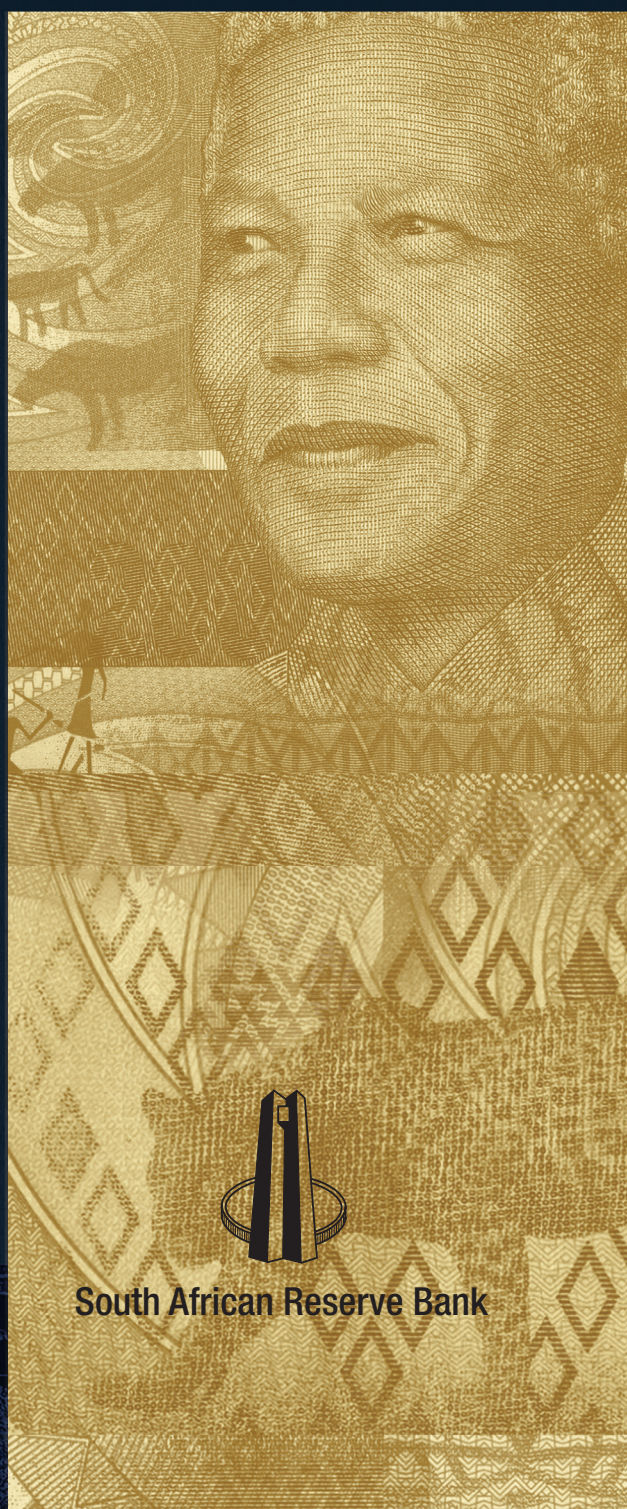
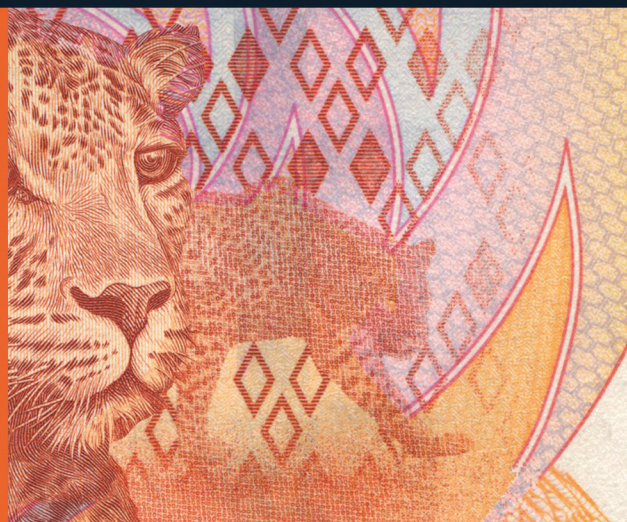


Monetary Policy Review

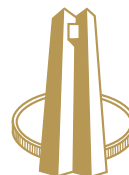
November 2015



South African Reserve Bank

Monetary Policy Review

November 2015



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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 bimonthly 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.

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Executive summary

Monetary policy faces difficult conditions. World financial and commodity price trends are shifting in unfavourable directions for South Africa. The problem is compounded by adverse local food and administered price shocks. The interaction of these forces with domestic pricing rigidities is producing persistently high inflation, despite weak and slowing growth. The policy response has been a gradual tightening cycle, with the repo rate moving from 5,00 to 5,75 per cent in 2014 and then to 6,25 per cent in 2015. This is aimed at containing price pressures and managing inflation expectations so that the adjustment to changing conditions and price shocks does not permanently accelerate inflation, to the economy's longer-term detriment.

Commodity prices peaked in 2011, following China's rebound from the Great Recession. They have since trended downwards, with the pace of decline accelerating over the past six months. It has been clear for some time that the Chinese economy is slowing and shifting away from investment-driven growth. Both these factors reduce its demand for industrial commodities. From about mid-year, risks of a more abrupt slowdown prompted renewed market volatility at the global level, and solidified the consensus that the commodity super cycle is winding down.

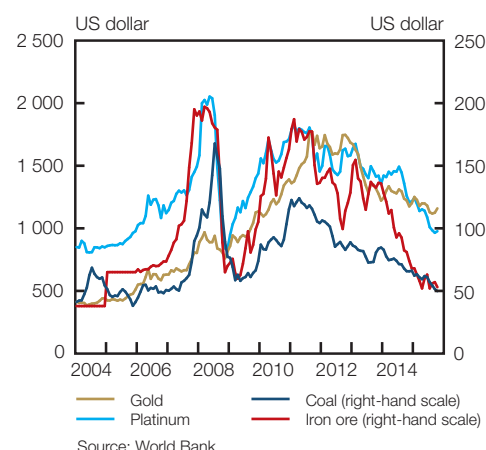
Like commodity prices, world financial conditions were extremely favourable for emerging markets in the years shortly after the global financial crisis. Advanced economy policy rates fell almost to zero and quantitative easing and forward guidance helped lower longer-term rates. As a result, investors moved large quantities of capital into emerging markets in a search for yield.

Financial conditions for emerging markets grew more challenging from 2013, mainly as a result of developments in the United States (US). Speculation around the onset of normalisation, starting with the 'taper tantrum' of May 2013, lifted financing costs both within the US and for many foreign borrowers. Since then, higher rates in the US have attracted capital inflows, causing the US dollar to appreciate to a 12-year high.¹ Emerging markets, by contrast, have experienced erratic capital flows and widespread currency depreciation. Capital flows to emerging markets were negative throughout the third quarter of this year, making it the longest sustained period of capital leaving emerging markets since the crisis.²

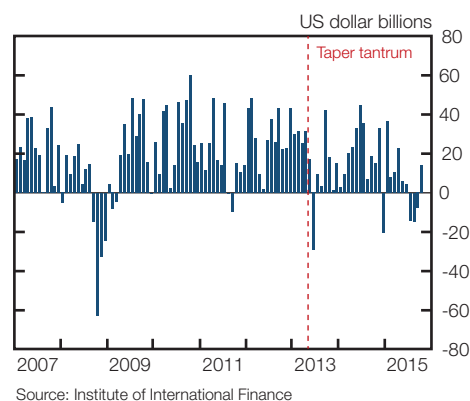
South Africa's economy is exposed to shifts in both the commodity and financial cycles. Lower commodity prices weigh on growth, discouraging investment and eliminating jobs. By reducing the value of exports, they also tend to sustain the current-account deficit – which becomes more difficult to finance as capital flows out of emerging markets and borrowing costs rise. These factors have combined to generate significant currency depreciation, which has been an important contributor to inflation and a major risk to the inflation forecast.

The growth forecast has also deteriorated. This is in part due to weaker export revenue. The challenge has been magnified by idiosyncratic factors, including electricity shortages and drought. Potential growth has declined to about 1,8 per cent for this year. Realised growth is likely to come in slightly below that, at around 1,4 per cent, implying a slightly more negative output gap.

Prices of major South African commodities



Emerging markets' net foreign capital flows



¹ In nominal effective terms, using the Bank for International Settlements' narrow exchange rate index.

² According to data from the Institute of International Finance.

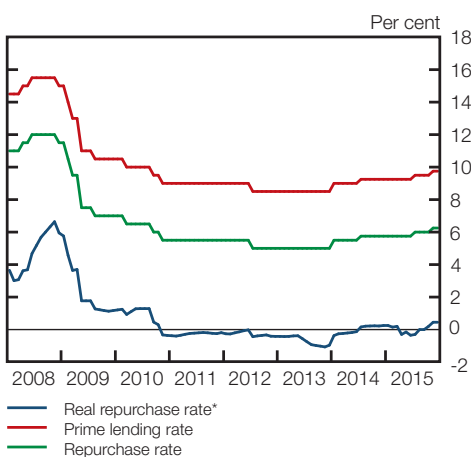
An economy with low and slowing growth and elevated unemployment might experience moderating inflation, as price and wage setters lose bargaining power in conditions of weak demand. In such circumstances, monetary policy would have the scope to lower rates to support growth. Unfortunately, South African trends are different. The outlook for inflation has been persistently high despite slowing growth and favourable price shocks (particularly from oil prices).

The forecast shows temporary breaches of the inflation target range in 2016, with inflation averaging 6 per cent for the year. For 2017, headline inflation remains close to the top of the target range. The risks are skewed to the upside. Core inflation has been above the midpoint of the target range since August 2012. The recent oil-induced plunge in headline inflation has prompted only a gentle moderation in core inflation, from a peak of 5,8 per cent in November 2014 to 5,2 per cent in October 2015. Core is expected to average 5,5 per cent in 2016 and 5,4 per cent in 2017. Labour cost inflation has been a persistent source of inflationary pressure, and this has continued with average wage settlements of around 8 per cent and unit labour cost (ULC) growth at around 5,5 per cent this year.

Food prices are expected to rise 6,0 per cent in 2016 in response to drought conditions, and there is a risk of even larger increases should the drought intensify. Various measures of medium-term inflation expectations all point to inflation entrenched close to the upper bound of the target range, either somewhat above or narrowly below 6 per cent. In a world characterised by unusually weak price pressures, South African inflation remains uncomfortably resilient.

Overview of the policy stance

Monetary policy and the prime rates



* Nominal repurchase rate adjusted with one-year-ahead Reuters inflation forecasts

Sources: South African Reserve Bank and Reuters

Monetary policy shifted dramatically following the global financial crisis. The repo rate was adjusted from 12 per cent in late 2008 down to 5,5 per cent in 2011. In 2012 an additional rate cut occasioned by deteriorating global economic conditions brought it to 5 per cent, the lowest level in a generation, where it stayed throughout 2013.

Policy changed course at the start of 2014, although it has travelled only a limited distance in the opposite direction. The hiking cycle commenced with a half-percentage point increase in the repo rate at the January 2014 meeting of the MPC, followed by an additional quarter-point hike in July. These moderate rate adjustments reflected a deteriorating inflation outlook with a prolonged period of above-target inflation. As it happened, inflation peaked at 6,6 per cent in the middle of 2014 but then slowed abruptly following the sudden collapse in world oil prices.

This was a pure example of a supply shock. The monetary policy response was similarly straightforward, in keeping with standard flexible inflation-targeting practice. The hiking cycle was paused, providing time to gauge whether the effects of the shock would be temporary or persistent. As expected, petrol and other fuel prices moved down quickly. Core inflation also slowed, with a lag. These developments were evidence of so-called first-round effects, both direct (cheaper petrol) and indirect (for the goods and services using petrol as a production input). The permanence of a shock,

however, depends on the second-round effects, most visible in changes to wages and inflation expectations. By the time of the March 2015 meeting of the MPC, it was fairly clear that these effects would be too muted to justify rate cuts. The outlook continued to deteriorate from there, and so the main focus of the policy discussion shifted to further rate increases. The first of these hikes came in July, with a quarter-point increase, followed by another quarter point in November. These lifted the repo rate to 6,25 per cent.

The resumption of the hiking cycle was prompted by three related considerations. The first is that monetary policy operates with a lag, with the strongest effects on the economy occurring between 12 and 24 months. Inflation was under 5 per cent in the second half of the year but the outlook was discouraging. The inflation forecast itself had deteriorated quite steadily over the year, showing inflation very close to the top of the target range throughout 2016 and 2017. The risks to the forecast were also increasing. One concern was food prices, given drought in parts of South Africa. Another was uncertainty over electricity prices. A further significant factor was currency depreciation.

This relates to the second consideration: the path of the exchange rate. The focus for monetary policy is on the inflationary consequences of exchange rate movements, particularly the potential second-round effects following larger and more sustained depreciations. Earlier in the year, the trade-weighted exchange rate had been quite stable as the rand weakened against the US dollar, but held up well against other currencies, including the Japanese yen and the euro. Furthermore, it was possible the exchange rate would stabilise if markets had priced-in sufficiently the impact of policy normalisation by the US Federal Reserve (Fed) on the rand. This suggested the possibility of a relatively benign path for the exchange rate.

However, exchange rate developments over the course of the year indicated greater inflation risks. The rand began losing ground across a wider front, leaving the trade-weighted exchange rate more than 10 per cent below its level at the end of 2014. The rand's decline against the US dollar also persisted. Although this exchange rate has been volatile, it has followed a clear depreciating trend, and reached an all-time nominal low of over R14,30 in November.

Table 1 Currency depreciation

Rand per foreign currency unit (unless otherwise indicated)

	Since 2014			Since the start of 2015		
United States dollar	Jan '14	11,12		Jan '15	11,65	
	Nov '15	14,11	-21,2%	Nov '15	14,11	-17,4%
Japanese yen	Jan '14	0,11		Jan '15	0,10	
	Nov '15	0,12	-5,3%	Nov '15	0,12	-13,9%
Euro	Jan '14	15,00		Jan '15	13,14	
	Nov '15	15,18	-1,4%	Nov '15	15,18	-13,5%
British pound	Jan '14	18,28		Jan '15	17,53	
	Nov '15	21,48	-15,0%	Nov '15	21,48	-18,5%
NEER* (index: 2010=100)	Jan '14	65,17		Jan '15	68,84	
	Nov '15	59,41	-9,0%	Nov '15	59,41	-13,7%

* NEER: nominal effective exchange rate

Sources: Bloomberg, South African Reserve Bank and own calculations

Break-even inflation rates



The third factor bearing on the decision to continue the tightening cycle was the behaviour of longer-run inflation expectations. These have remained uncomfortably close to the top of the target range, with some measures outside the target range entirely. Since the beginning of 2014, expectations as measured by the Bureau for Economic Research have moved relatively little. Expectations for two years and five years ahead have shifted between 5,8 and 6,0 per cent, while expectations for one year ahead have reached 6,1 per cent. Market-based expectations rebounded in early 2015, and have since fluctuated between 6 and 7 per cent, the same level as during the first half of 2014. Longer-term inflation expectations have therefore shrugged off lower inflation in 2015 as a result of low oil prices. These dynamics are made more problematic by the proximity of expectations to the top of the target range, which provides little margin for safety.

Following the July 2015 hike, policy held steady in September. An important aspect of the decision not to hike again immediately was evidence of a growth slowdown. The world economy was decelerating. The second-quarter gross domestic product (GDP) growth outcome in South Africa was unexpectedly negative, at -1,3 per cent. These developments were accompanied by a flurry of weak short-term indicators, including retail sales and manufacturing, supporting an unchanged monetary policy stance.

By the November meeting of the MPC, however, the risks to the inflation outlook had increased even as the forecast itself remained nearly unchanged. Both food and electricity prices looked ready to accelerate in 2016. The rand had continued to depreciate steadily, suggesting continued vulnerability. Deferring the hike might have created sufficient time to resolve some of these uncertainties, while providing a measure of support for a weak economy. Delaying, however, posed risks of an extended period of above-target inflation, which could de-anchor inflation expectations. Should this happen, policy would have to respond more strongly, with harsher consequences for growth. Consistent with the policy of a gradual hiking cycle, the MPC opted for another quarter-point hike, aimed at managing inflation pressures without unduly weighing on growth.

Conclusion

Demand pressures on inflation are minimal. As a result, policy is focusing on the risks of second-round effects from shocks. This permits a lower and slower trajectory for the policy rate than usual. The repo rate is also close to zero in real terms, an accommodative policy setting in both an historical and comparative perspective. The economy's response to these low rates has been disappointing. Potential growth has fallen to around 2 per cent. Investment growth has been subdued. Households have been reducing their savings to fund consumption, and further dissaving is not a desirable policy objective. Electricity shortages will keep growth constrained for at least two years. Meanwhile, inflation is proving resilient despite slowing growth, which points to pricing rigidities and inadequate competition in South African markets. The forecast continues to show inflation close to the top of the target range, with greater risks of surprises on the upside. The priority for monetary policy is controlling inflation so that it remains within the 3–6 per cent range. The flexible inflation-targeting framework is serving to deliver this objective while minimising the related costs.

Overview of the world economy

The world economy continues to slow. This sustains a trend of disappointing performance and sinking forecasts that has prevailed since the post-crisis rebound of 2010 and 2011. The causes of this failure have, however, changed over time. Advanced economies are doing relatively better. The US is growing quite strongly and the euro area appears to be recovering from the sovereign debt crisis of 2011 and 2012. Emerging markets, by contrast, have lost momentum. Chinese growth has decelerated and commodity prices have fallen abruptly, which has weighed heavily on the prospects of many emerging markets and helped throw some into recession. Emerging-market prospects are also at risk from rapid debt accumulation, chiefly by corporates. Lower commodity prices, meanwhile, have suppressed inflation, although currency depreciation is offsetting the benefits for some emerging markets.

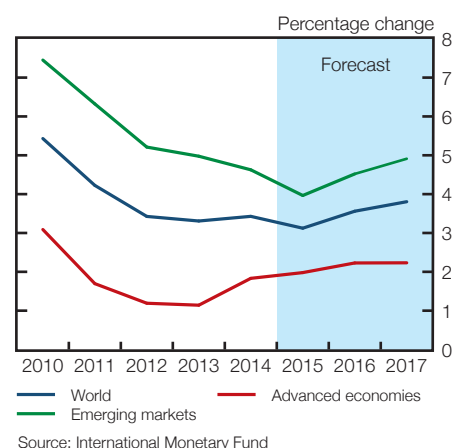
Emerging markets

China's rapid growth has made it increasingly central to the global economy. In purchasing power parity (PPP) terms it is now the world's largest economy, and it is second by market exchange rate measures. Since the crisis, China has accounted for around a third of all new world output. It has been a particularly important driver of EM growth, both through regional growth spillovers and through demand for commodities.

