

# **Quarterly Bulletin**

March 2002



South African Reserve Bank

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No 223



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ISSN 0038-2620

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## **Quarterly Economic Review**

#### Introduction

The news during the fourth quarter of 2001 was dominated by the steep and rapid decline in the exchange value of the rand. From the end of September 2001 to the end of December the weighted nominal effective exchange rate of the rand sunk by 24 per cent. Such a depreciation has undoubtedly strengthened the competitiveness of domestic producers in export markets and provides a strong incentive for future export growth. But it also raises the cost of imported intermediate, final and capital goods, threatening the successful attainment of the inflation target ranges set for 2002 and 2003. The uncertainty created by volatile rand movements is also likely to make international investors nervous and increasingly reluctant to commit investment funds to this economy.

At the international level, the attacks on America that destroyed the World Trade Center in New York and damaged the Pentagon building in Washington, D.C. pushed the United States economy into a recession. The attacks also triggered a chain reaction of economic events that spread the recession to other parts of the world and will probably affect the behaviour of communities for a long time.

As the United States economy faltered, it dragged other economies into its slump. This meant weaker demand from companies and households in most parts of the world, suppressing corporate earnings and prompting some governments to provide assistance to struggling industries. Fiscal policy became quite expansionary in the United States and monetary conditions have been eased on eleven occasions since the beginning of 2001. Still, the combined output of the members of the Organisation for Economic Cooperation and Development might have declined towards the end of 2001 for the first time since the beginning of the 1990s.

The key development in the world economy during the fourth quarter of 2001 was the weak growth in output and the relatively strong growth in demand, spurred in many countries by the easing of macroeconomic policy. The result has been substantial reductions in inventory levels, but this low level of inventories could now be laying the foundation for an output recovery in the remaining months of 2002. In the advanced economies a reversal from inventory run-downs to stockpiling should return the global economy to positive growth early in 2002, resulting in a fairly mild and relatively short recession.

The South African economy reacted in varying ways to the changing global economic scene. Until the middle of 2001 domestic economic growth had held up well in the face of the global slowdown and growth actually accelerated from the first to the second quarter. In the third quarter, export volumes bore the full brunt of the weakening international economic conditions and declined sharply, causing overall output growth to slow down to an annualised rate of just 1 per cent.

In the fourth quarter, and again contradicting the slower pace of global economic activity, export earnings recovered strongly, and along with continuing solid growth in domestic final demand, pulled output growth higher to an annualised rate of 2½ per cent. The resilience of domestic economic growth against the backdrop of the weakest international economy in more than a decade, was probably influenced significantly by

the greater competitiveness of South African producers in recent years, brought about by cost-cutting programmes since the beginning of the 1990s and competitive gains due to the depreciation in the real exchange value of the rand since 1996.

Domestic final demand conditions were highly conducive to an output expansion in the fourth quarter of 2001. Households increased their real spending levels at a faster pace than earlier in the year without incurring excessive debt. Government consumption started showing signs of renewed vigour and capital formation programmes got under way throughout the private business sector more resolutely than before. By contrast, inventory investment was curbed somewhat in the fourth quarter of 2001, but this was essentially because inventories had to help satisfy the strong expansion in domestic demand.

The national saving ratio remained disappointingly low. Corporate saving, which still represents the mainstay of the national saving effort, weakened in the fourth quarter of 2001 as companies stepped up distribution instead of retaining income in the business. This could have been motivated by the decline in capital cost which tilted the optimal debt-equity ratio in favour of debt financing, in the form of increased borrowing from banks or the issuance of interest-bearing securities.

Despite a narrowing in the discrepancy between growth in domestic expenditure and output in the fourth quarter of 2001, aggregate domestic expenditure still exceeded national disposable income by a sizeable margin. This left a gap between aggregate spending and disposable income which required the transfer of financial resources from the rest of the world in order to limit downward pressures on the exchange value of the rand, and general upward pressures on prices. These resource flows were, however, not forthcoming in the fourth quarter of 2001 and the exchange rate of the rand consequently suffered downward pressure.

Reflecting the relative strength of aggregate domestic demand, payments for imports – particularly of durable consumer goods and capital equipment – grew quite strongly in the fourth quarter of 2001. Export earnings, in turn, expanded even more than the payments for imports, improving somewhat the positive balance on the trade account of the country with the rest of the world. The overall imbalance on the current account of the balance of payments also had some help from a smaller deficit on the services account in the fourth quarter of 2001, among other things due to smaller dividend payments to the rest of the world. Still, the current account remained in deficit in the fourth quarter of 2001 to the tune of 0,3 per cent of nominal gross domestic product.

The balance on the financial account of the balance of payments switched from a healthy surplus in the third quarter of 2001 to a deficit in the fourth quarter, i.e. capital was exported from the economy in the last quarter of 2001. Outflows of capital on a net basis were recorded in all the major identified categories of capital transactions, namely foreign direct investment, portfolio investment and other investments such as short-term bank loans, trade financing and cross-border bank deposits. Exporters apparently accumulated offshore assets, i.e. they allowed capital to leave the economy by delaying the repatriation of export proceeds in order to profit from the depreciation in the exchange value of the rand.

With deficits on both the current account and the financial account of the balance of payments during the fourth quarter of 2001, a decline was recorded in the country's net gold and other foreign reserves owing to balance of payments

transactions. In such circumstances, there is a strong likelihood of a depreciation in the exchange value of the rand, but the extent and the speed of the depreciation are obviously not easy to explain.

Although the country's net international reserves declined as a result of balance of payments transactions, there was a sizeable increase in these reserves when measured in rands, virtually entirely due to revaluation gains from the stronger exchange value of the US dollar against the rand in the fourth quarter of 2001. Import cover accordingly improved from about 20 weeks' worth of imports of goods and services at the end of September 2001 to 24 weeks' worth at the end of December.

Despite continuing economic growth, overall employment in the modern sectors of the economy kept falling in the first three quarters of 2001. The pace of labour attrition nevertheless slowed down quite noticeably, giving the impression that the processes directed towards improving the international competitive ability of private businesses and the quality of public-service delivery may have achieved the desired results.

In the context of the South African economy, nominal wage growth was still fairly moderate during the first three quarters of 2001, even though the growth in nominal remuneration accelerated slightly from the rates of 2000. Simultaneously, the slower decline in employment levels, combined with weaker output growth, held back the solid advances in productivity growth seen in recent years. Economy-wide growth in unit labour cost accordingly picked up somewhat during the first three quarters of 2001.

As yet, little of the product price effects of higher growth in nominal unit labour cost have become evident in domestic price increases during the fourth quarter of 2001, but latent inflationary pressures were activated by steep increases in food prices and the first-round effects of the depreciation of the rand. Although these price shocks are not inflation in the strict sense of the word, they do help to perpetuate an inflation psychosis through their influence on price expectations.

What is usually found in the aftermath of one-off price shocks such as the rise in food prices and the depreciation of the rand, is that the overall price level is raised and that during the adjustment process, actual inflation is higher than it would otherwise have been. All other things remaining equal, consumers will experience a decline in their real income. If they are compensated for such a loss in real purchasing power, an inflationary process may get under way, or an already persistent increase in the general price level may be aggravated.

The immediate effect of a random price shock cannot be controlled by monetary policy measures. For instance, no level of interest rates would be sufficient if the prices of imported goods were to rise as a consequence of a depreciation of the rand, i.e. the first-round price adjustments following the depreciation. However, such a one-off price increase could be perpetuated as a process of continual increases in the prices of all goods and services if monetary policy is not vigilant enough.

Growth in the broadly defined money supply expanded in the second half of 2001, at first quite vigorously in the third quarter but later somewhat more moderately in the fourth quarter. Although this was partly a positive development reflecting the inherent strength of the economy, the high growth in money supply is unlikely to be consistent with low and stable inflation. Money was accumulated particularly in corporate bank balances with short maturities. This probably reflected concern about the sustainability of asset price increases generally, inducing a preference for

money balances as a temporary safe haven for investment. However, part of the money accumulation could also have been for transaction purposes with a view to increasing future spending. In this sense, rapid money growth might be indicative of a problem as it is known that growth rates of money supply and the general price level are highly correlated in the long run, with a correlation coefficient of close to one.

On the asset side of banks' balance sheets, credit extension to the private sector, especially to companies, was the main accounting counterpart of the expansion of the broad money supply in the second half of 2001. "Other loans and advances", which includes overdrafts to companies, contributed substantially to the overall growth in private-sector credit as, among other things, exporters accessed domestic bank facilities while delaying the repatriation of their export proceeds. Mortgage borrowing by households increased at a lively pace in the second half of the year alongside the buoyancy of the real-estate market. Instalment sale financing and leasing contracts also expanded appreciably in response to the strong demand for durable consumer goods, especially new motorcars.

The long bull market in bonds since May 2000, firmly based on declining inflation expectations and a dwindling supply of public-sector fixed-interest securities, was brought to a sudden end by the depreciation in the value of the rand in December 2001. Bond yields rose sharply as the decline in the value of the rand fuelled expectations of higher inflation. This rise in bond yields received further support from an upward adjustment in the Reserve Bank's repurchase rate in January 2002 – a step taken to prevent the depreciation of the rand from developing into a succession of rapid rises in the general price level.

Share prices increased strongly from September 2001 to early February 2002. It was mainly the prices of counters listed in the resources sector of the JSE Securities Exchange SA and other companies also benefiting from the depreciation of the rand that were pushed to new heights. Non-residents were eager buyers of listed South African equities throughout 2001, but simultaneously they were offloading their holdings of fixed-interest securities.

In the primary capital markets, companies shied away from the share market for raising new investment capital – capital raised in the primary equity market in 2001 was almost 70 per cent below the total amount of funds raised in 2000. However, in the primary fixed-interest market, the shrinking demand for funds by public-sector borrowers made room for private-sector borrowers to satisfy their funding needs outside the banking sector. The primary corporate bond market blossomed and the value of private-sector loan stock listed on the Bond Exchange of South Africa almost doubled from the end of 2000 to the end of 2001.

Sustainable and efficient fiscal policies are seen as a prerequisite for steady long-term economic growth. They usually stimulate private-sector investment while limiting the negative consequences for saving and investment that may arise from high and varying tax rates. Sound fiscal policy also supports the task of monetary policy makers to maintain price stability. There is likely to emerge over time a virtuous cycle of fiscal efficiency and price stability on the one hand, and sustained growth and rising employment on the other.

The fiscal authorities in South Africa have taken major steps during recent years in securing fiscal sustainability. The budget deficit of the national government relative to gross domestic product in the first three quarters of the current fiscal year has

been reduced to levels not seen in the past twenty years, the rise in the public debt relative to gross domestic product has been stopped and the interest burden of the national government has been eased considerably. All these initiatives contributed to the emergence of a healthy financial surplus in the accounts of the non-financial public sector in the first three quarters of fiscal 2001/02. These improvements in the efficiency of fiscal policy are helping to lay the foundation for sustained long-term economic growth and employment creation which are likely to promote further the government's empowerment and redistribution objectives.

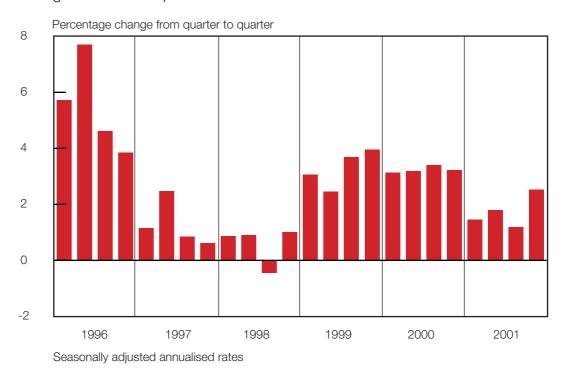
The principles of sound fiscal management were again firmly embedded in the Budget proposals of the Minister of Finance for the 2002/03 to 2004/05 medium-term planning period. Fiscal consolidation over the past five years has afforded government the opportunity to deepen its commitment to redistribution, allowing consumers significant tax relief, encouraging investment by the private sector and placing a renewed focus on physical infrastructural development.

## **Domestic economic developments**

## **Domestic output**

The seasonally adjusted and annualised growth in *real gross domestic product* accelerated from 1 per cent in the third quarter of 2001 to 2½ per cent in the fourth quarter. Despite the strong surge in economic growth in the fourth quarter of 2001, the global economic slowdown caused a decline in year-to-year growth from 3½ per cent in 2000 to 2 per cent in 2001.

### Real gross domestic product

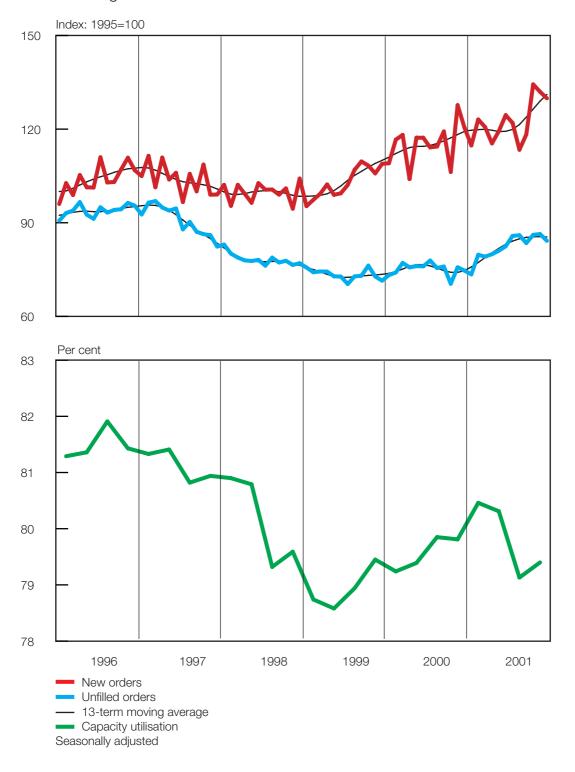


# Real gross domestic product Percentage change at seasonally adjusted annualised rates

	2000					2001				
Sectors	1st qr	2nd qr	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr	4th qr	Year
Primary sectors	2	2	1/2	- 1/2	2	-4	- ½	-1½	-2½	-1½
Agriculture	11	9½	3½	-2	7½	-10	-4	-1 ½	-21/2	-3
Mining	-3½	-3½	-2	1/2	-2	1 ½	2½	-1	-21/2	0
Secondary sectors		3½	5½	6	4	1/2	1	- 1/2	4	2½
Manufacturing	5	4	6½	7½	5	1/2	1	-1	5½	3
Tertiary sectors	3	3½	3	2½	3½	2½	2½	2½	2½	2½
Non-primary sectors	3	3½	3½	3½	3½	2	2	1 ½	3	2½
Total	3	3	31/2	3	31/2	1 ½	2	1	21/2	2

The manufacturing sector set the pace for output expansion during 2001. Though hampered by work disruptions in prominent subsectors of industry during the first nine months of 2001 and by the waning of global economic activity, manufacturers still achieved output growth of 3 per cent in 2001, following growth of 5 per cent in 2000. In the final quarter of 2001, growth in the manufacturing sector was fairly spectacular at an annualised rate of 5½ per cent, taking output levels 10½ per cent higher than the latest low point in the first quarter of 1999. Export-oriented

## Manufacturing



industries, in particular those producing chemicals and chemical products, basic metals and transport equipment, benefited from the depreciation in the exchange value of the rand. Also, industrial relations were far more harmonious and less disruptive than in the first three guarters of 2001.

Demand for manufactured goods remained strong throughout 2001 as was evident in lengthening order books and rising unfilled orders. The value of new orders increased impressively in the fourth quarter of 2001, suggesting that the renewed momentum in manufacturing production is likely to be carried forward into 2002. Ample spare capacity is still available to meet such growth in demand. The utilisation of production capacity was down at 79,1 per cent in the third quarter of 2001 when export demand and output volumes faltered temporarily. Subsequently, the utilisation rate picked up to 79,4 per cent in the fourth quarter, still leaving sufficient productive capacity to accommodate a further output expansion.

The sector supplying *electricity, gas and water,* facing weak demand for electricity from high intensity users such as base metal producers, struggled to add real value in 2001 and this actually declined at an annualised rate of 1 per cent in the fourth quarter. The *construction industry* is apparently recovering from the serious setbacks suffered in the late 1990s. Real value added by the construction sector grew by 4 per cent in 2001, after registering growth of  $2\frac{1}{2}$  per cent in 2000. The stronger pace of activity in the construction sector is corroborated by an increase in cement sales in the domestic market of about 2 per cent in 2001, and by a strong increase in real fixed capital outlays on buildings and other construction works.

The *tertiary sectors* also made a noteworthy contribution to overall output growth in 2001 when their real value added grew by 2½ per cent. In 2000 real value added by these sectors had expanded by 3½ per cent.

Growth from quarter to quarter in the tertiary sectors remained around 2½ per cent throughout 2001. Towards the end of the year there was quite a vigorous upturn of growth in the *wholesale and retail trade sectors*. Real value added by the entire commercial sector accelerated to an annualised rate of 4 per cent in the fourth quarter of 2001 as consumers went on a spree of pre-emptive buying. Consumers apparently wished to avoid the price increases they anticipated would follow the depreciation of the rand against virtually all other currencies. Growth in the *catering and accommodation* subsector remained rather flat in 2001 despite the higher number of foreign tourists visiting the country.

Real value added by the *transport, storage and communication sector* increased at seasonally adjusted and annualised rates of 4½ per cent in the third and fourth quarters of 2001. Growth in this sector was spurred on by increased activity in the telecommunication industry where a third cellular telephone operator started operations, and by increased activity among short-distance private transport operators.

The financial intermediation, insurance, real-estate and business services sector was not left unaffected by the overall slowdown in economic activity, but still succeeded in sustaining growth at a rate of 4 per cent in 2001, compared with 6 per cent in 2000. Moreover, growth in real value added in these sectors accelerated somewhat from the third to the fourth quarter of 2001. At a seasonally adjusted and annualised rate, the financial services sectors expanded their collective value added by 4 per cent in the last quarter of 2001. Heightened activity in the securities

markets and among financial asset managers contributed appreciably to the ongoing prosperity of the financial services sector.

Unlike the secondary and tertiary sectors of the economy where output levels expanded in 2001, real value added by the *primary sectors* fell in the course of 2001. Mining output held its ground and remained unchanged at the levels of 2000, but *agricultural production* declined by 3 per cent in 2001. The maize crop was down from 11,4 million tonnes in 2000 to 8,0 million tonnes in 2001. Real value added in the agricultural sector declined in every quarter of 2001, falling at an annualised rate of 2½ per cent in the fourth quarter.

The *mining sector* received a major boost from the depreciation in the exchange value of the rand. The higher rand prices received for exported commodities enabled mine management to reduce output volumes in order to lengthen the useful life of mines. This was true in the case of gold-mining companies where previously uneconomical deposits became profitable. By switching to the mining of ore with a lower gold content, mine management could successfully preserve high-quality gold deposits, and simultaneously enhance profitability. Real output increases in the non-gold mining sectors largely counteracted the decline in gold output in 2001, but in the last quarter of the year the real value added by diamond and platinum mines declined too.

Growth in *real gross national income*, which is an accurate indicator of changes in real aggregate disposable income, slowed down from 3 per cent in 2000 to 2 per cent in 2001, leaving income *per capita* unchanged at the level attained in 2000. A substantial portion of domestically generated income was transferred to non-residents, especially to non-resident holders of equity in South African companies. Interest and dividends earned on assets held offshore failed to match the outward payments of interest and dividends that were made. The international terms of trade improved during 2001, signalling a boost for the economy in the sense that a smaller volume of exports is now required to pay for the same volume of imports. This improvement was, however, insufficient to counter the effect of the outward movement of factor rewards to the rest of the world.

## Domestic expenditure

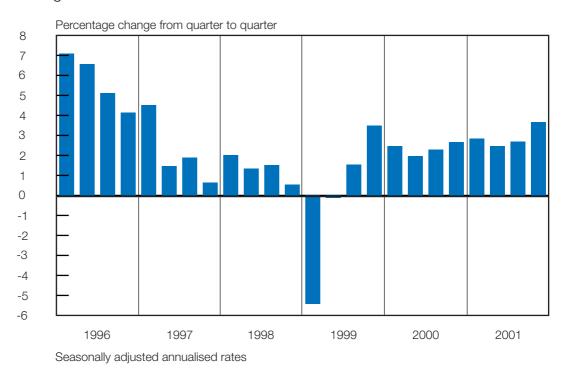
Growth in total *real gross domestic expenditure* slowed down considerably in the fourth quarter of 2001. After having recorded an increase at a seasonally adjusted and annualised rate of 6 per cent in the third quarter of 2001, the growth in total real gross domestic expenditure slowed down to 3 per cent in the fourth quarter. This

# Real gross domestic expenditure Percentage change at seasonally adjusted annualised rates

		2000					2001			
Components	1st qr	2nd qr	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr	4th qr	Year
Final consumption expenditure by households Final consumption expenditure	3½	2½	3	3½	3½	2½	2½	2½	3½	3
by general government	0 2 9,0 7½	0 2 7,0 1	0 2 8,7 3½	½ 2 3,2 -2	½ ½ 7,0 3	1½ 5 2,6 2½	2½ 3 -2,3 0	2½ 3 5,3 6	3 5½ 6,2 3	1½ 3½ 3,0 2

was the result of a substantial slowdown in the pace of net inventory investment, which countered the marked increases in real domestic final demand. For the calendar year 2001, total real gross domestic expenditure increased by 2 per cent compared with an increase of 3 per cent in 2000.

## Real gross domestic final demand

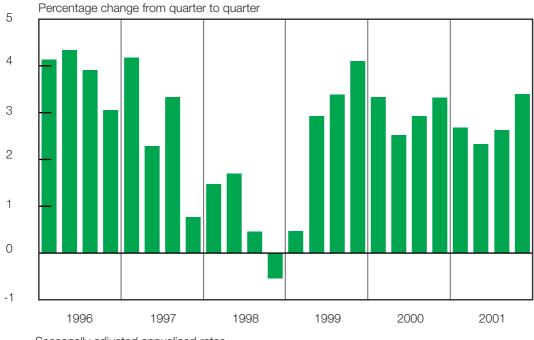


Growth in *real final consumption expenditure by households* accelerated in the fourth quarter of 2001. After growing at a quarter-to-quarter seasonally adjusted and annualised rate of 2½ per cent in the third quarter of 2001, real final consumption expenditure by households increased by about 3½ per cent in the fourth quarter. This was mainly due to increases in real expenditure on durable and semi-durable goods. There was a strong increase in real outlays by households on transport equipment, especially new cars, in the fourth quarter of 2001.

Real final consumption expenditure by households Percentage change at seasonally adjusted annualised rates

			2000		2001					
Components	1st qr	2nd qr	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr	4th qr	Year
Durable goods	11	6½	7	7½	9½	3½	-4½	3½	10½	3½
Semi-durable goods	4 ½	6	4	8	5½	6½	4	4	8½	6
Non-durable goods	0	1/2	1	1/2	1/2	1½	2½	2	1/2	1 ½
Services	5	2½	4	4	4	3	3	3	3½	3½
Total	31/2	21/2	3	3 1/2	31/2	21/2	21/2	21/2	31/2	3

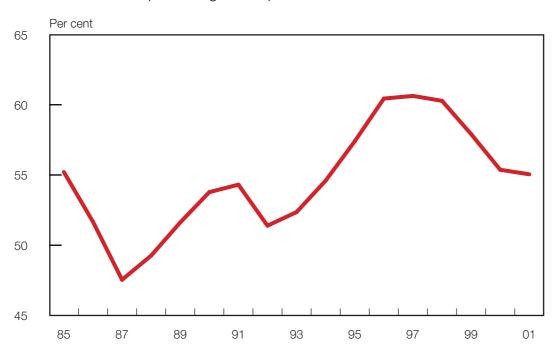
## Real final consumption expenditure by households



Seasonally adjusted annualised rates

The relatively strong growth in final consumption expenditure by households in the fourth quarter of 2001 can be attributed to some pre-emptive buying by consumers as the depreciation in the value of the rand fuelled fears of steep increases in the prices of consumer goods, particularly goods with a high import content.

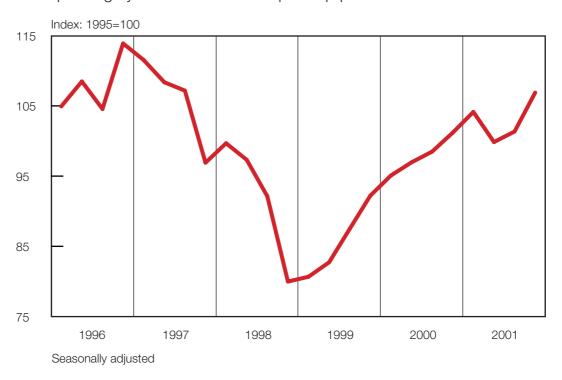
## Household debt as percentage of disposable income



Despite the stronger quarter-to-quarter growth in the fourth quarter of 2001, the growth in real *final consumption expenditure by households* slowed down from 3½ per cent in 2000 to less than 3 per cent in 2001. This was consistent with weaker growth in the real disposable income of households, which eased from 3 per cent in 2000 to 2½ per cent in 2001. Consumer confidence weakened during 2001 as news of the deteriorating global economy influenced the spending decisions of consumers. The somewhat gloomy outlook probably motivated consumers to avoid excessive debt financing of purchases. Reflecting this conservative attitude, the average debt-income ratio of households declined from 55½ per cent in 2000 to 55 per cent in 2001.

Real outlays by households on *durable goods* increased briskly at a seasonally adjusted and annualised rate of 10½ per cent in the fourth quarter of 2001, following an increase of 3½ per cent in the third quarter. Households' real expenditure on personal transport equipment in the fourth quarter of 2001 reached a level that was 33½ per cent higher than the recent low recorded in the fourth quarter of 1998, but this was still about 6 per cent lower than the high in the fourth quarter of 1996. Sustained growth was also recorded in real outlays on the other categories of durable goods, especially recreational equipment.

