

# **Quarterly Bulletin**

# **Kwartaalblad**



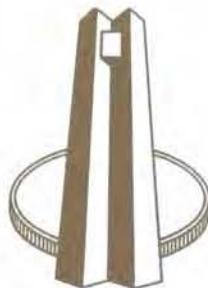
**South African Reserve Bank**  
**Suid-Afrikaanse Reserwebank**

# **Quarterly Bulletin**

## **Kwartaalblad**

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**South African Reserve Bank**  
**Suid-Afrikaanse Reserwebank**

# Contents

Quarterly economic review.....	1
Statement on money supply guidelines, 25 March 1994 .....	25
The modelling of inflation expectations.....	29
Notes to tables .....	36
Statistical tables: Contents .....	S-0
Key information.....	S-122

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## Inhoudsopgawe

Kwartaalikse ekonomiese oorsig .....	37
Verklaring oor geldvoorraadriglyne, 25 Maart 1994 .....	62
Die modellering van inflasieverwagtings .....	65
Notas tot tabelle .....	72
Statistiese tabelle: Inhoudsopgawe .....	S-1
Kerngegewens.....	S-122

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# Quarterly economic review

## Introduction

The economic recovery in South Africa in the second half of 1993 faltered somewhat in the first quarter of 1994 and real gross domestic product contracted. This poor performance of production was, however, largely the result of a decrease in agricultural output from an exceptionally high level in the fourth quarter of 1993. Real non-agricultural output continued to expand in the first quarter of 1994, albeit at a considerably lower rate than in the second half of the preceding year. Special circumstances were probably responsible for this lower growth, such as political uncertainty, ongoing violence in the run-up to the election, work stoppages and labour unrest.

The relatively calm and peaceful conditions after the election augur well for the continuation of the economic recovery in the remainder of 1994. Various other factors also favour economic growth in the short term, such as signs of an upturn in real investment partly related to the launching of large capital projects; the good agricultural season in the summer rainfall area, where the crops are now being harvested; relatively more stable financial conditions; the re-entry of South Africa in the international economy and the normalisation of trade and financial relations with many countries; the low level of the country's foreign debt; and the revival in economic activity in industrialised countries and in international commodity prices.

Despite the decline in domestic output, aggregate real gross domestic expenditure increased further in the first quarter of 1994, but at a much more moderate rate than during the second half of 1993. This was largely due to the fact that the growth in real private consumption expenditure became more hesitant, reflecting dampened consumer confidence ahead of the election, a relatively low increase in personal disposable income and only a small rise in household credit demand. A further moderate rise was recorded in real capital formation which was fairly broadly based and caused by expenditure on major capital projects, asset replacement and some expansion of capacity. In contrast to these developments, real consumption expenditure by general government increased markedly.

The recovery in economic activity was, up to the third quarter of 1993 (latest information available), unable to reverse the downward movement in employment and employment opportunities continued to decline, particularly in the private sector. As could be expected, the rising unemployment resulted in some moderation of wage demands in 1993. At the same time, labour productivity continued to improve appreciably, with the

result that nominal unit labour costs rose at a slower pace. This development was supported by a consistently conservative monetary policy stance which toned down inflation expectations. Exogenous factors, such as the relative price stability in trading partner countries, lower international oil prices and better agricultural conditions, also contributed to the attainment of a lower inflation rate.

In the first quarter of 1994 the current account surplus on the balance of payments weakened considerably because of lower exports of goods and services combined with a sharp rise in the imports of goods and services. These developments could not be offset by a rise in the value of net gold exports. Fortunately, the capital account of the balance of payments improved remarkably and only a small net outflow of capital was recorded in the quarter as a whole. A substantial inflow of capital, however, occurred in January 1994 when the large outflow in the preceding month was partly reversed. An inflow of short-term capital took place largely because the tight conditions on the domestic money market forced banks to make more use of foreign credit facilities to supplement funds. The net outflow of long-term capital, however, increased sharply due to the upfront payment in February 1994 in terms of the 1994 Debt Arrangements with foreign creditor banks, and to other fixed contractual commitments falling due for payment.

Owing to political uncertainty and ongoing violence, the capital outflow rose again dramatically in April and was only reversed in May after it became clear that the election results were generally acceptable to most South Africans. As a result of these speculative capital outflows, the net foreign reserves of the country decreased sharply and the nominal and real effective exchange rate of the rand contracted in the first four months of 1994. In May 1994 the rand depreciated further, although the net capital outflow apparently subsided.

Growth in all the money supply aggregates, which had generally been subdued in 1993, accelerated sharply in the first four months of 1994. The authorities were not unduly concerned about this development because it was mainly brought about by a shift from government deposits to private sector deposits with the banking sector. This reduction in government deposits with banks was also responsible for a more rapid expansion in total credit extension by monetary institutions in the first three months of 1994. The growth in credit extended by banks to the domestic private sector, however, receded over the first two months of 1994; it increased again rapidly in March.

After having eased somewhat in the first two months of 1994, money market conditions became very tight in

the ensuing three months. These tighter conditions were mainly the result of a marked increase in notes in circulation and a decrease in the net foreign assets of the Reserve Bank. Both these developments were probably related to uncertainties and fears in the pre-election period. The Reserve Bank generally allowed the money market shortage to reflect the tight underlying demand and supply conditions. By adopting this policy stance, the Bank discouraged private banks from substituting domestic liabilities for foreign credit facilities, in an attempt to contain the outflow of capital from the country.

Reflecting the tight money market conditions and uncertainty about domestic political developments, the general downward movement in money market interest rates in 1993 lost momentum in the first two months of 1994, and these rates then hardened somewhat in the ensuing three months. The yield on long-term government stock also firmed over this period. Share price increases, on the other hand, depressed the average dividend and earnings yield on shares.

Capital market conditions remained buoyant in the first five months of 1994. The nominal value of public-sector stock traded on the Johannesburg Stock Exchange reached new record levels and the turnover of listed shares was also exceptionally high. In the primary capital market, however, relatively low levels of new-issue activity were displayed in the first quarter by borrowing entities in both the public and the private sector. These new issues were at low levels because the government had already financed its deficit before borrowing for fiscal 1993/94 and most of the large listed companies were relatively liquid and had not yet embarked on significant investment programmes.

The public-sector borrowing requirement of the government in fiscal 1993/94 was nevertheless exceptionally large owing to special transfers of the government to redeem liabilities incurred over a relatively long period of time. As a result, government debt increased by R37,5 billion in this fiscal year to a ratio of 48,7 per cent of gross domestic product at the end of March 1994. Nearly two out of every ten rand received by the government now has to be used to finance interest payments on the growing public debt.

The government was, however, very successful in containing government expenditure in fiscal 1993/94 and it came close to the Budget estimates. Most of the main categories of government revenue also performed more or less in line with, or better than, the Budget projections, with the notable exception of income tax on individuals and companies. The lower-than-expected revenue from personal income tax was mainly related to a lower rate of increase in salaries and wages than had been anticipated in the Budget. The income tax proceeds on companies actually decreased in fiscal 1993/94 because of relatively low profits still

being made at the beginning of the economic recovery and the time lag between profit growth and the receipts of corporate tax.

## Domestic economic development

### Domestic output<sup>1</sup>

The growth in *real gross domestic product* turned negative in the first quarter of 1994. The revised seasonally adjusted and annualised rate of increase in real domestic output accelerated from 2½ per cent in the first quarter of 1993 to 5 and 7 per cent in the next two quarters, amounting to a still high level of 5 per cent in the fourth quarter. Current estimates indicate that domestic output contracted at an annualised rate of approximately 3½ per cent in the first quarter of 1994. At 3 per cent above the level in the first quarter of 1993, the level of domestic output was nevertheless still relatively high in the first quarter of 1994.

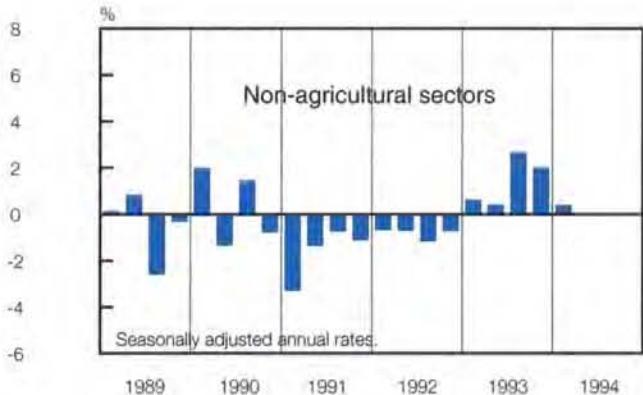
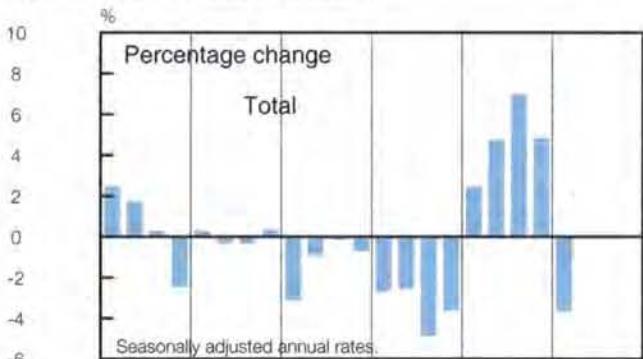
The poor performance of total production in the first quarter of 1994 was to a large extent due to a decline in agricultural output. A more-than-doubling of the real value added by agriculture in the course of 1993, owing to large maize and wheat crops, was followed by a drop in agricultural output in the first quarter of 1994 to approximately the average production level in the first quarter of the preceding four years. However, in view of the favourable 1993/94 season in the summer rainfall area, the downward movement in agricultural production could easily be reversed again in the next two quarters.

Growth in the real value added by the *non-agricultural sectors*, which had been relatively subdued in the first half of 1993 and then became much stronger in the second half of the year, slowed down again in the first quarter of 1994. Real non-agricultural output increased at an annualised rate of only ½ per cent in the first quarter of 1994 compared with an annualised increase of 2 per cent in the preceding quarter. Contrary to the fourth quarter of 1993 when all the main non-agricultural economic sectors showed positive growth, decreases were registered in the real output of mining, manufacturing and commerce.

After having increased fairly sharply at a rate of more than 2 per cent in 1993, the real output in the *mining industry* contracted at an annualised rate of 2½ per cent in the first quarter of 1994. In particular, gold production decreased on account of a lower throughput of ore and a small decline in the gold content of ore milled. As in the past, the gold mines shifted to the mining of lower quality ore with the increase in the rand price of gold. Mining production in general also suffered from labour unrest and work stoppages at several mines.

The real value added by the *manufacturing sector* declined at an annualised rate of approximately 1 per

### Real gross domestic product



cent in the first quarter of 1994; in the second half of 1993 it had still shown signs of a sustained recovery. The weak performance in manufacturing production at the beginning of 1994 was particularly evident in the industries producing textiles, clothing and leather goods, paper and printing products, as well as machinery and transport equipment. This was to some extent related to uncertainties that pertained to the pre-election period, the lower demand for exports and somewhat higher inventory levels at the end of 1993. Reports also indicate that the production of transport equipment had been affected adversely by high absenteeism and violence. The other subsectors of manufacturing, however, continued to perform well because of the improved domestic and external demand for their products.

The further expansion of electricity services was mainly responsible for an increase at an annualised rate of 3 per cent in the real value added by the sector supplying *electricity, gas and water* in the first quarter of 1994. In 1993 the growth in the real output of this sector was even more vigorous at nearly 4 per cent. The real value added by the *construction sector* also edged up in the first quarter of 1994, following one of the worst and longest slumps this industry has experienced since the Great Depression.

<sup>1</sup> Major revisions have been made to the national accounts statistics and the base year in calculating aggregates at constant prices has been changed to 1990. These revisions are discussed in "South Africa's national accounts, 1946-1993", included as a supplement to this edition of the *Quarterly Bulletin*.

The growth in the real value added by the tertiary sectors rose at a steady annualised rate of 1 per cent in the first quarter of 1994, or at the same rate that had been recorded in the second half of 1993. Continued buoyancy in financial activity, a strong rise in real estate transactions, a high volume of imports and improved agricultural conditions made an important contribution to the increase in the real value added by sectors such as transport, storage and communication; finance, insurance, real estate and business services; and general government. These increases were, however, partly offset by a contraction in the real value added by commerce, reflecting the influence of violence on trade in several parts of the country.

#### **Domestic expenditure**

Aggregate real gross domestic expenditure increased further in the first quarter of 1994, but at a much more moderate rate than during the second half of 1993. Following relatively high annualised increases of 10% and 7 per cent in the last two quarters of 1993, real domestic expenditure increased by 2½ per cent in the first quarter of 1994. This slower growth in real gross domestic expenditure was apparent in the real outlays on private consumption expenditure and inventory investment. In contrast, gross domestic fixed investment rose moderately, while real consumption expenditure by general government increased markedly.

The increase in real private consumption expenditure slowed down from annualised rates of 2 and 2½ per cent in the third and fourth quarter of 1993 to a rate of not

quite 1 per cent in the first quarter of 1994. This more hesitant growth in consumption expenditure of households was evident among most of the main categories of goods and services. Although real outlays on personal transport equipment rose moderately in the first quarter of 1994, they were still some 2½ per cent below the level registered in the first quarter of 1993.

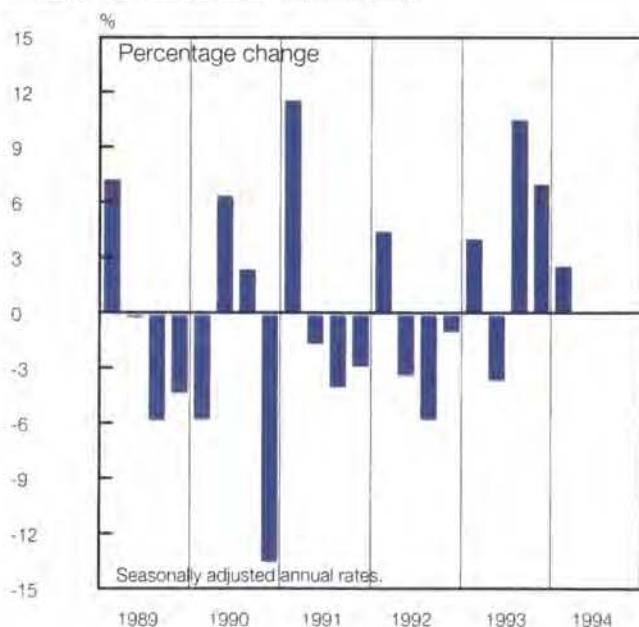
The slowdown in the growth of real private consumption expenditure was due to heightened uncertainty ahead of the election, which dampened consumer confidence. It also reflected the relatively low growth in real personal disposable income and only a small increase in household credit demand. Pre-emptive buying by private households in anticipation of possible disruptions in the supply of consumer goods in the period leading up to the election only became evident towards the end of the first quarter. It was then too late to have had any significant impact on aggregate real outlays on private consumption in the first three months of the year.

Quarter-to-quarter rates of increase in real consumption expenditure by general government rose sharply to revised annualised levels (mainly because of higher than had been reported earlier outlays by provincial administrations on intermediate goods and services) from 1½ per cent in the second quarter to 6 per cent in the fourth quarter of 1993 and 9½ per cent in the first quarter of 1994. This acceleration could be attributed primarily to a significant increase in real outlays on intermediate goods and services, while real remuneration of government employees expanded only marginally. For fiscal 1993/94 as a whole real consumption expenditure by general government rose by approximately 3 per cent; in fiscal 1992/93 an increase of 1 per cent had been recorded. The ratio of government expenditure to gross domestic product therefore continued to rise from 20% per cent to 21 per cent over the same period.

Total real gross domestic fixed investment is estimated to have increased further in the first quarter of 1994. After having moved along a downward trend since the middle of 1988, real outlays on fixed capital formation rose at annualised rates of 1 and 2½ per cent in the last two quarters of 1993 and by 1½ per cent in the first quarter of 1994. The further increase in the first quarter of 1994 was brought about by an expansion in real outlays on capital goods by the private sector and public corporations; capital expenditure by general government, however, declined sharply.

A classification of real capital formation by the private sector according to type of economic activity shows that the increase in the first quarter of 1994 was fairly broadly based. Investment expenditure of particularly agricultural, mining and manufacturing enterprises rose markedly. Higher real fixed investment in the agricultural sector was made possible by a rise in income brought about by improved weather conditions. The need to replace ageing agricultural equipment also led to higher capital outlays. The increase in capital formation in the mining

#### **Real gross domestic expenditure**



and manufacturing sector reflected, *inter alia*, expenditure on major capital projects that had been started in 1993, asset replacement and some capacity expansions in anticipation of an increased domestic and external demand.

The increase in real fixed capital formation of *public corporations* occurred mainly in the sector responsible for transport and communication services, and more specifically from infrastructural projects undertaken by Telkom. (Transnet, Telkom and the South African Post

Office were reclassified from general government business enterprises to public corporations in the latest revision of the national accounts statistics.) The excess production capacity of other public corporations was mainly responsible for the continued subdued real fixed capital investment by these institutions in the first quarter of 1994.

The decline in real gross domestic fixed investment by *general government* was caused by further cut-backs in the capital outlays of central and local government. The level of fixed investment by general government in the first quarter of 1994 was 21 per cent below its peak in the first quarter of 1989.

The moderate increase in real *inventory investment* in the first quarter of 1994 was the third consecutive quarterly increase in this aggregate. This followed an almost uninterrupted drawing-down of stocks from the beginning of 1989 to the end of 1992. The accumulation of inventories in the first quarter of 1994 coincided with an increase in import volumes and a significant decline in the demand for exports, and was particularly prominent in the mining and industrial sectors as well as in agricultural stocks-in-trade. As a result of this further rise, the ratio of industrial and commercial inventories to gross domestic product bottomed out at the very low level of 16 per cent in the second half of 1993 and edged higher to less than 16½ per cent in the first quarter of 1994.

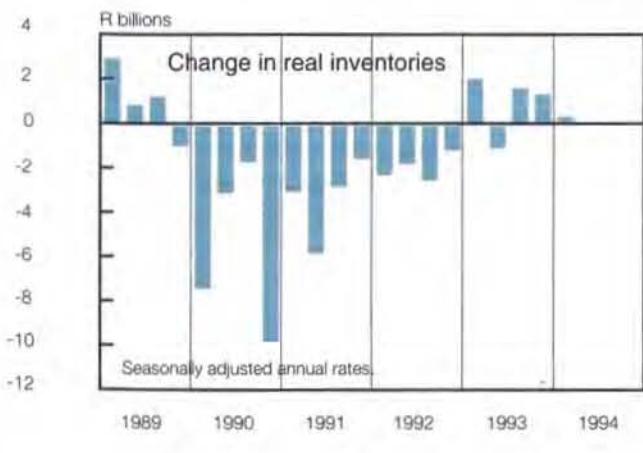
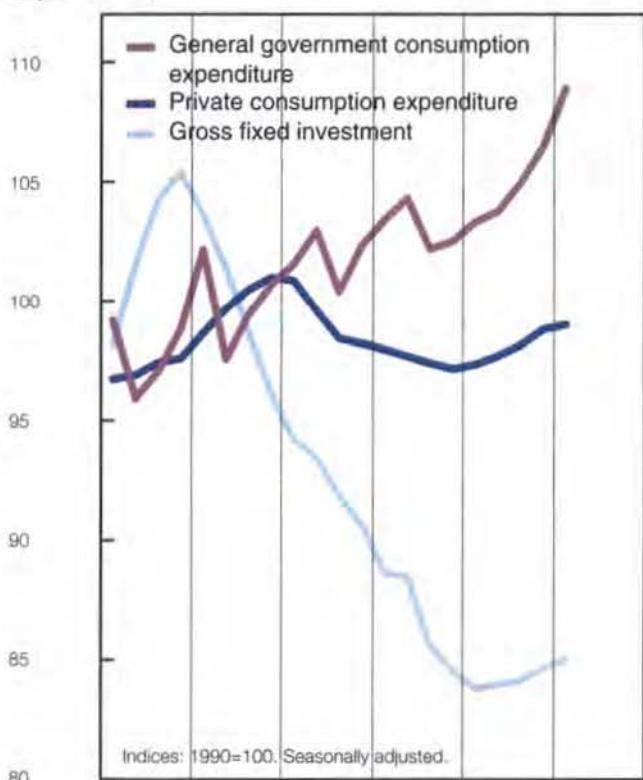
#### Factor income

The growth in aggregate *nominal factor income* at market prices, measured over a period of twelve months, which had risen from a low of 9½ per cent in the fourth quarter of 1992 to 12½ per cent in the fourth quarter of 1993, slowed down to 12 per cent in the first quarter of 1994. This lower rate of growth in factor income could be ascribed to slower growth in aggregate labour remuneration as well as in total gross operating surpluses.

