectations conducted by the Bureau for Economic Research in the first quarter of 2016 presents a mixed picture. Although average expectations remain unchanged at 6,2 per cent for 2016 and 2017, those of analysts increased significantly, while expectations of business people and trade unions moderated for both years. Inflation is expected to average 6,0 per cent in 2018, with both analysts and trade unionists expecting inflation to be within the target range. The five-year average inflation expectations remained unchanged at 6,1 per cent and have been stable within a range of between 5,8 per cent and 6,2 per cent since the first quarter of 2012.

The near-term expectations of economic analysts as reflected in the Reuters Econometer survey also increased following the depreciation of the rand in December. In the survey conducted in March, the median expectation for 2016 and 2017 was 6,4 per cent and 6,3 per cent respectively, but inflation is expected to return to within the target range in 2018 at a 5,6 per cent average. Bond market expectations implicit in the break-even inflation rates are more or less unchanged since the previous meeting and remain at fairly elevated levels.

The international economic outlook remains challenging following a marked decline in global growth in the fourth quarter of 2015 as well as a continued moderation in industrial production in the advanced economies. This included a slowdown in the United States (US) amid contractions in business fixed investment and exports, and a weakening in consumer spending. Some improvement is expected in the first quarter, although growth is expected to remain below potential in the coming months. Subdued growth is expected in the Japanese economy following a contraction in the fourth quarter, with only a slightly more favourable outlook for the euro area and the United Kingdom.

The outlook for many emerging-market economies remains weak, with continuing recessions in Brazil and Russia. The slowdown in China appears to be broad-based, with a declining Purchasing Managers' Index (PMI), moderating consumer demand, and lower imports and exports. The uncertain prospects for China remain a source of intense speculation and uncertainty for the rest of the global economy.

There are few signs of global inflation pressures, with inflation below target in most advanced economies, particularly in Japan and the euro area. These trends, combined with slowing growth, have prompted looser monetary policies in a number of advanced economies, and accommodative policies are likely to persist. Contrary to this trend, the US Federal Reserve is expected to continue on its normalisation path, but at a gradual pace. By contrast, exchange-rate-induced inflationary pressures persist in a number of emerging economies, particularly in Latin America, where more sustained tightening can be expected.

The rand exchange rate has recovered somewhat from the lows experienced in December and January, but nevertheless remains highly volatile and vulnerable to domestic and external developments. Since the previous meeting of the MPC, the rand traded in a wide range of between around R16,40 and R15,07 against the US dollar, and has appreciated by 4,5 per cent against the US dollar, by 0,9 per cent against the euro, and by 2,0 per cent on a trade-weighted basis.

A number of factors contributed to the appreciation of the rand during this period. These included the reaction to further monetary policy easing in the advanced economies, and the moderation of the US normalisation path; policy stimulus measures in China which overshadowed disappointing Chinese economic data; and the reaction to domestic monetary tightening. Offsetting factors included the weak domestic growth outcome and higher inflation outlook; the increased risk of a sovereign ratings downgrade; and domestic political developments which have had a significant impact on the rand in the past few days in particular.

The exchange rate was also negatively impacted by the wider-than-expected current-account deficit and its slow pace of adjustment to a depreciated exchange rate. The adjustment is expected to remain slow, particularly in the context of declining global trade. While the current account was adequately financed in the fourth quarter of 2015, the lack of portfolio capital flows remains a concern, despite expectations of some improvement of flows to emerging markets in 2016. According to JSE Limited (JSE) data, since the beginning of the year, non-residents have been net purchasers of bonds to the value of around R6 billion, but net sellers of South African equities to the value of around R20 billion.