## Real spending by households on transport equipment

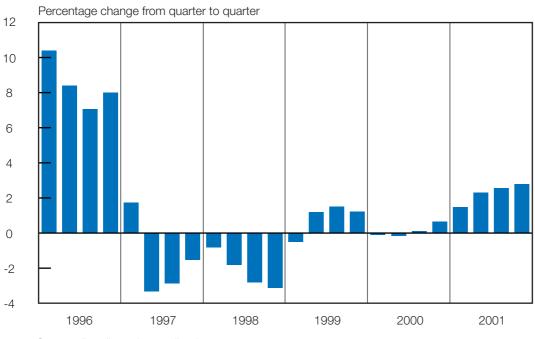


Household expenditure on *semi-durable goods* also increased strongly in the fourth quarter of 2001 at a seasonally adjusted and annualised rate of 8½ per cent, following an increase of 4 per cent in the third quarter. This increase was particularly pronounced in real outlays on clothing and footwear, but slower growth in expenditure was recorded for other categories of semi-durable goods.

Slower growth in real expenditure on *non-durable goods* was recorded in the fourth quarter of 2001, reflecting cutbacks in spending on food, beverages and tobacco, household fuel and power. By contrast, spending on petroleum products and medical and pharmaceutical products exceeded the rate of increase in prices. Real expenditure on services also increased in the fourth quarter of 2001, more specifically in the areas of medical services and transport and communication services.

The growth in *real final consumption expenditure by general government* accelerated somewhat from an annualised rate of 2½ per cent in the third quarter of 2001 to 3 per cent in the fourth quarter. This was the net result of higher real spending on intermediate goods and services which more than neutralised a decline in real expenditure on the compensation of employees. Overall, expenditure by general government increased by 1½ per cent in 2001 compared with ½ a per cent in 2000. Notwithstanding these developments, the ratio of final consumption expenditure by general government to gross domestic product has remained at about 18 per cent in the past eight quarters.

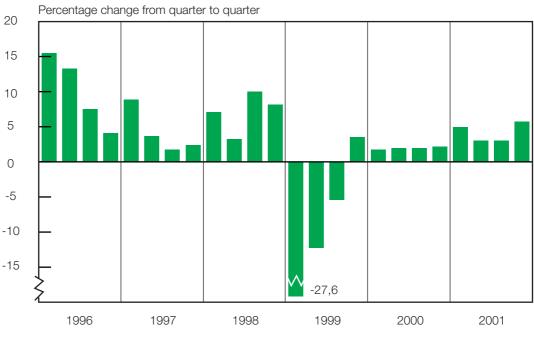
## Real final consumption expenditure by general government



Seasonally adjusted annualised rates

Real gross fixed capital formation increased at a seasonally adjusted and annualised rate of 5½ per cent in the fourth quarter of 2001, following increases of 5 per cent in the first quarter and 3 per cent in the second and third quarters. The acceleration in the growth of real gross fixed capital formation in the fourth quarter of 2001 was due to faster growth in real capital outlays by all three institutional subsectors, namely private business enterprises, general government and public corporations. As a result of these developments, real fixed capital formation grew by 3½ per cent in 2001 as a whole, considerably higher than the ½ per cent growth in 2000.

## Real gross fixed capital formation



Seasonally adjusted annualised rates

Real gross fixed capital formation in the *private sector* increased at a seasonally adjusted and annualised rate of 6 per cent in the fourth quarter of 2001. This helped to raise private-sector fixed capital formation in 2001 to a level that was 5½ per cent higher than in 2000, only slightly down from the 6½ per cent growth in 2000 despite the slump in overall economic conditions.

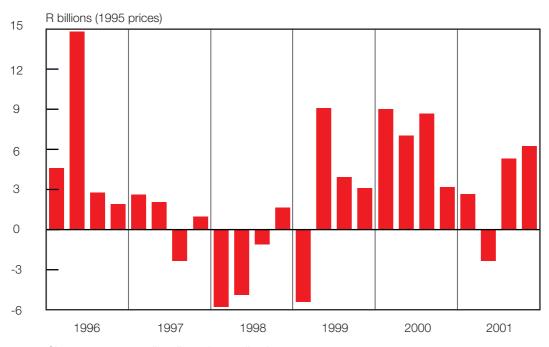
An analysis of real outlays on fixed capital by the private sector according to kind of economic activity shows that this acceleration was well dispersed over all subsectors of the economy. Real outlays on capital goods in the mining sector benefited from the expansion of the platinum mines. The communication sector improved its existing network and expanded its capacity to accommodate the third cellphone operator. The agricultural sector could afford to replace obsolete capital stock and expand capacity, following high income levels in 2000. The manufacturing sector expanded its capacity so that it could benefit from the new opportunities arising in export markets.

The real fixed capital formation by public corporations increased in the fourth quarter of 2001, but due to the quarter-to-quarter declines during the first three quarters of 2001, total annual spending still declined by 6 per cent in 2001, following a decline of 22½ per cent in 2000. This continued reduction of capital spending was apparently consistent with strategies to prepare these organisations for increased private-sector participation in ownership and management, and possibly also for increased competition from alternative suppliers of services.

Following a strong expansion in *inventories* in the third quarter of 2001, real inventory accumulation rose further in the fourth quarter but at a slower rate than previously. This was the net result of increases in inventory levels by all the economic subsectors except the commercial sector where inventories actually declined.

Declines were particularly evident in the inventories of the motor trade and wholesale trade. The contribution of inventory investment to growth in real gross domestic product declined from 5 percentage points in the third quarter of 2001 to just ½ a percentage point in the fourth quarter.

#### Total inventories



Changes at seasonally adjusted annualised rates

A slower rate of inventory investment was recorded in 2001 than in 2000. The level of inventories, at constant 1995 prices, increased by R3,0 billion in 2001, compared with about R7,0 billion in 2000, cutting overall economic growth by ½ a percentage point. The lower rate of inventory accumulation can be attributed to the relatively stronger growth in demand, which was not fully met by the growth in production and imports. An analysis by economic sector for 2001 shows that *industrial and commercial inventory* investment slowed down significantly and that the inventories in the other sectors declined absolutely. Despite these developments, the ratio of industrial and commercial inventories to non-agricultural gross domestic product remained at a level of roughly 15½ per cent in the fourth quarter of 2001 and in the year as a whole.

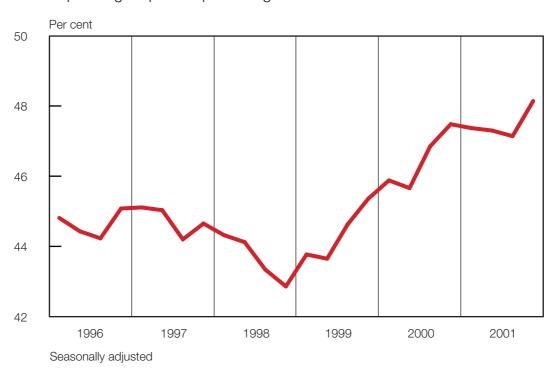
#### Factor income and saving

The growth over four quarters in *total nominal factor income* slowed down to 10 per cent in 2001, following growth of 10½ per cent in 2000. This slowdown was fully consistent with weaker economic growth in 2001 and a noticeable contraction of overall price inflation in the economy.

Operating surpluses increased at a higher rate than growth in the compensation of employees during 2001. Operating surpluses grew by 12 per cent and employee compensation by 8 per cent. This was the third year in succession that operating surpluses outstripped the growth in compensation of employees, taking the level of operating surpluses relative to total factor rewards higher from 43½ per cent in 1998

to 47½ per cent in 2001. Apart from the exceptional circumstances of 1980 when the price of gold reached unprecedented heights that have not since been equalled, operating surpluses in 2001 as a percentage of total factor income were at their highest level since World War II.

Gross operating surplus as percentage of total factor income



Although operating surpluses grew faster than employee compensation in 2001, the growth in operating surpluses slowed down from 16 per cent in 2000 to 12 per cent in 2001, whereas growth in the compensation of employees picked up from 6½ per cent to 8 per cent over the same period. This may indicate that although employees were still succeeding in negotiating wage settlements that provide for some real wage growth, employers were also more than fully recovering their input cost increases, but the growth in their operating margins decelerated slightly from 2000 to 2001.

The pick-up in economic activity in the fourth quarter of 2001 was reflected in the growth in operating surpluses, which increased from 9 per cent in the third quarter to 11½ per cent in the fourth quarter. The manufacturing sector led this upturn, but noteworthy accelerations also occurred in the transportation and communication sectors and in financial services. Corporate profits benefited, among other things, from the strong increase in export demand and the depreciation in the exchange value of the rand. Furthermore, labour cost growth remained well-contained as the total compensation of employees grew year on year by 8 per cent in the third quarter and again at the same rate in the fourth quarter. If the employment trends of the previous quarter had persisted in the fourth quarter, it is quite conceivable that profits and operating surpluses could also have been boosted by some productivity increases.

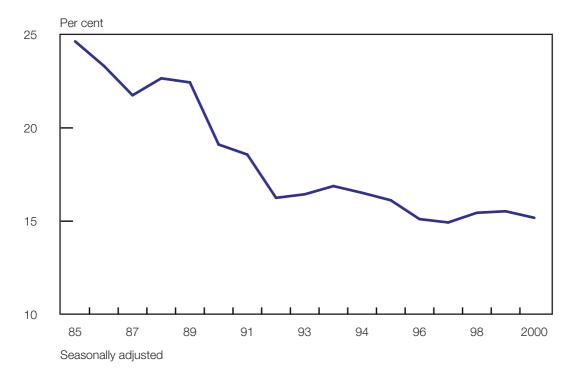
Despite operating surpluses (i.e. the main source of income of the corporate sector) growing faster than employee compensation (i.e. the main source of household income), corporate saving relative to gross domestic product fell back slightly from 13 per cent in 2000 to 10½ per cent in 2001. Higher dividend payments to

shareholders were mainly to blame for the weaker performance in corporate saving. This could have been due to the recent decline in capital cost which changed the optimal debt-equity ratio of companies in favour of external capital, either in the form of borrowing from banks or in the form of debt issuance in the primary corporate bond market. Irrespective of the cause of the deterioration in the corporate saving rate, it lowered the overall quantum of savings relative to gross domestic product from 15½ per cent in 2000 to 15 per cent in 2001.

Private household incomes benefited from the distribution of profits by companies. This helped the household sector to maintain its saving ratio at about the same, but low, level of the past two years.

The government sector contributed meaningfully to the national saving effort. Gross saving by general government has been improving consistently since 1998. As a consequence, gross saving by general government as a percentage of gross domestic product improved from a dissaving of less than ½ a per cent in 2000 to a positive saving of 1½ per cent in 2001. This improvement was brought about by the consistently higher government revenue collections which outstripped growth in recurrent expenditure, and is a clear reflection of government's strong commitment to prudent fiscal policy.

Gross saving as percentage of gross domestic product



#### **Employment**

According to the Survey of Employment and Earnings in Selected Industries (SEE) by Statistics South Africa, total employment in the formal non-agricultural sector of the economy continued to fall in the first three quarters of 2001, but there were clear signs that the pace of job attrition was slowing down. Regularly surveyed employment in the formal non-agricultural sectors of the economy declined at year-on-year rates of 2,2 per cent in the first quarter of 2001, 1,7 per cent in the second quarter and 1,2 per cent in the third quarter.

The more comprehensive six-monthly household-based *Labour Force Survey* (LFS) by Statistics South Africa indicates that formal-sector employment remained broadly unchanged between February 2000 and February 2001 – the latest information currently available. This implies that over that period employment growth must have been fairly robust in those sectors of the economy that are not adequately covered by the SEE.

The private and public sector recorded job losses in each of the first three quarters of 2001. Employment losses in the *private sector* during the first three quarters of 2001 occurred over almost the full spectrum of economic activity. Notable exceptions were the non-gold mining sector and the trade, catering and accommodation services sectors where healthy employment gains were registered. These sectors stand to benefit materially from growing internal demand for mineral exports and from continued growth in the number of foreign visitors touring the country.

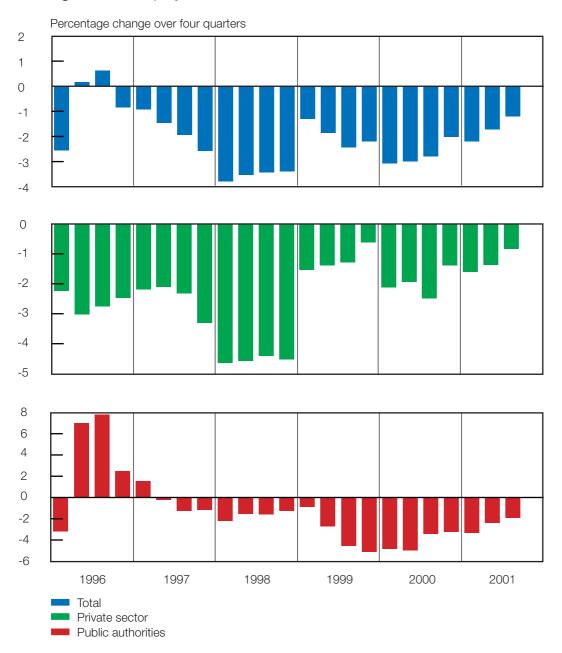
Year-on-year change in non-agricultural private-sector employment in the first nine months of 2001

Sector	Percentage change
Gold mining  Non-gold mining  Manufacturing  Electricity supply  Construction  Trade, catering and accommodation services  Transport, storage and communication  Financial intermediation and insurance  Washing and dry-cleaning services  Total private sector	-6,1 2,3 -2,9 -1,4 -0,9 1,8 -1,8 -1,4 -14,8 -1,2

The declines in *public-sector* employment occurred throughout the public service in the first three quarters of 2001, but were especially prominent in the transport, storage and communication services sector and in the ranks of provincial governments. These declines reflect a strong commitment to "right-sizing" the overall public service and to improving the quality of public-service delivery. The slower pace of job shedding, from an annualised rate of 3,4 per cent in the fourth quarter of 2000 to 0,6 per cent in the third quarter of 2001, seems to indicate that the process of "right-sizing" may be drawing to a close.

Although economy-wide job creation is progressing at a very modest pace, the number of workdays lost to strikes and other forms of work stoppages rose from about 0,5 million in 2000 to 1,25 million in 2001. According to NMG-Levy Consultants and Actuaries the rise in the number of workdays lost in 2001 can mainly be attributed to the renegotiation of a number of long-term agreements which heightened the potential for industrial action across large sections of the economy. However, the average duration of collective bargaining processes declined from about two months in 2000 to about 45 days in 2001, signalling the increased awareness among participants in the labour market of the need to limit the unnecessary wastage of productive resources.

## Non-agricultural employment



In an attempt to benefit new entrants to the labour market, government has also proposed to amend a section in the Labour Relations Act regarding dismissal procedures. Under the proposed amendment, employers will be required to engage in a fair dismissal procedure but will no longer have to prove that the dismissal was for a fair reason. Instead, the dismissed probationer will have to prove that the reason for discharge constitutes an unfair labour practice. It is envisaged that this proposed amendment will further contribute to the establishment of a labour market which is better geared towards sustainable high rates of employment growth.

#### Labour cost and productivity

The rate of increase over one year in the nominal compensation per worker in the formal non-agricultural sectors of the economy picked up from 7,4 per cent in the

year to June 2001 to 8,8 per cent in the year to September. Faster remuneration growth occurred in the public sector, while remuneration growth in the private sector slowed down slightly. On average, economy-wide nominal remuneration per worker outside of the agricultural sector increased by 8,9 per cent in the first three quarters of 2001 compared with the same period in the previous year. With overall consumer price inflation averaging 5,7 per cent, employed workers enjoyed a fairly generous improvement of about 3 per cent in their "real consumption wage", i.e. in the real spending power of their remuneration increments.

The pick-up in nominal wage growth in the third quarter of 2001 is consistent with survey results obtained from NMG-Levy Consultants and Actuaries, which show that the downward movement in the average annual *rate of wage settlements* in collective bargaining agreements was levelling out at 7,4 per cent in 2001, unchanged from the rate in 2000. The average minimum monthly wage per worker nevertheless rose by 10,4 per cent in 2001 compared with 9,1 per cent in 2000. Some compression of wage scales is therefore occurring in the South African economy, with minimum wage rates growing faster than wage levels in the higher income brackets.

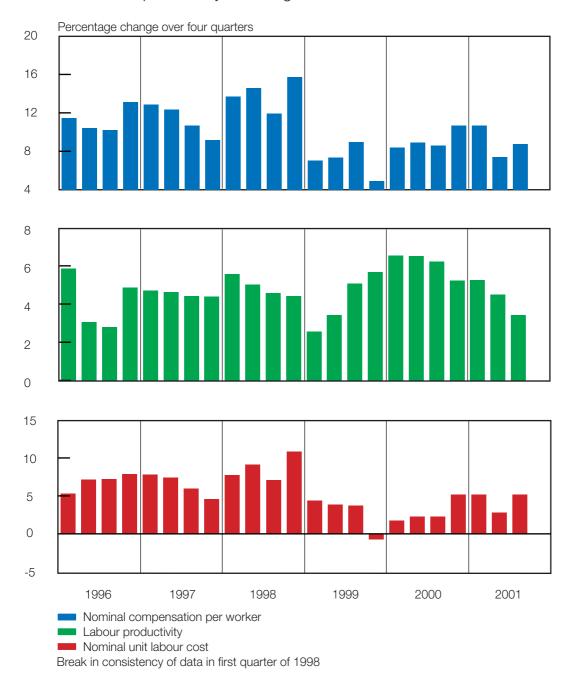
The acceleration in nominal remuneration growth in 2001 was more evident in *public-sector* salaries and wages than in private-sector pay improvements. Nominal income per worker in the public sector rose by 9,5 per cent in the first three quarters of 2001, approximately the same improvement as in 2000. In the public sector, workers in the national government's general departments fared considerably better than their counterparts at local government level.

Unlike the faster growth in nominal remuneration per worker in the public sector, remuneration growth over one year in the *private sector* slowed down from 9,8 per cent in the second quarter of 2001 to 9,1 per cent in the third quarter. This slowdown was especially noticeable in the gold-mining sector, trade, catering and accommodation services sector and in the financial intermediation and insurance industry. When comparing the first three quarters of 2001 with the same period in 2000, nominal compensation per worker in the private sector rose by 8,7 per cent, measurably down from the 9,2 per cent increase in 2000 as a whole.

Partly as a consequence of the heightened industrial action during 2001, the growth in worker productivity (measured as real output per worker in the non-agricultural sectors of the economy) fell back from a year-on-year rate of 6,5 per cent in the second quarter of 2000 to 3,4 per cent in the third quarter of 2001. Slower output growth, in part a consequence of the increased incidence of work disruption, alongside the slowdown in the rate of labour attrition, weighed down on productivity growth over the first three quarters of 2001. Year-on-year growth in labour productivity in the first three quarters of 2001 was still at a relatively high level of 4,4 per cent but was significantly down from growth of 6,1 per cent in 2000.

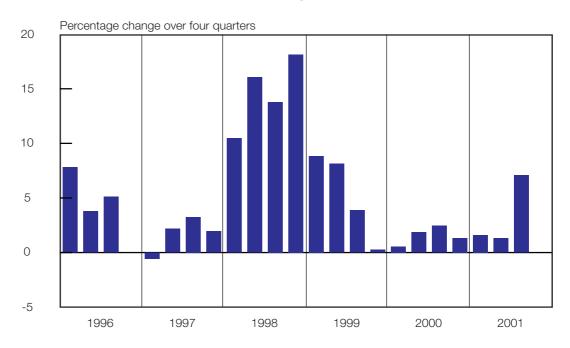
The rate of change in *nominal unit labour cost* is one of the main determinants of the inflationary process. Unit labour cost is derived as the ratio of nominal compensation per worker to output per worker. When productivity rises at a slower pace than nominal compensation per worker, the cost of the labour

## Labour cost and productivity in non-agricultural sectors



required to produce one unit of output rises. The recent slowdown in labour productivity growth is therefore key to the pick-up in the growth of unit labour cost from a year-on-year rate of 2,9 per cent in 2000 to 4,3 per cent in the first three quarters of 2001. In the manufacturing sector, growth in unit labour cost rose even more steeply – from a year-on-year rate of 1,7 per cent in the first quarter of 2001 to 7,2 per cent in the third quarter.

## Nominal unit labour cost in manufacturing



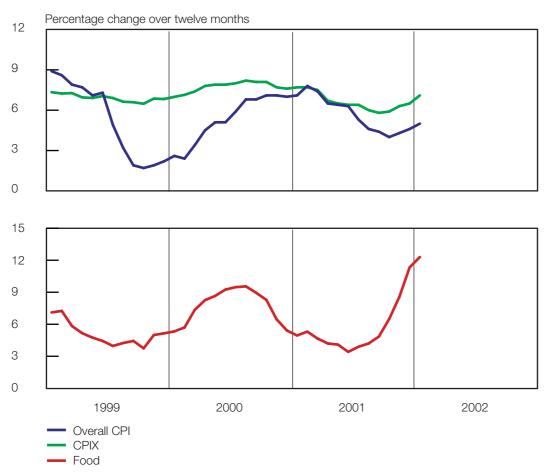
#### **Prices**

The progress made with stabilising the overall price level in recent years was set back somewhat in the closing months of 2001 when essentially the sharp depreciation of the rand and rising food prices, put upward pressure on inflation. *CPIX inflation* over twelve months (i.e. year-on-year increases in consumer prices in metropolitan and other urban areas, excluding interest cost of mortgage bonds) initially fell to below the psychologically important level of 6 per cent in the three months to September 2001, but subsequently picked up to 7,1 per cent in January 2002. Still, average CPIX inflation for calendar years slowed down from 7,8 per cent in 2000 to 6,6 per cent in 2001.

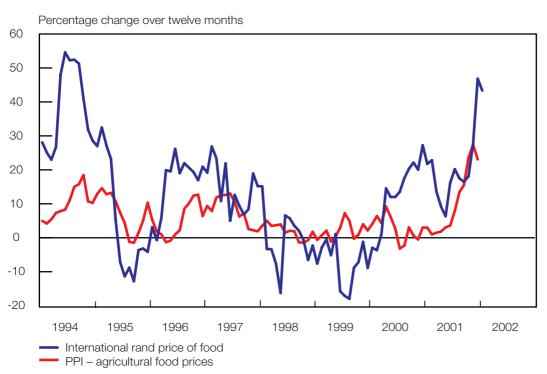
As indicated above, the acceleration in CPIX inflation towards the end of 2001 was first and foremost a consequence of higher rates of increase in the prices of consumer food products that, in turn, were associated with the decline in the exchange value of the rand. When food is omitted from the consumer basket, the other components of the index increased by 5,6 per cent in the year to January 2002 – 1,5 percentage points lower than CPIX inflation. Also, the quarter-to-quarter inflation rate of the non-food components was 3,9 per cent in the fourth quarter of 2001, instead of the 6,8 per cent rise indicated by the overall CPIX index figures.

An analysis of food prices indicates that the domestic price of food has closely tracked international food prices since about 1993. The tariff and agricultural marketing board reforms of the early 1990s firmly integrated the South African food market into the international economy. This resulted in lower food prices than would have been the case in a closed economy, and also in food price inflation corresponding closely with international food price changes and exchange rate movements. International food prices recently declined to levels last seen thirty years ago, thus losing most of their potential to counteract the effects of the depreciation of the rand. Changes in the exchange rate of the rand are therefore now more directly reflected in domestic food prices than previously. Against the backdrop of rand weakness during 2001, the year-on-year rate of consumer food price inflation accelerated from 4,9 per cent in January 2001 to 12,3 per cent in January 2002, and the agricultural food component of the production price index from 3,0 per cent to 26,6 per cent over the same period.

## Consumer price inflation



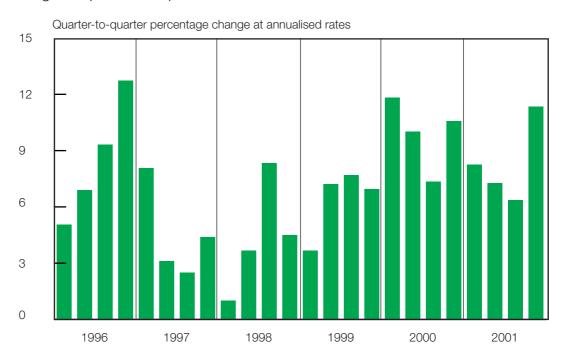
## Food price inflation



The annual rate of increase in the *all-goods production price index* slowed down from 9,2 per cent in 2000 to 8,4 per cent in 2001, mainly because of a decline in the international price of crude oil during this period. However, when rising food prices started making an impression on the pace of change in production prices generally, the quarter-to-quarter rate of change picked up markedly from an annualised 6,4 per cent in the third quarter of 2001 to 11,3 per cent in the fourth quarter.

The quarter-to-quarter rate of change in the prices of *domestically produced goods* accelerated from an annualised rate of 7,6 per cent in the third quarter of 2001 to 11,1 per cent in the fourth quarter. The rapid food price increases were largely behind this acceleration, but it is conceivable that the indirect effects of the decline in the exchange value of the rand and the effects of higher increases in unit labour cost also added to the overall inflationary momentum. The year-on-year increase in production price inflation accelerated from 6,9 per cent in April 2001 to 10,7 per cent in January 2002.

## All-goods production price index



The main driver behind food price inflation is the maize price which was pushed higher by the depreciation of the rand. Maize prices were close to 80 per cent higher in January 2002 than one year earlier. The changes in maize prices not only affect consumer price inflation directly, but also have a significant secondary effect as maize is extensively used as feed in the meat, poultry and egg industries.

Growth in the prices of *imported goods* was restrained in the first three quarters of 2001 by the decline in the international price of crude oil. Coupled with low rates of inflation in trading-partner countries, this caused the quarter-to-quarter annualised growth in the prices of imported goods to slow down from 12,8 per cent in the first quarter of 2001 to just 2,3 per cent in the third quarter. When the effects of rising food prices and of the depreciation of the rand began taking hold, imported price increases accelerated quite abruptly to 11,5 per cent in the fourth quarter of 2001, and to a year-on-year rate of 13,8 per cent in January 2002.

