Monetary Policy Review

May 2006

South African Reserve Bank

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Introduction

Forecasts suggest that the inflation outlook has improved significantly, and there is evidence that inflation expectations and wage settlements are increasingly in line with the inflation target. At the same time, however, there are aspects of the inflation environment that increasingly demand caution. Continued strong consumer demand, which shows few signs of moderating, and resurgent international oil prices are particularly significant concerns.

Against a backdrop of lower domestic inflation and interest rates, consumer and business confidence remain high. The strong growth in household consumption expenditure is reflected in rising household debt levels, vigorous credit extension, and the widening deficit on the current account of the balance of payments. All carry potential risks for the inflation and interest rate outlook. Furthermore, in an international environment characterised by robust global demand and persistent global imbalances, rising oil and commodity prices feature prominently. Geopolitical factors and tight market conditions suggest that the risks of oil price spikes are significant.

This *Monetary Policy Review* provides an analysis of recent price developments, the factors that affect inflation as well as the outlook for inflation. In addition, three focus topics are presented in boxes. The first box considers international trends in household debt, and discusses the factors underlying these trends and their implications. The second box reports on research into the growth rate of potential output in South Africa, and the third discusses recent proposals regarding how best to tackle global imbalances in order to ensure longer-term sustainable global economic growth.

Recent developments in inflation

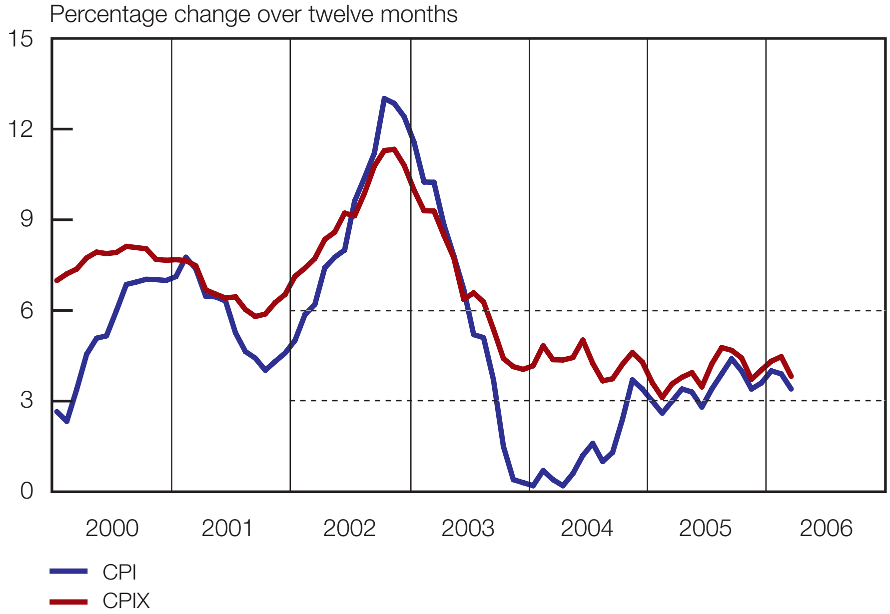
This section reviews recent trends in the main inflation indices, and provides an analysis of developments in the main factors impacting on inflation in South Africa.

The evolution of indicators of inflation

Figure 1 shows that the measure of inflation targeted by the Bank, the year-on-year increase in the consumer price index excluding mortgage interest cost for metropolitan and other urban areas (CPIX), has remained within the inflation target range of 3 to 6 per cent for 31 consecutive months up to March 2006. When the previous *Monetary Policy Review* was published, the latest available rate (for September 2005) was 4,7 per cent. Inflation then declined to 3,7 per cent in November 2005 before increasing to 4,5 per cent in February 2006 and then decelerated once more to 3,8 per cent in March. The analysis presented in this section shows that fluctuations in petrol and food prices have been the major contributors to movements in CPIX inflation in this period.

With the repurchase or repo rate having remained unchanged from mid-April 2005, inflation measured in terms of the headline consumer price index for metropolitan areas (CPI) has tracked that of CPIX closely in the past year (Figure 1). The CPI inflation rate declined from 4,4 to 3,4 per cent between September and November 2005, and then increased to 4,0 per cent in January 2006 before slowing to 3,4 per cent in March.

Figure 1 Consumer price inflation: CPIX and CPI



Source: Statistics South Africa

The weighted contributions of the main components of the CPIX to the overall year-on-year inflation rate, presented in Table 1, confirm that developments in the transport and food components of the index have had a significant influence on CPIX inflation. Food prices, which have a weight of 23,7 per cent in the index, contributed 0,5 percentage points to CPIX inflation in November 2005 when the overall inflation rate was 3,7 per cent. This contribution increased to 1,1 percentage points in December 2005 and January 2006, and further to 1,2 percentage points in February and March 2006. The contribution of the transport component to CPIX inflation, driven mainly by petrol prices, declined from 1,3 percentage points in September 2005 to 0,8 percentage points in December 2005, before increasing to 1,2 and 1,3 percentage points in January and February 2006, respectively. The contribution of this component then declined to 0,7 percentage points in March, when the overall CPIX inflation rate slowed to 3,8 per cent.

Table 1 Contributions to CPIX inflation

Percentage change over twelve months* and percentage points

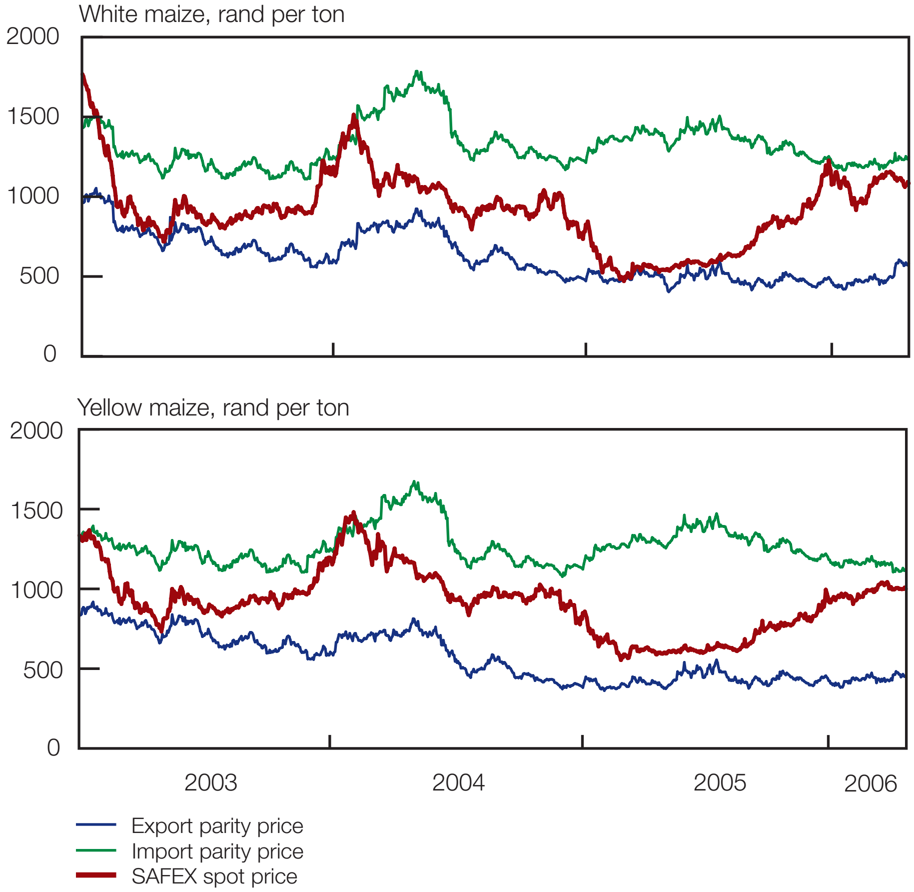
	2005				2006		
	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Total*	**4,7**	**4,4**	**3,7**	**4,0**	**4,3**	**4,5**	**3,8**
Of which:							
Food	0,7	0,6	0,5	1,1	1,1	1,2	1,2
Housing	0,6	0,6	0,5	0,5	0,5	0,5	0,5
Medical care and health expenses	0,6	0,6	0,6	0,6	0,6	0,6	0,6
Transport	1,3	1,3	0,9	0,8	1,2	1,3	0,7
Education	0,4	0,4	0,4	0,4	0,4	0,4	0,4
Other	1,1	0,9	0,8	0,6	0,5	0,5	0,4

Source: Statistics South Africa

The contributions of the other main components of the CPIX remained relatively constant over the period under review. The housing component, which contributed 0,6 percentage points in September and October 2005, contributed 0,5 percentage points between November 2005 and March 2006. The medical care and health expenses component and the education component remained subdued, contributing 0,6 and 0,4 percentage points, respectively, to the year-on-year inflation rates in Table 1.

Although inflation pressures from grain prices in the food component of the CPIX have been muted, maize prices have gravitated towards their import parity prices in 2006 (Figure 2). The price of yellow maize increased from a low of R554/ton late in February 2005 to R1 000/ton on 25 April 2006, while that of white maize rose from R471/ton to R1 084/ton over the same period.

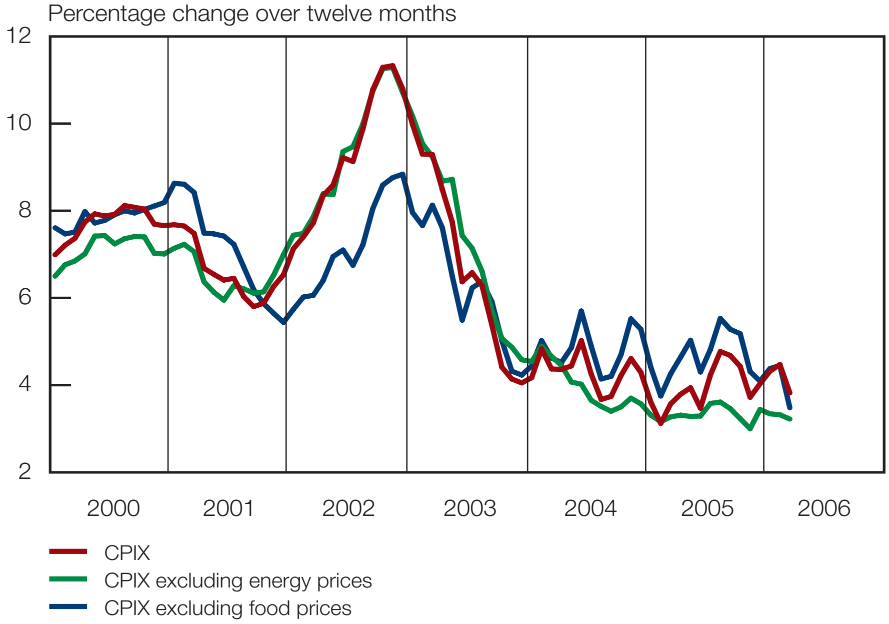
Figure 2 Maize prices



Source: Grain South Africa

The effect of excluding energy and food prices from the year-on-year CPIX inflation measure is shown in Figure 3. The moderating effect of food prices on the overall CPIX inflation rate, which was evident throughout 2005, has disappeared in recent months. Excluding food, CPIX inflation declined from 5,3 per cent in September 2005 to 4,1 per cent in December 2005, before increasing to 4,5 per cent in February 2006 and then slowing to 3,5 per cent in March. Energy prices, by contrast, continue to deviate significantly from the overall CPIX inflation rate. Excluding energy prices, CPIX inflation declined from 3,5 per cent to 3,0 per cent between September and November 2005, then increased once more to 3,4 per cent in December 2005 before receding to 3,2 per cent in March 2006.

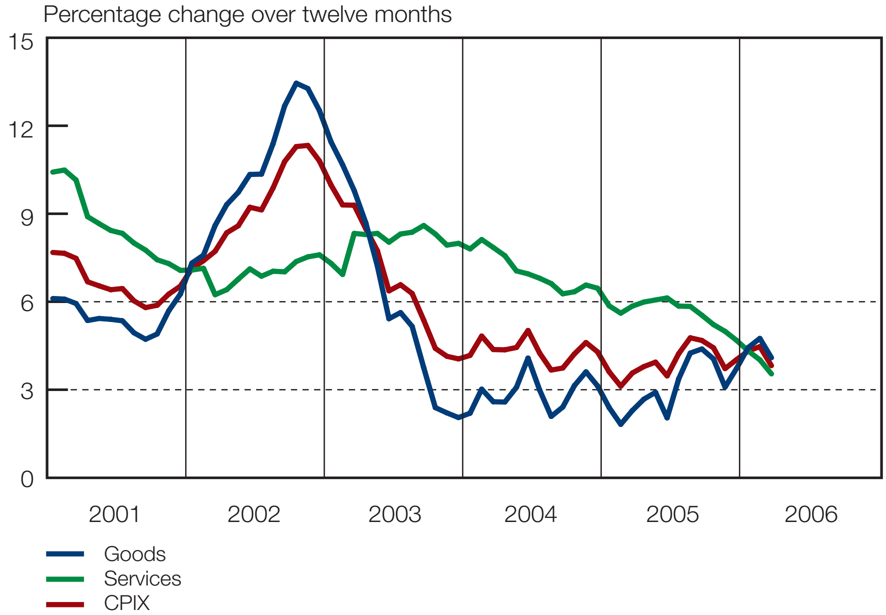
Figure 3 The effect of food and energy prices on CPIX inflation



Sources: Statistics South Africa and SARB calculations

Figure 4 presents the inflation rates for the goods and services categories of the CPIX, and reveals that since January 2006 goods prices have increased at a faster rate than those of services for the first time since April 2003. The year-on-year inflation rate for goods

Figure 4 CPIX: Goods and services inflation



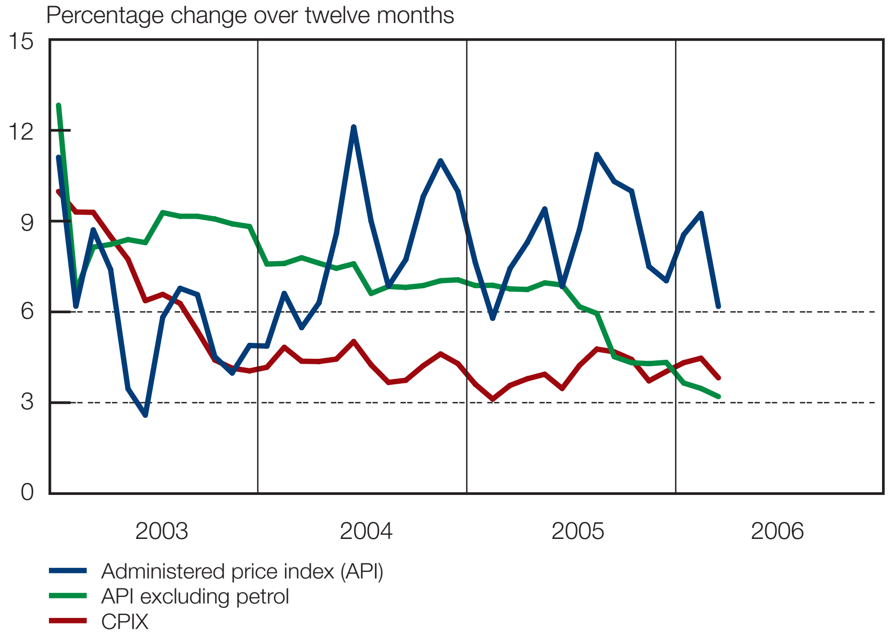
Source: Statistics South Africa

prices declined from 4,4 per cent in September 2005 to 3,1 per cent in November 2005 before increasing to 4,8 per cent in February 2006 and then decelerating once more to 4,1 per cent in March.