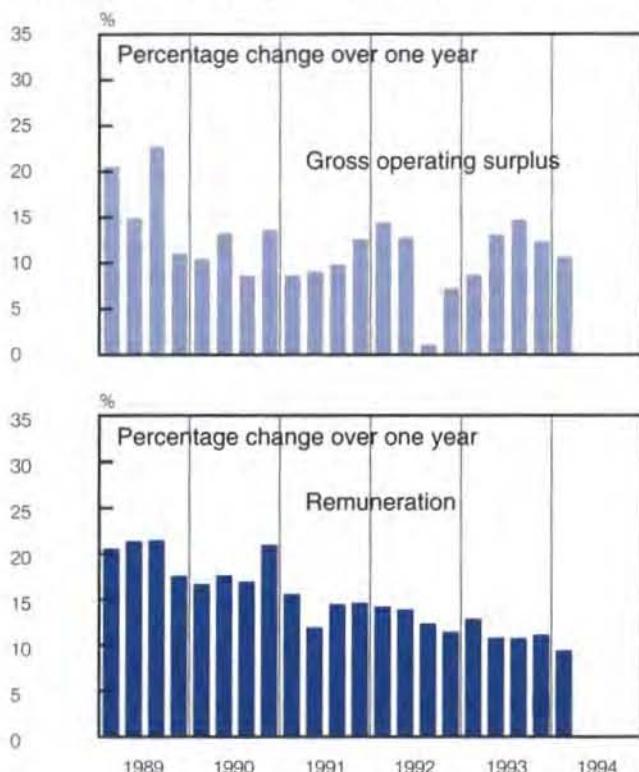
The rate of increase over four quarters in total nominal *remuneration of employees* receded marginally from 11½ per cent in the fourth quarter of 1992 to 11 per cent in the fourth quarter of 1993 and then more substantially to 9½ per cent in the first quarter of 1994. This slower increase in the total salaries and wages was particularly evident in the mining, manufacturing, commercial and the transport sectors. The more moderate growth in total remuneration of employees continued to reflect rationalisation programmes and the impact of the lower rate of inflation, which, in conjunction with the moderation of inflation expectations, led to more reasonable wage demands.

After having advanced from about 7 per cent in the fourth quarter of 1992 to 12½ per cent in the fourth quarter of 1993, the percentage change over one year in the *gross operating surplus* receded to 10½ per cent in the first quarter of 1994. This lower growth was mainly due to a decline in the operating surplus of agriculture, which had reached an exceptionally high level in the

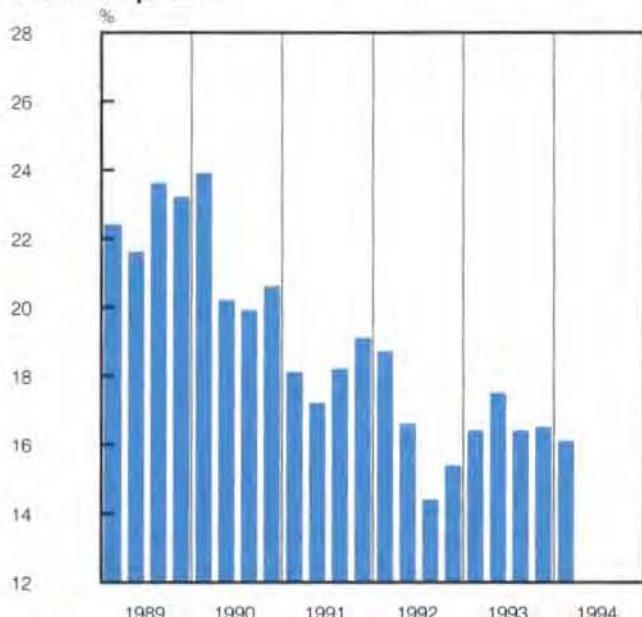
**Main components of real gross domestic expenditure**



### Gross operating surplus and labour remuneration



### Gross domestic saving as percentage of gross domestic product



This increase, however, was offset by lower personal saving resulting from a decline in real income from property.

preceding quarter. In the non-agricultural sectors of the economy the percentage change over one year in the gross operating surplus remained at a high level. Sustained sound results were particularly evident in the operating surpluses of the mining industry and the financial services sector.

#### Domestic saving

The ratio of gross domestic saving to gross domestic product receded further in the first quarter of 1994 to approximately 16 per cent from its already low average level of 17 per cent in 1993. The main reason for this low level of domestic saving continued to be the large dissaving of general government. Dissaving by government rose further in the first quarter of 1994 because the increase in current expenditure exceeded the higher current receipts. In particular, interest payments on government debt and consumption expenditure by government rose sharply.

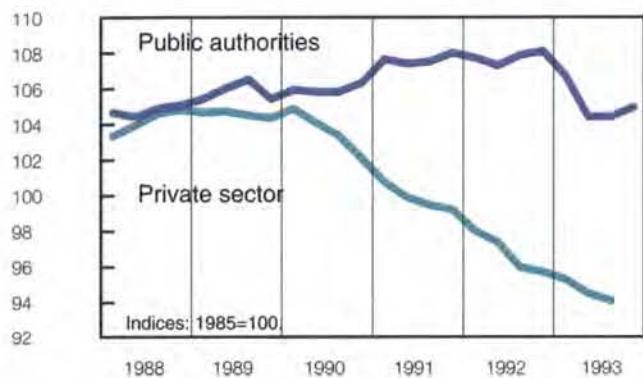
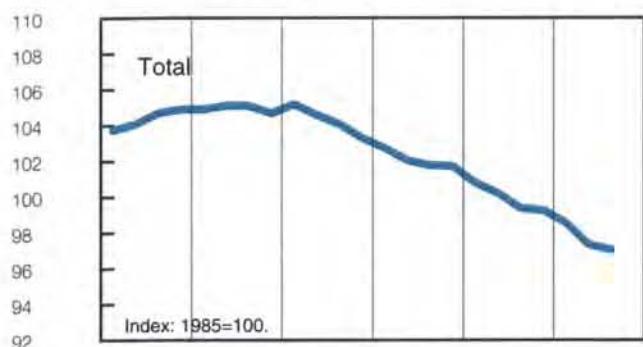
Net saving by the private sector, which had remained relatively firm during 1993, weakened slightly in the first quarter of 1994. Owing to the relatively good performance of the gross operating surplus of incorporated business enterprises in the non-agricultural sectors of the economy, net saving by the corporate sector rose moderately further in the first quarter of 1994.

#### Employment

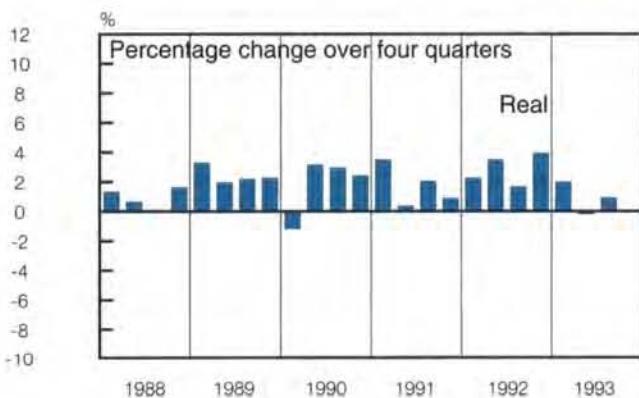
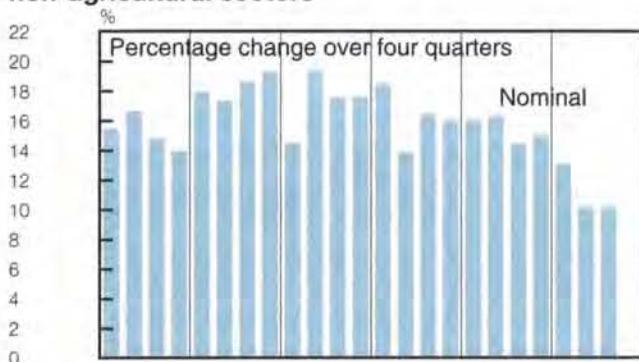
The recovery in economic activity in 1993 was unable to reverse the downward movement in employment. In fact, the rate of decline in the average level of employment in the formal non-agricultural sectors of the economy worsened somewhat from 2.1 per cent in both 1991 and 1992 to 2.5 per cent in the first three quarters of 1993 compared with the corresponding period of the preceding year. From the first quarter of 1989 (the start of a prolonged recession period) to the third quarter of 1993 (the latest information available) the number of employment opportunities in the formal non-agricultural economic sectors contracted by approximately 410 000; almost 8 out of every 100 positions therefore became redundant over this period.

The average level of *private-sector employment* in the first three quarters of 1993 was about 2.5 per cent below its level in the corresponding period of 1992; it declined by 3.6 per cent in 1991 and by 3.1 per cent in 1992. The quarter-to-quarter rate of decrease in employment by private enterprises (seasonally adjusted and annualised) subsided at first from 5.7 per cent in the third quarter of 1992 to 1.0 per cent in the fourth quarter; it then accelerated to 3.3 per cent in the second quarter of 1993 before slowing down again to 1.7 per cent in the third quarter.

## Non-agricultural employment



## Average remuneration per employee in non-agricultural sectors



Owing to a cut-back in current expenditure by general government and rationalisation programmes implemented by business enterprises in the public sector, total employment by public authorities declined by 2,4 per cent in 1993. Sharp declines were registered from quarter to quarter at seasonally adjusted and annualised rates of 5,1 per cent and 8,3 per cent in the first two quarters of 1993. In the third quarter of 1993 employment by public authorities remained more or less unchanged at the level of the preceding quarter and then increased by 2,0 per cent (seasonally adjusted and annualised) in the fourth quarter owing to a large increase in the employment by the self-governing territories.

The decrease in employment during the recession of 1989-1993 led to a rising number of registered unemployed workers. In 1992 the average number of registered unemployed workers rose by 16,2 per cent and in 1993 by 8,8 per cent. This brought the total number of registered unemployed to almost 290 000 in December 1993.

## Labour costs and productivity

The effect of the drawn-out recession on employment resulted in some moderation of wage demands in 1993. The rate of increase in the nominal remuneration per

worker contracted significantly from 15,4 per cent in 1992 to a year-on-year rate of 11,1 per cent in the first nine months of 1993. Although this increase still exceeds the current rate of consumer price inflation, it was nevertheless the lowest increase since 1978, when a rise of 10,6 per cent had been registered. Quarterly rates showed an even more significant decline in the growth of wages per worker: measured over four quarters it decreased from a peak of 19,4 per cent in the second quarter of 1990 to 10,2 per cent in the third quarter of 1993.

In the first three quarters of 1993 the rate of increase in the average nominal remuneration per worker in the private sector amounted to 11,3 per cent compared with the corresponding period of the preceding year. This was considerably lower than the increase of 15,6 per cent in 1992. The rate of increase over a period of four quarters in wages per worker in the private sector declined from a peak of 18,5 per cent in the first quarter of 1990 to 10,5 per cent in the third quarter of 1993. This significant slow-down in wage increases in the private sector was the result of low wage increases in most of the economic sectors. However, continued high rates of increase in wages per worker were recorded in retail trade, private road transportation, banks and the insurance industry.

The rate of increase in the average monthly nominal salaries and wages per worker employed by *public authorities* slowed down even more sharply from 21,9 per cent in 1989 to 14,8 per cent in 1992 and to 9,3 per cent in 1993. The year-on-year rate of increase in wages per worker employed by public authorities also decreased substantially, viz. from 22,5 per cent in the first quarter of 1991 to 5,4 per cent in the fourth quarter of 1993.

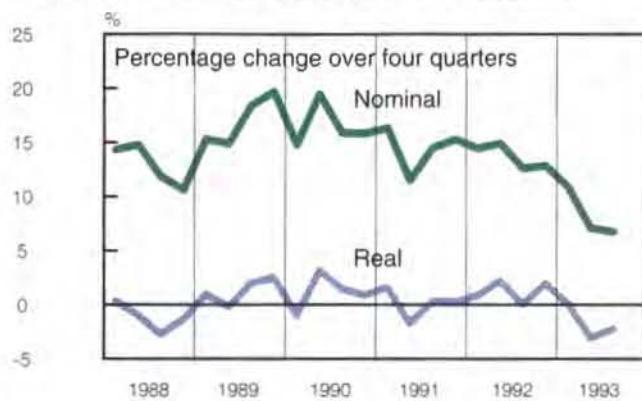
In view of the fact that the growth in nominal wages decreased more rapidly than the inflation rate, the rate of increase in the *real wage* per worker in the non-agricultural sectors of the economy dropped from 2,8 per cent in 1992 to 0,9 per cent in the first three quarters of 1993 compared with the corresponding period of 1992. The year-on-year rate of increase in the real remuneration per worker declined even more sharply from a high point of 3,9 per cent in the fourth quarter of 1992 to a negative level of 0,2 per cent in the second quarter of 1993; however, it then rose again to a positive level of 0,9 per cent in the third quarter.

*Labour productivity* improved considerably during the first nine months of 1993, when it was 2,5 per cent higher than in the corresponding period of the preceding year. This growth in productivity is a continuation of an upward trend already discernible from the end of 1991: the year-on-year rate of increase in the production per worker in the non-agricultural sectors of the economy accelerated from 0,5 per cent in the fourth quarter of 1991 to 1,8 per cent in the first quarter of 1993 and even more sharply to 3,1 per cent in the third quarter of 1993. The strong performance of productivity in the first nine months of 1993 was assisted by the fact that the number of man-days lost due to strikes and work stoppages was about 60 per cent lower than in the first three quarters of 1992.

The slower growth in nominal wages and a rise in non-agricultural production caused *nominal unit labour costs* to increase more slowly. After having contracted from 17,2 per cent in 1989 to 13,8 per cent in 1992, the rate of increase in nominal unit labour costs in the non-agricultural sectors of the economy declined to 8,3 per cent in the first three quarters of 1993 compared with the corresponding period of 1992. The year-on-year rate of increase in nominal labour costs per unit of physical output declined equally significantly from high points of 15,4 per cent in the fourth quarter of 1991 and 15,0 per cent in the second quarter of 1992 to 6,9 per cent in the third quarter of 1993 – the lowest level since the second quarter of 1978.

As a result of the lower rates of increase in real remuneration per worker and an improvement in productivity, the *real unit labour costs* in the non-agricultural sectors of the economy receded by 1,6 per cent in the first three quarters of 1993 as opposed to the corresponding period of 1992. On a quarterly basis, real unit labour costs also recorded negative rates of change measured over a period of one year of 2,9 per cent and 2,1 per cent in the second and third quarter of 1993, respectively.

### Unit labour costs in non-agricultural sectors



### Prices

For some time now both the all-goods production price index and the overall consumer price index have generally been increasing at single-digit rates. Exogenous factors such as the relative price stability in trading partner countries, lower international oil prices and better agricultural conditions undeniably contributed to this lower inflation. The increased financial stability must, however, be ascribed to a large extent to the consistent application of a conservative monetary policy that has gradually dampened inflation expectations. An increase in wage flexibility also contributed to the slowdown of price inflation.

In twenty-nine consecutive months up to March 1994 the *rate of increase over twelve months in the all-goods production price index* has remained at single-digit levels. Moreover, this rate of increase declined recently from 8,3 per cent in February 1993 to 5,4 per cent in October – the lowest level since January 1972 when an increase of 4,8 per cent was registered. It then edged upwards again to over 6 per cent and amounted to 6,3 per cent in March 1994. The bottoming-out in the downward movement in production price inflation was mainly due to an acceleration in agricultural and other food prices, particularly the price of red meat. A lower supply of livestock to the market because of the abundant pasturage after the high rainfall in most parts of the country pushed up prices.

Food prices were also responsible for a reversal of the downward movement in the rate of increase in the *prices of domestically produced goods*. After having slowed down from 9,0 per cent in February 1993 to 5,7 per cent in October, the rate of increase in these prices over a period of twelve months rose rapidly to 7,3 per cent in January 1994; it then receded again marginally to 6,9 per cent in March.

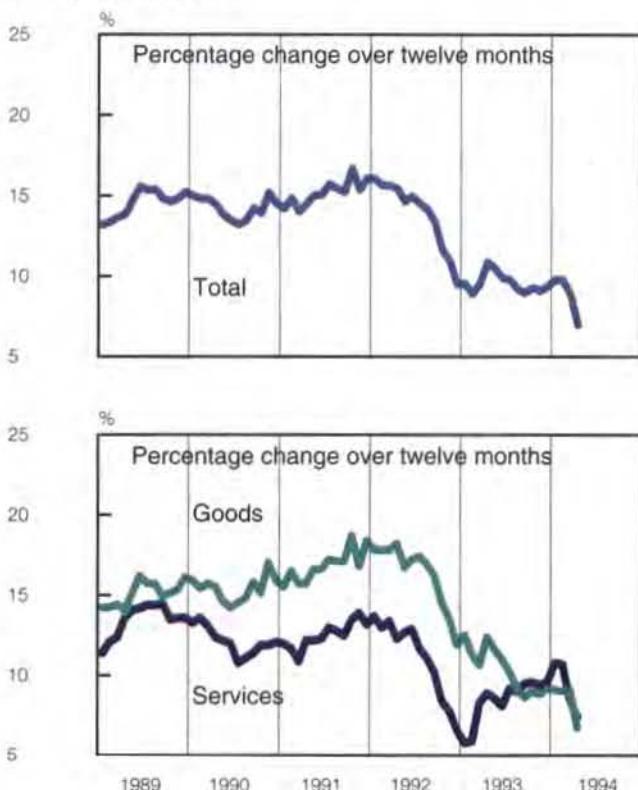
The rates of increase in the *prices of imported goods* over periods of twelve months have also been under 10 per cent since October 1991 and exceeded the measured inflation rate in the all-goods price index on only one occasion up to March 1994, namely in June 1993. Despite the depreciation in the nominal effective exchange rate of the rand, the twelve-month rate of increase in the prices of imported goods declined from a recent high of 6,8 per cent in June 1993 to 2,7 per cent in March 1994. These relatively low rates of increase were registered mainly owing to the persistent price stability in South Africa's main trading partner countries and a decrease in international crude oil prices. The twelve-month rate of increase in the weighted average wholesale price index of South Africa's six main trading partner countries decreased from 1,9 per cent in June 1993 to only 0,9 per cent in March 1994.

The *quarter-to-quarter* rate of increase in the all-goods production price index and in the price index of domestically produced goods also showed a distinct downward movement in 1993 before rising again steeply in the first quarter of 1994. The *quarter-to-quarter* rate of increase in the prices of imported goods, however, decreased sharply from the second quarter of 1993 and then became negative in the fourth quarter of 1993. In the first quarter of 1994 a small rate of increase was again recorded in import prices, although the rand depreciated considerably. A decline in international oil prices neutralised the effects of a lower rand exchange rate on import prices to some extent.

The *twelve-month* rate of increase in the *overall consumer price index* declined to a single-digit level of 9,6 per cent in December 1992 – the first time that this rate fell below 10 per cent since June 1978. With the exception of the period from April to June 1993, this rate of increase then remained in single digits in the ensuing months up to April 1994. From September 1993 to January 1994 this growth rate moved up slightly from 9,1 per cent to 9,9 per cent before declining again to 9,0 per cent in March. In April 1994 the rate of increase in consumer prices over a period of twelve months dropped to 7,1 per cent, when these prices were no longer affected by the increase in the value-added tax and other indirect taxes in April 1993.

From August 1993 to March 1994 the rate of increase over periods of twelve months in the prices of *consumer goods* remained fairly stable around a level of about 9 per cent; it then, however, fell to 6,8 per cent in April 1994. On the other hand, the twelve-month rate of increase in the prices of *consumer services* showed a distinct upward movement from 9,5 per cent in November 1993 to 10,8 per cent in February 1994. It then dropped to 8,6 per cent in March when the substantial increase in school fees in the corresponding month of the preceding year no longer affected this rate of increase in the prices of services, and to 7,5 per cent in April 1994 when the effect of increases in indirect taxes in 1993 fell away.

### Consumer prices



The *quarter-to-quarter* rate of increase in the overall consumer price index also declined sharply from its high post-Budget seasonally adjusted and annualised level of 16,8 per cent in the second quarter of 1993 to only 5,3 per cent in the fourth quarter; it then accelerated to 9,2 per cent in the first quarter of 1994. This higher rate of increase in the first quarter of 1994 was brought about mainly by a significant rise in food prices and to a lesser extent also in the costs of transportation, communication and medical services.