#### Production prices

Quarter-to-quarter percentage changes at annualised rates

Period	Domestically produced goods	Imported goods	Overall production prices
2000: 1st qr	8,5	21,9	11,8
2nd gr	8,8	14,4	10,0
3rd gr	6,3	8,3	7,3
4th gr	8,6	14,0	10,6
Year	7,3	14,4	9,2
2001: 1st gr	7,2	12,8	8,2
2nd gr	7,6	7,1	7,3
3rd gr	7,6	2,3	6,4
4th gr	11,1	11,5	11,3
Year	7,8	10,0	8,4

Headline inflation, i.e. year-to-year increases in the overall consumer price index for metropolitan areas, accelerated slightly from 5,4 per cent in 2000 to 5,7 per cent in 2001. To some extent the higher year-to-year inflation belied the disinflationary climate that prevailed during the first three quarters of 2001, encompassed in the quarter-to-quarter increases in the overall consumer price index falling from 8,9 per cent in the first quarter to nil in the third quarter. Declines in the interest cost of mortgage bonds and low increases in the prices of furniture and equipment, clothing and footwear, and transport running cost contributed significantly to the gradual waning of inflation during the first three quarters of 2001.

During the fourth quarter of 2001 renewed inflationary forces emerged and the quarter-to-quarter headline inflation rate increased to an annualised 4,1 per cent. Food price inflation pushed the overall index higher in the fourth quarter of 2001. Without the food component of the index, the prices of the other components lumped together have actually declined in the fourth quarter of 2001 relative to their levels in the third quarter. Year-on-year increases in the overall consumer price index have picked up lately from 4,0 per cent in October 2001 to 5,0 per cent in January 2002.

Increases in the prices of *consumer goods* initially slowed down to a year-on-year rate of 4,6 per cent in September 2001 before accelerating to 7,2 per cent in January 2002. Measured from quarter to quarter, the pace of increase in the prices of consumer goods picked up from 3,7 per cent in the third quarter of 2001 to 7,2 per cent in the fourth quarter. This acceleration was driven not only by an annualised

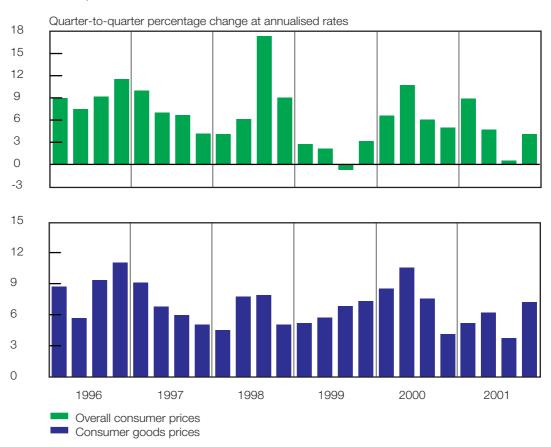
#### Consumer prices

Quarter-to-quarter percentage changes at annualised rates

Period		Goods	Services	Overall CPI	CPIX inflation
2000:	1st qr	8,5	5,5	6,6	8,2
	2nd qr	10,6	9,3	10,7	8,7
	3rd qr	7,6	4,1	6,0	7,7
	4th qr	4,1	6,5	5,0	6,6
	Year	7,9	2,4	5,4	7,8
2001:	1st qr	5,2	15,0	8,9	5,9
	2nd gr	6,2	1,8	4,7	3,6
	3rd qr	3,7	-3,6	0,0	5,9
	4th qr	7,2	-0,1	4,1	6,8
	Year	5,6	5,5	5,7	6,6

increase of 17,6 per cent in the prices of food products, but also by an increase of 12,7 per cent in the categories for other goods apart from food, beverages, clothing, furniture and transport. These categories constitute almost 30 per cent of the goods component of the consumer price index, and the price increases may be signalling the presence of more broadly based price pressures in the economy.

## Consumer prices



The year-on-year rate of increase in the prices of *consumer services* fell back from 8,9 per cent in February 2001 to 2,2 per cent in January 2002. As indicated in the table, the seasonally adjusted value of the consumer services price index actually declined in the second half of 2001. Falling home mortgage interest cost was the most important factor behind the slowdown in services price inflation. When mortgage interest cost is omitted from the index, services price inflation was still at a year-on-year rate of 6,1 per cent in January 2002.

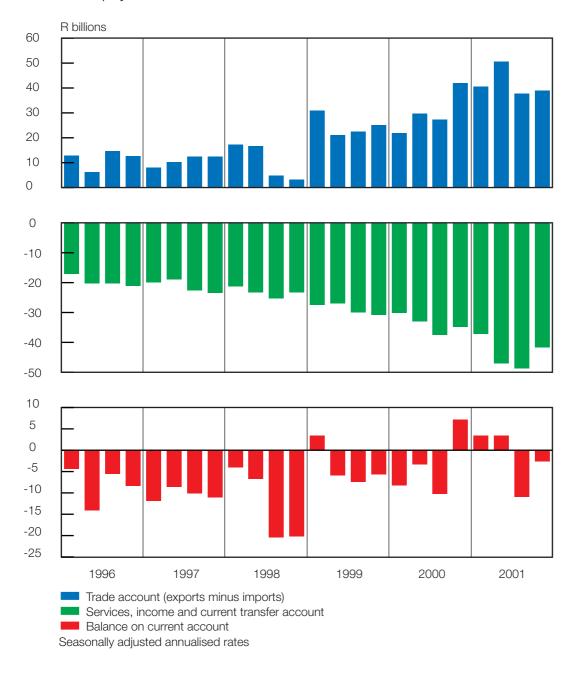
The sizeable depreciation of the rand in the second half of 2001 was akin to a severe supply-side shock to the economy. The cost of imported intermediate and capital goods certainly raised the cost structures of domestic producers and gave rise to potential inflationary pressures in the economy. The increase in prices following such a supply shock normally leads to a contraction in consumption spending which automatically assists in containing the growth in aggregate domestic demand and domestically generated inflation. For such an adjustment process to be satisfactorily concluded, the initial price increase should not be allowed to develop into a spiral of successive price and wage increases. If inflation is allowed to accelerate unchecked, it might be perpetuated to such a degree that it could become ingrained in domestic economic processes, making its eventual eradication far more difficult.

## Foreign trade and payments

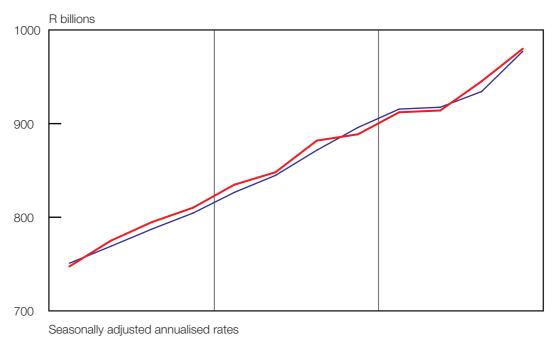
## Balance of payments on current account

The rapid growth in gross domestic expenditure in the second half of 2001 lifted aggregate spending in the domestic economy to a level significantly higher than aggregate national disposable income. This imbalance created a situation in which upward pressure on the overall price level could easily develop, and also one which required a transfer of financial resources from the rest of the world in order to limit downward pressure on the exchange value of the rand. Admittedly, the imbalance

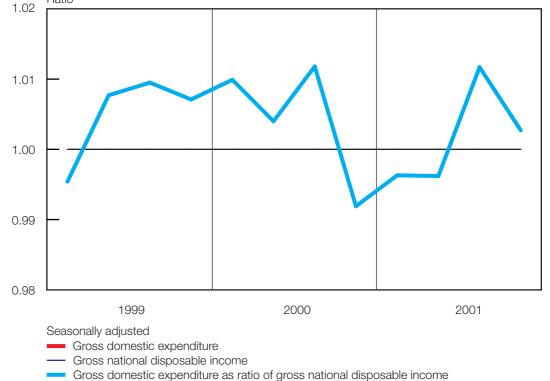
## Balance of payments: Current account











shrank from 1,4 per cent of aggregate disposable income in the third quarter of 2001 to 1,1 per cent in the fourth quarter. The essence of the situation is, however, that there was a deficit on the current account of the balance of payments in the last two quarters of 2001 which, in the absence of inward flows of foreign investment capital, had the potential to make the economy vulnerable to unforeseen external shocks and to cause a depreciation in the external value of the rand.

In absolute terms, the deficit on the current account of the balance of payments (seasonally adjusted and annualised) narrowed from R10,9 billion in the third quarter of 2001 to R2,7 billion in the fourth quarter. As a percentage of gross domestic product, the deficit shrank from 1,1 per cent in the third quarter of 2001 to 0,3 per cent in the fourth quarter. For 2001 as a whole the current-account deficit amounted to R1,7 billion, or 0,2 per cent of gross domestic product.

#### Balance of payments on current account Seasonally adjusted and annualised R billions

	2000			2001		
	Year	1st qr	2nd qr	3rd qr	4th qr	Year
Merchandise exports  Net gold exports  Merchandise imports  Net service, income and	193,2	226,0	241,4	221,5	240,9	232,4
	26,8	25,3	27,4	30,1	34,9	29,4
	-189,8	-210,7	-218,2	-213,9	-236,8	-219,9
current transfer payments  Balance on current account	-33,9	-37,2	-47,1	-48,6	-41,7	-43,6
	-3,7	3,4	3,5	-10,9	-2,7	-1,7

The smaller current-account deficit in the fourth quarter of 2001 can be attributed mainly to a strong recovery in export earnings and a decline in net service payments to non-residents. These forces working towards an improvement in the current-account balance, were partly neutralised by a sizeable increase in payments made for imported merchandise.

The effects of the global slowdown in economic conditions were clearly evident in a decline of roughly 3½ per cent in the physical quantity of *merchandise exports* in the fourth quarter of 2001. The rand prices of such goods, by contrast, were propelled higher by the sharp depreciation of the rand and they rose by 12½ per cent from the third quarter of 2001 to the fourth quarter. International commodity prices lent little support to this increase in export prices; in terms of US dollars they remained fairly subdued in the fourth quarter of 2001 while the average nominal effective exchange rate of the rand declined by 17,2 per cent.

Overall, the nominal value of merchandise exports increased by 8,8 per cent in the fourth quarter of 2001, having fallen by 8,2 per cent in the third quarter. The value of all the main categories of exports (namely mining products, agricultural products and manufactured goods) rose in the fourth quarter. Exports in the "vehicles and transport equipment" subcategory, dominated by motorcars, contributed appreciably to the rise in the nominal value of manufactured exports.

In 2001 as a whole, the value of merchandise exports increased by 20,3 per cent. Export volumes rose by just 1½ per cent owing largely to the slowdown in the global economy, which dampened the international demand for goods produced by South African companies. Export price growth picked up strongly to 19,0 per cent in 2001, essentially because of a depreciation of 14½ per cent in the average trade-weighted exchange value of the rand.

Gold exports jumped by almost 16 per cent from the third quarter of 2001 to the fourth quarter. The realised gold price in rands increased even more, by about 21½

per cent, over the same period. Again, the price rise was mainly caused by the depreciation of the exchange value of the rand against the United States dollar: the average gold price in dollars on the London market rose by only 1½ per cent.

The gold price received quite a significant boost in February 2002. The decision by some major gold producers to scale down their hedging activities contributed to an upward adjustment to more than US\$300 per fine ounce in the price of gold early in February. On 8 February 2002 the fixing price of gold at US\$305 per fine ounce was at its highest level since 21 February 2000. A subsequent announcement by the German authorities outlining their intention to sell some of their official gold reserves later contributed to a softening in the gold price. The price stood at US\$297 on 28 February 2002.

Despite the relative strength of aggregate domestic demand during the fourth quarter of 2001, *merchandise imports* in real terms (seasonally adjusted and annualised) contracted by about 1 per cent from the third quarter of 2001 to the fourth quarter, mainly in response to a steep rise in the prices of imported goods. However, nominal spending on imported goods increased by 10,7 per cent from the third to the fourth quarter of 2001, implying an average increase to 11½ per cent in the prices of imported merchandise. It is expected that not all of these cost increases will be absorbed by domestic producers and distributors, but that at least part of them is likely to be passed on to ultimate users. Value-wise, imports of machinery, electrical equipment, vehicles and transport equipment increased substantially in the fourth quarter of 2001.

In 2001 as a whole, merchandise import volumes declined by 1½ per cent and values rose by about 16 per cent. The unit cost of imported goods, therefore, increased by 17½ per cent in 2001, considerably faster than endogenously generated inflation as reflected by the growth in domestic unit labour cost.

The seasonally adjusted annualised balance on the *services account* of the balance of payments declined from R48,6 billion in the third quarter of 2001 to R41,7 billion in the fourth quarter. A decline in dividend payments to offshore shareholders and a sizeable increase in travel expenditure by foreign visitors to the country contributed most towards this improvement in the balance on the services account. Despite this fourth-quarter improvement, the deficit on the services account deteriorated from R33,9 billion in 2000 to R43,6 billion in 2001.

#### Financial account

Capital moved into the economy from offshore sources during the second and third quarters of 2001, but this fortuitous state of affairs came to an end in the fourth quarter when a deficit of R1,5 billion was recorded on the financial account of the balance of payments. In 2001 as a whole, the financial account registered a surplus of R7,2 billion, compared with R9,1 billion in 2000. Both the absolute level and the composition of these flows are generally regarded as inadequate, in view of the country's long-term growth and development needs.

Foreign direct investment flows into South Africa, which had been positive in the first three quarters of 2001, turned negative to the value of R1,9 billion in the fourth quarter. The outflow in the fourth quarter of 2001 resulted mainly from a decline in foreign liabilities when the dividends declared in the third quarter were actually paid in the fourth quarter. At the time when these dividends were declared in the third

quarter of 2001, they were recorded as an increase in foreign direct investment liabilities pending their eventual payment, i.e. an inflow of foreign investment capital that was reversed by an outflow in the fourth quarter.

Net financial transactions not related to reserves R billions

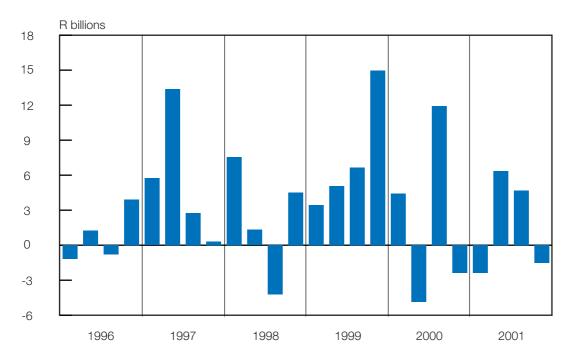
	2000			2001		
	Year	1st qr	2nd qr	3rd qr	4th qr	Year
Change in liabilities						
Direct investment	6,2	2,4	53,1	3,6	-1,9	57,2
Portfolio investment	11,8	3,5	-27,2	-0,2	-0,1	-24,0
Other investment	10,8	-2,5	-9,0	-5,1	-1,5	-18,1
Change in assets						
Direct investment	-1,9	-8,1	42,2	0,0	-5,4	28,7
Portfolio investment	-25,6	-0,7	-37,1	-2,5	-3,3	-43,6
Other investment	1,0	-6,0	-10,8	5,9	-0,3	-11,2
Total financial transactions*	9,1	-2,4	6,4	4,7	-1,5	7,2

<sup>\*</sup> Including unrecorded transactions

South African companies exported capital valued at R5,4 billion during the fourth quarter of 2001. They did this by acquiring a dominant interest in the equity capital of foreign companies and also by extending trade credits to foreign subsidiaries or other associated companies.

On a net basis, foreign direct investment flows changed from an inflow of R3,6 billion in the third quarter of 2001 to an outflow of R7,3 billion in the fourth quarter. In the whole of 2001 there was a net inflow of direct investment capital of R85,9 billion,

### Overall balance on financial account



concentrated in the second quarter of the year when the corporate relationship between the Anglo American Corporation and the De Beers mining company was restructured.

Inflows of foreign *portfolio* investment capital, or the net change in portfolio investment liabilities, were minimal in the fourth quarter of 2001. Non-resident investors acquired shares on the JSE Securities Exchange SA in the fourth quarter of 2001, but these were fully offset by their selling of fixed-interest securities on the Bond Exchange of South Africa. In the end, portfolio investment liabilities declined marginally by R0,1 billion in the fourth quarter.

South African institutional investors and individuals increased their offshore portfolio assets by R3,3 billion in the fourth quarter of 2001; i.e. another outflow of capital following an outflow of R2,5 billion in the third quarter.

The net outward movement of portfolio capital totalled R3,4 billion in the fourth quarter of 2001, increasing the total net value of portfolio capital outflows to R67,6 billion in 2001 as a whole, up from net outflows of R13,8 billion in 2000. The substantial outflows in 2001 were also mainly the outcome of buying out the minority shareholders in the De Beers mining company.

Other foreign investment liabilities of South Africa, consisting mainly of loans, trade finance and bank deposits, declined by R1,5 billion in the fourth quarter of 2001, i.e. this type of capital left the country on a net basis. The bulk of this outflow was a consequence of parastatal companies repaying foreign loans and the withdrawal of foreign-currency denominated deposits at domestic banks by non-resident deposit holders. Also in this capital category, South African entities increased their foreign assets by R0,3 billion in the fourth quarter. Trade financing, particularly that extended by South African businesses to non-resident clients, was stepped up in the fourth quarter of 2001. These outflows increased the net outflow of capital in the "other foreign investment" category to R29,3 billion in 2001.

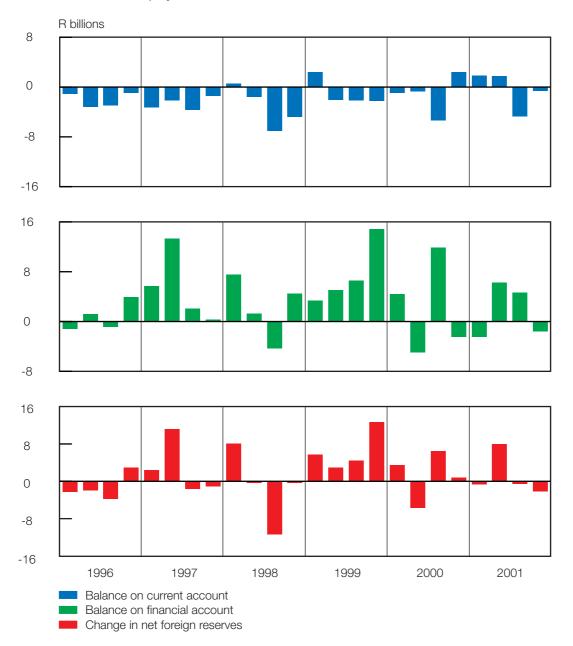
#### Foreign reserves

The international reserves of South Africa were influenced during the fourth quarter of 2001 by two prominent factors. On the one hand, balance of payments transactions tended to reduce the overall level of reserves (i.e. there was a deficit on the overall balance of payments as a consequence of balance of payments transactions) and, on the other, the depreciation in the exchange value of the rand tended to push the nominal value of international reserves higher. On balance, the depreciation effect outweighed the balance of payments effect.

Balance of payments transactions caused a decline in South Africa's net international reserves in the fourth quarter of 2001. This decline amounted to R2,1 billion, following a decline of R0,1 billion in the third quarter of 2001. For the whole of 2001 there was an increase of R5,2 billion in the country's international reserves owing to balance of payments transactions, occasioned primarily by healthy surpluses on the external accounts in the first half of the year.

The negative effect that balance of payments transactions had on international reserves was totally swamped by the revaluation effect working in the opposite direction. Valued in US dollars, South Africa's gross gold and other foreign exchange reserves (i.e. international reserves before reserve-related loans are netted off)

# Overall balance of payments

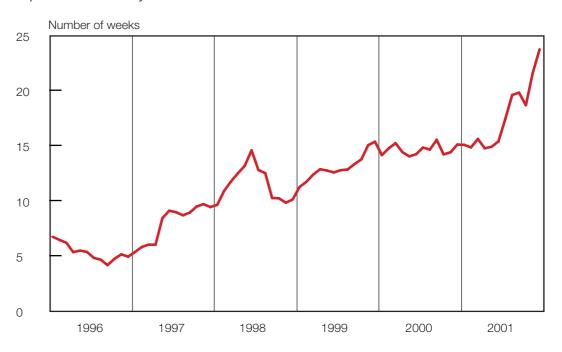


declined from US\$13,3 billion at the end of September 2001 to US\$12,4 billion at the end of December. But because of the weak rand exchange value, total international reserves in rand terms rose from R118,9 billion to R150,7 billion over the same period. Import cover, defined as the value of gross international reserves relative to the value of imported goods and services, accordingly improved from 20 weeks' worth of goods and services at the end of September 2001 to a record of 24 weeks' worth at the end of December.

The short-term credit facilities actually utilised by the Reserve Bank, also referred to as reserve-related liabilities, rose from US\$2,6 billion at the end of December 2000 to US\$4,0 billion at the end of September 2001, but then remained unchanged during the fourth quarter. The unchanged level of reserve-related liabilities of the Reserve Bank during the fourth quarter of 2001 indicates that the Bank did not draw on available credit lines as a means to strengthen gross international reserves.

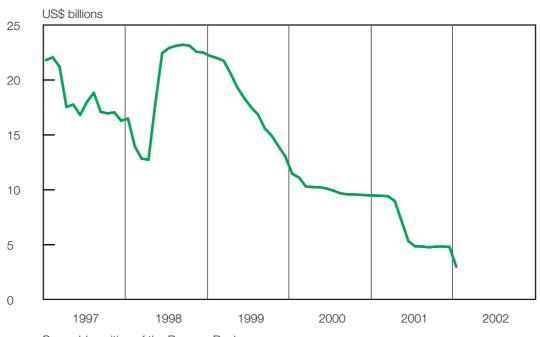
Revaluing foreign reserves and foreign liabilities in rands nevertheless caused a rise in the Bank's non-borrowed reserves (i.e. gross international reserves reduced by the amount of utilised foreign credit facilities) from R31,7 billion at the end of September 2001 to R42,4 billion at the end of December.

# Imports covered by reserves



The Bank's net open position in foreign currency, widely perceived as a serious source of exchange-rate vulnerability, remained unchanged at US\$4,8 billion throughout the fourth quarter of 2001. Subsequently, it declined to US\$3,0 billion at

# Net open position in foreign currency



Oversold position of the Reserve Bank

the end of January 2002. The National Treasury assumed liability for a syndicated foreign loan of US\$1,5 billion during January 2002, reducing the Reserve Bank's reserve-related liabilities by an equal amount and simultaneously improving the Bank's net international reserve position and the net open position in foreign currency. From August 2001 to December the syndicated loan was recorded on the Reserve Bank's balance sheet as a reserve-related liability. A further improvement in the net open position in foreign currency occurred when the government reopened an existing dollar loan, mobilising US\$274 million and releasing the funds for delivery against the oversold forward book of the Bank.

# Exchange rates

The weighted exchange rate of the rand, which had declined by 13,5 per cent from the end of June 2001 to the end of September, fell further by 24,0 per cent from the end of September to the end of December. Under a regime of freely floating exchange rates, a deficit on the current account of the balance of payments, coupled with a net outward movement of investment capital, would as a matter of course exert downward pressure on the exchange rate. These downward pressures were probably aggravated in the fourth quarter of 2001 by advanced payments for imports, by the delayed repatriation of foreign-currency export proceeds in anticipation of further declines in the value of the rand, and also by heightened risk aversion towards investment in emerging-market economies generally.

Capital inflows in the second quarter of 2001 contributed significantly to the virtual stability of the nominal effective exchange rate of the rand from the end of December 2000 to the end of June 2001. From the end of June 2001 to the end of December the exchange value of the rand depreciated by 36,1 per cent against the euro, 33,3 per cent against the US dollar, 35,3 per cent against the British pound and by 29,5 per cent against the Japanese yen. On balance, the nominal effective exchange rate of the rand declined by 34,4 per cent from the end of 2000 to the end of 2001, following a decline of 12,4 per cent in 2000.

# Exchange rates of the rand Percentage change

	29 Dec 2000 to 30 Mar 2001	30 Mar 2001 to 29 Jun 2001	29 Jun 2001 to 28 Sep 2001	28 Sep 2001 to 31 Dec 2001	31 Dec 2001 to 31 Jan 2002
Weighted average*	-1,3	1,2	-13,5	-24,0	7,2
Euro	-0,6	3,6	-16,5	-23,5	8,3
US dollar	-5,6	-0,6	-9,8	-26,0	5,6
British pound	-1,4	1,0	-13,7	-25,0	8,4
Japanese yen	3,1	-1,3	-13,5	-18,5	6,8

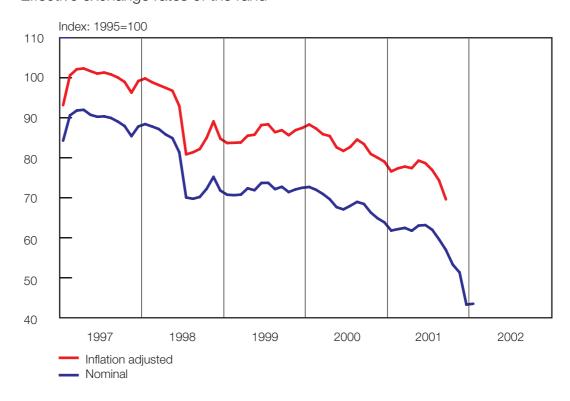
<sup>\*</sup> The weighted exchange-rate index is calculated with reference to a basket of 14 currencies

The deficit on the overall balance of payments and the growing preference of international investors for investments in mature markets rather than emerging markets, certainly put downward pressure on the exchange value of the rand in the fourth quarter of the year. What is difficult to explain is the speed and the extent of the depreciation in the fourth quarter of 2001. Factors which have been mooted as contributing to the steep decline in the external value of the rand are

- the net oversold position in foreign currency of the Reserve Bank;
- expectations of further relaxations of exchange controls early in 2002;
- the relatively low yields on fixed-interest securities in November 2001 which limited the scope for further increases in bond prices;
- the decline in international commodity prices that took place in 2000 and 2001;
- regional instability, particularly in Zimbabwe, and the threat that expropriation of assets may spread to other parts of the SADC region;
- continued negative market perceptions because of the HIV/Aids pandemic;
- weak long-term economic growth and high unemployment;
- the high incidence of violent crime in South Africa;
- high inflation in South Africa relative to inflation in major trading-partner countries;
- perceived procrastination with the privatisation of parastatal corporations; and
- the decline in the turnover in the foreign-exchange market since October 2001, following the announcement by the Reserve Bank that existing exchange controls would be strictly enforced.

Some beliefs that the rand was weakened by allegedly dubious transactions in the foreign-exchange market and by speculative activity that was in breach of the existing exchange control rulings influenced President Mbeki to appoint a Commission of Inquiry into the Rapid Depreciation of the Exchange Rate of the Rand and Related Matters, chaired by Adv J Myburgh. The Commission is expected to release an interim report in the first half of 2002.