Services price inflation declined continuously from 5,5 per cent in September 2005 to 3,5 per cent in March 2006. The deceleration in services inflation can be attributed to significant declines in a number of components of the index. The inflation rate for the housing services component (which has a weight of 40 per cent in the services index) slowed from 7,0 per cent in August 2005 to 3,6 per cent in March 2006. Communication services inflation declined from 2,5 per cent in August 2005 to a negative 2,4 per cent in January-March 2006, while medical services inflation slowed from 9,9 per cent in August 2005 to 7,0 per cent in March. Education services inflation declined from 8,0 per cent in the preceding twelve months to 7,1 per cent in March 2006.

Figure 5 presents the year-on-year inflation rate for the administered price index (API). In the period under review, the API inflation rate declined from 10,3 per cent in September 2005 to 7,0 per cent in December 2005, before increasing to 9,3 per cent in February 2006 and then slowing to 6,2 per cent in March. As noted above, fluctuations in petrol prices continue to have a significant impact on inflation in South Africa, and this is particularly the case with API inflation since petrol has a weight of 25,4 per cent in the API basket. Excluding the petrol component, the inflation rate for the remaining administered prices declined from 4,5 per cent in September 2005 to 3,2 per cent in March 2006.

Figure 5 CPIX and administered prices



Sources: Statistics South Africa and SARB calculations

Table 2 presents the contributions of various components of the API to the overall API inflation rate. The dominant influence of the contribution of the petrol component is clearly evident from the table, both in terms of size and in terms of the impact of fluctuations on the overall API inflation rate. Its contribution declined from 7,0 percentage points in September 2005, when the API inflation rate was 10,3 per cent, to 3,8 percentage points in December 2005, when API inflation was 7,0 per cent. It then increased to 7,1 percentage points in February 2006 when the corresponding API inflation rate was 9,3 per cent. In March, the contribution of the petrol component declined to 3,8 percentage points when the API inflation rate slowed to 6,2 per cent.

Table 2 Contributions to administered price inflation

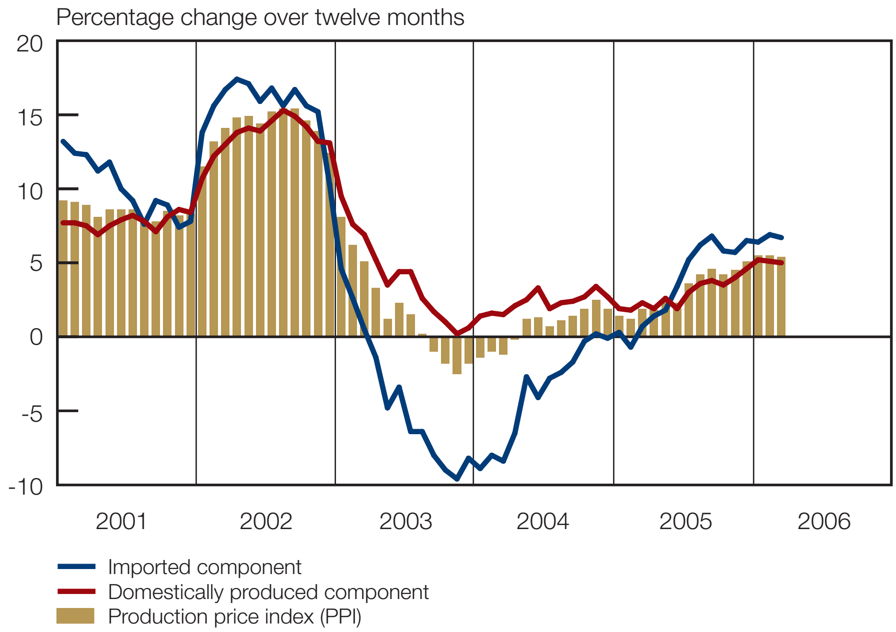
Percentage change over twelve months* and percentage points

	2005				2006		
	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Total*	10,3	10,0	7,5	7,0	8,6	9,3	6,2
Of which:							
Petrol	7,0	6,7	4,2	3,8	6,2	7,1	3,8
Electricity	0,5	0,3	0,3	0,3	0,2	0,1	0,0
Assessment rates	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Education services	1,2	1,2	1,2	1,2	1,2	1,2	1,1
Medical services	0,1	0,1	0,1	0,0	-0,0	-0,1	-0,1
Communication	0,0	0,0	-0,0	-0,0	-0,4	-0,4	-0,4
Other	1,0	1,2	1,2	1,2	0,9	0,9	1,3

Source: Statistics South Africa

The inflation rate measured in terms of the production price index (PPI) is presented in Figure 6. After declining from 4,6 per cent in September 2005 to 4,2 per cent in October 2005, the overall PPI inflation rate rose to 5,5 per cent in January and February 2006 before slowing marginally to 5,4 per cent in March. The imported component of the index continued to exert upward pressure on the overall PPI inflation rate. After declining

Figure 6 Production price inflation



Source: Statistics South Africa

from 6,8 per cent in September 2005 to 5,7 per cent in November 2005, the inflation rate for this component increased to 6,9 per cent in February 2006 and then slowed to 6,7 per cent in March. Inflation measured in terms of the domestic component of the PPI also increased from 3,8 per cent in September 2005 to 5,2 per cent in January 2006, before receding slightly to 5,0 per cent in March.

The weighted contribution of the imported component declined from 1,7 percentage points in September 2005 to 1,4 percentage points in November 2005 before increasing to 1,6 percentage points in the four months thereafter. The domestic component's contribution to PPI inflation increased from 2,9 percentage points in September 2005 to 3,8 percentage points in March 2006.

Factors affecting inflation

Recent developments in some of the main drivers of inflation in South Africa are reviewed in this section. The outlook for these variables, and therefore for inflation, is discussed in a later section.

International economic developments

The International Monetary Fund (IMF) estimates that the world economy grew by 4,8 per cent in 2005 (Table 3), above an earlier estimate of 4,3 per cent but below the 5,1 per cent recorded in 2004. While growth in some of the advanced economies slowed in 2005, emerging-market economies continued to grow strongly. The impact on global growth of higher oil prices, which has been a recurring theme in recent editions of this *Review*, has however been relatively moderate, and the global inflation rate rose only marginally from 3,7 per cent in 2004 to 3,8 per cent in 2005.

Table 3 Annual percentage change in real gross domestic product and consumer prices

Per cent

		Real GDP	Consumer prices
	Share of global real GDP*	2005	2005
World	100,0	4,8	3,8
Advanced economies	52,3	2,7	2,3
United States	20,1	3,5	3,4
Japan	6,4	2,7	-0,3
Euro area	14,8	1,3	2,2
United Kingdom	3,0	1,8	2,1
Other advanced economies	6,2	3,7	2,1
Other emerging-market and developing countries	47,7	7,2	5,4
Africa	3,3	5,2	8,5
Central and eastern Europe	3,3	5,3	4,8
Commonwealth of Independent States	3,8	6,5	12,3
Developing Asia	27,1	8,6	3,6
China	15,4	9,9	1,8
India	5,9	8,3	4,2
Middle East	2,8	5,9	8,4
Western hemisphere	7,4	4,3	6,3

* GDP shares based on the IMF's purchasing-power-parity valuation of country GDPs for 2005

Source: IMF *World Economic Outlook,* April 2006.

The economy of the United States of America (US) proved resilient in 2005, despite progressive monetary tightening, waning fiscal stimulus, natural disasters and a sharp increase in energy prices. Real gross domestic product (GDP) growth of 3,5 per cent was recorded, the fastest growth rate in the G7. As has been the case in many economies, however, consumer prices in the US continue to be buffeted by oil prices, averaging 3,4 per cent in 2005. Core CPI inflation – which excludes food as well as energy prices – moved higher in the first quarter of last year and then slowed slightly to stabilise at just over 2 per cent.

Growth in Japan was faster than expected at 2,7 per cent in 2005, with business investment and personal consumption expenditure acting as the main locomotives of growth. CPI inflation averaged -0,3 per cent in 2005. However with stronger growth resuming, the year-on-year headline CPI and core inflation rates became positive as of January 2006 and November 2005, respectively.

The widely anticipated improvement in euro area growth finally materialised in the third quarter of last year, with GDP advancing by 2,7 per cent, the fastest pace since the first quarter of 2004. Growth subsequently slowed to 1,0 per cent over the final three months of the year, resulting in overall growth of 1,3 per cent for 2005. The higher oil prices impacted on headline CPI inflation throughout 2005, briefly pushing the year-on-year rate as high as 2,6 per cent in September, well above the European Central Bank's (ECB's) "close to but below 2,0 per cent" target ceiling.

The United Kingdom (UK), after posting an expansion of 3,2 per cent in real GDP in 2004 slowed significantly in 2005 to record growth of 1,8 per cent, largely as a result of a deceleration in consumer spending associated with a cooling in the housing market. The CPI inflation rate accelerated to 2,1 per cent in 2005, after averaging 1,3 per cent in 2004.

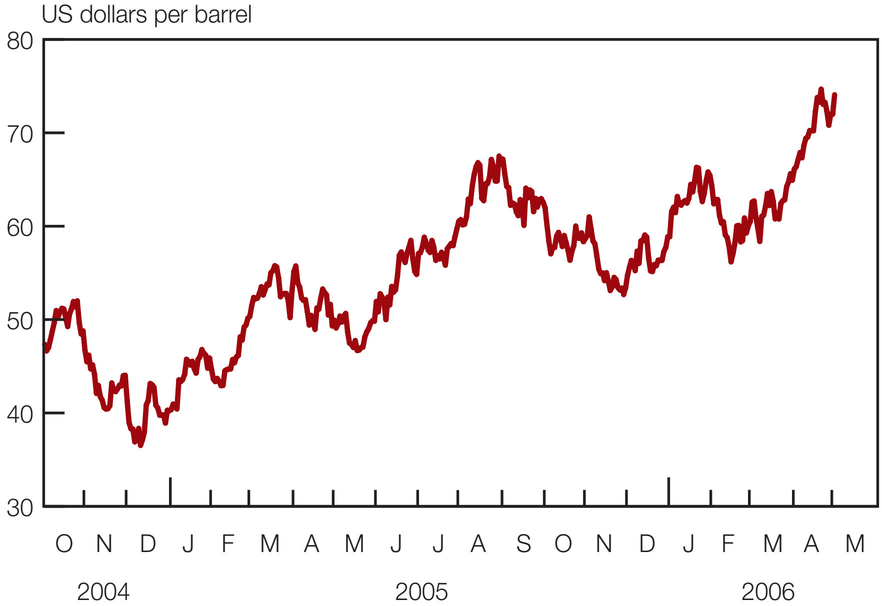
Growth in India in 2005 advanced impressively at 8,3 per cent, only slightly less spectacular than the 9,9 per cent posted by China. In the Middle East, rising oil production and prices have continued to support GDP growth, accompanied by dramatic improvements in external current-account and fiscal positions. GDP growth of 5,9 per cent was registered in 2005. Growth in oil-importing countries in the sub-Saharan Africa region, while slowing, has so far held up surprisingly well. African economies grew by 5,2 per cent in 2005, with inflation rising from 8,1 per cent in 2004 to 8,5 per cent in 2005.

Oil prices

International oil prices have fluctuated sharply in the period under review, as geopolitical factors and related concerns about supply disruptions as well as downstream bottlenecks have impacted on the markets. As Figure 7 shows, the Brent crude oil spot price declined from a peak of just below US$70 per barrel towards the end of August 2005 to around US$53 at the end of November, before increasing to over US$66 per barrel late in January 2006 and then falling once more to around US$56 in mid-February. By late April, the price had risen to new record-high levels above US$74 per barrel.

From the highs recorded in August 2005, prices fell immediately as emergency oil reserves were released to the markets and Saudi Arabia promised to increase its output. However, throughout December futures prices were supported by cold weather in the US. Attention also began to focus on concerns regarding Iran's nuclear programme as well as Nigerian supply disruptions, and international crude oil prices began to rise early in 2006 as a result of these concerns.