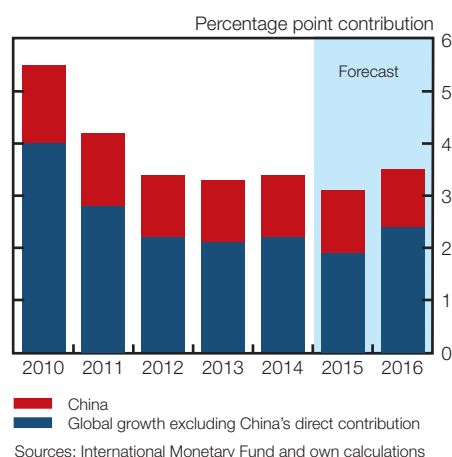
As the Chinese economy matured, it was inevitably going to slow from the double-digit growth rates of the past three decades. Accordingly, the official growth target for 2014 was 7,5 per cent, against a (revised) outcome of 7,3 per cent. Growth in 2015 is aimed close to 7 per cent. Over the next five years, the target is a growth rate above 6,5 per cent. It is uncertain, however, whether these rates will be attainable. Since the previous *MPR* in June, world financial markets have moved abruptly on perceived risks of growth slowing more sharply. The triggers for this appear to have been a surprise devaluation of the renminbi and large movements in the Shanghai stock market. By themselves, neither of these events appears capable of altering China's growth trajectory. The devaluation was small, only 1,2 per cent against the US dollar. (By contrast, the renminbi has appreciated by almost 7 per cent over the past year, in nominal effective terms.) Furthermore, equities are not a major source of financing for Chinese corporates, nor are they a large component of household wealth. These shifts nonetheless unsettled markets, raising fears that the slowdown was worse than reported.

Officially, China's GDP grew by 7 per cent in the first and second quarters of the year, and by 6,9 per cent in the third quarter (measured year-on-year). This data series has been unusually smooth, however, apparently owing to choices around the deflator. It may therefore understate downswings. The data may also not fully capture growth in the services sector, which is becoming a more important driver of the economy. Forecasts of Chinese growth have been strikingly stable throughout the year. For instance, between its April and October editions of the *World Economic Outlook*, the International Monetary Fund (IMF) did not adjust its 2015 or 2016 forecasts for China at all, despite the events of July and August. (2015 remains at 6,8 per cent; 2016 is at 6,3 per cent.) Paradoxically, fears of slowing growth in China are damaging other emerging markets'

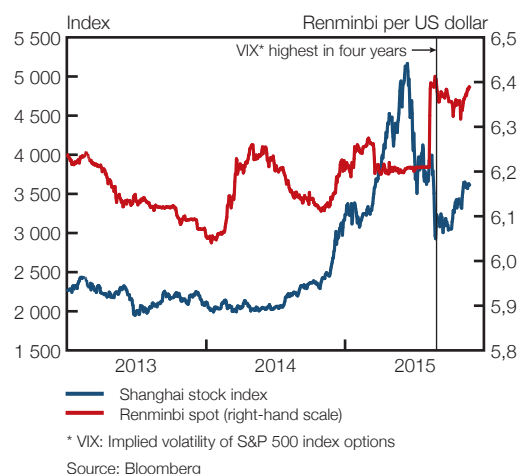
World GDP growth



China's contribution to global growth

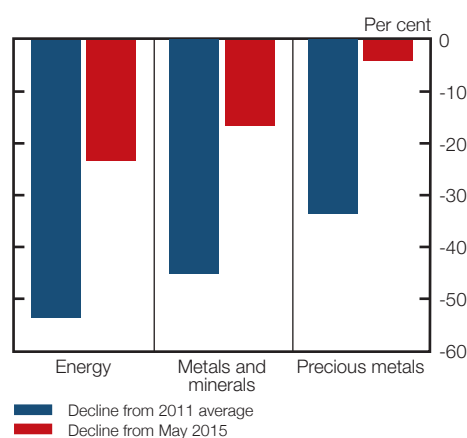


China stocks and currency, VIX



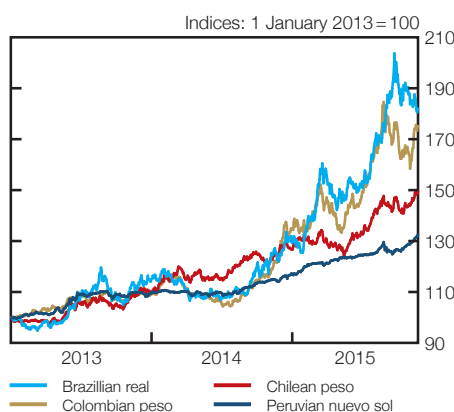
prospects more than China's own. For instance, the IMF's Latin American growth forecasts for 2015 and 2016 were revised down by 1,1 and 1,2 percentage points respectively. For sub-Saharan Africa, the downward adjustment was 0,7 percentage points for 2015 and 0,8 percentage points for 2016.

Changes in commodity prices



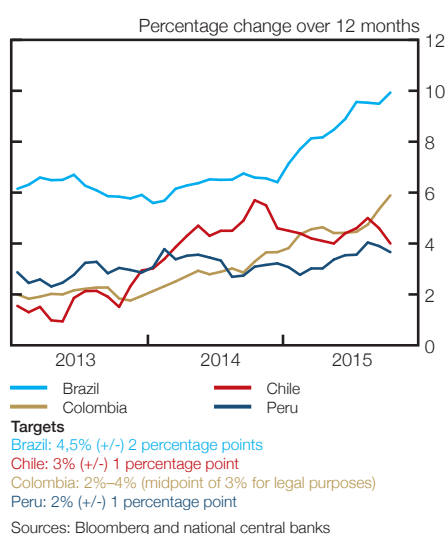
Source: World Bank

Exchange rates against the US dollar



Source: Bloomberg

Headline inflation



Sources: Bloomberg and national central banks

The principal connection between Chinese growth and the health of these other emerging-market regions is commodity prices. According to the World Bank, since 2011 energy prices have declined by 53,6 per cent, metals and minerals have fallen by 45,2 per cent and precious metals are down 33,6 per cent.³ An appreciable fraction of that decline has come since the middle of 2015. China is not the sole cause of these developments. Its influence has been most marked for industrial commodities such as copper, iron ore and coal. For other commodities, such as food and oil, Chinese demand has been important but not transformative, with other factors more decisive. Oil prices have responded to rising shale production in North America, as well as to the strategy of the Organization of the Petroleum Exporting Countries (OPEC) to protect market share rather than profits. Precious metals have been affected by monetary developments, especially in advanced economies. Food prices have declined, mainly owing to good harvests and lower energy costs, but they have not declined as much as the prices of other commodities. This reflects persistent world population growth.

In the emerging-market universe, Latin America has been one of the regions most vulnerable to declining commodity prices. The shock has been compounded by US dollar strength, given that currency's relatively high weight in western hemisphere trade baskets. As a result, a number of central banks have been forced into policy tightening despite slowing growth. Brazil is a relatively extreme case. Output is expected to contract by 3 per cent this year, with external shocks exacerbated by domestic factors including political uncertainty, drought and electricity shortages. Meanwhile, the central bank's policy rate has nearly doubled over two years to 14,25 per cent, in response to inflation which has neared 10 per cent, more than twice the midpoint of the target (of 4,5 per cent plus or minus 2 percentage points). Brazilian inflation has been high given substantial currency depreciation as well as rising administered prices, particularly from the elimination of quasi-fiscal fuel subsidies. It is expected to decelerate steadily over the medium term: *Consensus Forecasts* shows consumer inflation at 6,1 per cent at the end of 2016, 5,2 per cent by the end of 2017 and 4,4 per cent by 2020.

Inflation pressures have also prompted policy tightening in Chile, Colombia and Peru, but to a much smaller extent than in Brazil. All these central banks adjusted policy upwards between September and October 2015, following extended periods of above-target inflation which threatened to de-anchor inflation expectations. Their policy rates nonetheless remain low in historical perspective.

In sub-Saharan Africa (SSA), a number of economies have experienced acute inflation pressures from currency depreciation, linked to commodity price trends and, in countries with access to financial markets, lower investor appetites for emerging-market debt. In contrast to middle-income countries, pass-through from exchange rate changes to consumer prices has been rapid. In Zambia, for instance, inflation nearly doubled in just one month, from 7,7 per cent in September 2015 to 14,3 per cent in October, requiring the central bank to hike rates by 3 percentage points in November.

3 Calculated as the change from 2011 averages to September 2015.

Growth prospects for commodity exporters have also deteriorated, particularly for oil exporters, who have seen the value of their product halve in the space of a year. Given these headwinds, forecasts for regional growth have declined to around 4 per cent for this year and the next, down from rates of about 5 per cent in the immediate aftermath of the crisis. This, however, remains the second-highest regional growth rate after emerging Asia. The resilience of sub-Saharan growth points to improved policy frameworks in the region and some diversification away from commodity sectors.

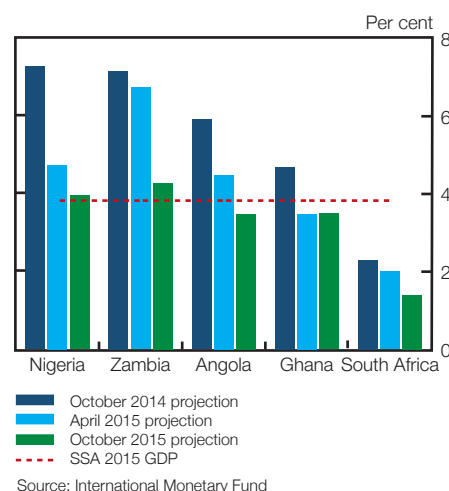
The steady decline in emerging-market growth since 2011 has made it clearer that the problem is not entirely cyclical. Instead, emerging-market potential growth has slowed. To an extent, lower potential reflects partial convergence with advanced economies, particularly in total factor productivity. Yet although emerging markets have been closing on advanced economies since around the turn of the century, most remain distant from the productivity frontier. For the gap to keep narrowing rapidly, emerging market potential will have to recover. Partly this requires continued technological catch-up, for instance through attracting foreign direct investment. There is considerable scope for product and labour market reforms, as well as improved infrastructure management. Some emerging markets also confront demographic challenges from ageing populations, particularly in Asia, which will require better resource allocation (for instance, by increasing female participation in the labour force).

Emerging-market prospects are also shadowed by private-sector debt accumulation, particularly by corporates, which has accelerated over the post-crisis period. Non-financial corporate debt has increased sharply since 2008, reaching a level equivalent to almost three quarters of world output (up from half at the time of the crisis).⁴ China has seen the greatest expansion in debt, but large increases have also occurred in other major emerging markets including Turkey, Brazil and India. (South Africa is an exception, with corporates on the whole deleveraging since the crisis.) World financial conditions have become less favourable to emerging markets, but they remain extremely benign in historical terms. As these conditions tighten, borrowing costs will rise. Variable interest loans will immediately become more expensive and shorter-term debt will prove more costly to roll over. Currency depreciation is a danger where loans are denominated in foreign currency. These threats have not yet become macroeconomic problems. Where borrowing has fuelled investment, it will have improved growth prospects. Some increase in leverage was appropriate given extremely favourable borrowing conditions over the period. But rapid debt accumulation has long preceded crises, and tightening world financial conditions alongside slowing growth suggests heightened vulnerability.

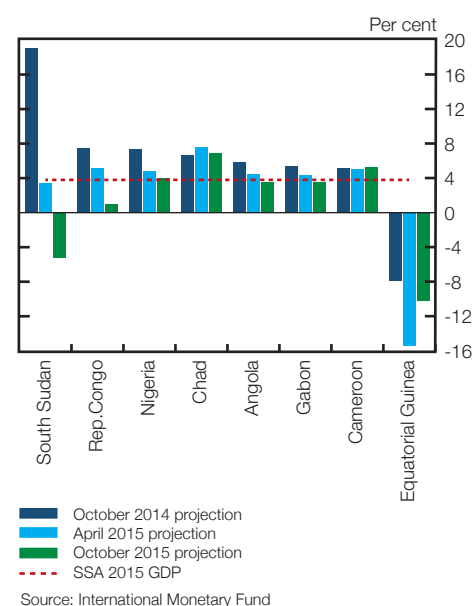
Advanced economies

The major advanced economies have also been affected by shifts in Chinese growth and commodity prices, but the consequences have tended to be the mirror images of those seen in emerging markets. Whereas a wide variety of emerging markets have witnessed rising inflation as a consequence of currency depreciation, major advanced economies have experienced lower inflation and sometimes deflation via cheaper commodities. The monetary policy responses have also varied. While emerging markets have in many cases been pushed towards tighter policy, advanced economies have been inclined to keep policy looser for longer.

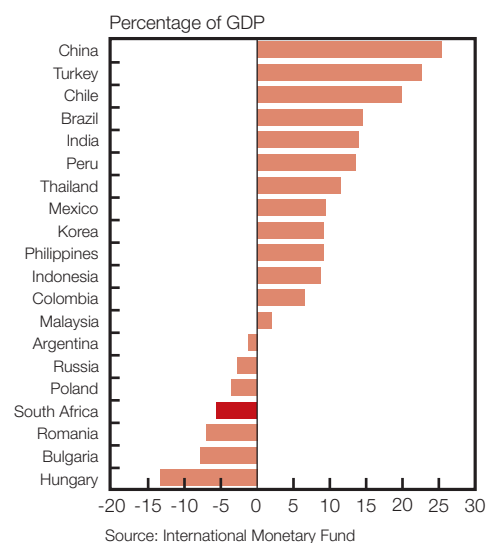
Selected SSA economies' 2015 GDP prospects



Oil exporters' 2015 GDP prospects

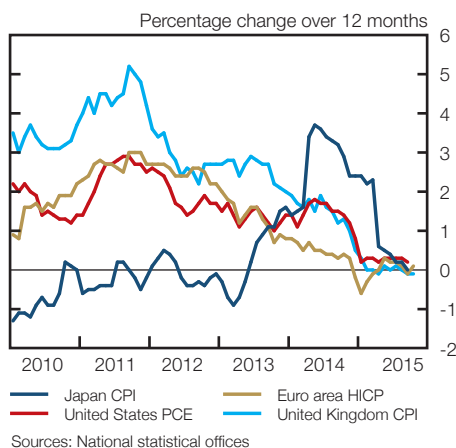


Change in corporate debt: 2007–2014

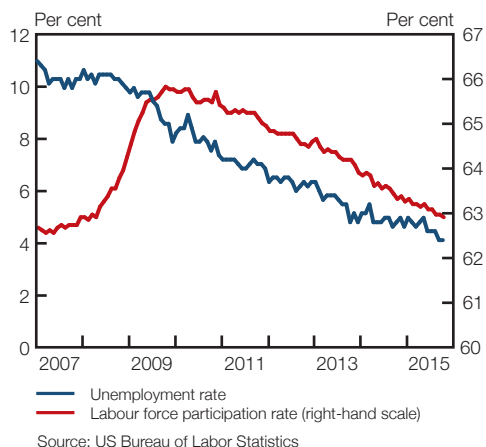


⁴ International Monetary Fund, 'Corporate leverage in emerging markets – a concern?', *Global Financial Stability Report*, October 2015. Available at <http://www.imf.org/external/pubs/ft/gfsr/2015/02/pdf/c3.pdf>.

Targeted inflation in major advanced economies



US unemployment and labour force participation



In the US, policymakers have for some time signalled that economic conditions would soon warrant the first increase in the Federal Funds Rate in almost a decade. The date of lift-off, however, has shifted steadily later. At the start of the year a hike in June appeared most likely, but weak growth in the first quarter deflected attention to September. That Fed meeting also passed without a change in policy, given volatility around China. Markets are now pricing in a rate hike in December.

The argument for raising rates starts with the premise that a policy rate at zero is a crisis setting, and the US is no longer in crisis. Growth is relatively robust, with output likely to expand around 2,6 per cent this year. The labour market also appears to be very close to full employment. Job creation has been vigorous, with an additional 2 million jobs created so far in 2015, on a net basis, and 13 million added since 2010. The unemployment rate fell to a seven-year low of 5,0 per cent in October 2015. Meanwhile, inflation should rebound. In part, this is because low commodity prices will no longer be compared to 2014's more elevated levels in the year-on-year inflation calculations (the base effect). More meaningfully, full employment should generate wage pressures, which should in turn feed into rising prices.

However, once rate hikes start they are unlikely to be large or rapid. Inflation remains significantly below 2 per cent and inflation expectations, far from rising, have been trending slowly lower. (The University of Michigan's survey of consumers showed long-term inflation expectations in October at their lowest level since the survey began in 1979). The prospect of tighter policy in the US relative to other major economies has already caused strong dollar appreciation, making the inflation goal more difficult to reach. Low unemployment should be pushing up labour costs and ultimately prices, but evidence for this is mixed. Wage growth has been muted, perhaps because broader measures of unemployment are still high. Labour force participation is now back to 1977 levels, a fact only partially explained by retiring baby boomers. Among prime-age males (aged 25–54), labour force participation has been falling since the 1960s, from over 95 per cent to around 87 per cent today – below the levels seen in other major advanced economies, including France, Sweden and the United Kingdom (UK).

Economic conditions in the UK are broadly similar to those in the US. Labour markets have performed well, bringing unemployment down to 5,3 per cent in September 2015. Inflation, meanwhile, is presently very low (-0,1 per cent in October 2015), on account of cheap commodities and currency strength, but is anticipated to rebound. Monetary policy has therefore focused on the appropriate timing of rate hikes. Before the oil shock, it seemed possible that these would commence in late-2014. Market expectations have now shifted out into 2016.

In the euro area, by contrast, unemployment remains elevated and expectations of policy changes are skewed towards additional easing. The Harmonised Index of Consumer Prices (HICP) briefly slipped into deflation again in September, owing to lower commodity prices and a somewhat stronger euro. Although this echoes the British and American experiences, the risks are greater for the euro area as it has come closer to sustained deflation over the past two years. Its growth and employment prospects are also weaker. The European Commission projects growth of 1,8 per cent in

the euro area next year, against 2,8 per cent in the US and 2,4 per cent in the UK. The Commission also projects unemployment of 10,6 per cent for the single-currency zone in 2016, versus 4,8 per cent in the US and 5,4 per cent in the UK.