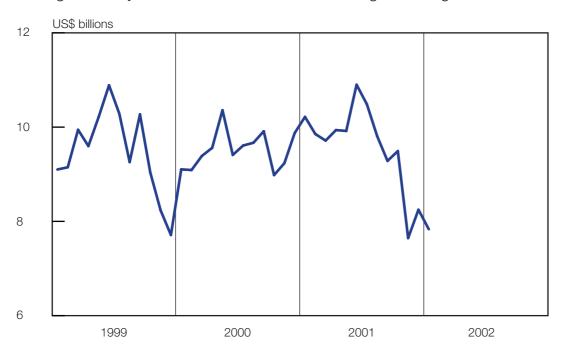
#### Effective exchange rates of the rand



The external value of the rand recovered some of its earlier losses in the second half of December 2001 and during the first two months of 2002, some time after Moody's in November 2001 raised the credit rating of South Africa's long-term foreign-currency debt. The rand benefited from capital inflows in the first two months of the year. Non-resident investors once again demonstrated confidence in the prospects for the South African economy and increased their holdings of domestic fixed-interest and equity securities. The weighted exchange rate of the rand strengthened by 7,2 per cent from the end of December 2001 to the end of January 2002.

After the Reserve Bank took steps during October 2001 to enforce the existing rules regarding foreign-currency trading activities, the average daily turnover in the market for foreign exchange declined from US\$9,9 billion in the third quarter of 2001 to US\$8,5 billion in the fourth quarter. The value of transactions in which non-residents participated, declined from US\$5,9 billion per day to US\$5,2 billion over the same period, leaving the proportionate share of non-resident participation broadly unchanged. This decline in liquidity in the foreign-currency market could have contributed to the weakness of the rand in the fourth quarter of 2001.

Average net daily turnover in the South African foreign exchange market



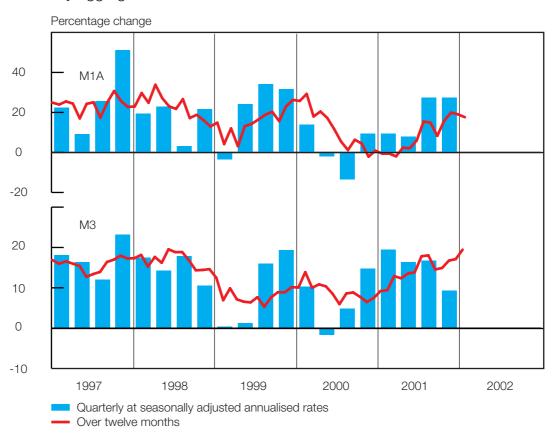
The competitiveness of domestic producers in international markets as measured by the inflation-adjusted effective exchange rate of the rand improved significantly from December 2000 to September 2001. The average inflation-adjusted effective exchange rate of the rand declined by 11,9 per cent over this period.

# Monetary developments, interest rates and financial markets

# Money supply

The broadly defined money supply (M3) increased at high seasonally adjusted annualised rates of 19,5 per cent in the first quarter of 2001, 16,3 per cent in the second quarter and 16,9 per cent in the third quarter, but slowed down to an annualised rate of 9,2 per cent in the fourth quarter. The slowdown in the fourth quarter of 2001 was essentially a consequence of a steep month-to-month decline in M3 in September, lowering the average fourth-quarter value. The growth over twelve months in M3 fell from 17,9 per cent in August 2001 to 14,5 per cent in September, but accelerated back to 17,0 per cent by December. In January 2002, M3 was 19,3 per cent higher than a year earlier.

## Monetary aggregates



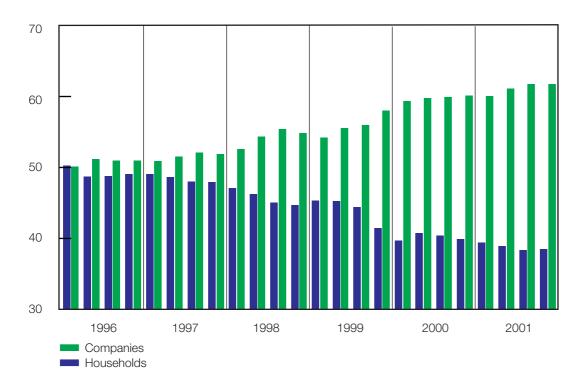
The private corporate sector rather than households, was responsible for most of the growth in M3 in 2001. The apparent liquidity preference of the corporate sector could have been influenced by

- firm growth in nominal domestic final demand;
- the withdrawal of the asset swap mechanism which narrowed the opportunities for offshore asset diversification;

- the large inflow of funds from the rest of the world emanating from the restructuring of the shareholding in the Anglo American Corporation and the De Beers mining company;
- the volatility of share-price movements and the associated risk of losses from equity investments, leading to an increased demand for depository-type assets; and
- more generally, an increased precautionary and speculative demand for money prompted by the uncertainty arising from recessionary global economic conditions, the terrorist attacks on the United States on 11 September, concerns about global financial stability in view of Argentina's problems, and the depreciation of the rand against major currencies in the second half of 2001.

In the case of the broad M3 aggregate, 37 per cent of the growth in the first nine months of 2001 was contributed by an increase in deposits with a maturity of six months and longer. By contrast, in the last three months of 2001, growth in cheque and other demand deposits dominated the overall growth in M3; long-term deposits actually declined as interest rates bottomed out and uncertainty fuelled the demand for more liquid assets. Deposits held by the corporate sector were responsible for 80 per cent of the overall growth in M3 deposits during 2001, with deposits held by households contributing the remaining 20 per cent.

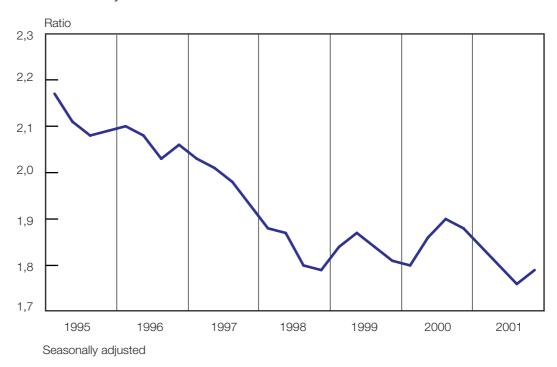
# Deposits as percentage of M3



Although the growth rate of M3 exceeded the growth in nominal gross domestic product in 2001, the growth differential between these two aggregates reversed abruptly from 10,6 percentage points higher M3 growth rate in the third quarter to 7,4 percentage points higher growth in nominal income in the fourth quarter. The income velocity of circulation of M3 accordingly declined from 1,84 in the first quarter of 2001 to 1,76 in the third quarter but then increased to 1,79 in the fourth quarter.

Rapid quarter-to-quarter growth in the narrowest monetary aggregate was recorded in the last two quarters of 2001: M1A growth increased from single-digit annualised levels in the first two quarters of 2001 to 27,3 per cent in the third quarter and 27,5 per cent in the fourth quarter as cheque deposits rose very briskly, partly at the expense of long-term deposits. This could have been a result of the uncertainty engulfing the financial markets, thus inducing a strong preference for more liquid assets. It is equally likely that this could have been a consequence of economic agents positioning themselves to step up future spending levels.

# Income velocity of M3



# Percentage change in monetary aggregates Quarterly at seasonally adjusted annualised rates

Period		M1A	M1	M2	МЗ
2001:	1st qr	9,5	18,8	21,0	19,5
	2nd qr	7,9	18,7	11,3	16,3
	3rd qr	27,3	10,5	9,8	16,9
	4th qr	27,5	9,1	9,2	9,2

The M3 money supply increased by R86,2 billion from the end of 2000 to the end of 2001. In a statistical or accounting sense, the dominant change on the asset side of the banks' consolidated balance sheet was the increase in their claims on the domestic private sector, which accounted for R71,6 billion of the total increase in M3. In addition, deficits accruing from the Reserve Bank's involvement in the forward foreign-exchange market contributed to a rise in banks' "net other assets" by another R32,6 billion. With net lending to the private sector and the increase in "net other assets" exceeding by far the growth in banks' deposit liabilities, other liabilities had to be increased or other assets reduced. Net foreign assets as well as net credit to the government sector accordingly decreased in 2001 by R8,6 billion and R9,4 billion, respectively.

# Changes in M3 and its statistical counterparts R billions

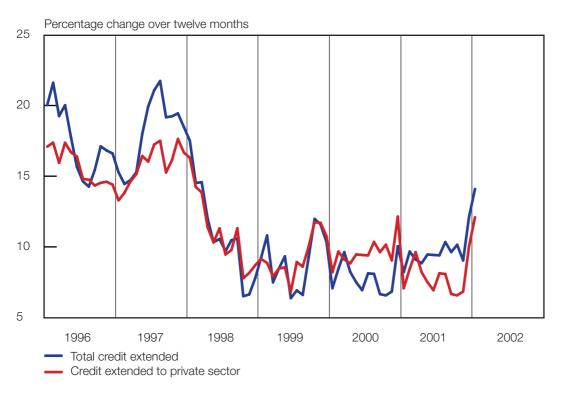
	2000		2001
Net foreign assets	-5,9		-8,6
Net claims on the government sector	0,8		-9,4
Gross claims	2,9	2,0	
Government deposits (increase -)	-2,1	-11,4	
Claims on the private sector	57,4		71,6
Net other assets and liabilities	-16,9		32,6
Increase in M3	35,4		86,2

#### Credit extension

Credit growth picked up vigorously in the fourth quarter of 2001 after sluggish growth had been recorded in the first three quarters. The quarter-to-quarter growth in *total domestic credit extension* (i.e. the total of credit extended to the private sector and net claims of banks on the government sector) accelerated from a five-year low of 2,2 per cent in the second quarter of 2001 to 7,4 per cent in the third quarter and 16,4 per cent in the fourth quarter. Growth over twelve months in total credit extension amounted to 10,0 per cent in December 2001 and 12,1 per cent in January 2002, after languishing between rates of 6,6 per cent and 9,6 per cent in the first eleven months of the year.

The generally weak growth in domestic credit extension in the first part of 2001 was mainly caused by declines in the private banks' claims on the *government sector*, which in turn reflected the emphasis placed on foreign borrowing in the government's funding strategy in fiscal 2001/02. The sharp acceleration in credit growth in the latter part of the year was directed wholly towards meeting increased private-sector demand for bank credit.

#### Domestic credit extension



The quarter-to-quarter growth in credit extension to the *private sector* accelerated considerably from an annualised rate of 2,8 per cent in the first quarter of 2001 to 14,2 per cent in the third quarter and 17,9 per cent in the fourth quarter. Growth over twelve months fluctuated between 8,2 per cent and 10,3 per cent from January to November, before increasing to 12,1 per cent in December and 14,1 per cent in January 2002. The stronger private-sector demand for credit towards the end of 2001 was to some extent an aberration as it reflected, among other things, the impact of the depreciation in the value of the rand which encouraged exporters to borrow in the domestic credit market for meeting their working-capital requirements while delaying the repatriation of their export proceeds for as long as possible. The pick-up in overall economic activity, slightly higher inflation, the acceleration of payments for imports as well as pre-emptive buying by individuals and companies ahead of anticipated price increases, also contributed to the steep increase in private-sector credit growth in the fourth quarter of 2001.

Among the components of bank credit extension to the private sector, the twelvementh growth rate in *mortgage advances* was consistently above the 14 per cent mark for the whole of 2001, reaching a four-year high of 16,1 per cent in May but slowed down to 12,1 per cent in January 2002. The firm growth in mortgage financing reflected the relatively easier monetary policy stance of recent times and the related higher level of activity in the real-estate market over the past two years. The share of this type of credit in the overall stock of outstanding private-sector credit reached a recent upper turning point of 40,9 per cent in April 2001, before losing some ground to 39,4 per cent in January 2002.

Credit categories as percentage of total claims on the domestic private sector

Period		Investment and bills discounted	Instalment sale and leasing finance	Mortgages	Other loans and advances	Total
2001:	Jan	6,0	14,0	40,1	39,9	100,0
	Feb	6,5	14,1	40,0	39,4	100,0
	Mar	6,0	14,4	40,5	39,1	100,0
	Apr	5,5	14,6	40,9	39,0	100,0
	May	5,8	14,5	40,8	38,9	100,0
	Jun	6,1	14,6	40,6	38,7	100,0
	Jul	6,3	14,7	40,4	38,6	100,0
	Aug	6,2	14,7	40,2	38,9	100,0
	Sep	6,2	14,6	39,8	39,4	100,0
	Oct	6,5	14,6	39,8	39,1	100,0
	Nov	6,8	14,5	39,8	38,9	100,0
	Dec	7,0	14,4	39,2	39,4	100,0
2002:	Jan	6,9	14,4	39,4	39,3	100,0

Fully consistent with the stronger consumer demand for durable goods, growth in *instalment sale credit and leasing finance* gained momentum throughout 2001. Growth over twelve months in this credit category increased from 9,8 per cent in January 2001 to 17,2 per cent in both September and October, and to 17,5 per cent in January 2002. These have been the highest growth rates since 1997. New business payouts of this form of finance increased from R15,8 billion in the third quarter of 2001 to a record level of R18,2 billion in the fourth quarter.

After having spiralled downwards since mid-2000, the twelve-month growth in other loans and advances picked up from a low of 0,6 per cent in January 2001 to 2,5 per cent in June and 5,1 per cent in September. Substantially higher year-on-year growth rates of 10,4 per cent in December 2001 and 12,4 per cent in January 2002 were then recorded. The strong demand for credit in this category was mostly noticeable in credit extended to companies, which partly originated from a livelier demand for foreign-currency loans and advances by resident companies. "Other loans and advances" remains an important asset class on banks' balance sheets and increased its contribution to the overall level of banks' claims on the private sector from 38,6 per cent in July 2001 to 39,3 per cent in January 2002.

The major part of the absolute increase of R25,5 billion in credit extended to the *corporate sector* in the fourth quarter of 2001 was an increase in investments and in other loans and advances. By contrast, mortgage advances contributed the most to the increase of R6,2 billion in credit extended to the *household sector* in the fourth quarter of 2001.

Reviewing the year as a whole, the corporate sector accounted for the bulk of the increase in credit extended to the private sector during 2001; its share in total credit extension to the private sector increased from 50,4 per cent and 50,8 per cent in the first and second quarters of 2001 respectively to 51,4 per cent in the third quarter and 52,8 per cent in the fourth quarter. Conversely, the share of households decreased from 49,6 per cent and 49,2 per cent to 48,6 per cent and 47,2 per cent over the same period.

#### Credit extended to households and companies



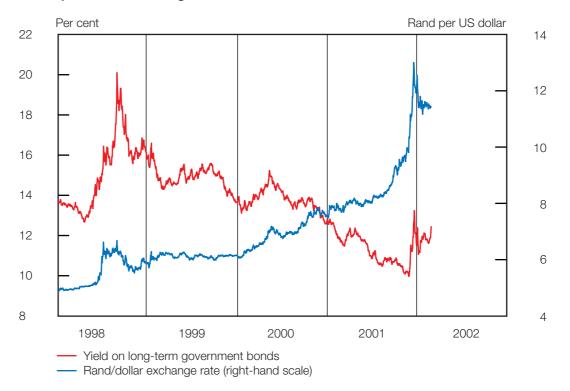
# Interest rates and yields

Bond yields, which move inversely to the price of bonds, declined steadily from May 2000 to November 2001. This bull run reflected a decline in inflation expectations and differed from previous rallies in the sense that bond yields on this occasion moved mostly independently of changes in the exchange value of the rand. The decline in yields was generally driven by strong domestic investor demand. Non-resident investors were mainly net sellers of bonds – they responded to the almost perennial depreciation of the foreign exchange value of the rand and to their heightened awareness of the risk associated with emerging-market investments.

The monthly average yield on long-term government bonds declined from 14,8 per cent in May 2000 to 10,8 per cent in August and September 2001. The terrorist attacks of 11 September apparently had no lasting negative effect on the domestic bond market and yields declined further to a monthly average of 10,3 per cent in November 2001 – their lowest level since August 1980. Reasons for this decline were, among other things, the following:

- The decline in the repurchase rate and other short-term rates in September 2001:
- the Medium Term Budget Policy Statement (MTBPS) on 30 October 2001 which stated that additional public expenditure would be financed without higher government borrowing and indicated that the net supply of government fixed-interest securities would shrink further in the new fiscal year;
- the narrowing of the inflation target for 2004 and 2005, as announced in the MTBPS, which supports a further structural decline in bond yields; and
- the upgrade of South Africa's international credit rating by Moody's in November 2001.

#### Bond yield and exchange rate



The abrupt depreciation of the rand in December 2001 completely changed the behaviour of market participants. Bond yield movements suddenly became highly sensitive to changes in the exchange rate of the rand as the sheer magnitude of the unexpected depreciation drastically changed expectations. The *daily* average yield on long-term government bonds reflected the deterioration in sentiment as it increased sharply from a low of 9,97 per cent on 28 November 2001 to 13,23 per cent on 20 December 2001 – the highest level since November 2000. The monthly average bond yield increased to 11,6 per cent in December 2001 from 10,3 per cent in November as the bond market reassessed longer-term inflation risks and their implications for monetary policy.

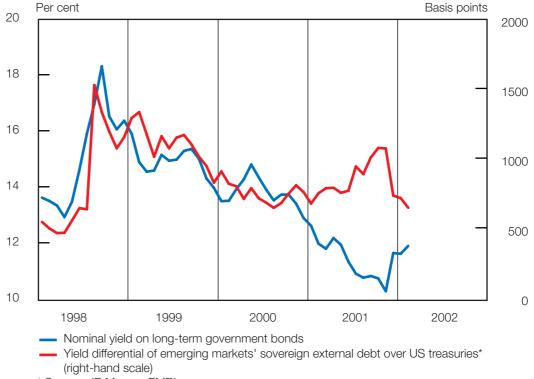
Bond yields again receded somewhat to 11,16 per cent on 14 January 2002, along with the return of some stability to the foreign-exchange market. The Reserve Bank increased the repurchase rate by 100 basis points on 16 January to constrain the risk of an inflationary spiral developing from the depreciation of the rand. The consequent increase in short-term interest rates pushed long-term bond yields higher: the monthly average bond yield initially remained at 11,6 per cent in January 2002 but rose to 11,9 per cent in February.

The upward-sloping *yield curve* shifted downwards over its entire maturity spectrum from 21 September 2001 to 28 November, following the 50 basis points reduction in the Reserve Bank's repurchase rate on 21 September. The yield curve then rose sharply from 28 November 2001. The slope of the curve also steepened up to 20 December 2001 as longer-term inflation concerns had a pronounced effect on the yields of long-dated bonds. From 20 December 2001 to 14 January 2002, when the exchange rate recovered some of its earlier losses, the level of the yield curve reversed its movement and shifted downwards while simultaneously flattening somewhat. Following the increase in the Reserve Bank's repurchase rate on 16 January 2002, the yield curve moved higher over the entire maturity spectrum with broadly similar increases at the short and long ends of the curve. The level of the yield curve on 28 February 2002 was, on average, 200 basis points above its level recorded just prior to the 21 September 2001 reduction in the repurchase rate, indicating the net negative effect of events over that period.

The *inflation-adjusted yield on long-term government bonds*, a key measure of bond value, decreased from 4,7 per cent in September 2001 to only 3,8 per cent in November – the lowest level since March 1994. The real bond yield then increased to 4,8 per cent in December when the sudden increase in nominal bond yields outpaced the acceleration in CPIX inflation, but fell back to 4,2 per cent in January 2002 as the rise in nominal yields levelled off while inflation continued to accelerate.

Yields in the South African bond market since about the last quarter of 2000 have moved in a completely opposite direction to yield changes in emerging debt-markets generally. The monthly average yield on long-term government bonds declined by 144 basis points from April 2001 to October, whereas there was a sharp increase of 300 basis points in the *emerging-market risk premium* as measured by the yield spread of emerging markets' sovereign external debt over US treasuries. South Africa's *foreign-currency denominated bonds* also performed reasonably well as reflected by the decrease of 89 basis points from December 2000 to December 2001 in the monthly average *sovereign risk premium* of the 10-year Yankee bond issued by the South African government in October 1996.

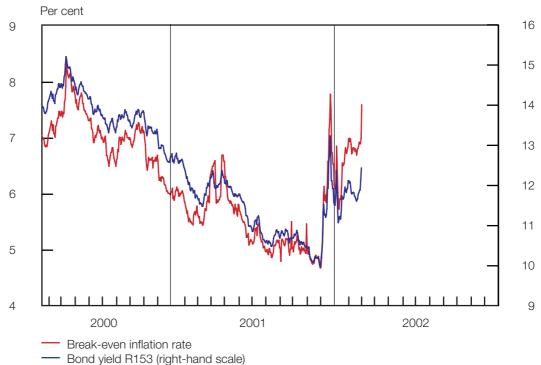




\* Source: JP Morgan EMBI+

The sharp depreciation of the rand in December 2001 changed inflation expectations quite decisively and arrested the downward trend in nominal rand-denominated bond yields. The sudden deterioration in inflation expectations was

# Bond yield and "break-even" inflation rate\*



\* Derived as the yield on the R153 bond minus that on the inflation-linked R189 bond

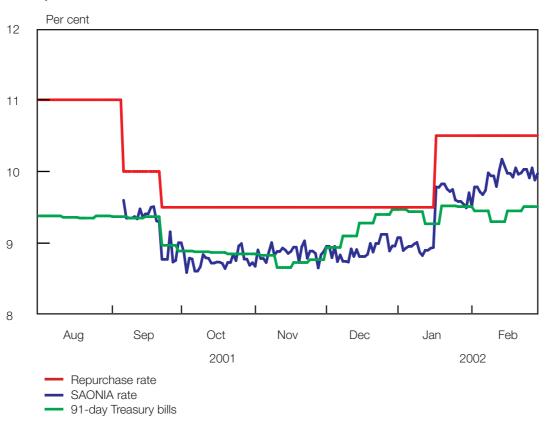
also reflected in the increase in the monthly average *implied* or *break-even inflation* rate (which equates the nominal return on government's conventional long-term bonds with the real yield on inflation-linked bonds) from a low 4,8 per cent in November 2001 to 6,3 per cent in December and 6,9 per cent in February 2002 – its highest level since October 2000.

Developments in the *currency risk premium* on South African government bonds (measured as the difference between nominal yields in the domestic market and in the United States market) also reflected the deterioration in the outlook for domestic inflation. According to this measure, the exchange-rate risk premium built into the yields of South African bonds increased from a low 310 basis points in June and July 2001 to 495 basis points in January 2002.

The repurchase rate of the Reserve Bank was lowered on three occasions during 2001 by a cumulative total of 250 basis points. The last adjustment for the year occurred on 21 September 2001 when the rate was lowered by half a percentage point to 9,50 per cent. A special meeting of the Reserve Bank's Monetary Policy Committee was convened on 15 January 2002 to assess the implications of the latest economic developments. The committee concluded that the sharp depreciation of the exchange rate of the rand had negatively influenced inflation expectations and that the attainment of the inflation target was at risk. To counter the second-round effects of the depreciation of the rand on inflation, the committee decided to raise the repurchase rate by 1 percentage point to 10,50 per cent as from 16 January 2002.

The South African Overnight Interbank Average (SAONIA) rate which was introduced by the South African Reserve Bank on 5 September 2001 to serve as a daily benchmark for money-market interest rates, was calculated at 9,60 per cent at

# Money-market interest rates



inception. Subsequently, the rate fluctuated downwards and recorded a low of 8,77 per cent on 21 September when the repurchase rate of the Reserve Bank was reduced. As liquidity conditions in the market became somewhat tighter towards the month-end, the rate increased to 9,01 per cent on 28 September and remained slightly below this level in the ensuing months. During December the SAONIA rate moved higher to reach 9,12 per cent on 24 December as the money market tightened and expectations of an imminent increase in short-term rates intensified. It subsequently jumped by 87 basis points to 9,78 per cent on 16 January 2002 when the increase in the repurchase rate became effective, but later moved even higher to 9,97 per cent on 28 February when inflation expectations deteriorated noticeably.

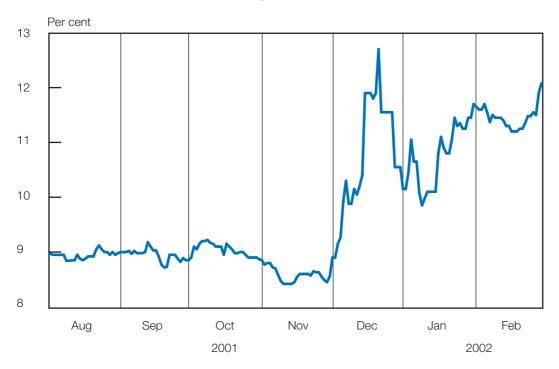
Other money-market interest rates declined in the first nine months of 2001, but displayed a strong upward bias in the fourth quarter of the year. Along with the reduction in the repurchase rate, the rate on *three-month bankers' acceptances* declined from 10,26 per cent at the beginning of the year to 9,64 per cent on 18 June and to a lower turning point of 8,82 per cent on 25 September. In the last months of 2001 money-market interest rates began to move higher, largely in anticipation of an increase in the Bank's repurchase rate as a defensive response to adverse developments in the foreign-exchange market. The rate on three-month bankers' acceptances increased to 9,58 per cent on 21 December 2001, and after a short relapse rose further to 9,95 per cent on 16 January 2002 when the Reserve Bank raised the rate on repurchase transactions. Subsequently, the rate on three-month bankers' acceptances rose to 10,03 per cent on 28 February 2002.

In similar vein, the tender rate on 91-day *Treasury bills* was at 10,25 per cent on 4 January 2001 but declined to 9,60 per cent on 18 June and 8,83 per cent on 8 November. From the middle of November, the rate on Treasury bills rose to reach 9,47 per cent on 28 December. This rate then declined to 9,27 per cent on 11 January 2002, but rose to 9,52 per cent on 18 January on the first tender for Treasury bills after the Bank's repurchase rate had been increased. In the subsequent tenders the Treasury bills rate increased, on balance, to 9,56 per cent on 1 March.

