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December 1999

South African Reserve Bank
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Introduction

Prospects for the world economy improved materially in 1999. The United States economy continued to expand robustly while inflation remained low. Aggregate demand in the euro area also began to expand, showing stronger growth in output in the second half of 1999 and promising further expansion in 2000. The fiscal stimulus in Japan is contributing to higher levels of production. Along with the improvement in Japan, the economies of the Southeast Asian countries have moved into a strong recovery phase after the setbacks they suffered in 1998. As a result of these developments, global economic growth is now expected to be stronger over the next two years than had been expected early in 1999.

The recovery in global economic conditions was supported by the subsiding of the turbulence in the international financial markets, owing mainly to the timely action of a number of central banks in the main financial centres of the world during 1998. With the return of stability, capital flows to many emerging markets resumed, causing share prices to rise, exchange rates to stabilise and interest rates to decline. Even when monetary conditions were tightened in the United States towards the middle of 1999, a step that was later followed by the Bank of England and the European Central Bank, the overall assessment of future global economic conditions remained positive.

On the whole, the benign international developments offer the prospect that output conditions in South Africa will improve over the next year or two. Some commodity prices have already risen in reaction to expectations of stronger world growth. Furthermore, the gold price responded positively to the allaying of uncertainties about the marketing of gold by central banks in Europe. Although there is a possibility of an economic slowdown in the United States in the course of 2000, this is widely expected to be a rather “soft” one, which is likely to be cushioned further by improved economic performances in the euro area and in Japan. South African producers are expected to benefit from this healthier global economy.

In tandem with the trend towards better global economic conditions, a gradual strengthening of domestic economic growth became apparent from the end of 1998. A relaxation of the domestic monetary policy stance, and a recovery in agricultural production, have helped the real gross domestic product to expand at progressively firmer growth rates over the past four calendar quarters, reaching an annualised rate of 3 per cent in the third quarter of 1999.

The faster growth in the third quarter was mostly concentrated in the agricultural and the services sectors of the economy, notably the communication sector and the trade sector which benefited greatly from a rise in current spending by consumers. Production conditions remained subdued in mining and in the secondary sectors – i.e. manufacturing, construction and electricity and water utilities. Manufacturing output in the first nine months of 1999, for example, was still below that of the first three quarters of 1998.

The increase in aggregate production in the third quarter of 1999 was propelled by the rise in final consumption expenditure by households for the second quarter running. In particular, spending on durable goods rose rapidly. Total consumer spending rose faster than household incomes, putting downward pressure on the saving capacity of the household sector. Wealth effects, following the demutualisation of the

Old Mutual life assurance company and some recovery in the real-estate market, together with stronger cash flows because of declining debt servicing costs, were among the prominent forces behind the recovery in consumer spending, and therefore of aggregate domestic production in the third quarter of 1999.

The other main components of gross domestic expenditure fell back in the third quarter of 1999. Inventory investment was at a much lower level than in the second quarter, confirming that the large second-quarter increase was essentially unplanned or involuntary. Government affirmed its commitment to fiscal prudence at all tiers of government when the Medium Term Budget Statement was released towards the end of October 1999. Indeed, this commitment had already been put into practice as real general government consumption has been declining for four consecutive quarters.

Real fixed capital formation continued to decline, but the pace of decline in the private sector appeared to have been flattening out. Ample production capacity still exists in the manufacturing industry. New investments are therefore targeted more towards the maintenance of existing production capacity or the implementation of new technologies, rather than towards creating additional capacity.

Along with the deterioration in the household saving ratio, dissaving by the general government as a percentage of gross domestic product increased somewhat in the third quarter of 1999. The corporate saving rate broadly maintained a level similar to that of the second quarter of 1999. The weakening of the household saving ratio and the slight increase in general government dissaving therefore mean that the overall saving performance of the economy has slipped again from the higher level established in the second quarter of 1999. A meaningful and lasting improvement in the national saving rate is required for sustained economic growth at a faster rate than currently experienced by the South African economy.

As could be expected, the weak state of the economy in the second half of 1998 resulted in the redundancy of a large number of workers in the private sector of the economy. This trend persisted into the first half of 1999, despite the improvement in overall economic performance. Over the same period, government's commitment to fiscal prudence and to a smaller, more efficient public service added to the total of job losses in the economy.

Nominal salaries and wages per worker began to respond to the process of labour paring and increased by less than overall output prices in the first half of 1999. These developments, coupled with steady growth in economy-wide labour productivity, should in due course assist in a general downward movement in production and consumer price inflation.

Consumer price inflation showed a distinct downward tendency in 1999 and reached levels unprecedented during the past three decades or more. Other measures of inflation showed some acceleration during 1999. However, these measures would have indicated lower inflation, had it not been for the effects of the strongly rising prices of imported oil. On the whole, domestically generated inflationary pressures seemed to be diminishing, and the additional inflationary forces observed in the first three quarters of 1999 apparently had their origins essentially in the external sector.

With the economy currently operating in the vicinity of a lower turning point of the business cycle, surpluses on the current account of the balance of payments can be expected to grow or deficits to shrink. A positive, though relatively weak export response to the improvement in the global economy, which nevertheless exceeded the increase in the value of merchandise imports, ensured that the deficit on the external current account shrank noticeably in the third quarter of 1999.

The physical volume of non-gold merchandise exports in the first nine months of 1999 has now been restored to a level roughly commensurate with that of the first nine months of 1998. The losses in export volumes recorded during the financial crisis of 1998 have therefore largely been recovered. However, over the medium term, i.e. from the second half of 1997, there was a small decline in the volume of merchandise exports. Continued growth in export earnings is generally regarded as a prerequisite for extending the duration of the current economic recovery.

The deficit on the current account of the balance of payments in the middle quarters of 1999 was comfortably financed by relatively strong inflows of international capital. In fact, the surplus on the overall balance of payments enabled the Reserve Bank to accumulate international reserves steadily and reduce its net open position in foreign currency.

The net inflow of international capital during the first three quarters of 1999 was more than fully accounted for by inflows of portfolio capital. Such flows, and more specifically those that enter the economy through the fixed-interest securities markets, are known for their capricious behaviour: they are volatile and their direction of flow is often reversed abruptly.

The relative stability of the financial markets and positive assessments of the economic outlook created circumstances for the rand to appreciate from the beginning of the year. The appreciation in the weighted effective value of the rand could have gone further, with negative consequences for import-competing industries and exporters trying to gain an increased share of foreign markets, had it not been for the Reserve Bank’s steady purchases of foreign currency. By strengthening its international reserves, the Bank also contributed to an overall reduction in the economy’s vulnerability to exogenous shocks.

The growth rates of the monetary and credit aggregates measured over twelve months decreased during the first nine months of 1999, reflecting the mildly subdued real economic conditions, combined with the legacy of the highly restrictive monetary policy stance of 1998. This seems to indicate the possibility of a slowdown in future inflation, especially as the growth in narrow money holdings have slowed down more than broad money growth.

Credit growth, although considerably below the growth of 1998, began to show some tentative signs of renewed buoyancy as the real-estate market picked up, and companies and households became more inclined to take on debt at the prevailing interest rate levels. The growth in M3 also appeared to have been accelerating from the second to the third quarter of 1999, but much of this should be attributed, for the present, to the influence of the technical procedures followed in accounting for changes in partially processed items appearing on the balance sheets of banks.

The shrinking borrowing requirement of public-sector bodies and the low level of fixed capital formation in the private sector have substantially reduced the demand for loanable funds in the primary capital markets. Simultaneously, financial stress among private households, which led to a sharp increase in surrenders of pension fund and life assurance business, reduced the current revenue surpluses of institutional investors. This decline in the supply of funds prevented capital market interest rates from responding more positively to the decline in the demand for loanable funds. Continued reductions in the public sector’s demand for funds, coupled with the restoration of growth in the current revenue surpluses of institutional investors are likely to lead to a greater demand for non-government paper in the period ahead.

The real-estate market, as reflected in the average nominal value per real-estate transaction, rebounded from the depressed levels of the last months of 1998 and the early months of 1999. Share prices also recovered from September 1998 to July 1999 and recouped most of the losses sustained during the financial market turmoil of 1998. There was little growth in share prices from July to October 1999. Turnover nevertheless remained lively and non-residents maintained a prominent presence as net buyers of South African equities.

An important feature of the economy over the past year was the recovery of the fixed-interest market from the disruptions of 1998. Money market interest rates declined throughout the first ten months of 1999, overtly guided lower along their descending path by the Reserve Bank's signalling at the daily auction of repurchase transactions. The private banks followed the lead given by the rate on repurchase transactions and lowered their retail lending rates on four occasions from June to October 1999.

In contrast to the general behaviour of short-term interest rates, the market-determined yields on long-term government bonds generally moved along a gentle upward trend from the beginning of the second quarter of 1999. An undertone of uncertainty about the situation in emerging markets, the rise in capital market rates in the United States and concerns about the accumulation of inflationary pressures imparted an upward bias to long-term interest rates over the first ten months of the year. News of an imminent implementation of an inflation-targeting monetary policy framework and expectations of an upward re-rating of South Africa's creditworthiness by a prominent international rating agency caused long-term bond yields to move downwards quite strongly from the end of October and in November 1999.

As a consequence of the divergent movements in short-term and long-term interest rates, the yield curve assumed an increasingly steeper positive slope over maturities of less than five years. Over maturities of longer than five years, the yield curve retained its generally flat shape. This might have been indicative of pervasive uncertainties in the financial markets about future movements in the general price level and possibly also of fears that the downward trend in inflation might be reversed.

In the area of public finance, the public-sector borrowing requirement improved in the first half of fiscal 1999/2000 because of, among other things, a reduction in the financing needs of non-financial public-sector enterprises. There was also a noticeable reduction in the national government budget deficit relative to gross domestic product. Exchequer revenue exceeded the budgeted revenue growth by more than the excess of actual expenditure growth over budgeted expenditure growth. The budget deficit for the full fiscal year as a percentage of gross domestic product is likely to be lower than the budgeted projections.

Fiscal consolidation in South Africa has now been continuing for more than five years. Since 1994, fiscal policy has focused consistently on enhancing national saving by reducing budget deficits. This, along with a monetary policy committed to price stability over the medium to long run, is a central element in creating an environment that will foster capital investment, rising productivity, more job opportunities and higher living standards for all the people of the country. When the Minister of Finance released the Medium Term Budget Policy Statement on 29 October 1999 he reaffirmed that these policies would be extended into the future for at least the next three fiscal years.

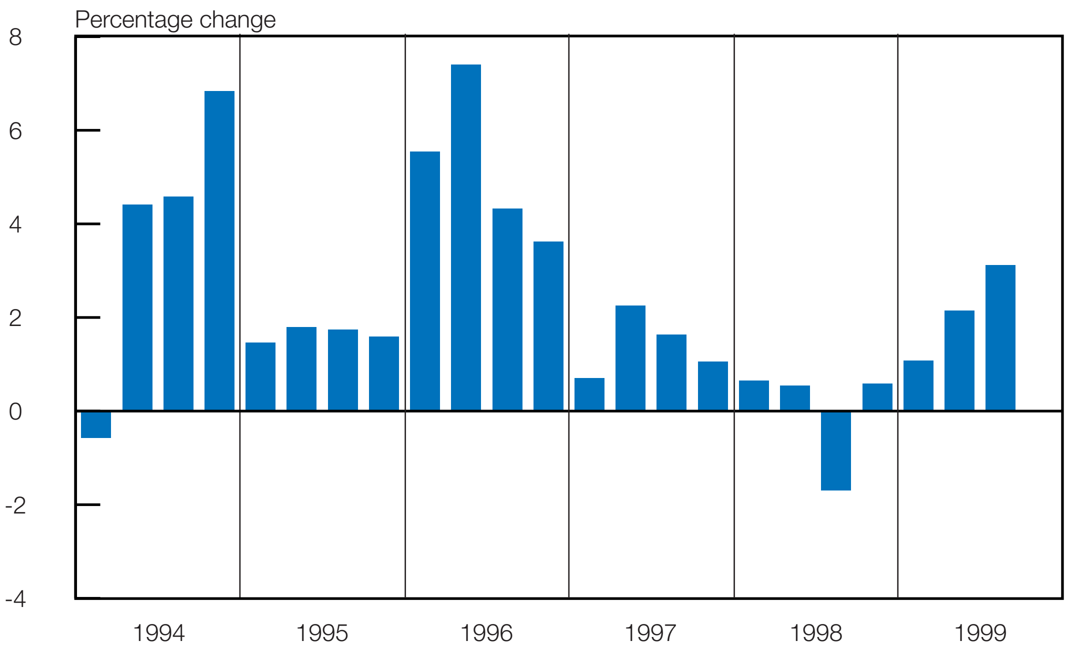
Domestic economic developments

Domestic output[1]

Economic growth firmed in the third quarter of 1999 for the fourth consecutive quarter. The seasonally adjusted and annualised change in *real gross domestic product* accelerated to 3 per cent in the third quarter of 1999, following increases of ½ per cent in the fourth quarter of 1998, 1 per cent in the first quarter of 1999 and 2 per cent in the second quarter. When the level of real gross domestic product in the first three quarters of 1999 is compared with that in the first three quarters of 1998, year-on-year economic growth amounted to just 1 per cent, slightly more than the year-to-year growth recorded in 1998.

1 In accordance with normal practice during the third quarter of every year, revisions have been made to national accounts data and are incorporated in this issue of the Quarterly Bulletin. These revisions are based on more detailed or more appropriate data that became available. In addition, seasonal factors have been updated.

Real gross domestic product

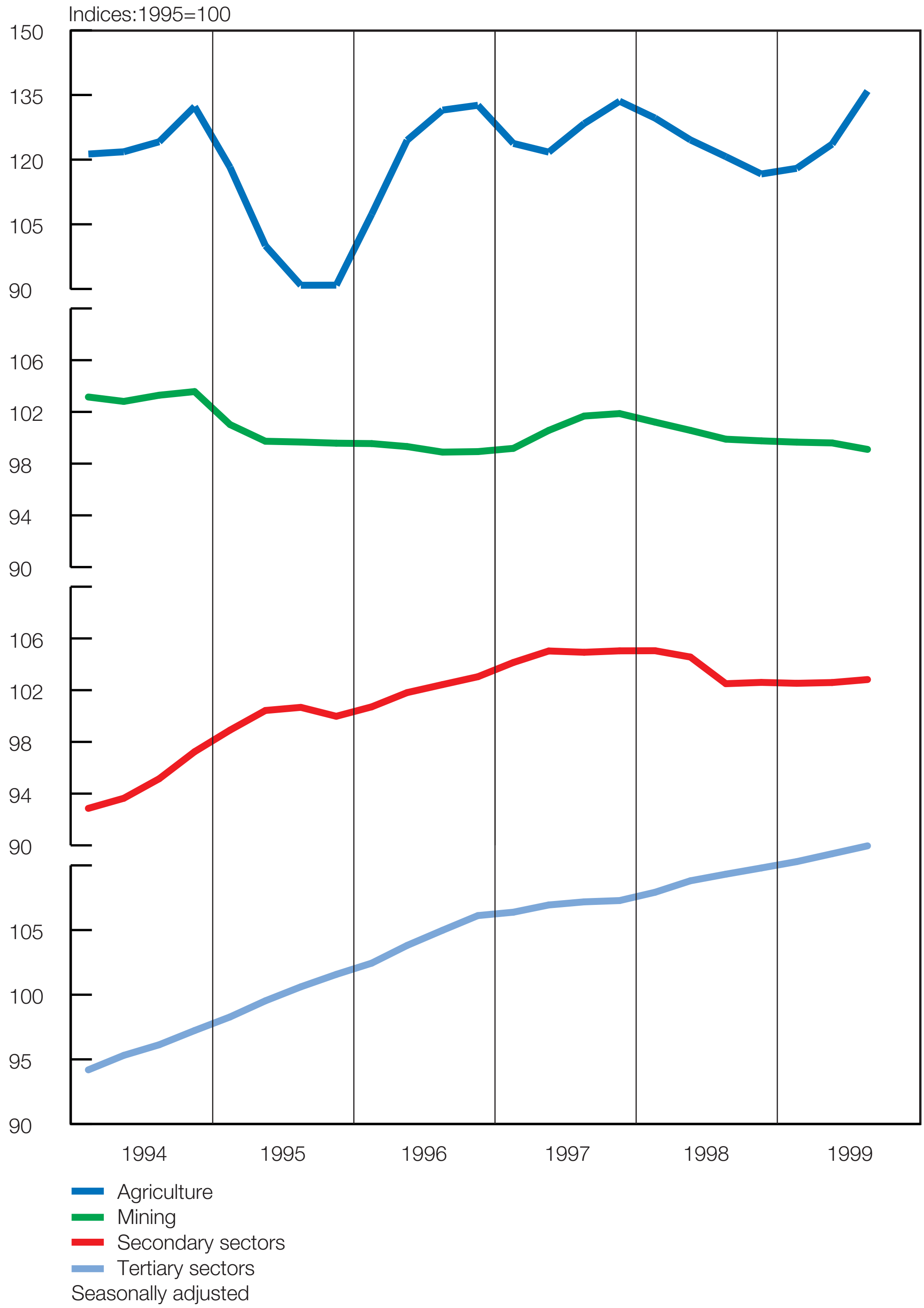


Seasonally adjusted annualised rates

The increase in total production in the third quarter of 1999 can be attributed to increases in the real value added by all the major sectors in the economy, except for the mining and construction sectors. As in the second quarter, *the agricultural sector* once again made a substantial contribution to output growth. Production increases were especially prominent in livestock and horticultural farming and, to a lesser extent, in the field crops sector. Excluding the value added that originated in the agricultural sector, the growth in the real gross domestic product would still have been about 1½ per cent at an annualised rate in the third quarter of 1999 – up from about 1 per cent on average in the first two quarters of the year.

Output in the *mining* sector shrank further in the third quarter of 1999. This decline was caused mainly by a contraction in the real value added by coal and gold mining. Coal mining was adversely affected by high cost structures and an oversupply of coal on world markets, which resulted in the loss of some export markets. The

Components of gross domestic product



steep decline in gold production over the past eight quarters continued in the third quarter, despite a recovery in the price of gold towards the end of the quarter. These negatives were partly countered by developments in platinum mining, which benefited from an increase in world demand and a rise in the international price.

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

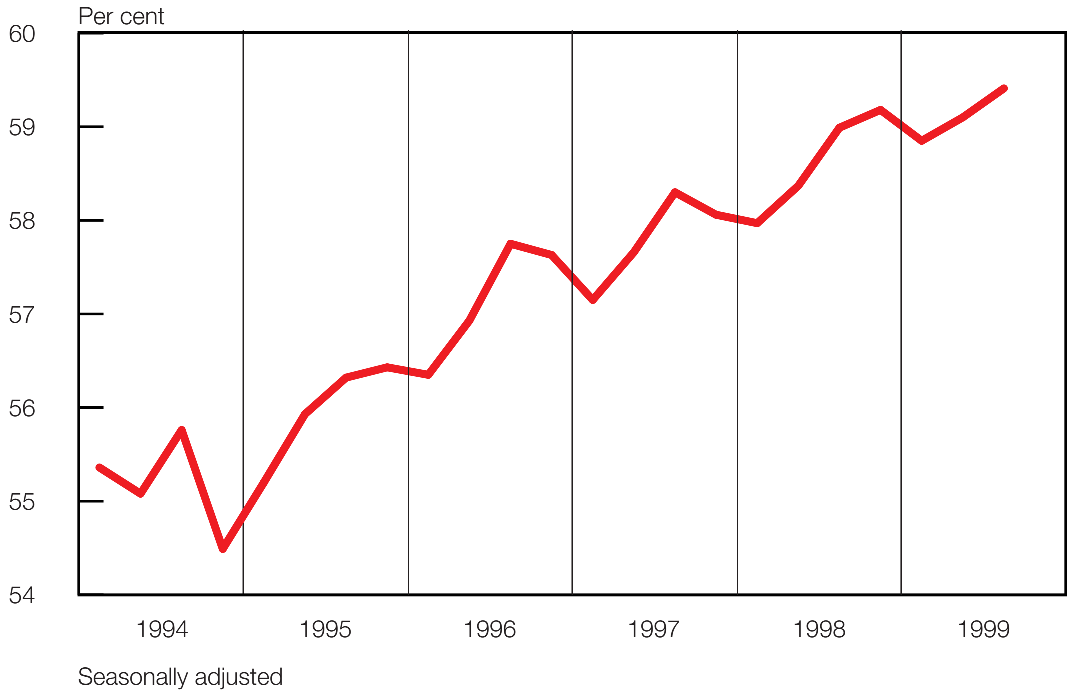
Sectors	1998					1999		
	1st qr	2nd qr	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr
Primary sectors	-6½	-8	-6½	-5½	-1½	1½	7½	16
Agriculture	-11	-15	-12	-12½	-3	4½	20½	46
Mining	-2½	-2½	-2½	-½	-½	-½	-½	-2
Secondary sectors	0	-2	-7½	½	-1	-½	½	1
Manufacturing	-½	-3	-9½	½	-2	½	½	1
Tertiary sectors	2½	3½	2	2	2	2	2	2
Non-agricultural sectors	1½	1½	-1	1	1	1	1½	1½
Total	½	½	-1½	½	½	1	2	3

The real value added by the three *secondary sectors* (manufacturing, construction, and electricity, gas and water) recovered somewhat after it had declined in the first quarter of 1999 and rose at an annualised rate of about ½ per cent in the second quarter and 1 per cent in the third quarter. Output in the sector supplying *electricity, gas and water* responded positively to a modest recovery in demand. *Manufacturing* output was flat and showed only modest growth from the second to the third quarter of 1999. Even at such a slow pace of production activity, the manufacturing sector succeeded in reducing its backlog of unfilled orders. Real value added by the *construction sector* continued along its downward trend in the third quarter as home-building activity still had to recover from the setback of 1998 and public-sector infrastructural development slowed down.

Growth in the combined *tertiary sectors* remained at an annualised rate of some 2 per cent in each of the first three quarters of 1999. The *commercial sector*, especially retail trade, benefited from the pick-up in private consumer demand and its real value added increased at an annualised rate of 2 per cent in the third quarter of 1999. In the motor trade, sales of new motor vehicles rose strongly, mostly in reaction to the substantial fall in bank lending rates.

In the sector *transport, storage and communication services,* the real value added rose at an annualised rate of 4 per cent in the third quarter of 1999, largely driven by the buoyancy of the telecommunications sector where the growth in cellular network and Internet activity and expansion to previously underserviced areas are continuing. Firm growth of 3 per cent in the real value added by the *finance, insurance, business services and real-estate sector* essentially came from the rebound in real-estate transactions and the stronger demand for financial services during the third quarter of 1999.

Contribution of gross value added by the tertiary sectors to total value added



Domestic expenditure

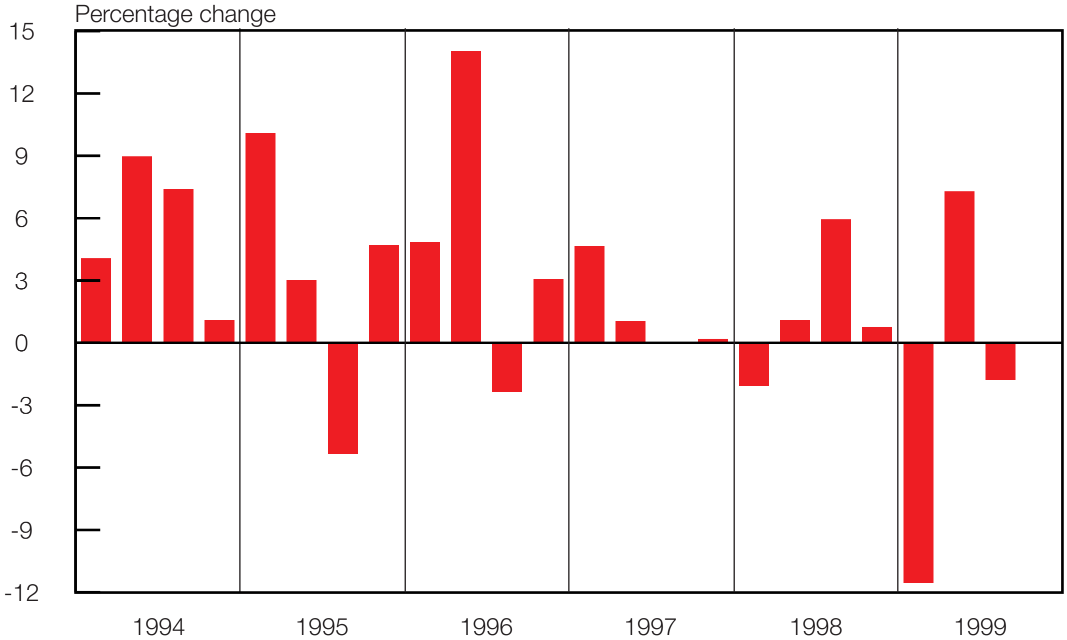
Aggregate *real gross domestic expenditure* declined at a seasonally adjusted and annualised rate of 11½ per cent in the first quarter of 1999, grew at a rate of 7½ per cent in the second quarter, and declined again, but at a rate of only 2 per cent, in the third quarter. This took the accumulated total of real gross domestic expenditure in the first three quarters of 1999 to a level roughly 1 per cent below that of the first three quarters of 1998. The slight decline in gross domestic expenditure in the third quarter of 1999 was brought about by lower levels of gross fixed capital formation and general government consumption expenditure, whereas aggregate inventory accumulation also slowed down substantially from the second to the third quarter of 1999. By contrast, real final consumption expenditure by households found new

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

Components	1998					1999		
	1st qr	2nd qr	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr
Household consumption expenditure	2	1	½	0	1½	-1	1	2
Government consumption expenditure	6½	-3½	-½	-2½	-½	-1½	-1½	-2½
Gross fixed capital formation	3½	8½	10	5	5	-24	-10½	-3½
Domestic final demand	3	1½	2	½	1½	-5½	-1½	½
Change in inventories (R billions)*	-7,5	-4,6	-3,3	-1,6	-4,2	-8,2	2,7	0,5
Gross domestic expenditure	**-2**	**1**	**6**	**1**	**½**	**-11½**	**7½**	**-2**

* Constant 1995 prices

Real gross domestic expenditure



Seasonally adjusted annualised rates

vigour and rose markedly in the third quarter, thus largely counteracting the slowdowns in the other components of real gross domestic expenditure.

The growth in *real final consumption expenditure by households* accelerated from a seasonally adjusted and annualised rate of 1 per cent in the second quarter of 1999 to about 2 per cent in the third quarter. All the components of private household spending contributed to the higher spending level, but by far the strongest rise was seen in spending on durable goods. Purchases of new motor cars, furniture and household appliances and recreational equipment increased markedly.

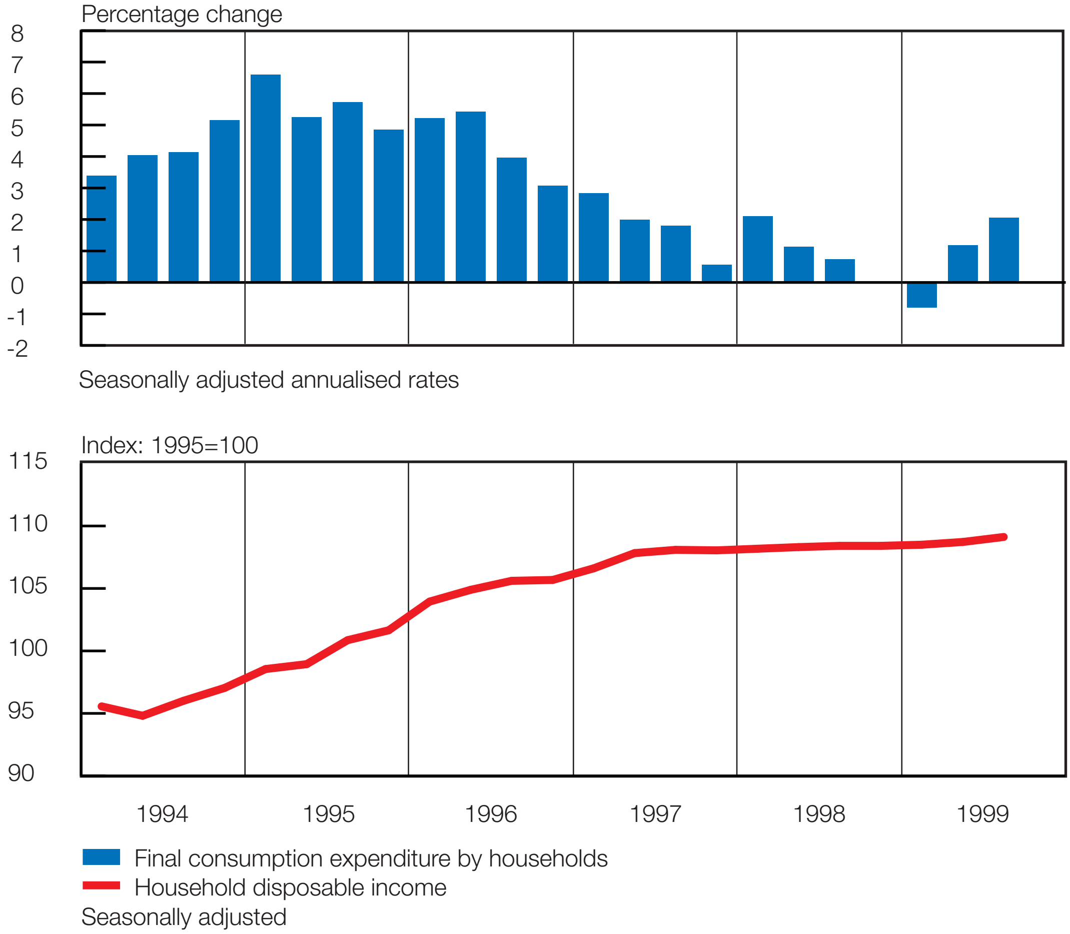
Real final consumption expenditure by households

Percentage change at seasonally adjusted and annualised rates

Components	1998					1999		
	1st qr	2nd qr	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr
Durable goods	6	-4	9½	-23½	-6	-12	10½	15
Semi-durable goods	4½	4	½	½	2½	-7½	-3	½
Non-durable goods	0	½	1	0	1	0	½	0
Services	3	2½	3	5	3	2½	1½	2½
Total	**2**	**1**	**½**	**0**	**1½**	**-1**	**1**	**2**

The pattern of consumers' expenditure growth in the third quarter of 1999 may have been linked to the turnaround in consumer confidence, declines in bank lending rates, and possibly to changes in housing wealth following the recovery in the real-estate market. Household balance sheets were further strengthened by the allocation of an equity interest in the Old Mutual life assurance company. Debt financing of

Real income and expenditure of households



household spending also played a role in this rise, but not an excessive one – outstanding debt as a percentage of households' disposable income actually slipped back from 59½ per cent in the second quarter of 1999 to 58½ per cent in the third quarter. Households' income strengthened slightly as growth in agricultural income spilled over into the third quarter of 1999.