Japan, like the euro area, faces extremely subdued inflation. Consumer prices spiked as high as 3,7 per cent in May 2014, but this was caused almost entirely by the April 2014 hike in value-added tax. As this point of comparison dropped out of the data in early 2015 inflation fell below 1 per cent. It is currently at zero. Core inflation is slightly higher, at 1,2 per cent in September, but this is still remote from the 2 per cent inflation target. Forecasts for inflation have also been drifting down, and are now around 1 per cent for 2016. The Bank of Japan has already adopted an exceptionally aggressive easing strategy to meet its inflation target, expanding the monetary base by a larger proportion of GDP than in the US, UK or euro area. Growth in Japan has been subdued, with the quarterly series volatile around zero. Unemployment, however, is extremely low at about 3,5 per cent. Since 2009 growth in GDP per capita has also been greater than that achieved in the UK or US, which do not have shrinking populations.⁵ This implies the Japanese economy is doing better than the growth and inflation numbers suggest.

Conclusion

The most important international economic development in recent months has been a downward reassessment of the world growth outlook. China was the catalyst for the shift, but the effects have been widespread, with commodity exporters particularly affected.

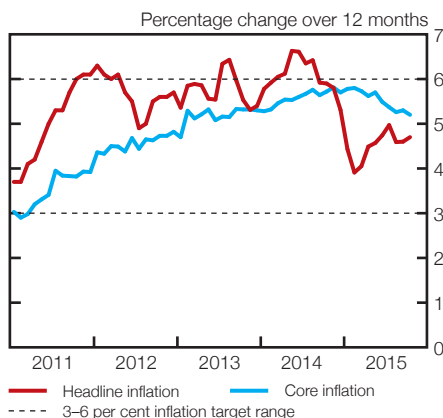
World output should expand by around 3 per cent this year, a post-crisis low, even though advanced economies have improved their performance. A recovery from here will require emerging markets to rebound. The vigour of the recovery will largely depend on the speed and quality of structural reform, given lower potential growth in emerging markets.

World inflation remains unusually low. The main exceptions are emerging markets where currency depreciation has raised inflationary pressures, prompting policy tightening even as growth slows. For the world's largest economies, by comparison, low commodity prices are contributing to extremely subdued inflation. In the US and UK, relatively robust recoveries will require some cautious tightening in the near term. In Japan and the euro area, policy may even ease further.

5 Measured in constant units of local currency.

Inflation developments and outlook

Headline and core inflation



Source: Statistics South Africa

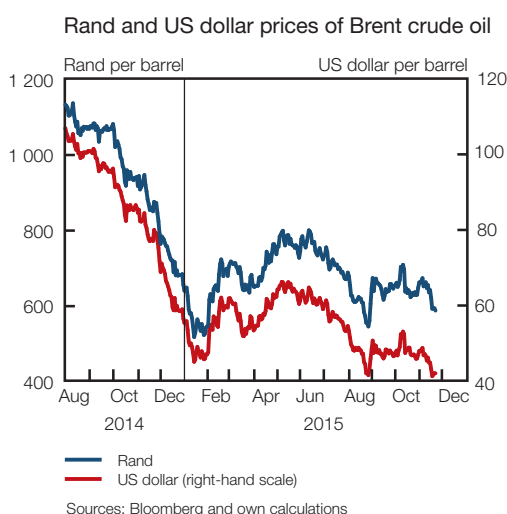
South Africa has shared in the global disinflation effect of low commodity prices, particularly cheap oil. As a result, headline inflation is expected to average 4,6 per cent in 2015, comfortably within the 3 to 6 per cent target range and below last year's 6,1 per cent. This level is quite high in global perspective, however; it is above the SA trade-weighted world average of 2,4 per cent for 2015 (and marginally above the SA trade-weighted emerging market average of 4,3 per cent). Furthermore, the forecast shows inflation higher over the next two years, despite a weak economy. Headline inflation is expected to average 6 per cent in 2016, with two temporary breaches of the target range, and 5,8 per cent in 2017. Longer-run expectations have shown little reaction to lower inflation through 2015, remaining clustered around the top end of the target range.

Rigidities in product and labour markets tend to keep inflation elevated. Price setters use their market power to maintain or raise revenues in real terms. Meanwhile, corresponding cost-of-living increases contribute to wage indexation. One prominent example is collective bargaining in the public sector, which is characterised by dense unionisation and high labour intensity. Yet this is also true of industries with high skills premiums, such as finance, where skills shortages and restrictions on skilled foreign workers increase the bargaining power of select employees. In goods markets, meanwhile, imported inputs raise production costs. In some cases, such as with government's infrastructure build programme, demand for these inputs is highly inelastic. These domestic dynamics keep inflation buoyant despite domestic demand and growth conditions.

Apart from these consistent pressures, weather-related and exchange rate shocks are important to the inflation outlook. Consumer food prices have not yet responded to drought earlier in the year but are expected to rise, boosting headline inflation in 2016. The exchange rate of the rand continues to exert inflationary pressure, having weakened against most major currencies since the previous MPR. The rand's depreciation has also partially offset the recent decline in oil prices. Additional depreciation – which could be triggered by further falls in the prices of South African export commodities, or by Fed lift-off – is the most significant risk to the inflation forecast. Other risks include additional food price increases, if the current drought persists, and the possibility of higher-than-anticipated electricity tariff hikes.

Oil prices

Brent crude oil prices collapsed in the second half of 2014, reaching a low of US\$45 per barrel in January 2015. By mid-year, however, prices had staged a partial recovery, to about US\$60. At the time of the May MPC meeting, oil prices were expected to average US\$60–65 for 2015 and 2016. Since then, oil prices have declined again. The Brent average for the second half of the year, to date, is US\$50. As a result, the oil price assumption has been lowered, contributing to the moderation in the 2015 inflation forecasts presented at the September and November meetings.



There are a number of reasons for the renewed slump in oil prices. Weaker world growth suggests subdued demand in future. Deteriorating growth in emerging markets is particularly important for this dynamic, as they are the main source of new demand for oil. In addition, OPEC has maintained its November 2014 decision not to cut supply, aiming to defend market share instead. Iranian production is expected to add further supply to world markets. Finally, although new shale oil extraction has slowed in the US, current supply has been quite stable. These factors have in combination applied downward pressure on oil prices.

Lower oil prices have a direct effect on inflation, given petrol's weight of 5,68 per cent in the consumer price index (CPI). Oil prices also have an indirect impact, particularly through transport which affects the production costs of most consumer goods and services. The benefits of cheaper oil have been diluted, however, by the April 2015 increase in fuel levies (of approximately 80 cents per litre) and, more significantly, continued rand weakness against the US dollar. In 11 of the past 16 months, international oil prices have pushed the petrol price lower. Yet the exchange rate has exerted upward pressure in all but three of those months. Cumulatively, since August 2014, international oil prices have taken 434 cents off of the domestic petrol price, while exchange rate depreciation has added back a third of this decline.

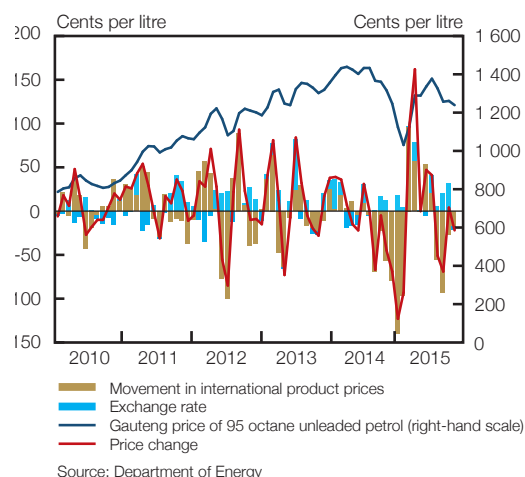
Inflation expectations

The oil price shock fed into inflation expectations for the current year from the first quarter, but it has had minimal effects on medium- and longer-run expectations. Surveys by the Bureau for Economic Research, for instance, show little or no moderation of expectations for one, two and five years ahead.⁶ It appears that respondents, instead of simply projecting the recent past into the future, have ignored lower inflation in 2015 in formulating their views of longer-run price changes. This suggests expectations are anchored. Unfortunately, they are not anchored comfortably within the target range, but rather around its upper end. Overall expectations for inflation two years ahead have moved within a narrow range of 5,8 to 6,2 per cent for the past 19 quarters, while those for five years ahead have fluctuated between 5,8 and 6,3 per cent.

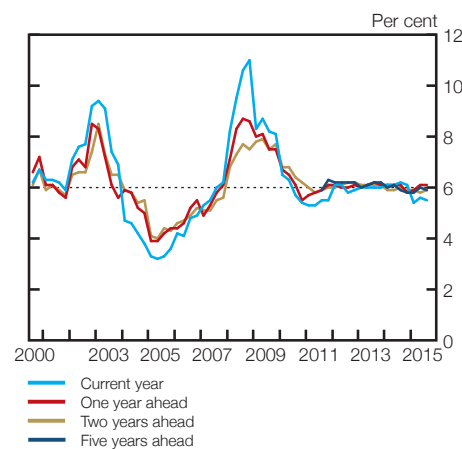
Moreover, inflation expectations have converged since 2011. Individual responses in the survey have become less diffuse. The average expectations of the different categories of respondents – analysts, businesses and trade unions – have also moved within one percentage point (or less) of one another. This last occurred around 2005, where the average was closer to the midpoint than to the top of the target range. Should shocks again push inflation above the target range, it is possible that average expectations could move outside the target range entirely.

Break-even inflation rates show similarly elevated longer-run expectations. Implied inflation rates for five- and ten-year bonds have moved within a range of 6 to 7 per cent for much of the year, averaging around 6,5 per cent – a worryingly high level. Reuters' surveys of analysts' inflation expectations cover a shorter period: 2015 to 2017. These have moved marginally over the past six months, and remain very close to the inflation forecasts of the Bank.

Contributions to changes in the basic fuel price



Inflation expectations



⁶ Furthermore, the adjustment in expectations for 2015 stemmed almost entirely from analysts, whereas business and trade union expectations (the other two categories of respondents) remained close to 6 per cent.

Product and labour markets

South African product, services and network markets are characterised by high levels of concentration and in some cases regulation.⁷ This constrains growth, keeps price levels relatively elevated, and creates persistence in inflation, particularly when supplemented by rigid labour markets. (See Box 1).

Wages in many industries are inflation- but not productivity-linked, which helps to explain why wage settlements remain divorced from growth conditions.⁸ In addition, skills shortages in the fastest-growing sectors contribute to significant wage premiums for highly skilled workers. Thus, while average salary expectations have moderated as inflation declined in 2015, these still average 7,1 per cent for this and next year – well above current and expected inflation. Unit labour costs have been less buoyant, continuing to slow in line with the downward trend from the 2008 peak of 12 per cent. ULCs averaged less than 6 per cent for both 2013 and 2014. Poor growth outcomes, however, may destabilise this trend. Lower total output, without a corresponding adjustment in wages or employment, would mechanically imply higher labour costs per unit of output. This is not necessarily a problem if in response to a single year's lower-than-expected growth, but it poses a risk to the forecast if higher ULCs endure.

Table 2 Product market regulation and its components

	South Africa		OECD average		BRICS average	
	2008	2013	2008	2013*	2008	2013
Product market regulation.....	2,65	2,21	1,59	1,47	2,89	2,59
State control.....	3,42	3,12	2,28	2,18	3,54	3,33
Barriers to entrepreneurship	2,65	2,17	1,88	1,70	3,00	2,66
Barriers to trade and investment.....	1,89	1,34	0,60	0,52	2,12	1,77

* Excluding the United States

Higher values indicate more regulation, which hampers business activity and hence is an obstacle to economic growth.

Source: Organisation for Economic Co-operation and Development (OECD)

Table 3 Labour market indicators

	South Africa		OECD average		BRICS average	
	2008/09	2015/16	2008/09	2015/16	2008/09	2015/16
Labour market efficiency.....	4,2	3,82	4,68	4,56	4,36	4,05
	2008	2012	2008	2012	2008	2012
Labour force participation rate.....	58,4	55,7	71,6	72,2	68,5	67,4
Unemployment rate*.....	22,7	25,0	5,8	8,7	8,9	8,9

* Narrow definition

The World Economic Forum's Global Competitiveness Index ranks labour market efficiency and its subset, flexibility, from 1 to 7, where 7 indicates a maximally efficient labour market.

Sources: World Economic Forum and World Bank

7 Philippe Aghion, Matias Braun and Johannes Fedderke, 'Competition and productivity growth in South Africa', *Economics of Transition* 16(4), 2008, pp 741–768.

8 Vincent Dadam and Nicola Viegi, 'Labour market and monetary policy in South Africa', in *Fourteen Years of Inflation Targeting in South Africa and the Challenge of a Changing Mandate: South African Reserve Bank Conference Series* 2014, Pretoria: South African Reserve Bank, 2015, pp 113–137.

Box 1 Product market reforms: a review of recommendations

South African product markets are characterised by high and downwardly inflexible prices, with firms able to impose substantial mark ups.¹ Although product market regulation in South Africa declined between 2008 and 2013, it is still well above the Organisation for Economic Co-operation and Development (OECD) average. Instead, SA is more comparable to the average within OECD emerging markets (EMs),² and is a slightly better performer than the BRIICS.³ Reforms to SA product markets are likely to boost productivity and therefore accelerate growth.⁴ Furthermore, by addressing price rigidities, these reforms could lower price levels and inflation in the medium term.

Barriers to entrepreneurship in South Africa are quite high. While legal barriers to entry are low, licensing processes are long and complex, and regulatory compliance is complicated by frequent changes to an already-large array of regulations. These obstacles pose difficult financial and administrative challenges for small and medium firms, which also often have to contend with high wages⁵ and other input prices. As a consequence, small firms struggle to establish themselves, and have very low survival rates. Weakly competitive markets entrench a pattern of very limited participation in the formal economy and high inequality. The effects of lower competitiveness are not limited to these groups. It also restrains exports and investment, thus affecting South Africa's growth outcomes. In addition, relatively uncompetitive product markets are a source of higher and more persistent inflation.

The International Monetary Fund (IMF) and OECD suggest a comprehensive approach to increasing competition in product markets. Improved access to credit and reduced regulatory compliance requirements would support small firms. Meanwhile, tariff liberalisation and broadened powers for the Competition Commission could encourage foreign and domestic competition. This type of market access is expected to drive down consumer prices and boost productivity. Firms could generate higher productivity with better management and training of employees, as well as through pushing for more competitive input pricing.⁶ A social dialogue could assist with this reallocation of resources, if firms and labour negotiated the implementation of necessary changes, with government advocating for the interests (and inclusion) of outsiders.

Product market reform, as with many necessary structural reforms, is a difficult undertaking. It would require coordination across a range of macro and micro policies, with cooperation from firms, labour and government. However, across a broad collection of countries, reform is associated with higher productivity and long-run employment gains. Reforms have also been shown to lower prices and inflation. Increasing price flexibility would improve the economy's resilience by facilitating rapid reallocation of resources when shocks occur. Furthermore, if the inertia of inflation declined, then its responsiveness to relatively exogenous factors, such as the repo rate, would increase. This could decrease the costs to the economy of disinflation.

1 See in particular the IMF's Article IV Consultation for 2013 and the OECD's *Economic Survey* for 2008.

2 Comprising Chile, Hungary, Mexico, Poland and Turkey.

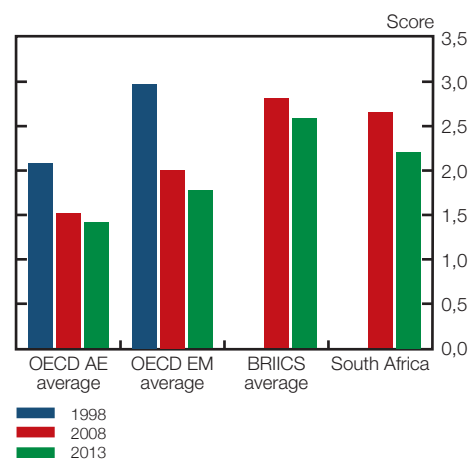
3 Comprising Brazil, Russia, India, Indonesia, China and South Africa.

4 Giuseppe Nicoletti and Stefano Scarpetta, 'Regulation, productivity and growth: OECD evidence', *Economic Policy* 18(36): 9–72, 2003.

5 Wages for small firms are often determined by sectoral collective bargaining arrangements that are legally extended to all firms within the industry.

6 Gary Banks, Chairperson of the Productivity Commission in Australia, noted that deregulating product markets in Australia in the early 1980s had spillover effects as incumbent firms then pushed for microeconomic policies to deal with overpriced inputs, which they had before simply passed through to consumer prices. See 'Structural reform Australia-style: lessons for others?', a presentation to the OECD, the IMF and the World Bank, May 2005. <http://www.pc.gov.au/news-media/speeches/cs20050601/cs20050601.pdf>.

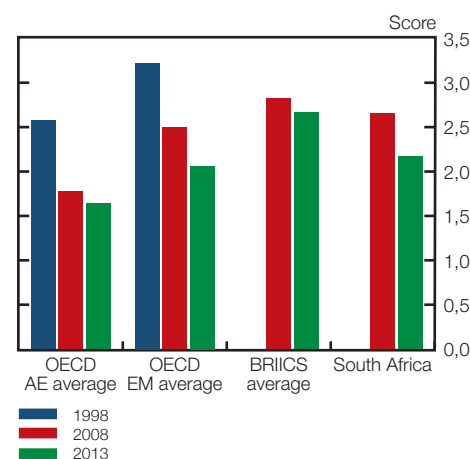
Product market regulation*



* Higher scores indicate more restrictive barriers

Source: Organisation for Economic Co-operation and Development

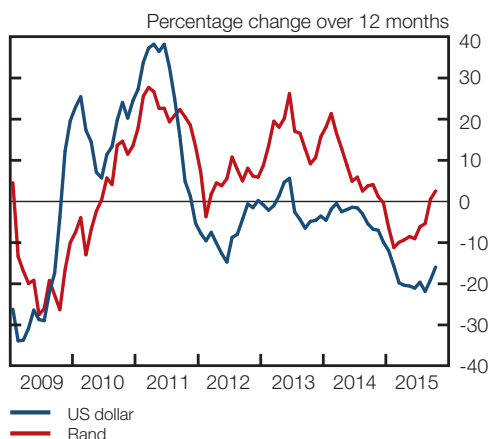
Barriers to entrepreneurship*



* Higher scores indicate more restrictive barriers

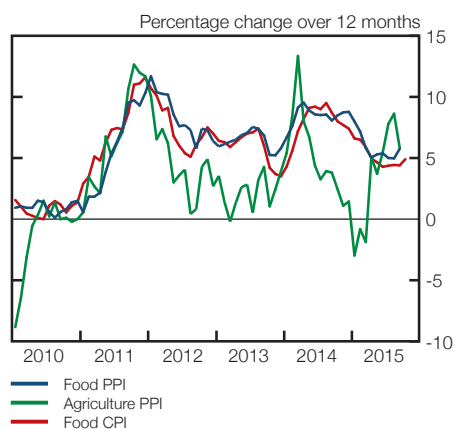
Source: Organisation for Economic Co-operation and Development

International FAO food price index



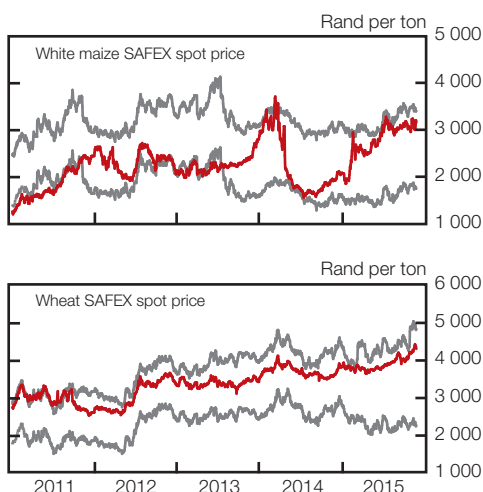
Sources: Food and Agriculture Organization, Bloomberg and own calculations

Food prices in the PPI and CPI



Source: Statistics South Africa

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

Food prices

International food prices declined through much of 2015 due to lower oil prices and generally excellent crop prospects for the year. However, prices began ticking up from September, led by dairy and sugar prices. In October, grains prices also increased as drought affected Australia and sub-Saharan Africa. Nonetheless, world food prices are lower than in the previous year, and there is no concern yet over global supply prospects for 2015 or 2016.