## Foreign trade and payments

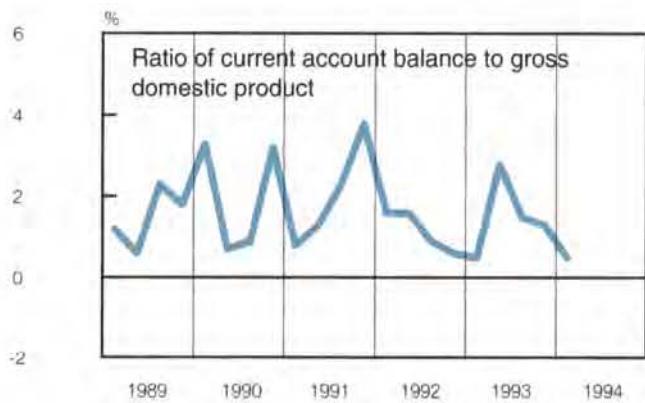
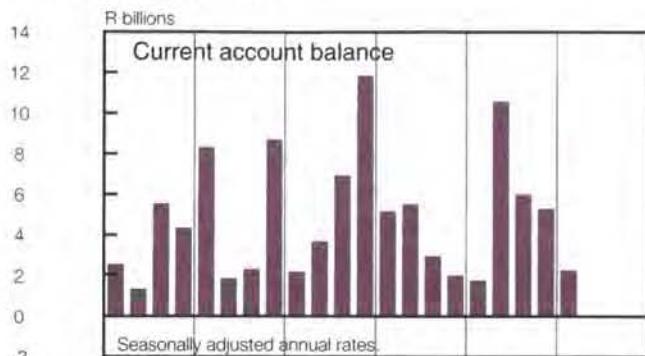
### Current account

The surplus on the current account of the balance of payments decreased considerably from R1,2 billion in the fourth quarter of 1993 to roughly R0,2 billion in the first quarter of 1994. After adjustment for seasonal influences and measured at an annualised rate, the surplus on the current account contracted from R5,3 billion to R2,3 billion over the same period. As a percentage of gross domestic product, the surplus on current account amounted to 0,6 per cent in the first quarter of 1994; this ratio averaged 1,5 per cent for 1993 as a whole. The substantial weakening in the current account surplus was the combined result of lower merchandise exports, higher merchandise imports and a further increase in net service and transfer payments to non-residents, which could not be neutralised by a rise in the value of net gold exports.

The value of *merchandise exports* (seasonally adjusted and annualised), which made a major contribution to the revival of economic activity in 1993, receded by 3,7 per cent to R61,3 billion in the first quarter of 1994. Sharp decreases were recorded in the exports of manufactured goods, particularly in the categories machinery and electrical equipment, transport equipment and chemical products. The exports of precious and semi-precious stones also contracted, whereas the exports of mineral products and agricultural goods continued to rise.

A drop of 5½ per cent in the volume of goods exported was mainly responsible for the lower value of exports in the first quarter of 1994; in the fourth quarter of 1993 an exceptionally sharp increase of nearly 11 per cent had been registered in export volumes. The volume of merchandise exports in the first quarter of 1994 was therefore still about 12 per cent above its level in the first quarter of 1993. In rand terms export prices rose by 2 per cent from the fourth quarter of 1993 to the first

### Balance of payments



quarter of 1994, i.e. at more or less the average rate of increase in the preceding year. This steady rise in export prices was mainly due to the depreciation of the rand. However, international commodity prices, which had begun to move upwards slightly at the end of 1993, progressed further in the first quarter of 1994.

After having declined from R24,5 billion in the third

### Balance of payments on current account

Seasonally adjusted annual rates

R billions

	1993				1994
	1st qr	2nd qr	3rd qr	4th qr	Year
Merchandise exports.....	48,6	56,2	55,8	63,6	56,1
Net gold exports .....	21,0	22,2	24,5	21,2	22,2
Merchandise imports.....	-56,1	-55,8	-59,3	-64,0	-58,8
Net service and transfer payments .....	-11,7	-12,0	-15,0	-15,5	-13,6
<b>Balance on current account .....</b>	<b>1,8</b>	<b>10,6</b>	<b>6,0</b>	<b>5,3</b>	<b>5,9</b>
					2,3

quarter of 1993 to R21.2 billion in the fourth quarter, the seasonally adjusted and annualised value of *net gold exports* recovered again to R22.6 billion in the first quarter of 1994. This increase could be attributed to a higher gold price. The rand price of gold per fine ounce rose from an average of R1 262 in the fourth quarter of 1993 to R1 321 in the first quarter of 1994; the average fixing price of gold per fine ounce improved slightly from US\$374 to \$384 over the same period. In the ensuing two months the average rand price of gold advanced even further to reach R1 383 per fine ounce in May, while the dollar price retreated to \$381 per fine ounce. On the other hand, the volume of net gold exports declined by about 5 per cent in the first quarter of 1994 on account of the lower domestic production of gold.

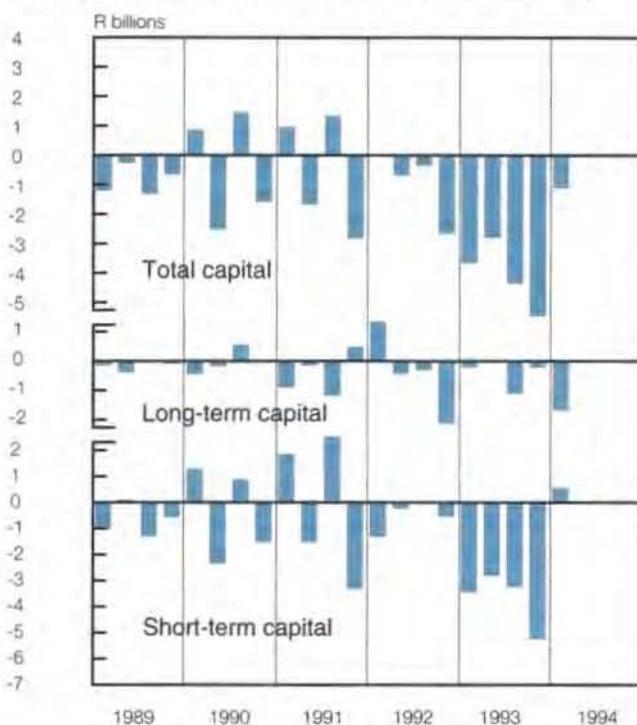
The value of *merchandise imports* (seasonally adjusted and annualised), which had risen sharply from the second quarter of 1993, rose further by 2½ per cent to R65.7 billion in the first quarter of 1994. This increase was due to both higher import prices and volumes. The prices of imported goods rose by only ½ per cent, despite the depreciation of the rand. As already indicated, a sharp rise in non-oil import prices was partly countered by the decline in international oil prices and relatively stable prices in South Africa's trading partner countries. Import volumes rose by 2 per cent in the first quarter of 1994, mainly because of pronounced increases in the imports of machinery and electrical equipment and precious stones and metals.

*Net service and transfer payments* (seasonally adjusted and annualised) rose somewhat further to R15.9 billion in the first quarter of 1994; in 1993 these payments had increased from R11.7 billion in the first quarter to R15.5 billion in the fourth quarter. Gross service payments increased in the first quarter of 1994, mainly on account of higher interest payments to non-residents and a further increase in tourist and travelling expenses by South Africans abroad, whereas gross service receipts declined as a result of lower travel receipts from non-residents.

#### Capital movements

The capital account of the balance of payments was characterised by a surprisingly small *total net outflow of capital* in the first quarter of 1994, i.e. in a period of transition to a new political dispensation in which violence and uncertainty were still rife. Following large net outflows of R4.4 billion and R5.5 billion in the last two quarters of 1993, the net outflow of capital not related to reserves but including unrecorded transactions declined to R1.1 billion in the first quarter of 1994. This smaller net outflow of capital included fixed repayment obligations on foreign debt both inside and outside the standstill net, indicating that some of these commitments may have been rolled over or that South Africa had obtained new loans abroad. Unfortunately, in April 1994 the capital account again deteriorated considerably as the elections drew closer and certain political parties had not yet

#### Net capital movements not related to reserves



indicated whether they would participate. The change in net foreign reserves of the country indicate that a large net capital outflow probably took place again during this month. Some of these outflows, however, may have been reversed again in May 1994.

As could be expected, the dramatic improvement in the capital account was mainly registered in *short-term capital* not related to reserves but including unrecorded transactions. Having shown outflows since the fourth quarter of 1991, short-term capital movements changed from a net outflow of R5.3 billion in the fourth quarter of 1993 to a net inflow of R0.6 billion in the first quarter of 1994. This remarkable reversal in the short-term capital flows could be attributed to a turnaround from a net outflow of R0.6 billion to a net inflow of R2.2 billion in the foreign short-term liabilities of private banks over the same period. This switch partly reflected a back-flow in January 1994 of an exceptionally large amount of short-term funds that flowed out of the country in December 1993. The tighter conditions on the domestic money market probably also forced banks to make greater use of foreign credit facilities to supplement their funds. A net outflow of R1.7 billion was still recorded in other short-term capital in the first quarter of 1994; this was, however, significantly smaller than the outflow in the second half of 1993.

In contrast to these favourable developments, the net outflow of *long-term capital* increased substantially from R0.2 billion in the fourth quarter of 1993 and an average

quarterly outflow of R0,4 billion in the year as a whole to R1,7 billion in the first quarter of 1994. Included in this amount, are net purchases by non-residents of securities listed on the Johannesburg Stock Exchange which totalled R1,2 billion in the first quarter of 1994. These purchases were, however, neutralised by net sales of gilts of R1,3 billion by non-residents through authorised banks, i.e. by so-called "over-the-counter" transactions rather than directly on the stock exchange. Although these transactions in securities by non-residents did not affect the level of the gross foreign reserves of the country because they were concluded through the financial rand mechanism, they indicate that the net outflow of other long-term capital came to about R1,6 billion in the first quarter of 1994. This net outflow of capital was affected by the upfront payment of R1,6 billion in terms of the 1994 Debt Arrangements with foreign creditor banks, the repayment of R0,8 billion on debt converted to medium- and long-term loans outside the standstill net as well as the redemption of loans of R0,5 billion guaranteed by foreign governments.

#### Foreign debt

Despite the large net outflow of capital not related to reserves (the identified capital flows plus errors and unrecorded transactions) in 1993, South Africa's *total outstanding foreign debt* (excluding debt subject to financial rand and blocked rand Exchange Control Regulations) was reduced further by only \$0,6 billion to \$16,7 billion at the end of the year. This was partly due to the fact that South Africa's reserve-related foreign borrowing amounted to R7,4 billion, while part of the capital outflow was due to an increase in foreign

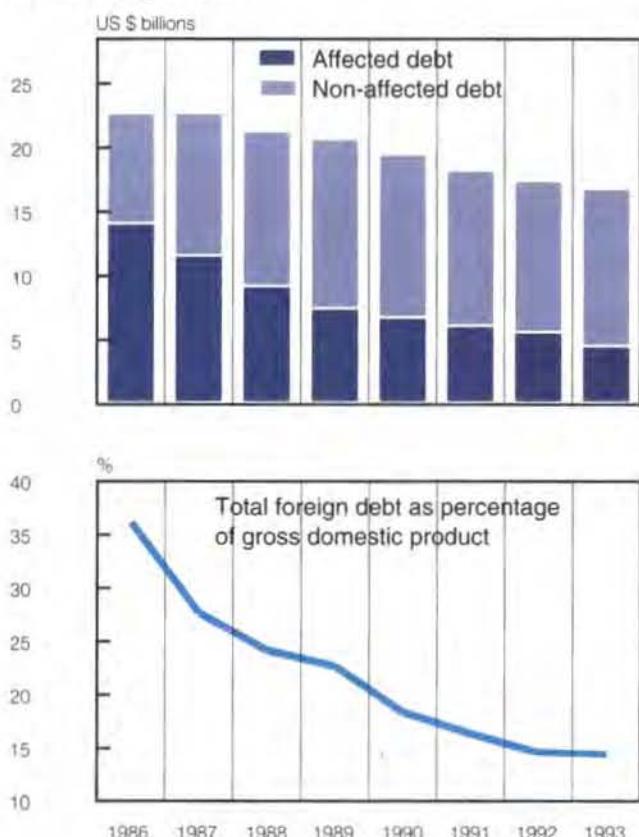
#### Foreign debt of South Africa\*

\$ billions

	31 Aug 1985	31 Dec 1992	31 Dec 1993
<b>Affected debt</b>			
Public sector .....	2,7	1,8	1,3
Monetary sector .....	8,8	2,1	1,6
Other.....	2,1	1,6	1,5
Total.....	13,6	5,5	4,4
<b>Non-affected debt</b>			
Public sector .....	7,3	5,0	6,3
Converted long- term loans .....	-	4,8	4,5
Other.....	2,8	2,0	1,5
Total.....	10,1	11,8	12,3
<b>Total foreign debt .....</b>	<b>23,7</b>	<b>17,3</b>	<b>16,7</b>

\* Excluding blocked rand accounts, ordinary and non-redeemable preference shares, quoted domestic debentures and quoted domestic loan stock.

#### Total foreign debt



assets. A comparison of changes in foreign debt and capital flows, however, also confirm that a large part of the indicated capital outflow in 1993 could not be identified, i.e. the balancing item "errors and unrecorded transactions" was large.

Valued at the exchange rates of the US dollar against other currencies as at 31 August 1985, South Africa's total foreign debt was reduced from \$23,7 billion at the beginning of the standstill arrangements to \$15,8 billion at the end of 1993. In terms of rand, South Africa's foreign debt decreased from R65,8 billion to R56,7 billion over the same period. As a ratio of gross domestic product, South Africa's foreign debt amounted to only 14,2 per cent at the end of 1993; at the end of August 1985 this ratio was 42,5 per cent.

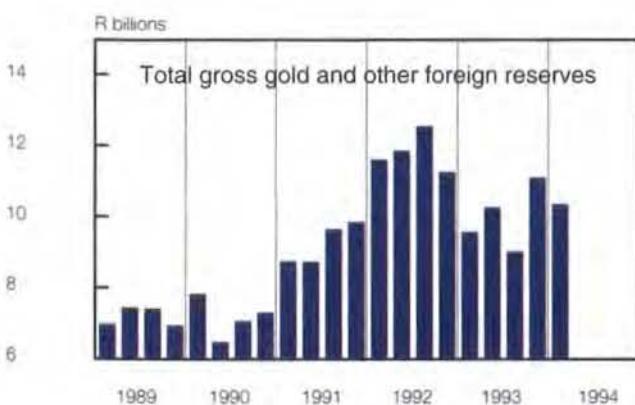
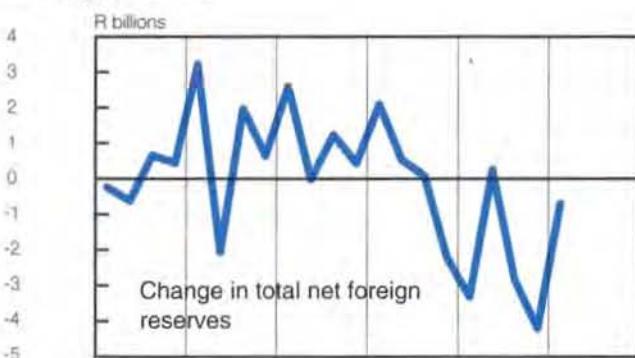
The *debt not payable* in terms of the debt arrangements with foreign creditor banks was reduced from \$5,5 billion at the end of 1992 to \$4,4 billion at the end of 1993; at the beginning of the debt standstill \$13,6 billion was affected by the arrangements. The *debt payable* in terms of the proclamation rose from \$11,8 billion at the end of 1992 to \$12,3 billion at the end of 1993, owing largely to borrowing by the authorities in support of the level of the foreign reserves.

### Foreign reserves

As a result of the relatively small net outflow of capital, the total *net gold and other foreign reserves* of South Africa fell by R0,9 billion in the first quarter of 1994; substantially less than the decline of R4,3 billion that had been recorded in the fourth quarter of 1993. In April 1994, however, the net gold and other foreign reserves of the Reserve Bank dropped by no less than R2,2 billion in one month before declining further by R0,4 billion in May.

The decline in net foreign reserves adjusted for valuation adjustments of R0,2 billion led to a decrease of approximately R0,7 billion in the total *gross gold and other foreign reserves* to a level of R10,3 billion at the end of March 1994. These reserves were equivalent to the value of about 5½ weeks' imports of goods and services. In the subsequent two months the Reserve Bank's gross gold and other foreign reserves declined further by R0,8 billion, reaching a level of R7,2 billion at the end of May 1994. The gold reserves of the Bank amounted to 4,4 million fine ounces at the end of May 1994, i.e. marginally lower than the 4,8 million fine ounces at the end of December 1993.

### Foreign reserves



### Changes in exchange rates of the rand

%

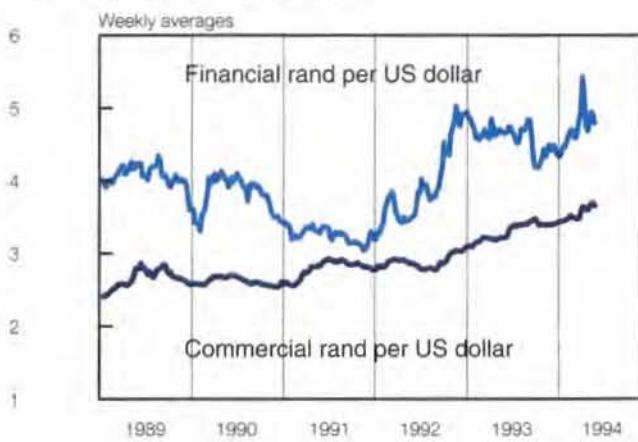
	31 Dec '92 to 31 Dec '93	31 Dec '93 to 31 Mar '94	31 Mar '94 to 31 May '94
Weighted average.....	-8,7	-4,1	-4,4
US dollar.....	-10,1	-2,1	-4,0
British pound .....	-7,7	-2,6	-5,6
German mark .....	-3,4	-5,8	-5,5
Japanese yen .....	-19,4	-10,2	-2,2
Netherlands guilder.....	-3,8	-5,4	-5,7
Italian lira.....	4,2	-7,9	-5,1

### Exchange rates

Owing to political uncertainty and ongoing violence in the run-up to the election in South Africa, the *nominal effective exchange rate* of the rand declined by 4,1 per cent during the first three months of 1994 and by a further 4,4 per cent until 31 May 1994. This brought the decline in the nominal effective exchange rate to 8,4 per cent in the first five months of 1994, compared with a depreciation of 8,7 per cent during 1993 as a whole. Although the rand depreciated sharply against most of the major currencies during the first five months of 1994, exceptionally large declines of 12,3 per cent and 12,6 per cent, respectively, were recorded against the Japanese yen and the Italian lira.

The sharp decline in the nominal effective exchange rate of the rand in the first quarter of 1994 was more than sufficient to make up for the differential in the inflation rates between South Africa and its main trading partner

### Exchange rates of the rand



countries; the *real effective exchange rate* of the rand in March 1994 was therefore 2 per cent below its level in December 1993. Since the end of 1992 the real effective exchange rate of the rand has declined by nearly 6½ per cent.

Having appreciated on balance by 13.1 per cent during the course of 1993, the exchange rate of the *financial rand* depreciated by 12.4 per cent during the first quarter of 1994. Concern over violence-related incidents, political uncertainty and profit-taking, however, then caused the financial rand to fluctuate widely in the ensuing two months. On 11 April 1994 the financial rand traded at an exchange rate of R5.58 per dollar – the lowest level since its introduction on 24 January 1979 – before appreciating to R4.74 per dollar on 31 May 1994. The financial rand discount narrowed accordingly from 35.7 per cent to 23.8 per cent over the same period.