Figure 7 Price of Brent crude oil



Source: Bloomberg

February 2006 was dominated by robust US inventories data, with the US Energy Department reporting a jump in inventories around the middle of the month. At the end of the month, crude inventories in the US reached their highest level since 1999. Prices were lower in February despite an attack on a Saudi Arabian oil facility at month-end, news that Nigerian oil production had been cut by 20 per cent as a result of attacks by militants, as well as lingering concerns about Iran, as the International Atomic Energy Agency reconvened to consider the country's nuclear programme.

In March, despite the International Energy Agency (IEA) lowering its forecast of global oil demand growth by 300 000 barrels per day to 1,5 million barrels per day, an unexpected decline in US inventories at the end of the month pushed oil prices back up to a two-month high. Prices then continued to rise amid increasing concerns that the dispute over Iran's nuclear programme could result in military conflict disrupting crude oil supplies, reaching levels above US$74 per barrel by late April 2006.

Central bank interest rate developments

Table 4 depicts the most recent interest rate changes made by a selection of central banks. Of those banks that made changes in the period since November 2005, when the previous *Monetary Policy Review* was published, a significant majority have opted to raise official interest rates.

The US Federal Open Market Committee (FOMC) raised its target for the federal funds rate to 4,75 per cent in March 2006, the fifteenth consecutive 25-basis-point increase since mid-2004. The FOMC indicated that while longer-term inflation expectations remain well contained in the US, inflationary concerns centre around the increased resource utilisation rates, and higher energy and commodity prices. In the short-to-medium term, monetary policy in the US is likely to have a bias towards tightening. Canada's central bank resumed interest rate increases in March and April 2006, raising the target for the overnight rate to 4,00 per cent.

Table 4 Selected central bank interest rates
Per cent

Countries	1 Jan 2005	3 May 2006	Latest change (percentage points)	
United States	2,25	4,75	28 Mar 2006	(+0,25)
Japan	0,00	0,00	19 Mar 2001	(-0,15)
Euro area	2,00	2,50	8 Mar 2006	(+0,25)
United Kingdom	4,75	4,50	4 Aug 2005	(-0,25)
Canada	2,50	4,00	25 Apr 2006	(+0,25)
Denmark	2,00	2,50	3 Mar 2006	(+0,25)
Sweden	2,00	2,00	1 Mar 2006	(+0,25)
Switzerland	0,25 – 1,25	0,75 – 1,75	16 Mar 2006	(+0,25)
Australia	5,25	5,75	3 May 2006	(+0,25)
New Zealand	6,50	7,25	8 Dec 2005	(+0,25)
Israel	3,70	5,25	1 May 2006	(+0,25)
China	5,58	5,85	28 Apr 2006	(+0,27)
Hong Kong	3,75	6,25	29 Mar 2006	(+0,25)
Indonesia	7,43	12,75	6 Dec 2005	(+0,50)
Malaysia	2,70	3,50	26 Apr 2006	(+0,25)
South Korea	3,25	4,00	9 Feb 2006	(+0,25)
Taiwan	1,75	2,375	30 Mar 2006	(+0,125)
Thailand	2,00	4,75	10 Apr 2006	(+0,25)
India	4,75	5,50	24 Jan 2006	(+0,25)
Brazil	17,75	15,75	19 Apr 2006	(-0,75)
Chile	2,25	5,00	13 Apr 2006	(+0,25)
Mexico	8,81	7,00	21 Apr 2006	(-0,25)
Czech Republic	2,50	2,00	31 Oct 2005	(+0,25)
Hungary	9,50	6,00	20 Sep 2005	(-0,25)
Poland	6,50	4,00	1 Mar 2006	(-0,25)
Russia	13,00	12,00	26 Dec 2005	(-1,00)

Source: National central banks

After maintaining an unchanged monetary policy stance since mid-2003, the ECB raised interest rates by 25 basis points in December 2005 and again in March 2006. The latter decision was due to perceived upside risks to price stability as a result of strong monetary and credit growth, and changes in administered prices and indirect taxes. After reducing interest rates by 25 basis points to 4,5 per cent in August 2005, the Bank of England (BOE) has subsequently left interest rates unchanged.

The Bank of Japan (BOJ) announced an important shift in policy in March 2006 which involved ending the quantitative easing policy which had been in place since March 2001. In terms of the new policy, the operating target of money-market operations has been shifted from the outstanding balance of current accounts of commercial banks held at the BOJ to a short-term interest rate, the uncollateralised overnight call rate. Australia raised its cash rate by 25 basis points to 5,75 per cent in May as a result of increased inflationary risks.

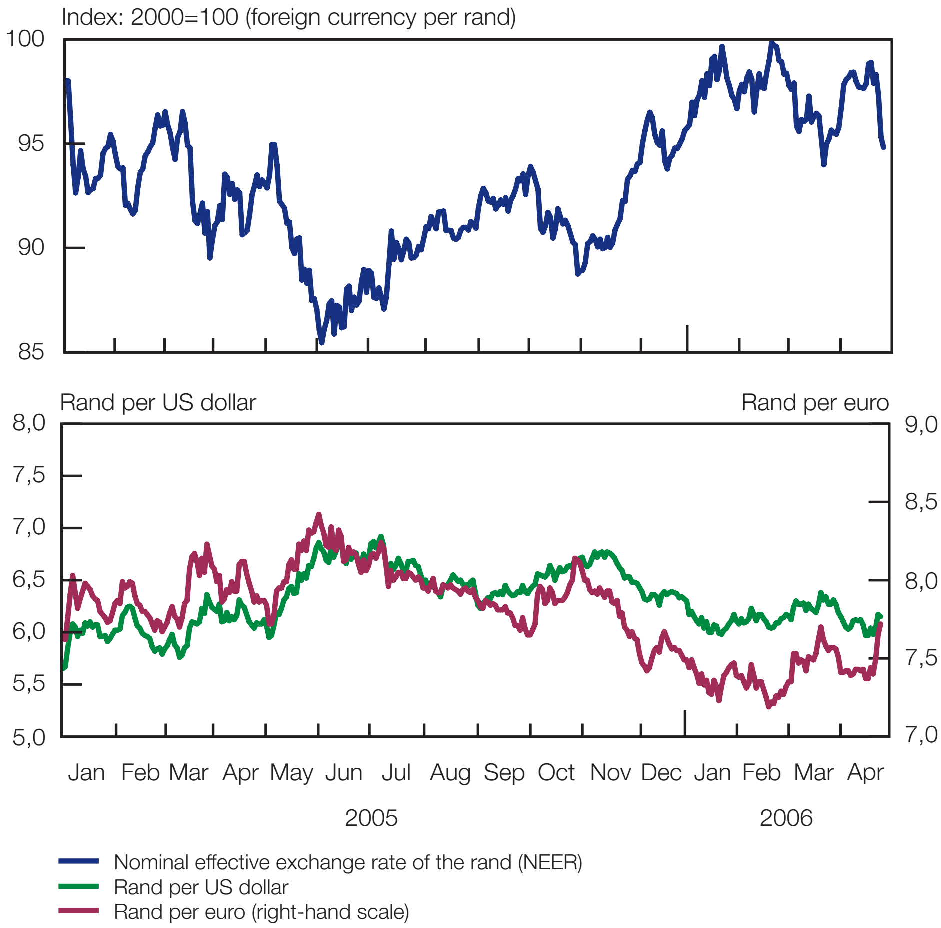
Taiwan’s discount rate was increased for the seventh consecutive quarter to 2,375 per cent, the highest level in more than four years, in order to contain inflation pressures, while China raised the benchmark lending rates of financial institutions to 5,85 per cent late in April. The central banks of Thailand and South Korea also raised interest rates during the first quarter of 2006 as a result of the robust domestic demand underpinning growth in both countries. Given the anticipated upward pressure on core inflation, interest rates have been increased to 4,75 per cent in Thailand and 4,0 per cent in South Korea.

In Latin America, the central banks of Brazil and Mexico reduced interest rates during 2006 as inflationary pressures continued to be benign. The Bank of Brazil has cut the overnight rate to 15,75 per cent, its lowest level since March 2001, although real rates remain among the highest in the world. After reducing interest rates by a further 25 basis points in April, the Bank of Mexico gave some indication that it may be reaching the end of its loosening cycle.

Exchange rate developments

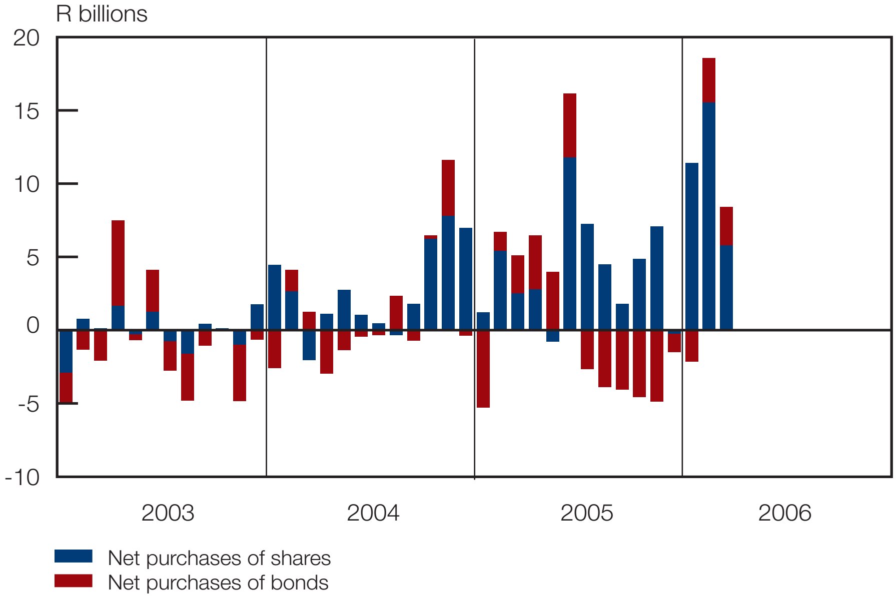
Figure 8 shows that the nominal effective exchange rate of the rand measured against a basket of thirteen currencies (NEER) strengthened to near its year-2000 average level in January and mid-February 2006, before weakening in March and recovering once more in April. The NEER is currently trading at around the levels recorded at the end of 2005. Measured on a bilateral basis, the rand has fluctuated between R5,97 and R6,77 against the US dollar and between R7,19 and R7,95 against the euro since the publication of the November 2005 *Monetary Policy Review.*

Figure 8 Exchange rates of the rand



Alongside movements in the US dollar-euro exchange rate and changes in investor sentiment regarding emerging markets in general, strong commodity prices and robust investment flows into the country have continued to support the domestic currency. Following a large foreign direct investment inflow of R32,2 billion during the third quarter of 2005, an inflow of R5,7 billion was recorded in the fourth quarter. Portfolio investment rose by 36,3 per cent in 2005, despite an outflow of R4,1 billion in the final quarter of the year as non-residents reduced their holdings of South African bonds and a eurodenominated bond was redeemed by Eskom. In the first three months of 2006, net purchases of shares and bonds by non-residents totalled R32,8 billion and R3,5 billion, respectively, although this may include some movements between asset classes (Figure 9).

Figure 9 Net purchases of shares and bonds by non-residents



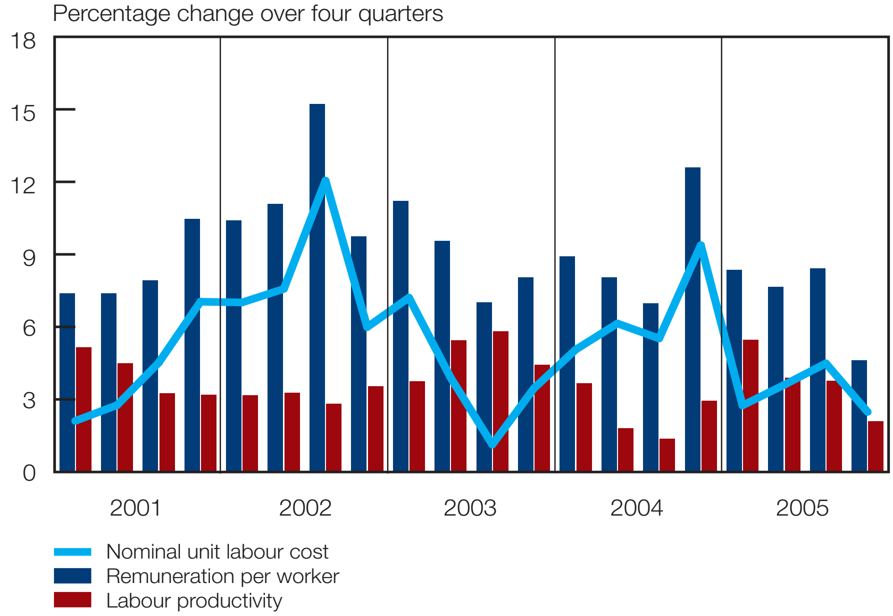
Labour markets

The December 2005 *Quarterly Employment Statistics* survey published by Statistics South Africa reveals that wage inflation, measured as the year-on-year growth rate in remuneration per worker in the formal non-agricultural sector of the economy, was 4,6 per cent in the fourth quarter of 2005 (Figure 10). The average growth rate for 2005 as a whole was 7,3 per cent, compared to 9,2 per cent for 2004. This downward trend in wage inflation is consistent with wage settlement trends in South Africa, as reported by Andrew Levy Employment Publications, which suggest that average wage settlements were 6,3 per cent in 2006 compared to 6,8 per cent in 2004. Settlements averaged 6,3 per cent in the first quarter of 2006.

Labour productivity, measured as the ratio of value added to employment in the formal non-agricultural sectors, rose at decelerating rates in 2005. In the final quarter, productivity increased at an annual rate of 2,1 per cent compared to 5,5 per cent in the first quarter of the year. The lower growth in labour productivity is largely attributable to faster growth in employment levels. However, for 2005 as a whole the average level of labour productivity growth was 3,8 per cent, compared to 2,5 per cent in 2004.

These developments in wage inflation and labour productivity growth mean that the growth in unit labour cost has been well contained. The growth in unit labour cost slowed from 4,5 per cent in the third quarter to 2,5 per cent in the fourth quarter of 2005. The average rate of increase for 2005 was 3,3 per cent, significantly down from the rate of 6,5 per cent recorded in 2004.