By contrast, South Africa has suffered severe drought conditions for most of the current year. As a result, domestic wheat and maize production has fallen. Currency depreciation will also affect food prices, through imported agricultural inputs such as agri-chemicals and fertilisers as well as through imported food to make up for the domestic supply shortfall.⁹ Under normal conditions, South Africa is a net exporter of maize and a net importer of wheat. However, the severity of the current drought could make the country a net maize importer in the current year and into 2016.¹⁰

Furthermore, continued dry conditions pose an upside risk to food prices in 2016 and 2017. The El Niño weather event may prolong drought into 2016, affecting next year's harvests. It is still too early to predict the consequences of further drought. The current drought, however, has already had a severe impact: five provinces have been declared disaster areas as a result.

The MPC began warning about food price pressures in March 2015, at which time they were expected to influence consumer prices from the second half of 2015. Food prices have a total weight of 14,2 per cent in the CPI, with bread and cereals contributing 3,55 percentage points and meat prices 4,56 percentage points.¹¹ Consumer price inflation for bread and cereals has been increasing since May, but meat price inflation has remained relatively low, suppressing overall consumer food prices. This may reflect drought-related culling, which would add later to food price pressures in the CPI. Although rising inflation has been visible in the agricultural producer price index (PPI) throughout 2015, it has yet to materialise in the final manufactured PPI and CPI food measures. Some lag between the agricultural and final manufactured prices is normal, so this delay does not suggest that these pressures will be fully absorbed along the supply chain before reaching consumers.

Core inflation

Core inflation has decelerated over the past year, from 5,7 per cent in December 2014 to 5,2 per cent in October 2015. This represents a minor surprise: core inflation was expected to slow given lower headline inflation, but, as with headline, the outcomes have marginally undershot forecasts in several months (by around 0,1 percentage points). Core has declined as indirect effects of lower oil prices filter through to other prices – thus the slowdown is more pronounced in the goods rather than in the services component of

⁹ There is also a tariff aspect to food prices. Until recently, depreciation provided a buffer for domestic producers from foreign competition, but this has been eroded as domestic spot prices reached import parity levels. In order to protect domestic wheat producers, an import tariff on wheat of R911,20 per metric ton was introduced in September 2015, to bring prices in line with the reference price of US\$294 per ton (the effective floor for domestic wheat prices).

¹⁰ Maize delivery contracts are concluded about 12 months in advance of the harvest, thus South Africa may export maize even though the country is not producing enough for its domestic needs.

¹¹ The influence of grains, particularly maize, is larger than it first appears, as yellow maize is an important input to meat production (as animal feed).

core. Although core has recently trended lower, it is still elevated relative to the (headline) inflation target range. Furthermore, as headline rebounds upwards, core is expected to move slightly higher, averaging 5,5 per cent in 2016.

Core inflation is typically smoother than headline inflation, and its direction changes less frequently. It moves closely in line with services, which fill a large part of the core basket. Price changes in this category are less frequent than with goods inflation; furthermore, services typically do not experience the types of exogenous shocks that affect goods. Yet the upward trend in core over the past five years is not unique to services: underlying goods inflation has also been increasing. This ‘core goods’ measure excludes food, non-alcoholic beverages, energy and petrol prices, and shows inflation of all the other goods in the CPI basket (it constitutes just a quarter of the total headline basket). This measure has remained between 4,5 and 5,5 per cent since February 2014, which likely reflects slow but sustained exchange rate pass-through.

Exchange rate

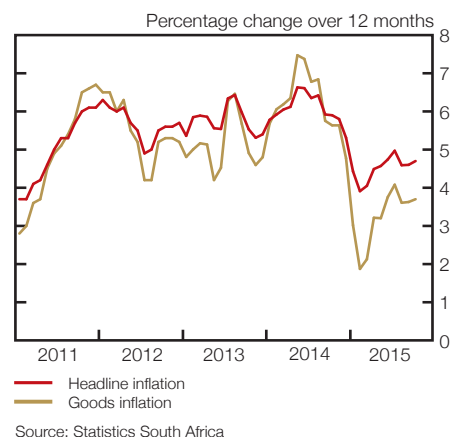
The currency has weakened steadily since 2011. The nominal effective exchange rate has depreciated by 40 per cent over the past five years. The real effective exchange rate has depreciated less markedly, by 30 per cent, as prices have risen relative to South Africa’s trading partners. This deterioration has coincided with the downswing of the commodity price cycle, which had inflated demand for South African goods (and hence for the rand). Since 2013, it has been exacerbated by US monetary policy changes, starting with the gradual phase-out of quantitative easing and followed by stronger prospects for Fed rate hikes.

Since the June edition of the *MPR*, both the commodity price and Fed policy factors have pushed the rand lower. The mid-year crash in commodity prices had widespread effects on commodity currencies, generating depreciation in countries with balanced current accounts as well as in those with deficits. In November, better data out of the US sharply increased the probability of the Fed hiking interest rates at its December 2015 meeting. The rand promptly weakened to an all-time low against the US dollar, in nominal terms.

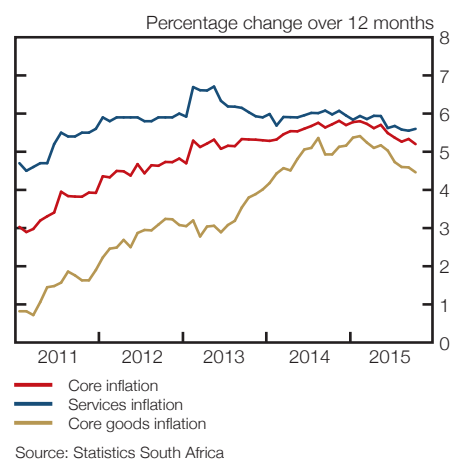
These commodity and portfolio factors constitute distinct kinds of depreciation shocks, with different consequences for inflation. Both have inflationary effects because they raise the domestic prices of tradeable goods through currency depreciation. The inflationary consequences of commodity price movements, however, tend to be offset by negative demand shocks, directly through the production of commodities and indirectly where they affect wages and wealth. Portfolio shocks, of which Fed normalisation is a good example, tend to be more clearly inflationary because they have smaller offsetting demand effects.

Disinflationary effects appear to have dominated in Australia, which has seen consumer price inflation slow after commodity prices turned in 2011, despite a persistently depreciating exchange rate. Headline inflation averaged 2,9 per cent from 2004 to 2011 but declined to 2 per cent between 2012 and 2015. Wages have also subsided. In turn, this disinflation allowed the Reserve Bank of Australia to lower interest rates. Since late 2011, the policy rate has been reduced from 4,75 per cent to just 2 per cent.

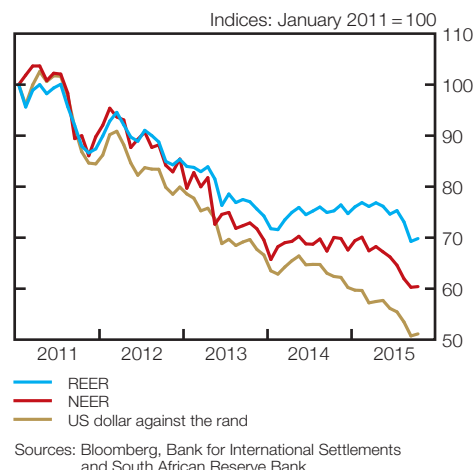
Headline and goods inflation



Core inflation and components



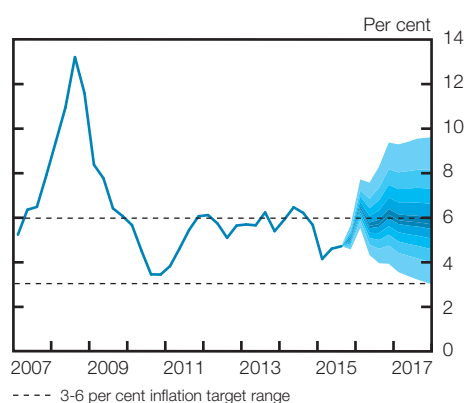
South African exchange rate measures



In South Africa, the pattern has been the opposite. Sustained rand depreciation has fed into inflation. Meanwhile, the shock to the mining sector has not lowered wages or prices across the broader economy. As a result, inflation has trended higher, not lower, requiring tighter policy (as it has in emerging-market peers such as Chile.) The failure of prices to soften in the face of a negative demand shock has also frustrated the reallocation of resources across sectors.

Inflation forecast

Targeted inflation* forecast



--- 3-6 per cent inflation target range

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

Source: South African Reserve Bank

Headline inflation is expected to remain close to the top end of the target range over the forecast horizon, averaging 6 per cent in 2016 and 5,8 per cent in 2017. The forecast for 2015 headline inflation has come down further given recent oil price declines as well as lower-than-anticipated food price inflation. It is now 4,6 per cent, very close to the midpoint of the target range, from 5 per cent in July. Core inflation is expected to pick up slightly from its current levels, averaging 5,5 per cent in 2016 and 5,4 per cent in 2017.

In 2016, inflation is forecast to breach the 6 per cent level in both the first and the fourth quarters. These breaches are statistical phenomena related to petrol price deflation in the corresponding quarters of 2015, which magnifies the effect of price increases in the same period of the following year. Food prices are likely to exert additional pressure on headline inflation, as the effects of severe drought reach consumers. Food price inflation is forecast at 6 per cent for 2016, a 0,8 percentage point increase from this year's estimate.

Unit labour cost increases are expected to remain close to 6 per cent. Downward adjustments to the growth forecast have pushed ULC forecasts slightly higher in 2016. They are expected to moderate to around 5,6 per cent by 2017, slightly below expected inflation for that year.

Administered prices have a total weight of 18,48 per cent in the CPI. They are expected to increase faster than headline over the next two years, rising 7,7 per cent in 2016 and 8,1 per cent in 2017. An important driver of this is higher electricity prices, forecast to grow at double-digit rates in both those years. However, the trajectory for administered prices has been lowered somewhat by anticipated easing in petrol price and education inflation. The decision to freeze university fee increases for next year lowered November's forecast for headline inflation by 0,1 percentage points, relative to the September forecast.

The balance of risk remains on the upside. Food prices could accelerate, particularly if the drought continues in 2016. Furthermore, electricity prices could rise by more than the 12 to 13 per cent currently forecast. Eskom has applied for a further tariff increase in the 2016/17 financial year, which if granted would mean tariffs increase by 16,6 per cent in April 2016.

The largest concern, however, is further currency weakness. This is fundamentally a risk to the forecast, and not already part of it, owing to the difficulties of making good exchange rate projections particularly for the currencies of small, open economies. The Bank's forecast relies on a PPP assumption. This assumes that the level of the real effective exchange rate (REER) remains stable, so the nominal effective exchange rate (NEER) adjusts based on producer price inflation differentials between South Africa

and its trading partners. The year 2015 has seen exceptionally low inflation in advanced economies and major emerging markets such as China, which are our largest trading partners. As a result, the nominal rate for the year is expected to depreciate by 5,1 per cent in 2015. In both the outer years of the forecast, the NEER is expected to depreciate further as domestic inflation continues to outstrip trading partner inflation.

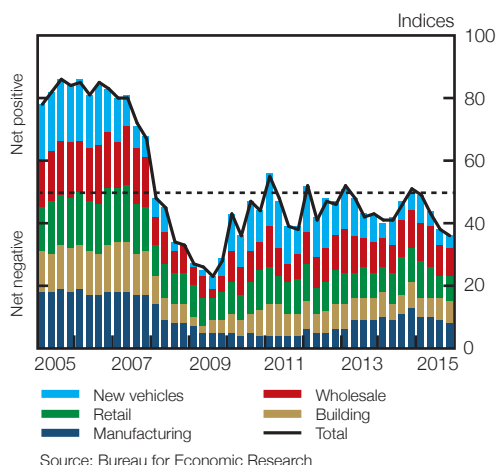
The risk is that actual NEER depreciation exceeds this forecast. One possible cause of further rand weakness would be additional falls in the prices of South Africa's commodity exports. Another would be Fed lift-off. The rand has been very sensitive to changing probabilities of the Fed hiking rates, suggesting that the first increase is not fully priced in to the rand's current level. It is also unclear whether the rand will stabilise after lift-off, as attention shifts to the pace and timing of additional rate adjustments.

Conclusion

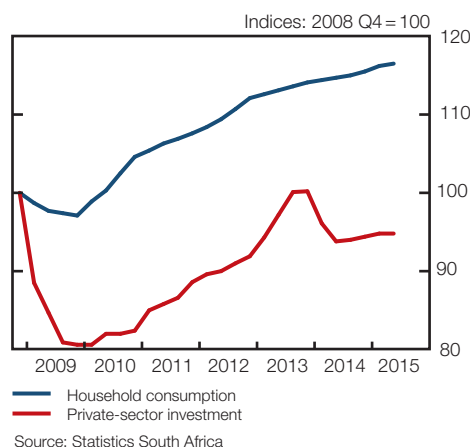
Inflation in South Africa remains high despite deteriorating economic conditions. It was lower in 2015 owing to falling oil prices, but the respite is expected to end soon. Temporary breaches of the inflation target are forecast for 2016, and headline inflation will remain in the upper part of the target range through 2017. ULC increases continue to underpin inflation, keeping it elevated. The forecast is also at risk from a variety of factors that could push inflation higher, including the exchange rate, food prices and electricity tariffs. Meanwhile, inflation expectations – already gathered around 6 per cent – show few signs of moderating. The inflation outlook is therefore relatively unfavourable, with risks skewed to the upside.

Growth developments and outlook

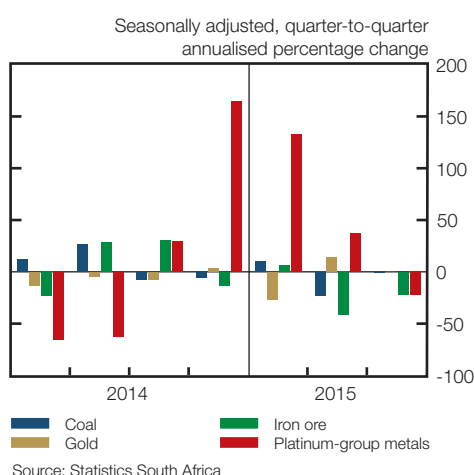
RMB/BER Business Confidence Index



Private-sector investment and household consumption



Mining production



South Africa's recent economic performance has been weak and uneven. This reflects a mix of adverse trends and specific shocks over the past few years. Individual quarters have been blighted by strikes and drought. More broadly, the economy has continued to suffer from a serious electricity constraint. Commodity prices have declined, mainly reflecting changes in China, while demand growth in traditional markets has been muted. This has limited the scope for growth through exports. Domestic investment has also been disappointing, despite the strong demand stimulus of government deficits and households reducing savings, which might have been expected to create an encouraging environment for investment. Instead, business confidence has been subdued. In this environment, employment growth has stalled.

Growth is expected to bottom out this year and accelerate slightly to just over 2 per cent in 2017 – still a low level in historical perspective. This underperformance is not principally a cyclical phenomenon. Rather, potential growth has fallen, from a pre-crisis high of 4 per cent to around 2 per cent. Remedying this problem will require more than additional stimulus from fiscal or monetary policy. With actual growth now close to potential, these policy tools are inappropriate for restoring growth to more satisfactory levels. This points to the need for structural reforms to lift the economy's growth potential.

Recent growth developments

The economy contracted by 1,3 per cent in the second quarter of the year, and then expanded by 0,7 per cent in the third quarter. The main causes of this weak performance appear to have been drought and electricity shortages. As a result, there is significant variation in the growth performance of different sectors of the economy.

The agricultural sector has declined by double-digit rates in all three quarters of the year to date. This reflects the onset of drought conditions, breaking a run of seven good years.

The real output of the mining sector declined in both the second and the third quarters, by 6,4 per cent and 9,8 per cent. This is partly explained by the recent decline in global commodity prices. In particular, world markets are oversupplied with iron ore, causing some producers to cut back on their operations. As a result, production in this subsector – which has been one of the best-performing components of the mining sector in recent years – contracted in both the second and third quarters of the year. The coal subsector, which is the single largest source of mining production in South Africa, at around a quarter of the total, also shrank in both these quarters. The platinum subsector contracted in the third quarter only, owing to maintenance requirements which temporarily interrupted production.

The mining sector was further hampered by the electricity constraint, as was the manufacturing sector. Electricity shortages were particularly serious in the second quarter, with load-shedding occurring on an almost daily basis. Conditions improved somewhat in the third quarter, with only one very brief period of load-shedding after 8 August 2015. This helped manufacturing rebound to 6,2 per cent growth from -6,3 per cent in the second quarter.

Other sectors of the economy have performed better. The strongest sector continues to be finance, real-estate, investment and business services, with growth of 2,6 and 2,8 per cent in the second and third quarters respectively. General government has also contributed to growth over the past two quarters. Overall growth in the non-primary sector was 2,2 per cent in the third quarter, significantly better than the 0,7 per cent for the economy as a whole, and a useful indicator of the negative effects of drought and falling commodity prices on growth.