The domestic economic growth outlook has deteriorated further. Annual economic growth of 1,3 per cent in 2015 was in line with the Bank's expectations, but the forecasts for 2016 and 2017 have been revised down from 0,9 per cent and 1,6 per cent to 0,8 per cent and 1,4 per cent respectively. Growth of 1,8 per cent is forecast for 2018. The potential output growth estimate remains unchanged at 1,5 per cent, rising to 1,8 per cent by 2018. The weak growth trend remains consistent with the Bank's leading business cycle indicator which declined further in December. Although the Rand Merchant Bank/Bureau for Economic Research (RMB/BER) business confidence index was unchanged in the first quarter, it remained at its five-year low and masked a collapse in the manufacturing confidence index.

The gross domestic product (GDP) slowdown was fairly broad-based, with contractions in the agriculture, manufacturing, and transport and communications sectors. The outlook for the first quarter for mining and manufacturing is constrained, following sharply negative growth rates in both sectors in January, particularly in mining. Although the Barclays PMI increased marginally in February, it remained below the neutral 50-point level for the seventh consecutive month, and capacity utilisation in the sector also remains relatively low. The continuing drought also points to an unfavourable outlook for the agricultural sector.

While growth in expenditure on gross fixed capital formation improved in the final quarter of 2015, it remains low at an annual growth rate of 1,4 per cent. Although capital expenditure by the private sector turned positive in the fourth quarter, it was concentrated in the renewable energy sector, while in most other sectors real capital investment contracted. These growth and investment trends create an unfavourable climate for making inroads into the unemployment rate which increased marginally to 24,5 per cent in the fourth quarter of 2015 from 24,3 per cent a year earlier.

Growth in consumption expenditure by households increased in the final quarter of 2015, but at 1,6 per cent was still at relatively low levels. While retail sales growth on a year-on-year basis was fairly resilient, the consecutive month-to-month contractions in real retail trade sales growth in December and January could signal further pressures on consumption expenditure, consistent with the low levels of consumer confidence. Total new vehicle sales continue to decline although, more positively, there was strong vehicle export growth in February.

A number of factors are expected to constrain consumption expenditure despite the persistence of wage and salary increases in excess of inflation. These factors include rising inflation and higher interest rates, high levels of household debt, and negative wealth effects from low or negative asset price growth. Furthermore, credit extension to households by the banking sector remains subdued, in contrast to the more vibrant growth in credit extension to the corporate sector, particularly with respect to mortgage advances on commercial properties and renewable energy investments.

The recent budget tabled in parliament provides for a fiscal consolidation path which sees the consolidated government budget deficit declining from an estimated 3,2 per cent of GDP in 2016/17 to 2,4 per cent in 2018/19. This is expected to be achieved through a combination of a lower expenditure ceiling and increased tax revenues. This path, if realised, can be expected to moderate inflation somewhat while improving South Africa's credit metrics and confidence in general.

Food price pressures, driven by the drought and the depreciated exchange rate, have intensified by more than previously forecast and remain a significant upside risk to inflation. Manufactured food price inflation measured 7,8 per cent in the producer price index (PPI), while agricultural prices increased by 25,9 per cent, with cereals and other crops increasing by 79,2 per cent. These increases are expected to impact with a lag on consumer prices. Annual CPI food price inflation is now expected to peak at 11,6 per cent in the final quarter of 2016, compared with 11,3 per cent previously.

International oil prices have recovered somewhat from their lows of below US$30 per barrel seen in January as the global oversupply appears to have subsided in the wake of production cutbacks in a number of countries. Although the Bank has reduced its oil price assumption for the forecast period, it still assumes an upward trajectory as in the previous forecast. However, there is some upside risk to this forecast, should some agreement on an output freeze be reached by some of the larger producers. The domestic petrol price was reduced by about 69 cents per litre earlier this month, to its lowest level since March 2015. However, the current under-recovery, driven mainly by higher international product prices, suggests that this decline could be substantially reversed in April. This increase will be in addition to the 30 cent per litre increase in the fuel levy announced in the budget.