The rate on *forward rate agreements* (FRAs) also fluctuated downward during the first three quarters of 2001, with the rate on 9x12-month FRAs declining from 10,15 per cent on 28 February 2001 to 8,42 per cent on 9 November. Probably in anticipation of a policy reaction by the Reserve Bank to the sharp fall in the exchange value of the rand, the rate on 9x12-month FRAs climbed by 428 basis points to 12,70 per cent on 20 December. In the absence of policy reactions to the developments in the foreign-exchange market, the rate on 9x12-month FRAs moved lower to 9,85 per cent on 8 January 2002, but rose to 11,10 per cent in the aftermath of the Reserve Bank's decision to increase the repurchase rate. For the greater part of February the 9x12-month FRAs was trading within a range of 11,20 per cent to 12,08 per cent, discounting further money-market interest rate increases in the near future.

Broadly following the downward movement of the repurchase rate in 2001, private banks lowered their *prime overdraft rates* in three steps from 14,5 per cent at the beginning of 2001 to 13,0 per cent by 25 September 2001. On 16 January 2002, they responded to the increase in the repurchase rate by raising their prime overdraft rates to 14,0 per cent. This meant that, on balance, rates had changed very little during the past year, clearly contrasting the volatile interest-rate changes of 1998 and 1999. The rate on twelve-month fixed deposits was recently increased from a predominant rate of 8,0 per cent in December 2001 to 9,0 per cent in January 2002.

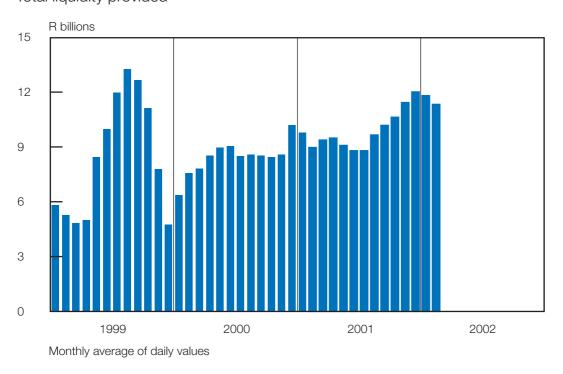
# Rate on 9x12-month forward rate agreements



# Money market

Money-market conditions were relatively stable during the first eight months of 2001 but tightened considerably in subsequent months. The average daily liquidity requirement of the private banks varied between R8,7 billion and R9,8 billion in the months from January to August but then increased sharply, reaching R12,0 billion in December, R11,8 billion in January and R11,3 billion in February 2002. The Reserve Bank kept the

# Total liquidity provided



daily liquidity requirement fairly high in 2001 by actively implementing various intervention techniques, essentially aimed at offsetting the liquidity injections arising from the deficits sustained on forward foreign-exchange transactions by the Reserve Bank and, at times, flows arising from changes in the Bank's net foreign assets.

On 5 September 2001 a number of important changes were made to the Reserve Bank's refinancing system. The main repurchase auctions, which used to be conducted daily, are now conducted only on Wednesdays, providing funds for one week at a time at a fixed interest rate. The Reserve Bank may also conduct final clearing repurchase auctions although, in practice, these have been held rather infrequently. On 21 September a final clearing repurchase auction to the amount of R12 million was conducted and another for R350 million was held on 16 January 2002. Both these auctions supplied liquidity to the market and were priced at a margin of 1,50 percentage points above the ruling repurchase rate. Supplementary auctions (i.e. those tenders conducted when unforeseen liquidity flows caused the Bank's first-round forecast of the market's liquidity needs to be off the mark) have been far more frequent. Since 5 September these auctions ranged from a liquidity-providing tender of R650 million to a liquidity-draining tender of R966 million, all at the fixed repurchase rate.

The banks' required cash reserve deposits with the Reserve Bank were raised by almost R2 billion from late September 2001 on account of the reduced deductibility (from 100 per cent to 75 per cent) of banks' vault cash in calculating their required reserve balances.

# Reserve Bank money-market intervention instruments: outstanding balances R billion

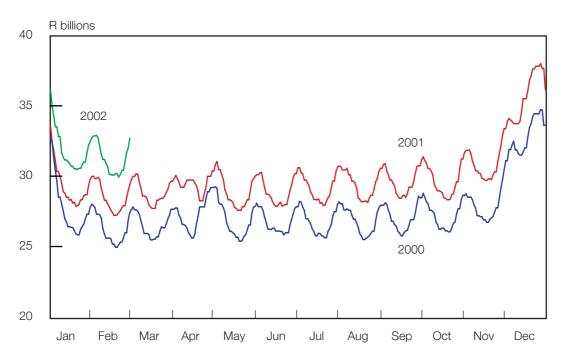
End of		Reserve Bank debentures	Reverse repurchase transactions
2000:	Dec	3,0	3,8
2001:	Mar	3,7	5,4
	Jun	4,9	3,3
	Jul	5,0	5,6
	Aug	4,9	5,9
	Sep	4,0	5,4
	Oct	2,5	6,6
	Nov	2,1	5,8
	Dec	1,3	3,5
2002:	Jan	2,0	6,6
	Feb	4,0	6,7

To maintain the private banks' dependence on central bank funding, the Reserve Bank primarily stepped up the amount of outstanding foreign currency swap arrangements with private-sector parties. The amount of outstanding swaps rose sharply at the end of January 2002 as liquidity had to be drained following the liquidity expansion when government assumed liability for the US\$1,5 billion foreign loan previously arranged with the Reserve Bank as debtor. The Reserve Bank credited government's Tax and Loan Accounts with R17,5 billion, the rand equivalent of the syndicated loan, necessitating offsetting measures to mop up this strong liquidity injection in the money market.

A further liquidity-draining operation undertaken by the Reserve Bank was an increase in the amount of outstanding reverse repurchase transactions in government securities with private-sector parties from R5,0 billion at the end of January 2001 to R6,6 billion at the end of October. The Reserve Bank also allowed the amount of outstanding debentures to fluctuate between R3,4 billion and R5,0 billion from January 2001 to August. As liquidity conditions tightened in the last months of 2001, the outstanding amounts of reverse repurchase transactions were reduced to R3,5 billion at the end of December and Reserve Bank debentures to R1,3 billion.

Notes and coin in circulation outside the Reserve Bank occasionally had a strong effect on the private banks' indebtedness to the Reserve Bank. At the height of the summer holiday season, notes and coin in circulation outside the Reserve Bank recorded a peak value of R38,0 billion on 27 December 2001 compared with a previous peak value of R34,7 billion in 2000. In order to alleviate these seasonal market pressures, the Reserve Bank scaled down its liquidity-draining operations by reducing to low levels the outstanding amounts of its own debentures and of reverse repurchase transactions in government securities.

#### Notes and coin in circulation outside Reserve Bank



During January 2002, notes and coin to an amount of R3,4 billion were returned to the Reserve Bank, easing money-market conditions, and requiring increases in reverse repurchase transactions and Reserve Bank debentures to R6,6 billion and R2,0 billion, respectively, at the end of January. The outstanding debentures were raised to R4,0 billion by the end of February 2002 and reverse repurchase transactions to R6,7 billion.

#### **Bond market**

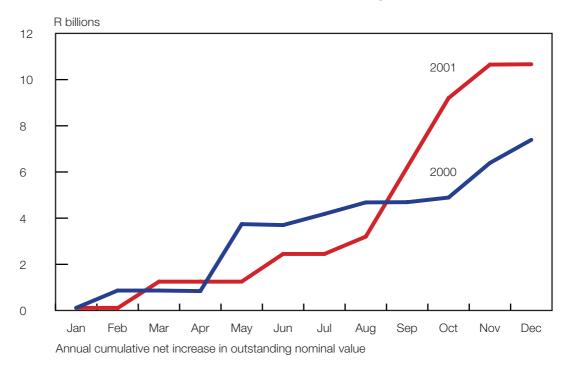
Funding by public-sector borrowers by means of the issuance of fixed-interest securities in the domestic primary bond market amounted to a net value of R9,9

billion in the first nine months of fiscal 2001/02, almost twice the net amount of R5,0 billion raised in the same period of the previous fiscal year. On a quarterly basis, a net amount of R3,6 billion was raised in the primary bond market by public-sector borrowers in the second quarter of 2001, followed by R2,8 billion in the third quarter and R3,5 billion in the fourth quarter. In January 2002, a government bond to the value of R22,2 billion was redeemed at maturity and the national government bought back about 5 per cent of the bonds targeted. These special buy-back auctions were less successful than anticipated as investors preferred to retain these mostly high-coupon bonds in their asset portfolios.

The national government raised R12,3 billion through foreign-currency denominated debt issues in the international bond markets from April 2001 to January 2002, compared with R1,9 billion in the whole of fiscal 2000/01. In January 2002 government reopened an existing dollar bond maturing in May 2009. This private placement was well supported by the international investor community and mobilised US\$274 million for the national government.

Private-sector borrowers increasingly targeted the primary bond market to meet their financing needs. Over the past year, the outstanding nominal value of private-sector loan stock listed on the Bond Exchange of South Africa almost doubled from R11,2 billion in December 2000 to R21,9 billion in December 2001. Banks accounted for 59 per cent and other private-sector companies for 41 per cent of the net increase in the nominal value of listed private-sector loan stock in 2001. New issues of private-sector debt securities became quite popular in the fourth quarter of 2001, especially in the banking sector. The first listing of securitised mortgage debt to the amount of R1,25 billion was concluded in November 2001.

Private-sector loan stock listed on the Bond Exchange of South Africa



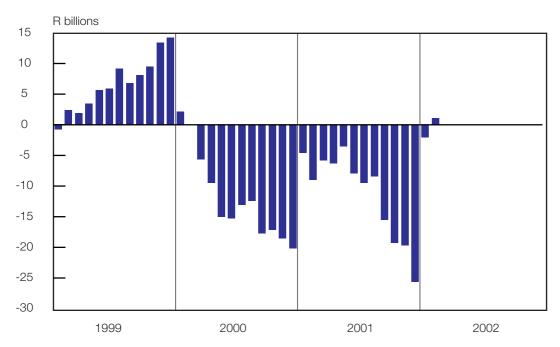
Trading activity on the Bond Exchange of South Africa in 2001 was at first driven by declining bond yields, and then by the depreciation of the rand in December, which

drastically changed inflation expectations and interest rate expectations. Turnover in the domestic secondary bond market rose by 18 per cent as the value of bonds traded increased from an already high R10,5 trillion in 2000 to R12,4 trillion in 2001. The quarterly value of bonds traded increased from R2,7 trillion in the first quarter of 2001 to a record R3,5 trillion in the fourth quarter of 2001. Turnover in January 2002 was roughly similar to the monthly average turnover value of R1,2 trillion in the fourth quarter of 2001.

There was a reduction in *non-resident holdings of domestic rand-denominated debt* from early 2000, reflecting a shift in global investor sentiment away from investing in emerging markets. Non-residents' *net sales* of bonds in the secondary bond market increased from R20,2 billion in 2000 to R25,6 billion in 2001 as offshore investors were deterred by, among other things:

- the volatility in the market for foreign exchange and protracted rand weakness which, together with the decline in domestic yields, eroded return relative to that offered by other investments; and
- uncertainties about future interest rate movements when the outlook for inflation deteriorated.





On a net basis, non-resident sales of bonds fell back somewhat from a quarterly value of R5,8 billion in the first quarter of 2001 to R2,1 billion in the second quarter, but then increased substantially to R7,6 billion and R10,1 billion in the third and fourth quarters, respectively. In December alone, net sales of bonds by non-residents amounted to R5,9 billion. In 2002 sentiment changed quite noticeably and non-resident holdings of South African debt securities increased by R1,1 billion up to the end of February.

#### Share market

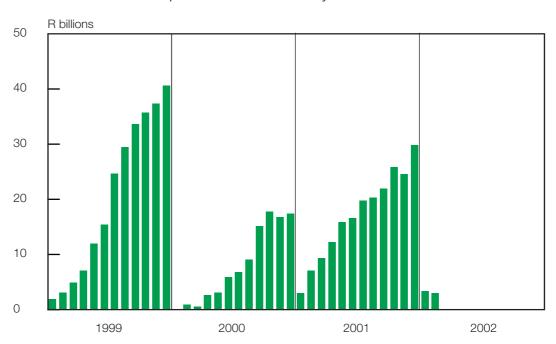
With lacklustre share prices until late September 2001 the total value of equity capital raised in the *primary share market* by companies listed on the JSE Securities

Exchange SA in 2001 was at R23,6 billion some 68 per cent less than the R74,1 billion raised in 2000. The quarterly value of the capital raised nevertheless increased from a low of R1,8 billion in the second quarter of 2001 to R5,0 billion in the third quarter and R12,9 billion in the fourth quarter. Equity financing in the primary market amounted to R8,4 billion in January 2002.

Price volatility throughout 2001 boosted trading activity in the *secondary share market*. Shares to the value of R606 billion were traded on the JSE Securities Exchange SA in 2001, about 13 per cent more than the previous record of R537 billion in 2000. The quarterly value of shares traded attained a record of R161 billion in the fourth quarter – almost 4 per cent more than the previous record turnover of R155 billion in the first quarter of 2000. Turnover in January 2002 was roughly similar to the monthly average of the fourth quarter of 2001.

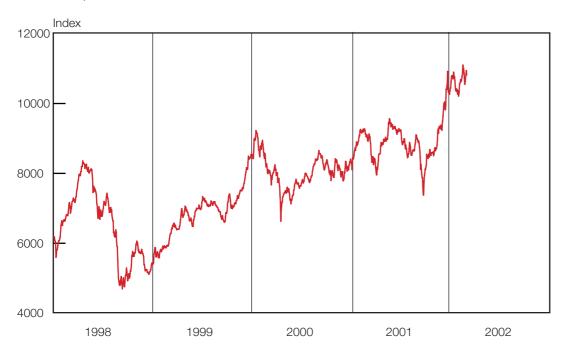
The sustained purchases by international investors of shares listed on the JSE Securities Exchange SA reflected the country's importance in emerging-market equity portfolios and indices. The rand-hedge qualities of some domestic shares obviously offset currency exposure and continued purchases by non-residents signal investor optimism about the future growth prospects of South Africa. The value of net purchases of shares by *non-residents* in the *secondary share market* increased from R17,4 billion in 2000 to R29,8 billion in 2001. The quarterly value of net purchases by non-residents increased from R5,4 billion in the third quarter of 2001 to R7,9 billion in the fourth quarter. In 2002 to the end of February, non-resident holdings of South African listed shares increased by R2,9 billion.

## Annual cumulative net purchases of shares by non-residents



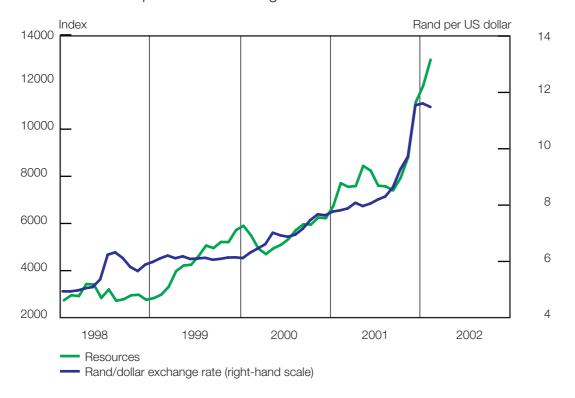
The price level of all classes of shares on the JSE Securities Exchange SA rebounded strongly towards the end of 2001, beginning nine days after the September 11 terrorist attacks on the United States. The monthly average price level of all classes of shares increased by 31 per cent from September 2001 to a record high in February 2002 while the daily closing level of the all-share price index increased by 50 per cent from a sixteen-month low on 21 September 2001 to an all-time high on 14 February 2002.

# All-share price index



The all-share price index on the JSE Securities Exchange SA increased in line with the overall international trend in the fourth quarter of 2001 as reflected by the Standard and Poor's composite index (S&P500). The recovery in domestic share values in the final months of 2001 should nevertheless be qualified somewhat; the values recovered from a low base in the aftermath of 11 September and were clearly underpinned by the depreciation of the rand.

#### Resources share prices and exchange rate



The price level of all classes of shares was driven by the depreciation of the rand which fuelled a rally in *rand-hedge shares* such as those in mining companies and other companies with substantial exposure to foreign earnings. The *resources sector* benefited as a defensive investment against volatility in the currency market with the monthly average price level increasing by almost 75 per cent from September 2001 to February 2002. In *dollar terms* the resources sector strengthened by 31 per cent, compared with an increase of 5 per cent in the US market over the same period.

The monthly average price of gold-mining shares, which often follow the dollar price of gold closely, increasingly responded to the rand price of gold. From September 2001 to February 2002 the average monthly price of gold-mining shares increased by 110 per cent as the monthly average rand price of gold rose by 38 per cent. By contrast, the weakness of the rand elicited inflation concerns and the monthly average price level of *financial sector* shares declined by almost 9 per cent from September 2001 to February 2002, broadly consistent with higher bond yields.

Shares were generally relatively cheap when assessed in terms of the *price-earnings* ratio of all classes of shares immediately after 11 September, but the price-earnings ratio increased from a low 10,5 in September 2001 – its lowest level since the emerging-markets crisis of 1998 – to 13,2 in January 2002. The *earnings yield on* all classes of shares declined from 9,5 per cent in September 2001 to 7,6 per cent in January 2002. The *dividend yield on all classes of shares* declined from 3,4 per cent in September 2001 to 2,8 per cent in January 2002.

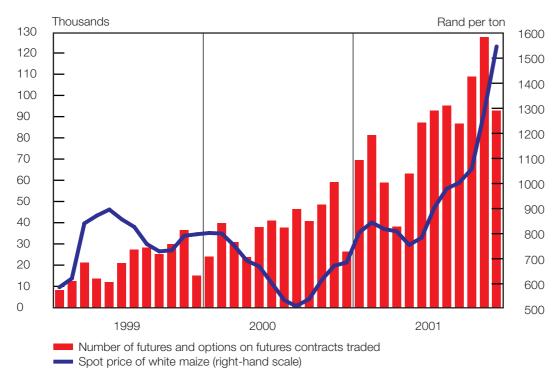
#### Market for derivatives

Price volatility boosted trading in *equity-related derivative contracts* in 2001. Index and individual equity derivatives, on average, accounted for 81 per cent and 18 per cent respectively of the overall number of trades in financial derivatives. The combined number of *futures and options on futures contracts* traded in the JSE Financial Derivatives Division, formerly SAFEX, rose by 47,1 per cent from 24,2 million in 2000 to 35,6 million in 2001. The quarterly number of these contracts traded increased from 7,6 million in the second quarter of 2001 to a record of 10,9 million in the fourth quarter. The number of these contracts traded then decreased from a monthly average of about 3,6 million in the fourth quarter of 2001 to 3,0 million in January 2002.

The number of *warrants* traded on the JSE Securities Exchange SA increased by 157 per cent from 9,9 billion in 2000 to 25,6 billion in 2001. Trading decreased from a quarterly record of 7,9 billion warrants in the third quarter of 2001 to 6,8 billion in the fourth quarter. Trading declined further from a monthly average of 2,3 billion in the fourth quarter of 2001 to 2,1 billion in January 2002 as interest shifted towards trading in the underlying securities.

The sharp increase in the price of white maize, in tandem with a depreciating rand, boosted the number of *commodity futures contracts and options on such contracts* traded in the JSE Agricultural Products Division. Total commodity contracts more than doubled from 455 000 in 2000 to 1 001 000 in 2001. The quarterly number of these contracts traded recorded an all-time high of 329 000 in the fourth quarter of 2001. Trading then levelled off at a monthly average of about 110 000 contracts in the fourth quarter of 2001 and 108 000 contracts in January 2002.

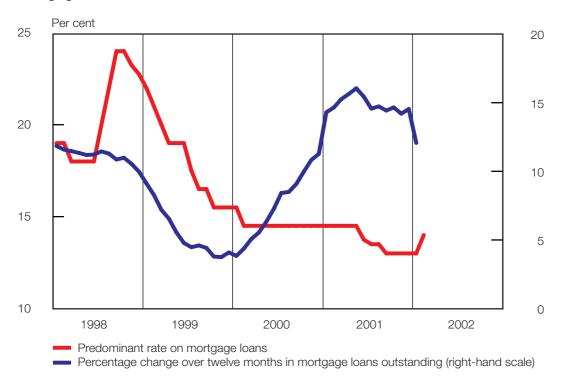
# Derivatives market: Agricultural products



#### Real-estate market

The *real-estate market* remained buoyant in 2001. Overall, the seasonally adjusted value of turnover, measured by *transfer duty paid*, increased by 18,5 per cent in 2001 and by 10,0 per cent from the first half of 2001 to the second half. By contrast, growth over twelve months in *outstanding mortgage loans* receded from a high point

# Mortgage market



in May 2001 and then levelled off at a still high level in the second half of 2001, despite the decline in the cost of mortgage finance.

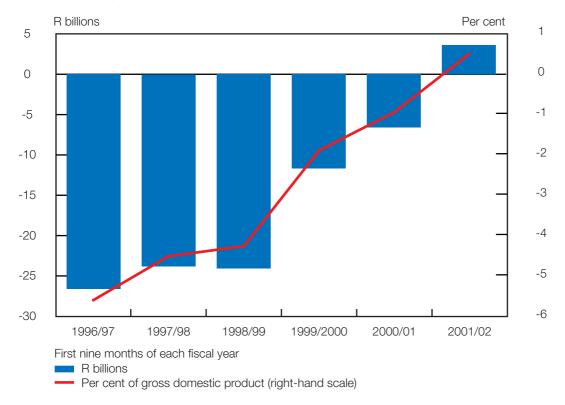
Gains in *residential property prices* also slowed down in 2001. The rate of change over four quarters in the average nominal price of houses as measured by Absa Bank slowed down from 20,3 per cent in the fourth quarter of 2000 to 11,1 per cent in the fourth quarter of 2001. The year-on-year increase in the *inflation-adjusted price* of houses also fell back from 10,3 per cent in the fourth quarter of 2000 to 6,6 per cent in the fourth quarter of 2001, using a building cost index of inflation.

#### **Public finance**

# Non-financial public-sector borrowing requirement

The financial activities of the non-financial public sector (i.e. the consolidated central government, provincial governments, local authorities and non-financial public-sector business enterprises) resulted in a *surplus* of R10,6 billion in the October–December quarter of 2001 – R4,4 billion more than the surplus recorded in the corresponding quarter of 2000. This resulted in a non-financial public-sector *surplus* of R3,6 billion in the first nine months of fiscal 2001/02, compared with a deficit of R6,6 billion in the corresponding period of the previous fiscal year.

# Non-financial public-sector balances



As a ratio of gross domestic product, the non-financial public-sector *surplus* amounted to 0,5 per cent in the first nine months of fiscal 2001/02 compared with the borrowing requirement of 1,0 per cent in the corresponding period of the previous fiscal year. These ratios signalled considerably tighter financial control and better public-sector financial management, as the deficit ratio in the first nine months of the preceding five fiscal years had averaged 3,5 per cent.

The decline in the borrowing requirement of the public sector can be ascribed to the significant improvement in the financial results of general government and the non-financial public enterprises. The surpluses of the public enterprises increased from R4,8 billion in the first nine months of fiscal 2000/01 to R5,4 billion in the same period of the current year, reflecting an excess of their saving over their investment.

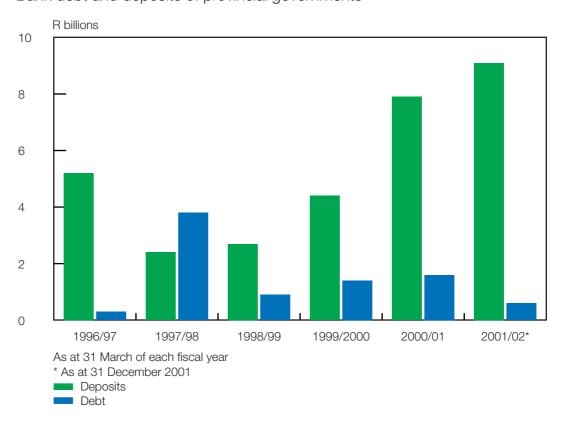
The activities of general government in the October–December quarter of 2001 resulted in a financial surplus of R8,4 billion, bringing the general-government borrowing requirement for the first nine months of fiscal 2001/02 to R1,8 billion – well down from the R11,4 billion recorded in the first nine months of the previous fiscal year. Improvements in the financial position of the national and provincial governments continued to provide the main impetus for the healthier finances of the general government sector.

An analysis of the *Statement of revenue*, expenditure and borrowing of the provincial governments indicated that their collective financial surplus rose from R4,1 billion in the first nine months of fiscal 2000/01 to R5,3 billion in the first nine months of fiscal 2001/02. The equitable share of national government revenue transferred to provincial governments increased at a rate of 11,7 per cent during the period under review.

Conditional grants, earmarked for specific purposes and amounting to R10,5 billion, were transferred to provincial governments in the first nine months of fiscal 2001/02. This represents an increase of 17,1 per cent compared with the same period of the previous year. Only R6,4 billion of these funds were spent, resulting in the expenditure of provincial governments increasing by just 11,8 per cent.

Financial restraint exercised by the provincial governments enabled them to increase their deposits with private banks from R7,9 billion at the end of March 2001 to R9,1 billion at the end of December. Their bank indebtedness improved too – from R1,6 billion at the end of March 2001 to R0,6 billion at the end of December.

#### Bank debt and deposits of provincial governments



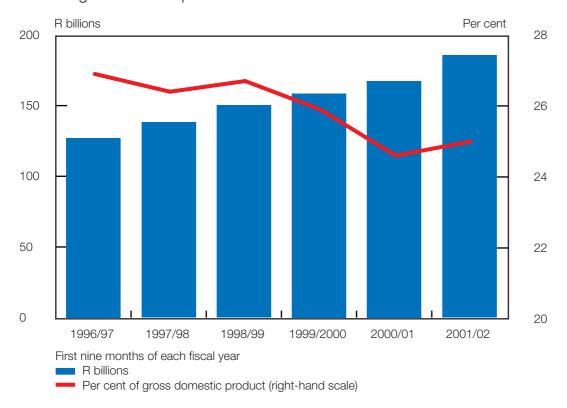
The reported financial position of local governments deteriorated slightly during the first nine months of fiscal 2001/02. Amidst this, National Treasury announced that it was involved in negotiations with the World Bank about a technical assistance loan, not exceeding US\$20 million. The aim of this loan is not only to acquire finance, but also to gain access to international policy and implementation expertise. The programme would enable municipalities to implement three-year budget frameworks, improve financial reporting systems and upgrade their capacity for service delivery. It would also assist local governments with the implementation of the Municipal Finance Management Bill when it takes effect later.