Declining growth potential

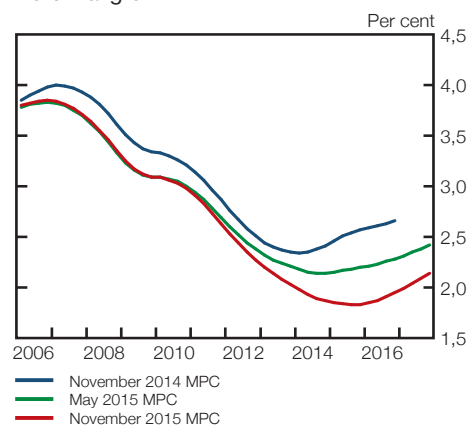
Potential growth for this year is estimated at just 1,8 per cent, a new low. With potential at such subdued levels, even weak growth adds little or nothing to the output gap. This low rate of potential growth – defined as the pace at which an economy can grow without accelerating inflation – is one of the most severe problems confronting the South African economy.

Potential is often confused with trend growth: a simple long-run growth average. However, an economy's potential growth rate can diverge from its trend for periods of time, given influences such as commodity cycles. Unlike trend growth, potential is unobservable. There are multiple competing approaches to its estimation, which tend to yield different answers. These estimates also tend to be highly uncertain, with wide margins of error. The concept is nonetheless useful, helping policymakers to judge the degree of slack in an economy.

The Bank revised its potential growth model in late 2014, drawing on methods introduced by the Bank for International Settlements.¹² The new model incorporates broader financial variables, such as credit growth, as well as manufacturing capacity utilisation.¹³ By drawing on financial data, these refinements build financial sustainability into the concept of potential; a house price boom, for example, will not be misinterpreted as a rise in potential growth. The improved model also accomplishes greater real-time accuracy, reducing the problem of large revisions to potential growth after policy decisions have been made.

The new estimates rewrite our understanding of potential growth after the crisis. It now appears that the economy actually exceeded its potential rate during the rebound of 2010 and 2011, when it achieved growth of over 3 per cent in both years. This outperformance made up for much of the difference between actual and potential growth accumulated during the crisis, meaning that the output gap largely closed. By contrast, the estimates available at the time indicated potential remaining at around its pre-crisis growth rate of 4 per cent, so the output gap seemed to widen. This perceived gap appeared to expand even further as growth slowed in subsequent years. By 2013 the output gap was being measured at -3,5 per cent of potential GDP. According to the latest estimates, however, the output gap at the end of 2013 was more likely -0,1 per cent. These figures reflect falling potential growth rates, now estimated at 2,1 per cent for 2013 and 1,9 per cent for 2014. Since the previous

Potential growth



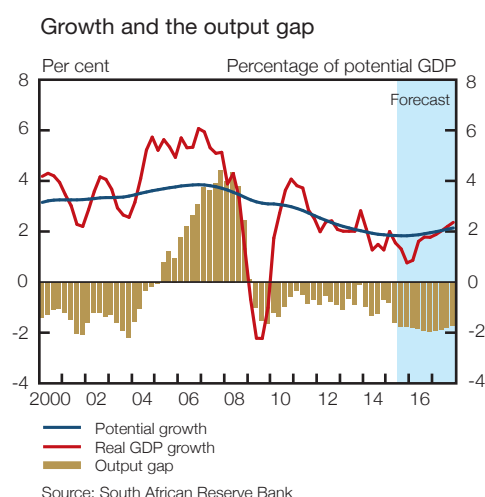
¹² Claudio Borio, Piti Disyatat and Mikael Juselius, 'Rethinking potential output: embedding information about the financial cycle', *Bank for International Settlements Working Papers No. 404*. Also Claudio Borio, Piti Disyatat and Mikael Juselius, 'A parsimonious approach to incorporating economic information in measures of potential output', *Bank for International Settlements Working Papers No. 442*. Basel: Bank for International Settlements.

¹³ For details, see Vafa Anvari, Neléne Ehlers and Rudi Steinbach, 'A semi-structural approach to estimate South Africa's potential output', *South African Reserve Bank Working Paper WP/14/08*, Pretoria: South African Reserve Bank, November 2014.

MPR, potential growth has declined below even this low threshold: projected potential for 2015 currently stands at 1,8 per cent.

Despite the large revisions, both the old and the new measures show that the output gap has remained negative throughout the post-crisis period. It has averaged just under 1 per cent of potential GDP since the end of 2011, and is expected to end 2015 at around -1,8 per cent of potential GDP. This suggests that demand has not contributed to inflationary pressure. As such, monetary policy has been appropriately calibrated to close the output gap. The repo rate is still fluctuating around zero in real terms, somewhat below its estimated neutral rate, and low in historical perspective.

Even closing the output gap, however, will not restore growth to satisfactory levels. With lower potential, much of the decline in South Africa's growth cannot be reversed using macroeconomic policy, which can smooth out cycles but not shift an economy from a 2 per cent growth track to 4 or 5 per cent. The fundamental growth challenge for the South African economy is raising the country's potential growth rate.

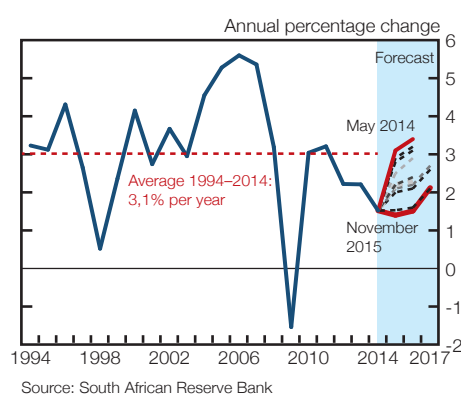


Domestic growth outlook

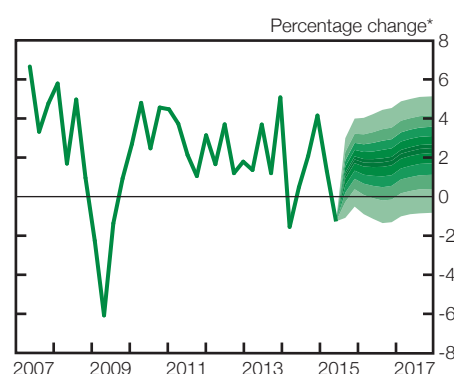
In line with low potential, the outlook is for low growth across the forecast horizon. The forecasts have also deteriorated from the previous *MPR*. Where growth was expected to be just over 2 per cent for 2015 and 2016, these numbers are now down to 1,4 per cent for 2015 and 1,5 per cent for 2016. The 2017 forecast remains slightly higher, at 2,1 per cent, as electricity shortages are alleviated. The risks are skewed to the downside.

Survey and other near-term indicators point to a subdued overall domestic growth environment over the next two quarters. Drought conditions appear to be intensifying, which would weigh on agricultural output. (An extended drought is not explicitly incorporated into the forecast, but poses an important risk.) The longer-term outlook for mining remains subdued, mainly owing to reduced demand from China. The forecasts now assume that commodity prices will decline further in 2016 and then stabilise, in US dollar terms. This is a change since the previous *MPR*; hitherto, the forecasts had repeatedly assumed an uptick in commodity prices over the forecast horizon. It is possible commodity prices could fall further from here, a scenario explored in Box 2.

Evolution of the real GDP growth forecast



Real GDP growth forecast



Box 2 Commodity price shocks and the South African economy

Commodity prices move in long cycles. The previous commodity price downturn lasted 22 years, from 1980 to 2002; prices fell by 70 per cent in real terms. The most recent commodity price downturn began in 2011, and prices have to date declined by 47 per cent. Further commodity price declines pose a risk to the inflation forecast, as they may exacerbate currency depreciation. Much lower prices would also impact negatively on growth through the mining sector and industries dependent on mining.¹

¹ The commodity price index is weighted by South African export values. The real index is obtained by deflating the nominal index using consumer price inflation in the United States.

The mining sector provides approximately 5 per cent of gross domestic product (GDP), a relatively small number, but one which understates its importance to the economy. The sector is closely connected to others, particularly manufacturing. More crucially, it contributes a majority of exports: more than 60 per cent over the past ten years. South Africa is therefore exposed to falling commodity prices in terms of both output and external balance. The drop in commodity prices between the June and November editions of the *Monetary Policy Review* would likely take approximately a quarter per cent off real GDP growth directly, via the export channel.²

From an output perspective, lower commodity prices reduce revenues and employment in the commodity sector. Lower revenue spills over to upstream and downstream industries, tax collection by government slows, and wealth effects from falling equity prices lead to a more generalised slowdown in domestic demand.

Potential growth is also affected through each of the factors of production. Capital accumulation slows and even contracts as investors respond to price signals that commodity markets are oversupplied. Labour is underutilised as workers are not quickly reallocated to other sectors. Total factor productivity could decline as the absorption of new technology and spending on research and development slows, contributing to the recent decline in South Africa's potential growth.

Negative terms-of-trade shocks also affect commodity-exporting countries by widening the gap between imports and exports. This is particularly problematic for South Africa which has run a persistent current-account deficit, reflecting both a low savings rate and high import penetration. The trade balance (including services) has been recovering since reaching a low of -3 per cent of GDP in the third quarter of 2013. It is expected to improve to around -1,5 per cent of GDP in 2016 and 2017.

The South African Reserve Bank's forecasts currently assume commodity prices will deteriorate in 2016 but stabilise in 2017. This assumption actually marks a change of direction from previous forecasts, which assumed commodity prices would partially recover.

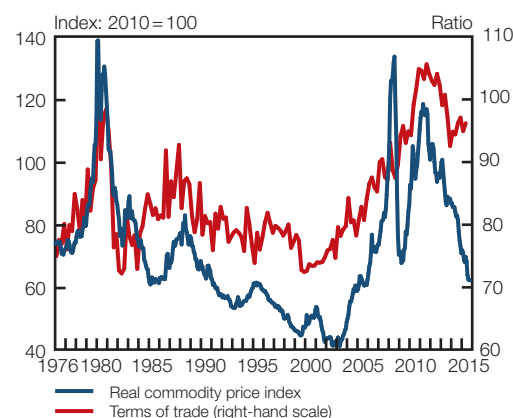
An alternative scenario is that South Africa's real commodity price index could revert to levels seen in the mid-2000s, prior to the commodity super cycle. This means that commodity prices would be around 20 per cent lower by the end of 2017, compared to the baseline, and the terms of trade 5 per cent worse. In this case, falling commodity prices are likely to widen the current-account balance by about 1,0 percentage point for each year of the forecast period. Rand depreciation should help to mitigate some of the impact as imports become more expensive and exports more competitive, but the current-account deficit would still be expected to widen to over 6 per cent of GDP. Falling income and employment in the commodity sector (with spillovers to other sectors of the economy) compounded by wealth effects, mean that overall growth would likely slow by an average additional 0,5 percentage points.

2 This is based on elasticities from the South African Reserve Bank's core econometric model, and excludes secondary effects.

Households' financial positions remain constrained. Household saving rates are negative, and have fallen in recent years. Credit extended by banks to households has grown only slowly since the crisis, and this pattern is unlikely to reverse in the near future. Incomes are under pressure from rising personal income taxes and electricity tariffs. Furthermore, employment growth is projected to be negative in both 2015 and 2016, although wage growth is likely to remain positive in real terms. Given these factors, household consumption growth is projected below 2 per cent over the next two years, with some acceleration in 2017.

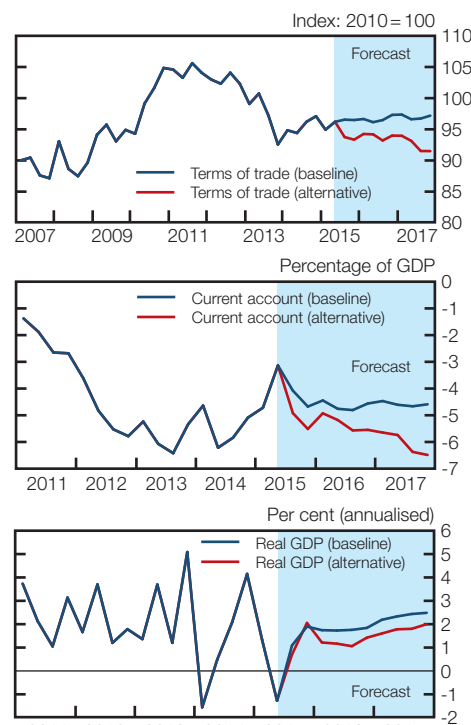
Private-sector fixed investment growth reached a five-year low in 2014, which has been followed by a mild recovery this year. It is only in energy generation where private sector investment has picked up noticeably. Elsewhere, electricity shortages appear to be deterring investment, an effect exacerbated by weakening demand for commodities. The forecast for

South Africa's real export commodity prices and rand terms of trade



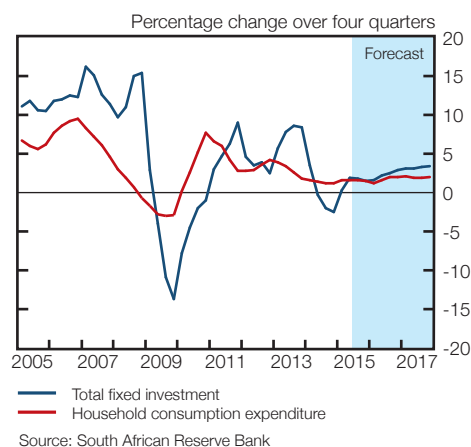
Sources: Datastream, South African Revenue Services, South African Reserve Bank, Federal Reserve Bank of St Louis and own calculations

Terms of trade alternative scenario



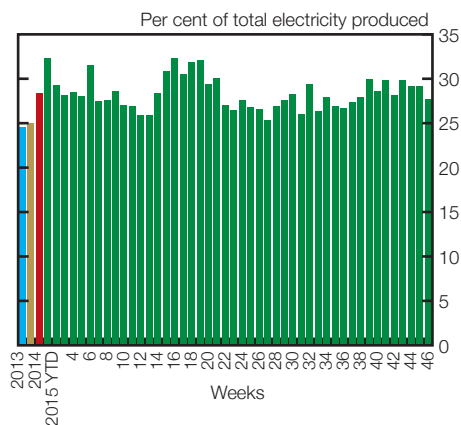
Source: South African Reserve Bank

Demand drivers of real domestic growth



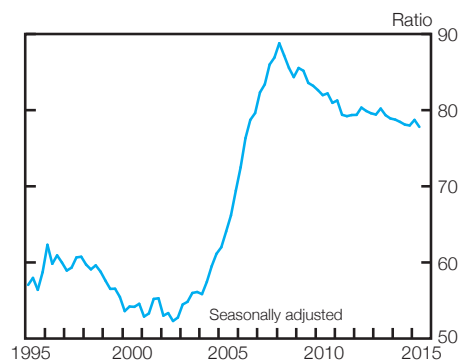
Source: South African Reserve Bank

Planned and unplanned electricity outage factor



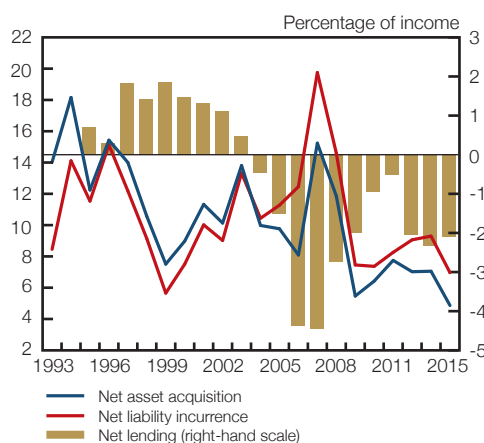
Source: Eskom

Household debt to disposable income of households



Source: South African Reserve Bank

South Africa – After GFC, households reduced both new asset and liability formation



Source: South African Reserve Bank

private investment growth has been revised down from the previous *MPR*. The 2015 projection is 0,4 per cent, 2016 is 1,6 per cent and 2017 is just over 3,0 per cent.

Revenue flows to the state are weakening, given conditions of low growth. The fiscal challenge is compounded by higher expenditure on public-sector wages and, more recently, the commitment to freeze university fees for 2016. Government is under increasing pressure to consolidate its finances, given higher debt levels and investors' more critical attitude to emerging-market assets. Government consumption is therefore expected to grow by only 0,5 per cent this year and by 1,5 per cent in 2016 and 2017, below the overall level of GDP growth. Government investment will grow faster, at between 5 and 6 per cent over the forecast horizon, although this is below the double-digit rates of 2013 and 2014.

Box 3 Household deleveraging and dissaving in South Africa

South African households accumulated debt rapidly before the global financial crisis, but have since partially deleveraged. In this respect, their behaviour apparently replicates that of households in advanced economies such as Australia, New Zealand, the United Kingdom and the United States. However, whereas households in these economies increased their savings as a share of disposable income, South African households did not. Instead, they deleveraged chiefly by reducing their acquisition of assets relative to their incomes.¹ The savings ratio declined and is now back around pre-recession lows.

The usual measure for evaluating household leverage is the ratio of debt to income. Households can grow out of debt if their incomes expand. If incomes remain constant, however, it is still possible to deleverage. This usually means lower consumption. However, the same result can be achieved without reducing consumption if households instead cut back on savings, for instance by reducing pension contributions, and redirecting the money to pay off debt. The overall household balance sheet does not improve, but gross debt falls. This appears to be how South African households deleveraged without increased savings.

In the 2000s, South African households levered up, in particular through borrowing to buy real estate. After the crisis, mortgage lending slowed precipitously, and it has remained subdued ever since. Overall credit extension to households has been similarly slow, mainly because mortgage lending is such a large proportion of the total that its dynamics shape the aggregate. Other types of lending have grown rapidly, however, including leasing finance and unsecured lending. The rotation of credit towards these categories means that borrowing has financed relatively more consumption, instead of asset accumulation.

Why did South African households not follow their advanced economy peers and increase saving rates? One explanation for this pattern is that South African households were not forced to save to the same extent. South Africa's financial sector was less directly affected by the global crisis. Financial conditions tightened in SA, but households appear to have retained much of their ability to borrow. Another possibility is that South Africans experienced less of a wealth shock during the recession, and were therefore more comfortable spending out of their incomes.

These findings suggest that households do not have pent-up demand which will boost growth once they feel more confident about the future, or once financial institutions recover their risk appetites. Deleveraging was not achieved by increasing precautionary savings, nor was it forced on households by credit rationing – at least not to the extent seen in some advanced economies. Household savings rates are low and have fallen in recent years. It is important to raise the savings rate, to provide a stable source of investment finance and to ensure that South Africans will be financially secure in retirement.

¹ South African households also enjoyed real income gains, but not enough to achieve the observed deleveraging.