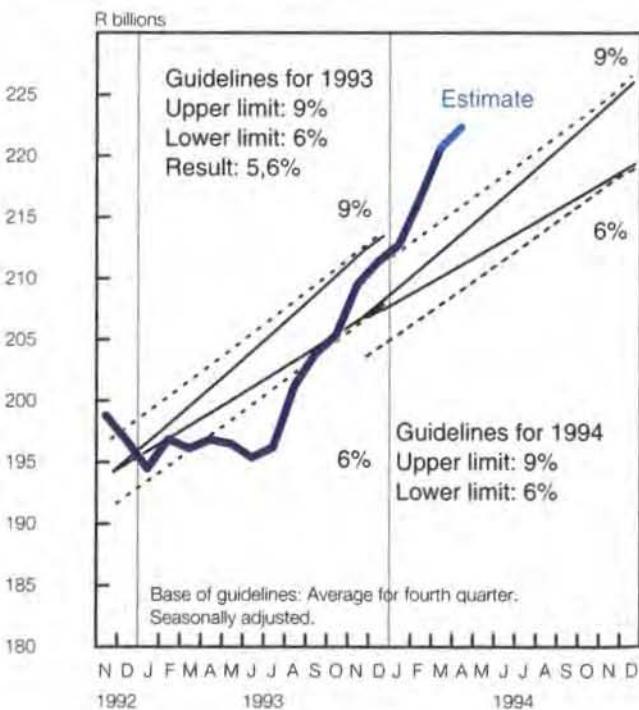
## Financial markets

### Money supply

Growth in the money supply, which had generally been subdued during 1993 and only started to show a moderate upward movement in the second half of the year, increased more rapidly in the first three months of 1994. The twelve-month rate of increase in the *broadly defined money supply (M3)* decreased from 8.0 per cent in December 1992 to only 1.9 per cent in July 1993; it then rose steadily to 7.0 per cent in December 1993 and to 12.3 per cent in March 1994. However, the quarter-to-quarter rate of increase in M3 (seasonally adjusted and annualised) decreased moderately from 18.1 per cent in the fourth quarter of 1993 to 15.5 per cent in the first quarter of 1994. Preliminary estimates indicate that the growth in M3 over twelve months remained high in April 1994 because it was measured from a low level in April 1993.

In view of this acceleration in the growth of money supply, the rate of increase in M3 exceeded the upper limit of the *new money guideline range* in the first four months of 1994. The Governor of the Reserve Bank announced on 25 March 1994 that the authorities had decided to keep the money supply growth guidelines for 1994 at their rates for the preceding year, i.e. a guideline range of 6 to 9 per cent growth in M3 from the fourth quarter of 1993 to the fourth quarter of 1994 will apply.

### Guidelines for growth in M3



In maintaining these guidelines, monetary policy should best serve the requirements of monetary stability and a recovery in the domestic economy, because these growth rates in money supply should:

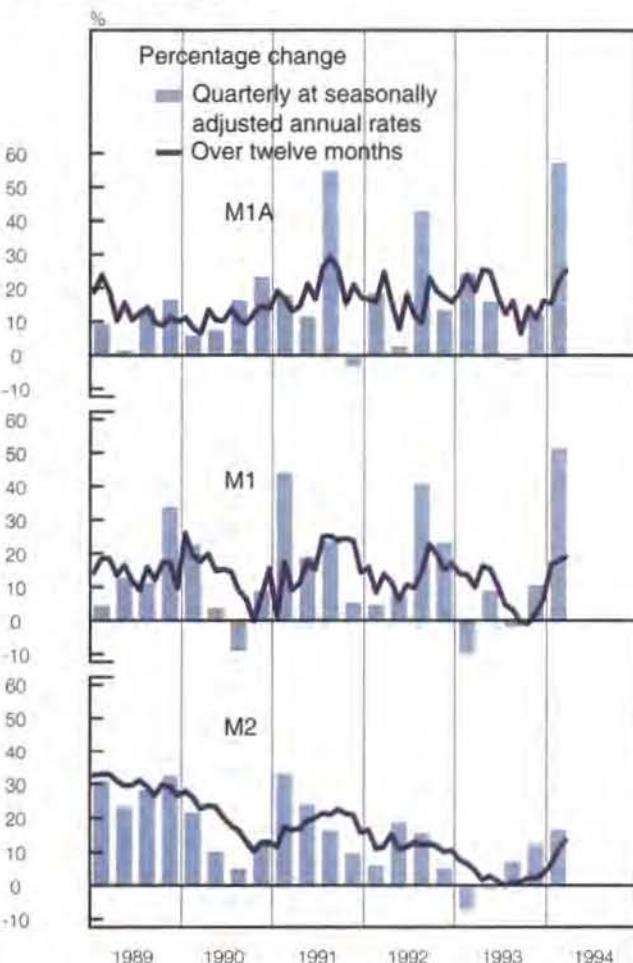
- not restrict the real growth in the economy which only came under way in 1993, nor stimulate it artificially;
- not facilitate further outflows of capital in an already vulnerable balance of payments situation;
- continue to apply downward pressure on inflation, which is still high compared with the inflation rates in most industrialised countries; and
- allow sufficient scope for total monetary expenditure to increase, taking into account the scope for some further increase in the income velocity of money.

As in the past, the monetary authorities emphasised that they did not intend to follow a rigid money rule linked to the guidelines at all times. The Reserve Bank would rather continue to evaluate the growth in money supply against the broader underlying conditions before deciding whether changes in money supply growth justified a shift in the monetary policy stance. In accordance with this approach, the recent acceleration in the growth of money supply did not elicit an increase in Bank rate because it was largely brought about by a shift from government deposits (not part of money supply) to private sector deposits (included in money supply) with monetary institutions. This shift in deposits was also largely responsible for a decline of 2,0 per cent in the income velocity of M3 in the first quarter of 1994, despite more or less unchanged margins between lending and average deposit rates of banks.

The rates of increase over periods of twelve months in the narrower monetary aggregates also declined to relatively low levels in 1993, but then rebounded in the final months of 1993 and in the first three months of 1994. The twelve-month growth rate in M1A fluctuated considerably in 1993, but declined on balance from 16,2 per cent in December 1992 to 6,9 per cent in September 1993; it then increased to 16,6 per cent in December 1993 and to 25,7 per cent in March 1994. The rate of increase in M1 over periods of twelve months receded from 17,5 per cent in December 1992 to -0,5 per cent in October 1993, before increasing to 6,7 per cent in December 1993 and to 19,4 per cent in March 1994. Similarly, the twelve-month growth rate in M2 declined from 10,8 per cent in December 1992 to 0,1 per cent in July 1993, but increased again to 3,9 per cent in December 1993 and to 13,6 per cent in March 1994.

The main counterparts (in a statistical or accounting sense) of the R12,5 billion increase in M3 during the first three months of 1994 were increases of R14,8 billion in the monetary institutions' net claims on the government sector and R7,1 billion in these institutions' claims on the private sector. In contrast to these developments, the net foreign assets (including gold) and the "net other assets" of the monetary sector decreased by R3,1 billion and R6,3 billion in the first quarter of 1994.

### Monetary aggregates



The large increase recorded in the monetary sector's net claims on the government sector and the large decrease in "net other assets" in the first quarter of 1994 were distorted by the issuing of a stripped coupon government stock to the Reserve Bank in March 1994. Government stock amounting to R7,5 billion (included in the monetary sector's net claims on the government) was issued to the Bank to redeem losses incurred for the account of the Treasury on the Gold and Foreign Exchange Contingency Reserve Account (included in "net other assets"). If these stock issues are not taken into consideration, the monetary sector's net claims on the government sector nevertheless still increased by R7,3 billion in the first quarter of 1994, which could largely be attributed to a decline of R7,2 billion in government deposits with the monetary sector during this period.

### Credit extension

The reduction of government deposits with banks was also mainly responsible for the sharp acceleration in the

growth of *total credit extension* (i.e. credit extension to the private sector and net claims on the government) by the monetary institutions in the first three months of 1994. After having risen from a trough of 6,7 per cent in May 1993 to 9,6 per cent in December, the rate of increase over twelve months in total domestic credit extension by banks rose much more rapidly to 12,9 per cent in February 1994 and 19,2 per cent in March. This latter rate of increase was also affected by the issuing of the stripped coupon government stock to the Reserve Bank.

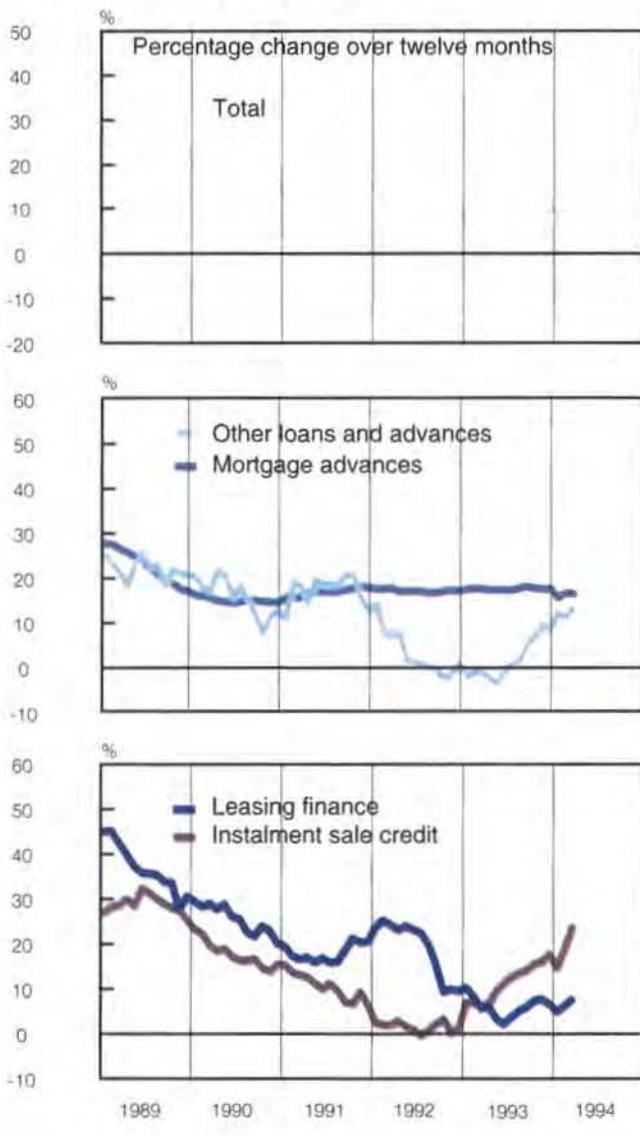
The growth in credit extended by the monetary institutions to the *domestic private sector* over a twelve-month period declined from 8,7 per cent in December 1992 to a low of 5,7 per cent in May 1993 before

increasing to 9,7 per cent in December 1993. This growth rate receded somewhat to 9,4 per cent in February 1994, but accelerated to 11,8 per cent in March 1994.

An analysis of monetary institutions' claims on the private sector by *type of credit* shows that the rate of increase over twelve months in *mortgage advances* remained at a relatively high level. Since the beginning of 1991 the twelve-month growth rate in mortgage advances has averaged 17,3 per cent. This remarkable performance in mortgage lending was to a large extent due to the banks' active promotion of this credit facility on account of the low capital requirements that apply to it. In view of the flexibility of some of the mortgage schemes and the comparatively low interest rates on mortgage advances, these accounts have been used increasingly by many banks' clients to finance the purchases of durable and other consumer goods.

As shown in the accompanying table, credit in the form of *instalment sales* has increased at very high rates since the second half of 1993. This could mainly be ascribed to rising car sales, "special rate" vehicle finance schemes that were introduced by banks, and higher instalment sales to farmers. The rise in "*other loans and advances*" (mainly overdrafts) reflected to some extent the upturn in real consumption expenditure, but was probably also due to distress borrowing by some smaller and medium-sized enterprises after a long period of negative economic growth. The rise in the growth in *leasing finance* that was discernible in the second half of 1993, tapered off in the first three months of 1994.

### Credit extension to the private sector



### Credit extension to the private sector by main type of credit

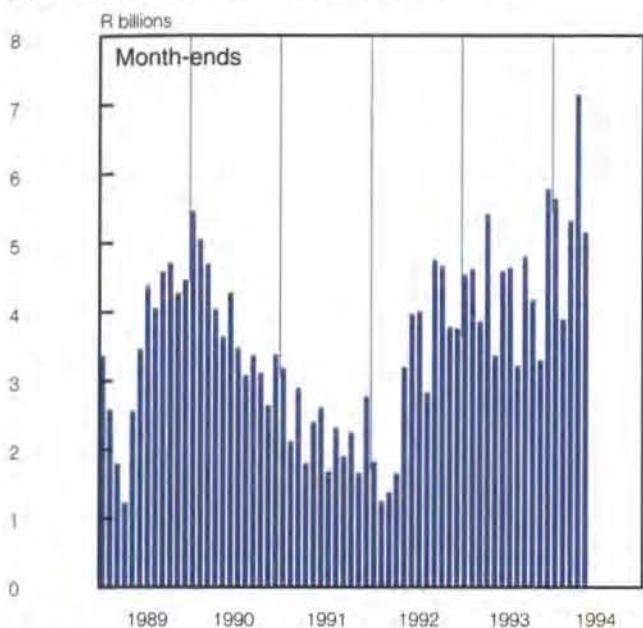
Percentage change over twelve months

	Dec '92	Jun '93	Dec '93	Mar '94
Mortgage advances.....	17,3	17,5	17,7	16,6
Instalment sales....	1,5	11,4	18,0	23,9
Leasing finance....	9,6	2,2	6,8	7,7
Other loans and advances.....	0,9	-0,7	8,4	13,1

### Money market conditions

After having tightened considerably in December 1993, money market conditions eased in February 1994, but then became very tight in the ensuing three months. These changes were reflected in the amount of accommodation at month-ends, which decreased from R5,8 billion at the end of December 1993 to R3,9 billion at the end of February 1994 before rising again to R5,3 billion and R7,1 billion at the end of the next two months. Money market conditions remained relatively tight in May although the amount of accommodation decreased to

### Accommodation at the discount window



R5,2 billion at the end of May 1994. The relative tightness in the money market forced many of the banks to borrow from the Reserve Bank at a rate of 13 per cent (i.e. at one percentage point above Bank rate), because of a lack of paper qualifying for the lower rate.

The easing of money market conditions in February 1994 was mainly the result of a substantial drop in government deposits with the Reserve Bank. Although these deposits decreased further in March, a marked increase of R2,0 billion in notes and coin in circulation in March and April and a decrease of R3,0 billion in the net foreign assets (including gold) of the Reserve Bank then accounted for the tightening of money market conditions. Both these developments were probably related to uncertainties and fears regarding political stability in South Africa in the period leading up to the election of a government of national unity. In May 1994 notes in circulation decreased again and the net foreign assets of the Reserve Bank increased by R0,2 billion as perceptions improved.

### Action of the Reserve Bank in the money market

The Reserve Bank generally allowed the money market shortage to reflect underlying demand and supply conditions. By adopting this policy stance, the Bank made it more arduous for the private banks to substitute domestic liabilities for foreign credit facilities and thereby discouraged the capital outflow from the country. Certain adjustments were, however, made in the asset portfolio of the Corporation for Public Deposits by selling the

corporation's financial assets in the money market. During the first five months of 1994 these transactions had a tightening effect of about R2,1 billion on money market conditions. In addition, in April and May, net sales of Treasury bills were increased to R445 million, which had a tightening effect on money market conditions to the extent that it caused an increase in government deposits at the Reserve Bank. This was achieved by increasing the sale of three-month Treasury bills in the weekly tender from R300 million to R400 million from 8 April 1994.

However, the monetary authorities also increased the Reserve Bank's own portfolio of government stock with R1,2 billion during the first five months of 1994 through normal open-market transactions, which again eased money market conditions somewhat. The Bank's holdings of government stock recorded in its balance sheet showed a much more substantial rise owing to the already mentioned stripped coupon government stock acquired from the government.

Gross sales of government stock by the Reserve Bank totalled R59 billion in the first five months of 1994, compared with R71 billion in the corresponding period in 1993 and R178 billion in 1993 as a whole. Net sales of these stocks by the Reserve Bank during the first five months of 1994 were R2,5 billion; in the corresponding period of 1993 these net sales were equal to R7,6 billion. The Reserve Bank's trading in government stock options increased from a monthly average of R5,3 billion in 1993 to a monthly average of R6,9 billion in the first five months of 1994.

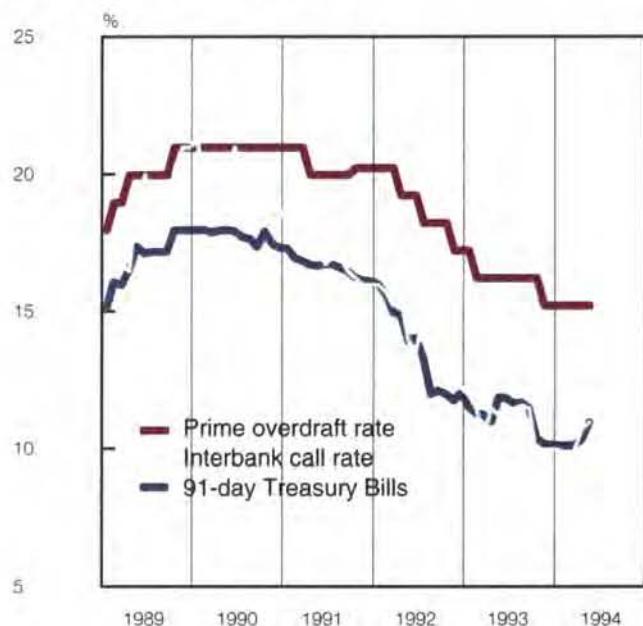
### Money market interest rates

The general downward movement in money market interest rates lost momentum during late 1993 and in the first two months of 1994; these rates then hardened somewhat in March, April and May, reflecting the relatively tight money market conditions and uncertainty about political developments in South Africa. This was clearly reflected in the rate on inter-bank call money, which decreased from 12,25 per cent at the end of December 1992 to 10,00 per cent at the end of December 1993 and to 9,50 per cent at the end of February 1994; it then rose again to 10,75 per cent at the end of April. This rate subsequently hardened slightly to 11,00 per cent at the end of May.

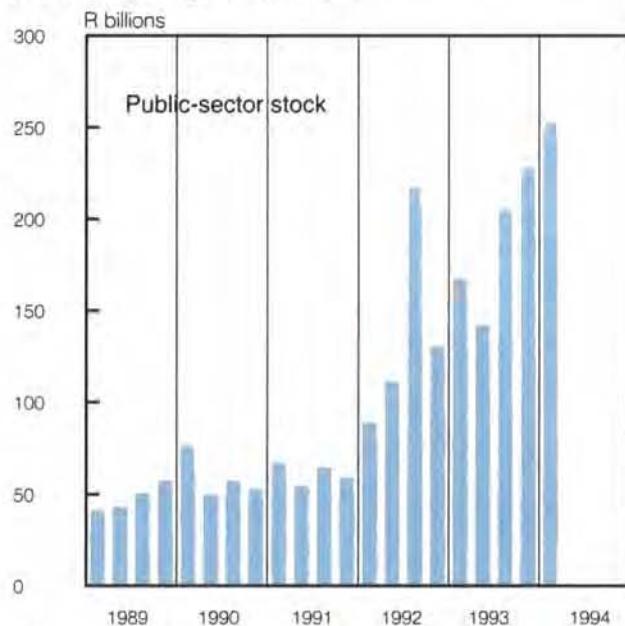
The rate on three-month bankers' acceptances showed a similar movement and declined from 12,65 per cent at the end of December 1992 to 10,15 per cent at the end of December 1993; it then remained more or less at that level in the next three months. In April it started increasing fairly sharply to 10,55 per cent at the end of the month and reached 11,05 per cent on 31 May 1994.

Both Bank rate and the private banks' prime lending rates remained unchanged during the first five months of 1994. Deposit rates of banks were, on average, also not adjusted in the first quarter of 1994, but firmed somewhat in the ensuing two months. The margin between lending and deposit rates therefore at first moved sideways

### Short-term interest rates



### Stock exchange transactions



before narrowing in April and May 1994. Although the banks maintained an unchanged prime lending rate of 15,25 per cent, the inflation-adjusted or real prime lending rate increased from 5,2 per cent in December 1993 to 7,7 per cent in April 1994, because of a decline in the inflation rate as measured by changes in the current consumer price index.

#### Capital market activity

Trading activity on the Johannesburg Stock Exchange, which had been buoyant throughout 1993, increased sharply further in the first quarter of 1994. After having increased from R168,3 billion in the first quarter of 1993 to R229,2 billion in the fourth quarter, the nominal value of public-sector stock traded on the stock exchange rose further to R253,5 billion in the first quarter of 1994. The higher value of stock traded was strongly influenced by volatility in long-term interest rates as a result of uncertainties on the political front and measured inflation that was higher than expected. In April 1994 the value of transactions in public sector stock decreased somewhat to R54,1 billion, from an average monthly value of R84,5 billion in the first quarter of the year. This decrease could largely be attributed to the smaller number of trading days in April. After the election of the new government and the comparatively peaceful way in which this had come about, the value of public-sector stock traded rose again to R93,0 billion in May.