Aggregate *real final consumption expenditure by general government* continued to decline in the third quarter of 1999, and the rate of decline even accelerated from an annualised rate of 1½ per cent in the second quarter to 2½ per cent in the third quarter. This brought real expenditure on the consumption of goods and services by general government in the first nine months of 1999 to a level that was 1 per cent lower than in the corresponding period of 1998. Strict budgetary control at the level of national government was extended to provincial and local governments. This control played an important part in containing the growth in general government consumption expenditure. Because of the recent declines, the ratio of government consumption expenditure to gross domestic product decreased from 19½ per cent in the first quarter of 1999 to 19 per cent in the third quarter.

The sharp decline in *real gross fixed capital formation* at a quarter-to-quarter annualised rate of 24 per cent in the first quarter of 1999 tapered off to declines of 10½ per cent in the second quarter and 3½ per cent in the third quarter. Real capital spending by all three institutional sectors, namely private enterprises, public corporations and general government, decreased in the third quarter of 1999.

Real gross fixed capital formation in the *private sector* declined at an annualised rate of only 1 per cent following declines varying between 8 and 4 per cent in the preceding six quarters. This decline was confined to only two sectors of economic activity, namely *mining and construction*. All the other sectors of economic activity stepped up their fixed investment activities in the third quarter of 1999. In the case of the *manufacturing sector* this occurred against the backdrop of a high level of unutilised production capacity. Therefore it seems unlikely that investment would have added to existing production capacity, but more probable that such investments were aimed at the introduction of new technologies. The infrastructure of the country's cellular communications network was also expanded; this is included in the fixed capital formation of the sector *transport, storage and communication*.

Real gross fixed capital formation

Percentage change at seasonally adjusted and annualised rates

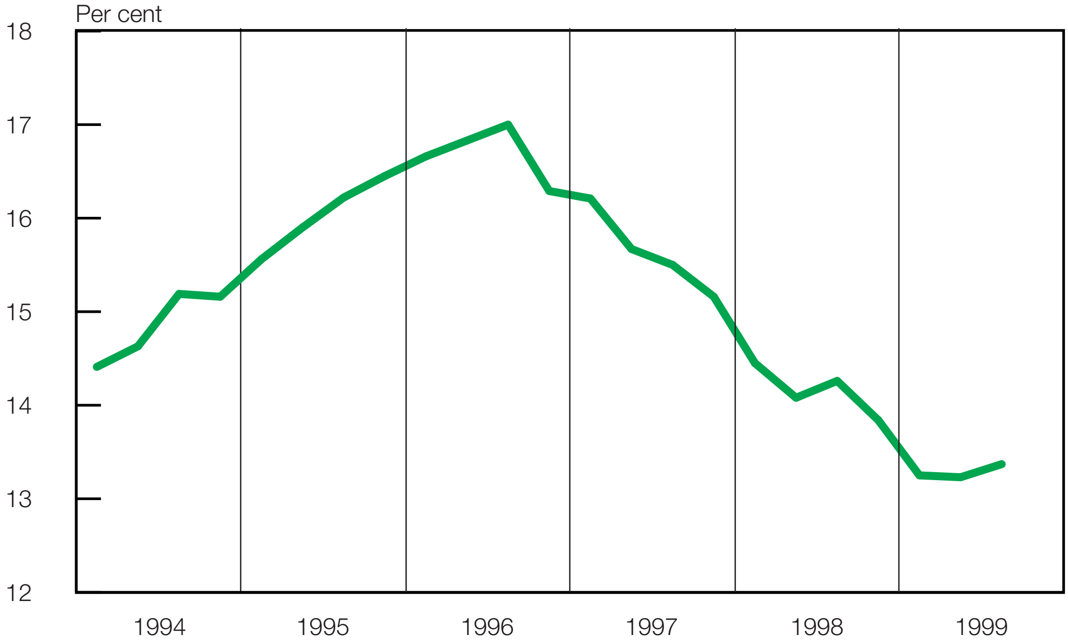
Sectors	1998					1999		
	1st qr	2nd qr	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr
Private business enterprises	-5½	-3	-8	-5	-3	-6½	-4	-1
Public corporations	53½	87½	119	58	51½	-68	-28½	-14
General government	9	1	4½	-10½	2½	-4	-17	-2
Total	3½	8½	10	5	5	-24	-10½	-3½

Unlike 1998 when the real gross domestic fixed capital formation by *public corporations* expanded rapidly, this spending aggregate has now declined at fairly high rates in three consecutive quarters. The completion of the renewal programme of the South African Airways contributed most to the declines in the first three quarters of 1999.

Real general government fixed capital formation has been declining since the fourth quarter of 1998. The Medium Term Budget Framework maintained the Government's commitment to increasing the ratio of public investment to gross domestic product. The growth rate of gross domestic fixed capital formation is therefore likely to turn positive again in the not too distant future.

The real value of *all inventories* in the economy increased slightly in the third quarter of 1999. Industrial and commercial inventories were by far the main contributors to this inventory build-up. Nonetheless, the ratio of the value of industrial and commercial inventories to non-agricultural gross domestic product remained at a level of 13½ per cent in the third quarter of 1999. Businesses have over time economised on inventory holdings relative to output, as is evident from the downward trend in the ratio of inventories to gross domestic product. Advances in information gathering and processing technologies have enabled many companies to run their businesses with the bare minimum of inventories.

Industrial and commercial inventories as percentage of non-agricultural gross domestic product



Seasonally adjusted

Factor income and saving

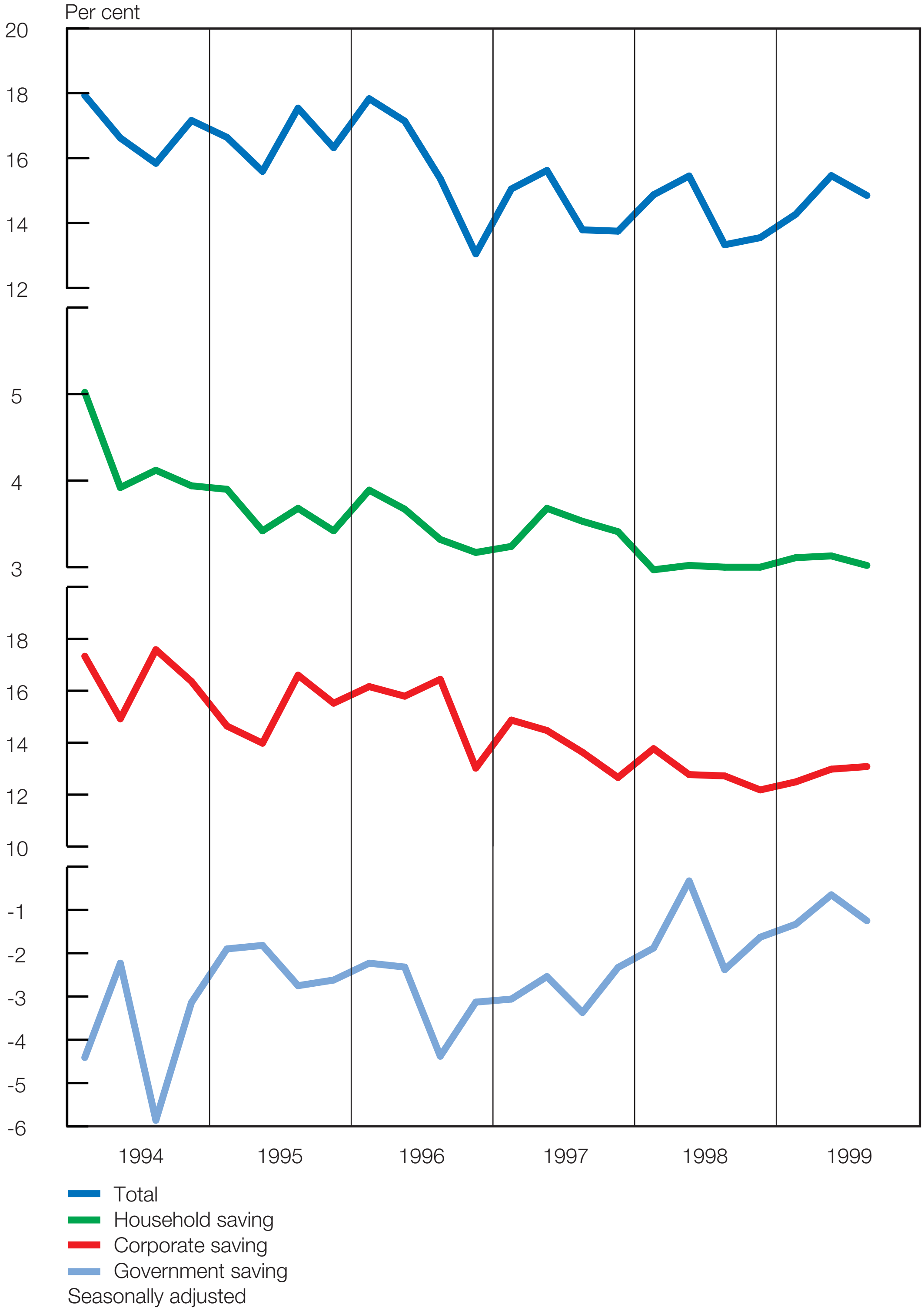
The year-on-year growth in *aggregate value added* at basic prices remained at 7½ per cent in the third quarter of 1999. This was due to a slowdown in the growth in employee compensation which neutralised faster growth in operating surpluses of business enterprises.

The growth over four quarters in aggregate gross operating surpluses increased from 7 per cent in the second quarter of 1999 to 8½ per cent in the third quarter. There was a strong acceleration in growth in the commercial and financial services sectors. This reflected mainly the relative strength of private household consumption expenditure and the continuing high levels of activity in financial markets in the third quarter of 1999.

The rate of growth over four quarters in *total compensation of employees* declined slightly from 7½ per cent in the second quarter of 1999 to 7 per cent in the third quarter. This occurred against the backdrop of declining employment in the regularly surveyed formal sectors of the economy.

Gross saving as a ratio of gross domestic product improved from 14½ per cent in the first quarter of 1999 to 15½ per cent in the second quarter, but then fell back to 15 per cent in the third quarter. Net *dissaving by general government* deteriorated slightly from 2½ per cent of gross domestic product in the second quarter of 1999 to 3 per cent in the third quarter, mainly because of the payment of interest on government debt towards the end of August. The spate of consumer spending in the third quarter of 1999 left its mark on *household saving* which declined marginally as a percentage of gross domestic product from the first quarter of 1999 to the third quarter. Net corporate saving was influenced by two opposing forces, namely higher operating surpluses and higher dividend payments, and consequently remained broadly unchanged at about 4½ per cent of gross domestic product. A higher saving ratio than the currently prevailing one is generally regarded a prerequisite for a sustained improvement in South Africa's growth performance and in the standard of living of the total population.

Gross saving as percentage of gross domestic product



Employment

Total employment in the non-agricultural sectors of the economy was severely affected by the cyclical downturn in economic activity from the fourth quarter of 1996, and by the tightening of monetary conditions at the time of the international financial turmoil in 1998. Reflecting the progressively weaker state of economic activity, non-agricultural employment declined by 1,7 per cent in 1997 and 3,7 per cent in 1998. There was a slight increase in total employment at a seasonally adjusted and annualised rate of 0,4 per cent in the first quarter of 1999, but this was followed by a further decline at an annualised rate of 3,8 per cent in the second quarter. The actual number of workers who became redundant during the first half of 1999 totalled about 50 thousand.

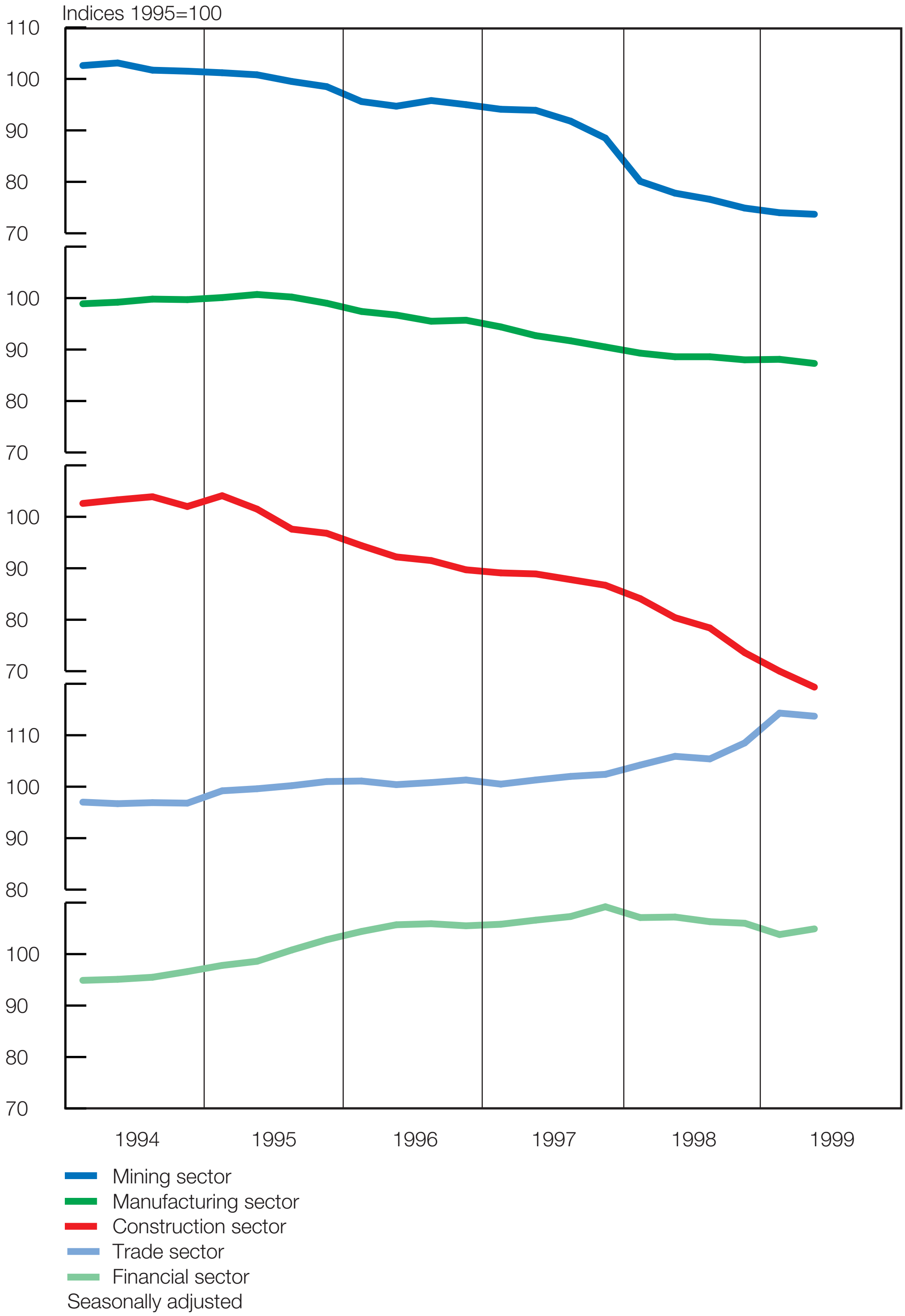
The recent changes in employment in the private sector, according to the Survey of *Total Employment and Earnings* by Statistics South Africa, displayed a pattern over time that was broadly similar to that of total employment: private-sector employment increased at a seasonally adjusted and annualised rate of 2,7 per cent in the first quarter of 1999, but declined at a rate of 3,0 per cent in the second quarter. Employment declined in five of the eight main sectors of economic activity during the second quarter, ranging in intensity from 16,2 per cent in the construction sector to a comparatively mild overall decline of 1,7 per cent in the mining sector. Increases in employment were recorded in the other three main sectors of the economy: in the transport, storage and communication sector at an annualised rate of 24,1 per cent, mainly due to the appointment of part-time workers; in the financial intermediation and insurance sector at a rate of 4,3 per cent; and in the laundering and dry-cleaning sector at an annualised rate of 1,4 per cent.

Unlike private-sector employment which had increased in the first quarter of 1999, employment by *public authorities* declined in both of the first two quarters of the year: in the first quarter at a seasonally adjusted and annualised rate of 3,6 per cent and in the second quarter at an even higher rate of 5,3 per cent. Decreases occurred at all tiers of government, barring local governments where employment totals increased at an annualised rate of 1,2 per cent in the second quarter. Decreases varied among the elements of the public sector from 14,0 per cent (seasonally adjusted and annualised) in the transport, storage and communication sector to 2,9 per cent in the general departments of national government. All the declines are consistent with the overriding policy objective of a smaller government service, but with a strong commitment to a better quality of service delivery.

Strikes and other work stoppages increased strongly in the third quarter of 1999, taking the estimated number of *workdays lost* since the beginning of the year to 2,5 million at the end of September, overtaking the total of 1,85 million during the same period in 1998.

The sharp increase in strike activity is attributable to large-scale work stoppages in the public sector, and in the post and telecommunications, mining and retail sectors. The protracted wage dispute in the public sector, which culminated in national demonstrations and strikes in July and August, accounted for 64,2 per cent of the total number of workdays lost since the beginning of the year. The second-largest strike, which accounted for 13,9 per cent of total workdays lost, was in the transport sector. Wage strikes involving the Post Office, Telkom and the chemical industry workers in August and September accounted for 9,7 per cent of the total. Strikes in the mining sector contributed 7,4 per cent to the total number of workdays lost because of strikes and other work stoppages.

Non-agricultural employment



The major *trigger for strike activity* so far in 1999 was wage disputes, accounting for 97,4 per cent of the total number of workdays lost. Retrenchment issues were responsible for 2,2 per cent of the total, followed by dismissals at 0,3 per cent, and grievances at 0,1 per cent.

Labour costs and productivity

The rate of increase over one year in the average *nominal amount of salaries and wages* per worker in the non-agricultural sectors of the economy decelerated from 7,3 per cent in the first quarter of 1999 to 6,7 per cent in the second quarter. This slowdown in the growth of nominal worker compensation seems consistent with gradually declining inflation and expectations of slower future growth in the overall cost of living. Slower nominal wage growth has the potential to weaken the apparent inertia of overall price inflation to react more positively to restrictive economic policy measures.

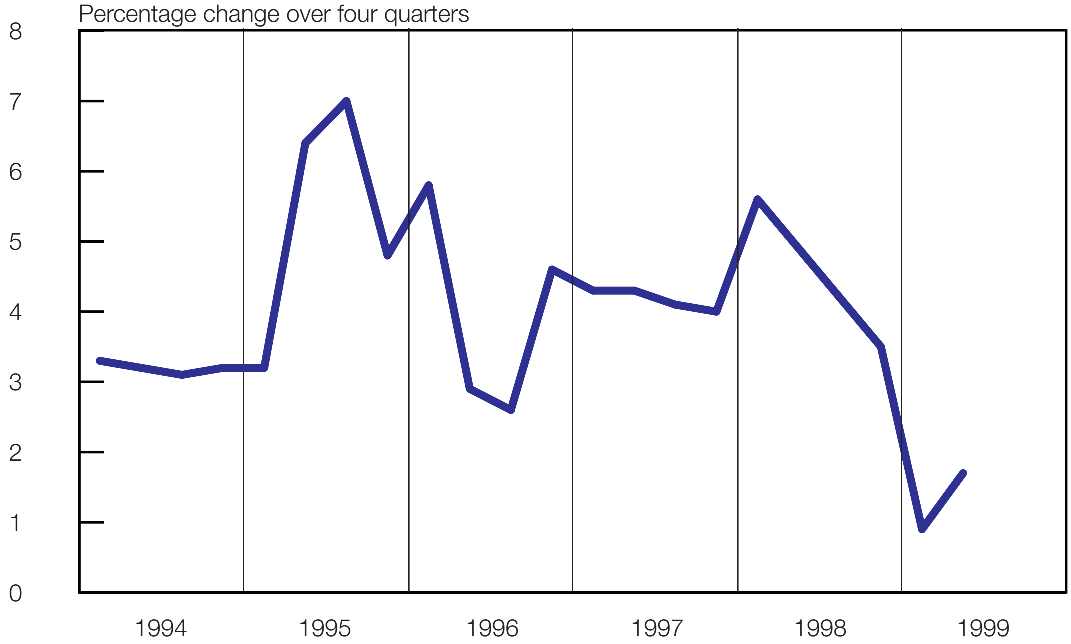
The decline in the growth in compensation per worker among all workers is more than accounted for by a slowdown in the growth of *public-sector remuneration.* The rate of increase over one year in the nominal compensation per worker in the public sector declined sharply from 4,9 per cent in the first quarter of 1999 to 2,7 per cent in the second quarter. Adherence to strict budgetary constraints throughout the public sector, the fall in overall consumer price inflation and expectations of lower future inflation were probably the most important factors accounting for the slowdown in remuneration growth in the public sector.

In contrast to developments in the public sector, the growth in average nominal remuneration per worker in the *private sector* accelerated in the second quarter of 1999. After having increased at a year-on-year rate of 9,2 per cent in the first quarter of 1999, average wages and salaries per worker in the private non-agricultural sectors of the economy increased by 10,1 per cent in the year to the second quarter. This acceleration in average earnings growth is somewhat at variance with the average level of wage settlements, which declined from 8,7 per cent in the nine months to September 1998 to 8,2 per cent in the same period of 1999. The difference between the growth in compensation per worker and the settlement rate reflects many other influences, such as the promotion of workers to higher ranks in organisations, changes in overtime worked and bonus payments.

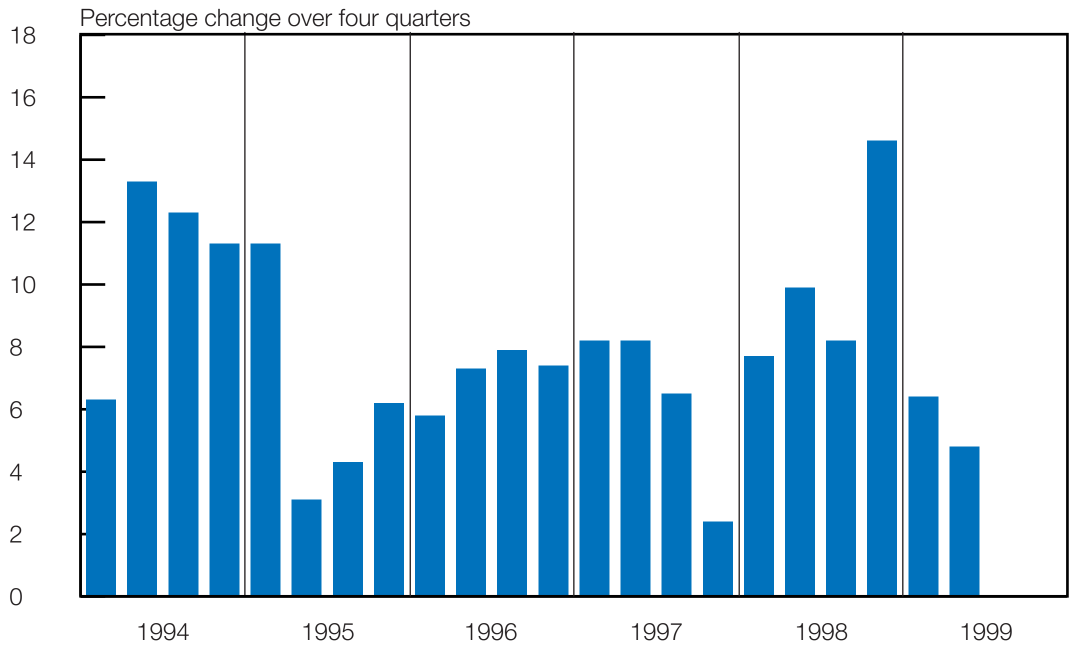
Output prices (as reflected by the price deflator for value added in the non-agricultural sectors of the economy) rose faster than the nominal remuneration per worker in the first half of 1999, indicating that producers generally managed to recover labour cost increases by raising output prices. As a consequence, the ratio of nominal remuneration per worker to output prices – *the real product wage* – declined at a year-on-year rate of 0,1 per cent in the first quarter of 1999 and 0,8 per cent in the second quarter. Prospects for future growth in operating surpluses will probably improve in such an environment where costs are being contained and aggregate final demand is expanding.

Operating surpluses were further bolstered by the growth in *real output per worker* which accelerated from a year-on-year rate of 0,9 per cent in the first quarter of 1999 to 1,7 per cent in the second quarter. The slowdown in the growth of nominal compensation per worker combined with the stronger growth in productivity to reduce the increase in nominal unit labour costs from a year-on-year rate of 6,4 per cent in the first quarter of 1999 to 4,8 per cent in the second quarter. Slowdowns such as these are fully consistent with the overriding monetary-policy objective of further reductions in the rate of production price and consumer price inflation.

Non-agricultural labour productivity



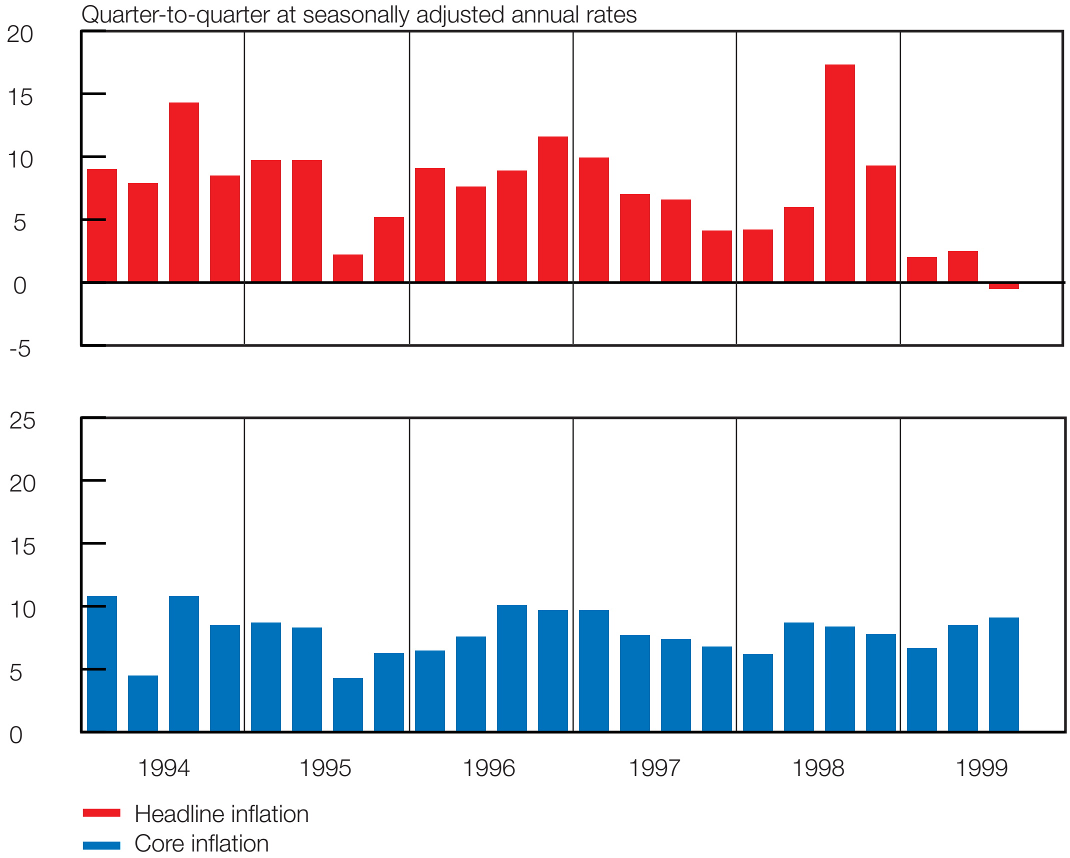
Non-agricultural unit labour costs



Inflation

There was a significant decline in *consumer price inflation* in recent months. The consumer price index declined at a seasonally adjusted and annualised rate of 0,5 per cent in the third quarter of 1999, taking the year-on-year inflation rate down to 1,9 per cent in September 1999 and 1,7 per cent in October – its lowest level since August 1968. In November 1998, the consumer price index was still as much as 9,4 per cent higher than in the previous year. The firm downward movement in consumer price increases was greatly assisted by temporary factors, most notably the fall in mortgage bond rates from 24 per cent in October 1998 to 15,5 per cent in October 1999.

Headline and core inflation



Other important measures of inflation suggest that the gains made in the fight against inflation were less impressive than those made by the reduction in overall consumer price inflation. After eliminating the effects of temporary or one-off events from the consumer price index, the *core inflation rate* (i.e. the change in the overall consumer price index, excluding the prices of certain food products, the cost of mortgage bonds and consumer credit and certain indirect taxes) declined, on balance, only slightly from 8,2 per cent in July 1999 to 8,0 per cent in October. Core inflation measured from quarter to quarter and annualised, actually accelerated over the first three quarters of 1999 – from 6,7 per cent in the first quarter to 9,1 per cent in the third quarter. Sharp increases in petrol and diesel prices from the beginning of 1999 have had a significant effect on the acceleration in core inflation, indicating that the stronger inflation momentum had its origin not so much in the domestic economy as in the foreign sector.