# National government finance

National government expenditure in the first nine months of fiscal 2001/02 amounted to R185,6 billion, which equals 71,8 per cent of the originally budgeted expenditure for the full fiscal year. This represents a year-on-year rate of increase in government expenditure of 10,9 per cent in the first nine months of fiscal 2001/02, slightly higher than the originally budgeted increase of 10,5 per cent for the fiscal year as a whole.

National government expenditure in the first nine months of fiscal 2001/02 was revised to exclude an amount of R1,9 billion paid in respect of the additional costs incurred during the implementation of the programme for the restructuring of government debt, which had not been provided for in the original budget. These expenses are now recorded as extraordinary spending. If this amount is included in expenditure, the rate of increase in the first nine months of fiscal 2001/02 amounted to 12,0 per cent. The Adjustments Budget projected that national government expenditure would increase by 11,7 per cent in fiscal 2001/02.

#### National government expenditure



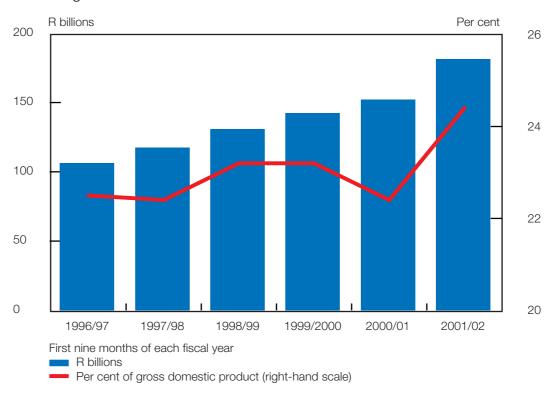
As a ratio of gross domestic product, national government expenditure in the first nine months of fiscal 2001/02 amounted to 25,0 per cent, measurably higher than the 24,6 per cent recorded in the corresponding period of the preceding fiscal year.

A well-contained level of loan debt and lower interest rates reduced the interest on government debt to R28,4 billion in the first nine months of fiscal 2001/02 compared with R28,7 billion in the same period of the previous fiscal year. An amount of R9,2 billion was spent on capital projects during this period, representing about 60 per cent of the R15,6 billion originally budgeted for projects of a capital nature.

After allowing for cash-flow adjustments (i.e. transactions recorded in the government ledgers but not yet cleared by the banking system, and late departmental requests for funds), government's cash expenditure in the first nine months of fiscal 2001/02 amounted to R186,3 billion, representing a year-on-year rate of increase of 10,3 per cent.

National government revenue in the first nine months of fiscal 2001/02 amounted to R181,3 billion, equalling 77,7 per cent of the originally budgeted revenue of R233,4 billion for the fiscal year as a whole. Revenue increased at a year-on-year rate of 19,3 per cent in the first nine months of fiscal 2001/02, exceeding by far the originally budgeted rate of increase of 8,1 per cent for the full fiscal year. The Adjustments Budget projected that total revenue collections could be expected to rise by 10,3 per cent in fiscal 2001/02 as a whole.

## National government revenue



Taxes on income and profits, the principal source of revenue, increased at a year-on-year rate of 24,6 per cent in the first nine months of fiscal 2001/02 to R109,0 billion. This rate of increase is well in excess of the originally budgeted rate of increase of 4,5 per cent for the full fiscal year. Once again, an improvement in tax

collection efficiency is cited as one of the main reasons for the substantial increase. Increases in the collection of tax from export-oriented companies also contributed to better results. Domestic taxes on goods and services contributed R61,8 billion to the National Revenue Fund.

# National government revenue

	R billi			
Revenue source	Fiscal 2001/02 Originally budgeted	Apr-Dec 2001 Actual	Percentage change*	
Taxes on income and profits	131,6	109,0	24,6	
	2,8	2,0	134,4	
	4,7	3,3	14,7	
	86,7	61,8	8,6	
	9,4	7,1	7,0	
	6,4	4,3	18,3	
Less: SACU payments** Total revenue	8,2	6,2	-2,3	
	233,4	181,3	19,3	

<sup>\*</sup> April–December 2000 to April–December 2001

As a ratio of the gross domestic product, national government revenue amounted to 24,4 per cent in the first nine months of fiscal 2001/02 compared with 22,4 per cent in the corresponding period of the previous fiscal year.

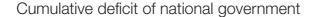
National government's cash revenue (revenue adjusted for timing differences between the recording of transactions and bank clearances) in the first nine months of fiscal 2001/02 amounted to R179,1 billion, representing an increase of 17,8 per cent compared with the corresponding period of the previous fiscal year.

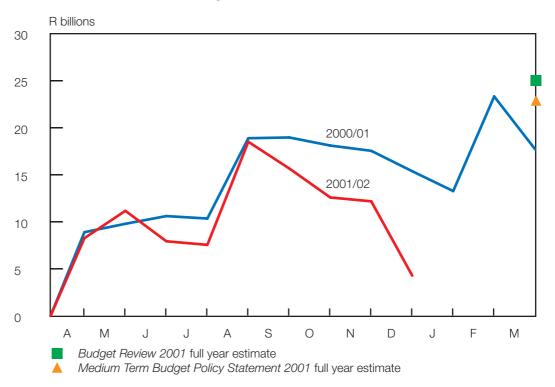
The net result of the revenue and expenditure recorded in the *Statement of national government revenue, expenditure and borrowing* was a national government deficit before borrowing and debt repayment of R4,3 billion in the first nine months of fiscal 2001/02 – equal to just 17 per cent of the originally projected deficit of R24,9 billion for the fiscal year as a whole. According to revised estimates contained in the Adjustments Budget, the national government deficit is projected to amount to R22,8 billion in fiscal 2001/02 as a whole.

The deficit before borrowing and debt repayment as a ratio of gross domestic product amounted to 0,6 per cent in the first nine months of fiscal 2001/02. This can be compared with a ratio of 2,3 per cent recorded in the corresponding period of the previous fiscal year.

The cash deficit (i.e. the deficit before borrowing and debt repayment, adjusted for cash flows) amounted to R7,2 billion in the first nine months of fiscal 2001/02. Apart from financing this deficit, a further R47 million had to be funded, being the increase in the outstanding value of debt following the revaluing of maturing foreign loans, as well as R1,9 billion for the cost of the debt restructuring programme. After taking these costs into consideration, together with the R2,3 billion in proceeds from the restructuring of state assets, the net borrowing requirement of national government amounted to R6,8 billion in the first nine months of 2001/02.

<sup>\*\*</sup> Southern African Customs Union





The greater part of the borrowing requirement in the first nine months of fiscal 2001/02 was financed through the issuance of bonds in the domestic and foreign capital markets, as summarised in the following table:

Financing of national government deficit R billions

Instrument	Fiscal 2001/02 Originally budgeted	April-Dec 2001 Actual
Cash deficit	24,9	7,2
Plus: Extraordinary payments	0,6	1,9
Less: Extraordinary receipts	18,0	2,3
Net borrowing requirement	7,5	6,8
Net receipts from domestic government bonds issued	-7,4	11,7
Treasury bills	3,5	-3,7
Foreign loans	11,3	12,8
Change in available cash balances*	_	-14,0
Total net financing	7,5	6,8

<sup>\*</sup> Increase -, decrease +

Domestic long-term funding in the first nine months of fiscal 2001/02 was obtained at an average rate of 9,9 per cent per annum, compared with a budget assumption of 11,6 per cent. However, this excludes the cost of revaluing the inflation-linked bonds. Domestic short-term instruments were sold at an average rate of 9,4 per cent per annum, compared with a budget assumption of 10,0 per cent.

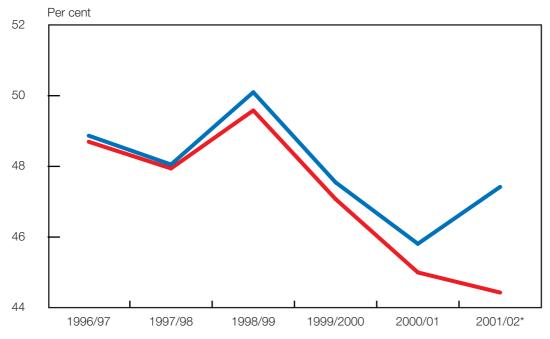
The proceeds from the restructuring of government assets made a substantial contribution towards reducing the overall financing requirement in the first nine months of fiscal 2001/02. Receipts from this source include an amount of R2,2 billion received from the restructuring of the insurance agency Sasria.

National Treasury has reviewed the 2001/02 funding strategy in view of the favourable financial position of national government. A special buy-back auction was arranged on 14 and 15 January 2002 in order to redeem part of the bonds issued by the now defunct homeland governments. Together with the scheduled bond redemption, this reduced the long-term loan obligations of national government by R24,2 billion during January 2002. The provisional financing data for January 2002 also indicated a R1,3 billion reduction in outstanding short-term loans.

The net borrowing requirement for January 2002 was mainly financed through the assumption of liability by the National Treasury for a syndicated United States dollar loan, previously concluded with the Reserve Bank as debtor. The proceeds of this loan amounted to R17,5 billion. In addition, the reopening of an existing US dollar loan contributed R2,8 billion to the Exchequer account. National Treasury also envisaged that the sale of Transnet's interest of 20 per cent in the telecommunications company M-Cell to a non-resident investment company, and the declaration of a special restructuring dividend by Transnet, would further add to the funds available to government.

The borrowing requirement of the government, together with the discount on new government bonds issued, led to an increase in the total *debt of national government* from R417,5 billion at the end of March 2001 to R462,4 billion at the end of December 2001. As a ratio of gross domestic product, government debt increased from 45,8 per cent at the end of March 2001 to 47,4 per cent at the end

Total debt of national government as ratio of gross domestic product



As at 31 March of each fiscal year

\* As at 31 December 2001

Nominal value adjusted for exchange rate movements

Nominal value at time of issue

of December 2001. However, the increase in this ratio can largely be attributed to the increase in debt caused by the revaluation of foreign debt with the appropriate foreign-exchange rates as at the end of each period. If foreign debt is valued at its original nominal value, national government debt as a ratio of gross domestic product amounted to 45,0 per cent at the end of March 2001, receding slightly to 44,4 per cent at the end of December 2001.

The combined balances in the Exchequer and tax and loan accounts of national government amounted to R15,2 billion on 31 January 2002, compared with R2,7 billion at the beginning of the 2001/02 fiscal year.

# The Budget for the fiscal years 2002/03 to 2004/05

The Minister of Finance presented his Budget Speech to Parliament on 20 February 2002. The following five key interventions in support of development and poverty relief were enunciated in the Budget Speech:

- Strong orientation towards growth, providing for an average increase in real spending over the medium term;
- the intensification of spending on alleviating poverty, through increases in oldage pensions, child-support grants and HIV/Aids projects;
- increasing investment in infrastructure in support of urban renewal and rural development;
- strengthening the fight against crime by increasing the resources available to the safety and security sector; and
- providing tax cuts for individuals, tax incentives for investment and a more generous tax regime for small businesses.

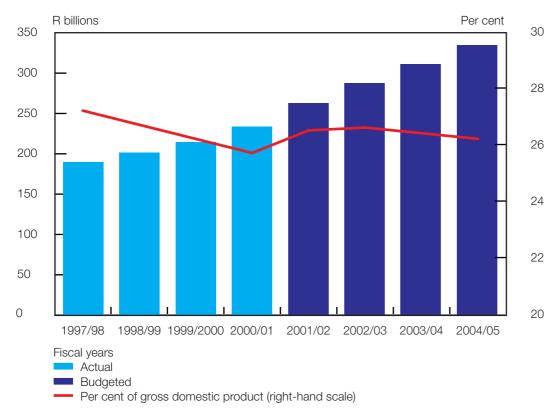
#### Fiscal projections

	200	2001/02  Revised estimate		2002/03		2003/04		2004/05	
				Budget		Budget		dget	
	Annual change R bn Per cent		Annual change R bn Per cent		Annual change R bn Per cent		Annual change R bn Per cent		
ExpenditureCapitalInterestNon-interest current	262,6 13,6 47,2 201,8	12,2 34,9 2,1 13,7	287,9 17,0 47,2 223,7	9,6 25,0 -0,1 10,9	311,2 19,6 49,5 242,1	8,1 15,2 4,9 8,2	334,6 21,6 52,1 260,9	7,5 10,0 5,2 7,8	
Revenue	248,4	15,2	265,2	6,7	288,7	8,9	313,2	8,5	
Deficit before borrowing and debt repayment	14,1		22,7		22,5		21,4		
Deficit as ratio of GDP (per cent)	1,4		2,1		1,9		1,7		

National government expenditure was estimated to increase by 9,6 per cent to amount to R287,9 billion or 26,6 per cent of the estimated gross domestic product in fiscal 2002/03, in comparison with a revised estimate of R262,6 billion or 26,5 per cent of the estimated gross domestic product in fiscal 2001/02. It was estimated that national government expenditure would increase at an average rate of 8,4 per

cent over the three-year budget period and, as a ratio of gross domestic product, it would be kept just above 26 per cent over the medium term.

# National government expenditure



Interest payments on government debt were budgeted to amount to R47,2 billion or 4,4 per cent of the estimated gross domestic product in fiscal 2002/03, and were expected to decrease to 4,2 per cent in fiscal 2003/04 and further to 4,1 per cent in fiscal 2004/05. This reduction was based on past experience showing a steady decline in the outstanding loan debt of government during recent years. Non-interest current expenditure was expected to increase to R223,7 billion or by 10,9 per cent in fiscal 2002/03 and at an average annual rate of 9,0 per cent over the three-year budget period.

Provincial governments, being at the centre of service delivery, would receive more than half of the non-interest current expenditure in the form of transfers. It was envisaged that these transfers would grow at an average rate of 7,9 per cent over the next three years. Although the amounts involved are relatively small, transfers to local governments were projected to increase at a rate of 18,3 per cent during the same period, reflecting government's commitment to basic service delivery and the creation of proper infrastructure in all communities.

Substantial increases were announced in allocations for capital expenditure in support of a number of government functions. Capital expenditure was expected to increase at a rate of 34,9 per cent in fiscal 2001/02, mainly because of the low base for year-on-year growth calculations in 2000/01. Growth rates of 25,0 per cent in fiscal 2002/03 and 15,2 per cent in fiscal 2003/04 were envisaged.

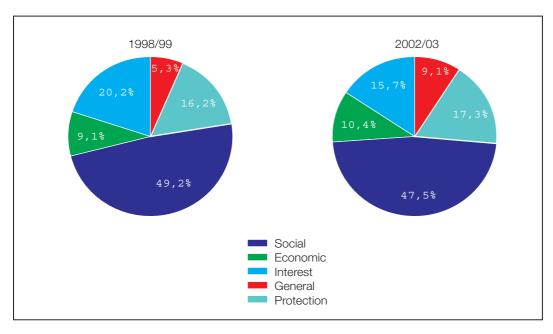
# Functional classification of expenditure of consolidated national and provincial governments

Spending category	Perd	Average growth			
	2001/02	2002/03	2003/04	2004/05	2001/02 - 2004/05 Per cent
General government services and unallocatable					
expenditure	7,8	9,1	10,1	11,5	23,9
Protection services	17,2	17,3	17,1	17,0	10,1
Defence	6,6	6,8	6,6	6,4	9,6
Police	6,8	6,6	6,7	6,8	10,0
Prisons	2,5	2,4	2,4	2,4	10,1
Justice	1,3	1,5	1,4	1,4	13,3
Social services	47,6	47,5	47,3	46,6	8,8
Education	20,4	19,6	19,6	19,2	7,2
Health	11,7	11,2	11,2	11,1	7,9
Social security and welfare	12,5	13,5	13,1	13,1	11,8
Housing and community					
development	2,4	2,6	2,7	2,6	10,1
Other	0,6	0,6	0,7	0,6	13,0
Economic services	9,9	10,4	10,2	9,9	11,3
Water schemes and related					
services	1,3	1,4	1,4	1,2	6,8
Fuel and energy	0,3	0,5	0,4	0,3	75,2
Agriculture, forestry and		·		•	
fishing	1,9	2,0	1,9	1,9	9,7
Mining, manufacturing and					
construction	0,5	0,5	0,5	0,5	6,9
Transport and	•	•	•	,	•
communication	3,7	3,6	3,6	3,6	9,2
Other economic services	2,2	2,4	2,4	2,4	17,3
Interest	17,5	15,7	15,3	15,0	3,2
Total	100,0	100,0	100,0	100,0	9,6

As indicated in the accompanying graph, spending on *social services* remains the largest functional category of government spending, amounting to 47,5 per cent of the consolidated national and provincial government expenditure in fiscal 2002/03. Spending on these services is expected to increase at an average annual rate of 8,8 per cent over the three-year budget period. In the area of *protection services* an increased portion of the spending allocated to police services provision has been made for the appointment of more police officers. Although the provision for general government services seems to be increasing, it is essentially due to the inclusion of a contingency reserve which is expected to grow to R3,3 billion in fiscal 2002/03 and R9,0 billion in fiscal 2004/05. The contingency reserve provides for future unforeseen and unavoidable spending in all functional areas.

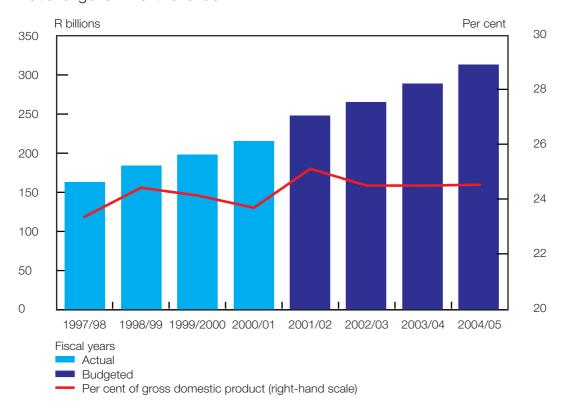
The total *revenue of national government* was estimated to amount to R248,4 billion in the current fiscal year and R265,2 billion in fiscal 2002/03, representing a year-on-year rate of increase of 6,7 per cent. It was estimated that national government revenue would increase at an average rate of 8,0 per cent over the three-year budget period. National government revenue as a ratio of gross domestic product was projected to decrease slightly from 25,1 per cent in fiscal 2001/02 to 24,5 per cent in fiscal 2004/05.





National government tax revenue was estimated to amount to R252,2 billion in fiscal 2001/02 and R268,5 billion in fiscal 2002/03, representing a year-on-year rate of increase of 6,5 per cent. National government tax revenue was expected to increase at an average rate of 7,9 per cent over the medium term. It was estimated that the burden of 25,5 per cent of gross domestic product in fiscal 2001/02 would probably decrease to 24,8 per cent in fiscal 2002/03. This ratio would probably remain unchanged over the medium term.

#### National government revenue



Specific tax adjustments were announced and are expected to reduce tax revenue by R15,2 billion in fiscal 2002/03. The tax relief was primarily associated with adjustments in personal income tax rates. The tax proposals included the following:

- A single rate scale for individuals reaching a maximum marginal rate of 40 per cent (previously 42 per cent) at a taxable income of R240 001 (previously R215 001) a year.
- The primary rebate was increased from R4 140 to R4 860, increasing the tax threshold by R4 000 to R27 000, or by 17,4 per cent.
- The secondary rebate for individuals 65 years and older was retained at R3 000 a year.
- The tax threshold for taxpayers aged 65 and over was raised to R42 640, or by 8,9 per cent.
- Tax rates and brackets were adjusted to eliminate the effects of inflation at all income levels.
- Individual taxpayers below the age of 65 who earn a taxable non-employment income of more than R2 000 a year have until now had to register as provisional taxpayers. This threshold would be raised to R10 000 from 1 March 2002.
- A number of monetary thresholds were adjusted to take account of the effects of inflation. These included the threshold on deductible medical expenses, bravery awards and long-service awards, donations tax, estate duty, bursaries and scholarships for employees and their relatives.
- It was proposed that the taxation system of employment income should be simplified by limiting employee deductions.
- Trusts, other than special trusts and testamentary trusts, would be taxed at a flat rate of 40 per cent. Special trusts and testamentary trusts established for the benefit of minor children would be taxed at the individual rates with effect from 1 March 2002.
- The interest and dividend income exemption was raised from R4 000 to R6 000 for taxpayers younger than 65 years and from R5 000 to R10 000 for taxpayers aged 65 and over. However, it was proposed that as from 1 March 2002 interest and dividends received from foreign sources would only be exempt up to R1 000.

Growth-enhancing adjustments were also proposed for the benefit of the corporate sector. An accelerated depreciation allowance on new manufacturing assets would be introduced on 1 March 2002 in order to encourage investment in productive assets. Tax and administrative relief was extended to the small business sector. Small business corporations would benefit from a graduated tax rate of 15 per cent on the first R150 000 of taxable income. Previously the figure was R100 000 of taxable income. These benefits were previously limited to businesses with an annual turnover of less than R1 million. This threshold was raised to include all businesses with a turnover of less than R3 million.

Increases in the excise duties payable on tobacco and alcoholic beverages were also announced, but the excise duty on soft drinks would be abolished. The general levy on diesel and fuel would remain unchanged, but an additional two cents a litre increase in the Road Accident Levy would be introduced to meet this fund's liabilities. In order to strengthen the competitiveness of the financial sector, it was proposed that the tax levied on certain financial transactions should be abolished as from 1 April 2002. These transactions include the following:

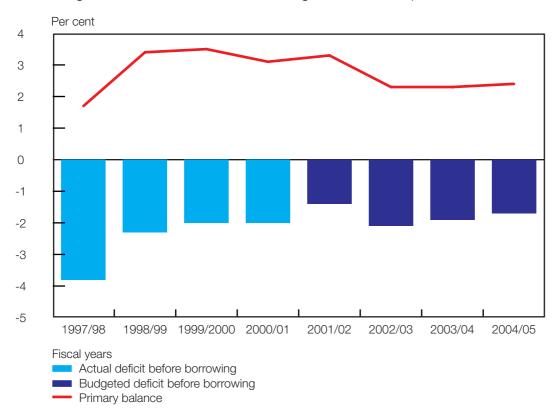
- The repurchase of warrants by their issuers;
- the issuance of listed debt instruments;

- the transfer of a mortgage bond from one institution to another; and
- various insurance policies or contracts, and the cession of insurance policies.

Progress has also been made with the tax reform initiatives announced in the 2001 Budget. The wage incentive scheme announced in the 2001 Budget has been assessed and it is now proposed that it should take the form of an additional tax allowance to employers who offer approved learnership programmes.

The net result of the revised estimates for the revenue and expenditure of national government in the fiscal year 2001/02 is an estimated deficit before borrowing and debt repayment of R14,1 billion, or 1,4 per cent of the projected gross domestic product. Although an increase in this ratio to 2,1 per cent was envisaged for fiscal 2002/03, it was expected this would be steadily reduced over the medium term, reaching a level of 1,7 per cent of gross domestic product in fiscal 2004/05. The primary balance (i.e. the deficit recalculated by excluding interest payments from total expenditure) was estimated to record a surplus of 3,3 per cent of gross domestic product in fiscal 2001/02. A slight decrease to 2,3 per cent was envisaged for fiscal 2002/03 which would be maintained at approximately that level over the three-year budget horizon.

National government balances as ratio of gross domestic product



As indicated in the accompanying table, the borrowing requirement of national government was determined after providing for certain extraordinary receipts and payments. Although extraordinary receipts of R18,0 billion were provided for in the original Budget for fiscal 2001/02, only R4,7 billion was expected to have been paid into the National Revenue Fund. The restructuring of state assets would contribute R12,0 billion to the financing of national government in fiscal 2002/03, with R5,0

billion provided for each of the subsequent years. An extraordinary payment of R2,1 billion provided for in fiscal 2001/02 was meant to defray the costs associated with the restructuring of government's domestic debt portfolio. It was estimated that these costs would amount to R1,0 billion in fiscal 2002/03. Provision was also made for the payment of R0,6 billion in fiscal 2002/03 in respect of the termination of the South African Housing Trust, originally anticipated in the 2001 Budget.

# Financing of national government deficit R billions

	Revised estimate	Medium-term estimates		
	2001/02	2002/03	2003/04	2004/05
Deficit  Plus: Extraordinary payments*	14,1 2,1 0,0 4,7 11,5 -11,1 -7,6 33,2 -3,0 11.5	22,7 1,6 0,0 12,0 12,3 -11,0 4,0 16,3 3,0 12,3	22,5 - 2,2 5,0 19,7 8,9 6,0 12,8 -8,0 19,7	21,4 - 5,0 5,0 21,4 20,6 6,0 -13,2 8,0 21,4

<sup>\*</sup> Including premiums paid on debt portfolio restructuring previously included in state debt cost expenditure

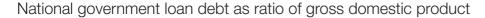
Although it was envisaged that the issuance of foreign loans would become the principal means of financing over the medium term, a net redemption of foreign government bonds was projected to the amount of R13,2 billion during fiscal 2002/03. It was envisaged that the foreign funding strategy would contribute towards the reduction in the South African Reserve Bank's net open position in foreign currency. Liquidity in the short-term market would be enhanced by increasing the issuance of Treasury bills by an amount of R4,0 billion in fiscal 2002/03 and R6,0 billion in the two ensuing years.

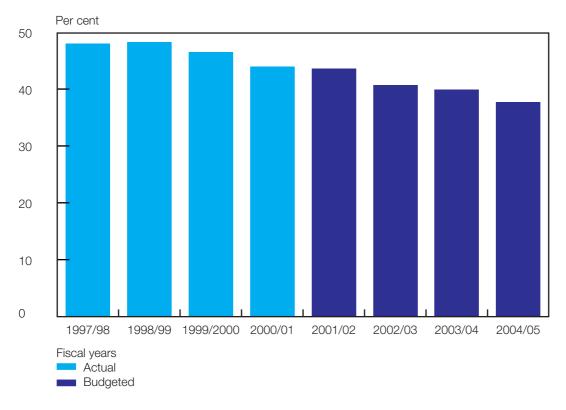
It was estimated that national government loan debt would increase from R399,5 billion at the end of fiscal 2000/01 to R432,0 billion at the end of March 2002 and to R440,6 billion at the end of March 2003. As a ratio of gross domestic product, national government loan debt was expected to decrease from 43,9 per cent at the end of fiscal 2000/01 to 43,6 per cent at the end of fiscal 2001/02 and eventually to 37,7 per cent at the end of fiscal 2004/05. Losses made on forward foreign-exchange contracts were expected to bring the estimated balance on the Gold and Foreign Exchange Contingency Reserve Account to R27,6 billion at the end of fiscal 2001/02. No projections have been made for ensuing years.