Employment

Unemployment in South Africa remains exceptionally high at around 25 per cent for the past five years.¹⁴ Given anaemic growth prospects, it is expected to remain around these levels over the forecast horizon. The private sector accounts for most employment in South Africa but has not created new jobs on a net basis since 2008. The public sector has been adding jobs, but is now stretched to the point that it cannot expand hiring further.

Labour market data in South Africa are quite difficult to parse. Formal-sector employment trends are analysed using the *Quarterly Employment Statistics (QES)*, but this publication is not completely consistent with the *Quarterly Labour Force Survey (QLFS)*, from which the official unemployment rate is derived.¹⁵ The *QLFS* shows some improvements in employment recently, particularly in the primary and secondary sectors, but this may reflect a change of sample rather than confirmed labour market improvements. It also records somewhat higher unemployment in the third quarter of 2015.

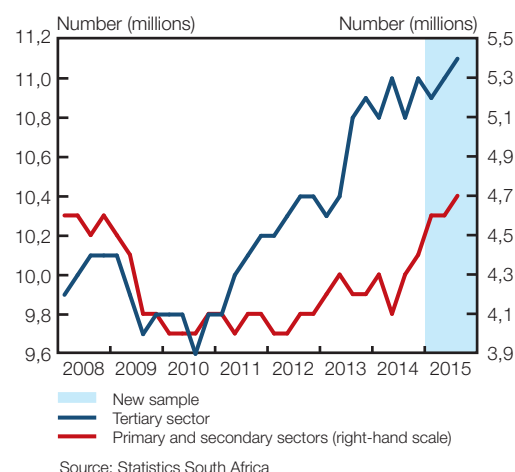
The *QES* shows that the non-agricultural private sector has yet to regain pre-crisis job levels, even though output surpassed its pre-crisis peak in mid-2010. All net gains in formal-sector jobs have come through public-sector job creation – even though public employment constitutes only about a quarter of total employment (up from 21 per cent in 2008).

In the private sphere, employment trends are heterogeneous across different subsectors. The tertiary sector¹⁶ accounts for just over half of all private sector jobs. Employment in this sector has grown and is now at just over 4,6 million jobs, but this is still below the peak of almost 4,7 million jobs reached in the third quarter of 2008. The primary and secondary sectors are smaller: mining contributes 5,5 per cent of the total and the secondary sector (manufacturing and construction) adds another 18 per cent.¹⁷ These sectors, however, are now reducing their demand for labour.

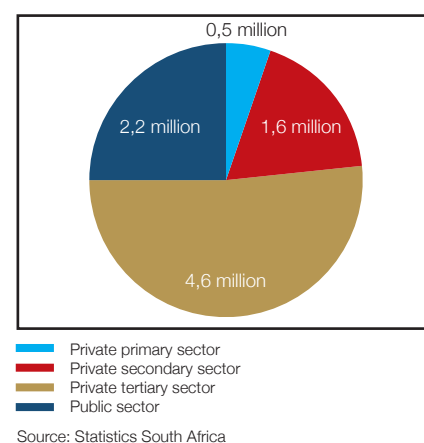
Employment in the primary sector¹⁸ grew strongly in the 2000s due to the commodity boom. It peaked in 2012, at which point commodity prices were already falling. Although the industry has started shedding jobs, mining employment is still at 2007 levels. Continued declines in commodity prices suggest that the potential for further job losses is relatively high.

The secondary sector has shown a more persistent decline in employment than any of the other sectors. From 2005 to 2008 – the height of the pre-crisis boom – job growth was only sufficient to restore the levels of employment last seen in the year 2000. The gains occurred almost entirely in the construction industry, with job losses in manufacturing slowing but not reversing. Manufacturing employment has declined continuously since peaking in 1990.

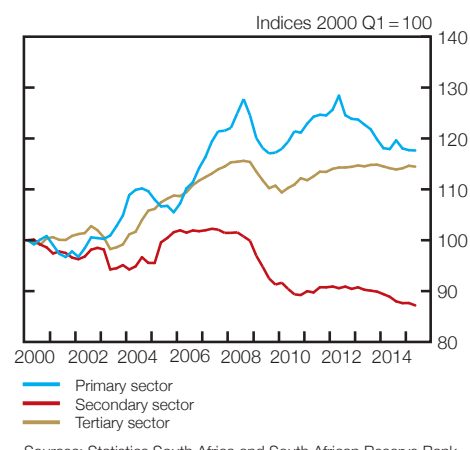
Employment levels by sector



Employment shares



Private-sector employment growth



14 Resampling in 2015 coincided with a first-quarter spike around 26 per cent, but given the structural break between 2014 and 2015, this is near-impossible to interpret.

15 The *QES* excludes both the informal sector and certain formal jobs, including domestic worker and agricultural employment.

16 Defined as private transport, storage and communication; private community, social and personal services; wholesale and retail trade, catering and accommodation; and finance, insurance, real-estate and business services. Employees in the labour broking industry fall into the finance category, thus employment in finance represents a much broader set of industries.

17 Agriculture is excluded. In the *QLFS*, agriculture has accounted for 5 per cent of total employment on average since 2008.

18 Defined as mining and quarrying. The primary sector also includes agriculture, but agricultural employment is measured in a different survey (*QLFS*), and is therefore excluded here.

The outlook for the labour market is quite bleak. Neither the public nor the private sector is creating jobs. Employment is forecast to contract this year, by 1 per cent, and again in 2016, by 0,1 per cent, before expanding modestly in 2017. These numbers are the first negative employment growth rates in five years, since the effects of the global crisis finished working their way through labour markets in 2010. Nonetheless, average salaries are still projected to grow faster than inflation.

Conclusion

The Bank has lowered its growth forecasts continually since the post-crisis rebound of 2010 and 2011. The world economy has become less favourable, particularly through falling commodity prices (although lower oil prices have provided some terms-of-trade compensation for South Africa). Load-shedding has abated, perhaps until May next year. This is partly the result of weak growth, however, and the deterrent effect on investment persists. Household consumption is suffering from sluggish employment growth, rising inflation and flagging disposable income growth, with minimal appetite for additional borrowing. Consumer and business confidence is weak. Potential growth has also consistently been revised lower over the forecast period, to as low as 1,8 per cent for 2015. As South Africa's growth has moved closer to its potential, the output gap has not widened markedly. Given this environment, real GDP growth for South Africa is now projected at 1,4 per cent in 2015 and 1,5 per cent in 2016. It is expected to reach 2,1 per cent in 2017, still a low level in historical perspective.

Conclusion: summary of *MPR* themes

South Africa's economy faces acute domestic challenges alongside adverse shifts in the world economy. Drought conditions and electricity shortages are pushing up prices while suppressing growth. International commodity prices have declined markedly and may fall further. World financial conditions are becoming less favourable for emerging markets. In this context, the rand has depreciated significantly.

These price movements are important for the economy's adjustment to changed conditions. In particular, currency depreciation is a crucial mechanism for rebalancing the economy. Yet these price shocks cannot be allowed to permanently accelerate inflation, outside the 3–6 per cent target range.

The risks are significant. Inflation in South Africa is currently forecast to average 6 per cent in 2016 and 5,8 per cent in 2017, barely within the target range. Inflation expectations are clustered around the top of the target range. Surveys show longer-term expectations in a narrow range around 6 per cent. Break-even inflation rates are higher, between 6 and 7 per cent. South African labour and product markets are characterised by rigidities and indexation. This leaves little margin for indulging higher inflation in the hopes it will prove temporary.

Growth in South Africa has slowed. Much of this deceleration comes from lower potential growth, given constraints such as limited electricity and heavy debt burdens on households. As a result, macroeconomic policy has limited scope to stimulate the economy without exacerbating imbalances. Estimates of the output gap show it remains negative, and for this reason monetary policy continues to be accommodative. The real repo rate is still low in historical and comparative perspective, and somewhat below its estimated neutral level.

Monetary policy has been tightened gradually over the past two years. This hiking cycle is aimed at preventing a sustained increase in inflation, consistent with the Bank's primary mandate for price stability. By preempting an acceleration in inflation, policy is also being set to minimise the possible growth costs of tightening. These would be higher were robust second-round effects left to materialise, requiring a stronger policy response.

Statement of the Monetary Policy Committee

23 July 2015

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 global environment has been dominated by heightened uncertainty relating to the debt crisis in Greece and the sharp decline in equity prices in China. While the tail risks from these events appear to have dissipated somewhat, uncertainties still remain. At the same time, the risks associated with financial market volatility related to the timing of the first increase in the United States (US) policy rate persist.

Domestically, the growth outlook remains weak, as both the supply and the demand sides remain constrained amid declining business and consumer confidence. The inflation forecast has deteriorated slightly since the previous meeting, notwithstanding the lower-than-expected outcome in June. Headline inflation is expected to breach the upper end of the target range during the first two quarters of next year, while upside risks posed by the exchange rate have increased.

The year-on-year inflation rate, as measured by the consumer price index (CPI) for all urban areas, stood at 4,6 per cent and 4,7 per cent in May and June respectively.

The latter surprised on the downside due to, inter alia, lower-than-expected increases in food price and rental inflation, with upside pressures coming from higher petrol prices. The categories of housing and utilities, food and non-alcoholic beverages, and miscellaneous goods and services contributed 3,1 percentage points to the overall inflation outcome. The South African Reserve Bank's (the Bank) measure of core inflation – which excludes food, fuel and electricity – moderated from 5,7 per cent in May to 5,5 per cent in June.

Producer price inflation (PPI) for final manufactured goods continued its upward trend, having reached a low point of 2,6 per cent in February. In April and May, the PPI measured 3,0 per cent and 3,6 per cent respectively. The latter was above market consensus, driven by higher-than-expected food, beverage and tobacco product prices which, at 2,2 percentage points, were also the main contributor to the annual change in the PPI. The upward trend is expected to persist, driven by rising agricultural crop prices and electricity tariffs.

The inflation forecast of the Bank has changed marginally since the previous meeting of the MPC, with headline inflation now expected to average 5,0 per cent in 2015, up from 4,9 per cent previously. The forecast for the first two quarters of next year has also been revised upwards by 0,1 percentage points to 6,9 per cent and 6,1 per cent respectively, with a return to within the target range by the third quarter. However, the forecast average inflation for both 2016 and 2017 is unchanged at 6,1 per cent and 5,7 per cent respectively.

The forecast for core inflation is unchanged and is expected to average 5,6 per cent in 2015, moderating to 5,4 per cent and 5,2 per cent in the next two years. As before, much of the persistence of core inflation at these levels is attributed to high levels of wage growth, currency depreciation, and inflation expectations entrenched at the upper end of the target range.

The headline inflation forecast assumes electricity price increases of 13,0 per cent in July 2016 and July 2017. Although the current multi-year price determination allows for an 8 per cent increase from July next year, Eskom is expected to apply for a clawback on diesel usage, and this accounts for the additional 5 percentage point assumption in the model. The main assumptions underlying the model are listed in the annexure to this statement.

Inflation expectations, as reflected in the survey conducted by the Bureau for Economic Research (BER) at Stellenbosch University, have shown a near-term deterioration but are more or less unchanged over the two-to-three-year horizon. Average inflation expectations for 2015 and 2016 increased by 0,2 percentage points, to 5,6 per cent and 6,1 per cent respectively, but declined marginally to 5,8 per cent for 2017. The deterioration was mainly driven by marked increases, of 0,6 and 0,4 percentage points respectively, by analysts for 2015 and 2016, and smaller increases by business people. The expectations of analysts and trade unionists remain within the target range but close to its upper end. The expectations of business people are above the target range, with a deterioration over all three years. Average five-year inflation expectations increased from 5,8 per cent to 6,0 per cent.

The median inflation expectations of analysts polled in the Reuters Econometer Survey are almost identical to the Bank's forecast. The break-even inflation expectations, as reflected in the yield differential between conventional government bonds and inflation-linked bonds, are relatively unchanged since the previous meeting and remain above the target range for all maturities.

Global economic growth has been revised downwards recently, mainly due to the weak first-quarter outcome in the US. While the recovery in the US still appears to be on track amid continued improvements in the labour market, growth this year is expected to be closer to the 2 per cent level compared with expectations of around 3 per cent earlier in the year. The steady but slow improvement in the euro area has continued, following a better-than-expected first-quarter outcome. However, the outlook for the region will in part depend on avoiding negative spillovers from the Greek debt crisis. The near-term risks from this crisis appear to have been averted for now, but the longer-term sustainability of the Greek debt burden remains a concern. Growth in Japan is expected to remain positive but subdued.

The Chinese economy grew at a year-on-year rate of 7,0 per cent in the second quarter, but some moderation is expected in the coming quarters. The sharp correction in the Chinese equity markets appears to have been contained by strong intervention by the authorities, and the impact on the broader economy is expected to be relatively limited, but it does point to some fragility in the financial sector. The slowdown in China has continued to impact on commodity prices, with the platinum price, for example, declining to its lowest level in six years. The prospects for a number of other larger emerging-market economies, particularly Russia and Brazil, remain weak.

Global inflation pressures, particularly in the advanced economies, remain benign, reinforced by declining commodity prices, including that of oil. Against this backdrop, the monetary policy stances in most advanced and emerging-market economies have either remained unchanged or become more accommodative since the previous MPC meeting, with the exception of Brazil where interest rates were increased further. Monetary policies in the advanced economies are likely to remain asynchronous: highly accommodative stances in the eurozone and Japan are likely to persist for some time, while a start of monetary policy tightening is likely in the US sometime this year, followed by the United Kingdom (UK).

The rand exchange rate has been relatively volatile and depreciated significantly since the previous meeting of the MPC. The rand, along with a number of other emerging-market currencies, has been particularly sensitive to changing global risk perceptions relating to the Greek crisis, the volatility in Chinese equity markets, declining commodity prices, and expectations of the start of US monetary policy tightening. Since the previous meeting of the MPC, the rand has traded in a wide band of between R11,82 and R12,58 against the US dollar. Over the period, the rand has depreciated by 5,0 per cent against the US dollar, by 3,6 per cent against the euro, and by 3,5 per cent on a trade-weighted basis.

The rand found some support from the improved current-account outcome of 4,8 per cent of gross domestic product (GDP) in the first quarter of 2015 and the more favourable recent trade

data. While these better outcomes may reflect the depreciated real effective exchange rate, further gains are likely to be constrained by the recent decline in commodity prices. The Bank forecasts a current-account deficit of around 4,6 per cent of GDP for the year.

Global capital flows have remained relatively volatile against the backdrop of changing risk perceptions. This has been reflected in non-resident bond and equity flows: according to data from the JSE Limited (JSE), non-residents were net sellers of South African government bonds to the value of R12,7 billion in May and June, but were net buyers of equities to the value of R17,7 billion. To date in July, non-residents have been net buyers of equities and bonds to the value of R3,7 billion and R2,4 billion respectively.

The rand remains a significant risk factor to the inflation outlook given the vulnerability of both the rand and long bond yields to possible US interest rate increases as well as a deterioration in South Africa's terms of trade. The inflation forecast assumes a relatively stable real effective exchange rate over the forecast period, implying a nominal effective depreciation in line with inflation differentials between South Africa and her major trading partners. A nominal depreciation in excess of this would pose an upside risk to inflation, although this risk could be ameliorated to some extent should the relatively low pass-through from the exchange rate to inflation persist. The extent to which US policy tightening is already priced into the exchange rate also remains uncertain.

The domestic growth outlook remains subdued amid continued electricity-supply constraints as well as weak business and consumer confidence. Growth in the first quarter of 2015 measured 1,3 per cent, and high-frequency data suggest that second-quarter growth is likely to be broadly similar. The Bank's forecast for growth in each year of the forecast period has been revised down marginally, to 2,0 per cent in 2015 and 2,1 per cent in 2016, rising to 2,6 per cent in 2017 when some easing of the electricity-supply constraint is assumed. However, risks to growth are still assessed to be moderately on the downside. The recent further decline in the Bank's composite leading business cycle indicator also suggests a continuation of the weak growth outlook.

The Rand Merchant Bank/Bureau for Economic Research (RMB/BER) Business Confidence Index has declined for two consecutive quarters, measuring 43 index points in the second quarter of 2015, with confidence in the manufacturing sector particularly low, at 29 index points. The physical volume of manufacturing production has contracted on a month-on-month basis in three of the first five months of this year, and this sector is expected to record negative growth in the second quarter. Although the Purchasing Managers' Index (PMI) improved in May and June, it remains around the 50 index point level, consistent with a constrained outlook. The mining sector, by contrast, has displayed some resilience, particularly in the platinum-group metals (PGMs) subsector, although the weaker platinum and palladium prices are expected to create further headwinds.

Underlying this subdued growth outlook is the persistent weakness in growth in gross fixed capital formation, particularly by the private sector. These trends contributed to a contraction in non-agricultural formal sector employment, both on a quarter-on-quarter and on a year-on-year basis. During the four quarters to the first quarter of 2015, over 41 000 jobs were shed, of which just over 30 000 were in the private sector.

Although consumption expenditure of households improved somewhat in the first quarter of 2015, this was probably induced by temporary factors, including the decline in the petrol price and lower food price inflation. However, following the increase in personal income taxes alongside higher electricity tariffs and a reversal of the petrol price declines, the outlook for consumption expenditure has deteriorated. This negative outlook is reflected in slowing retail sales growth, declining motor vehicle sales, and the continued weak pace in credit extended to households by the banking sector. Tighter affordability criteria as well

as proposals to cap interest charges on unsecured loans are likely to constrain bank credit extension to households further. This is in contrast to the continued buoyant growth in credit extension to the corporate sector. Against this backdrop, the First National Bank/Bureau for Economic Research (FNB/BER) Consumer Confidence Index reached a 14-year low in the second quarter of 2015.

Notwithstanding the recent moderation in nominal wage growth, the pace of growth remains high and contributes to the persistence of inflation at higher levels. Year-on-year growth in nominal salaries and wages per worker moderated to 6,7 per cent in the first quarter of 2015, from 7,3 per cent in the previous quarter. Adjusting for productivity increases, due in part to employment reductions, labour cost increases declined to 4,1 per cent in the first quarter. According to Andrew Levy Employment Publications, the average settlement rate in collective bargaining agreements declined to 7,8 per cent in the first half of 2015, compared with 8,1 per cent in 2014 as a whole.

Food prices remain a concern to the MPC, despite the continued moderation of food price inflation at the CPI level having measured 4,6 per cent in May and 4,3 per cent in June. However, the continuing drought in parts of the country has contributed to the upside risk to the outlook, despite benign global food price inflation. Maize and wheat prices have increased significantly since the beginning of the year, and we are yet to see the full impact on consumer prices. At the PPI level, however, cereal and crop price inflation accelerated to 17,8 per cent in May, and both wheat and maize prices are now trading at around import parity levels.