Although the inflation forecast has improved moderately since the previous meeting of the MPC, the Committee remains concerned about the protracted nature of the breach of the target. Furthermore, the Committee assesses the risks to the forecast to be on the upside. The main risk factors relate to the exchange rate and food prices. The exchange rate of the rand continues to be highly volatile and vulnerable to changes in both domestic and external developments. While the pass-through from the exchange rate to inflation is still relatively low, there are signs that this may be increasing.

Food prices have been accelerating faster than previously expected due to the weaker exchange rate and the intensification of the drought, resulting in an upward revision to the food price forecast. The Committee views the risks to this forecast to be on the upside, particularly for 2017 when fairly strong favourable base effects are expected. A more protracted drought, combined with a weaker exchange rate and restocking of herds, may keep food price inflation elevated for a longer period than currently forecast. The Committee also assesses the risks to the international oil price assumption to be on the upside.

The MPC is cognisant of the fact that demand pressures on inflation remain subdued, and indications are that household consumption expenditure is likely to remain constrained. Nevertheless, the recent increase in core inflation and its expected upward trend is indicative of broader inflationary pressures and possible second-round effects from supply-side shocks. While the evolution of inflation expectations is critical in this regard, at this stage there is no clear evidence of a deterioration in longer-term inflation expectations, but they remain at an elevated level.

The Committee remains concerned about the weak growth outlook amid negative business and consumer confidence. The growth challenges facing the economy are compounded by the deteriorating outlook for global growth. The Committee assesses the risk to the growth outlook to be on the downside.

Given the upside risks to the inflation forecast and the protracted period of the expected breach, the MPC decided that further tightening was required to complement the previous moves. Accordingly, the MPC decided to increase the repurchase rate by 25 basis points to 7,00 per cent per annum, effective from 18 March 2016. Three members favoured a 25 basis point increase while three members preferred no change. Ultimately, the Committee decided on an increase.

The Committee faced the continuing dilemma of a deteriorating inflation environment and a worsening growth outlook. The MPC remains sensitive to the possible negative effects of policy tightening on cyclical growth, but will remain focused on its mandate of maintaining price stability.

Summary of assumptions: Monetary Policy Commitee meeting on 17 March 2016*

1. Foreign-sector assumptions

Percentage changes (unless otherwise indicated)	Actual			Forecast		
	2013	2014	2015	2016	2017	2018
1. Real GDP growth in South Africa's major trading-partner countries	3,0%	3,1%	2,8%	2,8%	3,2%	3,5%
			(2,8%)	(2,9%)	(3,3%)	
2. International commodity prices in US$ (excluding oil)	-6,4%	-9,8%	-19,3%	-13,2%	2,0%	3,0%
			(-19,3%)	(-15,0%)	(1,0%)	
3. Brent crude (US$/barrel)	108,8	99,2	52,5	37,0	45,0	50,5
			(52,5)	(41,0)	(50,0)	
4. World food prices (US$)	-1,6%	-3,8%	-18,7%	-3,0%	2,0%	3,0%
			(-18,5%)	(-2,8%)	(2,7%)	
5. International wholesale prices	0,3%	-0,1%	-3,5%	-1,5%	0,8%	1,0%
			(-3,4%)	(-1,0%)	(1,0%)	
6. Real effective exchange rate of the rand (index 2010 = 100)	81,91	79,17	80,08	71,27	71,27	71,27
			(80,06)	(70,45)	(70,45)	
7. Real effective exchange rate of the rand	-10,1%	-3,3%	1,1%	(-11,0%)	0,0%	0,0%
			(1,1%)	(-12,0%)	(0,0%)	

2. Domestic-sector assumptions

Percentage changes (unless otherwise indicated)	Actual			Forecast		
	2013	2014	2015	2016	2017	2018
1. Real government consumption expenditure	3,3%	1,9%	0,3%	1,5%	1,0%	1,0%
			(0,3%)	(1,5%)	(1,5%)	
2. Administered prices	8,7%	6,7%	1,7%	5,3%	8,4%	8,7%
			(1,7%)	(8,0%)	(9,9%)	
– Petrol price	11,8%	7,2%	-10,7%	0,0%	10,2%	9,4%
			(-10,7%)	(7,9%)	(12,4%)	
– Electricity price	8,7%	7,2%	9,4%	10,1%	9,5%	10,0%
			(9,4%)	(12,2%)	(13,0%)	
3. Potential growth	2,1%	1,8%	1,6%	1,5%	1,6%	1,8%
			(1,6%)	(1,5%)	(1,6%)	
4. Repurchase rate (per cent)	5,00	5,57	5,89	6,71	6,75	6,75
			(5,89)	(6,25)	(6,25)	

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 38 and 39.