Guarantees issued to general government bodies with borrowing powers were reduced from R79,0 billion at the end of March 2000 to R70,3 billion at the end of March 2001.

<sup>\*\*</sup> Including premiums and book profits resulting from debt restructuring previously included in revenue

<sup>\*\*\*</sup> Increase -. decrease +





As indicated in the accompanying table, the public-sector borrowing requirement as a ratio of gross domestic product is projected to increase from 0,6 per cent in fiscal 2001/02 to 1,4 per cent in fiscal 2002/03. A further increase to 1,7 per cent is envisaged for the ensuing years. The future small increase in the public-sector borrowing requirement can be attributed to slight increases in the borrowing requirement of national government. Provincial governments, local authorities and non-financial public enterprises are also expected to contribute to the increase in the public-sector borrowing requirement.

# Public-sector borrowing requirement R billions

estimate	Medium-term estimates		
2001/02	2002/03	2002/03 2003/04 2004/	
11,5 1,2 -0,4 -3,4 -0,7 -2,3 5,8	12,3 1,0 -0,4 1,7 1,0 -0,5 15,0	17,5 0,7 -0,3 0,3 1,0 0,3 19,5	16,4 0,6 -0,1 -0,1 3,3 1,1 21,2
	11,5 1,2 -0,4 -3,4 -0,7 -2,3	11,5 12,3 1,2 1,0 -0,4 -0,4 -3,4 1,7 -0,7 1,0 -2,3 -0,5 5,8 15,0	11,5 12,3 17,5 1,2 1,0 0,7 -0,4 -0,4 -0,3 -3,4 1,7 0,3 -0,7 1,0 1,0 -2,3 -0,5 0,3 5,8 15,0 19,5

# **Statement of the Monetary Policy Committee**

15 January 2002

Issued by Mr T T Mboweni, Governor of the South African Reserve Bank, at a meeting of the Monetary Policy Committee in Pretoria

A special meeting of the newly constituted Monetary Policy Committee was called today to discuss the appropriate monetary policy stance in view of the effects of recent economic developments on the outlook for inflation. The steep depreciation of the rand has altered inflationary expectations in South Africa which endangers the attainment of the inflation targets. To counter second round effects of the depreciation on inflation, the Monetary Policy Committee decided to increase the repo rate with 1 percentage point to 10,50 per cent with effect from 16 January 2002. It is envisaged that this decision will lead to corresponding increases in the lending rates of domestic private banks. This decision should not have a material effect on domestic economic activity because of the stimulatory impact of the currency depreciation during the second half of 2001.

# Decentralised implementation of the 1993 system of national accounts: South Africa's experience

by J W Prinsloo and Jan W van Tongeren<sup>1</sup>

The main theme of the article is the role that co-operation between the South African Reserve Bank (SARB) and Statistics South Africa (Stats SA) has played in the past and continues to play in the development of national accounts in South Africa. The article shows how this co-operation has evolved over a lengthy period in which national accounts were developed in the country and further adapted as new policy-analysis needs arose, while making optimal use of the expertise available in each of the two institutions. Finally it explains how the 1993 System of National Accounts (SNA), which is being implemented conceptually both at the SARB and Stats SA, is again changing the parameters of the co-operation. In particular, the introduction by Stats SA of a Supply and Use Table (SUT), which establishes detailed data links between gross domestic product (GDP) by economic activities and expenditures, requires that the distribution of data responsibilities between the two institutions should be reviewed again. Taking this into account and using the elements of a discussion held in 1999 between the two institutions, the article concludes with a proposal for a further adaptation of the SNA data co-operation arrangements.

# Shared responsibilities by the South African Reserve Bank and Statistics South Africa

The national accounts in South Africa have a long history, dating back for some of the time series to 1910, though most of the time series are available from 1946 onwards. The SARB and Stats SA have also divided the work on the national accounts uniquely between them.

From 1946/47 the SARB, along with Stats SA, assumed a major responsibility for the compilation of South Africa's national accounts. However, there was always a clear distinction between the areas concentrated on by the SARB and Stats SA. The SARB is mainly responsible for the bulk of the quarterly estimates, whereas Stats SA is mainly responsible for the annual estimates and the quarterly estimates of GDP by kind of economic activity. This division of responsibilities is essentially similar to the practice in some of the large statistical offices abroad, where different divisions concentrate "independently" on the compilation of the quarterly and annual estimates of the national accounts. The SARB focuses on short-term estimates and on reconciling the core accounts on a quarterly basis because of the need, from a monetary policy point of view, to have access as soon as possible to data on short-term changes in real economic activities. The SARB does this mainly through the expenditure approach and compares the results with the quarterly estimates of GDP that Stats SA compiles by using the production and income approaches. Stats SA publishes these estimates of gross domestic product approximately sixty days after the end of the quarter and they represent the country's official GDP estimates.

Furthermore, in addition to the quarterly GDP estimates by kind of economic activity (by industry), Stats SA concentrated on historical input-output tables, social accounting matrices and regional GDP estimates at current prices. In accordance with the latest developments in national accounting, Stats SA has undertaken to compile the SUTs on an annual basis.

The National Department of Agriculture has also been a major player in the field of the national accounts. The department is mainly responsible for annual and quarterly

1 From the Research Department, South African Reserve Bank and the Statistical Division, United Nations, respectively. The views expressed in this paper are those of the authors and do not necessarily reflect those of the South African Reserve Bank or the United Nations.

estimates of the components of value added by the agricultural sector at current and constant prices. The National Department of Agriculture also assists Stats SA with the compilation of an input-output analysis for the agricultural sector, and aids the Bank in the calculation of household expenditure on food, beverages and tobacco by estimating the expenditure on these aggregates on a quarterly basis at current and constant prices.

In addition to national accounts, the Bank is also responsible for the compilation of the balance-of-payments statistics, consisting of the current account, the capital account, the financial account and the international investment position. This task was officially given to the Bank in 1956 in accordance with Government Notices 702 and 703 of that year. The Balance of Payments Division of the Research Department is in charge of the compilation of these accounts. In June 1999, revised estimates of South Africa's balance-of-payments statistics were published, to comply with the fifth edition of the International Monetary Fund's (IMF's) Balance of Payments Manual (BOPM5) issued in September 1993. In addition, a section of the Capital Market Division of the Research Department is also responsible for the national financial accounts. These accounts are available on an annual basis from 1971, whereas the quarterly accounts from 1992 onwards were published for the first time in a supplement to the Quarterly Bulletin of the SARB in December 1994. In terms of government statistics, the National Accounts Division draws information from the Public Finance Division in the Research Department. This division is responsible for the compilation of information about the income, expenditure, financing and debt of the non-financial public sector according to the guidelines of the IMF, as contained in A Manual on Government Finance Statistics.

Although this practice of shared responsibilities in the compilation of the national accounts is unique compared with international practices, it has served South Africa well over the past 50 years. South Africa's national accounts and the database supporting them are well established and certainly represent one of the most comprehensive systems in sub-Saharan Africa. Annual data for all the major aggregates (see list on pages 6 and 7) are available from 1946, though quarterly data series (with a lag of one quarter) are available from 1960.

Co-operation between the SARB and Stats SA in the compilation of the national accounts has been a great success in the past and will continue to have great value in the future. The success lies in teamwork towards a common goal, though both institutions have to acknowledge each other's independence, as well as a degree of interdependence, to ensure the reliability of the figures produced. Although certain problems may arise on account of this divided responsibility, there is the major advantage of a wider resource pool of economists and statisticians and the opportunity for cross-checking, since officials with different backgrounds in the two institutions work towards the timely production of reliable national accounts statistics, in accordance with international best practices.

The national accounts economists of the SARB have easy access to the detailed changes in the balance-of-payments statistics, government finance results, labour and price movements (including the exchange rate and international commodity prices) and a comprehensive short-term database for financial institutions as well as the short-term changes in the money and capital markets. This access helps considerably in assessing the basic data and estimating changes in the real economy on a quarterly basis. Likewise, Stats SA has the advantage of more direct

contact with respondents, the details of unpublished survey results, early access to survey results and the fact that its long-term orientation enables it to include more comprehensive short-term surveys and census results when finalising the estimates of various aggregates on an annual basis.

The present division of work between the SARB and Stats SA on the national accounts, as described above, is summarised in the following table:

Table 1: The persent co-ordination of the compilation of South Africa's national accounts between the SARB and Stats SA

SNA se	egments	FC	NFC	НН	GOV	ROW	Integration
GDP by	y industries	SARB	Stats SA	Stats SA	SARB	SARB	Stats SA
IEA*	Income and use of income accounts	SARB	SARB	SARB	SARB	SARB	SARB
ILA	Capital and financial accounts	SARB	SARB	SARB	SARB	SARB	SARB

<sup>\*</sup> Integrated Economic Accounts

The columns in the table refer to the sectors and the rows to the accounting segments of the SNA that are currently included in South Africa's national accounts, namely gross value added by industries, the income and use of income accounts, and the capital and financial accounts. The columns include the five institutional sectors of South Africa's national accounts, namely the Financial Corporate Sector (FC), the Non-financial Corporate Sector (NFC), the Household Sector (HH), which includes the sector Non-profit Institutions Serving Households (NPISHs), the General Government (GOV) and the Rest of the World (ROW). The cells indicate which parts of the national accounts system the SARB and Stats SA respectively compile at present.

Stats SA is responsible for the basic data supporting the compilation of gross value added of industries belonging to the household and non-financial corporate sectors. In the case of the gross value added by industries, the emphasis has shifted towards the production approach although estimates of the income components, namely compensation of employees and operating surpluses, are also calculated. The last column shows that Stats SA integrates the data into final estimates of GDP.

The SARB compiles almost all the data on the financial corporate sector, the general government sector and the rest of the world. In addition, it also develops the income, use of income, capital and financial accounts of the household sector and the non-financial corporate sector. Within the context of these accounts, the SARB also compiles data on all final demand components, i.e. final consumption expenditure by households and the general government, gross fixed-capital formation, change in inventories, and exports and imports. The income and use of income accounts are linked to a flow-of-funds analysis for the institutional sectors, also done by the SARB.

In addition, the SARB is responsible for the integration of the accounts across institutional sectors, as is reflected in two of the three segments of the last column.

The two approaches to GDP by Stats SA from the production side and by the SARB from the expenditure side have not yet been fully integrated. GDP estimated from the production side by Stats SA is on average about 0,5 per cent lower than GDP by expenditure as estimated by the SARB. The main reason for the difference may partly be the informal-sector activities that are reflected in the SARB estimate of household consumption, but underestimated in the Stats SA estimates of GDP activities. By contrast, the SARB estimate does not account for final consumption by NPISHs, but the Stats SA estimate of GDP by activities does cover to a large extent the value added by NPISHs.

The way that the co-operation between the SARB and Stats SA on national accounts evolved, is presented in the next section in a historical perspective, up to the time when the two institutions adopted the 1993 SNA.

## Historical development of South Africa's national accounts

The development of the national accounts in South Africa dates back to the 1920s when estimates by R A Lehfelt of South Africa's national income for 1917/18 and 1922/23 were published in 1922 and 1925, respectively. With these estimates South Africa became, in those years, one of the first few countries to produce national income estimates.

In the late 1930s these estimates were followed by new calculations and the classification of the national income by C G W Schumann according to kind of economic activity for selected years from 1910/11 to 1934/35. In addition, S H Frankel in the early 1940s produced estimates of GDP for 1910/11 and from 1917/18 to 1945/46. His work also includes estimates of gross investment from 1922/23 to 1945/46. However, it was not until 1946/47 that the former Bureau of Census and Statistics (at present Stats SA) started making official estimates of South Africa's Domestic Product and National Income.<sup>2</sup>

2 Domestic product less factor income paid abroad, plus factor income received from abroad equals national income.

The National Income and Domestic Product concepts used in the first publications of national accounts were partly a development phenomenon related to the establishment of the national accounts during the 1940s and 1950s in many African countries. Some of the African countries that have developed national accounts after World War II, use the National Income and others the Domestic Product concepts. The first official national accounts estimates of South Africa adhere in principle to the National Income concepts. For measuring the concept of National Income, South Africa and a few other African countries made separate estimates of the aggregate earnings of migrant labour. These estimates showed migrants' earnings as a payment to the rest of the world, and their purchases within the country were treated as exports.

Shortly after these developments the SARB, in the implementation of monetary policies, used the Bureau of Census and Statistics' estimates of GDP and its own expenditure estimates to establish a set of annual national accounts. These estimates, from 1946 onwards, were published for the first time in the December 1951 *Quarterly Bulletin of Statistics* of the SARB. This set of accounts, "The Union's National Accounts", compiled on the basis of a calendar year, compares with the Net National Income estimates produced by the Bureau of Census and Statistics for

the twelve months ended 30 June. Five types of accounts were included, all based in principle on the standard system of national accounts of the Statistical Office of the United Nations, called *A System of National Accounts and Supporting Tables, Studies in Methods*, Series F, No 2 published in 1953 and generally referred to as the 1953 SNA.

The tables also included additional data breakdowns for private final consumption by durable and non-durable goods and gross fixed-capital formation by type of capital goods, which were introduced into South Africa's national accounts in the 1950s and 1960s.

"The Union's National Accounts" included the following tables:

- Gross national product
- National income and expenditure
- Private income and expenditure
- Consolidated current account of public authorities
- Net savings and investment

The national accounts were instrumental in identifying the effects of the abnormal conditions that characterised the post-war phase of the economic cycle in South Africa for the period 1946-1950. Though income and expenditure aggregates showed a pronounced upward trend throughout this period, substantial shifts occurred in constituent items such as consumption expenditure by households, private saving and foreign investment.

Two main factors account for the marked changes in the composition of the income and expenditure aggregates between 1946 and 1950. As a result of the enforced curtailment of consumers' expenditure and outlays on capital formation for non-war purposes during World War II, the war ended with a substantial backlog of demand for consumer goods. The pent-up demand for imported durable consumer goods and depleted industrial and commercial inventories was particularly strong. In addition, there was an unprecedented range of investment opportunities in the mining sector, construction, manufacturing, transport services, electricity and communication facilities, and agricultural development. These developments led to a sharp increase in the real outlays by South African residents on consumption and capital equipment. The influence of these expansionary forces predominated up to the end of 1948 and contributed to a steady deterioration in private saving and South Africa's balance-of-payments position.

Towards the end of 1948 the authorities decided to address these problems by introducing measures such as import controls, which curbed the expansion of outlays on consumer goods and at the same time increased personal saving. The higher level of personal saving, in turn, offset the effect of the decline in foreign saving inflows (i.e. the balance on the current account) between 1949 and 1950. The net result of these developments was that the high level of fixed-capital formation of more than 20 per cent of GDP could be maintained, despite the paucity of foreign funds.

Following the greater demand by the monetary and fiscal institutions for policy formulation and by private-sector analysts for more up-to-date information about domestic economic developments, the SARB began the development of national accounts estimates from the expenditure side on a quarterly basis in the early 1960s. After extensive research on and development of these aggregates, the SARB published the national accounts for South Africa on a quarterly basis in the

March 1971 issue of the *Quarterly Bulletin*. The SARB was similarly also responsible for calculating the quarterly estimates of the GDP at factor cost by kind of economic activity for the period 1960 to 1968. From the first quarter of 1969, the former Department of Statistics (at present Stats SA) took over this task.

In addition to these developments, the national accounts statistics were revised further in order to align the compilation and classification of the figures with the revised standard international principles given in the United Nations' "new" manual *A System of National Accounts, Studies in Methods,* Series F, No 2, Rev. 3 New York, 1968, generally referred to as the 1968 SNA. These adjustments were made at the beginning of 1971.

Around the same time, the national accounts data were adjusted to exclude the data relating to Botswana, Lesotho and Swaziland from the national accounts of South Africa. Nearly twenty years later the independence of the Republic of Namibia in 1990 again necessitated major adjustments to South Africa's national accounts. The exclusion of Namibia from the national accounts statistics means that the accounts now consist of production, expenditure and saving accounts for the Republic of South Africa, including the former self-governing states, and the former Republics of Transkei, Bophuthatswana, Venda and Ciskei. In fact, these territories had always been included in the national accounts estimates of South Africa. After the exclusion of Namibia, all historical national accounts data were revised accordingly, so that comparable time series were available.

The exclusion of Namibia from the aggregate national accounts estimates produced somewhat lower absolute values for virtually all major components of income, expenditure and saving. However, the cyclical trends in the major national accounts aggregates on an annual basis were not affected to any significant degree by the exclusions.

Estimates of the various macroeconomic aggregates of Namibia, relative to the size of these aggregates in South Africa, ranged from a maximum of nearly 5 per cent in respect of real consumption expenditure by general government to not more than 4 per cent in respect of real gross capital formation, 3 per cent in respect of real GDP and only 2 per cent in the case of final consumption expenditure by households.

After a process of evaluation, revision and development, the following tables comprising data in current prices, constant prices and seasonally adjusted time series, are currently published in the *Quarterly Bulletin* of the SARB:

- National income and production accounts of South Africa
- Gross value added by kind of economic activity
- Expenditure on GDP
- Final consumption expenditure by households
- Final consumption expenditure by households according to purpose
- Gross fixed-capital formation
- Fixed-capital stock
- Change in inventories
- Gross and net capital formation by type of organisation
- Financing of gross capital formation
- National disposable income, saving and net borrowing
- National income and saving
- Account with the rest of the world

- Current income and expenditure of incorporated business enterprises
- Current income and expenditure of households
- Current income and expenditure of general government

3 For a more detailed discussion, see South Africa's national accounts 1946-1998. An overview of sources and methods, Supplement to the South African Reserve Bank's Quarterly Bulletin, June 1999, Pretoria.

In the June 1999 *Quarterly Bulletin* of the SARB, these tables were adjusted to accommodate the suggestions of the 1993 SNA. A preliminary set of integrated economic accounts was also developed and published in a Supplement to the June 1999 *Quarterly Bulletin* of the SARB. Although South Africa's national accounts are generally consistent with the principal guidelines and recommendations contained in the 1993 SNA, there are a number of areas where South Africa's national accounts do not fully adhere to the SNA specifications.<sup>3</sup> In general, differences are encountered where data limitations prevent the SNA recommendations from being adopted or where an alternative treatment is deemed more appropriate to South African circumstances. In addition, the degree of disaggregation or, in some cases, aggregation, of sectors or activities corresponds with particular economic and statistical realities.

## The implementation of the 1993 System of National Accounts

The implementation of the 1993 SNA in South Africa has impacted in two ways on the co-operation between Stats SA and the SARB in the area of the national accounts. One is that Stats SA has started work on a detailed Supply and Use Table (SUT) and has therefore integrated into its work the link between GDP estimates by activities and expenditures, which had until that time been split between the work programmes of the two institutions. As a consequence, co-operation between the two institutions is shifting from their independent compilation of GDP by activities and expenditures, to the compilation of the SUT by Stats SA and the Integrated Economic Accounts (IEA) by the SARB. As the SUT and IEA compilations interact with each other in a more detailed manner than the previous GDP compilation by activities and expenditures, the second effect has been a more urgent need for the co-ordination of concepts between the two institutions.

4 The above material is based on a report of a mission to South Africa by Jan W van Tongeren from 20-24 March 1999, unpublished document, Statistics Division, United Nations, New York.

This need was highlighted in a discussion in March 1999,<sup>4</sup> in which the SARB and Stats SA agreed on adjustments to the SNA concepts used by the South African institutions, to meet the requirements of the 1993 SNA. The following are examples of the adjustments to the concepts and classifications that were adopted and that have an impact not only on the product and production analysis of the SUT managed by Stats SA, but also on the income and expenditure analysis of the IEA carried out by the SARB. Most of these follow the 1993 SNA recommendations, but in a few instances deviations from the 1993 SNA recommendations were adopted, mainly owing to data limitations. The most important decisions taken are as follows:

- The 1993 SNA value concepts were adopted, notably the valuation of value added at basic prices and, in line with that, taxes and subsidies on production and imports were split between taxes/subsidies on production and products.
- Introduced into the accounts were the concepts of final consumption expenditure and actual consumption, including the related concepts of individual and collective consumption.
- The treatment of expenditure on selected durable goods for defence purposes as gross fixed-capital formation was adopted.

- The calculation of consumption of fixed capital for structures such as roads, dams and bridges was introduced into the accounts.
- The concepts of fixed assets and gross fixed-capital formation were broadened in the 1993 SNA to include selected intangible assets, namely mineral exploration, computer software and original artistic and literary works. The South African national accounts had already capitalised mineral exploration cost in past practices. However, the extension of the concepts to the other categories was not possible, owing to the lack of basic data. Furthermore, the asset category of valuables and the associated category of capital formation will currently not be applied in South Africa.
- The calculation of the output of insurance companies was revised to be in keeping with the definitional changes according to the 1993 SNA. However, for life assurance and pension funds, the SARB would continue to treat net premiums and benefit payments as saving and dissaving, and to reflect those in the changes in net equity in the financial account of households and financial corporations. For the time being, the SARB has not implemented the 1993 SNA treatment of also showing the net premiums and payments as social transfers and including an adjustment item in the use of (adjusted) disposable income account(s).
- The output of Financial Intermediation Services Indirectly Measured (FISIM) will be imputed and allocated to users, in line with the 1993 SNA recommendations. However, it was decided that FISIM should only be calculated for deposit-taking institutions, namely banks, and distributed on the basis of a reference rate. The output of these banks would be the sum of FISIM plus explicit service charges. FISIM would not be calculated for the central bank and development banks, as these banks are not regarded as purely financial intermediaries. Their output is equal to cost and any explicit charges are assumed to be included in the output thus measured. The explicit charges are to be separately allocated to the appropriate sectors and industries, and the remaining output – i.e. total output at cost minus explicit charges - will be allocated to government in the case of the central bank, and to the financial corporate sector in the case of other banks. The latter allocation will avoid the inclusion of a nominal industry. It was also agreed that FISIM would not be applied to microlenders, which generally charge extremely high interest rates and operate mainly by using their own funds accumulated from such charges. Instead, output would be calculated at cost, including a normal profit mark-up. This treatment would allocate most of the high-interest payments to net interest in the allocation of the primary income account, so that the high-interest rates would be reflected in the balance of primary income, not in output and value added.
- With regard to medical insurance, it was agreed, in line with 1993 SNA recommendations, that the final consumption of households should include two groups of expenditure. The first group comprises all expenditures on medicines, doctor's visits and hospital treatment, which are channelled to household final consumption by imputing social transfers for reimbursements or direct payments by the medical insurance schemes. The second component is the service charges of the medical insurance, which are added to medical expenditures as insurance schemes facilitate households' payments of medical cost by redistributing them among households.

- Some extra-budgetary institutions of general government (unincorporated enterprises) increasingly tend to make explicit charges for their services; they are progressively becoming market producers. This will be reflected in the future accounts, by shifting some of these institutions to the corporate sector as quasi-corporations. Examples of these types of institutions are government research organisations, the South African Bureau of Standards, and government armament corporations. The same treatment will not be accorded to universities, which until now have been included in the household sector. As this treatment affects the analysis of the household sector, it was decided they would be reallocated to the government sector. This classification was deemed appropriate, as universities cannot be treated as market producers, even though they do sell some of their services by charging tuition fees to students. However, most of them receive the bulk of their income from government.
- It was decided that the SNA recommendations regarding output in agriculture based on the growth of agricultural crops would not be implemented, even though this may result in distortions, when distributing agricultural output over the years and establishing a relation between agricultural output and cost. The SNA recommendations were found difficult to implement, because early estimates of production of agricultural output based on growth estimates are highly inaccurate. If implemented, the SNA recommendations would require frequent revisions of the value added by agriculture, which would be confusing and inconvenient. However, the growth of trees could be used to calculate forestry output in each year, as forestry growth is a much longer-term and smoother growth process. Consequently it was decided that expert knowledge of forestry should be used to determine the annual growth curve of a tree in terms of the volume of timber, and based on that, to distribute over the years such growth in physical terms. Accordingly, changes in inventories would reflect the growth of trees, but not the growth of agricultural crops.
- In the compilation of the supply and use tables by Stats SA, it was decided that the trade and transport margins should be jointly distributed to the products on which they are levied. This implies that transport services for goods would be allocated to the intermediate consumption of the trade industry, which would increase the output of that industry by the same amount. The total output of trade therefore corresponds to the combined trade and transport margin, which is to be distributed to products.

In addition to conceptual changes, the 1993 SNA revision was also an opportunity to revise the national accounts compilation practices used in South Africa's national accounts. These were mainly new benchmark revisions and a rebasing of figures from 1990 to 1995 in terms of the constant price estimates. Most of these revisions were carried out during 1998 and the first half of 1999, and then officially published in the respective reports of Stats SA and the SARB. In addition, the scope of the national accounts has been widened to accommodate specific areas emphasised by the 1993 SNA, notably regular SUTs and IEAs disaggregated by institutional sectors.

In the *Quarterly Bulletin* of the SARB the original national accounts were adapted to the revised concepts and terminology of the 1993 SNA. Likewise Stats SA accommodated similar changes, where relevant, in its estimates.

The implementation of the 1993 SNA recommendations as described above brought about an upward adjustment of about 2 per cent in the level of South Africa's GDP in the base year, 1995. This was broadly in keeping with the experience of other countries that apply the 1993 SNA recommendations, where the range of adjustments varies between an increase of 2 to 4 per cent, compared with the former estimates.

# Proposed restructuring of the division of work between the South African Rerserve Bank and Statistics South Africa

The introduction of the SUT by Stats SA and the adaptation of SNA concepts used in the national accounts of South Africa may require a review of the co-ordination arrangements between the two institutions. A proposal appears below, indicating how the division of work could be changed, taking into account the data sources that each institution manages, the priorities of policy analysis in each of the institutions, and the corresponding specialisations available in each.