Consumer prices
Quarter-to-quarter percentage changes at annualised rates

Period		Consumer price inflation	Core inflation
1998:	1st qr	4,2	6,2
	2nd qr	6,0	8,7
	3rd qr	17,3	8,4
	4th qr	9,3	7,8
1999:	1st qr	2,0	6,7
	2nd qr	2,5	8,5
	3rd qr	-0,5	9,1

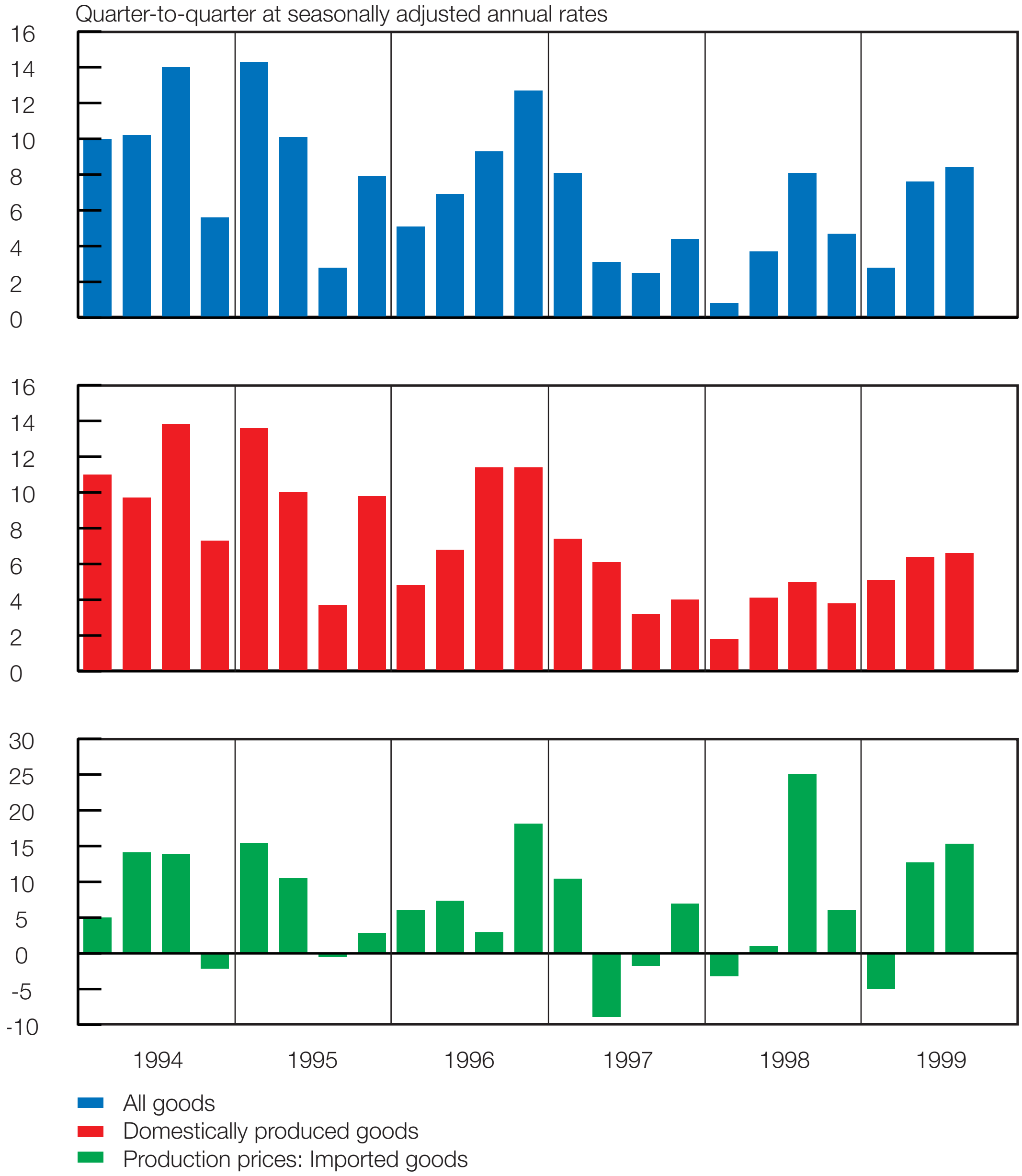
Changes in the *all-goods production price index* also corroborate the view that inflation has accelerated from the beginning of 1999. The year-on-year increase in production prices almost trebled from 2,3 per cent in March 1998 to 6,4 per cent in June 1999, but then abated somewhat to 5,7 per cent in September. Measured from quarter to quarter, inflation at the level of production prices accelerated from an annualised rate of 2,8 per cent in the first quarter of 1999 to 8,4 per cent in the third quarter.

The annualised increase in the seasonally adjusted index of the production prices of *domestically produced goods* – which gives some indication of the strength of domestically generated inflation – accelerated only modestly from 5,1 per cent in the first quarter of 1999 to 6,6 per cent in the third quarter. By contrast, growth in the prices of *imported goods accelerated* strongly from an annualised decline of 5,0 per cent in the first quarter of 1999 to an increase of 15,3 per cent in the third quarter. With production or wholesale prices in South Africa's main trading-partner countries generally declining, and with the exchange rate of the rand remaining relatively stable over the first three quarters of the year, the rapid acceleration in the growth of the prices of imported goods, and therefore also in the all-goods production price index, must essentially be attributed to the steep rise in the international prices of crude oil.

Production prices
Quarter-to-quarter percentage changes at annualised rates

Period		Domestically produced goods	Imported goods	All goods
1999:	1st qr	5,1	-5,0	2,8
	2nd qr	6,4	12,7	7,6
	3rd qr	6,6	15,3	8,4

Production prices



Foreign trade and payments

Current account balance

As could be expected from an economy that is still operating close to a lower turning point in economic activity – a phase of the business cycle when the trade account normally improves – the deficit on the current account of the balance of payments shrank from the second to the third quarter of 1999. Mainly because of a rise in the value of merchandise exports which exceeded the rise in the value of merchandise imports, the deficit on the current account balance (seasonally adjusted and annualised) narrowed from R3,6 billion in the second quarter of 1999 to R2,5 billion in the third quarter. As a ratio of gross domestic product, the current account deficit amounted to 0,3 per cent in the third quarter of 1999. For the first three quarters of 1999, the average deficit ratio was 0,1 per cent.

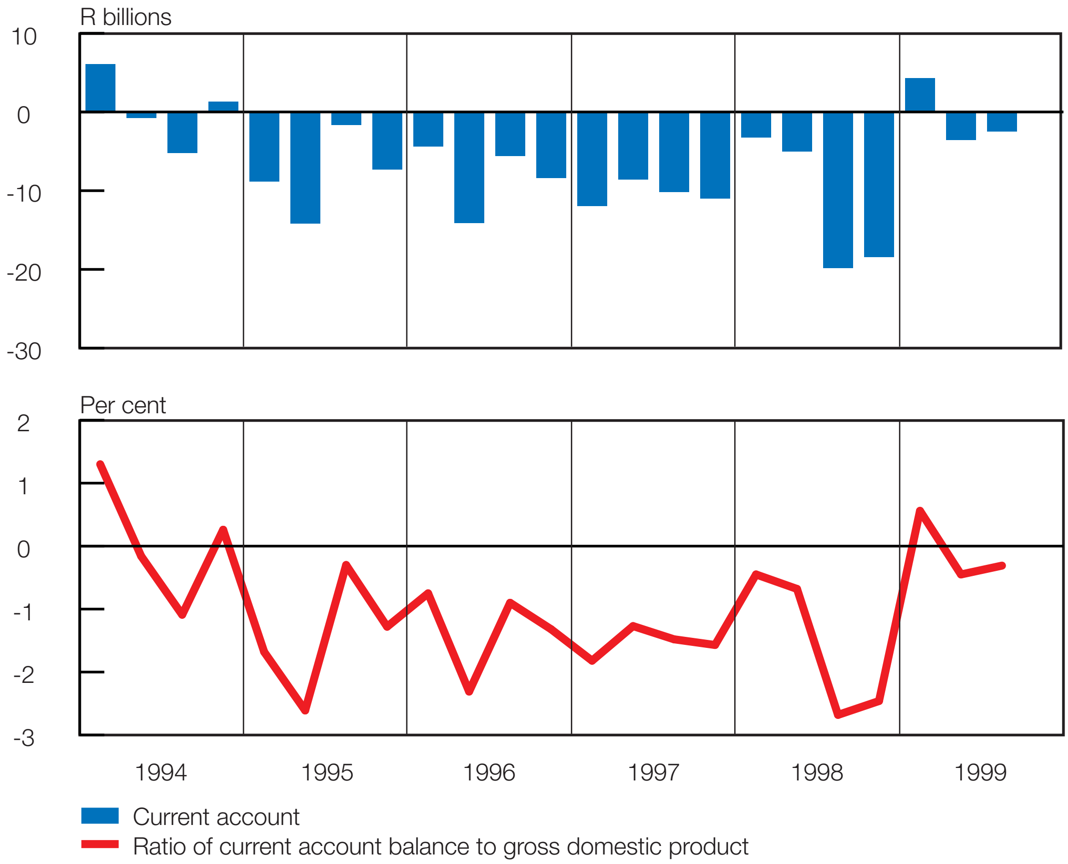
Balance of payments on current account
Seasonally adjusted and annualised
R billions

	1998				1999		
	1st qr	2nd qr	3rd qr	4th qr	1st qr	2nd qr	3rd qr
Merchandise exports	132,1	131,3	143,6	133,2	147,8	140,2	147,8
Net gold exports	25,5	23,0	26,9	28,2	24,7	23,8	22,9
Merchandise imports	-141,0	-137,7	-165,9	-158,5	-142,9	-142,8	-147,2
Net service, income and current transfer payments	-19,8	-21,6	-24,4	-21,4	-25,3	-24,8	-26,0
Balance on current account	**-3,2**	**-5,0**	**-19,8**	**-18,5**	**4,3**	**-3,6**	**-2,5**

The decline in the value of *merchandise exports* to the Asian countries which were affected by a financial crisis in 1998, has been largely reversed and was also offset by stronger sales to other markets. The seasonally adjusted and annualised value of merchandise exports rose to R147,8 billion in the third quarter of 1999, about 3 per cent higher than in the third quarter of 1998. The bulk of the recovery in merchandise exports in the third quarter of 1999 came from the mining sector, other than gold mining. Particularly large increases were recorded in the categories for mineral products and precious and semi-precious stones.

The physical quantity of merchandise exports (seasonally adjusted and annualised) increased by about 5 per cent in the third quarter of 1999, following a decline of about a similar magnitude in the second quarter. The third-quarter recovery brought the physical volume of merchandise exports in the first three quarters of 1999 to a level that was approximately equal to that of the first three quarters of 1998. Despite the stronger showing of export volumes in the third quarter of 1999, the general level of the physical quantity of merchandise exports in 1999 was still somewhat below that of the second half of 1997. The *average rand prices of export goods* increased by about ½ per cent from the second to the third quarter, but by 7½ per cent when comparing the first three quarters of 1999 with the first three quarters of 1998.

Current account



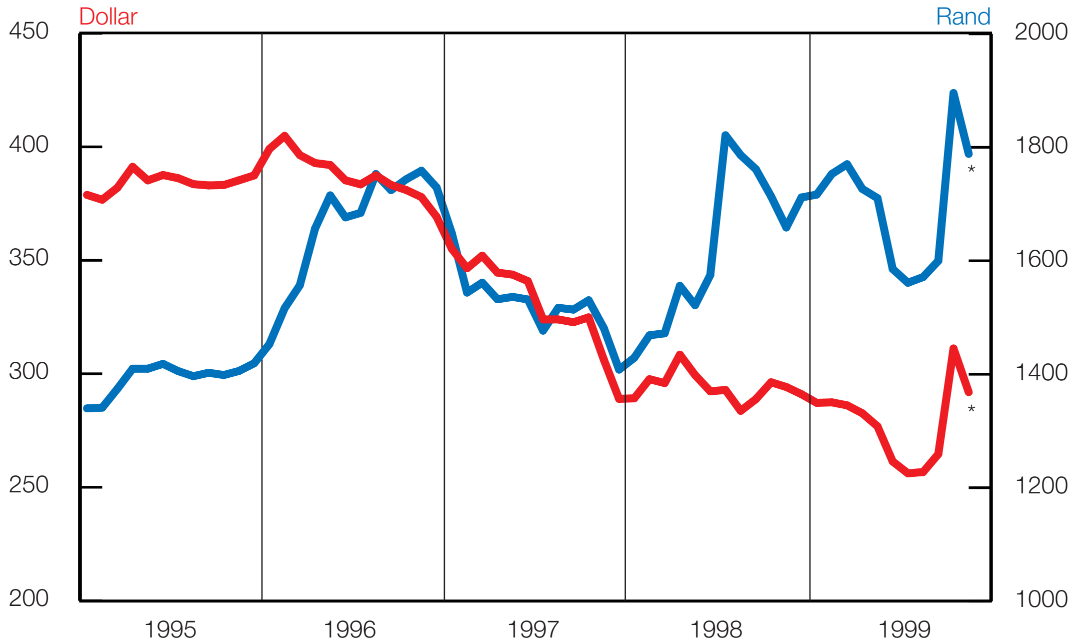
Seasonally adjusted and annualised

After having declined from R28,2 billion in the fourth quarter of 1998 to R23,8 billion in the second quarter of 1999, the value of *net gold exports* declined further to R22,9 billion in the third quarter. This decline of almost 4 per cent resulted entirely from a decline in the price of gold. The average realised *export price of gold* fell from R1 780 per fine ounce in the second quarter of 1999 to R1 612 per fine ounce in the third quarter, or by 9,4 per cent. The average fixing price of gold on the London market declined by 5,5 per cent from the second to the third quarter of 1999 or from US$274 per fine ounce to US$259 per fine ounce. This discrepancy between the rand price and the dollar price movements is explained by a slight appreciation of the rand against the dollar over the third quarter and by hedging operations of gold producers. The *physical quantity of gold exports* which had shrunk by about 3½ per cent from the first to the second quarter of 1999 increased by just more than 6 per cent in the third quarter.

The gold price responded strongly to an announcement by European central banks that they would limit gold sales and the lending of gold. This announcement improved sentiment in the gold market towards the end of the third quarter of 1999 and the average monthly London fixing price of gold rose from US$265 per fine ounce in September to US$311 per fine ounce in October. The London fixing price recorded a two-year high of US$326 per fine ounce on 5 October 1999 amid the large-scale covering of short positions. Subsequently the price fell back to US$292 per fine ounce on 16 November 1999.

The value of *merchandise imports* increased from a seasonally adjusted and annualised rate of R142,8 billion in the second quarter of 1999 to R147,2 billion in the third quarter, or by just over 3 per cent. A strong increase in the importation of crude oil was by far the most important cause of the increase in the value of merchandise imports. This was only partially offset by a decline in the value of imported manufactured goods.

Gold price per fine ounce on the London market



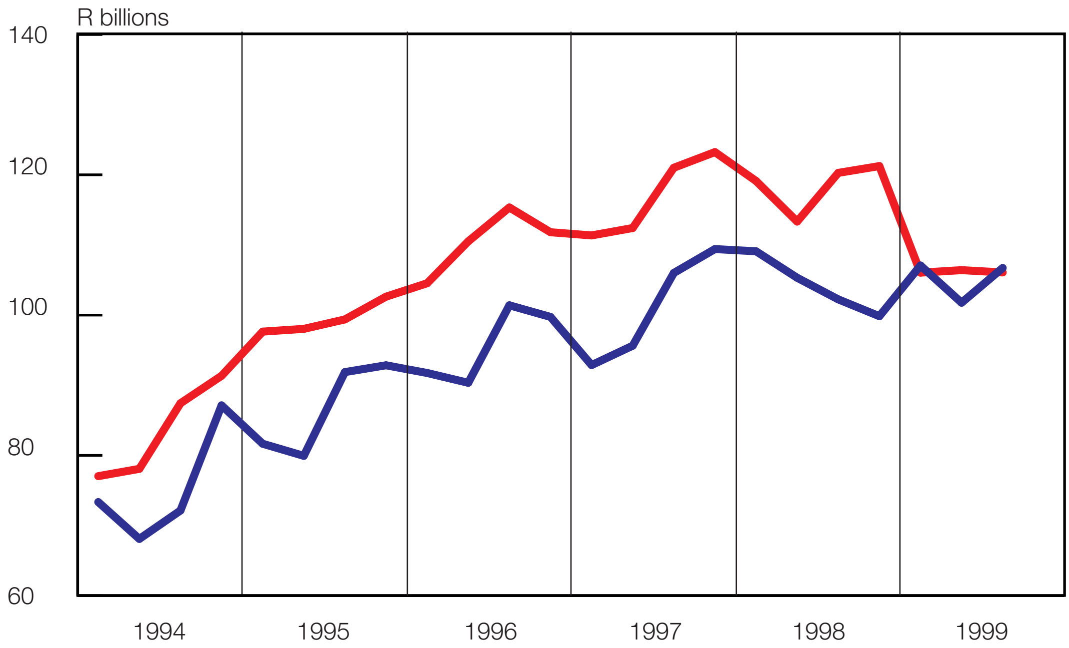
Monthly averages
* Until 15 November 1999

The physical quantity of merchandise imports declined by approximately ½ per cent in the third quarter of 1999, and was generally consistent with the relative weakness in domestic real aggregate final demand. Together with the sharp fall in the real value of imports in the first quarter of 1999, the latest decline in import volumes meant that the physical quantity of merchandise imports in the first three quarters of 1999 was some 10 per cent below the quantity imported in the first three quarters of 1998.

The decline in import volumes in the third quarter also meant that the rise in import values in the third quarter was more than fully explained by a rise in the *average rand prices of imported goods*. Import prices are estimated to have increased by about 3½ per cent in the third quarter of 1999, following two quarters of a roughly unchanged overall import price level. The rise in the overall measure of import prices reflects by and large the higher level of international crude oil prices: it also reflects to a far lesser extent a slight acceleration in producer and wholesale price inflation in South Africa's main trading-partner countries.

There was an increase in the value of service and income receipts from the rest of the world, but this was more than offset by an increase in the value of service and income payments to non-residents in the third quarter. *Net service, income and current transfer payments to non-residents* accordingly increased marginally from a seasonally adjusted and annualised value of R24,8 billion in the second quarter of 1999 to R26,0 billion in the third quarter. Payments for services increased as the higher nominal levels of international trade translated into an increase in payments to non-resident carriers for transportation and freight services. Higher investment-income payments in the form of interest and dividend payments to non-resident holders of South African bonds and shares also followed the strong influx of portfolio investment capital into the securities markets during the first nine months of 1999.

Merchandise exports and imports at constant 1995 prices



Seasonally adjusted and annualised

Financial account

Timely action by the South African authorities and central banks in the main financial centres of the world in the second half of 1998 successfully staved off the risk of instability in the domestic financial markets. These measures led to a resumption

Net financial transactions not related to reserves
R billions

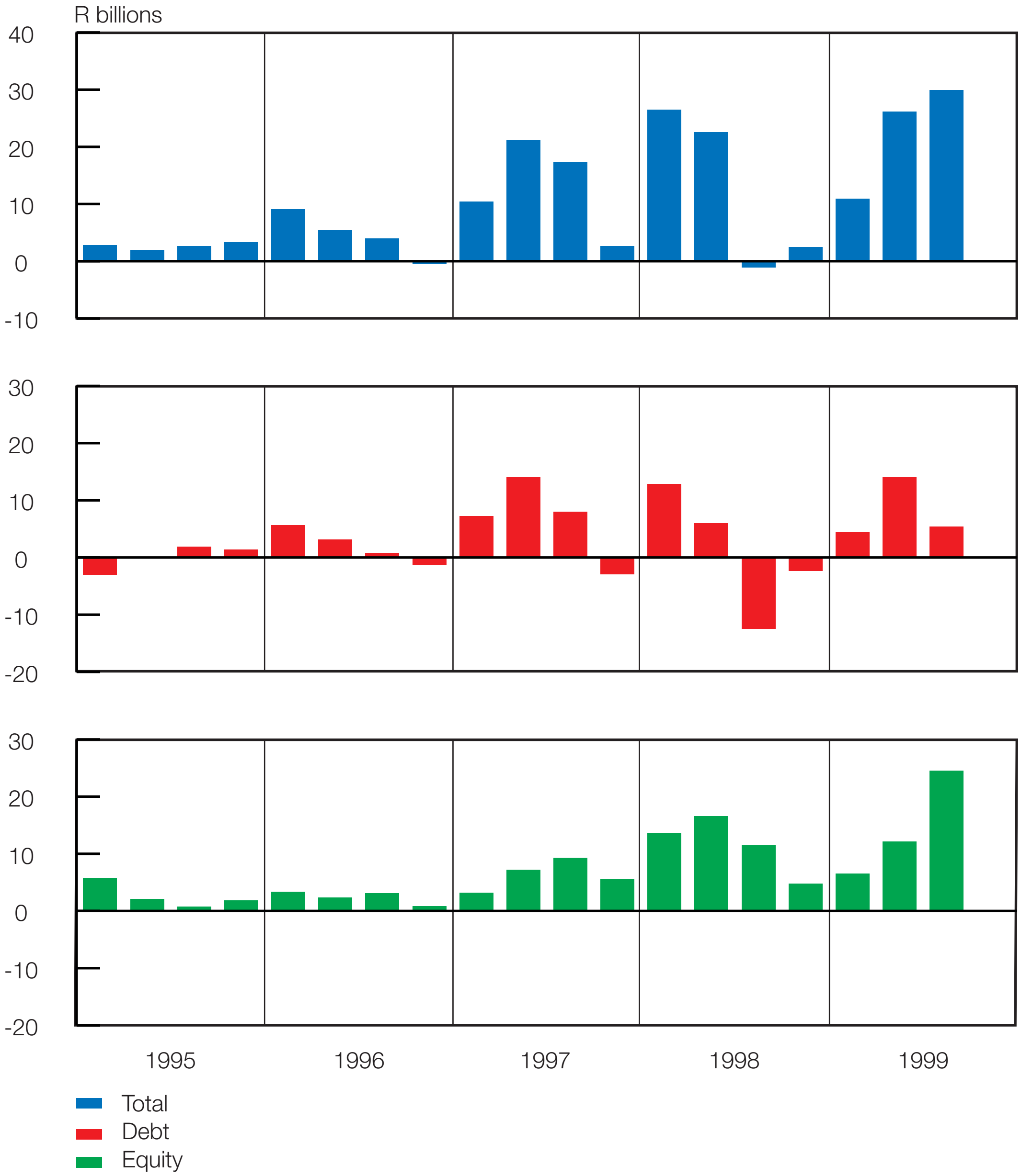
	1998					1999		
	1st qr	2nd qr	3rd qr	4th qr	Year	1st qr	2nd qr	3rd qr
Liabilities......................................								
Direct investment....................	0,4	1,2	1,9	-0,4	3,1	2,0	1,6	1,7
Portfolio investment................	26,5	22,5	-1,1	2,5	50,4	10,9	26,1	29,9
Other investment....................	-1,4	-2,3	1,4	8,8	6,5	-1,1	-3,0	-9,2
Total liabilities	**25,5**	**21,4**	**2,2**	**10,9**	**60,0**	**11,8**	**24,7**	**22,4**
Assets								
Direct investment....................	-1,0	-0,1	-8,1	-0,4	-9,6	-4,3	-2,1	-2,2
Portfolio investment................	-7,1	-11,3	-5,5	-6,2	-30,1	-5,8	-9,4	-5,0
Other investment....................	-5,1	-0,1	3,8	-1,5	-2,9	-2,1	-2,3	-3,9
Total assets	**-13,2**	**-11,5**	**-9,8**	**-8,1**	**-42,6**	**-12,2**	**-13,8**	**-11,1**
Total financial transactions*	**7,6**	**0,8**	**-4,4**	**4,0**	**8,0**	**2,4**	**4,2**	**6,8**

* Including unrecorded transactions

of international portfolio capital flows into the country. As a consequence, the surplus on the financial account of the balance of payments improved progressively throughout the first three quarters of 1999.

A large net inflow of portfolio investment capital outweighed a net outflow of other investment capital in the third quarter of 1999. The net inflow of capital through the financial account (including unrecorded transactions, but excluding reserve-related liabilities) accordingly increased from R4,2 billion in the second quarter of 1999 to R6,8 billion in the third quarter. The cumulative surplus on the financial account amounted to R13,4 billion in the first three quarters of 1999, compared with a surplus of R8,0 billion in 1998 as a whole.

Imports of portfolio capital



Foreign direct investment flows into South Africa increased marginally from R1,6 billion in the second quarter of 1999 to R1,7 billion in the third quarter. The latter inflow was more than fully offset by direct investment capital exported from the country. On a net basis there was still an outflow of foreign direct investment capital of R3,3 billion in the first three quarters of 1999, but this was significantly down from the outflow of R6,5 billion in 1998 as a whole.

Foreign portfolio investment flows into South Africa increased from R10,9 billion in the first quarter of 1999 to R29,9 billion in the third quarter – the highest quarterly inflow of portfolio capital ever recorded. A significant component of these inflows entered the economy through the domestic equity market. Strong inflows followed the primary listing of the Old Mutual life assurance company on the London Stock Exchange in July 1999.

South African institutional investors continued to increase their exposure to foreign securities markets, albeit at a much lower rate in the third quarter of 1999 than in the second quarter. Net capital exports through portfolio transactions accordingly declined from R9,4 billion in the second quarter of 1999 to R5,0 billion in the third quarter. In total, *net portfolio investment inflows* totalled R46,7 billion in the first three quarters of 1999, compared with a total net inflow of R20,3 billion in the whole of 1998.

Other foreign investment into South Africa (measured as changes in the foreign liabilities of resident South African organisations in the form of loans, trade finance arrangements, bank deposits and other mostly short-term liabilities) deteriorated from an outflow of R3,0 billion in the second quarter of 1999 to an outflow of R9,2 billion in the third quarter. The outflows in the third quarter were mainly caused by scheduled debt repayments in terms of the existing arrangements between foreign creditor banks and domestic debtors, the repayment of affected debt previously converted into long-term debt and of loans whose repayment was guaranteed by foreign governments. Over the same period, non-resident investors withdrew part of their foreign-currency denominated deposits with South African banks.

Net capital exports by resident organisations in the category other foreign investment (measured as changes in foreign assets originating from trade finance or other loans granted to non-residents, and deposits placed with non-resident banks) increased from R2,3 billion in the second quarter of 1999 to R3,9 billion in the third quarter. Foreign investment flows outside the fields of foreign direct investment and portfolio transactions were measured as a net outflow of R21,6 billion in the first three quarters of 1999, compared with a net inflow of R3,6 billion in 1998 as a whole.

Foreign debt

The net borrowing of South Africa in foreign capital markets led to a rise in South Africa's foreign-currency denominated debt from US$24,7 billion at the end of 1998 to US$25,1 billion at the end of June 1999.

Debt renegotiated in terms of successive standstill arrangements had been reduced from US$2,3 billion at the end of 1998 to US$1,9 billion at the end of June 1999, implying that debt obligations equivalent to only 13,7 per cent of the total debt originally affected by the standstill announcement of 1985, have not been restored to normal debt relationships.

Other foreign-currency denominated debt rose from US$22,4 billion at the end of 1998 to US$23,2 billion at the end of June 1999. This increase was caused primarily by government's two bond issues of 500 million and US$500 million in April and May 1999, respectively, and net borrowing by the non-monetary private sector.

Foreign debt of South Africa
US$ billions at end of year

	1995	1996	1997	1998	1999*
Renegotiated debt	3,0	2,7	2,5	2,3	1,9
Public sector	1,1	1,3	1,2	1,2	1,0
Monetary sector	0,7	0,3	0,2	0,1	0,1
Non-monetary private sector	1,2	1,1	1,1	1,0	0,8
Other foreign-currency denominated debt	22,4	23,3	22,7	22,4	23,2
Bearer bonds	3,8	4,0	4,0	4,4	5,2
Converted long-term loans	2,9	2,1	1,3	0,8	0,6
Public sector	4,5	4,7	4,2	3,3	3,0
Monetary sector	4,9	6,6	7,5	8,8	8,8
Non-monetary private sector	6,3	5,9	5,7	5,1	5,6
Total foreign-currency denominated debt	25,4	26,0	25,2	24,7	25,1

* As at end of June 1999

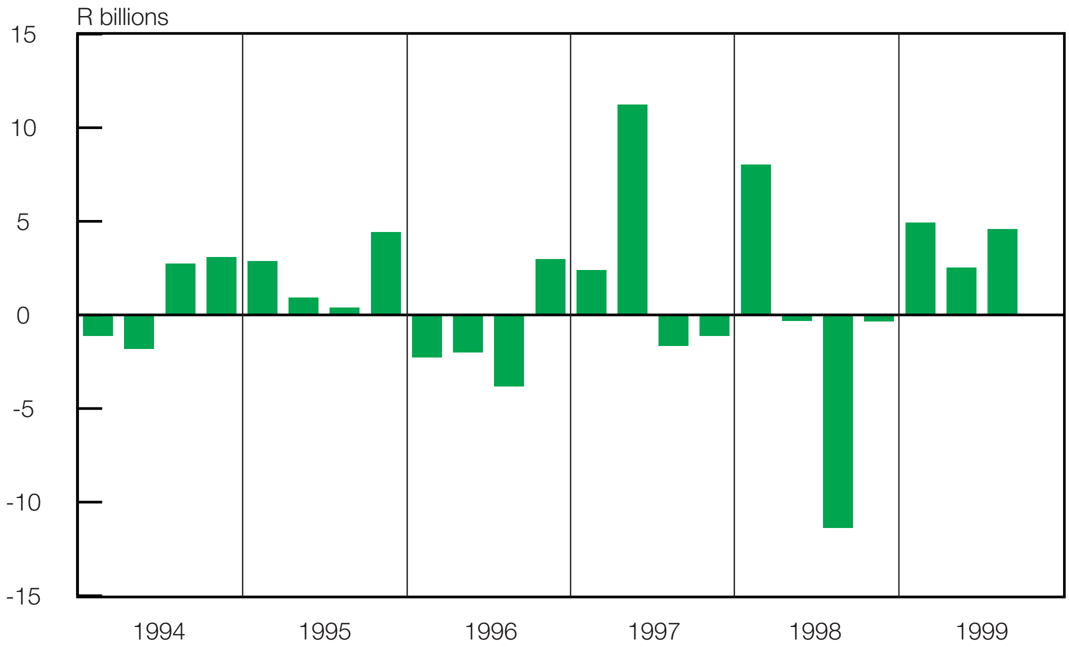
Measured in rands, total foreign-currency denominated debt rose by R6,6 billion in the first half of 1999 to R151,4 billion. The ratio of interest payments to total export earnings increased to 9,2 per cent in the year to June 1999, from 8,4 per cent in 1998. The latest ratio is somewhat higher than the historical average of 7,2 per cent in the past decade.

Foreign reserves

The deficit on the current account of the balance of payments in the third quarter of 1999 was more than fully financed by a strong surplus on the capital transfer and financial account. The resulting surplus on South Africa's overall balance of payments therefore increased from R2,5 billion in the second quarter of 1999 to R4,6 billion in the third quarter. During the first three quarters of 1999, the country's *net international reserves* increased by R12,0 billion, compared with a decline of R4,0 billion for 1998 as a whole.