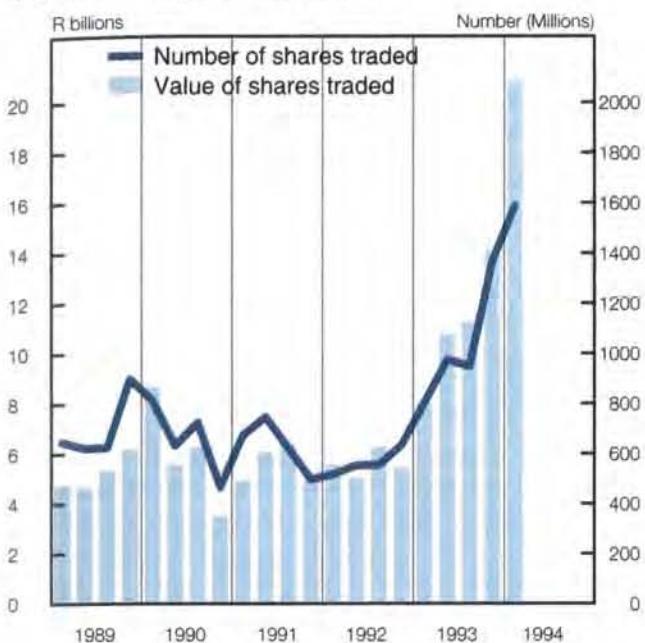
Non-residents were net sellers of public-sector stock on the Johannesburg Stock Exchange in the first

quarter of 1994. These net sales came to R0,6 billion; in the fourth quarter of 1993 non-residents had still been net purchasers of public-sector stock to an amount of R0,3 billion. Sales of public-sector stock by non-residents increased significantly with the firming of long-term rates in February and March 1994, but subsided somewhat in the ensuing two months when expectations began to arise that the rates might have peaked.

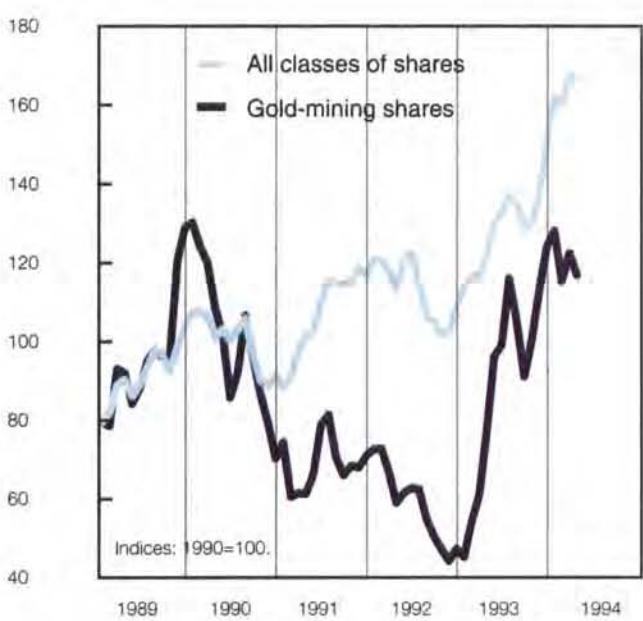
The value of shares traded on the Johannesburg Stock Exchange increased from R8,0 billion in the first quarter of 1993 to R14,1 billion in the fourth quarter and R20,9 billion in the first quarter of 1994. The high turnover in the first three months of 1994 was the combined result of increases in both the prices and the number of shares traded. In April 1994 the value of shares traded receded to R5,5 billion from an average monthly value of R7,0 billion in the first three months of the year. This decline was also related to the smaller number of trading days and uncertainty regarding political developments. In May 1994 the value of shares traded increased again to R6,1 billion.

The monthly average of prices of all classes of shares increased by 19,6 per cent in the first five months of 1994. In May 1994 the level of share prices was therefore 77,3 per cent above the lower turning-point in October 1992. Industrial, commercial and financial shares continued to perform well. The prices of gold shares, however, fell by 9,5 per cent from a peak in January 1994 to May.

### Stock exchange transactions



### Share prices



The continued upward movement in share prices, the weak financial rand and the increasing interest of overseas-based investment funds in the emerging South African market, led to a high level of *shares purchased by non-residents* on the Johannesburg Stock Exchange in the first quarter of 1994. In fact, non-residents' net purchases of shares increased from R0,9 billion in the last quarter of 1993 to R2,1 billion in the first quarter of 1994. However, downward corrections on some of the larger stock exchanges in industrialised countries and uncertainty about the socio-political conditions in South Africa caused non-residents to become net sellers of shares on the Johannesburg Stock Exchange to the value of R0,7 billion in April and May 1994.

In the *primary capital market* relatively low levels of new-issue activity were displayed in the first quarter of 1994 by borrowing entities in both the public and the private sector. The *public sector* did not raise any funds through issues of *fixed-interest securities* in the first quarter of 1994, but actually repurchased own securities to the amount of R2,0 billion. The value of funds acquired by companies in the *private sector* through issues of *fixed-interest securities* (including convertible preference shares, debentures and corporate bonds) decreased from R0,3 billion in the fourth quarter of 1993 to a negligible R25 million in the first quarter of 1994. New *share issues* remained slack in the first quarter of 1994 as a result of the fact that many listed companies have become flush with cash and are relatively free of debt, often as the counterpart of very low inventory levels

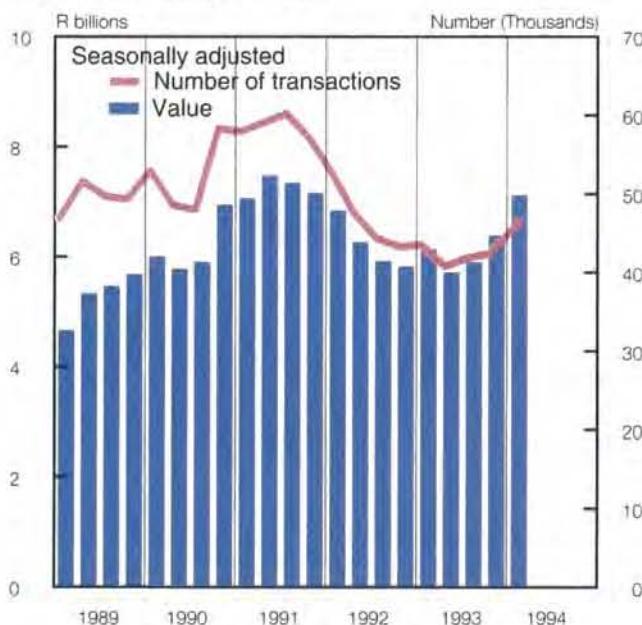
and an ageing capital stock. New issues of shares dropped from R1,0 billion in the fourth quarter of 1993 to R0,9 billion in the first quarter of 1994, also because most listed companies had not yet embarked on significant investment programmes.

In the *mortgage market* the average monthly value of mortgage advances paid out by banks decreased slightly from R3,5 billion in the fourth quarter of 1993 to R3,2 billion in the first quarter of 1994. The banks' total holdings of mortgage loans increased further from R92,9 billion at the end of December 1993 to R96,1 billion at the end of March 1994. As already pointed out above, this increase does not necessarily reflect a rise in construction activity or real estate transactions, because it may also have been used to finance ordinary consumer expenditure.

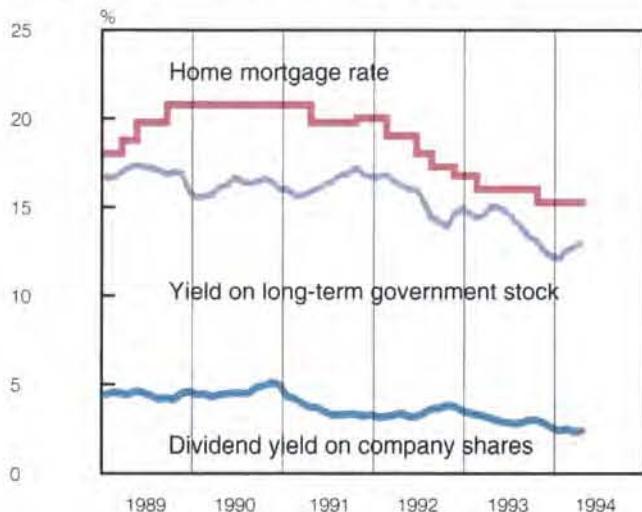
The seasonally adjusted value of *real estate transactions* nevertheless increased from R6,4 billion in the fourth quarter of 1993 to R7,1 billion in the first quarter of 1994. Although this was partly due to a small increase in the average price of such transactions, the number of transactions in fixed property also increased by 10 per cent over the same period. The higher level of transactions in fixed property was due to an increase in the demand for commercial property as well as residential property in certain regions.

Increased uncertainty regarding future share and commodity price movements was mainly responsible for the increase of 69,3 per cent in the number of *futures contracts* traded in the first four months of

## Real estate transactions



## Capital market interest rates and yields



1994, compared with the corresponding period of the preceding year. In March 1994 the number of these contracts reached an all-time monthly high of about 468 000 before falling back to 226 000 in April and 299 000 in May. Contracts in share indices continued to represent an overwhelming proportion of the number of futures contracts. The number of options on index futures contracts in the first four months of 1994 was more than four times higher than the level in the corresponding period of the preceding year. At the end of May 1994 the open interest in index futures contracts and in options on index futures contracts was 87 500 and 363 500 contracts, respectively.

### Capital market yields and interest rates

After having declined from 15,03 per cent in April 1993 to 12,07 per cent in January 1994, the monthly average yield on long-term government stock rose to 12,97 per cent in April and 13,02 per cent in May. This rise probably reflected uncertainties pertaining to political developments, net sales of domestic loan stock by non-residents, a firming in long-term interest rates in certain major economies and the market's concerns about the government's financing needs that may be associated with its reconstruction and development programme. In view of these higher long-term rates and a decrease in the inflation rate as measured by changes in the consumer price index, the real yield on government stock increased sharply from 2,0 per cent in January 1994 to 5,5 per cent in April.

Despite the fact that the predominant mortgage bond

rate remained unchanged at 15,25 per cent from November 1993, the banks lowered their long-term deposit rates. The twelve-month deposit rate, for instance, was reduced by 0,5 per cent to 10,5 per cent in February 1994. This lower rate provided depositors with a positive real pre-tax yield of 3,2 per cent on interest receipts in April 1994.

The higher average level of share prices in the first five months of 1994 depressed the average dividend yield on all classes of shares further from 5,95 per cent in December 1993 to 5,18 per cent in May 1994.

The maximum permissible finance charges rates, as laid down in terms of the Usury Act, were reduced with effect from 24 December 1993 from 25 to 23 per cent in respect of money lending, credit and leasing transactions for amounts of more than R6 000 (but not exceeding R500 000), and from 28 to 26 per cent in respect of amounts up to R6 000. This brought the total reduction in these rates during 1993 to 3,0 percentage points.

The standard interest rate applicable to loans granted by the State out of the State Revenue Fund (Exchequer Act, Act No. 66 of 1975) was lowered from 14,75 per cent to 13,5 per cent on 1 November 1993, and in three further steps to 12,5 per cent on 1 February 1994. This rate was then raised to 13,25 per cent with effect from 1 March 1994, but lowered to 13,00 per cent with effect from 1 April 1994. It was increased again, to 13,75 per cent, with effect from 1 May 1994.

The official rate of interest, as defined by the Income Tax Act, was reduced by 1 percentage point to 14 per cent with effect from 1 February 1994.

## 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 administrations, local authorities and non-financial public enterprises), which had shown a downward movement from R7,9 billion in the June quarter of 1993 to R6,2 billion in the December quarter, soared to R21,1 billion in the March or final quarter of fiscal 1993/94. For the fiscal year as a whole the public-sector borrowing requirement therefore totalled R41,9 billion, or 26 per cent more than the already high level of R33,3 billion of the preceding year. As a ratio of gross domestic product, the public-sector borrowing requirement was equal to 10,6 per cent in fiscal 1993/94.

The exceptionally high borrowing requirement of the public sector in fiscal 1993/94 was largely due to *special transfers* of the government to redeem liabilities incurred over a relatively long period of time, i.e. not only in fiscal 1993/94. A transfer of R7,5 billion was namely made to the Gold and Foreign Exchange Contingency Reserve Account to reduce deficits on this account dating back to the late 1980s. In addition, a transfer of R6,9 billion was made to the government employees' pension funds, and a transfer of R0,4 billion to the closed pension funds, in respect of commitments arising from retrenchments and actuarial shortfalls. If these transfers of R14,8 billion are excluded from the public-sector borrowing requirement, the borrowing needs of the public-sector in fiscal 1993/94 were equal to R27,0 billion, or to 6,8 per cent of gross domestic product.

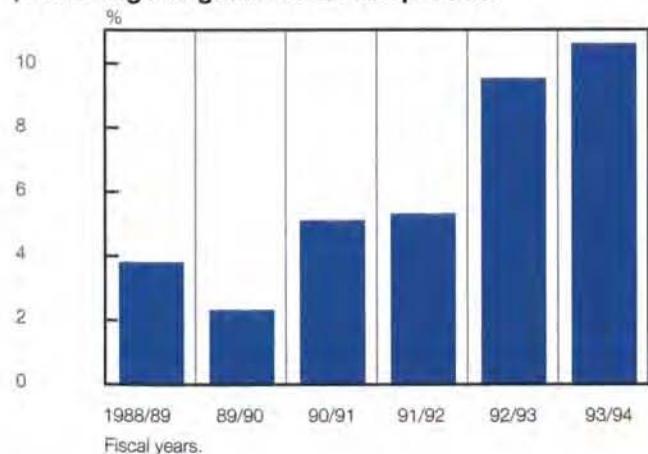
*Non-financial public enterprises* registered a small surplus on their income and expenditure accounts in

fiscal 1993/94; the large public-sector borrowing requirement in that year was therefore brought about entirely by the deficit before borrowing and debt repayment of *general government*. Provincial administrations were the only government bodies that had a surplus on their consolidated income and expenditure accounts in fiscal 1993/94. As in the preceding year, the borrowing requirement of local authorities amounted to R0,9 billion in fiscal 1993/94. In contrast, the borrowing needs of extra-budgetary entities (including the TBVC countries and self-governing states) rose from only R0,1 billion in fiscal 1992/93 to R2,9 billion in fiscal 1993/94. The worsening in the financial position of the extra-budgetary institutions was mainly the result of a substantial reduction in net transfer receipts from the Main Budget. The borrowing requirement on the Main Budget nevertheless increased substantially, owing to the above-mentioned extraordinary transfers that were made in the final quarter of fiscal 1993/94.

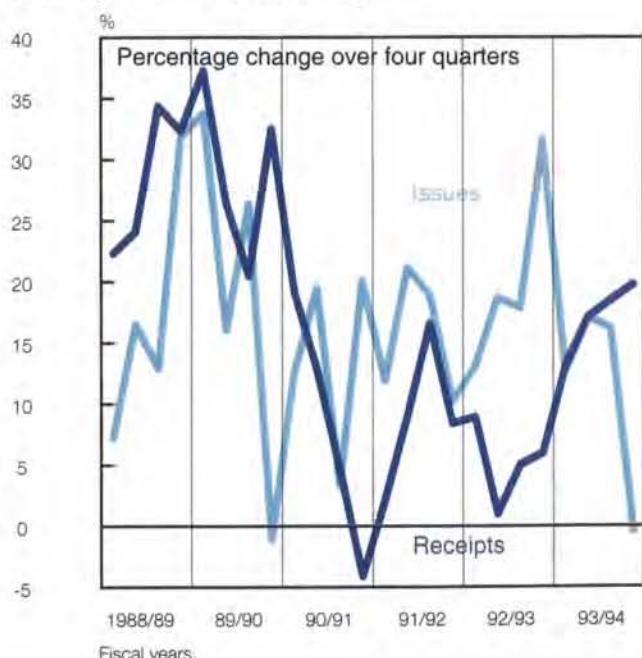
### Exchequer account in final quarter of fiscal 1993/94

The level of *Exchequer issues* (including changes in the balance on the Paymaster-General Account and other adjustments made to reflect actual cash flows) in the final quarter of fiscal 1993/94 was 0,5 per cent lower than in the last quarter of 1992/93, compared with year-on-year rates of increase that rose from 12,7 per cent in the June quarter of 1993 to 16,2 per cent in the December quarter. The decline in this rate in the final quarter of fiscal 1993/94 could be attributed mainly to the

### Public-sector borrowing requirement as percentage of gross domestic product



### Exchequer issues and receipts



exceptionally high rate of increase in Exchequer issues experienced in the corresponding quarter of the preceding year owing to drought relief provided to the farming community. Measured from quarter to quarter, the annualised rate of increase in Exchequer issues amounted to no less than 18,7 per cent, i.e. the quarter-to-quarter rate of increase in the final quarter was, therefore, considerably higher than in the preceding three quarters of the year.

The year-on-year rate of increase in *Exchequer receipts* (excluding the proceeds from privatisation), which had increased from 13,0 per cent in the June quarter of 1993 to 18,4 per cent in the December quarter, rose even further to 19,7 per cent in the final quarter of fiscal 1993/94. This continued good performance by government receipts was mainly due to the recovery in the domestic economy, which led to higher proceeds from nearly all major categories of taxation.

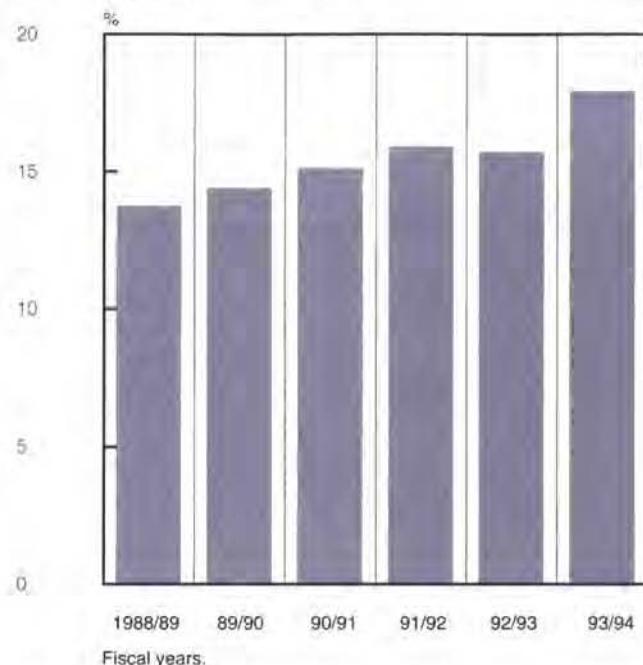
The *Exchequer deficit* before borrowing and debt repayment amounted to R4,8 billion, or 4,9 per cent of gross domestic product in the closing quarter of fiscal 1993/94. This deficit, and the transfers made to the Gold and Foreign Exchange Contingency Reserve Account and the government employees' and closed pension funds, were financed largely by means of the issue of government stock (R14,8 billion), a decrease in the available cash balances of the government (R5,3 billion) and transfers made from the National Supplies Procurement Fund and the Central Energy Fund (R1,4 billion). The government redeemed Treasury bills to an amount of R1,7 billion and made further small net repayments on foreign loans and non-marketable securities in the last quarter of fiscal 1993/94.

#### **Exchequer account for fiscal 1993/94**

The more rapid growth in *Exchequer issues* in the final quarter of fiscal 1993/94 brought issues for the year as a whole to R114,8 billion, or to 0,6 per cent more than the original Budget estimates. The rate of increase in government expenditure in fiscal 1993/94 amounted to 9,3 per cent, which was considerably lower than the rate of increase of 21,7 per cent in fiscal 1992/93. If drought-related aid payments of R3,4 billion are not taken into account in fiscal 1992/93, the rate of increase in government expenditure in fiscal 1993/94 still amounted to only 12,9 per cent. This rate of increase in government expenditure was much lower than the average rate of increase of 17,0 per cent in the preceding five fiscal years.

The favourable outcome in total Exchequer issues in fiscal 1993/94 was achieved despite a substantial increase in contractual interest payments on government debt. Interest payments totalled R20,6 billion in fiscal 1993/94, which was no less than 24,7 per cent higher than in the preceding fiscal year. If these interest payments are excluded from Exchequer issues, the other issues in fiscal 1993/94 were only 10,6 per cent higher

#### **Interest on government debt as percentage of total government expenditure**



than in fiscal 1992/93 (also adjusted for drought-related aid payments). As a percentage of total government expenditure, interest payments rose to 17,9 per cent in fiscal 1993/94; this ratio amounted to 15,7 per cent in the preceding year, and to 3,9 per cent in 1975/76. What makes this further increase in interest payments even more troublesome, is the fact that it does not include the discount incurred on the issuing of government marketable securities.

Seeing that the increase in government expenditure was lower than the increase in the nominal gross domestic product, the ratio of government expenditure to gross domestic product decreased from 30,1 per cent in fiscal 1992/93 to 29,1 per cent in fiscal 1993/94. This development is, of course, in accordance with the government's standing long-term objective of reducing the share of the government in the economy.