The proposed restructuring of the division of work is schematically represented in Table 2, which is a revised version of the present division of work shown in Table 1. The proposed changes are indicated in the table by shading the segments of the SNA that might be added in future compilations or might be redistributed between the SARB and Stats SA. Each of these proposed changes is briefly reviewed in the following paragraphs.

Table 2: Proposed division of work between the SARB and Stats SA regarding future SNA implementation activities

			lı	nstitutiona	l sectors			
SNA se	egments	FC	GOV	ROW	NFC	NPISH	HH	ntegration
SUT		SARB SARB	SARB SARB	SARB SARB	Stats SA Stats SA	Stats SA Stats SA	Stats SA Stats SA	
IEA*	Income and use of income accounts	SARB	SARB	SARB	Stats SA	Stats SA	Stats SA	SARB
ILA	Capital and financial accounts	SARB	SARB	SARB	Stats SA			SARB
	Balance sheets	SARB	SARB	SARB	Stats SA			SARB

<sup>\*</sup> Integrated Economic Accounts

The "independent" compilation of GDP, which is done separately by the SARB for the expenditure aggregates and by Stats SA for the production and income components, may be combined in the compilation of a SUT in which output information is compared with expenditure data at the product level. The benefit of such a development, which is already in use, would be the elimination of the present statistical discrepancies between the GDP compiled from the expenditure side by the SARB, and the GDP by industries based on the production approach presented by Stats SA. At present these estimates are compared at the aggregate level and are not fully reconciled, as mentioned above.

A further integration may be needed between the industry and sector data through the Cross-Classification by Industries and Sectors (CCIS) of production and value-added data. This would require in particular a breakdown of production by industries between the NFC and HH sectors. Key elements are available for such a breakdown, as the SARB already distributes operating surpluses between sectors. In addition, data is available about the NFCs' main activities, which consist of data that could be compared with the establishment data also classified by activities.

5 South Africa was recently included in a project initiated by the Institute for Policy Studies at the Johns Hopkins University regarding the identification of and reporting on non-profit institutions (NPIs). The compilation of a Handbook on Non-Profit Institutions, which is done in co-operation with the United Nations Statistics Division, is also in an advanced stage. These developments may place new emphasis on the importance, for policy analysis, of separating NPIs from the statistical reporting of the institutional sectors.

Independent and integrated compilations of NFC, HH and NPISH accounts may be initiated in future. The integrated accounts of NFCs would establish an important link between production analysis and financial analysis, as the NFC sector is a large contributor to production and at the same time may be important as the sector that attracts investment, including foreign direct investments. Likewise, the independent compilation of the household sector would facilitate analysis by household subsectors and provide a link between economic and social analysis. In addition, the compilation of the NPISH sector would be a necessary supplement to developing independent household-sector accounts, which would free this sector of the non-profit institution elements that are traditionally included in it. The household sector and NPISH accounts might only be compiled up to saving, because capital, financial accounts and balance sheets may be more difficult to compile on the basis of the existing data sources. This would deviate from the present practice of compiling some of the components of the household financial account residually – this is an option that would no longer be available when household and NPISH sectors are distinguished separately.5

Balance sheets can currently be derived for at least two sectors, namely NFC and FC, and "financial balance sheet data (excluding stocks of non-financial assets)" can be derived for the government and the external sector. Consequently, it is suggested that the compilation should be extended to balance sheets for those sectors. Even though the "milestone guidelines" of the Inter-Secretariat Working Group only accorded a last priority to balance sheets, the SARB may consider this extension because its financial analysis is not only focused on changes in financial assets and liabilities, but also includes their stocks, for example external debt, government debt and money supply.

Another valuable extension, also related to the SARB analyses, would be to consider making explicit the price data used in the compilation of the national accounts. These would be data on the wage rates used in converting or comparing employment data with data on the compensation of employees and also the price indices used to arrive at flows in constant prices. As "price" data are used jointly with national accounts data in macroeconomic analyses, it would be useful if analysts and researchers were more explicitly aware of the implicit "price" information of the national accounts.

Instead of the present functional division of work, the compilation activities might be split up along sectoral lines. Stats SA might be responsible for the integrated sector accounts of NFC, HH and NPISH, and the SARB might concentrate on the sector accounts of GOV, FC and the external sector. Furthermore, Stats SA might deal with the reconciliation of product balances and the conversion of industry data to sectors in the framework of the CCIS, and the SARB might reconcile the integrated accounts across sectors. As it would be difficult, given the current status of data available, to compile capital and financial accounts and balance sheets for households and NPISH sectors, the reconciliation by the SARB across sectors for these accounts might only be done for NFC, FC, GOV and the external sector.

However, it would be no easy task to accomplish the "paradigm" shift needed for the proposed restructuring of the compilation of the national accounts and the refinement of the division of work between the SARB and Stats SA. Furthermore, the aim should be to establish competent structures to compile the national accounts of the country on a comprehensive, reliable and internationally competitive basis. As these changes, if fully implemented, would require highly-skilled human resources in conjunction with the expansion and improvement of existing data sources, the implementation should be evolutionary and pragmatic.

From a more practical point of view, the way forward might be to develop and refine the relevant components falling naturally inside the operational boundaries of the two institutions, or those that could easily be transferred between the two organisations by mutual agreement. It should be possible to bridge the gap along these lines between the existing structures and procedures, and restructure comprehensively the responsibilities described above.

A first step might be for Stats SA to concentrate on the compilation of annual supply and use tables. The demand-side components would be done in collaboration with the SARB. This would ensure that the components could be compared at a more detailed and lower level, which would enhance the consistency of the accounts. In addition, Stats SA, in close co-operation with the SARB, could consider the further integration of the industry and sector data through the CCIS of the production and value-added data. Any analyses that would require the development of Social Accounting Matrices (SAMs) and Satellite Accounts while remaining the responsibility of Stats SA, should be done in close co-operation with the SARB, as the SAMs include institutional sector data.

During the implementation of the 1993 SNA the SARB took the initiative of compiling the IEA for four institutional sectors, namely households, the government, financial corporations and non-financial corporations. Currently the SARB compiles these accounts on an annual basis, up to and including the capital account. The compilation and integration of these accounts should be further developed by the SARB, including the possible incorporation of balance sheets, as previously discussed. However, on account of the current lack of data sources, the suggested split between the activities of the household sector and NPISH is unlikely to be implemented in the near future (see Footnote 5).

In the compilation of the quarterly accounts, Stats SA and the SARB might cooperate more closely in making the estimates for the GDP from the production side and the expenditure estimates, as the SARB has a well-developed infrastructure for dealing with quarterly estimates. In addition, the SARB might consider the possibility of developing, on an aggregated level, a quarterly supply and use table to improve the consistency checks for the quarterly estimates. The disaggregation of the components of the demand side should remain the responsibility of the SARB as this information is currently published in the *Quarterly Bulletin* of the SARB.

## Summary and concluding remarks

South Africa's official national accounts, developed since the early 1940s, currently consist of a comprehensive framework of accounts at current and constant prices, which fully comply with the Special Data Dissemination Standard (SDDS) of the IMF. In addition, the recent revisions took into account the implementation of important recommendations contained in the 1993 SNA. These adjustments also provided a

platform for improving the detail and accuracy of estimates and widening the scope of the accounts. Some of the important areas identified for further development and research are to integrate fully the compilation of supply and use matrices with the estimates of GDP by activity and by expenditure; to refine the cross-classification of institutional sectors by industries; to expand the details and scope of the IEA and to improve the relationship between the annual and quarterly estimates. It would certainly be an improvement if the compilation of the quarterly national accounts were closely co-ordinated with the annual accounts, so that when the annual estimates become available, the quarterly estimates could be revised accordingly.

Finally, the present co-operative arrangements between Stats SA and the SARB regarding the compilation of the national accounts are interesting, as they may be used as a model for the member states of the Southern African Development Community and other countries where such a division of work exists or is needed. It is quite possible that the need for such an inter-institutional division of work may increase in future, given the comprehensiveness of the SNA and the global demand for timely, reliable and comprehensive macroeconomic statistics. Therefore, in order to make progress with implementing the scope and details of the SNA in future, more resources and also the expertise of different disciplines and institutions may be required. These kinds of developments could only be successful with results that would meet the highest standards if there were the type of inter-institutional cooperation currently existing between the SARB and Stats SA in South Africa.

#### References

Ady, P. and Courcier, M. 1960. Systems of national accounts in Africa. Organisation for European Economic Co-operation, December 1960.

South African Reserve Bank. 1999. South Africa's national accounts 1946 – 1998. An overview of sources and methods. Supplement to the South African Reserve Bank *Quarterly Bulletin*, June 1999. Pretoria.

Stadler, J.J. 1973. Die Nasionale Rekeninge van Suid-Afrika. Pretoria: HAUM.

# A note on flows of funds in South Africa's national financial accounts for the year 2000

by D H Meyer and Z Nhleko<sup>1</sup>

#### Introduction

South Africa's national financial accounts for 2000 are published on pages S-44 to S-53 of this issue of the *Quarterly Bulletin*. This note highlights some of the important observations which can be made on the basis of the information presented. The note's coverage is illustrative rather than comprehensive.

The national financial accounts form part of the broadly defined System of National Accounts. The national financial accounts summarise the process of financial intermediation in the economy, and the flow-of-funds accounting system facilitates intersectoral and macroeconomic analyses. This set of accounts presents the macroeconomic interrelationships between the national income and product accounts, the balance of payments, government finance statistics, the monetary survey and financial statistics<sup>2</sup>.

# Financing balance

The sectoral financing balances of the five major institutional groupings and four subsectors for the calendar year 2000 are presented in Table 1.

1 The views expressed are those of the authors and do not necessarily reflect the views of the South African Reserve Bank. The Reserve Bank wishes to express its sincere appreciation for the co-operation of all the reporting organisations – government departments, financial market and other public and private-sector institutions – for furnishing the data used for the compilation of South Africa's financial accounts.

2 For a more comprehensive discussion on the technical aspects of South Africa's national financial accounts refer to: A note on flows of funds in South Africa's national financial accounts for the year 1999 by M A Kock and D H Meyer. Quarterly Bulletin, No 219. March 2001.

Table 1 Financing balances<sup>1,2</sup> 1999 and 2000 Surplus units (+) / deficit units (-)

R millions

		Foreign sector <sup>3</sup>	Financial inter- mediaries	gove	General government		inancial porate iness prises	House- holds <sup>4</sup>
				Central and provincial govern- ments	Local authorities	Public s sector		
1999:	Year	3 398	17 466	-19 746	-5 619	646	-2 585	6 440
2000:	1st qr	994	4 743	-8 270	-678	4 029	-4 707	3 889
	2nd qr	815	5 000	-7 399	-1 793	1 840	-6 274	7 811
	3rd qr	5 396	5 221	-10 042	-171	2 589	-6 660	3 667
	4th qr	-3 192	4 456	1 843	-936	2 515	1 760	-6 446
	Year	4 013	19 420	-23 868	-3 578	10 973	-15 881	8 921

Gross saving plus capital transfers less gross capital formation. Gross capital formation consists of total fixed-capital formation and total changes in inventories, before providing for consumption of fixed capital.

A positive amount reflects a net lending position and by implication a net acquisition of financial assets, whereas a negative amount reflects a net borrowing position and by implication a net incurrence of financial liabilities.

A positive amount reflects a surplus for the rest of the world and therefore a deficit on South Africa's balance on current account of the balance of payments. A negative amount represents a deficit for the rest of the world and a surplus on South Africa's balance on current account of the balance of payments.

Including unincorporated business enterprises and non-profit institutions serving households.

An analysis of the financing balances indicates which sectors were surplus or deficit sectors in 2000. As shown in Table 1, the general government and the non-financial private corporate business enterprises sectors were financing-deficit sectors that had to borrow extensively from financing-surplus sectors in order, primarily, to fund investment programmes. Financial intermediaries had a relatively large financing surplus, followed by non-financial public corporate business enterprises and households. In 2000 an inflow of capital from the rest of the world was nonetheless needed to augment domestic saving.

The financing balances of a number of sectors changed from a surplus to a deficit and vice versa in the fourth quarter of 2000. The foreign sector, which had provided inflows of funds to South Africa during the first three quarters, reverted to being a deficit unit in the fourth quarter as South African residents diversified asset portfolios into other markets and as portfolio investment into South Africa fell on account of mounting aversion towards emerging-market economies, fuelled by the perceived riskiness of investing in these markets.

Central and provincial governments switched from a financing-deficit sector in the first three quarters of 2000 to a surplus sector in the fourth quarter, as government consolidated its fiscal position and became a contributor to gross national saving. Non-financial private corporate business enterprises also recorded a small surplus in the fourth quarter. By contrast, the household sector recorded a fairly substantial deficit in the last quarter of 2000 on account of dissaving by households, unincorporated business enterprises and non-profit institutions serving households.

## Sectoral analysis

Beyond the financing balances and net financial investment of the various sectors, the flows underlying net financial investment are classified by *financial instrument* in the national financial accounts, and the financial transactions of economic sectors can be analysed from a wide variety of vantage points.

#### Foreign sector

The foreign sector captures all transactions between South Africa and the rest of the world. This sector has a role similar to that of the domestic institutional sectors and, within the financial account framework, its primary function is to balance the domestic saving-investment gap – i.e. through imbalances on the current account of the balance of payments of South Africa.

The total net acquisition of financial assets equals the total net incurrence of liabilities, with transactions with the rest of the world as the balancing item. In 2000, as noted in Table 2, the net accrual of financial assets by the domestic institutional sectors amounted to R313 billion and their net incurrence of financial liabilities amounted to R317 billion. The difference of R4 billion represents net borrowing from the rest of the world <sup>3</sup>.

The foreign sector's net contribution to saving in the South African economy was mainly effected through non-residents' increased holdings of ordinary shares, while monetary deposits and long-term loans also increased. In response to a

3 "Borrowing" in this context should be interpreted in the widest sense, including new share investment global reassessment of risk in emerging markets, there were net sales of government bonds by non-residents. This dampened the total inflows from the rest of the world.

Table 2 Flow of funds: foreign sector, 2000 R millions

	Domestic institutional sectors	Rest of the world	Total
Net incurrence of financial liabilities	316 761	20 396	337 157
Net lending (+)/net borrowing (-)	-4 013	4 013	0
Net acquisition of financial assets	312 748	24 409	337 157

#### Financial intermediaries

Financial intermediaries convert the funds they receive from surplus entities (lenders) into a variety of financial instruments structured to suit the requirements of deficit entities (borrowers). The financial intermediaries sector identified in South Africa's national financial accounts consists of five subsectors, namely the monetary authority, other monetary institutions, Public Investment Commissioners, insurers and retirement funds, and other financial institutions. These will be discussed individually below.

#### Monetary authority

The monetary authority, consisting of the South African Reserve Bank and the Corporation for Public Deposits, interact mostly with other monetary institutions, the central government and the foreign sector. The bulk of transactions in 2000 was focussed around loans and advances made to and received from other monetary institutions, the issuance of Reserve Bank securities and an increase in foreign assets – i.e. gold and other foreign reserves.

#### Other monetary institutions

The other monetary institutions sector, by definition, includes banks, mutual banks, the Land Bank and Postbank and is usually a financing-surplus sector, as reflected by its positive financing balance in the abbreviated flow of funds presented in Table 3.

Other monetary institutions recorded gross saving of R12,9 billion in 2000 which, together with the accrual of additional liabilities to the amount of R74,1 billion, was utilised to finance gross capital formation of R2,1 billion and the acquisition of financial assets to the amount of R84,9 billion. As can be expected, monetary deposits of R45,6 billion were the major source of funds, and intermediation to financing-deficit sectors was effected through bank loans and advances amounting to R39,1 billion, mortgage loans of R22,8 billion and gold and foreign reserves of R3,1 billion. Mainly reflecting derivatives, other assets nearly equalled

other liabilities. In 2000, the other monetary institutions sector invested 97,6 per cent of their total resources in financial assets and this sector's asset flows accounted for 39,1 per cent of financial intermediary asset flows and 18,0 per cent of total asset flows.

Table 3 Flow of funds: other monetary institutions, 2000

Transaction items	Sources/ liabilities R millions	Uses/ assets R millions
Gross saving	12 887	2 065
Net lending (+)/net borrowing (-)	10 812	10 812
Net incurrence of financial liabilities	74 098	84 910
Gold and other foreign reserves  Monetary deposits  Bank loans and advances  Bills, bonds and loan stock  Mortgage loans  Other assets/liabilities	45 578 6 469 -373 - 22 424	3 137 1 431 39 091 -2 707 22 767 21 191
Total sources/liabilities and uses/assets	86 975	86 975
Percentage of total sources used for gross capital formation	Per cent 2,4 97,6 18,0 39,1	

#### Public Investment Commissioners

The Public Investment Commissioners received funds from the government's official pension and provident funds and, to a lesser extent, social security funds, other government funds and trust accounts of households to the amount of R24,7 billion in 2000. The Public Investment Commissioners, on balance, reduced their exposure to fixed-interest securities and reinvested the proceeds, together with net new receipts, allocating a third to monetary deposits and two-thirds to investment in equities.

#### Insurers and retirement funds

Insurers and retirement funds accounted for 20,8 per cent of financial intermediary asset flows and 9,6 per cent of total asset flows in 2000. As indicated in Table 4, the financing-surplus, together with the accrual of financial liabilities amounting to R40,1 billion, indirectly financed gross capital formation through the acquisition of financial assets to the amount of R46,0 billion. However, this exposure to financial assets increased their vulnerability to market fluctuations.

Table 4 Flow of funds: insurers and retirement funds, 2000

	R millions
Financing balance	5 915
Net incurrence of financial liabilities	40 128
Members' interest in the reserves of retirement and insurance funds	53 959
Other liabilities	-13 831
Net acquisition of financial assets	46 043
Monetary deposits	-5 782
Other deposits	23 353
Public Investment Commissioners	24 736
Foreign deposits	-476
Other	-907
Bills and bonds	17 115
Short-term government bonds	-11 178
Long-term government bonds	21 421
Other	6 872
Other loan stock and preference shares	8 791
Domestic	-2 215
Foreign	11 006
Shares	-19 233
Domestic	-28 542
Foreign	9 309
Other assets	21 799
	Per cent
Percentage of total asset flows	9,6
Percentage of total financial-intermediary asset flows	20,8
Totolitage of total illatiolatifite illientaly asset 110003	20,0

Member contributions accounted for the bulk of the amount available for investment in financial assets by insurers and retirement funds. The official pension and provident funds increased their investment portfolio at the Public Investment Commissioners by R24,7 billion, while the rest of the insurer and retirement fund industry increased their exposure to the international markets. Domestic shareholding was reduced in favour of foreign equities and, similarly, the holding of foreign loan stock and preference shares increased – this is indicative of the general acceleration in portfolio outflows to the rest of the world during 2000. However, insurers and retirement funds not only increased their foreign exposure but also acquired domestic government bonds in a period when global risk aversion led to net sales of bonds by non-residents.

#### Other financial institutions

In 2000, other financial institutions, among others unit trusts, participation mortgage bond schemes, finance companies and financial public enterprises, recorded, as a group, the third largest increase in the net acquisition of financial assets, surpassed only by other monetary institutions and the household sector. Financial activity in this sector resulted mainly from inflows to unit trusts. The spread of assets, which covers nearly all asset categories ranging from deposits with monetary institutions, trade credit and short-term loans, bills, fixed-interest securities, ordinary shares and long-term loans to other assets, reflects the diversity of this sector's investments.

# General government: central government and provincial governments

The central government and provincial government sector recorded a financing deficit of R23,9 billion for the calendar year 2000. As shown in Table 5, the financing deficit was funded through the net accrual of financial liabilities amounting to R23,0 billion.

Table 5 Flow of funds: central government and provincial governments, 2000

	R millions
Financing balance	-23 868
Net acquisition of financial assets	-839
Net incurrence of financial liabilities	23 029
Net incurrence of financial liabilities by financial instrument	23 029
Treasury bills	8 900
Short-term government bonds	-13 700
Long-term government bonds	24 988
Non-marketable government bonds	1 293
Other	1 548
Financing by sector	23 029
Foreign sector	-11 755
Public Investment Commissioners	6 174
Insurers and retirement funds	9 997
Other financial institutions	5 296
Other domestic sectors	13 317

A substantial portion of the financing needs for 2000 was funded through the issuance of government bonds to the amount of R11,3 billion – long-term government bonds issued more than offset the redemption of short-term government bonds. Declining interest rates boosted the issuance of Treasury bills which, together with non-marketable government bonds and long-term loans, financed the outstanding deficit. The increase in holdings of government bonds by insurers and retirement funds, other financial institutions and the Public Investment Commissioners, more than filled the void left by non-resident net sales of government fixed-interest securities.

#### **General government: local authorities**

Local authorities, on a net basis, reduced their long-term loans and redeemed a small portion of their outstanding fixed-interest securities in 2000. However, their short-term loans and outstanding balances with other creditors increased markedly. The increase in their asset transactions was biased towards deposits at monetary institutions and other assets or claims against the private sector.

# Non-financial public corporate business enterprises

Non-financial public-sector enterprises recorded an overall financing surplus in 2000. This surplus, together with net sales of financial assets, financed the reduction in financial liabilities, such as bills.

## Non-financial private corporate business enterprises

As indicated in Table 6, gross capital formation of non-financial private corporate business enterprises exceeded gross saving. The financing deficit of R15,9 billion for the year 2000 was funded in the financial markets through share issues, bank loans and advances, long-term and mortgage loans and an increase in other financial liabilities. The acquired funding in excess of the financing deficit, was channelled to trade credit, short and long-term loans, other assets and deposits with monetary institutions.

Table 6 Flow of funds: non-financial private corporate business enterprises, 2000

Transaction items	Sources/ liabilities R millions	Uses/ assets R millions
Gross saving	71 063 648	
Gross capital formation	0.0	87 592
Net lending (+)/net borrowing (-)	-15 881	
Net financial investment (+/-)		-15 881
Net incurrence of financial liabilities	54 238	
Net acquisition of financial assets		38 357
Monetary deposits	-	8 141
Other deposits	1 549	-4 428
Bank loans and advances	12 075	-
Trade credit and short-term loans	-1 110	15 585
Bills, bonds and loan stock	-3 065	-2 095
Shares	13 564	-860
Domestic	-18 725	-3 589
Foreign	32 289	2 729
Long-term and mortgage loans	10 014	7 264
Other assets/liabilities	21 211	14 750
Total sources/liabilities and uses/assets	125 949	125 949
	Per	cent
Percentage of total sources used for gross capital formation	6	9,5
Percentage of total sources used to acquire financial assets	4	3,1
Percentage of total asset flows	2	6,0

#### Households

Households, with gross saving exceeding gross capital formation were, on balance, a net provider of funds to deficit sectors in 2000. Access to funding through bank

loans and advances, mortgage loans and trade credit enabled them to increase their gross financial claims or financial assets in 2000. Households mainly increased their interest in retirement and life funds and their deposits with banks and other financial institutions, such as unit trusts.

## **Summary and conclusion**

South Africa's national financial accounts, or flow-of-funds accounting system, describes transaction flows in the macroeconomic accounts and financial transactions between economic sectors through financial instruments.

Noteworthy developments and observations regarding the financial flows in 2000 include:

- the foreign sector's net contribution to saving in the South African economy;
- the indirect funding of non-financial private corporate business enterprises' investment through non-resident net purchases of shares;
- the demand for government bonds by insurers and retirement funds, other financial institutions and the Public Investment Commissioners, which more than filled the void left by non-resident's net sales in response to a global reassessment of risk in emerging markets;
- the offshore diversification of asset portfolios;
- the shift of the Public Investment Commissioners' investments towards equities;
- the consolidation of government's fiscal position; and
- the continued positive contribution of households to saving.

#### References

International Monetary Fund. 2000. *Monetary and Financial Statistics Manual.* Washington, DC: IMF, September 2000.

Meyer, D. H. 1995. Suid-Afrika se Nasionale Finansiële Rekening: 1980 - 1992. Ongepubliseerde M.Com-verhandeling. Johannesburg: Randse Afrikaanse Universiteit.

Meyer, D. H. 1999. A flow of funds analysis: South Africa's National Financial Account. *Bank of Botswana Research Bulletin*, December 1999, Vol.17, No 2. Gaborone: Bank of Botswana.

South African Reserve Bank. 1994. South Africa's National Financial Account, 1970 – 1992. Supplement to the *Quarterly Bulletin*, No 194, December 1994. Pretoria: South African Reserve Bank.

South African Reserve Bank. 2001. A note on flows of funds in South Africa's national financial accounts for the year 1999 by M A Kock and D H Meyer. *Quarterly Bulletin*, No 219, March 2001. Pretoria: South African Reserve Bank.

Uys, D. J. 1992. The system of national financial accounts, in Fourie, L. J., Falkena, H. B. and Kok, W. J. (eds). *Fundamentals of the South African financial system.* Halfway House: Southern Book Publishers.

Van der Walt, J. G. 1999. *Institutional sector classification guide for South Africa*. Pretoria: South African Reserve Bank.

### Notes to tables

# Money-market and related interest rates – S-28

On 28 August 2001, the Governor of the Reserve Bank announced changes to the Bank's operational procedures in the money market for implementation on 5 September. These changes were fully described in the September 2001 *Quarterly Bulletin* and necessitated some amendments to Table S-28.

The set of money-market interest rates reported on page S-28 has been expanded and a rate on forward rate agreements has been included.

# National government finance – S-55, S-56 and S-145

Until 30 September 2001 the revenue collected on behalf of provincial governments by national government was recorded in the National Revenue Fund. From 1 October 2001 these revenues are excluded from the National Revenue Fund. The presentation of the National Revenue Fund in the *Quarterly Bulletin* of the Reserve Bank has been amended accordingly.

The National Treasury also amended the way in which certain revenues and expenses are recorded in the National Revenue Fund. The premium paid on debt portfolio restructuring was previously recorded as part of the cost of state debt. From November 2001 these costs are recorded as part of extraordinary payments. Profits on debt portfolio restructuring were previously recorded as part of revenue. Such profits are now regarded as extraordinary receipts.

Revenue from debt portfolio restructuring has always been treated as extraordinary revenue in the Reserve Bank's presentation of the National Revenue Fund.

Debt portfolio restructuring costs, however, were previously presented in the Bank's publications as part of the cost of state debt. Debt portfolio restructuring costs are now recorded as extraordinary payments in the Reserve Bank's representation of the National Revenue Fund.