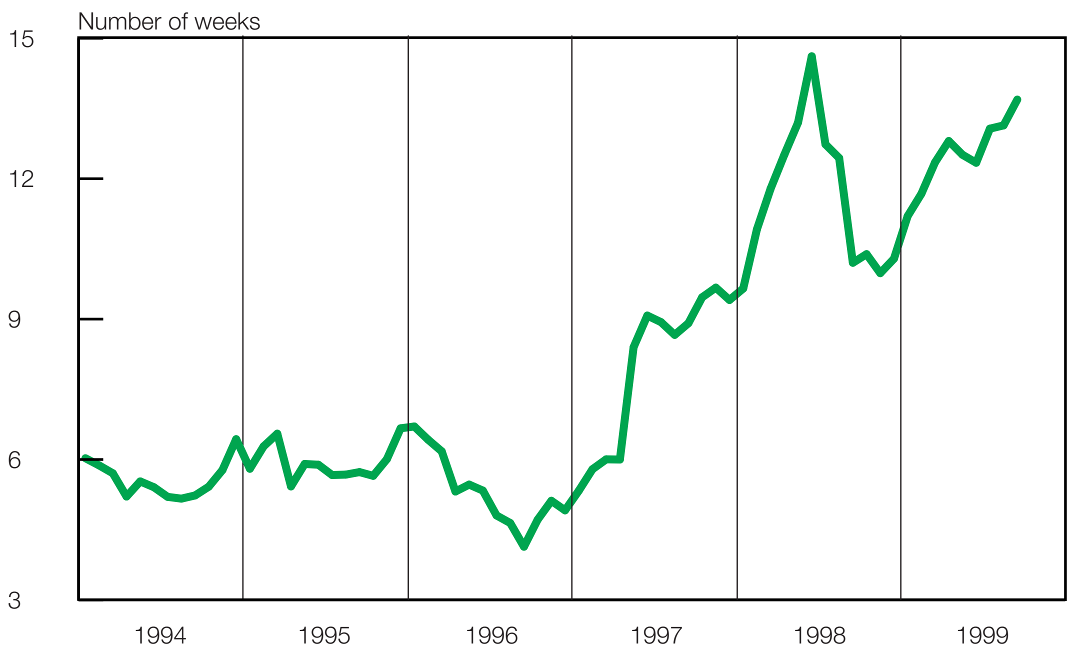
The country's *gross international reserves,* which had increased from R42,2 billion at the end of December 1998 to R47,2 billion at the end of June 1999, increased by R6,7 billion to R53,9 billion at the end of September. Import cover improved from about 10 weeks' worth of imports of goods and services at the end of December 1998 to about 13 weeks' worth at the end of September 1999. In dollar terms, the country's gross international reserves increased from US$7,2 billion at the end of December 1998 to US$9,0 billion at the end of September 1999.

Changes in net foreign reserves



The Reserve Bank's gross international reserves which had increased consistently from R30,5 billion in September 1998 to R39,2 billion at the end of September 1999, advanced to R42,6 billion at the end of October. The utilisation of short-term credit facilities increased by R2,0 billion from the end of September 1999 to the end of October 1999, partly as a measure to ensure that liquidity in the foreign-exchange market would not run dry because of millennium-related problems with computer systems at the end of the year.

Imports covered by international reserves

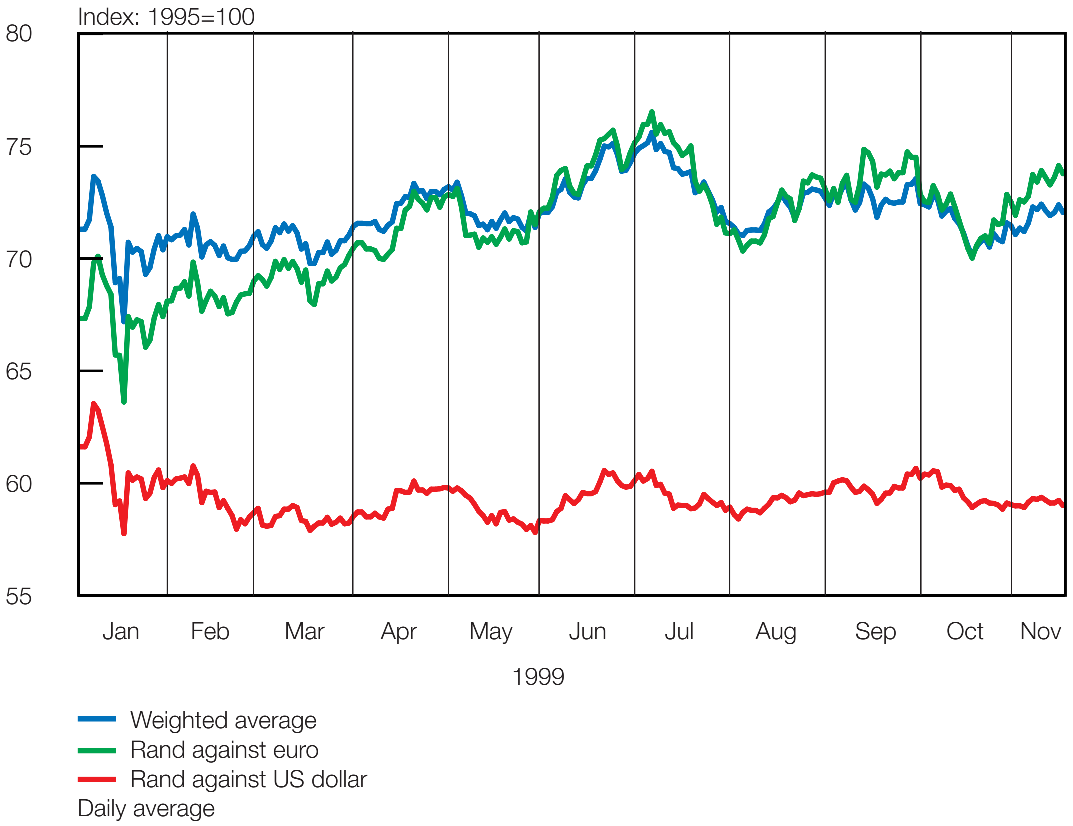


The Reserve Bank's net *oversold forward position in foreign currency* declined from US$21,5 billion at the end of June 1999 to US$19,2 billion at the end of September 1999 and US$18,7 billion at the end of October. Over the same period the Bank's *net open position in foreign currency* declined from US$18,3 billion in June 1999 to US$15,6 billion at the end of September and US$14,9 billion at the end of October. At the end of September 1998 the Reserve Bank's net open position in foreign currency stood at US$23,2 billion.

Exchange rates

Financial markets around the world began to stabilise towards the end of 1998. Notwithstanding these favourable developments, conditions in emerging-market economies remained fragile during the first ten months of 1999 and were often disrupted by volatile asset price movements. These developments had implications for the external value of the rand, which fluctuated in a somewhat unsystematic way during the first ten months of 1999. Volatility in the domestic market for foreign exchange was further amplified by large portfolio investment inflows following the listing of the Old Mutual life assurance company on the London Stock Exchange and by the fluctuating movements of the gold price.

Nominal effective exchange rate of the rand



On balance, the nominal effective exchange rate of the rand strengthened at first by 3,6 per cent from the end of December 1998 to the end of June 1999, but then fell by 4,2 per cent in July. Investor confidence in emerging markets improved during the latter part of the third quarter of 1999 and non-resident investors substantially increased their holdings of South African debt and equity securities. The rand strengthened during August and September 1999, reducing the decline in the nominal effective exchange rate of the rand to 3,0 per cent from the end of the second quarter to the end of the third quarter of 1999. Over the whole of the first three quarters of 1999 the weighted exchange rate of the rand gained about 0,5 per cent in value.

In October 1999, wide fluctuations in the dollar price of gold and concerns about the readiness of South Africa to address millennium-related computer programming and market liquidity problems added to uncertainty and nervousness in the foreign exchange market. As a consequence, there was a decline of 1,4 per cent in the nominal effective exchange rate of the rand from the end of September 1999 to the end of October.

Over the first ten months of 1999 the external value of the rand strengthened by 6,0 per cent against the relatively weak euro, but generally weakened against other key currencies. The inflation-adjusted effective exchange rate of the rand appreciated by 4,2 per cent from December 1998 to June 1999, probably signalling some loss in the competitive power of South African producers in external markets.

Exchange rates of the rand
Percentage change

	31 Dec 1998 to 30 Jun 1999	30 Jun 1999 to 30 Sep 1999	30 Sep 1999 to 29 Oct 1999	31 Dec 1998 to 24 Nov 1999
Weighted average*	3,6	-3,0	-1,4	-0,4
Euro	9,8	-3,1	-0,5	9,0
US dollar	-2,8	0,2	-2,0	-4,4
British pound	2,5	-4,3	-1,5	-2,1
Japanese yen	3,5	-12,4	-2,8	-12,3

* The weighted exchange-rate index consists of a basket of 14 currencies. Prior to the introduction of the euro on 1 January 1999, the basket consisted of 24 currencies

The *total net average daily turnover* in the domestic market for foreign exchange, which usually rises strongly during times of market turbulence, declined slightly from US$10,2 billion in the second quarter of 1999 to US$9,9 billion in the third quarter.

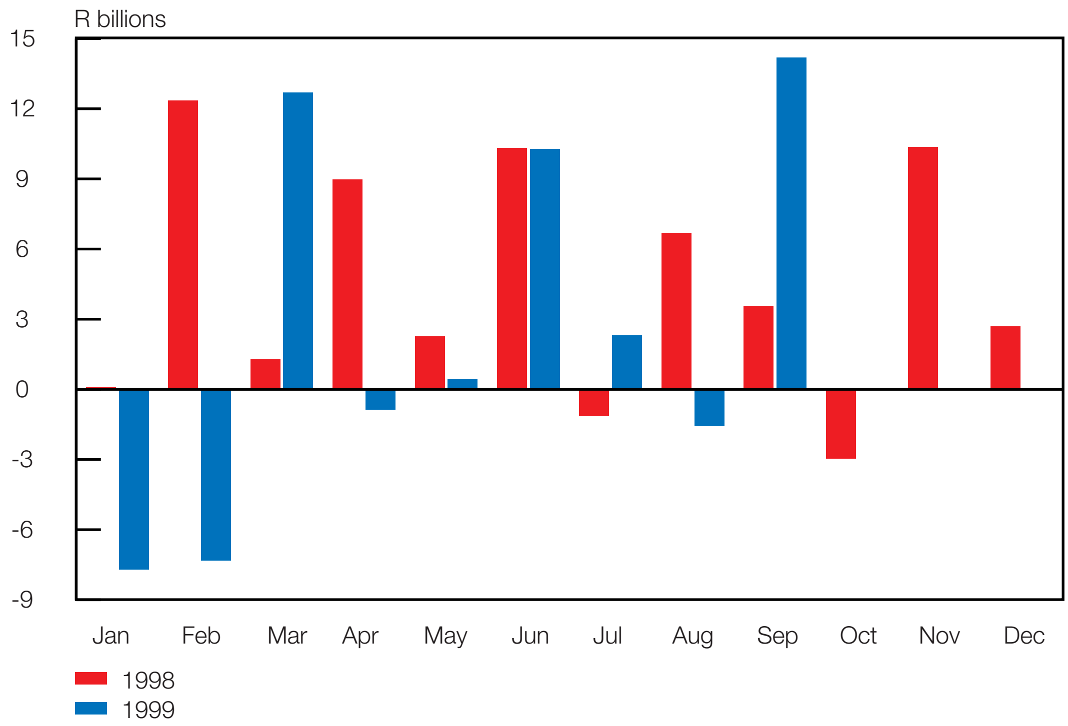
Monetary developments, interest rates and financial markets

Money supply

Reflecting the generally subdued real economic conditions, together with the delayed effects of the tightening of monetary policy during 1998, the year-on-year growth rate of the broad monetary aggregate M3 decreased during the first nine months of 1999.

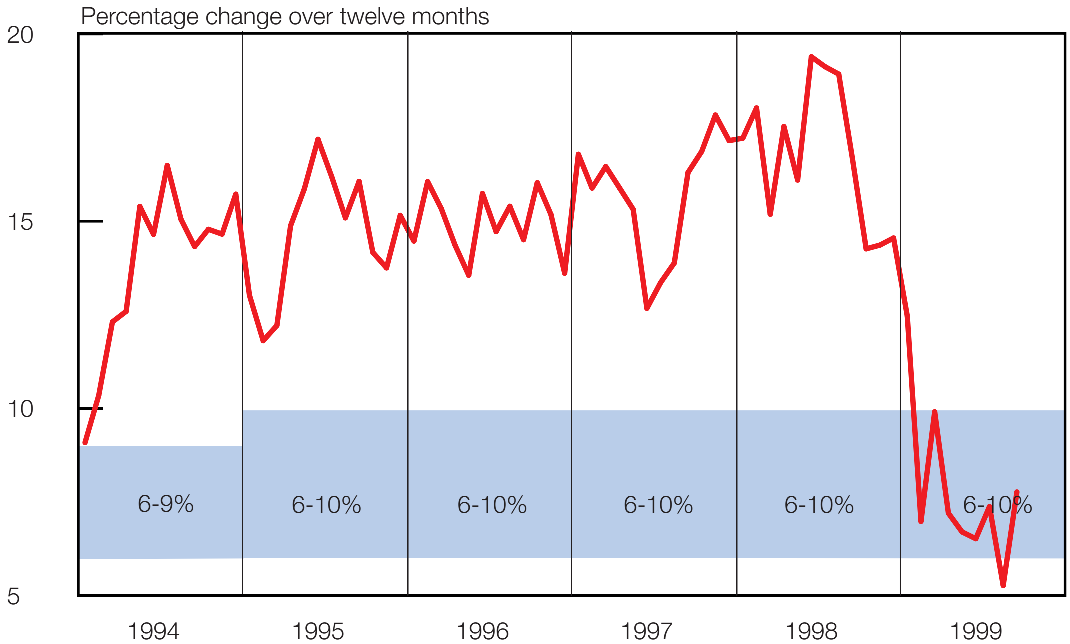
The average month-to-month increase in the value of M3 during 1999 was considerably smaller than the average monthly increase in 1998. Prominent deviations from this general pattern occurred in the last month of each quarter of 1999 when there were abrupt and sizeable increases in M3. The impact that these deviations could have had on the growth over twelve months in M3 in 1999 was largely dampened by the very high base for year-on-year growth calculations which had been established by the behaviour of M3 between June and August 1998.

Month-on-month absolute changes in M3



The twelve-month rate of increase in M3 receded, on balance, from 19,4 per cent in June 1998 to 5,3 per cent in August 1999, but accelerated to 7,8 per cent in September when the high levels of M3 recorded in August 1998 dropped out of the base for twelve-month growth calculations. Another factor of an even more technical nature which influenced the growth in M3 during August and September 1999 was the changes in the value of remittances in transit recorded on the banks' monthly balance sheets. In August 1999 these balance sheet items contributed to a substantial slowdown in the growth of M3, but the influence that this had was largely reversed in September when the change in remittances in transit added to the growth in M3.

M3 money supply



Shaded areas indicate the money growth guideline ranges

The relatively large increase in M3 from August to September 1999 was also responsible for an acceleration in the seasonally adjusted and annualised quarter-to-quarter growth in M3. This growth rate had slowed down from 18,7 per cent in the third quarter of 1998 to around 1 per cent in each of the first and second quarters of 1999, before rebounding to 16,2 per cent in the third quarter. Most of this increase in the quarter-to-quarter growth rate was concentrated in September 1999.

The overall slowdown in the growth of M3 in the course of 1999 arose *inter alia* from a shift in the *composition of portfolios* away from relatively low-risk depository-type investments to comparatively high-risk but attractively priced interest-bearing debt securities and equity investments – a shift that occurred parallel with slower growth in bank's claims on the private sector. The decline in liquidity preference is reflected in the sharp deceleration in the twelve-month growth of M1 from 22,0 per cent in March 1999 to 3,6 per cent in August and 4,3 per cent in September.

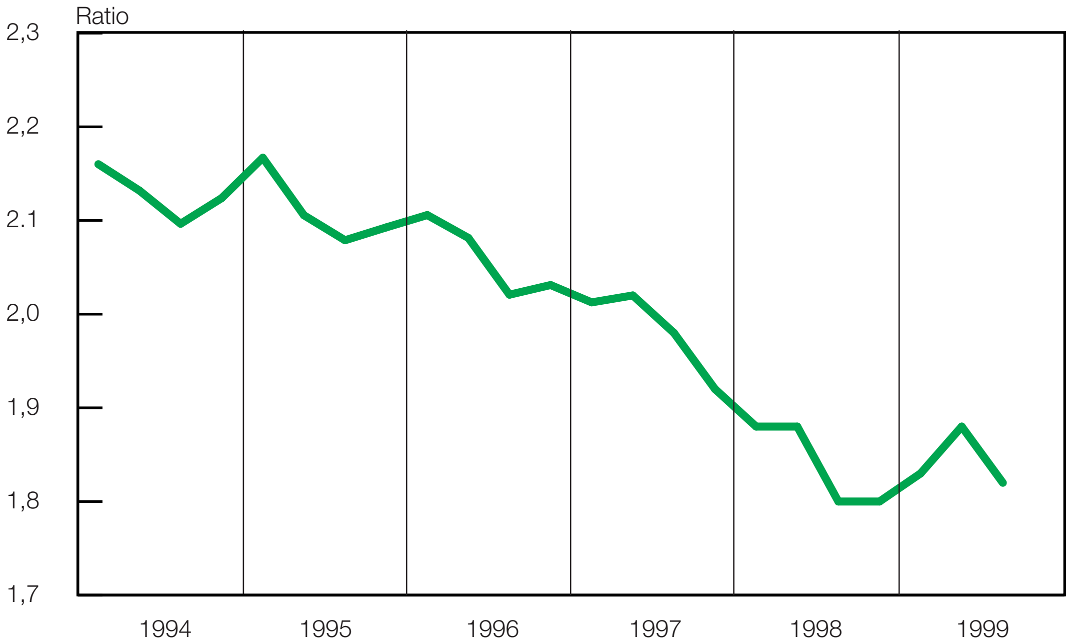
Further evidence of the relative reduction of the highly liquid component of money holdings is the changing difference between the growth rates in M1 and M3 during the second and third quarters of 1999. The difference narrowed at first, but was then inverted when the growth in M3 outpaced the growth in M1 in August and September 1999. The year-on-year growth in M1 fell from 43,7 per cent in August 1998 to 3,6 per cent in August 1999 – the latter growth rate is the lowest since November 1993.

Twelve-month growth rates in M1 and M3
Per cent

Period		M1	M3	Differential
1999:	Jan	22,0	12,5	9,6
	Feb........................	14,8	7,0	7,9
	Mar........................	22,0	9,9	12,1
	Apr	15,8	7,2	8,6
	May	15,2	6,7	8,5
	Jun	8,4	6,5	1,9
	Jul	7,4	7,4	0,0
	Aug	3,6	5,3	-1,7
	Sep	4,3	7,8	-3,5

The twelve-month growth rates in M3 since February 1999 were nearly all within the *three-year guideline range* for the growth in M3 of between 6 and 10 per cent. The quarter-to-quarter growth rates in M3 fell below the growth in nominal gross domestic product in the first two quarters of 1999. The *income velocity* of M3 accordingly increased somewhat during the first half of 1999. In the third quarter of 1999, however, this was again reversed when M3 grew faster than the nominal gross domestic product, leading to a slight falling back in the income velocity of M3.

Income velocity of M3



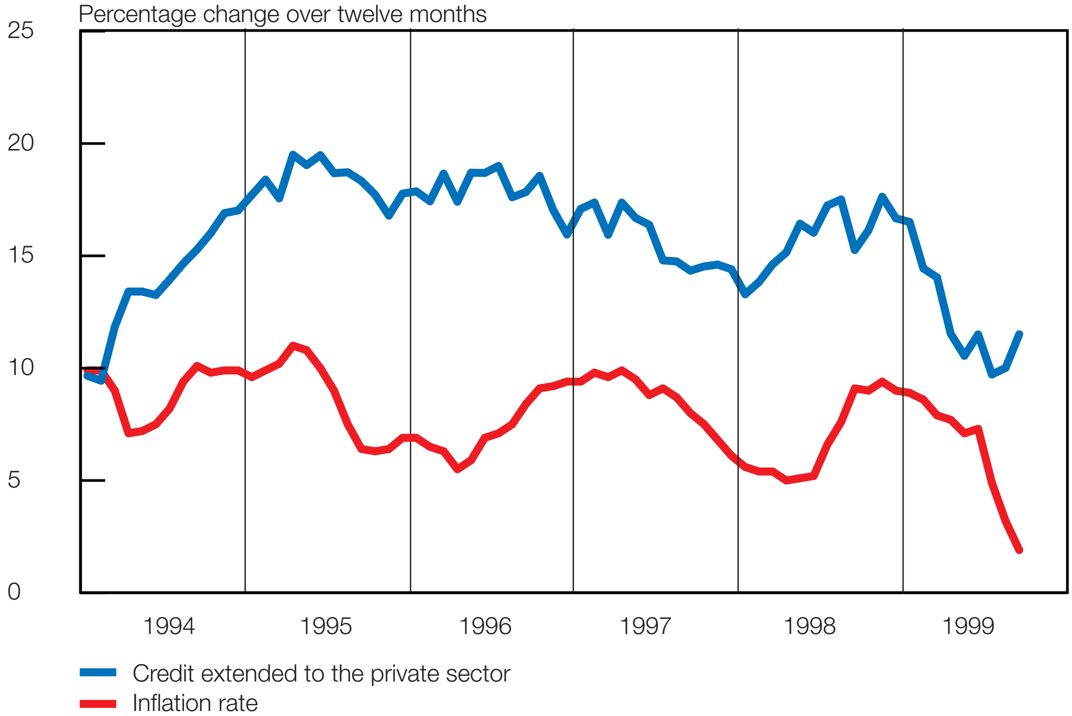
Seasonally adjusted
Based on consolidated liabilities of the monetary sector

In a statistical or accounting sense, the main counterparts to the R14,9 billion rise in M3 during the third quarter of 1999 were a R9,1 billion increase in the banks' claims on the private sector and a R9,1 billion increase in the net foreign assets of the banking sector. These increases were augmented by an increase of R5,7 billion in the banks' net claims on the government sector, but were countered by a decrease of R9,0 billion in the "net other assets" of banks. The "net other assets" declined, among other things, because of a rise in "other liabilities" which, in turn, originated from changes in the "in transit" items on the banks' balance sheets. Changes in banks' capital and reserves liabilities also had implications for the "net other assets".

Credit extension

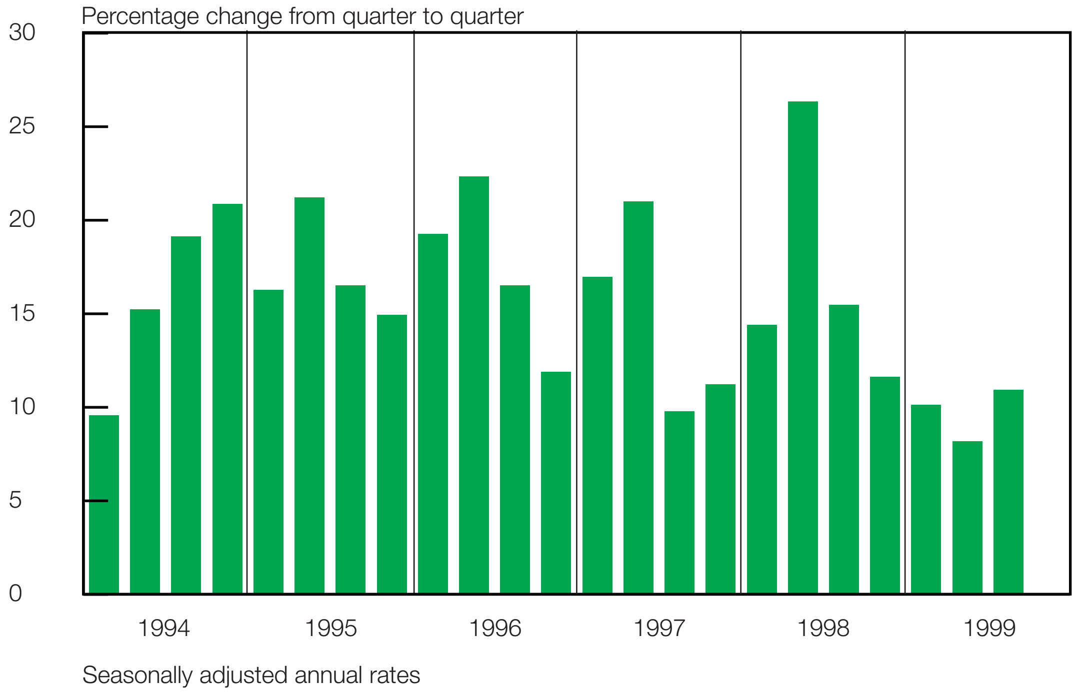
The underlying growth in total credit extended by banks during the first nine months of 1999 remained above inflation as measured by changes in the overall consumer price and core inflation indices. The twelve-month growth rate in total credit extension fell from 18,5 per cent in December 1998 to 9,9 per cent in July 1999, but then accelerated slightly to 10,8 per cent in September. In real or inflation-adjusted terms, the growth in total credit extension by banks remained positive throughout the first nine months of 1999, and even accelerated towards the end of the period under review.

Credit extension and inflation rate



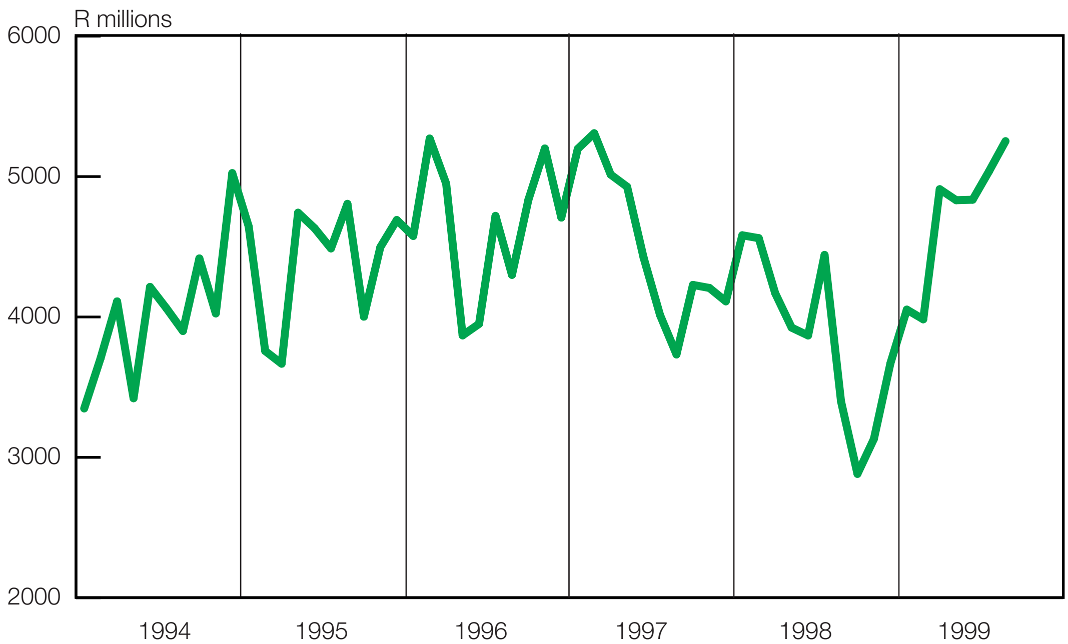
The slowdown in the demand for credit during the first nine months of 1999 can be attributed proximately to weaker growth in the demand for credit by private-sector bodies. The growth over twelve months in *credit extended to the private sector* slowed down from 16,5 per cent in January 1999 to 9,7 per cent in July, before picking up moderately to 11,5 per cent in September. Quarter-to-quarter growth in nominal credit extension to the private sector also accelerated somewhat from an annualised rate of 8,2 per cent in the second quarter of 1999 to 10,9 per cent in the third quarter.

Credit to the private sector



Among the components of bank credit extended to the private sector, the rate of growth over twelve months in *mortgage advances* declined from 7,2 per cent in March 1999 to 4,4 per cent in September – the lowest growth rate on record. The slow growth in mortgage advances in recent months caused the share of mortgage

Mortgage advances - gross amounts granted

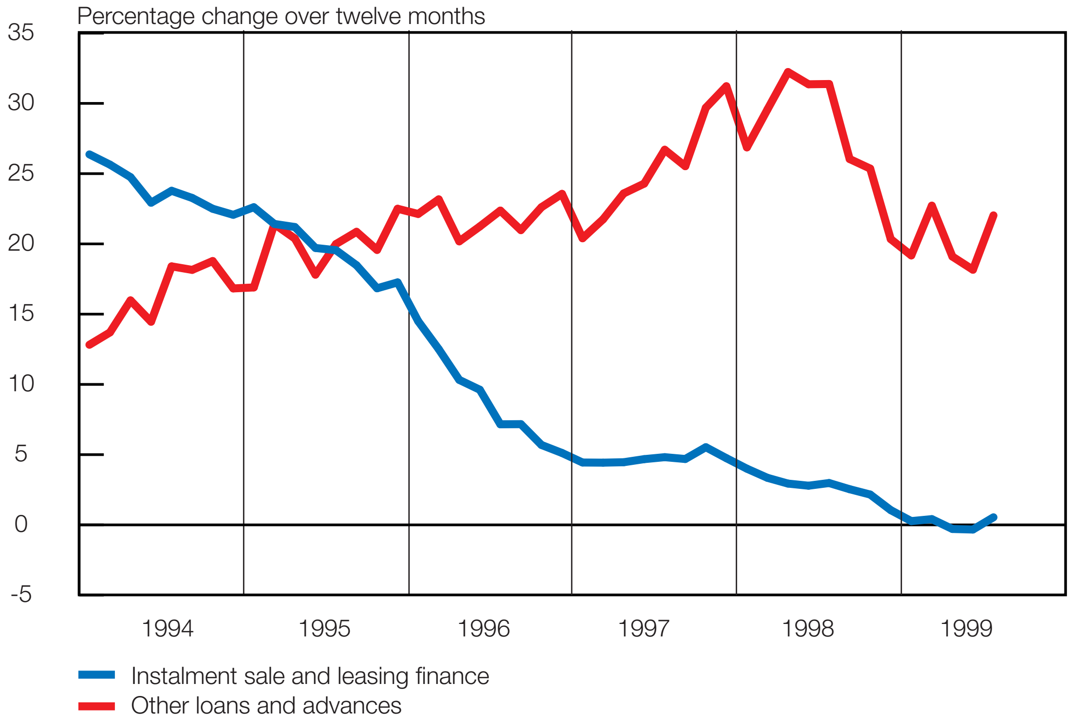


advances in the overall stock of outstanding private-sector credit to decline from 41 per cent in September 1998 to 38,4 per cent in September 1999. The slump in the home-building industry, along with the growing aversion to debt among households were the main reasons for the slow growth in the demand for mortgage financing.