Figure 10 Remuneration per worker, labour productivity and unit labour cost in the formal non-agricultural sector



Source: Statistics South Africa

Note: Data from the fourth quarter of 2004 are from the *Quarterly Employment Statistics* (QES) published by Statistics South Africa, which replaced the *Survey of Employment and Earnings* (SEE) in June 2005. Since these two surveys differ both in terms of their sample sizes and content, data from the fourth quarter 2004 onwards may not necessarily be fully comparable with previous periods.

Demand and output

Although growth in the South African economy slowed from an annualised rate of 4,2 per cent in the third quarter of 2005 to 3,3 per cent in the fourth quarter, the real growth rate for the year at 4,9 per cent is the highest since 1984. The contributions to growth in the fourth quarter of 2005 were confined to sectors other than mining and manufacturing, while expenditure growth in all the components of real domestic final demand accelerated. Table 5 examines the recent growth in real GDP in more detail.

Table 5 Growth in real gross domestic product and expenditure components

Per cent*

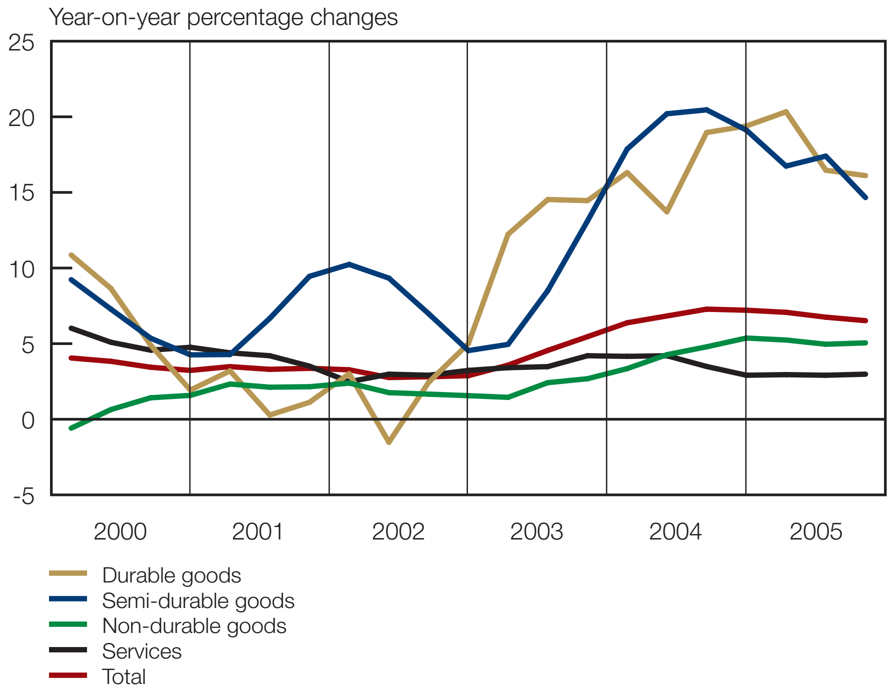
	2004			2005				
	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr	4th qr	Year
Final consumption expenditure by households	7,4	7,7	6,5	6,5	6,7	6,1	6,8	6,9
Final consumption expenditure by government	0,1	12,6	6,9	0,8	5,9	5,5	14,7	5,6
Gross fixed capital formation	7,5	9,7	8,8	9,9	4,6	7,0	7,5	8,0
Changes in inventories (R billions)**	17,8	12,7	14,5	12,2	6,1	13,3	2,9	8,6
Gross domestic expenditure	**4,7**	**3,8**	**7,5**	**7,0**	**5,9**	**7,4**	**3,9**	**5,9**
Exports of goods and services	10,5	25,0	2,5	-18,4	23,5	10,5	-4,1	6,7
Imports of goods and services	3,2	20,8	14,1	9,1	23,2	21,6	1,2	10,1
Gross domestic product	**6,6**	**4,3**	**4,5**	**4,6**	**5,4**	**4,2**	**3,3**	**4,9**

* Quarterly data refer to quarter-on-quarter growth at annual rates of seasonally adjusted data
** Constant 2000 prices

The slowdown in GDP growth in the fourth quarter of 2005 can be attributed mainly to temporary or special technical factors that adversely affected output in both the manufacturing and mining sectors. The real value added in the mining sector fell significantly in the fourth quarter of 2005 as production of platinum group metals was adversely affected by scheduled maintenance of a smelter at one of the platinum mines, and manufacturing suffered the adverse effects of refinery plant conversions related to the change-over to unleaded and lead replacement fuel. However, growth in the real value added in other sectors remained buoyant in the fourth quarter of 2005 with certain secondary and tertiary subsectors recording impressive growth rates.

Continued brisk expansion in final consumption expenditure by households was underpinned by the steady increase in household disposable income, continued buoyancy in the real-estate and securities markets and a favourable interest rate environment. The particularly rapid growth in household spending on durable and semi-durable goods continued throughout 2005 (Figure 11).

Figure 11 Real final consumption expenditure by households



Robust domestic demand fuelled growth in expenditure on imports of goods and services and although import growth slowed significantly in the fourth quarter of 2005, real imports of goods and services grew by 10,1 per cent for the year as a whole. The decelerating global expansion in the second half of 2005 and a strengthening currency constrained growth in exports of goods and services, and a contraction of 4,1 per cent was recorded in the fourth quarter of 2005. Although overall annual growth in exports was 6,7 per cent in 2005, the stronger growth in imports served to widen the deficit on the current account to 4,2 per cent of GDP, compared with 3,4 per cent in 2004.

The record R98,4 billion net capital inflow on the financial account of the balance of payments in 2005 more than comfortably financed the current-account deficit for the year.

The resulting large surplus recorded on the country's overall balance of payments enabled South Africa's reserve position to strengthen in 2005 as the Bank continued to purchase foreign exchange with the objective of building up reserves prudently. On balance, the country's official reserves rose by US$5,9 billion in 2005. By the end of March 2006, gross reserves measured in US dollars amounted to US$23 billion and the international liquidity position stood at US$19,5 billion. This can be compared to the situation at the end of September 2005, when gross reserves were US$19,5 billion and net reserves were US$16,1 billion.

Box 1 Household debt: An international perspective

The escalation of household debt in recent years has become a source of concern in a number of countries. Higher levels of debt may make households more vulnerable to interest rate and house price shocks, with adverse implications for both economic growth and financial stability. This box takes a closer look at international trends in household debt, the forces that drive these trends and their implications.[1]

Internationally, household debt ratios have been influenced by a common set of fundamental factors, although the timing and extent of these influences have tended to differ from one country to another. Financial market deregulation for example, occurred in many countries, particularly in the 1980s. The deregulation process, apart from removing many of the credit constraints on household borrowing, generated competition among financial institutions with the consequence that efficiency improved and costs were lowered. Together with high levels of financial innovation, deregulation resulted in improved risk assessment by lending institutions, declining transaction costs and the proliferation of credit and other financial products such as securitisation and home equity withdrawal schemes. Access to credit by households improved, and this increased debt levels.

Mortgages generally constitute a large proportion of household debt, therefore rising house prices and demographic changes that increase home ownership contribute to rising debt levels. Rising household debt may also reflect a rational response by households to low levels of interest rates and inflation expectations, and high levels of consumer confidence. Together with buoyant asset prices, both financial and real estate, the low inflation environment has resulted in households being more comfortable with higher debt levels.

Figure B1.1 shows household debt as a percentage of disposable income for a selected group of countries over the period 1990 – 2005.[2] The generally increasing trend for this ratio is clearly evident from the figure, although there are notable differences in the timing of accelerations between the episodes. Although valid comparisons between countries cannot be made without analyses of the underlying balance sheet positions of the various household sectors, it is notable that a relatively wide range of ratios is reported by countries. Italy and Chile, for example, have debt to disposable income ratios which are below 60 per cent while the UK and New Zealand have ratios above 150 per cent. The household debt-to-income ratio of South Africa rose from 49,1 per cent in the final quarter of 2002 to 65,5 per cent in the corresponding quarter of 2005.

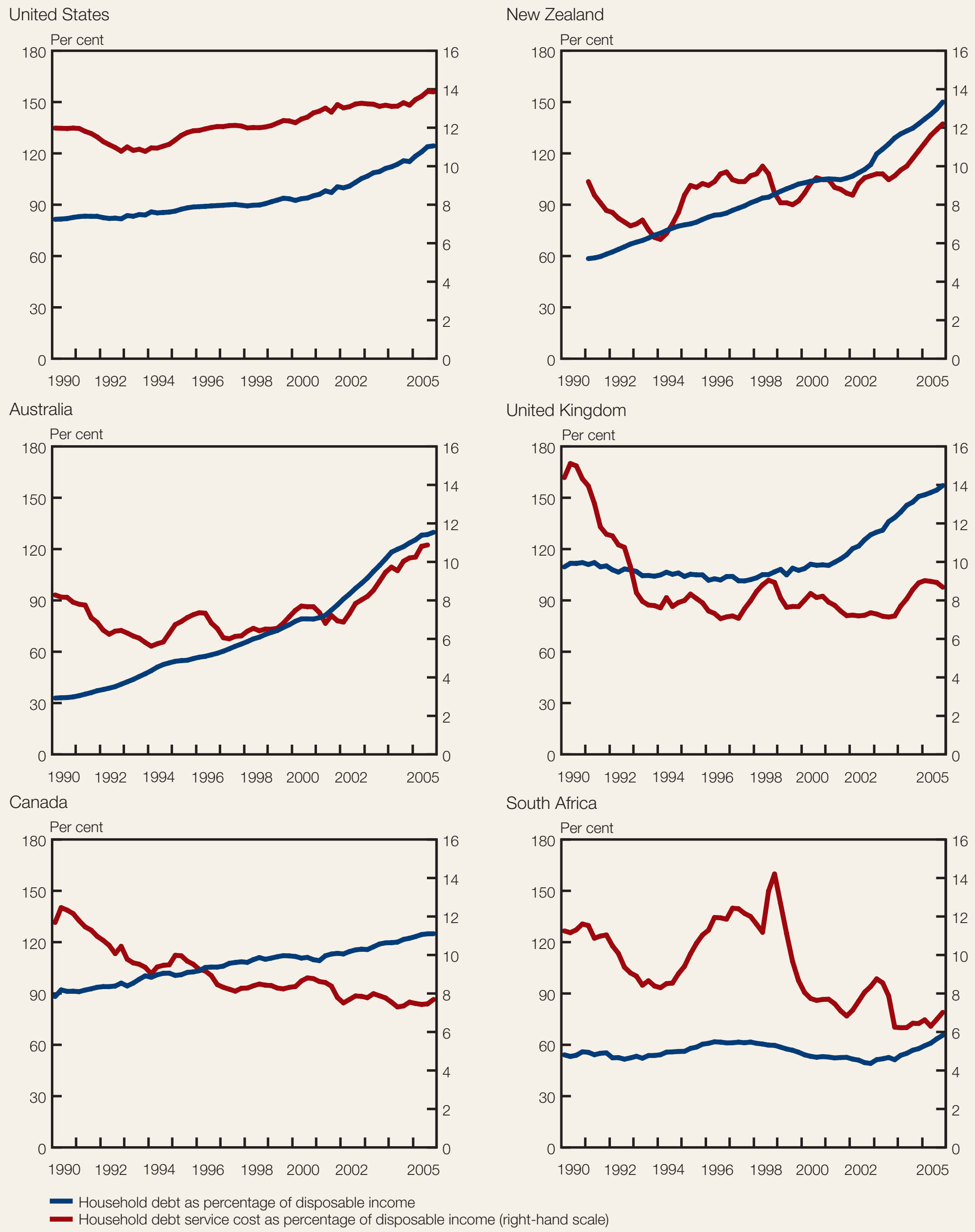
It has been argued that household debt ratios provide little information about whether household debt is excessive or sustainable. The right-hand axes of the individual country graphs therefore depict the costs of servicing the debt.[3] Although rising household debt has been offset somewhat by the global moderation in interest rates, servicing costs have risen to double-digit levels in Australia, the US and New Zealand in recent years. South Africa's debt service costs are currently around 7 per cent of disposable income, less than half the level that prevailed in 1998.

1 Given differences in country characteristics and data compilation, it must be stressed at the outset that unconditional comparisons between countries should be treated with caution.

2 Countries were selected largely on the basis of data availability.

3 There is no single universally accepted indicator of sustainability. Another common measure is the gearing ratio of households, i.e. debt levels relative to the assets of households. A problem with this measure is that it is easily affected by changes in house prices.

Figure B1.1 Household debt and debt service costs in selected countries



Sources: Bank of Australia; Federal Reserve Bank of St. Louis; FRB Flow of Funds; Reserve Bank of New Zealand; Office for National Statistics (UK) and Bank of Canada.