Total government revenue amounted to R88,0 billion in fiscal 1993/94. This was 16,1 per cent higher than the revenue collections for fiscal 1992/93, and only R0,2 billion lower than the budgeted amount. After having declined for three consecutive years, government income as a ratio of gross domestic product rose from 21,7 per cent in fiscal 1992/93 to 22,3 per cent in fiscal 1993/94, owing largely to a rise in the proceeds from indirect taxation. Indirect tax as a percentage of total government income increased from 40,3 per cent in fiscal 1992/93 to 45,3 per cent in fiscal 1993/94.

As shown in the accompanying table, most of the main categories of government revenue performed more

### Exchequer receipts 1993/94

Percentage change

	Budgeted	Actual outcome
Value-added tax.....	43,1	44,5
Income tax.....	11,6	6,4
Companies .....	1,0	-6,7
Individuals .....	15,5	11,6
Customs and excise duties.....	10,0	10,6
Customs duty (including surcharge).....	5,9	14,9
Fuel levy.....	12,1	11,5
Excise duty.....	11,1	11,2

or less in line with, or better than, the Budget projections, with the notable exception of income tax on individuals and companies. The lower-than-expected revenue from personal income tax was mainly related to a lower rate of increase in salaries and wages than had been anticipated in the Budget. Income tax on companies was the only category of taxation that showed an actual decline over the fiscal year; this decrease was probably caused by the relatively low profits in the year of assessment and the reduction in the tax rates applicable to companies. As anticipated, the proceeds from value-added tax rose sharply in the fiscal year with the four percentage points increase in this tax rate.

The net result of these changes in expenditure and income was a *deficit before borrowing and debt repayment* of R26,8 billion in fiscal 1993/94; in the Budget the deficit had been estimated at R25,9 billion. As a percentage of gross domestic product, the deficit before borrowing amounted to 6,8 per cent. After taking net transfers of R13,4 billion and the discount on new issues of government stock of R2,7 billion into consideration, the total financing needs of the Exchequer came to R43 billion in fiscal 1993/94.

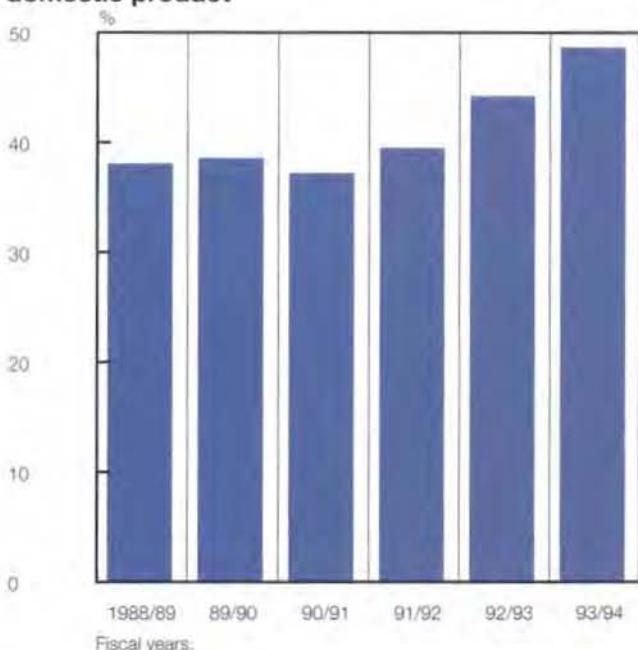
The *borrowing requirement* of the government in fiscal 1993/94 was largely met by issuing government stock to a net amount of R41,8 billion and by a decrease of R1,8 billion in the available cash balances of the government, while small net repayments were made on outstanding Treasury bills, foreign loans and non-marketable securities. As shown in the accompanying table, the funds for the financing of the government deficit were mostly obtained from the Public Investment Commissioners and the non-monetary private sector. However, the net claims of the monetary institutions on the government also rose by R15,3 billion, owing to the stripped coupon government stock issue of R7,5 billion to the Reserve Bank in order to reduce the deficit on the Gold and Foreign Exchange Contingency Reserve Account, a decrease of R0,2 billion in the deposits of the Exchequer and Paymaster General with the monetary sector, and purchases of government stock (mainly long-term paper) to the amount of R7,6 billion.

### Financing of government deficit by type of lender, fiscal 1993/94

Type of lender	R millions
Public Investment Commissioners .....	14 528
Non-monetary private sector .....	13 164
Monetary institutions.....	15 625
Corporation for Public Deposits.....	312
Other monetary institutions.....	15 313
Foreign sector .....	-319
Total gross financing.....	42 998
Plus: Transfers from the National Supplies Procurement Fund and the Central Energy Fund .....	1 406
Less: Transfers to the Gold and Foreign Exchange Contingency Reserve Account ..	7 500
Transfers to the government employees' pension funds and closed pension funds..	7 340
Less: Discount on new issues of government stock.....	2 722
<b>Total net financing .....</b>	<b>26 842</b>

Despite a total gross financing requirement of R43,0 billion, total government debt increased by R37,5 billion to R192,1 billion from the end of March 1993 to the end of March 1994. Valuation adjustments to government debt were not the only reason for the difference between

### Total government debt as percentage of gross domestic product



the increase in government debt and the total financing requirement. The difference was also due to a reduction in the available cash balances of the government, extraordinary transfers received, and a drawing on the International Monetary Fund (which is a part of the government debt but not of financing). At the same time, the deficit on the Gold and Foreign Exchange Contingency Reserve Account already formed part of government debt as it is calculated by the Reserve Bank. As a ratio of gross domestic product, government debt nevertheless rose from 44,2 per cent at the end of fiscal 1992/93 to 48,7 per cent at the end of fiscal 1993/94.

#### **Exchequer account in April 1994**

In April 1994 the Exchequer issues to government departments (adjusted to reflect cash flows) were 15,3 per cent higher than in April 1993, while Exchequer receipts increased by 36,7 per cent over the same period. This substantial rise in Exchequer receipts could, however, be ascribed to the exceptional low level of these receipts that had been recorded in April 1993. The deficit before borrowing and debt repayment amounted to R3,7 billion in April 1994.

# Money supply guidelines for 1994

Statement issued by Dr C.L. Stals, Governor of the South African Reserve Bank

25 March 1994

## 1. Background

It is now eight years since the Reserve Bank in March 1986 first introduced predetermined targets for the growth rate in the money supply. At that time, an acceptable rate of growth of 16 to 20 per cent in the M3 money supply for 1986 was announced. In the event, the actual rate of increase in M3 for 1986 turned out to be only 9,3 per cent. Subsequently, in 1988, the growth rate in M3 accelerated to 27,2 per cent, when a target range of 12 to 16 per cent applied.

The Reserve Bank's experience with money supply targeting since 1986 has been mixed. As originally envisaged, the Bank never applied a rigid or overriding "money rule" – discretion continued to play a role. Account had to be taken from time to time also of movements in the level of interest rates, the level of the foreign reserves and exchange rate changes. The "causes" of changes in the money supply could also not always just be ignored.

On balance, the Bank is of the opinion that money supply targeting remains, at least in the present South African context, the most sensible anchor for monetary policy and for guiding the authorities in their decisions in executing their monetary policy responsibilities. It is true that in many other countries, the money supply has lost some of its appeal as an anchor for monetary policy purposes, and, in some instances, has been abandoned and replaced by a different basis, e.g. the exchange rate. In some countries – for example in the United Kingdom, New Zealand and Canada – the authorities are now pursuing inflation targets more directly, instead of through an intermediate target such as the money supply. This approach, however, requires a degree of co-operation between government, private businesses, trade unions and the central bank which will in the present phase of socio-political reforms in South Africa be extremely difficult to obtain.

The Reserve Bank will therefore at this juncture continue with the existing policy of using changes in the money supply as the most important monitor for its decisions regarding the implementation of monetary policy.

## 2. The balance of payments threat to financial stability

The overall domestic financial situation remained relatively stable over the past year. The twelve-month growth rate in the M3 money supply decreased from 8,0 per cent in December 1992 to only 1,9 per cent in July 1993; in the subsequent six months, however, it rose to 7,0 per cent in December 1993, and then further to an estimated 9,6

per cent in January 1994. The average level of the M3 money supply in the fourth quarter of 1993 was 5,6 per cent higher than the average level of M3 in the fourth quarter of 1992. The rate of increase was, therefore, slightly lower than the lower limit of the guideline range of 6 to 9 per cent announced by the Reserve Bank at the beginning of last year.

The twelve-month growth rate in domestic credit extension to the non-bank private sector by monetary institutions likewise receded from 8,7 per cent in December 1992 to 5,7 per cent in May 1993, before rising to 9,6 per cent in December 1993.

Money market conditions, however, remained relatively tight throughout the year. This was mainly due to an almost continuous decrease in the net foreign assets of the Reserve Bank. As a result of a huge net capital outflow now estimated at R16,3 billion for the calendar year, that is, substantially in excess of the estimated surplus of R5,9 billion on the current account of the balance of payments, the country's net foreign reserves declined by R10,3 billion in 1993. Sales of foreign exchange to the market by the Reserve Bank drained liquidity from the system. The Bank, however, intervened and, through a series of other actions, injected a huge amount of additional liquidity to prevent interest rates from rising. These actions were even sufficient to support some further decline in market interest rates. In the process the Bank:-

- reduced the minimum cash requirement for banking institutions in April 1993 and again in August 1993. These reductions released approximately R2,2 billion of cash reserves previously held with the Reserve Bank;
- redeemed all outstanding Reserve Bank debentures amounting to R0,5 billion. These debentures had previously been issued to sterilise some surplus cash in the money market;
- increased the Reserve Bank's own portfolio of government stock by a net amount of R0,7 billion from 31 December 1992 to 31 December 1993. The additional stock was acquired from the market through normal open-market operations of the Bank;
- adjusted the asset portfolio of the Corporation for Public Deposits by investing more of the Corporation's available funds in the money market, and less with the Treasury. These transactions had an easing effect on money market conditions of about R1,6 billion; and
- transferred Treasury cash balances previously held on deposit with the Reserve Bank to private banking

institutions. This new procedure was introduced in June 1993 in anticipation of a proposed system of Tax and Loan Accounts for Treasury funds to be finalised and implemented during 1994.

These intervention operations of the Reserve Bank in the money market therefore played a major role in maintaining financial stability in 1993, and supported a further downward drift in interest rates, albeit at a slower tempo. The inter-bank call money rate, for example, decreased from 16,00 per cent at the end of 1991 to 12,25 per cent at the end of 1992, to 10,00 per cent at the end of December 1993, and to 9,50 per cent at the end of February 1994.

The Reserve Bank lowered Bank rate on two occasions during 1993 by one percentage point to its present level of 12 per cent. In total, Bank rate has now been reduced by 6 percentage points, or by one-third from the peak of 18 per cent reached late in 1989. Other market-related interest rates, such as the prime lending rates of banking institutions, followed suit and were also reduced further during 1993.

At the same time, the Bank's support to the foreign exchange market prevented the exchange rate of the rand from depreciating unduly. The nominal effective exchange rate of the rand nevertheless declined by 8,7 per cent in 1993, compared with 4,4 per cent in 1992. The depreciation of the rand in 1993 exceeded the difference in the inflation rates between South Africa and its main trading partners, with the result that the real effective exchange rate declined by 4,9 per cent in 1993.

### 3. Positive results on inflation

After a period of relative financial stability and annual rates of increase in the money supply of well below 10 per cent in each of the last two years, inflationary pressures in the economy at last subsided. The rate of increase in the all-goods production price index declined from 15,2 per cent in 1989 to only 6,6 per cent in 1993 – its lowest level since 1971.

The rate of increase in the consumer price index also declined to below 10 per cent last year. With this rate at a level of 9,7 per cent, 1993 represented the first year since 1973 to show a single-digit rate of consumer price inflation. From April 1993, the month during which value-added and other indirect taxes were increased, until January 1994 the seasonally adjusted and annualised rate of increase in the consumer price index came to only 7,4 per cent.

There are normally long time lags involved between changes in the underlying economic forces behind inflation and in the eventual changes in consumer prices. Whilst it can therefore be predicted with some confidence that the rate of inflation should remain subdued in the rest of this year, we must guard against taking actions now that will in the longer run lead to the re-emergence of stronger inflationary pressures in the economy. As the

experience of the past few years has proved, it is extremely difficult to bring inflation down once it has become entrenched in the minds of people.

### 4. Money supply guidelines for 1994

The Reserve Bank now has to decide on money supply guidelines for 1994 without the advantage of first having had insight into the Government's Budget programme for 1994/95. It is, of course, essential that monetary and fiscal policy be harmonised and the guidelines for an acceptable rate of increase in M3 for 1994 were, as is normal practice, only decided on after consultation with the Minister of Finance.

After the positive results of the past year, it is tempting now to speed up the battle against inflation, and to tighten the monetary policy applied for this purpose even further. More than just a tight monetary policy will be needed, however, to knock this obnoxious disease completely out of the system. In the present phase of major socio-political reform, it will be extremely difficult to put a total economic package deal together that will stop inflation in South Africa completely at this stage, despite the obvious and extensive advantages such a policy may have for future economic development.

The Reserve Bank has therefore been influenced by the following considerations in deciding on an acceptable range for the increase in the money supply in 1994:

- The present fledgling economic recovery should not be allowed to falter. Monetary policy should not be used to stimulate the recovery artificially, but should also not restrict it. The increase in the money supply should be sufficient to accommodate real growth of at least 3 per cent in gross domestic product in 1994.

- The balance of payments situation, which is still vulnerable, should be protected. An excessive increase in the money supply at this stage will facilitate further outflows of capital from the country.

- The underlying rate of inflation, which is currently running at around the level of 7 per cent, is still relatively high if compared with current rates of inflation in almost all industrial countries. Monetary policy must therefore continue to exert downward pressure on inflation in South Africa.

- There is further scope for total monetary expenditure to increase even without any increase in the money supply, because of the still relatively low level of the velocity of circulation of the existing money supply.

Against this background, the Reserve Bank has decided to retain the guideline of 6 to 9 per cent used for 1993 as an acceptable range also for the rate of increase in M3 for 1994. It will be compatible with the objectives of the Bank for the maintenance of overall financial stability if

the average level of the M3 money supply in the fourth quarter of 1994 will fall within a 6 to 9 per cent range above the average level of M3 in the fourth quarter of 1993.

Major deviations from these guidelines should trigger pro-active monetary policy actions by the Bank, although it must again be emphasised that the Bank does not intend to follow a rigid money rule linked to these guidelines at all times. Temporary deviations from the limits of the guidelines may again occur, as has often happened in the past, and may be caused by balance of payments or other temporary changes in the causal factors behind the money supply statistics. The Bank will nevertheless have to act timely whenever distinct longer-term trends develop for the money supply to move out of the boundaries of the "cone" established by the accepted guideline rates of 6 to 9 per cent growth in M3 in 1994.

# The modelling of inflation expectations

by C. J. Pretorius

## 1. Introduction

As described in some detail in an article in the *Quarterly Bulletin* for March 1994<sup>1</sup>, the price-formation process in South Africa is particularly dependent on changes in labour costs, which in turn are largely driven by inflation expectations, i.e. the rate of inflation that people expect to prevail in the future. Unfortunately, there is no unanimity about the uniqueness of inflation expectations, i.e. on how such expectations are formed and how they should be measured. In econometric analyses a subjective assumption must therefore be made about the formation of expectations which can then be used as an auxiliary hypothesis in the estimation of behavioural equations.

Econometric analyses would, of course, be improved considerably if inflation expectations were directly observable and could be measured. In some countries surveys of price expectations are conducted on a regular basis and these can be used directly in structural relationships as a proxy for the true underlying expectations. Although some opinion surveys on inflation expectations are made in South Africa, no consistent time series on price expectations are available for use in the estimation of equations.

The aim of this paper is, therefore, to investigate some formulations of inflation expectations and to test their validity based on South African data. These hypotheses on the formation of inflation expectations are first described in Section 2 of this document and then tested empirically in Section 3. The forecast results as well as a test of the accuracy of the different inflation expectations hypotheses are tabulated in Section 4. Some concluding remarks are finally made in Section 5.

## 2. Models of inflationary expectations

The inflation hypotheses investigated in this study, are:

- expectations based on recent actual inflation rates;
- expectations based on distributed lags of actual inflation rates;
- adaptive expectations;
- extrapolative expectations;
- rational expectations;
- expectations based on time series analysis.

### Actual inflation rate of previous period

One of the most elementary methods of describing inflation expectations is to assume that the rate of increase in the general price level in period "t" is expected to be equal to the actual inflation rate of the previous period, "t-1". This method can be represented by the following equation:

$$\begin{aligned}\dot{p}_t^e &= \dot{p}_{t-1}, \text{ where} \\ \dot{p}_t^e &= \text{inflation expectations in period "t", and} \\ p_{t-1} &= \text{the inflation rate in the immediately preceding period.}\end{aligned}$$

One of the disadvantages of this approach is that it puts too much emphasis on the inflation rate of a single period. For example, the negative effects of non-recurrent events (such as the introduction of the value-added tax system) on the inflation rate in a specific period are assumed to "pass through" fully into the expected inflation rate for the immediately succeeding period, even though the events concerned are unlikely to be repeated in the succeeding period.

### Distributed lags of actual rates of inflation

In view of the disadvantages of basing inflation expectations on the result of a single period, a different approach has been adopted in which the expected rate of inflation is assumed to be a weighted average of past inflation rates. It is usually assumed that the weights decline over time, implying that inflation expectations adapt systematically over time. This method of calculating inflation expectations can be represented in the following manner:

$$\dot{p}_t^e = \sum_{i=1}^n w_i \dot{p}_{t-i}$$

The sum of the coefficients (w) is often assumed to be equal to one. This means that continued inflation at a uniform rate will eventually be fully anticipated.

### Adaptive expectations

One of the most popular and widely used hypotheses concerning the formation of inflation expectations is the adaptive expectations formula used by Cagan<sup>2</sup> in his studies of hyperinflation. This approach entails expressing inflation expectations as a geometrically declining weighted average of past inflation. The

Pretorius, C.J. and Smal, M.M.: "A macro-economic examination of the price-formation process in the South African economy", *Quarterly Bulletin* of the South African Reserve Bank, March 1994.

Cagan, P and Lipsey, R.: *The Financial Effects of Inflation*, Cambridge, Massachusetts, National Bureau of Economic Research, 1978.

Koyck transformation technique can then be applied to the equation to convert it to the following equation:

$$\dot{p}_t^e = a_0 + a_1 \dot{p}_{t-1}^e + a_2 p_t$$

If it is assumed that  $a_1 + a_2 = 1$  and  $a_0 = 0$ , the adaptive expectations can also be indicated by:

$$\dot{p}_t^e - \dot{p}_{t-1}^e = a_2 (p_t - \dot{p}_{t-1}^e), 0 < a_2 < 1$$

This equation implies that expectations are revised upwards or downwards according to the most recent error in the prediction of the inflation rate. However, in the case of a rising trend in inflation, this formulation of inflationary expectations should lead to a persistent underestimation of the actual inflation rate. Conversely, when inflation is falling, expected inflation should always exceed actual inflation.

### Extrapolative expectations

The extrapolative expectations as described by Hirsch and Lovell<sup>8</sup> can be written as:

$$\dot{p}_t^e = a_0 + a_1 (\dot{p}_{t-1}^e - \dot{p}_{t-2}^e) + a_2 p_{t-1}$$

Inflation expectations are described in this equation as a function of the previous actual inflation rate as well as the difference between the inflation rate of the previous two periods. One characteristic of the extrapolative hypothesis is the regressivity of expectations. If  $a_1 > 0$ , the past trend is extrapolated and expected to continue. On the other hand, if  $a_1 < 0$ , the past trend is expected to be reversed.

### Rational expectations

The rational-expectations model of inflation suggests that the expected inflation rate in any single period is based on all information available to decision-makers at that moment. This information includes the past performance of the economy and expectations of future policies that are likely to be followed by the authorities. Changes in selected key variables, such as the money supply, the exchange rate of the currency and the government's budget deficit, can be regarded as indicators of economic policies which may influence inflation expectations.

Based on the assumption that changes in the money supply are an indicator of monetary policy and of concurrent or future inflation, economic agents would set their rational expectations of inflation in period "t" according to the rate of expected monetary expansion for period "t". This leads to the following expression for price expectations:

<sup>8</sup> Hirsch, A.A. and Lovell, M.C.: *Sales Anticipations and Inventory Behaviour*, New York, John Wiley and Sons.

$$p_t^e = \dot{m}_t^e$$

The variable  $\dot{m}_t^e$  represents the expected rate of monetary expansion. The expected rate of monetary expansion is determined by the perception of economic agents of what factors the monetary authorities respond to when they determine  $\dot{m}_t$ , and the likely results of the authorities' actions. The central bank may, for instance, have a rule or target in setting the rate of monetary expansion. Economic agents will study the behaviour of monetary authorities and use this information to predict the systematic components of the central bank's policies. The actual rate of monetary expansion that is realised will depend on the average rate of growth in money supply and a random factor that represents random fluctuations in the rate of monetary growth, which are not controllable by the central bank. This can be illustrated by the following equation:

$$\dot{m}_t = \dot{m} + e_t$$

where  $\dot{m}$  represents the average rate of monetary expansion and  $e_t$  represents the random component in the rate of growth in the money supply.