Some tentative indications of a revival in the demand for mortgage advances emerged during the second and third quarters of 1999. New mortgage advances granted and mortgage advances paid out both accelerated moderately during the middle quarters of 1999. The introduction of new home-loan products in October 1999, some of which set the cost of borrowing at 2,4 percentage points below the prime lending rate, may further encourage credit-financed home ownership in the near term. At the same time, banks are considering the securitisation of mortgage loans. This may result in some disintermediation as mortgage advances move off the balance sheet of banks, in this way further limiting the growth in mortgage financing by banks.

The main contribution to the growth in bank credit extension to the private sector came from the category "other loans and advances" during the second and third quarters of 1999. Although slowing down somewhat until May 1999, the growth over twelve months in "other loans and advances" remained solidly above 18 per cent in the third quarter and rose to 22,0 per cent in September 1999. Some of the relatively brisk expansion in "other loans and advances" was probably related to financial market activity and corporate restructurings, including mergers and acquisitions that substituted debt for equity. The financing needs of an inventory build-up ahead of the oncoming festive season may also have added to the business sector's demand for bank credit.

Credit extended to private sector by type of credit



The twelve-month growth rate in *instalment sale credit* and *leasing finance* hovered around zero in the third quarter of 1999. On average, the percentage change over twelve months in the combined total of these two credit categories declined from 4,2 per cent in 1998 to only 1,0 per cent in the first nine months of 1999, reflecting private households' subdued spending on durable goods. New business payouts of such finance nevertheless began to show clear signs of renewed strength from the second quarter of 1999.

The corporate sector absorbed the greater part of the increase in credit extended to the private sector, its share in total credit extension to the private sector increasing from 46,5 per cent in September 1998 to 50,2 per cent in September 1999. Conversely, the share of households decreased from 53,5 per cent to 49,8 per cent over the same period. Measured over a period of four quarters, the growth rate in credit extension to the corporate sector decreased from 25,9 per cent in the third quarter of 1998 to 20,4 per cent in the third quarter of 1999. The corresponding growth rates in credit extension to households at 7,4 per cent in September 1998 and 3,8 per cent in September 1999, were well below the growth in credit extended to the corporate sector.

After having increased by R5,9 billion in the second quarter of 1999, the net claims of banks on the *government sector* increased by R5,7 billion in the third quarter. The increase in the third quarter of 1999 was mainly the result of a R4,4 billion increase in the banks' holdings of government securities which was reinforced by a decline in government deposits with the banks. Government deposits with the banks had been run down partly because of the large interest payments on government bonds made in August and September.

Interest rates and yields

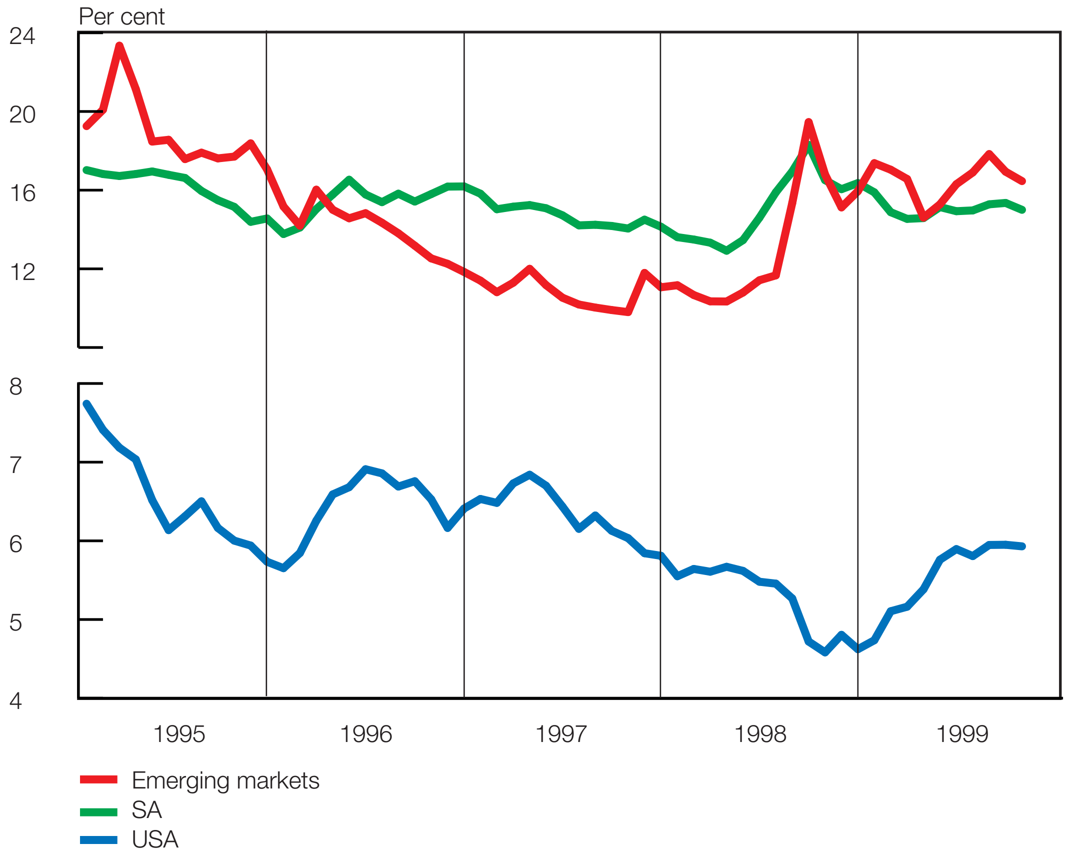
Bond yields moved in a relatively narrow range around a steadily rising trend during the second and third quarters of 1999, despite conditions pointing towards a more bullish outlook, such as the greater stability in international financial markets, the relative strength of the exchange rate of the rand and a general easing of domestic monetary policy.

A number of factors could be cited as potentially contributing to the upward movement in yields on long-term government bonds from March 1999. These include

- the tendency for interest rates to rise in the main financial centres of the world;
- uncertainties about gold-price movements and rising oil prices;
- the assessment by financial market participants of underlying domestic inflation risks;
- the potential volatility of non-resident portfolio capital flows;
- some lingering concern about financial stability in emerging markets generally; and
- concerns about the potential dearth of liquidity in financial markets at the turn of the millennium.

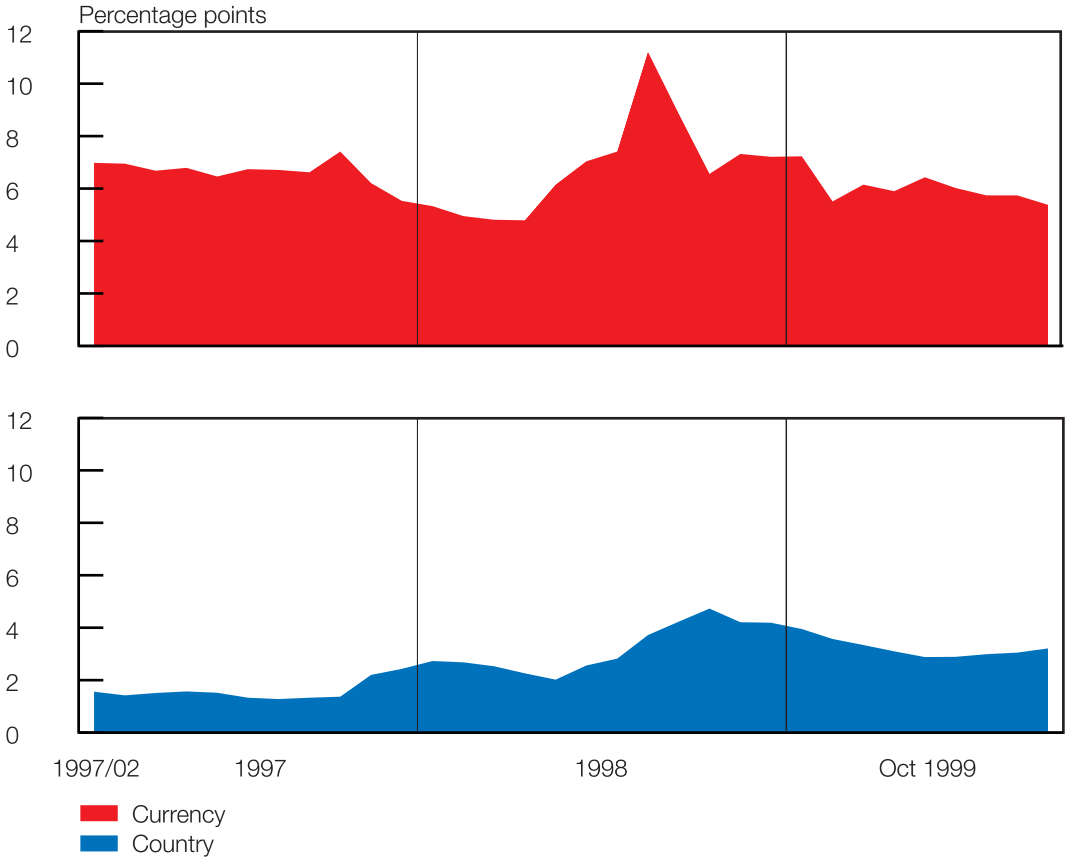
Developments in the United States securities markets had a strong impact on the pricing of bonds in other markets during the first ten months of 1999. South African bond yields followed the international trend towards higher yields and maintained some correspondence with movements in bond yields in other emerging markets, but the rise from about April 1999 was far less pronounced in South Africa than in other emerging markets. A consequence of the lower yield volatility of South African bonds was that the country and currency risk premiums of investment in South Africa diminished appreciably from the fourth quarter of 1998.

Nominal yield on long-term government bonds



The upward movement in rates worldwide helped to take the *monthly average yield on long-term government bonds* from 14,5 per cent in March 1999 to 15,3 per cent in September – a level that was still almost 300 basis points lower than the average rate prevailing at the height of the international financial crisis in September 1998. Recently the long-term bond yields moved lower from a daily average of 15,58 per cent on 16 September 1999 to below 15 per cent on 5 October. The decline in yields was probably motivated by the levelling off of the rate of core inflation and the improvement in the price of gold. Sentiment was also buoyed by the relatively small projected budget deficit of the national government and public-sector borrowing requirement contained in the Medium Term Expenditure Framework which was released by the Minister of Finance on 29 October.

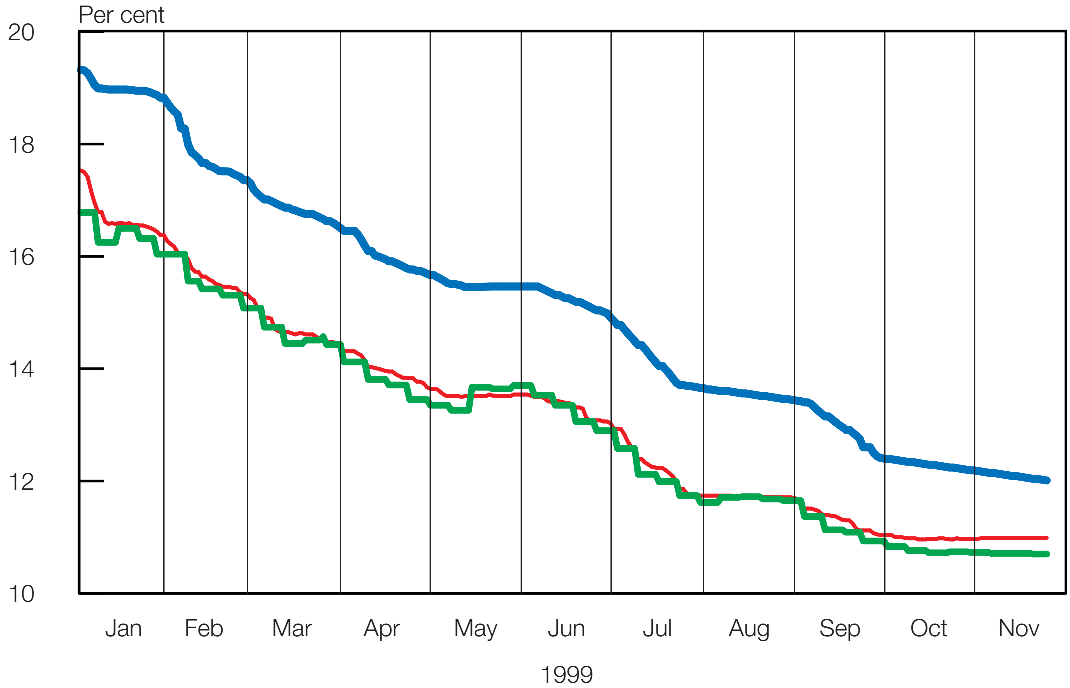
Premiums: nominal yield on government bonds with an outstanding maturity of five years



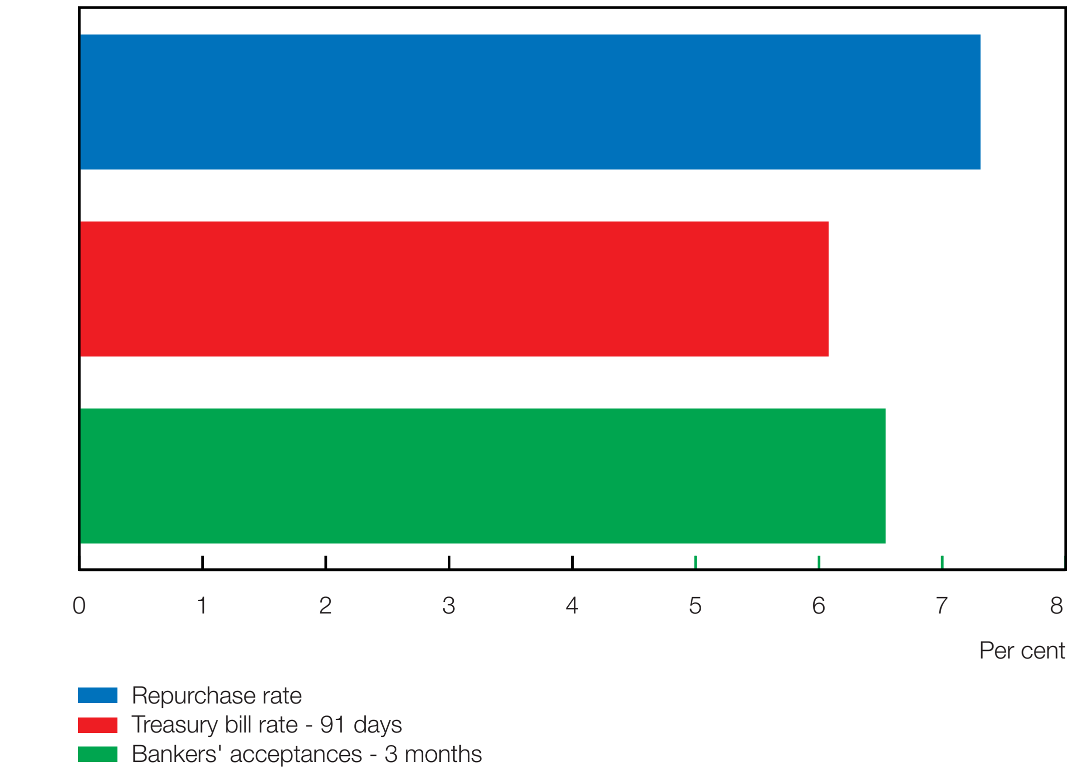
The monthly *inflation-adjusted yield* on long-term government bonds averaged 6,7 per cent in the first quarter when core inflation is used as the indicator of the rise in the general level of prices. From the second quarter of 1999, core inflation moved broadly in tandem with the upward trend in the yield on long-term government bonds, raising the *real* yield to 6,9 per cent in September, i.e. only fractionally higher than the average level in the first quarter of 1999.

Money market interest rates eased considerably in the course of 1999. Along with the general decline in short-term interest rates, the Reserve Bank overtly guided the repurchase rate lower by signalling its interest rate intentions to the private banks at the daily repurchase-based auction. The repurchase rate accordingly declined from 19,32 per cent at the beginning of the year to 12,01 per cent on 24 November – a total decline of 731 basis points. Over the same period the tender rate on three-month Treasury bills declined by 608 basis points and the rate on bankers' acceptances with a maturity of three months by 654 basis points.

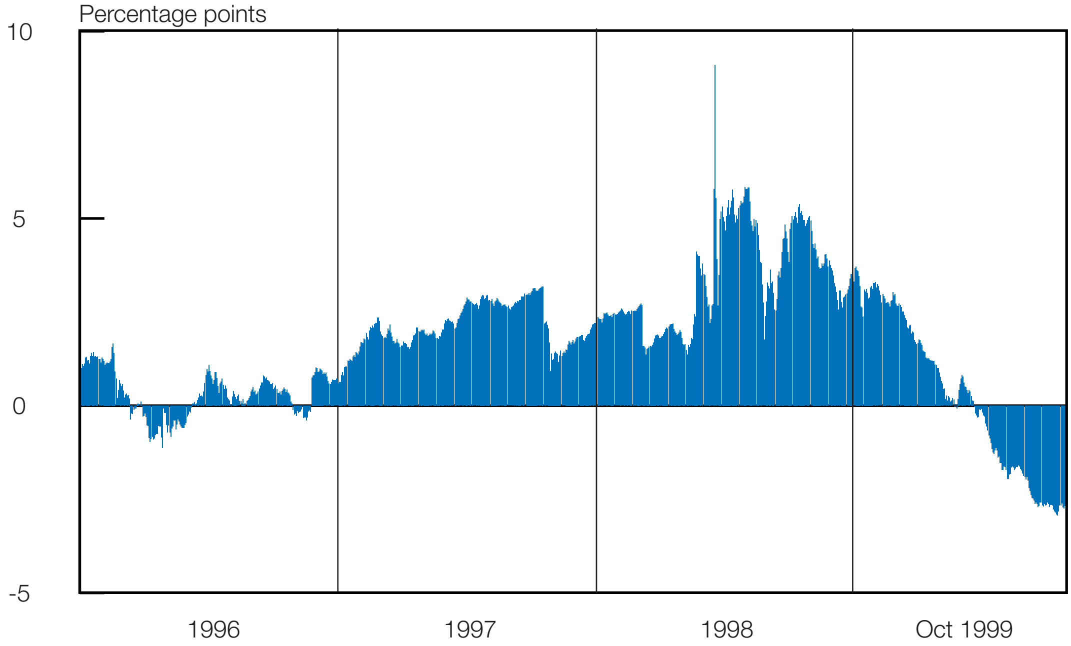
Daily money market rates



Money market rates - change from January - November 1999



Interest rates and yields



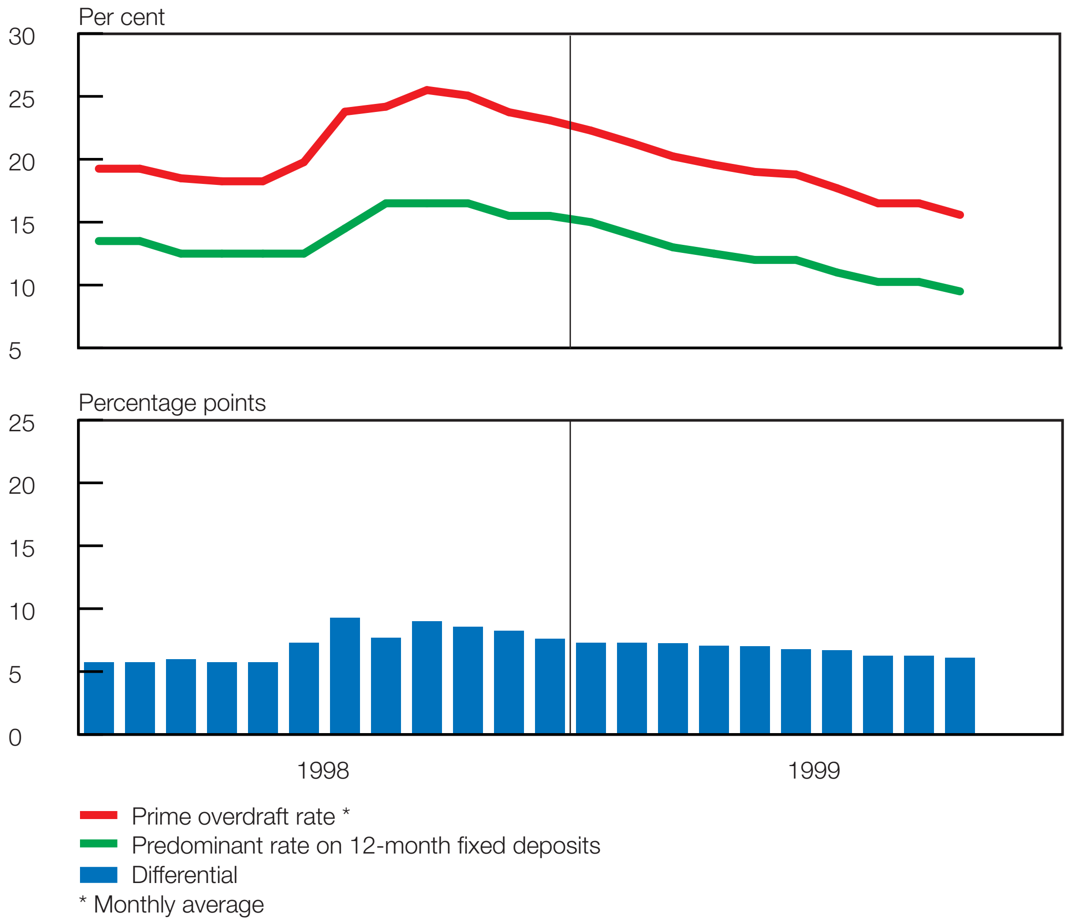
Differential between Bank rate/Repurchase rate of Reserve Bank and long-term government bond yield

The shape of the *yield curve* changed drastically as short-term interest rates declined faster than long-term interest rates and tilted the slope of the curve from negative to positive. This change was first and foremost a reflection of the easing of the domestic monetary policy stance. The yield curve had flattened out from January to April, but then assumed an upward slope when short-term rates fell below long-term yields. This upward slope steepened until mid-September 1999 as short-term rates discounted further declines in the repurchase rate of the Reserve Bank and long-term rates followed the rising rates in the international capital markets. The general level of the curve drifted lower from mid-September 1999 to the end of October as markets became more sanguine about the outlook for inflation and the future borrowing needs of the public sector.

Following the decline in the repurchase rate of the Reserve Bank over the past five months, the private banks have lowered their *prime overdraft* rate on current accounts in four steps from 19 per cent on 24 June 1999 to 15,5 per cent on 4 October 1999. This means that from its plateau in August to October 1998, the prime overdraft rate has declined by 10 percentage points. Over the same period the *predominant rate on mortgage loans* fell by 8,5 percentage points to 15,5 per cent, i.e. a level equal to that of the prime overdraft rate. However, the design of new mortgage products and the establishment of new institutions transacting through the electronic media offer borrowers the opportunity of obtaining mortgage finance at rates lower than the prime overdraft rate.

The *predominant retail rate on twelve-month fixed deposits with banks* has declined by 7,0 percentage points since October 1998 to 9,5 per cent in October 1999. The *difference* between this deposit rate and the monthly average prime overdraft rate of banks narrowed from more than 900 basis points in July 1998 to slightly more than 850 basis points in October 1998 and further to 600 basis points in October 1999, which is about equal to the average differential in the first half of 1998.

Lending and deposit rates



The *standard interest rate* applicable to loans granted from the State Revenue Fund was lowered from 18,50 per cent in October 1998 to 15,25 per cent in July 1999, but was raised to 15,75 per cent in October 1999. The *maximum permissible finance charges rates* laid down in terms of the Usury Act, were lowered from the all-time high level prevailing from August 1998 to June 1999, to a level in October 1999 which was its lowest since October 1994. The reduction of 5 percentage points from June 1999 to July and 4 percentage points from September to October left these rates at 24 per cent for money lending, credit and leasing transactions of more than R6 000 but less than R500 000, and 27 per cent for amounts up to R6 000.

Money market

After easing during the first four months of 1999, liquidity conditions tightened considerably in the money market during the second and third quarters of the year. The average daily liquidity requirement of the banks accordingly increased from a low monthly average of R4,8 billion in March 1999 to a peak of R13,5 billion in August.

Subsequently the average daily liquidity requirement fell back to R13,0 billion in September 1999 and R11,5 billion in October as the Reserve Bank began to curb its liquidity-draining operations with a view towards alleviating a potential dearth of liquidity at the turn of the millennium.

The tightening in money market conditions in the second and third quarters of 1999 was due primarily to the liquidity-draining operations of the Reserve Bank. These operations were reinforced by an increase in the value of notes and coin in circulation outside the Reserve Bank and the surpluses arising from the Bank's transactions in the forward foreign exchange market. The Reserve Bank's action of draining liquidity from the money market was intended to increase the private banks' dependence on central bank funding and thus increase their participation in the daily auction of repurchase agreements. The daily tender is expected, thereby, to become more competitive and the market more sensitive to the signals emitted from the Bank. Concerns about the seizing-up of liquidity in the money market because of millennium-related problems over the year-end subsequently caused the Bank to change its strategy and to deliberately assist in the easing of the liquidity position of the banks in the fourth quarter of 1999.

As part of its liquidity-draining operations, the Reserve Bank entered into special foreign currency swap transactions with private banks. Other steps taken by the Reserve Bank to influence money market liquidity included the issuance of its own debentures. The amount of outstanding Reserve Bank debentures was raised from R3,9 billion at the end of March 1999 to R5,0 billion in September, but was reduced to R3,3 billion at the end of October as concerns about millennium-related liquidity problems came to the fore.

Liquidity management operations were also strengthened by conducting reverse repurchase transactions in government securities. These transactions were concluded between the Reserve Bank and private-sector parties and were scheduled to be reversed after 28 days had elapsed. Outstanding reverse repurchase transactions increased from an initial amount of R0,5 billion in April 1999 to R1,0 billion at the end of September and R2,0 billion at the end of October.

The Reserve Bank has also actively applied its signalling mechanism in the past four months or so, to guide the movements of money market interest rates. Overprovision by the Reserve Bank in the private banks' daily liquidity requirements on 30 June 1999 accelerated the daily change in the repurchase rate from a decline of 2 basis points on 29 June to a daily decline of 7 basis points from 30 June to 22 July.

On 26 July 1999 the Reserve Bank underprovided the market by R10 million as a way of signalling to the banks that a slower decline in the repurchase rate was warranted. The private banks responded by adjusting their bids at the daily repurchase auction to allow for a daily decline of one basis point in the repurchase rate. This continued until 7 September 1999 when the Reserve Bank once again overprovided in the daily liquidity needs of the private banks, thus accelerating the decline in the average repurchase rate to six basis points a day.

On 23 September 1999 the private banks bid the repurchase rate down by 15 basis points in order to prepare for a decline in their prime overdraft rates. In subsequent auctions, the daily change in the repurchase rate declined steadily until it settled at one basis point from 30 September 1999.

Bond market

Funding by *public-sector borrowers* exerted no undue pressure in the domestic *primary bond market* in the first half of the current fiscal year. The disciplined management of public-sector revenue and spending and borrowing in foreign markets kept the national government's demand for loanable funds in the domestic bond market within limits and left ample resources for other public-sector and private-sector borrowers.

Total *net issues of fixed-interest securities* by the public sector amounted to R8,4 billion during the first half of the current fiscal year, compared with a net amount of R8,2 billion in the corresponding period of fiscal 1998/99. The quarterly value of these net issues decreased from R5,3 billion in the second quarter of 1999 to R3,1 billion in the third quarter. National government's demand for loanable funds amounted to R3,6 billion in the third quarter of 1999 whereas other public-sector borrowers had net redemptions of R0,5 billion. The nominal value of government bonds *auctioned and allotted* declined from R20,7 billion in the first seven months of fiscal 1998/99 to R11,7 billion in the corresponding period of the current fiscal year.

National government and other domestic borrowers accessed the *international primary bond markets* in the first ten months of 1999 when borrowing conditions and investor sentiment improved. The *national government* raised an amount of about R8,2 billion through three *foreign-currency denominated bond issues.* The first two issues, one denominated in euro and the other in US dollar, were concluded in April and May 1999. The third, a 300 million five-year bond, was concluded in October at an interest cost that was 250 basis points above the five-year bonds of the Federal Republic of Germany. Part of the proceeds of these issues will be used for the redemption of a US$750 million global bond in December 1999. Eskom raised about R1,3 billion in October through a 200 million three-year bond issue. Transnet issued *rand-denominated bonds* to the value of R1,0 billion in the *eurobond market* in March 1999.

Relatively low and declining short-term money market interest rates reduced borrowing by *private-sector companies* in the domestic primary market for fixed-interest securities to a bare minimum. Private-sector borrowers raised capital of only R73 million through the issuance of *listed fixed-interest securities* from December 1998 to September 1999. On the Johannesburg Stock Exchange, listed companies made no *rights issues of preference shares and debentures* during the first nine months of 1999.

Developments in the area of public finance are likely to shape the future evolution of the primary market for fixed-interest-bearing securities in South Africa. The steady reduction of the deficit on the national government budget in recent years, sales of business enterprises and other assets by the public sector, coupled with continued growth in the liabilities of institutional investors will probably create an increase in the demand for non-government debt securities. Such developments could cause a reversal in the general trend in financing in South Africa and the emergence of a livelier market in corporate and other non-government debt securities. The potential reduction in public-sector debt, relative to corporate and other private-sector debt, will inevitably have implications for trading and price formation in the secondary capital market, and also for the market in derivative instruments based on non-government debt instruments.