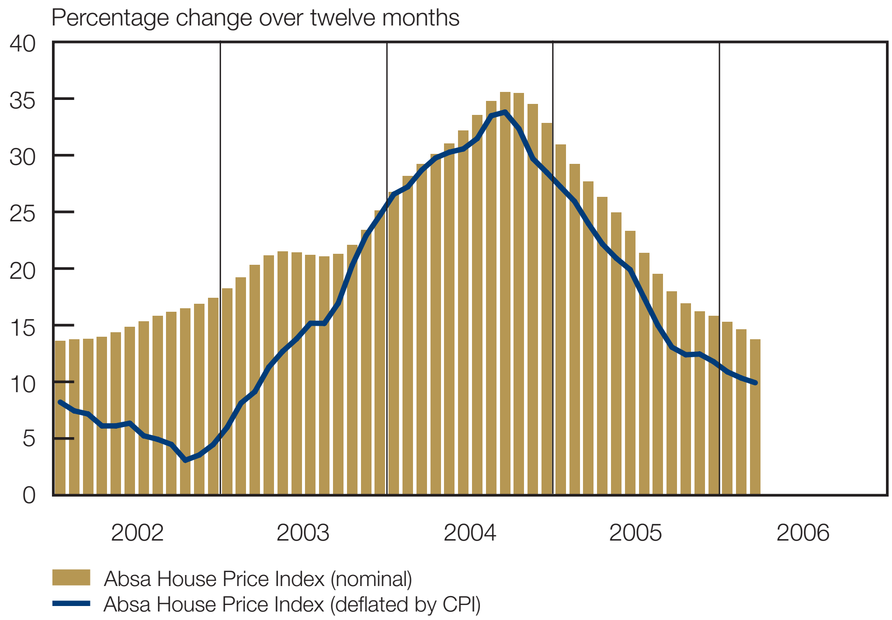
High levels of household debt have significant macroeconomic implications. The higher the level of household indebtedness, the more sensitive the economy is to unexpected fluctuations in the levels of both incomes and interest rates. Furthermore, this sensitivity may be affected by country-specific factors that are not incorporated in ratios such as those presented in Figure B1.1. The form of debt contract would be an example here. In the US, the interest rate applying to the debt is predominantly fixed, whereas in Australia, the United Kingdom, and South Africa it tends to be variable over the life-span of the loan, and closely linked to the policy rate. In the latter case, the implications of increased household indebtedness are potentially much greater.[4] Other factors that need to be considered when assessing the indebtedness of households include the composition and distribution of debt, the vulnerability of debtors and the health of the financial system in general.

4 *Debelle, G. 2004. Macro-economic implications of rising household debt.* BIS Working Paper No. 153.

Real-estate and equity prices

Developments in the real-estate and equity markets may generate wealth effects which have the potential to impact on aggregate demand and inflation. Figure 12 shows that the year-on-year increases in house prices, measured in terms of the Absa House Price Index, continued to slow from the record high levels experienced in September and October 2004. Since the publication of the previous *Monetary Policy Review*, growth in nominal house prices has declined from 18,0 per cent in September 2005 to 13,7 per cent in March 2006. In real terms, the rate of increase in house prices declined from 13,1 per cent to 9,9 per cent over the same period.

Figure 12 House prices



Source: Absa

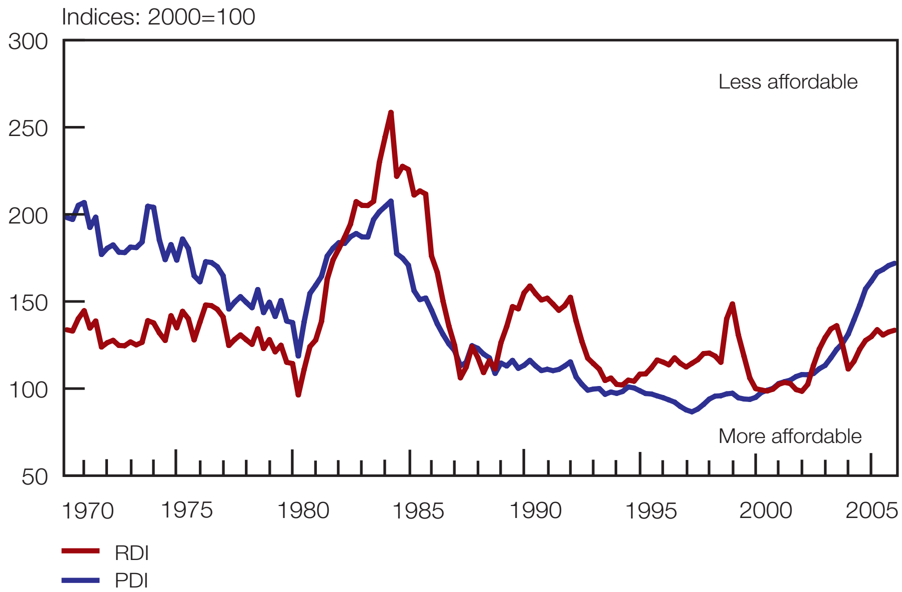
Note: The Absa House Price Index records the total purchase price of houses in the 80 – 400 m^2 size category, valued at R2,2 million or less and for which loan applications were approved by Absa.

On average, nominal house prices rose by 22,5 per cent in 2005 compared with 32,0 per cent in 2004 while in real terms house prices grew by an average of 18,5 per cent in 2005 compared with 30,2 per cent in 2004.

The slowdown in the growth in house prices can be explained partly by the impact of sustained buoyant real-estate market conditions on the affordability of houses (an increase denotes a decline in affordability in Figure 13). The price/disposable income (PDI) index, which is the ratio of the indices of Absa nominal house prices to per capita disposable income, shows a stronger decline in the affordability of houses than the repayments/disposable income (RDI) index. The latter index is calculated as the ratio of mortgage repayments on the average priced house to per capita disposable income, and reflects the moderating effect of the prevailing interest rate environment.

Notwithstanding the slowdown in the rate of increase in house prices, building statistics published by Statistics South Africa continue to suggest buoyant economic activity in

Figure 13 Housing affordability indices



Sources: Absa and SARB calculations

Note: A deposit of 20 per cent is assumed in the calculation of RDI. The mortgage rate is proxied by the predominant rate of banks for dwelling units, and the monthly repayment is calculated over a period of 20 years.

the real-estate market (Table 6). In 2005, the real value of buildings completed rose by 32,2 per cent compared with 22,5 per cent in 2004. The corresponding real value of building plans passed (an indicator of future construction activity) increased by 41,8 per cent in 2005 compared with 33,0 per cent in 2004.

Table 6 Real value of building plans passed and buildings completed by larger municipalities

Annual percentage change

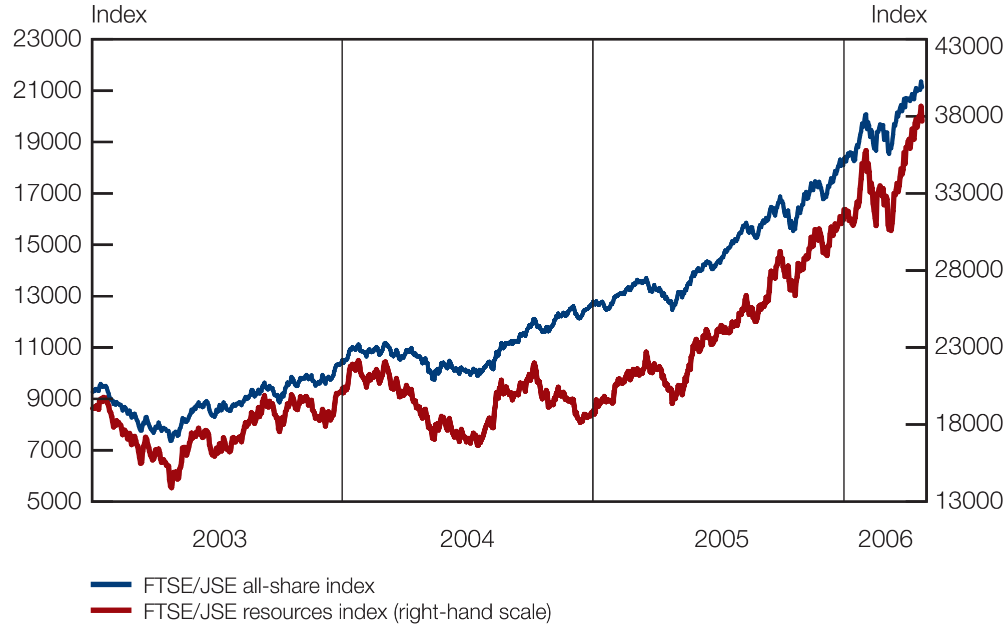
	2002	2003	2004	2005	2006*
Building plans passed					
Total	**17,2**	**11,3**	**33,0**	**41,8**	**22,6**
Residential	18,8	16,3	39,6	34,8	23,0
Non-residential	13,4	3,5	18,1	61,7	40,3
Additions and alterations	16,3	6,3	27,6	47,0	11,4
Buildings completed					
Total	**3,2**	**6,8**	**22,5**	**32,2**	**29,5**
Residential	31,2	8,1	33,8	40,0	26,9
Non-residential	-35,7	8,7	6,2	11,1	42,7
Additions and alterations	-0,1	1,4	5,8	23,7	27,9

* Figures for January – February 2006 compared with the corresponding months of 2005

Source: Statistics South Africa

Equity prices on the JSE Limited (JSE) continued to show a strong upward trend in the period since September 2005, as Figure 14 shows. The closing levels of the daily all-share price index repeatedly set record highs, increasing by 8,5 per cent from 16 875 at the end of September to 18 312 at the end of December 2005, before breaking the 21 000-level in April 2006. The resources index also performed strongly, breaching the 38 000-level at the end of April.

Figure 14 Share price indices



Fiscal policy

The Budget presented by the Minister of Finance on 15 February 2006 revised the estimate of total revenue for the 2005/06 fiscal year to R411,1 billion, approximately R41 billion more than originally budgeted (Table 7). The corresponding estimate for total expenditure was revised upward only marginally to R419,0 billion, resulting in an estimated budget deficit of R7,9 billion for 2005/06. This represents 0,5 per cent of GDP, below the 3,1 per cent originally expected in February 2005 and the revised 1,0 per cent presented in the *Medium Term Budget Policy Statement* (MTBPS) in October 2005. In the medium term, the budget deficit as a proportion of GDP is expected to rise to 1,5 per cent in 2006/07 and then contract to 1,2 per cent by 2008/09.

Table 7 Public finance data
R billions and per cent

	2003/04	2004/05	2005/06	2005/06	2006/07	2007/08	2008/09
	Actual	Actual	Budget	Revised estimates	Medium-term estimates		
National government							
Revenue	299,4	347,9	369,9	411,1	446,4	492,0	547,1
Expenditure	328,7	368,5	417,8	419,0	472,7	519,2	571,3
Deficit (-)	29,3	20,7	48,0	7,9	26,4	27,2	24,2
As percentage of GDP:							
Deficit (-)	2,3	1,5	3,1	0,5	1,5	1,4	1,2
Total gross loan debt	35,5	35,3	30,6	34,2	32,3	31,5	30,5
PSBR*	2,3	1,7	3,9	0,6	2,4	2,3	2,4

* PSBR: Public-sector borrowing requirement

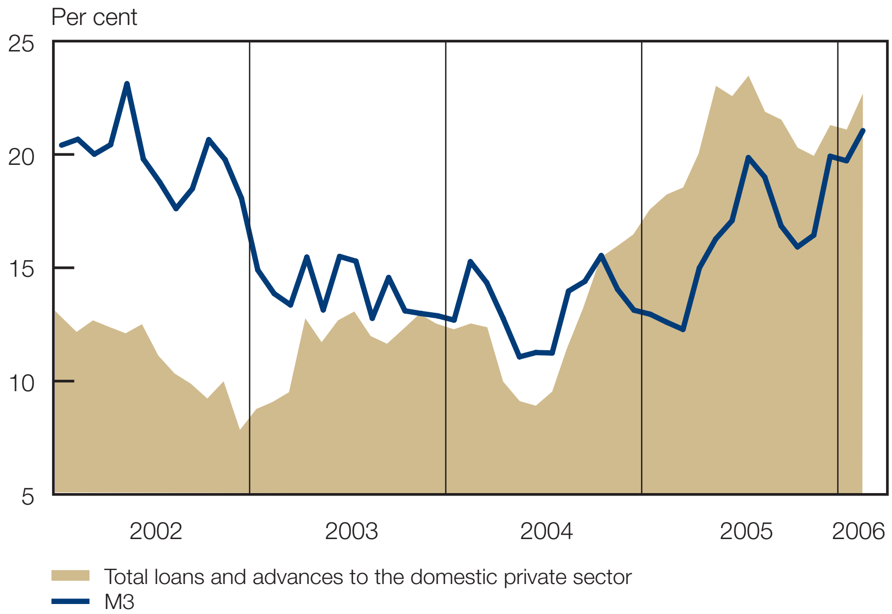
Source: National Treasury *Budget Review* 2006

The public-sector borrowing requirement (PSBR) for 2005/06 has also been revised downward to 0,6 per cent of GDP in the *Budget Review* from the 3,9 per cent of GDP projected in February 2005 and the 1,2 per cent of GDP presented in the 2005 MTBPS. The PSBR is projected at 2,4 per cent of GDP in 2006/07, and at 2,3 and 2,4 per cent of GDP in 2007/08 and 2008/09, respectively.

Monetary conditions

Growth in the monetary aggregates remained robust during 2005, reflecting strong domestic expenditure levels. The growth rate measured over twelve-month periods for the broad monetary aggregate (M3) increased from 15,9 per cent in October 2005 to 21,1 per cent in February 2006 (Figure 15). The quarter-on-quarter annualised growth in seasonally adjusted M3 declined significantly from 29,3 per cent in the third quarter of 2005 to 12,5 per cent in the fourth quarter of 2005. The growth in total loans and advances to the private sector rose from 19,3 per cent in October 2005 to 21,9 per cent in February 2006. On average, total loans and advances to the private sector increased by 20,7 per cent in 2005 compared with 12,3 per cent in 2004.