Selected forecast results: Monetary Policy Committee meeting on 17 March 2016

Selected forecast results (quarterly)

Year-on-year percentage change	Actual					Forecast														
	1	2	3	4	2015	1	2	3	4	2016	1	2	3	4	2017	1	2	3	4	2018
1. Headline inflation............................	4,2	4,6	4,7	4,9	4,6	6,4	6,0	6,6	7,3	6,6	7,1	6,9	6,1	5,5	6,4	5,4	5,5	5,6	5,7	5,5
				(4,9)	(4,6)	(6,2)	(6,1)	(7,0)	(7,8)	(6,8)	(7,8)	(7,3)	(6,7)	(6,2)	(7,0)					
2. Core inflation..................................	5,7	5,6	5,3	5,2	5,5	5,7	6,1	6,5	6,5	6,2	6,4	6,0	5,3	5,0	5,7	5,0	5,2	5,2	5,3	5,2
				(5,2)	(5,5)	(5,4)	(5,9)	(6,3)	(6,4)	(6,0)	(6,4)	(6,1)	(5,7)	(5,5)	(5,9)					

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

Selected forecast results (annual)

Per cent	Actual			Forecast		
	2013	2014	2015	2016	2017	2018
1. Real gross domestic product (GDP) growth	2,2%	1,5%	1,3%	0,8%	1,4%	1,8%
			(1,3%)	(0,9%)	(1,6%)	
2. Current account as a ratio to nominal GDP.............................	-5,8	-5,4	-4,4	-4,6	-4,7	-4,9
			(-4,2)	(-5,2)	(-5,3)	

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 determined broadly using the Global Projection Model (GPM) of the International Monetary Fund (IMF), which is then 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 four largest trading partners: the euro area, China, the United States (US) and Japan. The remaining trading partners are grouped into three regions: emerging Asia (excluding China), Latin America, and the Rest of Countries bloc. The assumption takes account of country-specific 'consensus' forecasts as well as IMF regional growth prospects.

2. The **commodity price index** is a weighted aggregate price index of the major South African export commodities based on 2010 prices. The composite index represents the total of the individual commodity prices multiplied by their smoothed export weights. Commodity price prospects generally remain commensurate with global liquidity as well as commodity supply/demand pressures as reflected by the pace of growth in the trading-partner countries.

3. The **Brent crude oil price** is expressed in US dollar per barrel. The assumption incorporates an analysis of the factors of supply, demand (using global growth expectations) and inventories of oil (of all grades) as well as the expectations of the US Energy Information Administration (EIA), the Organization of the Petroleum Exporting Countries (OPEC) and Reuters.

4. **World food prices** uses the composite food price index of the Food and Agriculture Organization of the United Nations (FAO) in US dollar. The index 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 as well as imbalances from the anticipated trend in international food supplies relative to expected food demand pressures.

5. **International wholesale prices** refers to a weighted aggregate of the producer price indices (PPIs) of South Africa's major trading partners, as per the official real effective exchange rate calculation of the South African Reserve Bank (the Bank). Although individual country consumer price index (CPI) inflation forecasts provide a good indication for international wholesale price pressures, the key drivers of the assumed trend in global wholesale inflation are oil and food prices as well as expected demand pressures emanating from the trends in the output gaps of the major trading-partner countries. Other institutional forecasts for international wholesale prices are also considered.