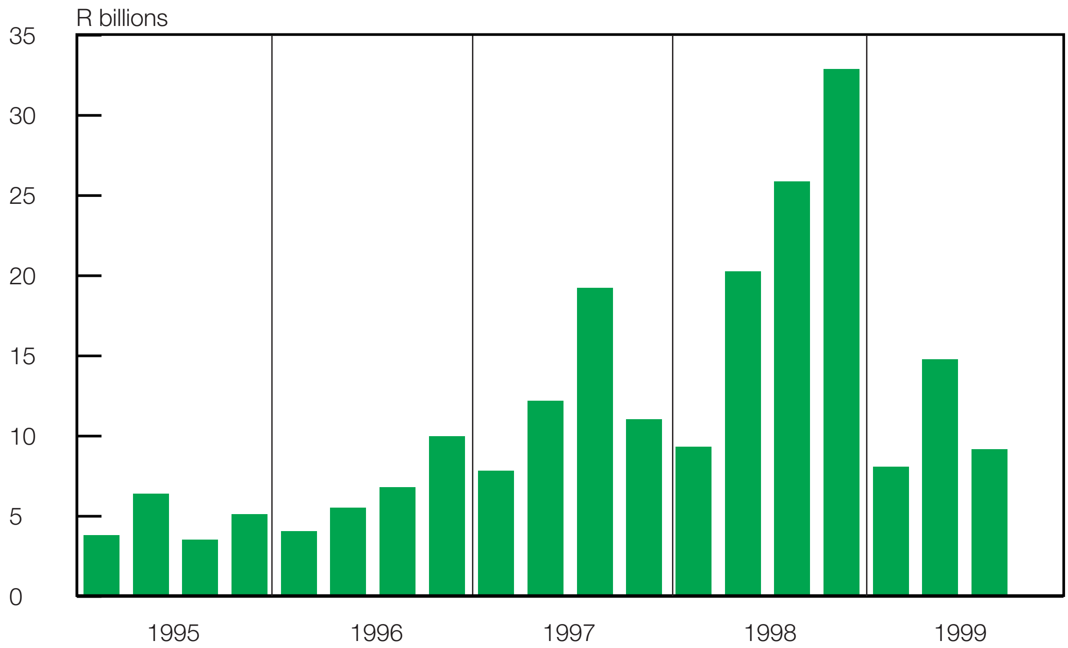
Trading activity on the Bond Exchange of South Africa during the first ten months of 1999 was boosted by the volatility in bond prices and by the widening spread between short-term and long-term bond yields. The R7,3 trillion turnover in the *domestic secondary bond market* in the first ten months of 1999 was only 2 per cent lower than the unprecedented high turnover in the corresponding period of 1998. The quarterly value of bonds traded increased from R1,7 trillion in the fourth quarter of 1998 to R2,5 trillion in the third quarter of 1999.

Foreign investor sentiment towards South Africa improved strongly during 1999 and a net outflow of non-resident portfolio capital of R9,8 billion through the secondary bond market in 1998 as a whole was turned into a net inflow of R9,5 billion in the first ten months of 1999. Non-residents' net purchases fell back slightly during the third quarter of 1999 as millennium-related concerns about emerging-market economies probably began to influence portfolio capital flows to these economies. The quarterly value of net purchases of bonds by non-resident investors accordingly declined from R4,1 billion in the second quarter of 1999 to R2,2 billion in the third quarter. As a percentage of the total value of purchases and sales of bonds, the gross transaction value of non-resident purchases and sales declined from 16,2 per cent in 1998 to 12,7 per cent in the first ten months of 1999.

Share market

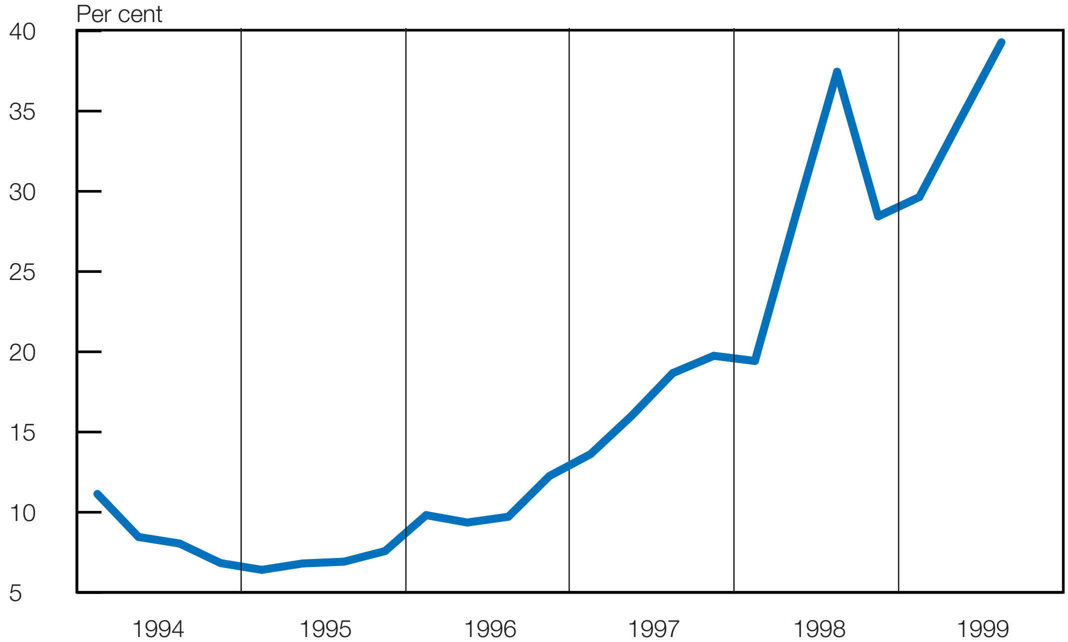
The low level of fixed capital formation by private-sector organisations was reflected in a decline in the amount of capital raised in the *primary share market* by companies listed on the Johannesburg Stock Exchange, from R55 billion in the first three quarters of 1998 to R32 billion in the first three quarters of 1999. Uncertainties about the sustainability of the current but still rather hesitant recovery, caused the quarterly amount of new capital mobilised to fall from R14,8 billion in the second quarter of 1999 to R9,2 billion in the third quarter. The demutualisation and listing of Old Mutual accounted for about one-third of the total amount of capital raised in the third quarter of 1999.

Capital raised in the primary share market



Turnover in the *secondary share market* was brisk in the first ten months of 1999 as the recovery of share prices in the first two quarters of the year and later the heightened volatility in the price of gold shares fuelled trading activity. The value of shares traded in the first ten months of 1999, at R369 billion, exceeded the R319 billion traded in the whole of 1998. The quarterly value increased from R71 billion in the fourth quarter of 1998 to consecutive all-time highs of R114 billion and R128 billion in the second and third quarters of 1999 respectively. *Market liquidity*, measured by turnover as a percentage of market capitalisation, accordingly rose from 28 per cent in 1998, on an annualised basis, to an all-time high of 45 per cent in July 1999.

Share market liquidity



Annualised
Turnover as a percentage of market capitalisation

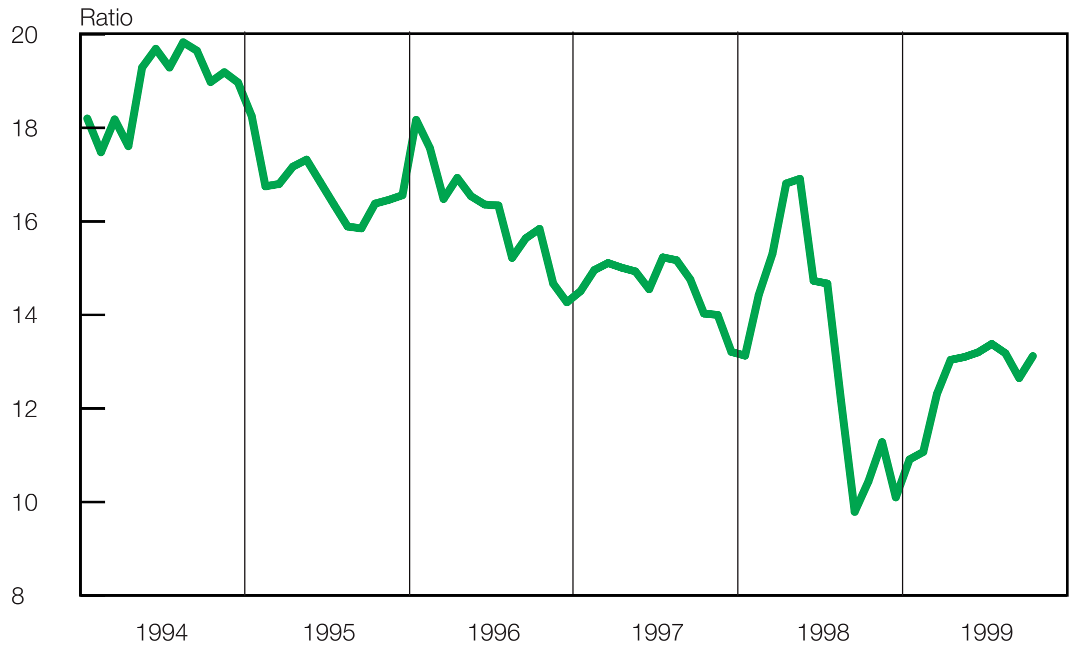
Foreign participation in the secondary share market broadly kept pace with total turnover on the Johannesburg Stock Exchange. Non-residents' share transactions as a percentage of total purchases and sales on the share market remained at an average level of 28 per cent in the first ten months of 1999 – roughly the same percentage as in 1998. On a net basis, non-residents increased their holdings of South African listed shares by R35,7 billion in the first ten months of 1999, compared with R42,3 billion in the whole of 1998.

The *monthly average price level of all classes of shares* increased, on balance, by 45 per cent from September 1998 to October 1999. This increase occurred mostly in the months from October 1998 to April 1999 and then in October 1999; from May to September 1999 share prices tended to decline generally. The strong increase in share prices over the past twelve months or so was mainly driven by increases in the financial and resources sectors which countered the impact of the fall in the prices of gold-mining shares from November 1998 to July 1999. From

August to October 1999 the gold-mining sector supported further gains in the resources sector, but the financial sector then weakened. Notwithstanding the strong recovery in the past year, the average monthly all-share price index in October 1999 was still some 12 per cent lower than the all-time high in May 1998.

The improvement in the share market over the past year led to a decrease in the *monthly average dividend yield* on all classes of shares from 3,5 per cent in September 1998 to 2,4 per cent in July 1999. When the general increase in share prices flattened in the ensuing months, the monthly average dividend yield increased somewhat but receded again to 2,4 per cent in October 1999. The movements in the monthly average *earnings yield* of all classes of shares, excluding the shares of gold-mining companies, followed the same pattern as that of the average dividend yield: it declined from 10,2 per cent in September 1998 to 7,5 per cent in July 1999, and increased, on balance, to 7,6 per cent in October. Mirroring the movements in the earnings yield, the *price-earnings ratio* of all classes of shares, apart from gold shares, rose from 9,8 in September 1998 to 13,4 in July 1999, and then fell back to 13,1 in October.

Price-earnings ratio on all classes of shares



Excluding gold-mining shares

Market for derivatives

Activity in equity and commodity related contracts in the *formal derivatives market* was very buoyant in the first ten months of 1999. *Non-resident participation* in futures and options on futures contracts, together with price volatility and turnover in the underlying securities and commodities markets, supported such activity. *Non-resident participation* in the South African Futures Exchange, measured as a percentage of open interest, increased on average from 30 per cent in 1998 to 47 per cent in the first ten months of 1999.

The combined number of *futures contracts and options on futures contracts* traded on the South African Futures Exchange rose by 15 per cent in the first ten months of 1999 compared with the corresponding period of 1998. The number of contracts traded increased from a quarterly average of 4 million in 1998 to an all-time high of 5,7 million contracts in the second quarter of 1999, before receding to a still fairly high 4,4 million in the third quarter.

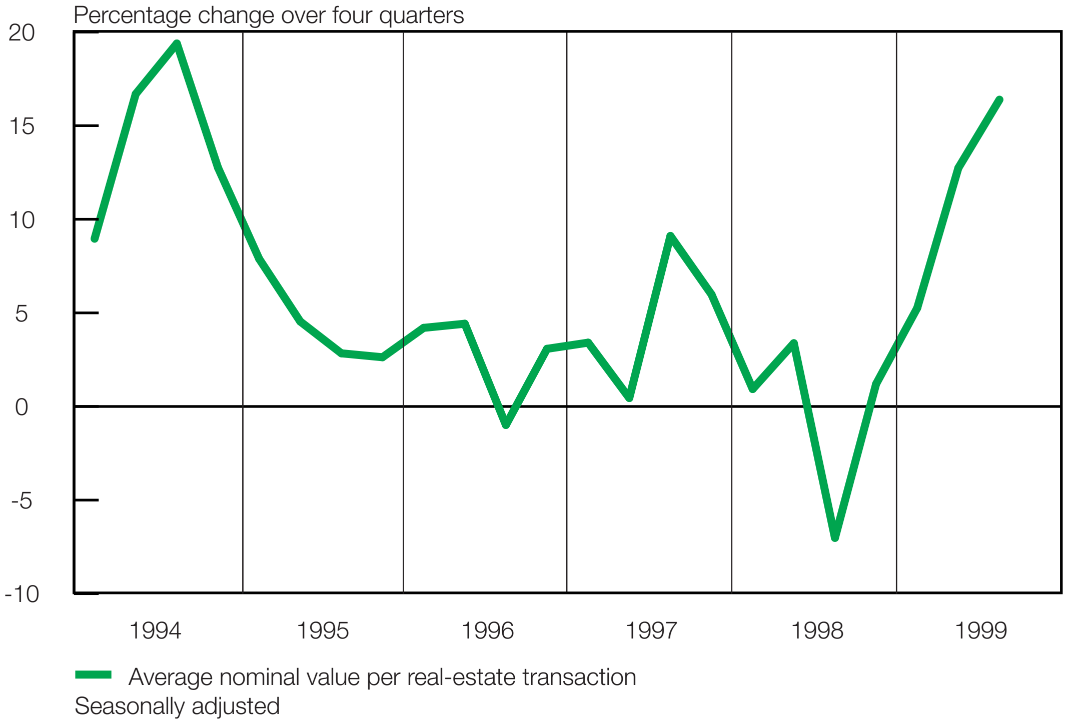
In September 1999, the number of trades conducted in *warrants* on the Johannesburg Stock Exchange from the beginning of the year surpassed the number of trades recorded in 1998 as a whole. The number of trades increased to an all-time high of 523 million in October and, for the first ten months of 1999, 1,8 billion warrants were traded: 70 per cent more than in the corresponding period of 1998. Significantly, the first warrant on a bond was launched in October 1999, two years after the introduction of warrants on equities.

Trade in *maize* commodity futures contracts was the main thrust behind a strong rise in the number of commodity futures contracts and options on such contracts traded in 1999. The number of *commodity futures contracts and options* on such contracts traded, more than doubled from 80 600 contracts in 1998 as a whole to 198 500 contracts in the first ten months of 1999. These contracts increased from a quarterly average of 20 000 in 1998 to a quarterly all-time high of 80 600 in the third quarter of 1999. These volumes indicate a better understanding of the benefits of derivatives in the deregulated agricultural marketing environment in South Africa.

Real-estate market

Activity in the real-estate market rebounded from deeply depressed levels in the first quarter of 1999. The reduction in mortgage bond rates from October 1998 led to the improved affordability of owner-occupied dwellings and, as market confidence increased, to rising turnovers in the real-estate market. The *value* of real-

Real-estate market



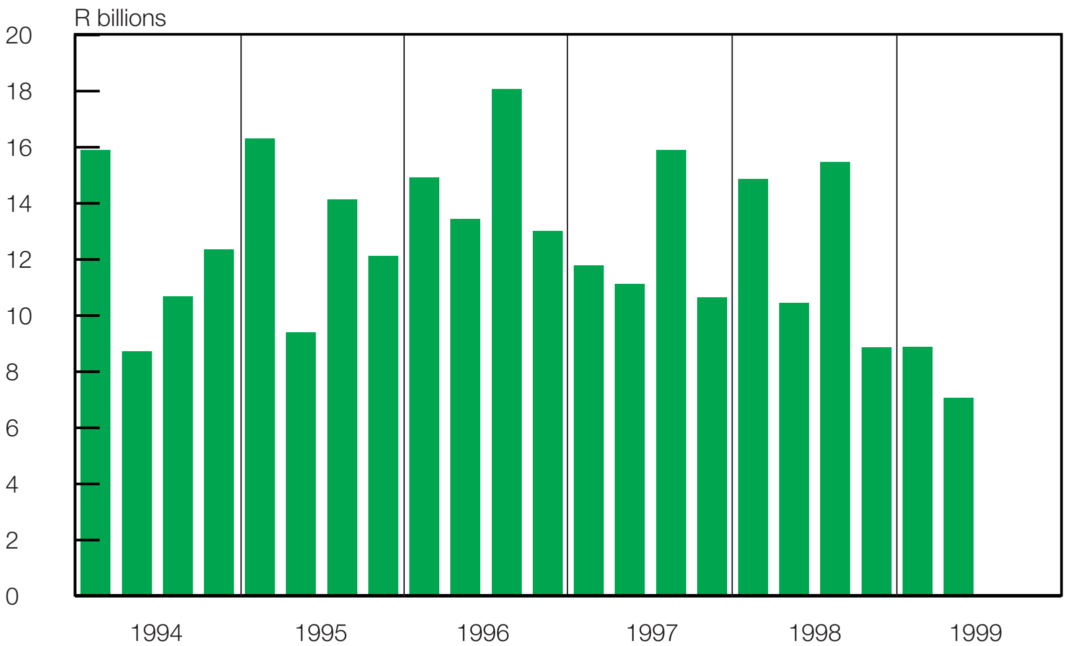
estate transactions increased from a low R5,7 billion in the first quarter of 1999 – its lowest level since 1995 – to R7,1 billion in the second quarter of 1999 and R7,6 billion in the third quarter. With the *number* of real-estate transactions increasing more modestly, the average *nominal value per real-estate transaction* increased by 11 per cent in the first nine months of 1999 relative to its level in the first nine months of 1998; i.e. an increase significantly exceeding the current rate of core and overall consumer price inflation.

Contractual savings market

Tight economic conditions in 1998 and most of 1999 caused a deterioration in the cash flows of many households. This was reflected in an increase in *policy surrenders* (i.e. where policyholders prematurely terminate their contributions to pension annuities and other life policies or buy back the present value of accumulated contributions) from R36,5 billion in 1997 to R41 billion in 1998. These surrenders increased, on balance, from a quarterly average value of R9,7 billion in the first three quarters of 1998 to a quarterly all-time high of R15,8 billion in the second quarter of 1999.

The *domestic current income surplus* of long-term insurers, official and private self-administered pension and provident funds (i.e. current receipts less current expenditure) decreased from a recent high of R59,5 billion for the calendar year 1996 to an annual average of R49,6 billion in 1997 and 1998. Then the domestic current income surplus decreased further from a quarterly average of R13,6 billion in the first three quarters of 1998 to R8,9 billion on average in the last quarter of 1998 and the first quarter of 1999. It then amounted to R7,1 billion in the second quarter of 1999. Downward asset revaluation, which had a significant negative impact on balance sheet values during 1998, is not included in the current income surplus of contractual savings institutions.

Institutional cash flows



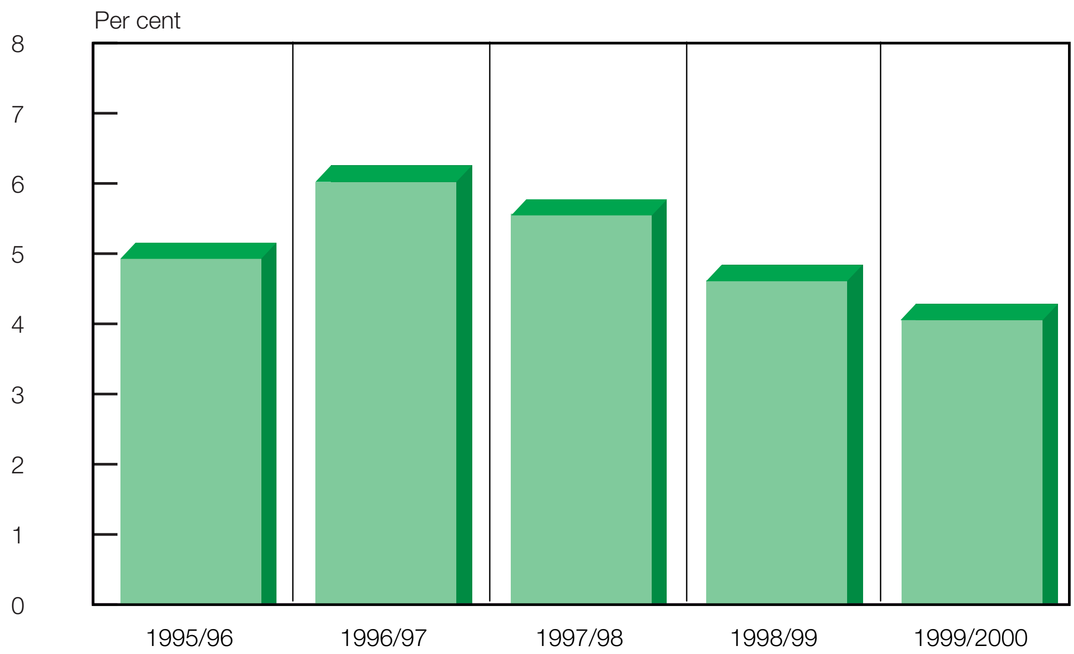
Domestic current income surplus

Public finance

Public-sector borrowing requirement

The *public-sector borrowing requirement* (i.e. the deficit before borrowing and debt repayment of the consolidated central government, provincial governments, local authorities and non-financial public enterprises and corporations) amounted to R6,1 billion in the July – September quarter of fiscal 1999/2000: R1,6 billion less than in the corresponding quarter of fiscal 1998/99. This brought the public-sector borrowing requirement for the first half of fiscal 1999/2000 to R16,2 billion which is R1,0 billion less than that recorded in the same period of the previous fiscal year. As a ratio of gross domestic product, the public-sector borrowing requirement declined noticeably from 4,6 per cent in the first half of fiscal 1998/99 to 4,0 per cent in the first half of fiscal 1999/2000. This ratio was substantially lower than the average ratio of 5,6 per cent observed in the first half of the preceding five fiscal years.

Public-sector borrowing requirement as a ratio of gross domestic product*



* April to September of each fiscal year

The improvement in the public-sector borrowing requirement was the result of a reduction in the borrowing needs of *non-financial public enterprises and corporations.* Revised financial results indicated a somewhat smaller borrowing requirement for public-sector businesses than had previously been estimated. On the basis of the new data, the borrowing requirement of these businesses declined from R1,5 billion in the first half of fiscal 1998/99 to R0,5 billion in the first half of fiscal 1999/2000.

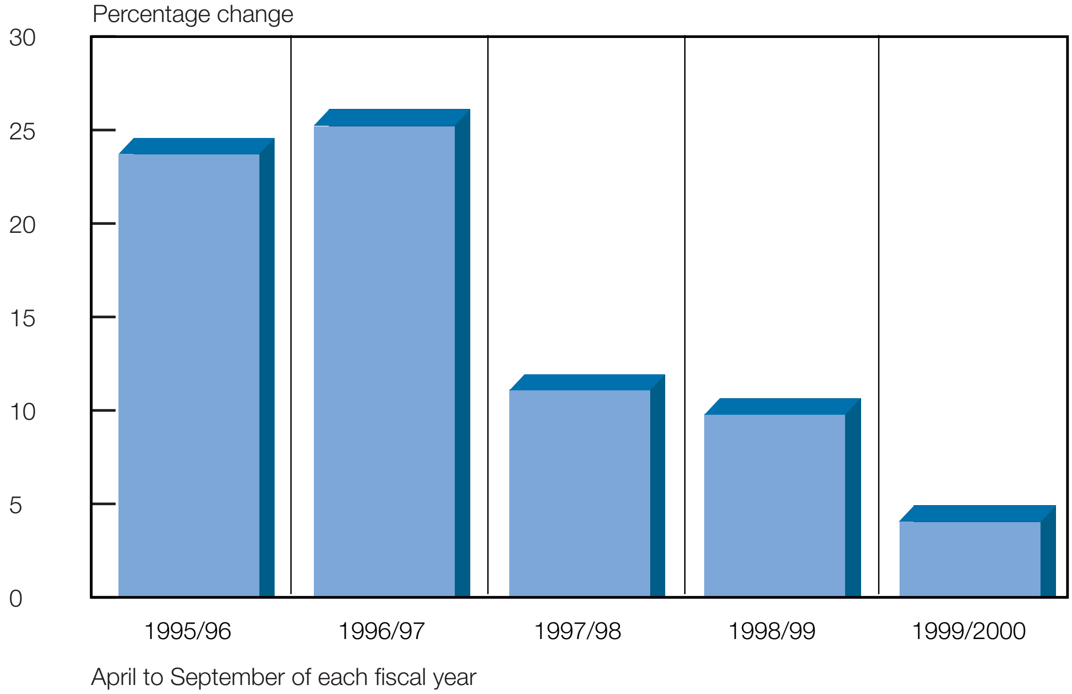
The borrowing requirement of *general government* amounted to R5,9 billion in the July – September quarter of fiscal 1999/2000, bringing the borrowing requirement for the first six months of the fiscal year to R15,7 billion. This equals the borrowing requirement recorded in the corresponding period of the previous fiscal year. The consolidated surpluses of the *provincial governments* deteriorated from R2,7 billion in the first six months of fiscal 1998/99 to R0,1 billion in the same period of fiscal 1999/2000. This decrease in the aggregate surplus was mainly the result of little growth in the amount of grants transferred to provinces and a year-on-year rate of growth of 5,3 per cent in expenditure. The slightly weaker financial position of provincial governments led to a decrease in their deposits with private banks, from R3,6 billion at the end of June 1999 to R3,4 billion at the end of September, and a slight increase in their combined bank indebtedness from R1,4 billion to R1,6 billion over the same period. The financial position of local governments improved slightly during the first six months of fiscal 1999/2000.

The improvement in the finances of the *consolidated central government* stemmed mainly from the improvement in the finances of national government. The financial position of social security funds was revised according to more accurate accounting information and the funds also contributed to the improvement in the finances of the consolidated central government.

National government finance

National government expenditure in the July – September quarter of fiscal 1999/2000 amounted to R56,9 billion which brought this expenditure in the first six months of fiscal 1999/2000 to R110,0 billion. This took the year-on-year rate of increase in government expenditure to 6,8 per cent in the first six months of fiscal 1999/2000, which was somewhat higher than the budgetary provision of 5,9 per cent for the fiscal year

Interest on government debt



as a whole. The rate of increase in national government expenditure was lower than the increase of 8,0 per cent in the corresponding period of the previous fiscal year and also lower than the average year-on-year rate of increase of 11,5 per cent in the first six months of the preceding five fiscal years. Interest on government debt in the first six months of fiscal 1999/2000 amounted to R21,7 billion, representing a year-on-year rate of increase of only 4,0 per cent.

National government expenditure as a ratio of gross domestic product amounted to 27,4 per cent in the first six months of fiscal 1999/2000, which was slightly lower than the 27,7 per cent that had been recorded in the corresponding period of the preceding fiscal year. After allowing for cash-flow adjustments associated with, among other things, requisitions from the Exchequer account but not yet spent, government expenditure increased by 5,6 per cent in the first six months of fiscal 1999/2000 relative to the corresponding period of the previous fiscal year.

If national government expenditure in October 1999 is also taken into consideration, the year-on-year rate of increase in the first seven months of fiscal 1999/2000 came to 5,2 per cent. The cash-flow adjusted expenditure in the first seven months of fiscal 1999/2000 amounted to R123,7 billion, compared with the R118,9 billion recorded in the same period of the previous fiscal year.

National government revenue (excluding extraordinary revenue) amounted to R49,0 billion in the July – September quarter of fiscal 1999/2000. Such revenue increased at a year-on-year rate of 8,3 per cent in the first six months of fiscal 1999/2000 to amount to R88,9 billion. The Budget for fiscal 1999/2000 envisaged an increase of 4,8 per cent on the actual collections of the previous fiscal year.

The higher-than-budgeted rate of increase in government revenue could mainly be attributed to sharp increases in inland revenue receipts which increased at a year-on-year rate of 10,1 per cent in the first six months of fiscal 1999/2000 compared with the 5,2 per cent envisaged in the Budget. Receipts from customs and excise duties decreased at a year-on-year rate of 3,3 per cent in the first six months of fiscal 1999/2000 against a budgeted rate of increase of 1,8 per cent for the year as a whole. This decrease can mainly be ascribed to a decline in the revenue collection of customs duties in the first six months of fiscal 1999/2000 relative to the first six months of fiscal 1998/99.

Percentage increase in national government revenue in fiscal 1999/2000*

Revenue source	Budgeted	Actual Apr - Sep
Inland revenue	**5,2**	**10,1**
Income tax	3,4	11,4
Value-added tax	7,7	8,9
Other inland revenue	5,6	11,8
Customs and excise duties	**1,8**	**-3,3**
Customs duty	10,4	-3,2
Fuel levy	5,9	5,7
Other excise duty	9,1	11,2
Total revenue	**4,8**	**8,3**

* Based on actual outcome of previous fiscal year

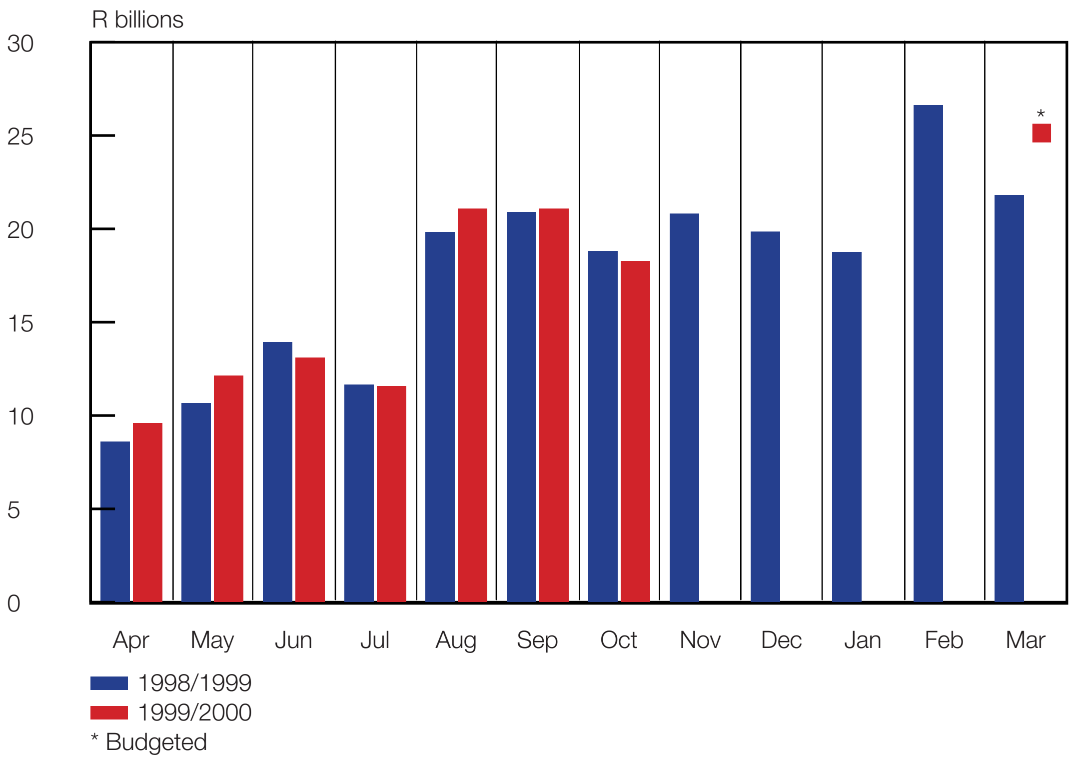
As a ratio of gross domestic product, national government revenue amounted to 22,2 per cent in the first six months of fiscal 1999/2000 which equalled the ratio recorded in the corresponding period of the previous fiscal year.