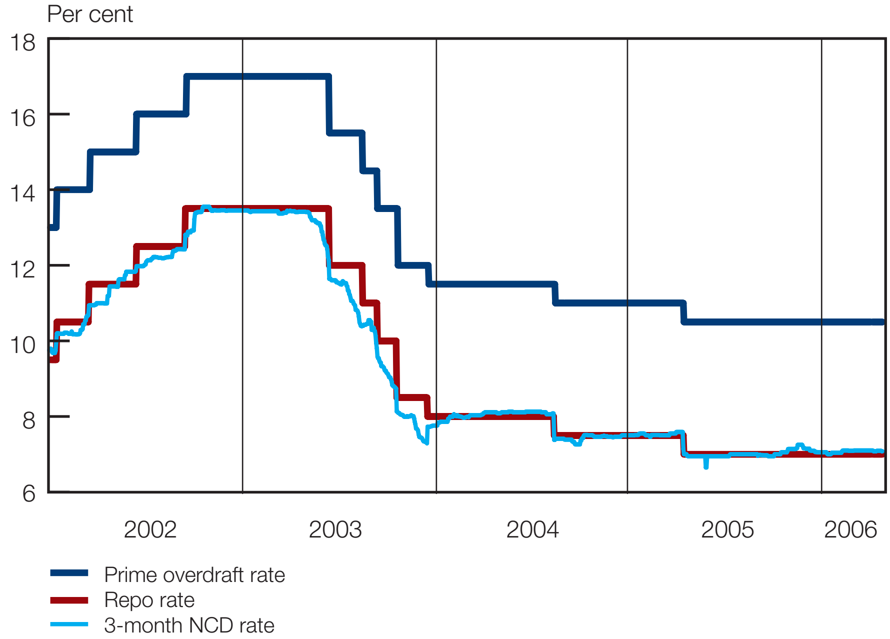
Figure 15 Growth in M3 and in bank loans and advances



Monetary policy

The monetary policy stance has remained unchanged since mid-April 2005 when the repo rate was reduced by 50 basis points to 7 per cent per annum (Figure 16). Since the previous *Monetary Policy Review* there have been three meetings of the Monetary Policy Committee (MPC) and at each of these meetings the issues facing the committee were similar. In brief, the MPC was faced with an improving inflation outlook as reflected in the central forecast generated by the Bank's macroeconomic model. At the same time there were significant risks, including emerging macroeconomic imbalances, that the committee had to take cognisance of. These risks related primarily to the continued strong domestic demand growth which was fuelled in part by high credit extension and relatively low nominal interest rates; a burgeoning current-account deficit which is also in part a manifestation of the high domestic demand; and resurgent international oil prices.

Figure 16 The repo and other short-term interest rates



As noted earlier, CPIX inflation has remained within the target range for the 31 months to March 2006. The Monetary Policy Committee (MPC) has been particularly encouraged by the evolution of some of the components of CPIX. It has become clear that there has been a steady convergence of the inflation rates of many of the categories of goods and services which make up the index to within the target range of 3 – 6 per cent. In particular, the committee noted the fact that services price inflation had fallen to within the inflation target range after an extended period of inertia around the 8-per-cent level. In addition, the inflation rate for administered prices excluding petrol had fallen to a level significantly below the overall CPIX inflation. These developments bode well for the sustainability of inflation within the target range. Although food price inflation had increased from very low levels in the first half of 2005, the most recent rate of increase of 4,5 per cent was still well within the inflation target range, despite the sharp increase in maize prices in the latter part of 2005.

In the previous *Monetary Policy Review*, the central forecast presented to the October MPC meeting was published. That forecast showed that CPIX inflation was expected to rise to about 5,8 per cent in the second quarter of 2006 before easing to 5,3 per cent in the final quarter of 2007. Since then the forecasts have shown successive improvements. In December 2005, CPIX inflation was expected to rise gradually to reach an upper turning point around 5,5 per cent in the fourth quarter of 2006, whereafter it was expected to decline to a level of around 5 per cent by the end of 2007. By February 2006 there was a further improvement in the forecast. At that time the forecast was for the inflation trajectory to follow a more moderately rising trend compared to that discussed at the previous meeting. According to the central forecast, CPIX inflation was expected to peak at around 4,9 per cent in the first quarter of 2007 whereafter it was expected to decline slowly to reach around 4,7 per cent at the end of the forecast period. The forecast at the April 2006 meeting was similar to this. By then the forecast period had been extended to the end of 2008 and a level of 4,6 per cent was expected by the end of that period. This was despite the fact that the oil price assumption in the forecast was increased significantly. The forecast presented to the MPC in April is reproduced later in this *Review*.

These benign inflation forecasts were a result of a number of positive factors which were anchoring inflation within the target range. These factors are generally expected to continue to help keep inflation under control, and therefore are not considered to pose a significant upside or downside risk to the forecast. Of particular significance is the evolution of inflation expectations over the past few months. At the time of the October meeting, the MPC noted, with concern, the results of the inflation expectations survey conducted by the Bureau for Economic Research (BER) for the third quarter of 2005. At that time it appeared that the rising trend in oil prices was impacting unfavourably on inflation expectations and expectations had moved higher. These fears were allayed somewhat with the publication of the survey for the fourth quarter of 2005 which showed that expectations had not deteriorated further and that there was a slight improvement for 2007. The survey for the first quarter of 2006, which was presented to the April meeting, showed a significant improvement in expectations. Not only was there a decline in the expected inflation for 2006, but the expected inflation rate for the end of the forecast period in 2008, although marginally higher than that expected in 2006 and 2007, was a moderate 4,8 per cent. This reflects confidence that low and stable inflation will prevail over the medium term. These trends were confirmed in the breakeven inflation rates, measured by the spreads between the yields on South African CPI inflation-linked bonds and conventional nominal bonds of the same maturity.

Entrenched inflation expectations are also expected to feed into wage and price formation. Over the past two years there has been increasing evidence that nominal wage settlements are declining. These settlements were still above the inflation rate, and therefore implied real wage increases. Nevertheless, the MPC was satisfied that these settlements had become consistent with the inflation target range. Furthermore, the trend in unit labour cost was extremely favourable, with unit labour cost increases averaging 3,3 per cent in 2005, which was half the average increase measured in the previous year. If these trends persist they will make an important contribution to sustaining inflation within the target range.

Fiscal policy also remained supportive of monetary policy over this period. At the time of the *Medium Term Budget Policy Statement* in October 2005, the National Treasury had revised down its budget deficit forecast for 2005/06 from 3,9 per cent to 1,0 per cent of GDP. At the time of the February 2006 Budget, this forecast was revised down further to 0,5 per cent as a result of higher-than-expected tax revenues. At the same time the estimated budget deficit for 2006/07 was reduced from the October estimate of 2,2 per cent to 1,5 per cent of GDP.

Expected movements in the exchange rate have a significant impact on expected inflation. Although the rand exchange rate has been subject to some volatility, it has remained within a fairly limited trading range for some time and therefore has had a stabilising effect on inflation. Since the beginning of the year the nominal effective exchange rate has appreciated by around 2 per cent. The movements of the rand continued to be determined by factors such as movements in the US dollar against the euro; changes in investor sentiment towards emerging markets; strong capital inflows to South Africa; and continued strong commodity prices. The MPC is aware that there are potential risks in both directions to the exchange rate outlook. However, given the underlying improvements in the foreign exchange market with the elimination of the net open forward position and the build-up of reserves, the rand exchange rate is expected to be less vulnerable to exogenous shocks, and to react in a more orderly manner than was previously the case.

There was some change in the outlook for output growth in the economy. At the December 2005 and February 2006 MPC meetings, it was already apparent that growth in output was moderating. This was evident in the mining and manufacturing output data and the Investec/BER Purchasing Managers Index (PMI) which indicated a possible contraction in manufacturing in January and February. By April 2006 this weakening trend had been confirmed. The annualised GDP growth rate in the fourth quarter of 2005 was 3,3 per cent, and the most recent output data continue to indicate that although growth is expected to remain robust in 2006, it is likely to be more in line with the estimated potential output in the economy. Box 2, on the next page, reports on the results of research by the Bank to estimate potential output in the economy.

World inflation is also expected to be well contained, despite the higher international oil prices and resilient world growth. The most recent *World Economic Outlook* of the IMF shows that world inflation is expected to average 3,8 per cent in 2006 and 3,5 per cent in 2007, while global growth is expected to average 4,8 per cent in these two years. These developments have been accompanied by a general tightening of monetary policy in most major industrial countries.

Despite the promising inflation outlook, the MPC became increasingly concerned about the growth rate of domestic consumption expenditure. This has been identified as one of the main risk factors for some time. In 2005, household final consumption expenditure grew by 6,9 per cent, and all indications are that this trend is going to continue. As noted in the April 2006 MPC statement, the FNB/BER consumer confidence index was at an all-time high, and had been at high levels for some time. It was noted that the reasons for this high level of demand included low nominal interest rates, higher real incomes and wealth effects emanating from record high prices on the JSE, and a buoyant housing market. Despite the strong expenditure, there had been little impact on domestic inflation. The MPC noted in February that if these trends continued unabated, some impact on prices would be inevitable. At issue then is how pre-emptive the MPC should be, given the absence so far of significant price increases in the wake of this high demand.

The robust domestic demand has been reflected in the growth of money supply and credit extension, both of which have accelerated significantly. By the time of the April meeting, domestic credit extension to the private sector was growing at a year-on-year rate of over 20 per cent, and asset-backed credit was growing at around 27 per cent. The MPC noted with some concern the pace at which household indebtedness was rising. The level of such indebtedness had, by the fourth quarter of 2005, risen to almost 66 per cent of disposable income. The cost of servicing this debt, while still low, increased moderately during the past year. By the end of 2005 debt servicing costs had risen to around 7 per cent of disposable income.

The MPC also became increasingly concerned about the widening deficit on the current account of the balance of payments, which is also in part a manifestation of the high consumption expenditure. Although the current-account deficit of 4,2 per cent of GDP is high by historical standards for South Africa, it is recognised that it is also a consequence of the higher investment and growth in the economy. As noted in various MPC statements, the widening current-account deficit is not in itself inflationary. The potential threat to inflation comes through its possible impact on the exchange rate, should the deficit be regarded as unsustainable. At current levels the deficit has been comfortably financed by capital inflows, which have even allowed the Bank to continue with its accumulation of foreign exchange reserves. At these levels the deficit appears to be sustainable. However, the MPC would be concerned about a continuous and rapid widening of the deficit.

The behaviour of international oil prices continued to be identified as a major risk factor. In the past few months, there have been numerous occasions when it appeared that the oil prices would stabilise at slightly lower levels. Brent crude oil prices had peaked at around US$70 per barrel in August 2005 in the wake of hurricane Katrina. Prices then moderated, and in February of this year had fallen to around US$55 per barrel. Since then, however, renewed geopolitical tensions and tight supply and demand conditions in the oil markets resulted in a surge in prices to US$70 per barrel. These developments resulted in the MPC raising its assumptions about future prices, but there is nevertheless the risk that international oil prices could in fact increase even further than assumed. The MPC has stated on numerous occasions that it would not react to first-round effects of higher oil prices. However, the higher and faster these prices rise, the more likely they are to feed through to generalised inflation.

During the past few months, the MPC has been faced with contradictory signals. On the one hand, the inflation outlook as reflected in the inflation forecast of the Bank has improved at each successive meeting. On the other hand, the MPC has become increasingly concerned about international oil price developments and the level of domestic demand which are also contributing to higher consumer indebtedness and a widening of the current-account deficit. The MPC has left the monetary stance unchanged but has indicated that, on balance, the risks to the outlook are on the upside.

Box 2 Measuring potential output in South Africa

The estimated level of potential output plays an important role in monetary policy making. If potential output is interpreted as the maximum sustainable level of output consistent with stable inflation, then its growth rate provides a useful guide for the assessment of sustainable growth in output and employment in an economy. It follows that the gap between actual and potential GDP, often referred to as the GDP or output gap, is a key variable determining the evolution of prices and thus inflation. A level of real GDP above its potential suggests excess demand and is thus a source of inflationary pressures, while the converse is true for a level below potential. However, because potential output is a non-observable variable, measuring it with any degree of accuracy is a difficult assignment, and estimates should not be employed in a mechanical fashion. This box provides a summary of the results of recent research that has been undertaken at the Bank on the estimation of potential output for South Africa (Du Toit et al, 2006).

Two broad categories of methods are employed in the literature to estimate potential output. The first category comprises statistical detrending methods, with examples including the well-known Hodrick-Prescott (HP) filter, Beveridge-Nelson decompositions and unobserved components methods. A common characteristic of these methods is that they are purely statistical and mechanical in nature and have no explicit economic foundation. Cerra and Saxen (2000) and Van Norden and St-Amant (1997) provide detailed discussions of these and other methods. The second category comprises structural methods which are based on estimated structural models. Examples here include production function methods and structural vector autoregression (SVAR) models. It is important to realise that the results obtained using different methodologies may differ substantially (Cerra and Saxen, 2000). It is also the case that estimates of potential output will change as the structure of the economy changes, an issue which appears to have particular relevance in the South African case.

The work reported here falls into the second of the categories discussed above. A structural production-function method is employed to estimate potential output for South Africa, based on a Cobb-Douglas production function with constant returns to scale. This production function may be represented by the following expression:

$$Y_t = A_t K^{\alpha}_t N^{\beta}_t \qquad (1)$$

where Y_t is actual gross domestic product at factor cost; A_t is unobservable total factor productivity (TFP); K_t is the actual capital stock, and N_t is actual employment. α and β represent the capital and labour share parameters, respectively.

By estimating the potential levels of all the variables on the right-hand side of Equation 1, the potential level of output can be determined. If one uses a * to denote potential levels of all variables, then potential output Y_t^* is obtained from:

$$Y^*_t = A^*_t K^{*\alpha}_t N^{*\beta}_t \qquad (2)$$

Employing a Solow-residual approach to estimate the potential level of total factor productivity A^*, a neoclassical (Jorgenson) approach to estimate the desired capital stock K^*, and adjusting labour input for the gap between actual unemployment and the non-accelerating wage rate of unemployment (NAWRU) to obtain potential employment[1] N^*, a 10-equation structural model was simulated to determine the potential output for the South African economy. Four alternative scenarios were considered:

(a) Status quo: This scenario assumes the existence of structural unemployment given the current structure and growth impediments of the South African economy, i.e. it assumes a positive NAWRU.
(b) Utopia: This assumes full employment, i.e. potential output is equal to the economically active population and therefore NAWRU is set to zero.
(c) Government targets: This assumes that the quantified targets of the government are achieved (halving unemployment in 10 years, attracting an additional US$ 804 million per annum resulting in an FDI to GDP ratio of 1,3 per cent, and increasing the savings to GDP ratio to 22 per cent).
(d) International benchmark: This assumes that the South African economy becomes more competitive in terms of the average performances of emerging markets (the unemployment rate was set to 12 per cent, the FDI to GDP ratio to 4 per cent, the savings to GDP ratio to 25 per cent, and openness to 0,55).