International oil prices have been somewhat weaker since the previous meeting of the MPC, following higher output by Saudi Arabia and the prospects of a resumption of oil exports by Iran. This follows two consecutive months of oil prices in the range of US\$60–65 per barrel. Since early July, spot prices have traded below US\$60 per barrel, while futures prices are currently trading at around US\$58 per barrel for December delivery. The Bank's forecast assumes a moderate increase in oil prices over the forecast period. Domestic petrol prices have increased by about 90 cents per litre in the past two months. Should current trends persist, a price reduction of around 40 cents per litre is likely in August.

While the June inflation outcomes were below expectations, this respite is expected to be temporary. The persistence of forecast inflation at elevated levels and the continued upside risks to the outlook remain a concern to the MPC. Although inflation is currently within the target range, given the lags in monetary policy changes on inflation, the focus of policy continues to be on the medium-term trend and to ensure that inflation remains comfortably and sustainably within the target range.

Inflation is expected to breach the upper end of the target range for two quarters, and the medium-term trajectory remains uncomfortably close to the upper end of the target range. The upside risks make this trajectory vulnerable to any significant changes in inflation pressures.

Although the risks of higher electricity tariffs have not materialised yet, other upside risks persist. The rand remains vulnerable to the global market reaction to US monetary policy normalisation, particularly in the context of South Africa's twin deficits. Pressures on the exchange rate have been exacerbated by the recent significant decline in commodity prices, which are likely to impede the favourable current-account adjustment. Some of the rand adjustment has already occurred since the previous MPC meeting, but further reaction to US monetary policy tightening could cause inflation to diverge even further from target and set in motion an exchange rate-inflation spiral. Further upside risks are expected to come from food prices, which have yet to react to the significant increases in spot prices of agricultural commodities.

The MPC has been indicating for some time that it is in a hiking cycle in response to rising inflation risks and a normalisation of the policy rate over time. The MPC is cognisant of the fact that domestic inflation is not driven by demand factors, and the outlook for household consumption expenditure remains subdued. Economic growth remains subdued, constrained by electricity-supply disruptions as well as low business and consumer confidence, and the risks to the outlook remain on the downside. However, as emphasised previously, the MPC must be mindful of the risk of second-round effects on inflation, and it is concerned that failure to act against these heightened pressures and risks will cause inflation expectations to become entrenched at higher levels.

The MPC has therefore decided to continue on its path of gradual policy normalisation. Accordingly, the repurchase rate will increase by 25 basis points to 6,0 per cent per annum with effect from 24 July 2015. Four members favoured the 25 basis point increase, while two members favoured an unchanged stance.

The expected inflation trajectory implies that the real repurchase rate remains low and possibly still slightly negative at times, and below its longer-term average. The monetary policy stance therefore remains supportive of the domestic economy. The continuing challenge is for monetary policy to achieve a fine balance between achieving the Bank's core mandate of price stability and not undermining short-term growth unduly. Monetary policy actions will continue to be sensitive, to the extent possible, to the fragile state of the economy. As before, any future moves will therefore be highly data-dependent.

Annexure

Summary of assumptions: Monetary Policy Committee meeting on 23 July 2015*

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	3,1%	3,1%	3,0%	3,3%	3,3%
			(3,3%)	(3,5%)	(3,4%)
2. International commodity prices in US\$ (excluding oil)	-6,4%	-9,8%	-17,0%	0,0%	5,0%
			(-14,0%)	(5,0%)	(5,0%)
3. Brent crude (US\$/barrel)	108,8	99,2	60,2	65,0	68,1
			(60,2)	(65,0)	(68,1)
4. World food prices (US\$).....	-1,6%	-3,8%	-14,0%	1,5%	2,5%
			(-11,0%)	(2,0%)	(2,5%)
5. International wholesale prices	0,3%	-0,1%	-2,2%	0,8%	1,3%
			(-2,0%)	(1,0%)	(1,5%)
6. Real effective exchange rate of the rand (index 2010 = 100)	81,91	79,17	81,29	80,50	80,50
			(81,60)	(81,30)	(81,30)
7. Real effective exchange rate of the rand.....	-10,1%	-3,3%	2,7%	-1,0%	0,0%
			(3,1%)	(-0,4%)	(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%	1,0%	1,5%	1,5%
			(2,0%)	(1,5%)	(1,5%)
2. Administered prices	8,7%	6,7%	2,8%	9,6%	8,4%
			(2,5%)	(9,5%)	(8,3%)
– Petrol price	11,8%	7,2%	-7,2%	11,7%	6,4%
			(-8,4%)	(11,1%)	(6,5%)
– Electricity price.....	8,7%	7,2%	9,7%	12,5%	13,0%
			(10,1%)	(13,1%)	(13,1%)
3. Potential growth.....	2,2%	2,1%	2,1%	2,2%	2,3%
			(2,2%)	(2,2%)	(2,4%)
4. Repurchase rate (per cent).....	5,00	5,57	5,75	5,75	5,75
			(5,75)	(5,75)	(5,75)

The figures in brackets represent the previous assumption of the MPC.

* For an explanation of foreign-sector assumptions and domestic-sector assumptions, see pages 45 and 46.

Selected forecast results: Monetary Policy Committee meeting on 23 July 2015

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

Selected forecast results (annual)

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

Figures below the forecast in parentheses represent the previous MPC forecast.

Statement of the Monetary Policy Committee

23 September 2015

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), risks to the global economic outlook have increased against the backdrop of a slowing Chinese economy. These risks, in conjunction with continued capital outflows from emerging markets, have resulted in heightened global financial market volatility and have contributed to the decision by the United States Federal Reserve (the Fed) to maintain its current monetary policy stance. This delay has added uncertainty to an already volatile global setting.

The domestic economic outlook has deteriorated following the surprise contraction in the second quarter of the year. At the same time, the rand experienced a further significant depreciation in response to domestic and global developments, intensifying the upside risks to the inflation outlook. The combination of sharply slowing growth and rising inflation compounds the dilemma facing monetary policy.

The year-on-year inflation rate, as measured by the consumer price index (CPI) for all urban areas measured 5,0 per cent and 4,6 per cent in July and August respectively.

The decrease in the inflation in August was mainly the result of changes in the housing and utilities as well as transport indices. Having reached a recent high of 5,8 per cent in both January and February, the Bank's measure of core inflation – which excludes food, fuel and electricity – amounted to 5,3 per cent in August, down from 5,4 per cent in July.

Producer price inflation (PPI) for final manufactured goods increased from 3,3 per cent in July to 3,4 per cent in August, down from 3,7 per cent in June. The upward trend is expected to continue in the coming months as the impact of higher agricultural crop and food prices becomes more apparent.

The inflation forecast of the Bank has changed marginally, with a near-term improvement and a slight medium-term deterioration. Inflation is now expected to average 4,7 per cent in 2015, from 5,0 per cent previously, and then to breach the upper end of the target range in the first quarter of 2016, with a peak of 6,7 per cent (previously 6,9 per cent). Inflation is then expected to settle at around the top end of the target range, with a further temporary breach of 6,2 per cent in the final quarter. This breach is mainly due to the base effects from the lower starting point for the petrol price in the fourth quarter of this year. The forecast for 2017 follows a slow downward trend, with inflation measuring 5,7 per cent in the final quarter. The changes in this trajectory are mainly due to the more depreciated starting point for the real effective exchange rate, which is offset to some extent by a lower international oil price assumption.

The forecast for core inflation is marginally higher in the later quarters, but with an unchanged expected average of 5,4 per cent in 2016 and slightly higher at 5,3 per cent in 2017, up from 5,2 per cent.

Inflation expectations, as measured by the survey conducted in the third quarter by the Bureau for Economic Research, are more or less unchanged; they remain at the upper end of the target range. Average inflation expectations for 2016 are unchanged at 6,1 per cent and reverted to 5,9 per cent for 2017, following the decline to 5,8 per cent in the previous quarter. As before, there were marked differences between the different categories of respondents, with the 2017 expectations averaging 5,4 per cent for financial analysts, 6,5 per cent for business people and 5,9 per cent for trade unionists. Average five-year inflation expectations declined from 6,0 per cent to 5,9 per cent, but those of business people reverted to their 2014 level of 6,5 per cent, from 6,3 per cent previously.

Median annual inflation expectations of market analysts, as reflected in the Reuters Econometer survey, are almost identical to those of the Bank's forecast and more or less unchanged since the previous survey. The break-even inflation rates derived from the inflation-linked bonds have increased moderately since the previous meeting and have remained above the upper end of the target range across all maturities.

The global economic outlook has become more uncertain since the previous meeting of the MPC, driven in part by the strong financial market reactions to the deteriorating outlook for the Chinese economy. Although growth prospects in the United States (US) remain positive, they have been clouded by growing concerns about possible spillbacks from a slowdown in emerging markets, particularly in China, as well as from the impact of the strong dollar. Euro area growth moderated in the second quarter and remains relatively subdued, while real output in Japan declined.

Growing concerns about the risk of an abrupt slowdown in the Chinese economy have been fuelled by excess capacity in the real-estate market and in the industrial sectors of the economy. The recent equity market correction, the surprise devaluation of the renminbi as well as the uncertain policy responses have added to these concerns. While, to date, the actual slowdown has been relatively moderate, a hard landing could have a severe impact on global markets and on commodity prices in particular.

These developments have had an adverse effect on the outlook for commodity producers, particularly emerging-market economies, but Asian economies with close trade links with China have also been affected. The deteriorating terms of trade have compounded the impact of continued capital flows from emerging markets in anticipation of US monetary policy normalisation. Consensus growth forecasts for most Latin American and Asian economies have accordingly been revised downwards.

Lower commodity prices have contributed to a more benign global inflation environment, although some emerging markets are experiencing inflationary pressures through depreciating currencies. In the US, concerns about the possible restraining effect of the appreciating dollar on domestic economic activity and inflation, coupled with global financial market volatility and the risk of a sharp slowdown in emerging markets, were key factors in the decision to delay the commencement of monetary policy normalisation. The European Central Bank has indicated that further monetary easing is being contemplated, while developments in Japan suggest that monetary policies will remain highly accommodative for some time.

Domestic financial markets, including bond and equity markets, have not been immune to the turmoil in global markets. Although the rand has been one of the more volatile currencies, having fluctuated in a range of between around R12,60 and just over R14,00 against the US dollar since the previous MPC meeting, its trend depreciation over the year has not been significantly different to those of other commodity currencies and a number of other peer emerging economies. Since the previous meeting of the MPC, the rand has depreciated by about 9 per cent against the US dollar, by about 10 per cent against the euro, and by about 8 per cent on a trade-weighted basis.

The rand was negatively affected by developments in China, continued speculation regarding the timing of US policy 'take-off', and the weaker-than-expected gross domestic product (GDP) growth outcome. The rand reacted positively to the US decision to maintain its policy stance as well as to the narrowing deficit on the current account of the balance of payments.

The rand exchange rate remains an upside risk to the inflation outlook. As noted in previous statements, a key uncertainty for the MPC is the extent to which the US policy normalisation is already priced into the currency. The fact that the rand appreciated in response to the Fed's decision suggests that some depreciation is likely when US rates are increased. However, the extent is uncertain, with the possibility of a temporary overshoot in a highly volatile environment.

A further uncertainty relates to the sustainability of the contraction in the current account of the balance of payments in the second quarter when a deficit of 3,1 per cent of GDP was

recorded. While this narrowing is attributed in part to temporary factors, there appears to be some evidence that both export and import volumes are responding to the depreciation of the rand and the weaker economy. However, the Bank expects this process of adjustment to remain slow, with the export response inhibited by a number of factors, including headwinds from the slowing global economy, electricity supply constraints and declining tourism receipts.

The domestic economic growth outlook has deteriorated compared with the previous forecast. This follows the surprise annualised contraction of 1,3 per cent in the second quarter of this year. While the MPC is of the view that a further contraction is unlikely in the third quarter, the outlook remains relatively weak amid declining business and consumer confidence. The Bank's forecast for growth has been revised down by half a percentage point in each year of the forecast period, to 1,5 per cent in 2015 and to 1,6 per cent and 2,1 per cent respectively in the subsequent two years. The Bank's estimate of potential output for 2015 has also been revised down to 1,8 per cent. The risks to the growth outlook are now seen to be more or less balanced. This weak outlook is consistent with the Bank's leading indicator of economic activity, which has exhibited a more pronounced downward trend in recent months.

The growth disappointment was particularly evident in the goods-producing sectors of the economy, with contractions in agriculture, mining and manufacturing, although growth in the services sectors also moderated. The agricultural sector remains constrained by the continuing drought, and although mining output increased in July, prospects are being negatively affected by weak commodity prices, lower global demand and the risk of industrial action in parts of the sector. Manufacturing output also increased marginally in July, but the decline in the Barclays Purchasing Managers' Index (PMI) to below the neutral 50 level in August and a further decline in capacity utilisation suggest a challenging outlook.

Growth in gross fixed capital formation moderated to 1,0 per cent in the second quarter, with general government providing the only notable increase. The weak contribution from the private sector is reflected in the further sharp decline in the Rand Merchant Bank/Bureau for Economic Research (RMB/BER) Business Confidence Index to its lowest level since 2011. The only area where private-sector investment increased markedly was with respect to energy-generation projects. This disappointing scenario does not bode well for employment growth, despite the decline in the official unemployment rate to 25,0 per cent in the second quarter, mainly due to growth in informal sector employment.

Growth in the consumption expenditure by households also reflects the subdued demand conditions in the economy, with a moderation in growth to 1,2 per cent in the second quarter, with some resilience only evident in semi-durable goods consumption. Retail sales grew only marginally in July, amid a sharp decline in the business confidence of retailers. The weakness in durable goods sales is evident in the lower new vehicle sales in August, particularly commercial vehicles.

Consumers are expected to remain constrained against the backdrop of slow employment growth, declining disposable income growth and rising inflation. Furthermore, the pace of credit extension to households, which remains negative in real terms, is expected to be affected further by the tighter affordability criteria following the implementation of amendments to the National Credit Regulations. At the same time, household deleveraging has continued, with the debt-to-disposable-income ratio moderating further to 77,8 per cent in the second quarter of 2015, its lowest level since 2006. Credit extension to the corporate sector, by contrast, has been buoyant, particularly with respect to general loans and mortgage advances.

No new data concerning wage and unit labour cost developments have become available since the previous meeting of the MPC, but trends are expected to be relatively unchanged, with average nominal wage growth in excess of inflation contributing to the persistence of inflation at higher levels.

Although food price developments have been relatively benign, they remain a concern to the MPC, with the expectation of an acceleration in the coming months as the impact of the drought feeds through to consumer prices. This is despite the favourable impact of falling prices at the global level. Domestic food price inflation at the consumer level appears to have reached a low point of 4,3 per cent in June, increasing marginally to 4,4 per cent in July and August. The pressures are expected to come from the drought-induced increases in agricultural price inflation for cereals and crops which increased at a year-on-year rate of 38,7 per cent in July.

The recent decline in international oil prices has provided some respite to inflation pressures, with the price of Brent crude oil currently trading at around US\$10 per barrel lower than at the time of the previous MPC meeting. The current global oversupply of crude oil, coupled with the slowdown in China, is expected to keep oil prices contained in the short to medium term. The MPC has revised down its oil price assumption by between US\$3 and US\$4 per barrel in each of the coming years. However, the MPC assesses the risk to the oil price assumption to be on the downside, particularly in the short term. The domestic petrol price declined by a cumulative R1,20 per litre in August and September, and current trends suggest that no significant change is likely in October, with the weaker rand offsetting the impact of the falling dollar price of oil.

The inflation outlook remains a concern for the MPC, with the risks to the forecast assessed to be on the upside. Although two breaches of the target are now expected – in the first and fourth quarters of next year – they are expected to be temporary and primarily the result of base effects from lower petrol prices four quarters previously.

Nevertheless, the MPC is concerned that the longer-term inflation trajectory remains uncomfortably close to the upper end of the target range, and given the upside risks to inflation, the probability of a more extended breach than currently forecast is relatively high. A sustained breach of the target range brings with it the danger of impacting negatively on inflation expectations, which are currently sticky at the upper end of the target range.

The MPC is also concerned about domestic growth prospects, with the economy contracting in the second quarter. Growth is expected to remain constrained by global developments and associated uncertainty and volatility, low business and consumer confidence, and electricity supply shortages. Domestic inflation is not driven by demand factors, and the outlook for household consumption expenditure has deteriorated. However, we have to be mindful of the second-round effects of supply-side shocks on inflation.

There are a number of upside risks to the inflation outlook, the primary one being the exchange rate which has already depreciated significantly against the advanced economy currencies in response to global developments, and is still likely to react further to the commencement of US monetary policy tightening. A further risk emanates from possible higher multi-year increases in electricity tariffs from the middle of next year.

Downside risks to the inflation outlook include international oil prices, should they be sustained at current levels. In addition, weak domestic demand may continue to constrain pricing power in the economy. The Committee nevertheless assesses the overall risks to the inflation outlook to be on the upside.

As noted in previous statements, the MPC has to achieve a fine balance between realising its core mandate and not undermining short-term growth unduly. The MPC has unanimously decided to keep the repurchase rate unchanged for now at 6,0 per cent per annum.

The MPC remains on a gradual policy normalisation path. It will continue to monitor developments closely, and will not hesitate to act appropriately should the risks to the inflation outlook deteriorate materially. As before, any future moves remain highly data-dependent.

Annexure

Summary of assumptions: Monetary Policy Committee meeting on 23 September 2015*

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%	3,3%	3,3%
	(3,1%)	(3,1%)	(3,0%)	(3,3%)	(3,3%)
2. International commodity prices in US\$ (excluding oil)	-6,4%	-9,8%	-17,9%	-5,0%	0,0%
			(-17,0%)	(0,0%)	(5,0%)
3. Brent crude (US\$/barrel)	108,8	99,2	57,1	61,5	65,5
			(60,2)	(65,0)	(68,1)
4. World food prices (US\$).....	-1,6%	-3,8%	-16,2%	1,6%	2,5%
			(-14,0%)	(1,5%)	(2,5%)
5. International wholesale prices	0,3%	-0,1%	-3,0%	0,5%	1,0%
			(-2,2%)	(0,8%)	(1,3%)
6. Real effective exchange rate of the rand (index 2010 = 100)	81,91	79,17	81,41	80,50	80,50
			(81,29)	(80,50)	(80,50)
7. Real effective exchange rate of the rand.....	-10,1%	-3,3%	2,8%	-1,1%	0,0%
			(2,7%)	(-1,0%)	(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%	0,5%	1,5%	1,5%
			(1,0%)	(1,5%)	(1,5%)
2. Administered prices	8,7%	6,7%	2,0%	9,9%	8,5%
			(2,8%)	(9,6%)	(8,4%)
– Petrol price.....	11,8%	7,2%	-9,8%	12,9%	6,6%
			(-7,2%)	(11,7%)	(6,4%)
– Electricity price.....	8,7%	7,2%	9,4%	12,2%	13,0%
			(9,7%)	(12,5%)	(13,0%)
3. Potential growth.....	2,1%	1,9%	1,8%	1,9%	2,1%
	(2,2%)	(2,1%)	(2,1%)	(2,2%)	(2,3%)
4. Repurchase rate (per cent).....	5,00	5,57	5,86	6,00	6,00
			(5,75)	(5,75)	(5,75)

The figures in brackets represent the previous assumption of the MPC.