6. The **real effective exchange rate** is the nominal effective exchange rate of the rand deflated by the producer price differential between South Africa and an aggregate of its trading-partner countries (as reflected in the *Quarterly Bulletin* published by the Bank). Although the nominal rate is a weighted average of South Africa's 20 largest trading partners, particular focus is placed on the rand outlook against the US dollar, the euro, the Chinese yuan, the British pound and the Japanese yen. The assumed trend in the real effective exchange rate remains constant from the latest available quarterly average over the projection period. However, due to the time delay in the calculation of the real effective exchange rate, the most recent trend in the nominal effective exchange rate is adjusted with the assumed trend for the domestic and foreign price differential for the current quarter. This may result in a technical annual adjustment over the current and next forecast year that differs from zero.

Domestic-sector assumptions

1. **Government consumption expenditure** (real) is broadly based on the most recent National Treasury budget projections. However, since these projections take place twice a year, the most recent actual data points also play a significant role in the assumptions process.

2. **Administered prices** represent the total of regulated and non-regulated administered prices as reflected by Statistics South Africa (Stats SA). Their weight in the consumer price index basket is 18,48 per cent and the assumed trend over the forecast period is largely determined by the expected pace of growth in petrol prices, electricity tariffs, school fees as well as water and other municipal assessment rates.

   The petrol price is an administered price and comprises 5,68 per cent of the overall basket. The basic fuel price (which currently accounts for roughly half of the petrol price) is determined by the exchange rate and the price of petrol quoted in US dollars at refined petroleum centres in the Mediterranean, the Arab Gulf and Singapore. The remainder of the petrol price is made up of wholesale and retail margins as well as the fuel levy and contributions to the Road Accident Fund (RAF). Since most taxes and retail margins are changed once a year, the assumed trajectory of the petrol price largely reflects the anticipated trend in oil prices and the exchange rate.

   The electricity price is an administered price measured at the municipal level with a weight of 4,13 per cent in the CPI basket. Electricity price adjustments generally take place in July and August of each year, and the assumed pace of increase over the forecast period reflects the multi-year price determination (MYPD) by the National Energy Regulator in respect of Eskom, with a slight adjustment for measurement at municipal level.

3. The **pace of potential growth** is derived from the Bank's 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 (see South African Reserve Bank Working Paper Series WP/14/08).

4. The **repurchase rate** (commonly called the 'repo rate') is the official monetary policy instrument and represents the interest rate at which banks borrow money from the Bank. Although the rate is held constant over the forecast period, this assumption is relaxed in alternative scenarios where, for instance, the policy rate responds to deviations of output from its potential and the gap between future inflation and the inflation target, in other words, via a stylised 'Taylor rule', one that is based on market expectations of the future path of the policy rate, and other paths (as requested).

Glossary

Administered prices: These prices are set according to government's policy rather than determined by market supply and demand forces.

Advanced economies: Advanced economies are countries with high levels of gross domestic product per capita. These countries are sometimes described as industrialised. With further growth, however, they have tended to diversify, with particular emphasis on services sectors.

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.

Baseline (forecast): The baseline forecast is the one that is considered most likely. Alternative scenarios use different assumptions.

Budget deficit: A budget deficit indicates the extent to which government expenditure exceeds government revenue (a budget surplus occurs when revenue exceeds expenditure).

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

Central projection: This is the most likely outcome for the variable of interest over the period, according to the forecast of the South African Reserve Bank (the Bank).

Commodity prices: 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 volatile elements (e.g. food and energy prices). The Bank's forecasts and discussions refer to headline CPI excluding food, non-alcoholic beverages, petrol and electricity prices.

Crude oil price: This is the price, in US dollars, per barrel of unrefined oil (Brent crude refers to unrefined North Sea oil).

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 transfer account.

Demand pressures: Demand pressures refer to price pressures from increased consumption in the domestic or foreign economy.

Emerging-market economies: Emerging-market economies are those 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 1 per cent change in the exchange rate). Changes in the exchange rate affect import prices, which in turn affect domestic consumer prices and inflation.