The results are reported in Table B2.1

Table B2.1 Summary of the results
Per cent

Scenario	Real potential output growth rate
Status quo	4,1
Utopia	6,9
Government targets	5,1
International benchmark	6,5

These results suggest that South Africa's current growth potential is a rate of 4,1 per cent. This can be compared with the results of Arora and Bhundia (2003) who also use a production function approach and estimate an average potential output growth rate of 3 per cent for the period 1995 – 2003. However it must be stressed these results should be viewed as indicative and a contribution to the literature, and not as immutable numbers to be applied in a mechanical fashion. At the extreme, adopting the utopia scenario, the simulations generate a potential output growth rate of 6,9 per cent, while in the intermediate cases, a growth rate of 5,1 per cent results when government meets its own targets and 6,5 per cent is possible if the South African economy's competitiveness rises to around the average level of other emerging economies.

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1 The potential level of employment is defined in two different but related ways in the paper. First, potential employment is defined as the level of labour resources that might be employed without resulting in additional inflation. This definition admits the existence of some natural rate of unemployment, sometimes referred to as the NAWRU. According to this definition potential employment (N) is the difference between the economically active population (EAP) and the fraction of EAP that is naturally unemployed, i.e. N* = EAP (1-NAWRU). The second definition assumes that potential employment is equal to the EAP, i.e. NAWRU is equal to zero.*

The outlook for inflation

The outlook, risk and uncertainties relating to some of the factors that determine the outlook for inflation and that are embodied in the forecast, are presented in this section.

International outlook

Recent data suggest that the global recovery that began in 2002 will remain on track, with world GDP advancing at a robust pace (Table 8). The projection for global GDP growth in 2006 has been revised upward by the IMF from 4,3 to 4,9 per cent, followed by growth of 4,7 per cent in 2007. The buoyancy of activity in China, India, and Russia together accounted for two-thirds of the upward revision to global growth in 2006. In the four-year period 2004 – 2007, the global economy is set to expand at close to 5,0 per cent annually, well above its 3,7 per cent long-term average.

Although global headline inflation has risen slightly in response to higher oil prices, with the latest forecast for 2006 revised upward by 0,1 percentage points to 3,8 per cent, core inflation has not been affected significantly and inflationary expectations remain well grounded. The current worldwide boom is also not expected to spark significant inflationary problems. While advanced country inflation is expected to be slightly higher than previously estimated, estimates for most developing countries have been lowered.

Table 8 IMF projections of world growth and inflation for 2006* and 2007

Per cent

	Real GDP		Inflation rates	
	2006	2007	2006	2007
World	**(4,3) 4,9**	**4,7**	**(3,7) 3,8**	**3,5**
Advanced economies	**(2,7) 3,0**	**2,8**	**(2,0) 2,3**	**2,1**
United States	(3,3) 3,4	3,3	(2,8) 3,2	2,5
Japan	(2,0) 2,8	2,1	(-0,1) 0,3	0,6
Euro area	(1,8) 2,0	1,9	(1,8) 2,1	2,2
United Kingdom	(2,2) 2,5	2,7	(1,9) 1,9	1,9
Other advanced economies	(3,9) 4,1	3,7	(2,3) 2,2	2,3
Other emerging-market and developing countries	**(6,1) 6,9**	**6,6**	**(5,7) 5,4**	**4,8**
Africa	(5,9) 5,7	5,5	(7,0) 9,1	7,3
Central and eastern Europe	(4,6) 5,2	4,8	(4,3) 4,1	3,4
Commonwealth of Independent States	(5,7) 6,0	6,1	(10,5) 10,4	9,7
Developing Asia	(7,2) 8,2	8,0	(4,7) 3,9	3,5
China	(8,2) 9,5	9,0	(3,8) 2,0	2,2
India	(6,3) 7,3	7,0	(5,1) 4,8	4,9
Middle East	(5,0) 5,7	5,4	(9,7) 8,7	8,5
Western hemisphere	(3,8) 4,3	3,6	(5,4) 5,8	5,6

* IMF projections for 2006 as at September 2005 in parentheses

Source: IMF *World Economic Outlook*, April 2006

In the G7 countries, growth is generally forecast to accelerate in 2006 and moderate somewhat in 2007. The US and UK are clear exceptions. In the former, growth is expected to slow during 2006, while in the latter growth improves progressively over the forecast interval. After faltering in the fourth quarter of 2005, the US economy recently regained strong momentum in the first quarter of 2006. However, growth is expected to slow in the remaining quarters of 2006 to record 3,4 per cent for the year. US inflation has been revised upward to 3,2 per cent in 2006. The UK's economic growth, after slowing to 1,8 per cent in 2005, is projected to accelerate to 2,5 and 2,7 per cent in 2006 and 2007, respectively. Inflation is expected to remain well contained in the neighbourhood of the Bank of England's 2 per cent inflation target.

Growth is expected to accelerate in the euro area, averaging 2,0 per cent over the next two years. Although ECB officials have expressed concern about excess liquidity and rapid money growth, inflation forecasts remain relatively benign, with headline CPI inflation projected to slow from 2,2 per cent in 2005 to 2,1 per cent in 2006 before rising to 2,2 per cent in 2007. The Japanese recovery is also expected to stay on track, with GDP rising by 2,8 per cent in 2006 – the fastest rate since 1991 – before slowing to around 2,1 per cent in 2007. With the long road out of deflation seemingly finally ended, consumer prices are projected to rise by 0,3 per cent in 2006 and 0,6 per cent in 2007.

The IMF raised its growth forecasts for the greater part of the Asia-Pacific region, although it warned that the projected favourable outlook could worsen existing global imbalances (Box 3 discusses the issue of global imbalances). Developing Asia is forecast to grow by 8,2 per cent this year, above the September 2005 forecast of 7,2 per cent. Key areas of strength are China and India. China's economy is expected to grow at 9,5 per cent this year while India's growth rate is expected to be a similarly impressive 7,3 per cent. Sustained in certain cases by high prices for oil and other commodities, sub-Saharan African nations are projected to grow 5,8 per cent this year, the fastest rate in more than 30 years. Growth forecasts for Southeast Asia, Australia and New Zealand have been trimmed, however.

Box 3 Tackling global imbalances

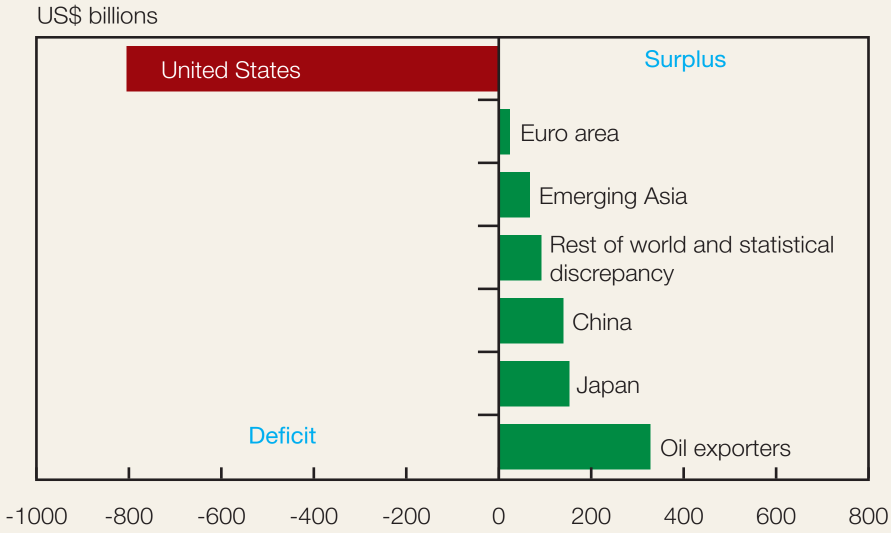
Global imbalances have continued widening in recent years, raising fears regarding their sustainability over the long run (Figure B3.1 depicts global current-account balances as estimated for 2005). Three aspects of global capital flows are deemed as being without precedent and are referred to by Summers (2006)[1] as the capital flows paradox in the current world financial system. Firstly, the net flow of capital is mainly from developing countries and emerging markets towards the industrialised world and, principally, the United States. Secondly, escalating US foreign debt is mirrored in foreign reserve accumulation by emerging-market countries that in many instances is far in excess of any acknowledged criterion of reserve need for financial protection. Finally, expected real returns on these foreign reserves are expected to be low and relatively risky.

The main risks for the global economy resulting from these imbalances are that exchange rates might adjust abruptly and in a disorderly fashion, characterised by substantial overshooting, a large increase in interest rates and a sharp contraction of global activity. Concern about such an outcome has led to an increasing consensus worldwide that exchange rates should more appropriately reflect economic fundamentals. The IMF has in this regard called for greater currency flexibility in emerging Asia, arguing that in the absence of significant movements in relative prices, Asian countries will have few incentives to rebalance their economies towards domestic demand or the US towards export industries.

In order to address current global imbalances, policy changes are required in almost all regions of the world, unlike in the 1980s when large current-account imbalances were mainly confined to the US, Japan and Europe. The G7 finance ministers and central bankers have repeatedly declared that vigorous action on various fronts is needed to unwind global imbalances and to ensure sustainable growth. They have stressed that these actions include fiscal consolidation in the US; further structural reforms in Europe; and further structural reforms including fiscal consolidation in Japan. However, the policy changes required to address global imbalances are spread more widely and are

1 *Summers, L H. 2006. Reflections on Global Account Imbalances and Emerging Markets Reserve Accumulation.* L K Jha Memorial Lecture. *Reserve Bank of India. Mumbai, India, March.*

Figure B3.1: Global current-account balances for 2005



Source: Summers (2006)

of concern not only to the developed economies. The differences between desired savings and desired investment rates in different regions of the world will have to be reduced if sustainable global economic growth is to be achieved and the probability of a sudden unfavourable correction in the world economy is to be reduced significantly.

The strong growth in the foreign exchange reserves of Asian central banks has been one of the most visible features of growing global imbalances, along with the US current-account deficit. Large Asian trade surpluses and foreign direct investment inflows into East Asia have resulted in central bankers in the region buying US dollars to prevent their currencies appreciating. The accumulation of foreign exchange reserves is deemed by many to be artificially depressing Asian exchange rates, boosting trade surpluses, hindering natural adjustment mechanisms to rectify imbalances and creating the risk of financial crisis. The IMF recommends that relative changes should be gradual to minimize the costs of adjustment and also recommends increased national savings with fiscal consolidation in the US and more effective measures to strengthen domestic demand in Europe, Japan and emerging Asia. In oil-producing countries the IMF recommends spending on infrastructure, health and education, and gradual currency appreciation.

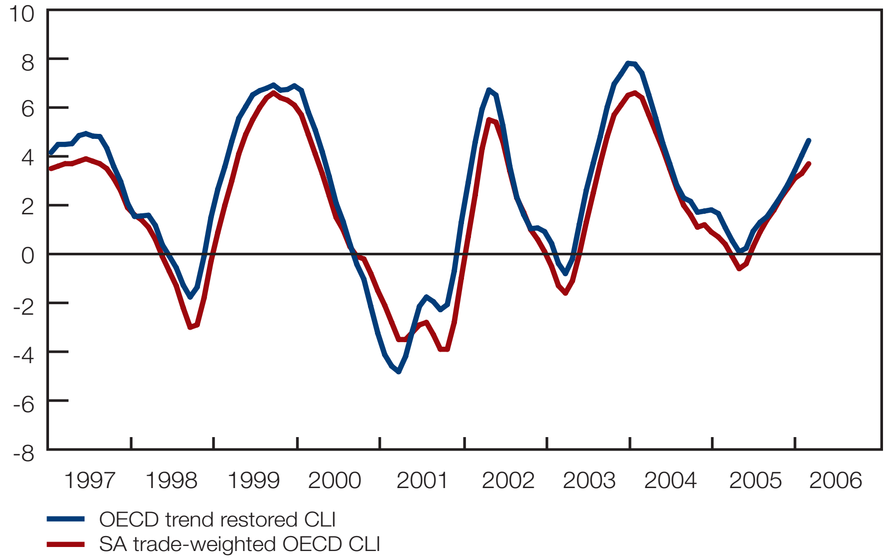
It is becoming increasingly clear that an outcome characterised by a benign unwinding of global imbalances in the international monetary system will require an effective international institutional forum for debate and effective policy formulation. Although the IMF is still deemed by many to be the most appropriate institution for this role, it has in the past few years concentrated more on being the lender of last resort to middle income countries and on surveillance of economies without a specific focus on systemic macroeconomic problems. Some countries have therefore, among other measures, called for more active surveillance by the IMF as well as a number of other measures to improve the institution’s effectiveness although other countries are less enthusiastic in this regard. Some countries have called for effective forums to discuss global imbalances in small groups and have suggested that there should be a group of at most three or four countries representing the big currency blocks – the euro area, the US, Japan and China. Regular discussions have also been proposed for a new group of 11 countries that would comprise the G7 plus the newly important economies of Brazil, Russia, India and China.

The world economy has in recent years been characterised by rapid above-trend growth within a relatively low inflation environment. Although there are a number of factors that could remain supportive of continued beneficial global growth outcomes, tackling the problem of global imbalances effectively will be the most important prerequisite in ensuring that favourable conditions continue underpinning longer-term sustainable global economic growth.