After allowance had been made for cash-flow adjustments resulting from funds surrendered by government departments to the Exchequer and other receipts, national government revenue amounted to R90,4 billion in the first six months of fiscal 1999/2000. This represents a rate of increase of 9,1 per cent in the first six months of fiscal 1999/2000 compared with the corresponding period of the previous fiscal year.

National government revenue in October 1999 amounted to R17,7 billion and brought the revenue for the first seven months of fiscal 1999/2000 to R106,6 billion or 6,7 per cent more than in the same period of fiscal 1998/99. This rate of increase in national government revenue was once again the result of sustained strong growth in inland revenue collections. Inland revenue increased at a year-on-year rate of 6,0 per cent to amount to R93,0 billion in the first seven months of fiscal 1999/2000. The receipts from customs and excise duties increased at a rate of 12,0 per cent in the first seven months of fiscal 1999/2000 compared with the rate of 1,8 per cent envisaged in the Budget. National government revenue, adjusted for cash flows associated with surrenders by government departments and other receipts, amounted to R108,5 billion or 7,8 per cent more than in the first seven months of fiscal 1998/99.

The net result of the higher-than-budgeted revenue and expenditure was a *national government deficit before borrowing and debt repayment* which amounted to R21,1 billion in the first six months of fiscal 1999/2000. As a ratio of gross domestic product, the deficit before borrowing and debt repayment amounted to 5,3 per cent in the first six months of fiscal 1999/2000. This can be compared with the 5,6 per cent

National government cumulative deficit before borrowing



recorded in the corresponding period of the previous fiscal year. A comparison of the evolution of the national government deficit during the current fiscal year with the pattern of the previous year indicates that the budgeted deficit for the full year will probably be realised.

The deficit of R21,1 billion in the first six months of fiscal 1999/2000 came to 83,9 per cent of the deficit budgeted for the year as a whole. This was lower than the 88,3 per cent recorded in the corresponding period of the previous fiscal year. The deficit before borrowing and debt repayment, adjusted for cash flows, amounted to R18,4 billion in the first six months of fiscal 1999/2000.

The net result of the national government's revenue and expenditure in October 1999 was a surplus of R2,8 billion which brought the national government deficit before borrowing and debt repayment down to R18,3 billion in the first seven months of fiscal 1999/2000. The deficit before borrowing and debt repayment, adjusted for cash flows, amounted to R15,2 billion in the first seven months of fiscal 1999/2000. The greater part of the cash-flow deficit in the first seven months of fiscal 1999/2000 was financed by means of new issues of government bonds, both in the domestic and foreign markets. The deficit was financed as indicated in the accompanying table.

Financing of the national government deficit in the first seven months of fiscal 1999/2000

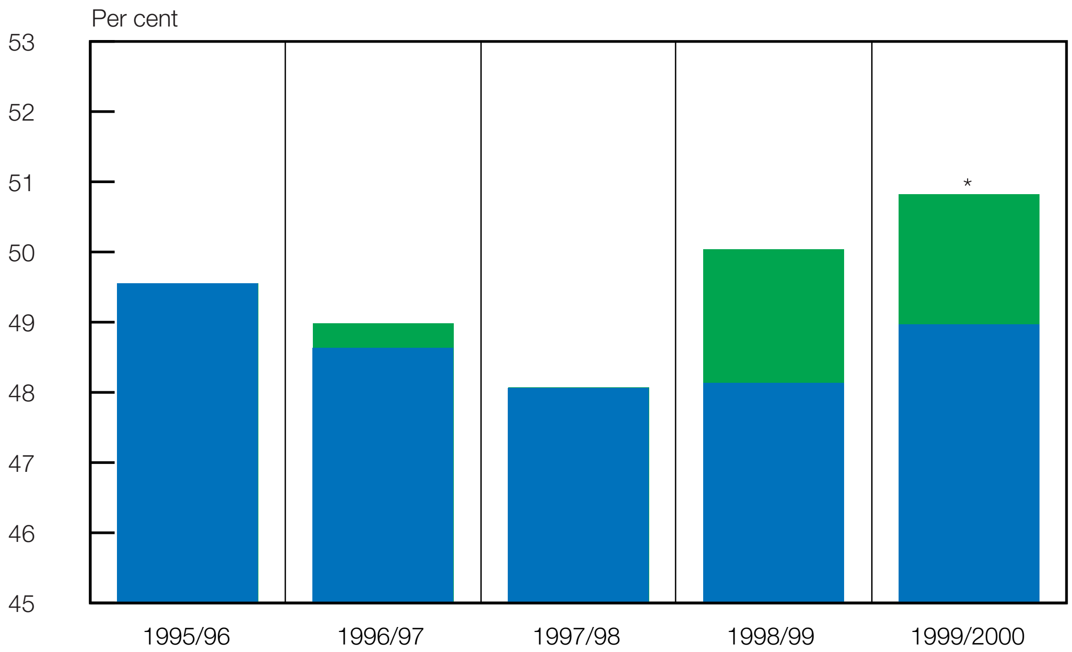
Financial instruments	R millions
Government bonds (including discount)	11 388
Less: Discount on government bonds	2 509
Net receipts from government bonds issued	**8 879**
Treasury bills	822
Extraordinary receipts	
Sasria	3 073
Demutualisation levy	577
Airports Company	44
Extraordinary payment	
Closed pension fund	-152
Foreign loans	8 301
Redemption of Namibian debt	-272
Redemption of Section 239 debt*	-160
Non-marketable securities	-2
Increase in available cash balances	
Exchequer and Paymaster-General account	-3 970
Foreign investment balance	-1 956
Total net financing	**-15 184**

* Debt of the former Transkei, Bophuthatswana, Venda and Ciskei and self-governing territories

Long-term funding was obtained at an average rate of 14,4 per cent per annum and short-term instruments were sold at an average rate of 12,8 per cent per annum in the first seven months of fiscal 1999/2000. These rates can be compared with a budget assumption of 14,0 per cent. Government also managed to secure a new five-year eurobond issue to the value of 300 million at a rate that was 250 basis points higher than the rate on five-year bonds of the Federal Republic of Germany. The proceeds from this issue are set to facilitate the redemption of the global dollar bond, which matures on 15 December 1999.

The borrowing requirement of national government plus the discount on new government stock issues and the revaluation of foreign debt to take account of exchange rate changes, led to an increase in *total debt of national government* from R377,7 billion at the end of March 1999 to R398,2 billion at the end of September 1999. As a ratio of gross domestic product, government debt increased from 50,0 per cent at the end of March 1999 to 50,8 per cent at the end of September 1999. The debt of national government decreased slightly to R398,0 billion at the end of October 1999.

National government debt as a ratio of gross domestic product



As at 31 March
* As at 30 September 1999
Loan debt
Gold and Foreign Exchange Contingency Reserve Account

Adjustments Budget for fiscal 1999/2000

In the Adjustments Budget, tabled in Parliament on 29 October 1999, the Minister of Finance sought approval for additional expenditure of R1,8 billion for the fiscal year 1999/2000. This raised the budgeted expenditure to R218,6 billion for the fiscal year as a whole. The adjustment to expenditure had been necessitated by adjustments to allocations to provincial and local governments as well as unforeseen and unavoidable expenditure by national government departments.

Additional transfers of R1,4 billion to provincial governments according to the equitable share formula will be used primarily for reducing outstanding debts and backlogs in staff promotions. To provide for their millennium-related needs, R0,2 billion will be transferred to local authorities. Requests from government departments for additional funds included a provision for the introduction of the National Prosecution

Authority, unforeseen activities of the South African National Defence Force in support of the police service, transfers to the Rail Commuter Corporation and additional salary increases over and above the budgeted increases. Interest on government debt is now expected to be R1,6 billion less than envisaged at the time of the Budget in February 1999.

Provision was also made in the Adjustments Budget for an upward revision of the initially estimated revenue. Ordinary revenue is now estimated at R193,4 billion, excluding demutualisation receipts of R0,6 billion. The adjustments to the expenditure and revenue estimates resulted in a deficit before borrowing and debt repayment of R25,2 billion on the budget of national government. This is equivalent to 3,1 per cent of the estimated gross domestic product. However, if the demutualisation levy of R0,6 billion is included in the revenue, and the cost of the revaluation of maturing foreign loans of R2,0 billion is excluded from the expenditure of national government, the deficit is estimated at R22,6 billion which is equivalent to only 2,8 per cent of the estimated gross domestic product.

Adjustments Budget estimates for 1999/2000

	R billions
Original budgeted expenditure	216,8
Plus: Additional expenditure	3,4
Total	220,2
Less: Savings	1,6
Total adjusted expenditure	218,6
Total revenue	193,4
Adjusted deficit	**25,2**
Adjusted deficit as percentage of gross domestic product	3,1

The Medium Term Budget Policy Statement

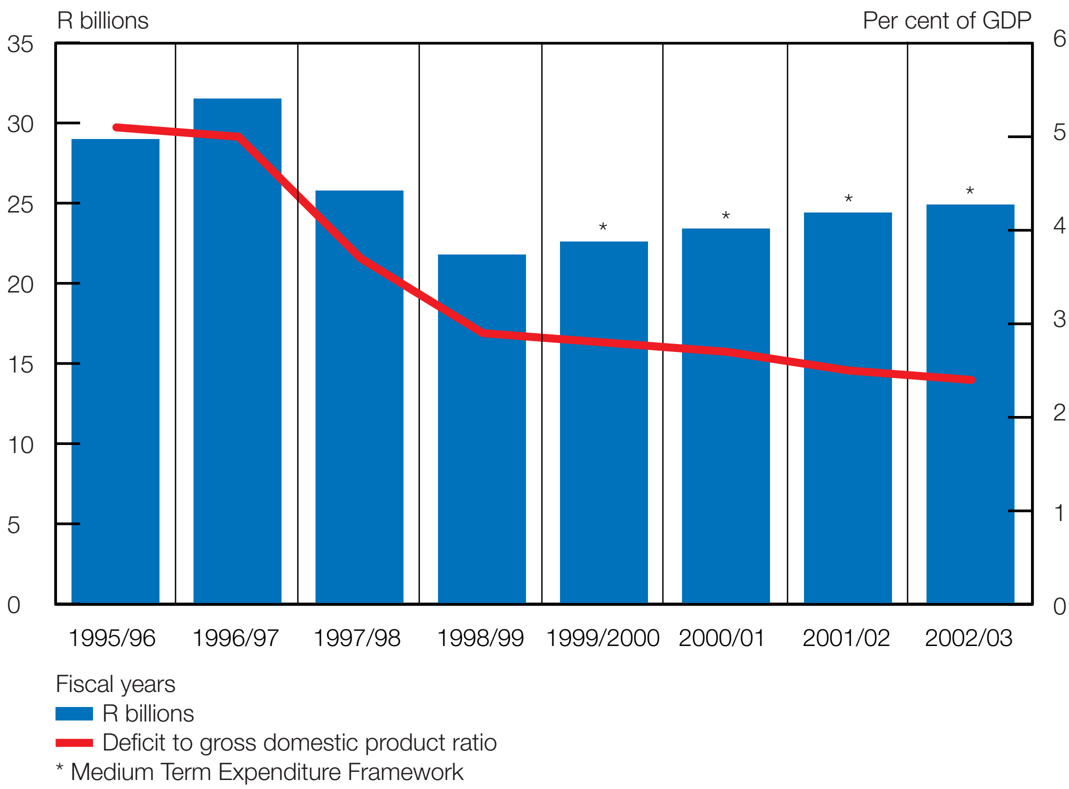
The Minister of Finance presented the 1999 Medium Term Budget Policy Statement to Parliament on 29 October 1999. The Minister stated that this third Medium Term Budget Policy Statement reviews the difficult adjustments that were made but also reflects on the improved prospects for the economy for the next three years. The statement was prepared against the background of a reduced budget deficit as a ratio of gross domestic product over the past three years, which has led to lower borrowing requirements and reduced interest payments on government debt.

Some structural difficulties in the South African economy remained important factors which were taken into consideration. Government is continuously working towards addressing these structural problems through specific measures. These measures include the introduction of inflation targeting as a framework for monetary policy, steps to promote public-sector and private-sector investment, the restructuring of the public sector, enhancing the propensity to save, a review of elements in the labour market that may have an impact on employment creation, and trade agreements that might be beneficial to exports over the longer term.

The Minister also announced that the new Medium Term Expenditure Framework focuses on the wider public sector to ensure sound public finances, to protect the corporate assets owned by government and to ensure that public-sector activities provide optimal support for reconstruction and development. New budget targets were announced, including targets for borrowing by public-sector bodies outside the Budget of national government. These targets should contribute to lowering the public sector's claims on available savings and increase the prospects for growth.

The 1999 Medium Term Budget Policy Statement reiterated the increased emphasis on the quality and efficiency of public-service delivery. Government remains committed to reforms in the budgetary process and improved information about service delivery that will enable more accountable decision making. Formal service delivery objectives, indicators and targets will be introduced in selected pilot departments in national and provincial government. These reforms will be supplemented by new, effective financial management, stemming from the passage of the Public Finance Management Act. Managers will now be given greater freedom to manage, within a strong framework of accountability.

National government deficit



Government accepts that improved long-run growth, employment creation and an equitable distribution of income are the underlying goals of fiscal policy. Increased investment and sustainable growth are supported by government through the following fiscal policy objectives:

- Moderating the level of government consumption expenditure, inclusive of public service personnel expenditure, as a ratio of gross domestic product;
- enhancing capital formation by general government and public corporations;
- reducing the level of government dissaving, in part through steady reductions in the budget deficit;
- establishing the level of debt and reducing debt service costs;

- lowering the burden of tax on the economy by broadening the tax base and reducing the distorting effects of tax; and
- reprioritising government expenditure to support growth, employment, income redistribution and extending economic opportunities.

These policy objectives led to the adoption of specific aims for the wider general government and public-sector accounts for the ensuing three years covered in the 1999 Medium Term Expenditure Framework. These aims are
- to lower government consumption expenditure as a ratio of gross domestic product to 19 per cent by fiscal 2002/03;
- to maintain real growth in general government capital formation of 5 per cent a year;
- to reduce general government dissaving by 1 per cent of gross domestic product a year;
- to reduce interest on public debt to 5,5 per cent of gross domestic product by fiscal 2002/03; and
- to lower general government tax revenue to 25 per cent of gross domestic product by fiscal 2002/03.

As indicated in the accompanying table, government envisages a steady decline in the borrowing requirement at all levels of the public sector over the next three fiscal years. The national government deficit is projected to reach 2,4 per cent of gross domestic product in fiscal 2002/03 and general government's borrowing requirement is projected to reach a level of 2,6 per cent of gross domestic product at that time. Similarly, the public-sector borrowing requirement is projected to decline to reach 3 per cent of gross domestic product in fiscal 2002/03.

Fiscal projections

	1999/2000 revised estimates	Medium-term estimates		
		2000/01	2001/02	2002/03
	R billions			
National government				
Revenue	194,0	210,7	227,3	243,0
Expenditure	216,6	234,2	251,6	267,9
Deficit before borrowing	22,6	23,4	24,4	24,9
General government deficit	**24,4**	**25,6**	**25,8**	**26,9**
Public-sector deficit	**28,1**	**29,1**	**29,7**	**31,0**
	Ratio of gross domestic product (per cent)			
National government				
Revenue	24,0	23,9	23,7	23,5
Expenditure	26,8	26,6	26,3	25,9
Deficit before borrowing	2,8	2,7	2,5	2,4
General government deficit	**3,0**	**2,9**	**2,7**	**2,6**
Public-sector deficit	**3,5**	**3,3**	**3,1**	**3,0**

Opening statement at the Monetary Policy Committee

13 October 1999

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

I would like to welcome the Deputy Governors and senior members of the staff of the South African Reserve Bank, who are gathered here today at this first meeting of the Monetary Policy Committee. The significance of this first meeting is who will be with us for this first session, now that we have created a formal decision-making process for monetary policy in South Africa, as was announced in my address to the shareholders of the Bank on 24 August 1999.

I would also like to welcome representatives of the news media. We have decided to open the start of this meeting to the media, so that the members of the committee can be introduced to the public, and further that the public can gain a better understanding of the monetary policy decision making process. Monetary policy decisions affect the lives of each and every citizen of South Africa, and we are certain that it is correct that people should have a good insight into how we arrive at these decisions.

Let me start off by introducing the members of the committee, other than myself. Some of them will be familiar to you; others may be complete strangers. The members of the committee are: Senior Deputy Governor James Cross, who is on official duty in Europe, Deputy Governor Timothy Thahane, Deputy Governor Gill Marcus, Chief Economist and Head of Research Dr Ernie van der Merwe, Head of Bank Supervision Mr Christo Wiese, Head of International Banking Mr Bertus van Zyl, Head of Money and Capital Markets Dr Roelf du Plooy, Dr X P Guma (international economic research), Dr Daleen Smal (econometric modelling), Dr Monde Mnyande (national economy), Dr Johan van den Heever (financial analysis and public finance), Mr Bernie de Jager (economic reviews and statistics), Head of Organisation Development and Transformation Thelma Ngcobo, Brian Kahn (monetary policy research), and we also have in attendance, the Secretary of the Bank, Mr Jannie Rossouw.

I would have loved to tell you more about each and every one of them, but unfortunately we do not have the time. The curricula vitae of the unfamiliar committee members will be made available to you at the end of this session.

There has understandably been some attention in the markets and in the financial media on this first meeting. People expect us to provide them with some idea of what factors are taken into account when monetary policy decision makers decide on monetary policy. At the end of today, after our deliberations, we will release a statement which will put across the monetary policy stance which has been decided upon by this MPC.

The last time we communicated formally with the markets about the monetary policy stance was on 7 September 1999. At the time, the Reserve Bank decided to give a signal to the market for a quicker reduction in the repo rate for the following reasons: the inflation outlook for next year was favourable; the growth in the money supply and credit extension had moved within the guideline range of 6 – 10 per cent, the overall balance of payments situation had been healthy and the net gold and other foreign reserves had risen strongly, and the rate of growth in nominal unit labour costs had slowed down.

The market responded to the signal as expected, and banks announced a 100 basis point reduction in their prime overdraft rates to 15,5 per cent on 23 September 1999.

Since sending the signal, the Reserve Bank has endorsed the trend in the repo rate by meeting the full daily liquidity requirement in the money market. In other words, the

Bank has maintained a neutral monetary policy stance. In our deliberations today, we have to decide whether it is appropriate to continue with a neutral stance, or whether circumstances have changed sufficiently to require a change in the stance.

Since the banks announced a cut in their prime overdraft rates last month, the repo rate has dropped by 43 basis points to 12,32 per cent yesterday, bringing the gap between the prime overdraft rate and the repo rate to 318 basis points. The trend in the repo rate forms one of the factors for our discussions today, as do other developments in the financial markets, the real economy and on the international front.

Since 7 September, when we last communicated formally with the market, bond yields have remained high, although the yield on the R150 bond has declined from 14,68 per cent to 14,34 per cent yesterday afternoon. Over the same period, the rand exchange rate weakened slightly from R6,0460 to the US dollar to R6,07 yesterday afternoon.

The gold price has risen sharply, from a London afternoon fix of US$255,60 per fine ounce on 7 September to a morning fix of US$323,50 yesterday. The rise reflects the agreement by 15 European central banks that gold will remain an important element of global monetary reserves. These central banks, which included the Bank of England, have decided to cap annual gold sales at 400 tons per year over the next five years.

Share prices on the Johannesburg Stock Exchange have firmed, with the all-share index rising from 6 898 to yesterday's close of 7 390.

On the international front, interest rates in the major industrialised economies are trending higher. The Bank of England tightened policy last month, following in the footsteps of the US Federal Reserve. The European Central Bank may also be moving towards tightening policy to pre-empt a pick-up in inflation. In addition, concerns about Y2K computer problems in the run-up to the new millennium could affect liquidity in the financial markets.

In the real economy in South Africa, signs of a recovery have emerged, and economic growth has picked up to 1,7 per cent in the second quarter of this year. The economic recovery has been accompanied by a slowdown in headline consumer inflation, which has fallen from an annual rate of 9,4 per cent in November last year to 3,2 per cent in August this year. Core inflation, which excludes mortgage bond rates, increased from 6,9 per cent in March 1998 to 8,2 per cent in July this year before falling back to 7,9 per cent in August 1999.

Money supply and private-sector credit growth are below the Reserve Bank's guideline for growth of 10 per cent. Money supply growth has fallen significantly, to 5,3 per cent in August from almost 19 per cent in the same month last year. Private-sector credit growth has fallen to 9,8 per cent in August, compared with 17,5 per cent in August 1998. Although private-sector credit growth rose in August from the level of 9,5 per cent in July, consumer credit demand remained weak.

It is against this backdrop that we will today consider detailed developments in the real economy and in the financial markets, with a view to looking ahead to the future path of inflation.

That concludes my opening statement and the part of the meeting which is open to the media.

I thank you for you attendance.

Statement of the Monetary Policy Committee

13 October 1999

Released by the South African Reserve Bank after the deliberations at the first meeting of the Bank's Monetary Policy Committee (MPC) in Pretoria

In the Governor's address to shareholders at the annual general meeting of the South African Reserve Bank held on Tuesday, 24 August 1999, it was announced that a Monetary Policy Committee (MPC) would be established for the formulation of monetary policy. It was explained that the creation of this Committee formed part of ensuring a well-organised decision-making process in the Bank as an important factor in the conduct of monetary policy. The Monetary Policy Implementation Committee is tasked with the implementation of the decisions of the MPC, but may also bring issues to the attention of either the Governor or the MPC.

The Governor also explained in his address that the MPC will consist of the Governor and deputy governors as voting members and senior officials of the Bank as non-voting members, although the final decision-making power on monetary policy matters will nevertheless still vest in the Governor and deputy governors, in accordance with the current legal framework. In addition, it is envisaged that specialists from outside the Bank might in due course be co-opted to serve on the MPC, although an amendment to the South African Reserve Bank Act will be necessary beforehand.

The Bank's new Monetary Policy Committee met for the first time for the whole of today. Its current composition is:

Voting members

Mr T T Mboweni	(Governor and Chairperson)
Mr J H Cross	(Senior Deputy Governor)
Mr T T Thahane	(Deputy Governor)
Ms G Marcus	(Deputy Governor)

Non-voting members

Dr E J van der Merwe	(Chief Economist and Head of Research)
Mr C F Wiese	(Banking Supervision)
Mr L van Zyl	(International Banking)
Mr B L de Jager	(Economic Reviews and Statistics)
Dr R M du Plooy	(Money and Capital Markets)
Dr X P Guma	(International Economic Research)
Dr M M Smal	(Econometric Modelling)
Dr M Mnyande	(National Economy)
Dr J P van den Heever	(Financial Analysis and Public Finance)
Ms T T Ngcobo	(Organisation Development and Transformation)
Mr B Kahn	(Monetary Policy Research)

The secretary of the committee is Mr J J Rossouw, who is also the Secretary of the Reserve Bank.

In reviewing the state of the economy today, specific note was taken by the MPC of the following developments:

International economic developments

Global economic and financial conditions have improved markedly during 1999. Financial and economic conditions in the African and other emerging-market economies have generally become much more stable and the outlook for economic growth seems to be favourable. The sharp changes that were discernible in the money and capital market interest rates of emerging-market economies in 1998, stabilised considerably during the course of 1999. At present the level of real interest rates in South Africa is more or less in the middle of the range of interest rates in other emerging-market economies.

With the exception of Japan, the economic growth prospects of the more advanced economies have improved significantly. The economic performance of the United States, with strong growth, falling unemployment and low inflation, has been remarkable, even though indications are that there will be a slight slowdown in the period ahead. The economic growth in the European Union, which had lost some momentum in the second half of 1998, showed signs of recovery in the first half of 1999. Although the International Monetary Fund is projecting negative growth for Japan in 1999, the rate of increase in real gross domestic product is expected to become positive in the year 2000. The inflation rate in the advanced economies has edged up slightly during 1999, and interest rates in the United States and Europe are tending to rise. There is evidence of a tightening monetary policy.

Real economic conditions in South Africa

Quarterly growth of real gross domestic product in South Africa at an annualised rate accelerated from 0,6 per cent in the first quarter of 1999 to 1,7 per cent in the second quarter. Aggregate real domestic expenditure increased at a seasonally adjusted and annualised rate of 6 per cent in the second quarter of 1999. This increase could mainly be ascribed to an accumulation of inventories, which more than outweighed a further contraction in gross fixed capital formation and the consumption expenditure of general government. The final consumption expenditure by households showed almost no change. The existing excess production capacity should not present any upward demand pressures on inflation.

The year-on-year rise in the cost of labour per unit of output moderated to 6,4 per cent in the first quarter of 1999 and even further to 4,8 per cent in the second quarter because of a deceleration in nominal wage growth. Consumer price inflation continued to slow down. However, mainly due to the exclusion of changes in mortgage bond rates, the core inflation rate gradually crept higher from a year-on-year level of 6,9 per cent in March 1998 to 8,2 per cent in July 1999, but then declined to 7,9 per cent in August. The change in the production price index, measured over periods of twelve months, continued to rise during 1999 largely due to an increase in the prices of imported goods. It is generally expected in South Africa that core consumer price inflation may, on balance, decline further from current levels.

Domestic monetary developments

The growth in money supply has expanded relatively slowly during the first seven months of 1999. The year-on-year growth in the M3 money supply remained in the lower half of the 6 to 10 per cent guideline range of the Bank, before declining to 5,3 per cent in August. The growth in M3 was partly held back by a rise in the income velocity of circulation of this broad money supply.

The growth over twelve months in total domestic credit extended by the monetary sector slowed down from a recent peak of 21,7 per cent in August 1998 to 10,5 per cent in August 1999. This decline could be attributed to factors such as the weak spending of households on durable consumer goods, a decline in the private sector's fixed capital formation, a weak demand for working capital by the corporate sector and a shift in trade finance from domestic to offshore sources of credit.

Domestic money and capital markets

After liquidity in the money market had tightened considerably during the first eight months of 1999, conditions have eased somewhat in September. Declining overall consumer price inflation and more stable conditions in financial markets were conducive to declining money market interest rates.

Activity on the bond and share market remained buoyant and the value of real estate transactions has improved during 1999 from the very low levels at the end of the previous year. Bond yields generally showed a steadily rising trend from the beginning of the second quarter of 1999 in response to changes in international interest rates, and perceived domestic inflationary tendencies. Share prices behaved more positively and increased until June 1999 before declining somewhat in line with developments in international share markets. With the sharp increase in the gold price during September, share prices again recovered markedly from about the middle of the month.

Balance of payments and the foreign exchange market

The current account of the balance of payments (seasonally adjusted and annualised) changed from a surplus of R4,9 billion in the first quarter of 1999 to a deficit of R3,4 billion in the second quarter. From preliminary trade figures for July and August, it seems as if a further and perhaps somewhat larger deficit will be recorded in the third quarter of 1999. However, no difficulties are anticipated in the financing of the deficit on the current account, but the type of financial flows into the economy is easily reversible.

As a result of the relatively favourable overall balance of payments position of the country, the total gross gold and other foreign reserves increased from R42,2 billion at the end of December 1998 to R51,7 billion at the end of August 1999. In September 1999 the gross foreign reserves of the Reserve Bank rose by R1,9 billion to R39,2 billion at the end of the month and the net open position in foreign exchange of the Reserve Bank also improved further.

The outlook for international commodity prices has generally improved in response to a recovery in demand from Asia. The prices of South Africa's main commodity exports appeared to have reached a lower turning point in the first half of 1999. An announcement by European central banks that they would limit gold sales and the lending of gold reserves impacted positively on the gold price.

The nominal effective exchange rate of the rand decreased by 0,4 per cent from the end of December 1998 to 12 October 1999. The rand traded in a relatively stable range against the US dollar in the first nine months of 1999. From December 1998 to August 1999 the real effective exchange rate of the rand has risen by 3,4 per cent.

Stability in the financial sector

In contrast to many other emerging-market economies, the South African banking sector proved to be remarkably resilient in the global financial turmoil and its impact on domestic economic conditions. Although the non-performing loans of banks have increased during 1999, they also increased their provisions for bad and doubtful debts. The banks in South Africa are well capitalised and other sound banking supervision principles are being applied.

Considerable resources have also been applied to all phases of the Y2K compliance projects. After visits to and consultations with banks, they generally seemed well prepared for any problems that could arise. However, cognisance was taken of the possible effect of Y2K developments on financial conditions.

Monetary policy developments

Evidence that the emerging-market crisis was abating and other improvements in domestic economic conditions allowed a persistent decline in the repurchase rate of the Reserve Bank from 21,85 per cent early in October 1998 to 12,31 per cent on 13 October 1999, or by 9,54 percentage points. Over the same period, the prime overdraft rate of the banks was reduced from 25,5 per cent to 15,5 per cent or by 10 percentage points. Monetary policy has therefore been relaxed considerably during the course of 1999.