First-round effects: Price shocks entail direct and indirect first-round effects. For example, should the petrol price rise sharply, this directly affects the cost of transport for the consumer. It also impacts on producers who will then increase the price of their goods to cover the transport, thus indirectly affecting consumer prices.

Flexible inflation targeting: This refers to inflation-targeting regimes that consider changes in inflation and other variables affecting the real economy in the short term. Under strict inflation targeting only inflation matters, but flexible inflation-targeting takes into account other variables, such as output.

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

Gross domestic product (GDP): GDP is the total market value of all 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 that is released monthly by Statistics South Africa. 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.

Leverage: This refers to the process of borrowing money to buy assets or fund consumption; highly leveraged entities are those with a large amount of outstanding debt.

Load-shedding: Eskom has adopted a policy of load-shedding to manage insufficient electricity supply. This entails pre-planned, rotating interruptions to electricity supply to alleviate pressure on the national grid, thus avoiding a national blackout.

Median: This is a statistical term used to describe the observed number that separates ordered observations in half.

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

Nominal effective exchange rate (NEER): A 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 effective exchange rate 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 15 currencies. The weights of the five major currencies are as follows: euro (34,82), US dollar (14,88), Chinese yuan (12,49), British pound (10,71) and Japanese yen (10,12). Index: 2000 = 100. The real effective exchange rate, by contrast, is the NEER adjusted by relative consumer prices in South Africa and its main trading partners.

Output gap/potential growth: Potential growth is the rate of GDP growth that could theoretically be achieved if all 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.

Producer price index (PPI): This index measures changes in the prices of goods at the factory gate. Stats SA currently produces five different indices that measure price changes at different stages of production. Headline PPI is the index for final manufactured goods. PPI measures indicate potential pressure on consumer prices.

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

Purchasing power parity (PPP): PPP is based on the law of one price, assuming that in the long run, exchange rates will adjust so that purchasing power across countries is approximately the same. It is often used to make cross-country comparisons without the distortionary impact of volatile spot exchange rates.

Real effective exchange rate (REER): See 'Nominal effective exchange rate'.

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 Bank.

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

Second-round effects: If a price shock goes beyond first-round effects by shifting inflation expectations (and hence wage demands), then it is seen to have second-round effects. These are the effects that the MPC would seek to counter in the event of a price shock.

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

Unit labour costs: A unit labour cost 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.

Unsecured loans: These are loans extended without any collateral (guarantees or underlying assets) as security to protect the value of the loan.

Abbreviations

BER	Bureau for Economic Research
BIS	Bank for International Settlements
BRICS	Brazil, Russia, India, China and South Africa
CPI	consumer price index
CPIX	consumer price index for metropolitan and other urban areas, excluding the interest cost on mortgage bonds
ECB	European Central Bank
EIA	US Energy Information Administration
FAO	United Nations Food and Agriculture Organization
FNB	First National Bank
GDP	gross domestic product
GPM	Global Projection Model
IMF	International Monetary Fund
JSE	JSE Limited
MPC	Monetary Policy Committee
MPR	*Monetary Policy Review*
MTBPS	*Medium Term Budget Policy Statement*
MYPD	multi-year price determination
NEER	nominal effective exchange rate
NERSA	National Energy Regulator
OPEC	Organization of the Petroleum Exporting Countries
PMI	Barclays Purchasing Managers' Index
PPI	Producer price inflation
PPP	purchasing power parity
RAF	Road Accident Fund
REER	real effective exchange rate
repo (rate)	repurchase (rate)
RMB	Rand Merchant Bank
RMSE	root mean square error
SACCI	South African Chamber of Commerce and Industry
S&P	Standard & Poor's
SAFEX	South African Futures Exchange
Stats SA	Statistics South Africa
the Bank	South African Reserve Bank
the Fed	United States Federal Reserve
ULC	unit labour cost
US	United States