The forecasts of moderate expansion in the Organisation for Economic Cooperation and Development (OECD) are confirmed by the latest composite leading indicators (CLIs) compiled by the OECD. These CLIs are aggregate time series compiled for 23 member countries that show a leading relationship with the growth cycles of key macro-economic indicators (the average lead is 6 months). As shown in Figure 17, the six-month rate of increase of the CLI for the overall OECD area was 4,7 per cent in February 2006, reflecting improved performance in the corresponding CLIs in most of the major OECD economies. Figure 17 also presents a trade-weighted OECD CLI, where the weights are based on South Africa's exports to OECD member countries. The six-month rate of increase in the SA trade-weighted OECD CLI was 3,7 per cent in February 2006, reflecting an improved but slightly less resilient performance in South Africa's OECD trading partners than that recorded for the overall OECD.

Figure 17 OECD composite leading indicators

Per cent, annualised 6-month rate of change



Sources: OECD and SARB calculations

The outlook for the international oil markets remains uncertain. While the underlying dynamics of the market will probably continue to change slowly, as investment by OPEC and non-OPEC producers eventually allows capacity to grow slightly faster than demand, the market seems set to remain tight. Recent forecasts by the IEA put global oil demand at 84,7 million barrels per day, with non-OPEC production in February at approximately 50,7 million barrels per day (close to the IEA projected average production of approximately 51,3 million barrels per day in 2006). If the status quo is maintained, then the call on OPEC production (including natural gas liquids) will be around 34 million barrels per day in 2006, which is very close to OPEC's output level in February 2006. Given the supply concerns in some of the major oil-producing countries, the uncertainty surrounding the hurricane season in the Gulf of Mexico, the limited spare production capacity and the anticipated strong demand as a result of robust global growth rates, tight conditions are expected to characterise developments in the oil market for some time. Geopolitical developments are expected to add further to volatility in the coming months.

Outlook for domestic demand and supply

The economic growth momentum in the domestic economy is expected to continue in 2006, although at a lower rate than in 2005. Among other factors, the government's strong focus on improving the growth potential of the economy through the Accelerated and Shared Growth Initiative of South Africa (ASGISA), infrastructural investment associated with the 2010 Soccer World Cup preparations and the improved global outlook will underpin this growth momentum. The tertiary sector, which contributed most to growth in 2005, is expected to remain resilient in 2006.

According to the April 2006 Reuters consensus forecasts, the South African economy is expected to grow at 4,5 per cent in 2006 and 2007, and by 5,0 per cent in 2008. These forecasts represent the mean of 14 individual forecasts for both 2006 and 2007 and the mean of 7 forecasts for 2008. They range from 4,1 to 4,8 per cent for 2006, 4,0 to 5,7 per cent for 2007 and 4,7 to 5,8 per cent for 2008. In its *Budget Review*, the National Treasury expects economic growth of 4,9 and 4,7 per cent for 2006 and 2007, respectively.

Consumer spending, which has been driving economic expansion, is expected to remain robust. Factors that will underpin consumer spending include a steady increase in the real disposable income of households, tax relief provided in the 2006/07 national Budget, especially for the low income groups, substantial equity price increases on the JSE, continued lower levels of expected inflation, and buoyant levels of consumer confidence. Consumer confidence, measured by the FNB/BER consumer confidence index as the percentage of respondents expecting an improvement less the percentage expecting deterioration, increased by one percentage point to +21 in the first quarter of 2006. On the downside, increasing levels of household debt and a cooling down of house prices are factors that should moderate consumer spending going forward.

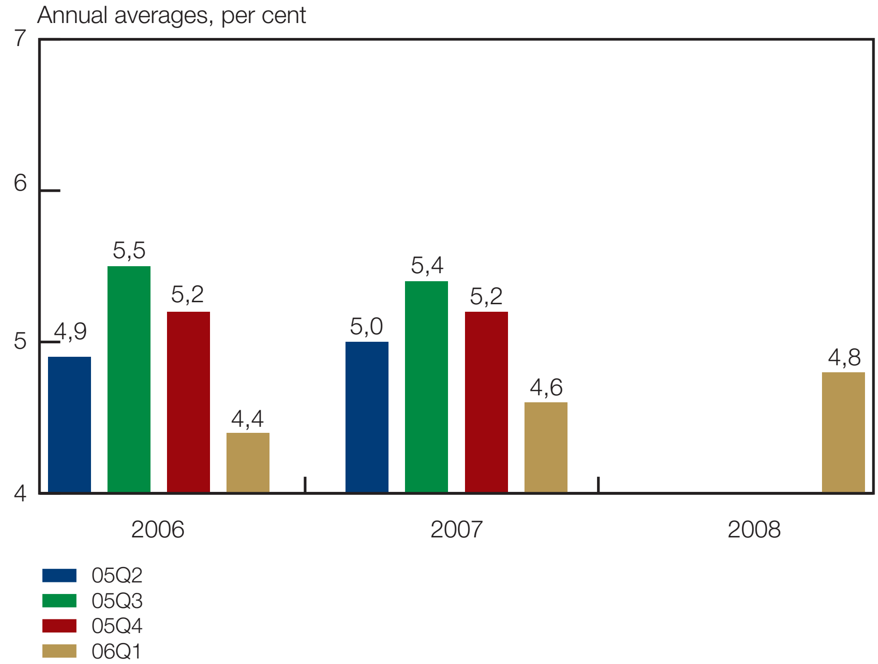
Business confidence levels generally remain upbeat. The RMB/BER business confidence index, which reports the gross percentage of respondents who perceive business conditions as satisfactory, rose to 86 per cent in the first quarter of 2006. This is just below the 88 per cent recorded in late 2004, which was the highest level since 1980. The SACOB/Absa Trade Activity Index also remained high in March 2006, with 66 per cent of respondents optimistic about trade conditions. Although this index declined for the second consecutive month in March, having recorded values of 68 per cent in January and 67 per cent in February, it nevertheless remains at a higher level than in March 2005. The Investec/BER Purchasing Manager's Index (PMI), which is a barometer of manufacturing activity, rose to 54,3 index points in April 2006 from 51,5 in March, suggesting some improvement in conditions for the manufacturing sector this year.

Overall, the short-to-medium-term outlook for aggregate demand and supply remains favourable and continues to be underpinned by domestic demand. However, sustained robust domestic demand growth generates some upside risk for inflation, particularly since recent growth in consumer demand has been strongest for durable and semi-durable goods which are either imported or have high import content, and thus contribute to a widening of the current-account deficit.

Indicators of inflation expectations

The various measures reviewed here suggest that inflation expectations are currently anchored around the midpoint of the inflation target range. The results of the latest BER survey, undertaken in the first quarter of 2006 and reproduced in Figure 18, show that respondents expect CPIX inflation to average 4,4 per cent in 2006, before increasing slightly to 4,6 and 4,8 per cent in 2007 and 2008, respectively. The results for 2006 and 2007 are notably below those obtained in the previous three quarterly surveys.

Figure 18 BER surveys of CPIX inflation expectations



Source: Bureau for Economic Research, University of Stellenbosch

According to the April 2006 Reuters survey of long-term forecasts for the South African economy (Table 9), CPIX inflation is expected to average 4,2 per cent in 2006, before rising to 4,7 per cent in 2007 and 2008. The median forecasts do not differ from these averages or from the median forecasts of the previous survey.

Table 9 Reuters survey of CPIX forecasts: April 2006*

Per cent

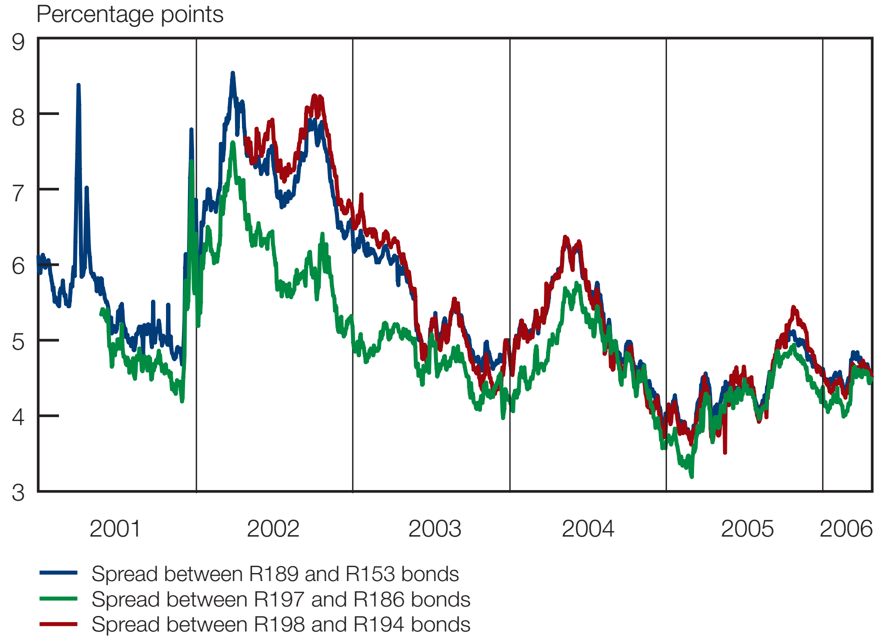
	2006	2007	2008
1. Mean	(4,2) 4,2	(4,6) 4,7	(4,5) 4,7
2. Median	(4,2) 4,2	(4,7) 4,7	(4,7) 4,7
3. Highest	(4,6) 4,5	(6,0) 6,0	(5,6) 5,5
4. Lowest	(3,4) 3,9	(3,2) 4,0	(3,5) 3,8
Number of forecasters	(16) 14	(16) 14	(9) 7

* March 2006 survey results in parentheses

Source: Reuters

An indication of developments in inflation expectations may also be obtained from the breakeven inflation rates in Figure 19, measured as the difference between the yields on South African CPI inflation-linked bonds and conventional nominal bonds of similar maturity. Breakeven inflation rates obtained from the R197 (maturing 2023), R189 (maturing 2013) and R198 (maturing 2008) inflation-linked bonds are all currently close to the midpoint of the inflation target range.

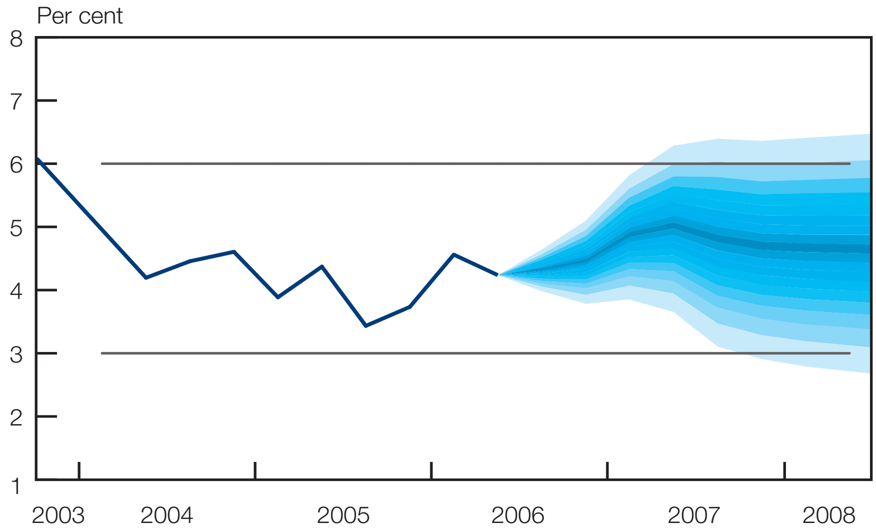
Figure 19 Breakeven inflation rates



The Reserve Bank inflation forecast

The Reserve Bank's latest quarterly forecast for CPIX inflation, which was presented to the MPC meeting on 12 and 13 April 2006, is presented in Figure 20. The central projection is for the CPIX inflation rate to accelerate to just below 5 per cent in the first quarter of 2007, and then remain slightly above the midpoint of the inflation target range until the end of the forecast period in the first quarter of 2008.

Figure 20 CPIX forecast



Note: The fan chart uses confidence bands to depict varying degrees of certainty. The darkest band of the fan chart covers the most likely 10 per cent of probable outcomes foreseen for CPIX inflation, including the central projection. Each successive band, shaded slightly lighter and added on either side of the central band, adds a further 10 per cent to the probability until the whole shaded area depicts a 90 per cent confidence interval (see Box 4 "Understanding the fan chart" on p. 27 of the March 2001 *Monetary Policy Review*).

The future is of course uncertain, as the fan chart technique is intended to communicate, and there are a number of risks that could cause the actual rate of CPIX inflation to differ from the central projection. Consumer demand continues to grow strongly, and with sustained asset price growth and consumer confidence at an all-time high, this shows few signs of abating. The related growth in credit extension to the private sector, and the increases in household indebtedness and debt servicing ratios are cause for concern, as is the widening of the deficit on the current account of the balance of payments. On the international front, the oil market remains beset by geopolitical tensions and tight demand and supply conditions, and the possibility of price spikes therefore also pose a risk to the inflation outlook.

Assessment and conclusion

Monetary policy faces a challenging period ahead as a result of conflicting tendencies. On the one hand the inflation outlook, as reflected in the recent inflation forecasts of the Bank, has improved significantly. Most private-sector forecasts have also improved over the past few months. These forecasts are also consistent with the improved inflation expectations which are evident in the latest inflation expectations survey. Moreover, wage settlements are in line with the inflation target, and the inflation rates of most components of the CPIX basket have converged to within the target range. These factors, *inter alia*, appear to point to a very comfortable picture for monetary policy going forward.

On the other hand there are a number of developments that have led the MPC to remain vigilant. One of these concerns is the growth in household consumption expenditure. Although there have not been any significant inflationary consequences of this growth to date, the MPC has expressed concern that if it continues to grow unchecked, inflationary pressures could emerge in the future. The brisk growth in demand has also had a significant impact on the current account of the balance of payments. Although the current levels of the deficit appear to be sustainable, a further material widening could bring about a change in sentiment towards South Africa. Added to these concerns are the movements in the international oil prices which have experienced a renewed surge in recent weeks.

On balance, the current outlook for inflation remains benign and indicates that the prevailing stance of monetary policy is appropriate. However, during the period ahead the MPC will continue to be faced with the difficult task of fashioning monetary policy to obviate the negative consequences to the economy which would arise should the risk factors which have been identified materialise.