The idea that economic agents can identify the systematic behaviour of the central bank and predict the results of such behaviour, can be extended to their prediction of any other systematic policy and the results of any such policy. Price expectations can also be influenced by perceived changes in fiscal policy and observed and expected changes in the exchange rate.

### Time-series models

The distinguishing feature of a time-series model, as opposed to an econometric model, is that normally no attempt is made to relate a specific time series to other variables; the movements of the time series are explained solely in terms of own past values. A stochastic process can be used to describe the movements of a time series fluctuating around its mean as:

$$y_t - \mu = \phi (y_{t-1} - \mu) + \varepsilon_t$$

where  $y_t$  represents the observation of the time series in period "t",  $\mu$  the mean of the series and  $\varepsilon_t$  is a random disturbance term.

A model that contains lagged values of both the observed variable and the disturbance term is known as an autoregressive-moving-average (ARMA) process. If  $|\phi| < 1$ , the observations fluctuate around the mean of the series and the process is stationary. Although very few time series are stationary, the notion of stationarity is fundamental to time-series analysis, and stationary ARMA processes form the basis on which a more general series can be built. The majority of time series do not fluctuate around a constant level, but

show some kind of systematic upward or downward movement instead. In order to make a time series stationary, transformations such as logarithms and differences of the observations are calculated.

If a classical linear regression model (with time as the independent variable) is fitted to the observations of a time series, constant parameters will be estimated and a global trend line can be determined. This is assumed to hold good at all points in time. The ARMA process, in contrast, is a forecasting procedure which allows the parameters to adapt to changes in the data. More weight is placed on the most recent observations, basing forecasts on the estimate of the recent trend rather than the trend over the entire estimation period.

Box and Jenkins made use of the proposition that the optimal forecast for a time series in general depends on the particular form of the stochastic process which characterises the series that is being forecast. If the series is described by an ARIMA (an autoregressive-integrated-moving-average) process, the current period's forecast is the result of a weighted average of all previous observations.

### 3. Statistical estimation of inflation-expectations equations

The empirical results of the estimated equations are described in this section. All the econometric calculations were carried out with quarterly, seasonally adjusted data. T-values of the estimated coefficients as well as the following summary statistics are tabulated:

$\bar{R}^2$  = Adjusted coefficient of determination;

D-W = Durbin-Watson d-statistic;

RHO = Autocorrelation coefficient.

The period of estimation is stated below the summary statistics for each equation.

The percentage change over four quarters in the derived deflator for private consumption expenditure is used as the indicator of inflation and of expected inflation.

#### Actual inflation rate of previous period

If inflation expectations can only be explained by the previous period's actual inflation rate, the function can be presented in the following manner:

$$\dot{p}^e = 1.0 \cdot \dot{p}_t$$

This kind of expectations formulation is obviously not

suitable in an environment where actual inflation is highly volatile. In South Africa, with its relatively stable inflation rate in the 1980s, this rate could have been used by many decision-makers as an acceptable technique for forecasting inflation in that period.

#### Distributed lags of actual rates of inflation

An Almon lag structure was used to describe the pattern of the actual rates of inflation in the period specified. It was assumed that the weights of the lagged variable followed a pattern dictated by a second-degree polynomial with an end restriction, i.e. the weights reach zero after a number of time periods.

The function was estimated as follows:

$$\begin{aligned}\dot{p}^e &= 0.54 + 0.48 \cdot \dot{p}_t + 0.32 \cdot \dot{p}_{t-1} + 0.16 \cdot \dot{p}_{t-2} \\ (2.06) &\quad (40.57) \quad (40.57) \quad (40.57) \\ \bar{R}^2 &= 0.93 \\ D-W &= 1.30\end{aligned}$$

Estimation period: 1962.I to 1993.IV

#### Adaptive expectations

It is not possible to test the adaptive-expectations approach as described in Section 2 empirically, because of the lack of observations on inflation expectations. The adaptive expectations cannot be equated to the observed inflation rate, because the observed inflation rate will then appear on both sides of the equation to be estimated.

Under the assumption that expected inflation is proportionally equal to actual inflation, the equation for adaptive expectations, namely:

$$\dot{p}^e = a_0 + a_1 \dot{p}_{t-1} + a_2 \dot{p}_t$$

can be reduced to be a function of only the previous period's inflation rate. The function was calculated as follows:

$$\begin{aligned}\dot{p}^e &= 0.45 + 0.96 \cdot \dot{p}_t \\ (1.88) &\quad (44.83)\end{aligned}$$

$$\begin{aligned}\bar{R}^2 &= 0.94 \\ D-W &= 2.22\end{aligned}$$

Estimation period: 1961.II to 1993.IV

#### The hypothesis of extrapolative expectations

According to the extrapolative hypothesis, the expected inflation rate in a period is determined by the actual inflation rate in the previous period, adjusted for the actual change in the inflation rate. The function was estimated as follows:

$$\dot{p}^e = 0,47 - 0,18 \cdot (\dot{p}_{-1} - \dot{p}_{-2}) + 0,96 \cdot \dot{p}_1$$

(1,98) (1,99) (45,15)

$$\bar{R}^2 = 0,94$$

D-W = 1,99

Estimation period: 1961.III to 1993.IV

### Rational expectations

On the assumption that changes in the money supply are representative of monetary policy, that changes in the prices of imported goods are indicative of exchange rate changes, and that government's budget deficit is representative of fiscal policy, economic agents are assumed to base their rational expectations of inflation in period "t" on :

- the growth rate over four quarters in the M3 money supply per unit of production (My);\*
- the percentage change over four quarters in the price of imported goods (pf);
- the inflation rate in the preceding period ( $\dot{p}$ ); and
- a four-quarter moving average of the government's budget deficit relative to nominal gross domestic product (gd).

$$\dot{p}^e = 0,03 \cdot My_4 + 0,03 \cdot pf_2 + 0,08 \cdot gd_3 + 0,89 \cdot \dot{p}_1$$

(2,34) (2,05) (1,70) (30,18)

$$\bar{R}^2 = 0,94$$

D-W = 2,27

Estimation period: 1962.III to 1993.II

As a result of the substantial increase in the government's budget deficit in the past few years, forecasts with the above equation resulted in a considerable overestimation of inflation expectations. This can be ascribed to the fact that the equation was estimated over an extended period in which the budget deficit was relatively small, resulting in a relatively large coefficient for the budget deficit. When the above equation was re-estimated over a shorter and more recent period, the coefficients changed considerably, but they were no longer statistically significant.

A different rational expectations model was therefore specified that excluded the government's budget deficit and which improved the forecast ability considerably. The appropriate equation was estimated as:

\* Experiments were made with different definitions of the money supply in the specification of the rational expectations equation. In the end the M3 money-supply definition clearly proved to be the superior variable to use in these calculations.

$$\dot{p}^e = 0,04 \cdot My_3 + 0,03 \cdot pf_2 + 0,91 \cdot \dot{p}_1$$

(3,04) (2,15) (37,23)

$$\bar{R}^2 = 0,94$$

D-W = 2,26

Estimation period: 1962.III to 1993.IV

### ARIMA-models

An inflation-expectations ARIMA-model was estimated, using the Box-Jenkins methodology in which expectations were assumed to be a weighted function of their own past values.

The inflation expectations process was identified as an ARIMA(0,1,1) model, which implies:

- that no autoregressive structure was applicable;
- a differencing factor of one; and
- a moving average factor  $\epsilon$ , with a four-period lag.

The calculated coefficients of the ARIMA-model can be summarised as:

$$\dot{p}^e - \dot{p}^e_{-1} = 0,11 + (\epsilon - 0,6314 \epsilon_{-4})$$

(3,12) (8,91)

$$\bar{R}^2 = 0,95$$

Estimation period: 1961.II to 1993.II

## 4. Summary of results

### Summary of regression results

In Table 1 the regression results of the various expectations hypotheses are compared. From this table it is obvious that the adjusted coefficients of determination ( $\bar{R}^2$ ) of the different hypotheses are all of the same high order of magnitude. The  $\bar{R}^2$  would thus not be a sufficient criterium to differentiate between the various hypotheses.

**Table 1**  
**Summary of regression results**

Expectations hypothesis	$\bar{R}^2$	D-W
Distributed lags of actual inflation rates ...	0,93	1,30
Adaptive expectations.....	0,94	2,22
Extrapolative expectations .....	0,94	1,99
Rational expectations.....	0,94	2,27
Rational expectations (without budget deficit).....	0,94	2,26
ARIMA-model .....	0,95	-

**Table 2**  
**Forecast based on past inflation**

	Actual value	Prediction	Percentage error
1992 q1	16,95	16,61	-2,0
1992 q2	16,37	16,61	1,5
1992 q3	15,66	16,61	6,1
1992 q4	15,71	16,61	5,7
1993 q1	12,71	16,61	30,7
1993 q2	11,14	16,61	49,1
1993 q3	10,48	16,61	58,5
1993 q4	8,21	16,61	102,3
Mean absolute percentage error		32,0	

#### Summary of forecast results

It was consequently decided to compare forecasts of the various hypotheses with the estimated equations over a sample period for which actual data exist. Dynamic simulations were executed over the period from the first quarter of 1992 to the fourth quarter of 1993.

The hypothesis according to which inflation predictions are based on actual inflation rates in the past, was able to forecast inflation for 1992 fairly accurately because the actual inflation rate throughout 1992 remained more or less at the same level as the actual inflation rate in the fourth quarter of 1991. When inflation started to subside in 1993, the percentage error increased noticeably. This proves that the time horizon of the forecast, especially in the case of a dynamic forecast, plays a prominent role in the accuracy of the forecast. If the forecast is performed for only one period ahead, the actual inflation rate of the previous period instead of the previous forecast value can be used, which enables the expectations to adapt more easily to actual changes in inflation.

**Table 3**  
**Forecast based on distributed-lag model**

	Actual value	Prediction	Percentage error
1992 q1	16,95	15,90	-6,2
1992 q2	16,37	16,01	-2,2
1992 q3	15,66	15,97	2,0
1992 q4	15,71	15,87	1,0
1993 q1	12,71	15,83	24,5
1993 q2	11,14	15,77	41,6
1993 q3	10,48	15,72	50,0
1993 q4	8,21	15,66	90,7
Mean absolute percentage error		27,3	

**Table 4**  
**Forecast based on adaptive-expectations model**

	Actual value	Prediction	Percentage error
1992 q1	16,95	16,39	-3,3
1992 q2	16,37	16,18	-1,2
1992 q3	15,66	15,98	2,0
1992 q4	15,71	15,79	0,5
1993 q1	12,71	15,60	22,7
1993 q2	11,14	15,43	38,5
1993 q3	10,48	15,26	45,6
1993 q4	8,21	15,09	83,8
Mean absolute percentage error		24,7	

The distributed-lag hypothesis was also unable to predict the turning-point in the inflation rate during the 1990s (see Table 3). This shortcoming in the forecasting ability of this hypothesis can be attributed to the fact that the equation is based on the weighted average of fairly stable past inflation rates.

The simplified adaptive-expectations hypothesis was able to forecast the inflation rate fairly accurately in 1992. However, this method was also not able to predict the deceleration in the inflation rate during 1993. The accuracy of the forecast under the adaptive-expectations hypothesis was, however, slightly better than that obtained by means of the two methods already described above.

As indicated in Table 5, the extrapolative hypothesis performed marginally weaker than the adaptive-expectations and the distributed-lag hypotheses. It also predicts the inflation rate based on previous values of inflation only and was therefore unable to forecast the turning-point in the inflation rate during 1993.

**Table 5**  
**Forecast based on extrapolative-expectations model**

	Actual value	Prediction	Percentage error
1992 q1	16,95	16,32	-3,7
1992 q2	16,37	16,25	-0,7
1992 q3	15,66	16,15	3,1
1992 q4	15,71	16,05	2,2
1993 q1	12,71	15,96	25,6
1993 q2	11,14	15,86	42,4
1993 q3	10,48	15,78	50,6
1993 q4	8,21	15,69	91,1
Mean absolute percentage error		27,4	

**Table 6**  
**Forecast based on rational-expectations model,  
incorporating fiscal policy**

	Actual value	Prediction	Percentage error
1992 q1	16,95	16,1	-5,0
1992 q2	16,37	15,6	-4,7
1992 q3	15,66	15,1	-3,6
1992 q4	15,71	14,7	-6,4
1993 q1	12,71	14,3	12,5
1993 q2	11,14	13,8	23,9
1993 q3	10,48	13,5	28,8
1993 q4	8,21	13,3	62,0
Mean absolute percentage error		18,4	

In Tables 6 and 7 forecasts are furnished of the inflation rate based on two versions of the rational-expectations model. Both versions of the rational expectations model clearly outperformed the other hypotheses which are based only on historical inflation rates, in terms of the forecast accuracy of inflation-expectations. In Table 6 the rational-expectations model used includes a variable representing fiscal policy as indicated by the government deficit before borrowing. The results still show a considerable overestimation of the inflation rate for 1993, which clearly accentuates the fact that the actual lower inflation rate was brought about despite a large increase in the government deficit before borrowing and debt repayment. A re-estimation of this equation over a shorter sample period (including the most recent observations) reduced the forecast error because the coefficient of the budget deficit was markedly smaller than the one calculated over a longer time period.

**Table 7**  
**Forecast based on rational-expectations model,  
disregarding fiscal policy**

	Actual value	Prediction	Percentage error
1992 q1	16,95	16,0	-5,6
1992 q2	16,37	15,3	-6,5
1992 q3	15,66	14,7	-6,1
1992 q4	15,71	14,1	-10,2
1993 q1	12,71	13,4	5,4
1993 q2	11,14	12,7	14,0
1993 q3	10,48	12,2	16,4
1993 q4	8,21	11,5	40,1
Mean absolute percentage error		13,0	

The best forecasting results were, however, obtained with the rational-expectations model in which the effects of fiscal policy on inflation expectations were disregarded (see Table 7). The fact that other policy variables were included in this model in addition to the historical inflation rates, enabled it to predict the decline in the actual inflation rate during 1993. This improved forecasting accuracy seems to confirm that fiscal policy was not fully taken into consideration by economic agents when they formed expectations of future changes in the aggregate price level. However, with a consistently growing public sector deficit, the effect may be different.

The ARIMA-model specified inflation expectations as a moving average of its own past values (see Table 8). As was the case with the other hypotheses which also explain inflation expectations based on inflation rates recorded in the past, it clearly overestimated inflation in 1993 and was unable to predict the decline in the inflation rate.

From these results it can be seen that most of the hypotheses failed to predict the deceleration in the inflation rate during 1993. This can, among other things, be attributed to the fact that the forecasts were carried out in a dynamic way. The lagged value of the forecasts, and not the actual data of the previous period, were used when performing such dynamic simulations. This emphasises to some extent the disadvantage of explaining a variable only by its values in previous periods, because no correction is made once the particular variable is overestimated or underestimated. From the results obtained, it was also apparent that the rational-expectations model (excluding the government's budget deficit) clearly outperformed the other hypotheses regarding the forecast accuracy of inflation expectations.

**Table 8**  
**Forecast based on ARIMA-model**

	Actual value	Prediction	Percentage error
1992 q1	16,95	16,5	-2,7
1992 q2	16,37	16,8	2,6
1992 q3	15,66	16,7	6,6
1992 q4	15,71	16,6	5,7
1993 q1	12,71	16,8	32,2
1993 q2	11,14	16,9	51,7
1993 q3	10,48	17,0	62,2
1993 q4	8,21	17,1	108,3
Mean absolute percentage error		34,0	

## 5. Conclusion

The inflation expectations of agents depend on inflation rates recorded in the past and the behaviour of policy-makers. The results reported in this paper indicate fairly conclusively that expectations formed in a rational way by duly recognising the intentions of policy-makers are likely to be closer to the mark than those based on historical inflation rate patterns only. The first-mentioned method is therefore applied in the Reserve Bank's econometric model to take inflation expectations into consideration.

When visible success is demonstrated in reducing actual inflation, the adjustment of expectations in response to policy changes is increased. This reconfirms the importance of applying monetary policy measures in a consistent manner in order to achieve greater price stability. If policies are conducted in a time-consistent manner, they will be perceived as credible and thus succeed in influencing inflation expectations in the desired direction. Conversely, policies which are pursued in an inconsistent way are unlikely to influence expectations downwards because they may be regarded with suspicion, and may often elicit private-sector responses contrary to those intended by public-sector decision-makers.

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## **Notes to tables**

### **Government finance - Table S-68**

In this issue of the *Quarterly Bulletin* Table S-68 was revised by combining information under the previous two separate headings "public corporations" and "central government enterprises" under one heading, viz. "public corporations and central government enterprises". This change was necessary to provide users with a series comparable over time because certain central government enterprises have been reclassified as public corporations. Transnet was reclassified as a public corporation from the beginning of 1990 and Telkom and Sapos from the beginning of 1992.

### **Foreign liabilities and assets - Tables S-78 to S-83**

The tables presenting data on the foreign liabilities and assets of South Africa have also been changed to include information in respect of certain selected countries. Data were previously provided only for groups of countries. The publication of additional detail in respect of certain countries has now become possible because of the lifting of sanctions against South Africa. In Tables S-78 and S-79, information is provided with regard to the total foreign liabilities and assets of South Africa from 1986 to 1992. Data on South Africa's foreign liabilities to the selected countries are shown in Tables S-80 to S-82. The foreign assets of South Africa in selected countries are shown in Table S-83.

### **National accounts - Tables S-91 to S-113**

As discussed in some detail in a special supplement to this issue of the *Quarterly Bulletin*, major revisions have also been made to the national accounts statistics presented in Tables S-91 to S-113.

# Kwartaallikse ekonomiese oorsig

## Inleiding

Die ekonomiese herstel in Suid-Afrika gedurende die tweede helfte van 1993 het in die eerste kwartaal van 1994 effens wankelrig voorgekom en die reële bruto binnelandse produk het gedaal. Hierdie swak prestasie van die produksie was egter in 'n groot mate die gevolg van 'n daling in die landbouproduksie vanaf 'n buitengewoon hoëvlak in die vierde kwartaal van 1993. Die reële produksie in die sektore buite die landbou het in die eerste kwartaal van 1994 voortgegaan om te groei, hoewel teen 'n aansienlik stadiger koers as in die tweede helfte van die voorafgaande jaar. Buitengewone omstandighede, soos die politieke onsekerheid, voortslepende geweld in die aanloop tot die verkiesing, werkstopsettings en arbeidsonrus was waarskynlik vir die stadiger groei verantwoordelik.

Die betreklike kalm en vreedsame toestande na die verkiesing hou belofte in dat die ekonomiese herstel in die oorblywende deel van 1994 voortgesit sal word. Verskeie ander faktore is ook bevorderlik vir ekonomiese groei op kort termyn, soos die aanduidings van 'n oplewing in reële investering wat verband hou met die loodsing van groot kapitaalprojekte; die goeie landbouseisoen in die somerreënvalgebied waar die oeste tans ingesamel word; die betreklik bestendiger finansiële toestande; die hertoetreden van Suid-Afrika in die internasionale ekonomie en die normalisering van handel en finansiële betrekkinge met baie lande; die laevlak van die land se buitelandse skuld; en die herlewing in die ekonomiese bedrywigheid in die nywerheidslande en in internasjonale grondstofpryse.

Ondanks die afname in die binnelandse produksie, het die totale reële bruto binnelandse besteding in die eerste kwartaal van 1994 verder toegeneem, maar teen 'n matiger koers as gedurende die tweede helfte van 1993. Dit was grootliks die gevolg van die groei in die reële private verbruiksbesteding wat meer huiwerig geword het, en wat 'n weerspieëeling was van die gedempte verbruikersvertroue op die voorhand van die verkiesing, 'n betreklik lae toename in die persoonlike beskikbare inkome en slegs 'n geringe stygging in huishoudings se vraag na krediet. 'n Verdere matige stygging in die reële kapitaalvorming, wat taamlik algemeen voorgekom het, is aangeteken. Dit is veroorsaak deur besteding aan groot kapitaalprojekte, die vervanging van bates en 'n effense uitbreiding van produksievermoë. In teenstelling met hierdie ontwikkelings het die reële verbruiksbesteding van die algemene owerheid aansienlik toegeneem.