From 23 September 1999 (the date on which the banks announced a 1 percentage point cut in their prime lending rates) the repurchase rate has declined further by 44 basis points. The repurchase rate at first dropped sharply immediately after the prime rate was reduced, but from the end of September this decline has become more subdued.

After careful consideration of all these developments, the MPC of the Reserve Bank decided to maintain the current monetary policy stance. However, the committee noted potentially unfavourable domestic and international factors which may necessitate a reconsideration of the monetary policy stance.

The MPC will meet approximately every six weeks, and the next meeting will be held on Wednesday, 24 November 1999. A statement will be issued after each meeting of the Committee.

Statement of the Monetary Policy Committee

24 November 1999

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

The Monetary Policy Committee today made a detailed assessment of international economic conditions, domestic economic developments and the monetary policy stance. The main conclusions of the Committee are summarised in this statement.

International economic developments

The world economic conditions are generally expected to be favourable at the advent of the new millennium. In contrast to much of the 1990s, favourable economic conditions are projected for the advanced economies in 2000. Although economic growth is expected to decline slightly in the United States, its level will still be high. In the European Union and Japan the growth rate in real gross domestic product should accelerate. A sharp increase is projected in the economic growth rates of most emerging-market economies in Africa, Asia and Latin America.

The higher world economic growth is expected to take place under relatively stable economic conditions. Inflation rates should remain low in advanced economies and decline in most emerging-market economies. Current forecasts generally show sustainable balance of payments positions, while unemployment is expected to decline in the advanced economies. The creation of employment opportunities, however, still remains a challenge in many of the emerging-market economies.

The monetary policy stance has been tightened in the United States, Canada and the European Union in recent weeks based on signs of higher growth in money supply, bank credit extension and other aggregates indicating a build-up of inflationary pressures. The rise in short-term interest rates has on the whole been accompanied by a moderate decrease in long-term yields and interest rates.

Domestic real economic developments

Clear signs of an upturn in economic activity are apparent in South Africa. Four consecutive quarters of positive growth have been recorded. Moreover, the seasonally adjusted and annualised change in real gross domestic product accelerated consistently from ½ per cent in the fourth quarter of 1998 to 2 per cent in the second quarter of 1999 and slightly more than 3 per cent in the third quarter. This increase in domestic production was mainly propelled by a rise in real private consumption expenditure, the accumulation of inventories and an increase in agricultural production. To a large extent, the outcome was a result of a reduction in interest rates, the demutualisation of life assurance companies, good agricultural conditions and the fact that inventories had previously been run down. A sustainable economic recovery will be dependent largely on the export performance of the country. Fortunately, world economic conditions appear to be more favourable for a rise in South Africa's exports.

Despite the recovery in economic activity, the total number of people employed in the non-agricultural sectors of the economy declined by 50 000 in the first half of 1999. This decrease occurred mainly in the employment of public authorities in terms of the objective to create a smaller but more efficient government service. Although strikes and work stoppages increased during the course of 1999, labour productivity rose. This development, together with a slowdown in the rate of increase in the nominal salaries and wages per worker, was responsible for a decrease in the growth of nominal unit labour costs from a year-on-year rate of 6,4 per cent in the first quarter of 1999 to 4,8 per cent in the second quarter.

The Monetary Policy Committee also took note of recent reports from the private sector on the impact that the spread of HIV/Aids may have on economic activity.

Domestic monetary developments

The lower rate of increase in nominal unit labour costs contributed to the significant decline in consumer price inflation, which dropped to a year-on-year rate of 1,7 per cent in October 1999. More importantly, this decline was assisted by the fall of 8,5 percentage points in mortgage bond rates from October 1998. Other important measures of inflation, such as the core and production price indices, showed a distinct rising trend during 1999. Sharp increases in petrol and diesel prices from the beginning of 1999 were primarily responsible for this upward movement.

The growth rate in broad money supply (M3) measured over twelve months slowed down from a peak of 19,4 per cent in June 1998 to below the upper boundary of the money supply guidelines of 10 per cent from February 1999 and amounted to 7,8 per cent in September. The seasonally adjusted and annualised quarter-to-quarter growth in M3, however, recently accelerated again from 1,4 per cent in the second quarter of 1999 to 16,2 per cent in the third quarter. Broadly similar developments were discernible in both total and private-sector credit extended by the banking sector.

Domestic money and capital markets

Money market interest rates eased considerably in the course of 1999 in accordance with the direction stipulated by the Reserve Bank. By contrast, bond yields generally showed a steadily rising trend from the beginning of the second quarter of 1999 in response to changes in international interest rates and perceived domestic inflationary tendencies. From the middle of October 1999 the longer term interest rates began to decline moderately. The country and currency risk premiums of investment in South Africa decreased sharply.

Activity in the bond and share market remained buoyant. The value of real-estate transactions improved markedly in 1999 from the very low levels at the end of 1998. Non-residents participated heavily in the bond and share market, and their net portfolio investments amounted to no less than R50 billion from the end of 1998 to 22 November 1999. Non-residents' net purchases on the Johannesburg Stock Exchange came to R36 billion over this period and contributed to the increase in the monthly average price level of all classes of shares by 45 per cent over the period from September 1998 to October 1999. Bond holdings by non-residents rose by R14 billion from the beginning of 1999 to date.

Balance of payments and foreign exchange market

The current account of the balance of payments moved into a deficit from the second quarter of 1999 despite the still low level of economic activity in South Africa. The shift from a surplus to a deficit in the current account balance mainly reflected a deterioration in South Africa's terms of trade, which was partly offset by a decline in the volume of imports. The volume of South Africa's merchandise exports has not reacted much to the improved world economic conditions.

The financial account of South Africa with the rest of the world was characterised by the already mentioned large net inflow of portfolio investments. Foreign direct inflows into South Africa were relatively small. Further integration of South Africa into the world economy also led to large direct investments in other countries by residents. Moreover, in the third quarter of 1999 there seems to have been a substantial shift from foreign to domestic financing of trade transactions.

The overall surplus on the balance of payments and the utilisation of foreign credit facilities by the Reserve Bank to prevent any liquidity problems at year-end, resulted in a sharp increase in the Reserve Bank's gross international reserves to R42,6 billion at the end of October 1999. From the end of June to 16 November 1999, the net open position in foreign currency of the Reserve Bank declined from an oversold position of US$18,3 billion to US$14,5 billion.

The external value of the rand nevertheless fluctuated in a somewhat unsystematic way during the first ten months of 1999. As a result, the nominal effective exchange rate of the rand, on balance, showed almost no change from the end of 1998 to the middle of November 1999. This implies that there was a moderate increase in the real effective exchange rate of the rand over this period.

Stability in the financial sector

Relative stability was maintained in the financial sector during the third quarter of 1999, but there were some signs of liquidity shortages probably related to perceptions with regard to the possible effects of Y2K developments. The Reserve Bank continues to monitor these developments, and provided more liquidity to the banking sector.

The gross overdues of the banking sector as a ratio of loans and advances increased in the third quarter of 1999 to 4,73 per cent from 4,66 per cent in the preceding quarter. However, accounts overdue in respect of so-called other loans and advances continued to grow, whereas the growth in overdue amounts on mortgage payments moderated noticeably.

Monetary policy developments

Smaller banks were at times forced to make use of the marginal lending facility of the Reserve Bank and of their balances on cash reserve contra accounts due to liquidity problems. In view of these temporary developments, the Reserve Bank supported a decline in the liquidity requirement of banks from R10,3 billion on 13 October to R6,2 billion on 24 November 1999.

The Bank also continued with its neutral signals to the market by supplying fully in the daily liquidity requirements of banks. The repo rate accordingly continued to decline consistently by 1 basis point per day. From 23 September 1999 (the date on which the banks announced a 1 percentage point cut in their prime lending rates) the repo rate has declined further by 74 basis points.

After careful consideration of international and domestic economic developments, the Monetary Policy Committee of the Reserve Bank decided that the repo rate should be fixed at a level of 12 per cent. This fixed rate will apply as a temporary measure, until the next Monetary Policy Committee meeting, which can be convened as circumstances require.

This deviates from the agreed signalling procedures. We have taken this decision, given a possible year-end liquidity situation in the international and national money markets, arising primarily from the Y2K phenomenon. Although no disruptions are foreseen, the Bank is of the opinion that temporarily establishing a fixed, stable repo rate is in the interests of overall financial stability over this millennium change.

The Monetary Policy Committee also agreed to a reduction in the marginal lending rate. The marginal lending rate was initially introduced at one percentage point above the repo rate. This rate was then increased dramatically to a level of 20 percentage points above the repo rate as a result of the impact of the global financial crisis. In view of more stable conditions internationally, the marginal lending rate will be reduced from its current level of 15 percentage points to 5 percentage points above the repo rate, i.e. to 17 per cent from 25 November 1999.

Preparations to introduce inflation targeting

Considerable progress has been made with the preparatory work for the implementation of inflation targeting in South Africa. Discussions have taken place between staff of the Department of Finance, Statistics South Africa and the Reserve Bank about technical issues such as the price index which could be used and the targets which could be applied. International experts in inflation targeting were invited to participate in a round table discussion about inflation targeting with officials of the government and the Reserve Bank, as well as with some members of Parliament.

Improvements have been made to the forecasting techniques of inflation in the Reserve Bank. The Bank has already made considerable progress in developing a core model for the forecasting of inflation. In addition to the core model, Philips-curve models, other small-scale macroeconomic models, vector autoregressive models and calibrated models will be developed. The computer capacity of the Bank will be improved as part of the preparations for inflation targeting. The Reserve Bank has been in consultation with other central banks and a programme has been put in place for the improvement of the macroeconometric models. The Monetary Policy Committee reconfirmed the Reserve Bank’s commitment to ensure the widest possible consultation process as part of implementing inflation targeting.

Index linked bonds

by L P Venter[1]

Introduction

In the Budget Review of 17 February 1999, the Department of Finance indicated that the South African Government was investigating the introduction of a bond which would pay interest indexed to an appropriate measure of inflation. If South Africa were to issue index linked bonds, it would become one of a relatively small group of countries in the world to do so. Experiences with the introduction of index linked bonds in these countries, which include the United Kingdom, United States of America, Canada, New Zealand, Australia, Sweden, Argentina, Brazil, Israel, Poland and Mexico, have varied quite significantly. For example, in the United Kingdom consumer price inflation decreased from 11,9 per cent in 1981, the year of first issue, to 4,6 per cent two years later. In the case of Argentina consumer price inflation fell from 61,2 per cent in 1973, the year of issue, to 23,5 per cent in 1974 before it accelerated sharply to 182,9 per cent in 1975.

1 The author is grateful for the valuable contributions made by Johan van den Heever and other colleagues in the Research Department of the South African Reserve Bank. The views expressed in this paper are those of the author and do not necessarily represent those of the Reserve Bank

The issuing of index linked bonds in most countries resulted from the sharp increase in the cost of government debt due to high rates of inflation in the 1970s. These high rates of inflation were inter alia fuelled by high public spending in the United States at the time of the Vietnam War, the ensuing devaluation of the dollar and the first oil crisis and all its repercussions – all against the background of inflation-tolerant policies in many of the G10 countries.

In the 1980s the expansionary fiscal policies in some of these countries accelerated the growth in the public debt. As a result, real interest rates increased quite sharply. The high interest rates added further to public spending and in some cases developed into a persistent increase in public debt in relation to gross domestic product. Consequently, treasuries began searching for ways to manage public debt more effectively by, for example, issuing index linked bonds.

This note explains the mechanics of such bonds and how information about inflation expectations can be extracted once such bonds are issued. This follows the indication recently given by the Governor of the Reserve Bank that the market prices of such bonds would provide valuable information about inflation expectations to the Reserve Bank.

Reasons for issuance of government index linked bonds

The primary objective of government debt management is to minimise over the long term the cost of meeting government's financing needs, taking account of risk, while ensuring that debt management policy is consistent with monetary policy. The secondary objectives of government debt management may be to contribute to the improved functioning of financial markets, to contribute to the development of the bond market specifically or to promote private household saving. These objectives are normally implemented by constructing an optimal issuance strategy, setting out how government intends to finance its borrowing requirement by using different types of debt and maturities.

Government debt managers are primarily responsible for realising the government's borrowing needs, at as low a cost as possible, through non-inflationary ways of financing. Index linked debt has an impact on the real cost of government funding through its ability to insulate investors against an unexpected increase in inflation. Therefore, if investors are prepared to pay a premium for the guaranteed real returns on index linked bonds, the government should be able to obtain cheaper funding. This saving on the cost of government financing should, however, be weighed against risks; for example, a sharp increase in inflation would lead to a sharp increase in debt service costs.

Index linked debt may also influence the real debt service costs through other possible channels:

- Issuing index linked debt may further reduce real debt service cost by enhancing the government's credibility regarding the conduct of monetary policy; and
- market expectations of inflation may at times be less accurate than the government's own forecasts. If market expectations of inflation are higher than actual future inflation, government will ultimately pay less interest.

The design of index linked bonds

Index linked bonds can be defined as financial instruments designed to protect investors fully or partially against the erosion by inflation of the principal and interest due on their bond investments. A number of practical issues have to be resolved before a government or private-sector entity can issue index linked bonds. These include the choice of the price index, structure of security, time to maturity and the tax treatment of the interest and compensation for inflation.

Choice of the index

The choice of the index will depend on the needs of the issuer and investors. The issuer will want an index that fits well with its income stream expectations, and investors will want one that matches their expected spending flows. So the choice of an index is ultimately a compromise between the needs of potential borrowers and investors. There is no doubt that the preferences of certain groups of investors regarding the index will influence the demand for and also the amount of bonds issued, and therefore also the liquidity in the market for these bonds. In the United States the Treasury considered four price indices before issuing its first index linked bonds in January 1997. These indices were

- the consumer price index;
- the "core" inflation rate;
- the gross domestic product deflator; and
- the employment cost index of average wages.

Among the above indices, the consumer price index was the overwhelming choice of not only the United States but also all the countries that had issued index linked bonds. The main reason for this choice was that the consumer price index is well established in the financial markets and has legal status. However, the consumer price index has one drawback: it includes indirect taxes which can, in theory, be manipulated by the government just before the day of maturity.

Structure of the security

The choice of structure, like that of the index, also involves a compromise among interest groups to obtain the highest level of liquidity. Unlike the index, the structure of the bonds can be re-engineered after the bond has been issued. In the case of the United States, four different structures were considered:

- A zero-coupon bond whose payment is linked to the inflation index;

- a mortgage-type bond whose periodic interest plus principal are linked to the index;
- a fixed-coupon bond whose outstanding principal is linked to the index, also known as the "Canadian" model or capital-indexed bond; and
- a "floater" structure, similar to the Canadian model, except that the principal accrued is paid on each coupon date and not postponed until final maturity.

The most widely known model is the Canadian model or the capital-indexed bond used in Canada, the United States and the United Kingdom. The capital-indexed bond links the principal to the index.

Time to maturity

It is difficult to decide on the time to maturity for an index linked bond, as the size and maturity structure of existing stock should be taken into account. It seems, however, that the idea of indexation is most relevant for long-term bonds where investors face greater uncertainty about inflation. Institutions such as insurance companies and pension funds might be interested in securing real purchasing power over a period of two to three decades. However, this could decrease the liquidity of this kind of bond, as the market in most countries is normally more liquid in the ten-year maturity area.

Tax treatment of the interest and compensation for inflation

In terms of South African tax law, coupon interest and the adjustment made to the underlying capital in order to compensate for inflation, would be regarded as nominal yield and be taxed accordingly. Therefore the index linked bonds would not be completely risk-free for an investor who pays income tax: the real pre-tax yield would be certain but the real after-tax yield would depend on the actual tax rate.

Mechanics of a capital-index bond

The indexation of the capital-index bond occurs on the capital (principal) and the coupon becomes a fixed nominal percentage of the real value of the principal. Effectively, therefore, as the principal grows with the index, coupon payments also increase because the fixed coupon rate is multiplied by the accrued principal amount on each payment date. The accrued principal is paid in full at maturity. The principal value is adjusted by multiplying the value at issuance by an index ratio which changes in accordance with measured inflation. The index ratio for a particular date is equal to the price index number applicable to that date, divided by the index number at the date of issue.

For example, suppose the government launches a two-year bond with an initial nominal value of R1 000 on 15 December 1999. At that date, of course, the consumer price index for December 1999 is not yet available; the latest available consumer price index is for October 1999. At redemption on 15 December 2001 the latest available consumer price index would be for October 2001. The bond's initial nominal value is therefore linked to the consumer price index value recorded two months earlier. An inflation-adjusted nominal value is calculated on the basis of changes in the consumer price index, so as to keep the real value of the bond constant. Suppose that it pays coupon interest every six months at a rate of 5 per cent per annum of the adjusted nominal value. This translates into 2½ per cent, or a nominal coupon amount of R25 at initial prices, every six months. If the bond is issued at par, the cash flows are as indicated in the Table.

Hypothetical cash flows related to an index linked bond

Month	Consumer price index 1995=100	Consumer price index Oct 99 = 100	Initial nominal value Rand	Inflation adjusted nominal value Rand	Interest: Adjusted nominal value times 2½% Rand	Investor receives Rand	Payment date
Oct 1999........	120,0	1,000	1 000	1 000	...	-1 000	15 Dec 1999
Apr 2000........	124,0	1,033	1 000	1 033	26	26	15 Jun 2000
Oct 2000........	130,0	1,083	1 000	1 083	27	27	15 Dec 2000
Apr 2001........	135,0	1,125	1 000	1 125	28	28	15 Jun 2001
Oct 2001........	141,0	1,175	1 000	1 175	29	29	15 Dec 2001
Oct 2001........	141,0	1,175	1 000	1 175	...	1 175	15 Dec 2001

Consistency with monetary policy

In many cases in the past, governments have covered their borrowing needs largely, or exclusively, through recourse to central bank credit. Today, however, in most member countries of the Organisation for Economic Co-operation and Development (OECD) and in South Africa, this way of raising funds for the government is largely avoided, or rigidly controlled for reasons of general economic and monetary policy. Although index linked debt has the potential to contribute to the credibility of monetary policy, it should not be seen as an instrument which could help to reduce inflationary expectations and hence inflation, for it should never be seen as a substitute for a country's monetary track record and its proven commitment to low inflation.

Arguments for and against index linked bonds

Arguments for the issuing of index linked bonds include the following:

- Index linked bonds can protect the purchasing power of accumulated savings;
- other financial assets do not provide as good a hedge against inflation;
- it allows the issuer to annul the inflation-risk premium;
- it has the potential for encouraging saving;
- it expands the range of investment opportunities;
- the successful implementation of index linked government bonds could activate the development of an index linked corporate debt market;
- it allows the monetary authorities to obtain useful information about real interest rates and inflation expectations;
- it eliminates the incentive for the state to inflate the economy; and
- it satisfies the hedging needs of the state: as revenue is positively correlated with the inflation rate, expenditure also needs to be positively correlated with the inflation rate.

Arguments against the issuing of index linked bonds include the following:

- It may be viewed as an explicit admission of surrendering to inflation;
- such bonds can be replicated by alternative securities or strategies, for example the issuing of floating-rate bonds;
- it involves the risk for the investor that the index basket may lose its significance because of possible future changes;
- it could reduce saving as there may no longer necessarily be a precautionary demand for securities in response to the uncertainty about future inflation rates;

- the introduction of index linked securities by the Treasury might alter the rates of return on other assets and on balance the representative investor might be worse off;
- the success of such bonds has been limited in countries such as Argentina;
- if these bonds were superior to fixed income bonds, they would have been issued by private firms; and
- the introduction of index linked bonds entails the costs of information gathering and administration.

Measuring expected inflation

The above example clearly indicates that the indexed linked bond compensates the investor for the erosion of purchasing power and also pays a real rate of return. By contrast, conventional securities are generally issued at a fixed coupon rate which incorporates the underlying expected real rate of return in the economy, the market's expectation of inflation over the life of the instrument at the time when the security was issued, a premium to compensate for uncertainty about future rates of inflation and an adjustment reflecting the tax treatment of interest. If the latter is ignored for the moment, the nominal rate of return can implicitly be split into a real rate of return and an estimate of inflation over the period until the bond matures. The American economist, Irving Fisher, captured this in the identity:

$$i = r + \dot{p}$$

where i is the nominal rate of return, r the real rate of return and $\dot{p}$ the expected inflation rate. However, as this is rather simplistic, the Fisher identity above can be refined to:

$$i = r + \dot{p} + d$$

where d is a risk premium, based on the variability of inflation and factors such as tax treatment, and political and exchange rate risks.

On the one hand, investors in nominal bonds will receive the nominal rate (i) and bear the onus and risk of future inflation plus the inflation variability risk and factors such as tax treatment, political and exchange rate risks ($\dot{p}$ + d). On the other hand, investors will receive the real rate (r) with certainty, but they will still bear the risks of changes in the tax treatment of interest income and political and exchange rate risks. The issuer will bear the cost associated with expected inflation and inflation volatility.

Indexed bonds can therefore be viewed as providing to investors a form of insurance, namely purchasing power insurance. Unfortunately, the empirical estimation of the premium d is complicated by the fact that both $\dot{p}$ and d are not observable. However, as these bonds, like conventional bonds, are traded in the secondary market, both yields will include key risks such as tax treatment, and political and exchange rate risks. Therefore the difference between the real yield on the inflation-indexed bond of a certain maturity and the nominal yield of a conventional bond of the same maturity will be an indication of expected inflation and the inflation variability risk factor. The nominal rate equals the real rate plus the forward inflation rate; the latter is wider than expected inflation, and is equal to the expected inflation rate plus a risk premium (or a risk discount) that depends on the variances and covariances of the risk factor and on the degree of risk aversion of economic agents.

If, very simplistically, the assumption is made that the effective inflation rate is always equal to the expected inflation rate, the risk premium will be zero and the difference between the real interest rate and the nominal interest rate will be equal to the expected inflation rate. As stated above, this is a very simplistic assumption and as soon as enough data on directly measured inflation expectations are available, risk can be assessed empirically using standardised mathematical models (De Cecco et al.). More realistically, in the interim, it can be assumed that the difference between the nominal interest rate and real (index linked) rate is proportional to (but not equal to) the expected inflation rate; the expected inflation rate is probably somewhat lower than the difference.

Introducing inflation linked bonds in South Africa

The monthly average of nominal yields on long-term South African government bonds in the first half of 1999 fluctuated in the region of 14,5 to 15,9 per cent per annum. Adjusted by using the historical core inflation rate as proxy for expected inflation, this implies a real rate of around 6,6 to 8,0 per cent per annum, employing the subtraction method. As indicated above, this "real rate" in fact includes an element of compensation for risk on account of inflation's volatility.

If expectations of future inflation differ significantly from the latest historical inflation rate, this calculation should of course be adjusted accordingly, although the problem is that expected inflation is not directly observable. If the issuers of debt instruments have an expectation of future inflation deviating substantially from the average expectation among investors, issuing (or not issuing) inflation-linked bonds gives the issuers an opportunity to capitalise on the differing expectations.

It appears quite possible that South Africa is heading towards structurally lower inflation than the annual average rate of 7,8 per cent established in the past four years. Several reasons for such optimism may be noted:

- Firstly, in the Constitution and in the South African Reserve Bank Act, the South African Reserve Bank has been given the task of combating inflation and is fully committed to performing this task in a responsible way.
- Secondly, the Growth, Employment and Redistribution strategy (GEAR) is strongly endorsed by government, which is therefore committed to prudent fiscal policies and the elimination of various constraints on the expansion of aggregate supply and employment.
- Thirdly, and related to the GEAR strategy, is the discipline imposed by South Africa's stronger international linkages. Reduced tariffs and other barriers to trade increase the level of competition that domestic producers face and limit their ability to change prices. It also makes it easier to import cost-reducing technologies.

International financial account liberalisations mean that investors can convert their rand-denominated assets into alternative currencies if they become suspicious of South Africa's macroeconomic policies, thus imposing additional discipline on policy makers. To ensure that a comprehensive picture of the economic environment and policies is disseminated to investors on a timely basis, macroeconomic information is released in a manner that meets the specifications of the Special Data Dissemination Standard of the International Monetary Fund. Private-sector analysts worldwide are accordingly well informed about changes in the South African economic situation, and would be quick to react to prospects of deteriorating inflation.

Tactical issues

If the South African authorities were to decide to issue inflation linked bonds, a number of important tactical questions would need to be addressed. These include the number, size and maturity of the issues, as well as the coupon rate of interest attached to the bonds and the taxation of these bonds.

From the point of view of the South African taxpayer, benefits would be optimised if the real rate on the bonds was as low as possible at issue. It follows that the issues would have to be structured in a way which would reduce as far as possible the illiquidity premiums perceived by investors. It would be prudent at the outset to limit the number of issues – for example by launching just a ten-year bond, and by making it known to investors that the issue of specific stock would be gradually expanded through net selling into the market, which would not exceed a certain amount per annum. This would address the fears of investors who are wary of being caught long in a bond, if the authorities should suddenly decide to expand the supply greatly. It would also be helpful if private-sector entities were appointed to make a market in the inflation linked bonds on a continuous basis. The availability of these bonds in small denominations to tap the market for individuals seeking certainty might also be helpful, but would involve substantial administrative costs.

It is generally admitted that the only economically fair taxation of interest would be a tax levied on the real interest component of total interest accrued. In an imperfect world, however, such treatment solely for inflation indexed bonds would give them an unfair tax advantage over conventional bonds. In practice, therefore, the tax on the interest income derived from inflation linked bonds could be expected to be levied on the sum of the coupon interest paid and the nominal revaluation of the underlying capital amount. As with conventional bonds, the major holders of indexed bonds could therefore be expected to be tax-exempt institutions and institutions subject to a comparatively low tax rate on all interest income, such as retirement funds. To this may be added individuals making use of the R2 000 per annum tax-exempt interest income allowance, and individuals earning comparatively little income overall and desiring a high degree of certainty about the purchasing power of their savings.

As with conventional bonds, a higher coupon rate of interest would lead investors to bid up the price of the indexed bonds at issue, perhaps to a higher level than the initial nominal value stipulated on the bond. A lower or zero-coupon rate would have the opposite effect. To arouse the interest of savers who need the cash flow income from their savings to maintain their standard of living but wish to maintain the real value of their capital, it would be advisable to rule out a zero-coupon rate and instead, set this rate at a level considered to lead to minimal discount or premium at issue.

Concluding remarks

Notwithstanding the arguments against the issuing of index linked bonds, a case can be made for the inclusion of index linked bonds in government's portfolio of liabilities if these bonds are introduced at a time when financial stability is improving and monetary and fiscal authorities are committed to prudent policies. It is difficult to estimate how large the proportion of index linked debt in government's portfolio should be. This would depend on the depth of the market, as index linked debt is normally held by institutional investors who seek to match liabilities defined in real rather than nominal terms. In terms of risk, index linked bonds could provide government with a hedge against high *ex post* real borrowing costs, while providing a long-term, low-risk hedge against inflation for investors with long-term real liabilities.

Index linked bonds also have the potential to contribute to the credibility of monetary policy and to provide valuable information about inflation expectations and real interest rates.

Bibliography

Bank of England. 1995. *Index linked debt*. Papers presented at the Bank of England Conference, September. London: Bank of England.

Bodie, Z. 1988. Inflation, index linked bonds, and asset allocation. *NBER Working Paper*, No. 2793. Cambridge, Massachusetts: NBER.

Bröker, G. 1993. *Government securities and debt management in the 1990s.* Paris: OECD.

Brown, R & Schaefer, S. 1996. Ten years of the real term structure: 1984-1994. *The Journal of Fixed Income,* Volume 5 No. 4.

De Cecco, M, Pecchi, L & Piga, G. 1997. *Managing public debt: Index linked bonds in theory and practice.* Cheltenham, UK: Edward Elgar.

Friedman, C. 1999. Index linked bonds: Intrinsically a good product, but the timing looks wrong. Barnard Jacobs Mellet, *Gilts Research*, 24 February. Johannesburg: Barnard Jacobs Mellet.

Kopcke, R & Kimball R. 1999. Inflation-indexed bonds: The dog that didn't bark. *New England Economic Review.* Boston: Federal Reserve Bank.

Munnell, A & Grolnic, J. 1986. Should the U.S. Government issue index bonds. *New England Economic Review,* September/October.

Price, R. 1997. The rationale and design of inflation-indexed bonds. *Working Paper of the International Monetary Fund*, WP\97\12. Washington, DC: International Monetary Fund.

Robertson, D & Symons, J. 1997. Real interest rates and index linked gilts. *The Manchester School* Vol LXV No.1. Manchester UK: Blackwell Publishers.

Van den Heever, J. P. 1998. Inflation-linked government bonds. *Discussion Paper* No. 31. Applied Fiscal Research Centre, School of Economics, University of Cape Town.

Notes to tables

Public Finance

National government financing according to ownership of government debt – Table S-57

The ownership distribution of government debt can be established either from the liability side by consulting the registers of the government and the custodian institutions handling its debt instruments, or from the asset side by consulting the balance sheets of the ultimate holders of such debt instruments. Owing to problems experienced by member banks of the Central Depository Ltd to supply data on the registered ownership of national government bonds, this table was revised to reflect ownership according to the assets held on the balance sheets as reported by the institutions in the respective institutional groupings.

Ownership distribution of domestic marketable bonds – Table S-60 and S-61

Owing to problems experienced by member banks of the Central Depository Ltd to supply data on the registered ownership of national government bonds, these tables were revised to reflect ownership according to the balance sheets of the respective institutions. Columns indicating the marketable bond issues by local authorities, sundry public-sector borrowers and financial public enterprises were also added to the table. However, information on these entities' domestic marketable bonds issued is only available on a quarterly basis. This led to the inclusion of a column indicating the quarterly balance of total domestic marketable bonds of the public sector.

Ownership distribution of domestic marketable bonds of local authorities – Table S-67

Water boards have previously been classified under local authorities. In accordance with the Public Financial Management Act (Act 119 of 1998), water boards have now been classified as government enterprises. Information in this table was revised to exclude the water board data from the local authority data as from 1990 onward. Since the local authorities' bonds were not deposited with the Central Depository Ltd, it is now possible to report on the ownership of local authority bonds according to a survey collecting data from the local authorities.

Ownership distribution of domestic marketable bonds of non-financial public enterprises – Table S-68

In accordance with the Public Financial Management Act's classification of water boards as government enterprises, information in this table was revised to include water boards' data in the data for non-financial public enterprises as from 1990 onward.