* For an explanation of foreign-sector assumptions and domestic-sector assumptions, see pages 45 and 46.

Selected forecast results: Monetary Policy Committee meeting on 23 September 2015

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	4,9	5,2	4,7	6,7	5,9	6,0	6,2	6,2	5,9	5,8	5,7	5,7	5,8
							(4,7)	(5,2)	(5,8)	(5,0)	(6,9)	(6,1)	(5,8)	(5,7)	(6,1)	(5,7)	(5,6)	(5,6)	(5,6)	(5,7)
2. Core inflation	5,4	5,6	5,7	5,7	5,6	5,7	5,6	5,4	5,3	5,5	5,4	5,4	5,4	5,5	5,4	5,4	5,3	5,3	5,3	5,3
							(5,7)	(5,6)	(5,5)	(5,6)	(5,5)	(5,4)	(5,4)	(5,3)	(5,4)	(5,3)	(5,2)	(5,2)	(5,1)	(5,2)

Figures below the forecast in parentheses represent the previous MPC forecast.

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

Figures below the forecast in parentheses represent the previous MPC forecast.

Statement of the Monetary Policy Committee

19 November 2015

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 forecast has remained relatively unchanged but the risks to the forecast have increased. The key risks are a marked depreciation of the rand; worsening drought conditions and their likely impact on food prices; and the possibility of additional electricity tariff adjustments. At the same time the economy remains weak despite an improved performance in the manufacturing sector, but both the mining and agricultural sectors appear to have contracted further in the third quarter.

Although global financial markets have stabilised somewhat since the previous meeting, the outlook for emerging markets in particular remains challenging. The United States Federal Reserve (the Fed) is likely to raise its policy rate in December, and further volatility in financial markets can be expected in the lead-up to this.

The year-on-year inflation rate, as measured by the consumer price index (CPI) for all urban areas, measured 4,7 per cent in October, following two consecutive months at 4,6 per cent. Food and non-alcoholic beverages inflation surprised again on the downside at 4,8 per cent, with a contribution of 0,7 percentage points to the overall CPI outcome. Services price inflation remained unchanged at 5,6 per cent, while goods price inflation increased to 3,7 per cent from 3,6 per cent previously. The Bank's measure of core inflation – which excludes food, fuel and electricity – amounted to 5,2 per cent, down from 5,3 per cent in the previous two months.

Producer price inflation for final manufactured goods increased from 3,4 per cent in August to 3,6 per cent in September. The main pressure came from the category of food, beverages and tobacco products, which contributed 2,0 percentage points to the outcome. Food and agricultural crop price developments are expected to sustain the upward trend in producer price inflation in the coming months.

The latest inflation forecast of the Bank shows a slight near-term improvement while the medium-term forecast is marginally higher. Inflation is now expected to average 4,6 per cent in 2015, and 6,0 per cent and 5,8 per cent in the next two years. The anticipated breach of the upper end of the target range in the first quarter of 2016 is now expected to average 6,4 per cent, compared with 6,7 per cent forecast previously. The trajectory for the rest of the year is also slightly lower than previously forecast, with a temporary breach in the fourth quarter of 6,1 per cent. The forecast for 2017 follows a slow downward trend, with inflation still expected to measure 5,7 per cent in the final quarter. The changes in the forecast are due to a lower starting point for the forecast, lower international oil price assumptions, and an adjustment to fees for higher education which are more or less offset by a more depreciated starting point for the real effective exchange rate.

The forecast for core inflation is marginally higher, with an expected average of 5,5 per cent in 2016 and 5,4 per cent in 2017, mainly due to the more depreciated exchange rate assumption.

The inflation expectations survey of the Bureau for Economic Research (BER) is only due for release in December. The median inflation forecast of analysts polled in the latest Reuters Econometer survey is similar to that of the Bank, and has also declined marginally since the previous survey. The break-even inflation rates, while having improved since the previous meeting, remain above the upper end of the target range.

Divergent global developments continue to create a challenging environment for monetary policy. Although the United States (US) recovery appears to be sustained, with further improvements in the labour market, the strong dollar poses downside risks to both growth and inflation. The United Kingdom (UK) economy also remains on its recovery path. By contrast, the recovery in the euro area is much weaker, although the outlook is more favourable than it was earlier in the year. The Japanese economy has contracted for two consecutive quarters, with positive but slow growth expected in the coming quarters.

The Chinese economy shows signs of stabilising, aided by policy stimulus, but the medium-term outlook remains a concern. There is still some uncertainty regarding the extent to which services output and consumption have compensated for the decline in industrial output and investment. The tail risk of a hard landing remains, which could have a significant impact on countries with direct trade linkages, particularly those in Asia, as well as on commodity prices.

Brazil and Russia remain in recession, while the strong performance of the Indian economy has been sustained following a number of structural reforms. The outlook for sub-Saharan Africa, while still positive, has deteriorated in the wake of lower commodity prices, and further weakening could create greater headwinds for South African manufactured exports to this region.

Global inflation trends are benign, with concerns about deflation abating in most advanced economies. Despite significant currency depreciations in commodity-producing economies in particular, inflation pressures have generally been surprisingly contained, with a few exceptions. Emerging markets have had differing experiences: a number of countries in Latin America, particularly commodity producers, have tightened policy in recent months in response to incipient inflationary pressures, while those with low inflation, particularly in Asia, have loosened policy further.

In the advanced economies, monetary policy divergence is expected to continue. Monetary policy is set to remain accommodative in the euro area and Japan, with the possibility of further quantitative easing, against a backdrop of slow growth and benign inflation pressures. In the US, inflation and labour market dynamics as well as communication from the Fed suggest that, in the absence of any major surprises or shocks, an increase in the policy rate can be expected in December. Market expectations are for monetary policy tightening in the UK to commence sometime in the second half of 2016, later than previously expected.

Although volatility in global asset markets has moderated amid improving risk sentiment, emerging-market foreign-exchange markets have been relatively volatile and vulnerable to capital outflows. In the past three months, South Africa has also seen net portfolio outflows: since the end of August, according to JSE Limited data, non-resident sales of equities amounted to R25,9 billion while net bond sales amounted to R5,9 billion.

The rand exchange rate has been particularly volatile, even compared to its peers, as domestic factors also impacted on the currency. Since the previous meeting of the MPC, the rand has appreciated by about 1,0 per cent against the euro but has depreciated by around 3,0 per cent against the dollar and by 1,5 per cent on a trade-weighted basis. As before, the extent to which Fed tightening has been priced into the exchange rate remains uncertain. Nevertheless, a high degree of volatility and overshooting of the exchange rate may be expected in the lead-up to, and in the immediate aftermath of, the start of the US interest rate cycle. Fed communication of future moves will be key. To date, indications are that a moderate policy hiking cycle will be pursued.

Domestic economic growth prospects remain subdued amid weak business confidence, but a further contraction in the third quarter is not expected. The Bank's forecast for gross domestic product (GDP) growth has been revised down marginally for 2015 and 2016 – to

1,4 per cent and 1,5 per cent respectively – but remains unchanged at 2,1 per cent for 2017. The estimate of short-term potential output remains unchanged at 1,8 per cent for this year, rising to 2,1 per cent in 2017. The Bank's composite leading business cycle indicator declined further in August, consistent with the fragile outlook.

The manufacturing sector recovered somewhat in the third quarter, mainly due to a surprisingly strong performance in September, and is expected to have contributed positively to GDP growth. However, the Barclays Purchasing Managers' Index (PMI) declined further in October, and has been below the neutral level of 50 for three consecutive months, suggesting a constrained outlook for the sector. The mining sector is expected to subtract from GDP growth following a further contraction in the third quarter, while the continuing drought points to a third successive quarterly contraction for the agricultural sector. The outlook for the construction sector is constrained following significant declines in new building plans passed, reflected in a 9-point drop in the First National Bank (FNB)/BER Building Confidence Index.

Against this backdrop, formal sector employment trends remain disappointing. According to the *Quarterly Employment Statistics* survey of Statistics South Africa (Stats SA), employment in the formal non-agricultural sector declined in the second quarter of 2015, as the private sector continued to shed jobs. Although the *Quarterly Labour Force Survey* indicates an increase in the number of persons employed in the third quarter, the number of unemployed persons rose sharply in the quarter as the number of new entrants increased. Consequently, the official unemployment rate increased to 25,5 per cent in the third quarter.

There are minimal demand-side pressures in the economy. Consumption expenditure by households continues to be inhibited by, inter alia, low consumer confidence, declining disposable income growth and slow employment growth. The latest retail trade sales data suggest that household expenditure may have lost further momentum in the third quarter. Durable goods sales remain under pressure, as indicated in the intensification of the downward trend in motor vehicle sales in recent months.

Consumption expenditure is also constrained by the continued slow growth in credit extension to households by banks. Unsecured lending remains subdued and is likely to be affected further by the recently announced caps on interest rates by the Department of Trade and Industry, while the decline in growth in instalment sale credit and leasing finance is indicative of the softer motor vehicle sales.

Credit extension to corporates remains robust, particularly commercial mortgage finance, which reflects in part a switch away from funding in the bond market by property funds.

The recent Medium-Term Budget Policy Statement (MTBPS) signalled government's continued commitment to fiscal consolidation, although at a slower pace. Most of the expanded deficit is attributable to lower-than-expected tax revenues in response to the weaker growth outlook.

Trends in wage growth remain a concern and contribute to the persistence of inflation at elevated levels. Year-on-year growth in salaries and wages per worker accelerated to 8,7 per cent in the second quarter of 2015; after adjusting for labour productivity increases, total unit labour costs increased from 4,3 per cent to 5,1 per cent. By contrast, the average wage settlement rate in collective bargaining agreements recorded by Andrew Levy Employment Publications recorded a moderation to 7,7 per cent in the first three quarters of the year, compared with 8,1 per cent in 2014.

Apart from the exchange rate, the main upside risks to inflation come from possible electricity tariff and food price increases. Eskom's application for a Regulatory Clearing Account (RCA) to the National Energy Regulator (NERSA) to claw back excess expenditure of R22,8 billion is likely to lead to a further tariff increase, although the quantum and

timing is uncertain. This is in addition to the 12,2 per cent tariff increase already built into the inflation forecast for next year. No provision is made for the RCA application in the forecast at this stage, but it is regarded as an upside risk.

A higher food price trajectory has been incorporated in the forecast for some time, but food price inflation has surprised on the downside in recent months despite sharp increases in maize and cereals prices earlier in the year. However, the increased intensity of the drought (which has led to downward revisions of the domestic maize crop estimate) as well as the incipient pressures evident in both the PPI and the CPI suggest that an acceleration in food price inflation is likely, adding to the upside risk to the inflation outlook.

By contrast, international oil price developments are expected to remain benign, with current spot prices below US\$45 per barrel, somewhat lower than those assumed over the forecast period. Although petrol prices have contributed to a succession of downside inflation surprises in recent months, the beneficial impact of lower international oil prices on domestic petrol prices has been offset to some extent by the depreciation of the rand. The latest data suggest that, should current trends continue, a small drop in the petrol price can be expected next month despite the further depreciation of the currency.

Although the inflation forecast is relatively unchanged since the previous meeting, the upside risks to the inflation outlook are more pronounced. As noted, these risks relate to the persistent exchange rate depreciation, electricity tariffs and food prices, and are assessed to outweigh possible downside risks from lower international oil prices and subdued exchange rate pass-through. While these factors cannot be dealt with directly through monetary policy, the MPC is concerned that failure to act could cause inflation expectations to become unanchored and generate second-round effects and more generalised inflation. Although core inflation has remained steady and inflation expectations to date have been relatively anchored, they remain at uncomfortably elevated levels.

The general approach of the MPC is to attempt to see through exogenous shocks and react to second-round effects. However, shocks of a persistent nature – for example extended periods of currency depreciation or drought, or multi-year increases in electricity prices – make it more difficult to disentangle these first- and second-round effects.

In the absence of demand pressures, the MPC had to decide whether to act now or later. On the one hand, given the relative stability in the underlying core inflation, delaying the adjustment could give the MPC room to re-assess these unfolding developments at the next meeting and avoid possible additional headwinds to the weak growth outlook. On the other hand, delaying the adjustment further could lead to second-round effects and require an even stronger monetary policy response in future, with more severe consequences for short-term growth.

Complicating the decision was the deteriorating economic growth outlook. Although the change to the growth forecast was marginal, risks to the outlook – which were more or less balanced at the previous meeting – are now assessed to be on the downside.

Against this difficult backdrop, the MPC has decided to increase the repurchase rate by 25 basis points to 6,25 per cent per annum effective from 20 November 2015. Four members preferred an increase while two members favoured an unchanged stance.

Despite the increase, the MPC still views the monetary policy stance as being accommodative. The continuing challenge is for monetary policy to achieve a fine balance between achieving the Bank's core mandate of price stability and not undermining short-term growth unduly. Monetary policy actions will continue to focus on anchoring inflation within the target range while remaining sensitive, to the extent possible, to the fragile state of the economy. As before, any future moves will therefore be highly data-dependent.

Annexure

Summary of assumptions: Monetary Policy Committee meeting on 19 November 2015*

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%	3,1%	3,3%
			(2,8%)	(3,3%)	(3,3%)
2. International commodity prices in US\$ (excluding oil)	-6,4%	-9,8%	-18,2%	-7,0%	-0,5%
			(-17,9%)	(-5,0%)	(0,0%)
3. Brent crude (US\$/barrel)	108,8	99,2	54,9	56,0	60,0
			(57,1)	(61,5)	(65,5)
4. World food prices (US\$).....	-1,6%	-3,8%	-18,0%	-2,8%	2,7%
			(-16,2%)	(1,6%)	(2,5%)
5. International wholesale prices	0,3%	-0,1%	-3,2%	0,2%	0,8%
			(-3,0%)	(0,5%)	(1,0%)
6. Real effective exchange rate of the rand (index 2010 = 100)	81,91	79,17	80,41	77,00	77,00
			(81,41)	(80,50)	(80,50)
7. Real effective exchange rate of the rand.....	-10,1%	-3,3%	1,6%	-4,2%	0,0%
			(2,8%)	(-1,1%)	(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%	0,5%	1,5%	1,5%
			(0,5%)	(1,5%)	(1,5%)
2. Administered prices.....	8,7%	6,7%	1,7%	7,7%	8,1%
			(2,0%)	(9,9%)	(8,5%)
– Petrol price.....	11,8%	7,2%	-10,6%	7,2%	6,4%
			(-9,8%)	(12,9%)	(6,6%)
– Electricity price	8,7%	7,2%	9,4%	12,2%	13,0%
			(9,4%)	(12,2%)	(13,0%)
3. Potential growth.....	2,1%	1,9%	1,8%	1,9%	2,1%
			(1,8%)	(1,9%)	(2,1%)
4. Repurchase rate (per cent)	5,00	5,57	5,86	6,00	6,00
			(5,86)	(6,00)	(6,00)

The figures in brackets represent the previous assumption of the MPC

* For an explanation of foreign-sector assumptions and domestic-sector assumptions, see pages 45 and 46.

Selected forecast results: Monetary Policy Committee meeting on 19 November 2015

Selected forecast results (quarterly)

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

Figures below the forecast in parentheses represent the previous MPC forecast.

Selected forecast results (annual)

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

Figures below the forecast in parentheses represent the previous MPC forecast.

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), 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 inflation (CPI) 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**, or 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).

Abbreviations

BER	Bureau for Economic Research
BRICS	Brazil, Russia, India, China, South Africa
BRIICS	Brazil, Russia, Indonesia, India, China and South Africa
CPI	consumer price index
FAO	Food and Agriculture Organization of the United Nations
Fed	United States Federal Reserve
FNB	First National Bank
GDP	gross domestic product
HICP	harmonised index of consumer prices
IIF	International Institute of Finance
IMF	International Monetary Fund
MPC	Monetary Policy Committee
<i>MPR</i>	<i>Monetary Policy Review</i>
MTBPS	Medium-Term Budget Policy Statement
MYPD	multi-year price determination
NEER	nominal effective exchange rate
NERSA	National Energy Regulator
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PMI	Purchasing Managers' Index
PPI	producer price index
PPP	purchasing power parity
<i>QES</i>	<i>Quarterly Employment Statistics</i>
<i>QLFS</i>	<i>Quarterly Labour Force Survey</i>
RAF	Road Accident Fund
RCA	Regulatory Clearing Account
REER	real effective exchange rate
repo (rate)	repurchase (rate)
Stats SA	Statistics South Africa
SSA	sub-Saharan Africa
the Bank	South African Reserve Bank
UK	United Kingdom
ULC	unit labour cost
US	United States

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 GDP 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 South African Reserve Bank forecasts.

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.

Crawling peg: An exchange rate regime that lies between the fixed and floating regimes. A crawling peg adjusts slowly based on the changes to an 'anchor' exchange rate against which it is linked.

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): 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 Stats SA. Headline CPI is a measure of price levels in all urban areas. The 12-month percentage change in headline CPI is referred to as 'headline CPI inflation' and reflects changes in the cost of living. This is the official inflation measure for South Africa.

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

Household disposable income: Household disposable income is defined as primary income, net current transfers and social benefits, less taxes on income and wealth.

Import penetration: This ratio shows the degree to which domestic demand is satisfied by imports. It is calculated as imports divided by domestic demand (where domestic demand is gross domestic product minus exports plus imports).

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 a 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: 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.

Mortgage: A mortgage is a form of secured loan extended for the purchase of real estate.

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.

Non-tradeables: These are goods and services produced and consumed domestically that are not close substitutes for goods and services that are imported or exported.

Output gap/potential growth (GDP): Potential growth is the rate of GDP growth that could theoretically be achieved if all productive assets in the economy are 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 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.

Quantitative easing (QE): QE involves the central bank purchasing assets on the open market so as to inject liquidity into the economy.

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 South African Reserve Bank.

Real repo rate: This is the nominal repurchase (repo) 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.

Structural reforms: The reforms necessary to increase a country's potential growth rate, which differ from country to country. In South Africa, the National Development Plan is considered the most comprehensive guide to necessary structural reforms for the economy.

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

Tradeables: Goods or services that are imported or exported.

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