Die herstel in die ekonomiese bedrywigheid was tot die derde kwartaal van 1993 (jongste beskikbare inligting)

nog nie in staat om die afwaartse beweging in werkverskaffing om te keer nie en werkgeleenthede het veral in die private sektor verder gedaal. Soos verwag kon word, het die toenemende werkloosheid tot 'n matiging van looneise in 1993 aanleiding gegee. Terselfdertyd het die arbeidsproduktiwiteit voortgegaan om aansienlik te verbeter sodat die nominale arbeidseenheidskoste teen 'n stadiger pas gestyg het. Hierdie ontwikkeling is gerugsteun deur 'n konsekwente konserwatiewe monetêre beleid wat inflasieverwagtings in toom gehou het. Eksogene faktore, soos die betreklike bestendigheid van prys in handelsvennootlande, laer internasionale oliepryse en gunstiger landboutostande het ook bygedra om 'n laer inflasiekous te bewerkstellig.

In die eerste kwartaal van 1994 het die oorskot op die lopende rekening van die betalingsbalans aansienlik verswak vanweë die laer uitvoer van goedere en dienste tesame met 'n skerp stygging in die invoer van goedere en dienste. Die stygging in die waarde van die netto gouduitvoer kon nie hierdie verwikkellings uitskakel nie. Gelukkig het die kapitaalrekening van die betalingsbalans aansienlik verbeter en slegs 'n klein uitvloeiing van kapitaal is in die kwartaal in geheel aangeteken. 'n Aansienlike invloeiing van kapitaal het egter in Januarie 1994 plaasgevind toe die groot uitvloeiing in die voorafgaande maand gedeeltelik omgekeer is. 'n Invloeiing van korttermynkapitaal het voorgekom omdat die stram toestande op die binnelandse geldmark banke gedwing het om hul fondse aan te vul deur meer van buitelandse kredietfasilitete gebruik te maak. Die netto uitvloeiing van langtermynkapitaal het egter skerp toegeneem vanweë die aanvangsbetaling ingevolge die Skuldreëlings van 1994 met buitelandse krediteurbanke in Februarie 1994 en die ander vaste kontraktuele verpligtinge wat nagekom moes word.

As gevolg van die politieke onsekerheid en voortslepende geweld het die kapitaaluitvloeiing in April weer op dramatiese wyse toegeneem en is dit eers weer in Mei omgekeer toe dit duidelik geword het dat die verkiesingsuitslae deur die meeste Suid-Afrikaners aanvaar is. Hierdie spekulatiewe kapitaaluitvloeiinge het die netto reserwes van die land skerp laat afneem en gevoglik het die nominale en die reële effektiewe wisselkoers van die rand in die eerste vier maande van 1994 gedaal. In Mei 1994 het die rand verder gedepreseer, hoewel die netto kapitaaluitvloeiing klaarblyklik bedaar het.

Die groei in die geldvoorraadgroothede, wat in 1993 oor die algemeen beperk was, het in die eerste vier maande van 1994 skerp versnel. Die owerhede was nie oormatig besorg oor hierdie verwikkeling nie omdat dit hoofsaaklik die gevolg van 'n verskuiwing van regeringsdeposito's na deposito's van die private sektor by die

banksektor was. Hierdie daling in regeringsdeposito's by banke was ook verantwoordelik vir die vinniger uitbreiding in totale kredietverlening deur die monetêre instellings gedurende die eerste drie maande van 1994. Die toename in kredietverlening deur banke aan die private sektor het egter in die eerste twee maande van 1994 teruggesak; dit het in Maart weer skerp toegeneem.

Nadat geldmarktoestande in die eerste twee maande van 1994 ietwat verruim het, het dit in die daaropvolgende drie maande baie stram geword. Hierdie strammer toestande was hoofsaaklik die gevolg van 'n opmerklike toename in die note in omloop en 'n afname in die netto buitelandse bates van die Reserwebank. Albei hierdie verwikkelings het moontlik verband gehou met onsekerhede en vrese in die tydperk voor die verkiesing. Die Reserwebank het die geldmarktekort oor die algemeen toegelaat om die stram onderliggende vraag- en aanbodtoestande te weerspieël. Deur hierdie beleid singesteldheid te aanvaar is private banke deur die Bank ontmoedig om binnelandse laste met buitelandse kredietfasilitete te vervang en het die Bank gepoog om die uitvloeiing van kapitaal uit die land sodoende in toom te hou.

As 'n weerspieëeling van die stram geldmarktoestande en onsekerhede rakende binnelandse politieke ontwikkelings, het die algemeen afwaartse beweging in geldmarkrentekoerse gedurende 1993 hul stukrag in die eerste twee maande van 1994 verloor en het hierdie koers in die daaropvolgende drie maande ietwat gestyg. Die opbrengskoers op langtermynstaatseffekte het ook oor hierdie tydperk verstewig. Stygings in aandelepryse het daarenteen die gemiddelde dividend- en verdiensteopbrengskoers op aandele afgedruk.

Toestande in die kapitaalmark het in die eerste vyf maande van 1994 lewendig gebly. Die nominale waarde van effekte van die openbare sektor wat op die Johannesburgse Effektebeurs verhandel is, het nuwe rekordvlakte bereik en die omset van genoteerde aandele was ook besonder hoog. In die primêre kapitaalmark het die bedrywigheid ten opsigte van nuwe uitgiftes deur leners in sowel die openbare as die private sektor egter betreklik lae vlakke in die eerste kwartaal getoon. Hierdie nuwe uitgiftes was op lae vlakke omdat die regering reeds sy tekort voor lenings vir die fiskale jaar 1993/94 gefinansier het en omdat die meeste groot genoteerde maatskappye betreklik likwied was en nog nie met betekenisvolle investeringsprogramme begin het nie.

Die leningsbehoefte van die openbare sektor in die fiskale jaar 1993/94 was desnieteenstaande buitengewoon groot vanweé spesiale oordragte van die regering om skuld af te los wat oor 'n betreklike lang tydperk opgeloop het. Staatskuld het gevoldiglik in hierdie fiskale jaar met R37,5 miljard toegeneem na 'n verhouding van 48,7 persent van die bruto binnelandse produk aan die einde van Maart 1994. Bykans twee uit elke tien rand wat deur die staat verdien word, moet nou gebruik word om rentebetalings op die toenemende staatskuld te finansier.

Die staat was egter baie suksesvol om owerheidsuitgawes in die fiskale jaar 1993/94 in bedwang te hou en dit het na aan die begrotingsramings gekom. Die meeste van die belangrikste kategorieë van staatsinkomste het ook min of meer in ooreenstemming met verwagtings gevaar of beter as wat in die Begroting voorsien is, met die opmerklike uitsondering van inkomstbelasting op individue en maatskappye. Die laer-as-verwagte inkomste uit persoonlike inkomstbelasting het hoofsaaklik verband gehou met die laer koers van toename in salaris en lone as wat in die Begroting verwag is. Die opbrengs van inkomstbelasting op maatskappye het in die fiskale jaar 1993/94 in werklikheid afgeneem vanweé die betreklik lae winste wat nog aan die begin van die ekonomiese herstelfase behaal is en die tydsloering tussen die toename in winste en die ontvangste op maatskappybelasting.

## Binnelandse ekonomiese ontwikkelings

### Binnelandse produksie<sup>1</sup>

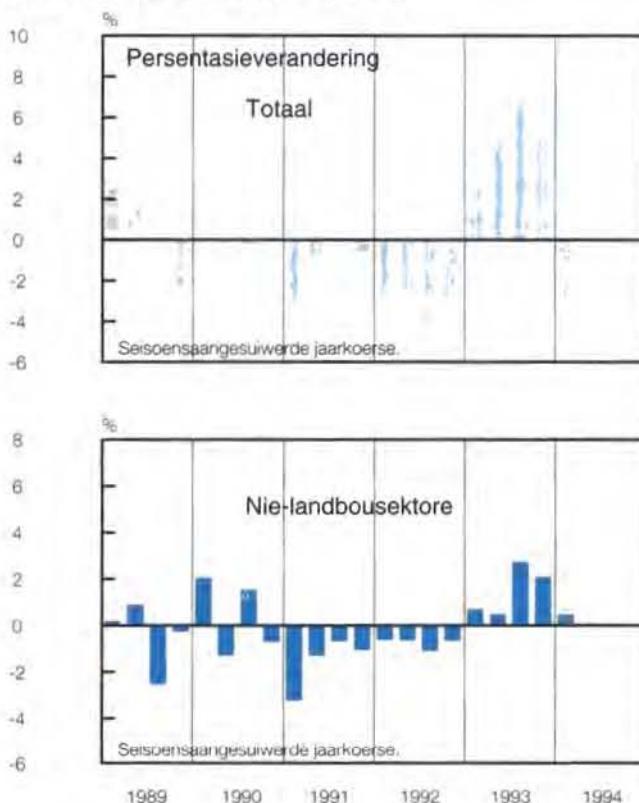
Die groei in die reële bruto binnelandse produk het in die eerste kwartaal van 1994 negatief geword. Die hersiene koers van toename in die reële binnelandse produk (seisoensaangesuiwerd en tot 'n jaarkoers verhef) het van 2½ persent in die eerste kwartaal van 1993 tot 5 en 7 persent in die daaropvolgende twee kwartale versnel, en in die vierde kwartaal op 'n steeds hoë vlak van 5 persent te staan gekom. Huidige ramings toon dat die binnelandse produksie in die eerste kwartaal van 1994 teen 'n jaarkoers van ongeveer 3½ persent afgeneem het. Teen 3 persent bô die vlak in die eerste kwartaal van 1993, was die vlak van die binnelandse produksie in die eerste kwartaal van 1994 nietemin steeds betreklik hoog.

Die swak vertoning van die totale produksie in die eerste kwartaal van 1994 was in 'n groot mate te wye aan 'n afname in die landbouproduksie. Die reële toegevoegde waarde van die landbou het gedurende 1993 meer as verdubbel as gevolg van die groot mielie- en koringoeste, maar dit is gevolg deur 'n daling in die landbouproduksie in die eerste kwartaal van 1994 tot ongeveer dieselfde vlak as die gemiddelde produksie van die voorafgaande vier jare. As gevolg van die gunstige 1993/94 seisoen in die somerreënvalgebied, kan die afaartse beweging in die landbouproduksie nietemin maklik gedurende die volgende twee kwartale omgekeer word.

Groei in die reële toegevoegde waarde van die sektore buite die landbou, wat in die eerste helfte van 1993 betreklik laag was maar in die tweede helfte van die jaar sterker vertoon het, het in die eerste kwartaal van 1994 weer verlangsaam. Die reële produksie buite die landbou het in die eerste kwartaal van 1994 teen 'n jaarkoers van slegs ½ persent toegeneem, teenoor 'n toename teen 'n jaarkoers van 2 persent in die voorafgaande kwartaal. In teenstelling met die vierde kwartaal van 1993, toe al die belangrike sektore van die ekonomie buite die landbou positiewe groei getoon het, is afnames in die reële produksie van die mynbou, die fabriekswese en die handel aangeteken.

Ná 'n skerp toename teen 'n koers van meer as 2 persent in 1993, het die reële produksie van die mynboubedryf in die eerste kwartaal van 1994 teen 'n jaarkoers van 2½ persent afgeneem. Goudproduksie het in die besonder verminder vanweé 'n laer tonnemaat erts wat vergnis is en 'n klein afname in die goudinhoud van erts wat gemaal is. Soos in die verlede, het die goudmyne met die toename in die randprys van goud na die

### Reële bruto binnelandse produk



ontginning van erts met 'n laer goudinhoud omgeskakel. Mynbouproduksie is in die algemeen ook deur arbeidsonrus en werkstopsettings by 'n aantal myne benadeel.

Die reële toegevoegde waarde van die fabriekswese-sektor het in die eerste kwartaal van 1994 teen 'n jaarkoers van nagenoeg 1 persent gedaal; in die tweede helfte van 1993 het dit nog tekens van 'n voortgesette herstel getoon. Die swak vertoning van die fabrieksprouksie aan die begin van 1994 was veral waarmeebaar in die bedrywe wat tekstiele, klerasie en leerprodukte, papier- en drukwerkprodukte, en masjinerie- en vervoertoerusting produseer. Dit het in 'n sekere mate verband gehou met onsekerhede wat in die tydperk voor die verkiesing bestaan het, die laer vraag na uitvoere en effense hoë vlakke van voorrade aan die einde van 1993. Berigte dui ook daarop dat die produksie van vervoertoerusting deur hoë afwesigheid en geweld benadeel is. Die ander onderafdelings van die fabriekswese het nogtans steeds goed gevaaar, danksy 'n verbeterde binnelandse en buitelandse vraag na hul produkte.

Die verdere uitbreiding van elektrisiteitsdienste was in die eerste kwartaal van 1994 hoofsaaklik verantwoordelik vir 'n toename teen 'n jaarkoers van 3 persent in die reële toegevoegde waarde van die sektor wat elektrisiteit, gas

<sup>1</sup> Omvattende hersienings is aan die gegewens met betrekking tot die nasionale rekeninge aangebring en die basisjaar vir die berekening van totale teen konstante pryse is na 1990 verander. Hierdie hersienings word bespreek in "Suid-Afrika se nasionale rekeninge, 1946-1993", wat as 'n bylaag tot hierdie uitgawe van die Kwartaalblad verskyn.

en water voorsien. In 1993 was die groei in die reële produksie van hierdie sektor teen bykans 4 persent nóg sterker. Die reële toegevoegde waarde van die konstruksiesektor het ook in die eerste kwartaal van 1994 'n geringe toename getoon, ná een van die ergste en langste dalings wat hierdie bedryf sedert die Groot Depressie ervaar het.

Die groei in die reële toegevoegde waarde van die tersiëre sektore het teen 'n bestendige jaarkoers van 1 persent in die eerste kwartaal van 1994 gestyg, oftewel teen dieselfde koers as wat in die tweede helfte van 1993 aangeteken is. Die voortgesette lewendige finansiële bedrywigheid, 'n skerp stygging in vaste eiendoms-transaksies, 'n groot hoeveelheid invoere en verbeterde landboutoestande het 'n belangrike bydrae gelewer tot die toename in die reële toegevoegde waarde van die sektore soos vervoer, opberging en kommunikasie; finansies, versekering, vaste eiendom en sakedienste; en die algemene owerheid. Hierdie toenames is egter gedeeltelik deur 'n inkrimping in die reële toegevoegde waarde van die handel teengewerk, wat 'n weerspieëeling was van die invloed wat geweld in verskeie dele van die land op die handel gehad het.

### Binnelandse besteding

Die totale reële bruto binnelandse besteding het in die eerste kwartaal van 1994 'n verdere toename getoon, maar teen 'n heelwat laer koers as in die tweede helfte van 1993. Ná betreklik hoë toenames teen jaarkoerse van 10½ en 7 persent in die laaste twee kwartale van 1993, het die reële binnelandse besteding in die eerste

kwartaal van 1994 met 2½ persent toegeneem. Hierdie stadiger groei in die reële bruto binnelandse besteding kon in die reële private verbruiksbesteding en investering in voorrade waargeneem word. In teenstelling hiermee, het die bruto binnelandse vaste investering 'n geringe stygging getoon, terwyl die reële verbruiksbesteding van die algemene owerheid merkbaar toegeneem het.

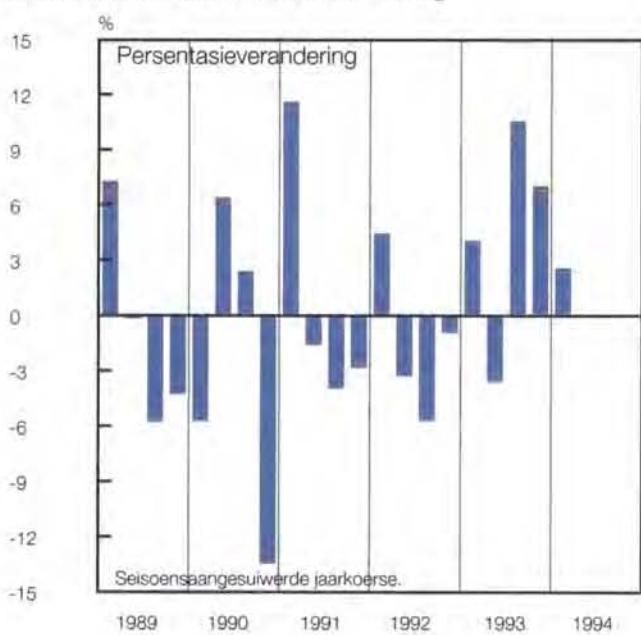
Die toename in die reële *private verbruiksbesteding* het van jaarkoerse van 2 en 2½ persent in die derde en vierde kwartaal van 1993 tot 'n koers van bykans 1 persent in die eerste kwartaal van 1994 verlangsaam. Hierdie meer trae groei in die verbruiksbesteding van huishoudings was in meeste van die belangrikste kategorieë van goedere en dienste waarneembaar. Hoewel die reële besteding op persoonlike vervoertoerusting in die eerste kwartaal van 1994 matig gestyg het, was dit steeds ongeveer 2½ persent onder die vlak wat in die eerste kwartaal van 1993 aangeteken is.

Die verlangsaming in die groei van die reële private verbruiksbesteding was die gevolg van groter onsekerheid wat die verkiesing voorafgegaan het, wat op sy beurt die verbruikersvertroue gedemp het. Dit was ook 'n weerspieëeling van die betreklik lae groei in die reële persoonlike beskikbare inkomne en slegs 'n geringe toename in huishoudings se vraag na krediet. Vooruitaankope deur private huishoudings in afwagting van moontlike ontwrigtings in die aanbod van verbruikersgoedere op die voorraad van die verkiesing het eers gedurende die einde van die eerste kwartaal sigbaar geword. Dit was toe egter reeds te laat om enige betekenisvolle uitwerking op die totale reële besteding aan private verbruik in die eerste drie maande van die jaar te hê.

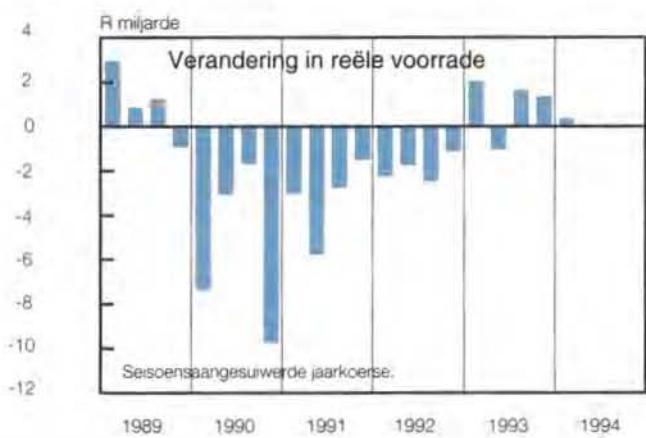
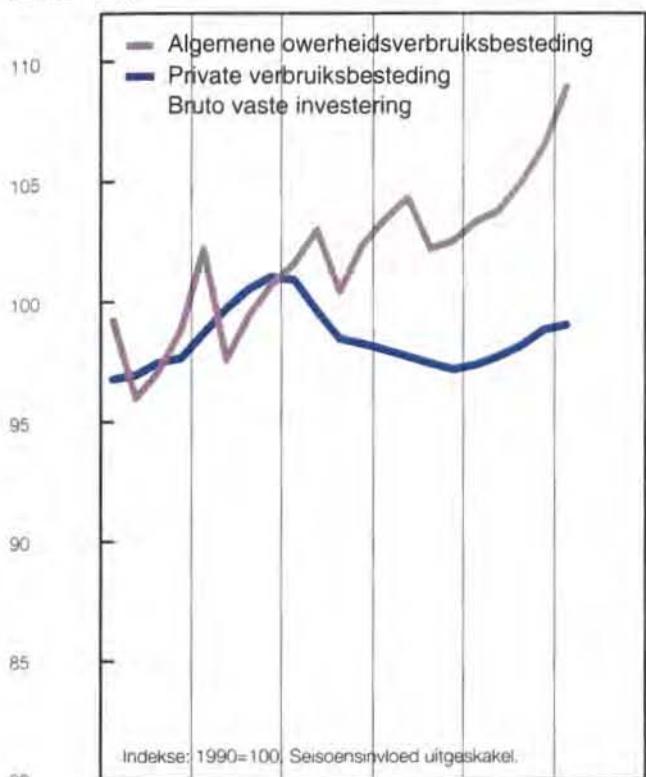
Koerse van toename van kwartaal tot kwartaal in die reële *verbruiksbesteding van die algemene owerheid* het skerp gestyg tot hersiene jaaylakte van 1½ persent in die tweede kwartaal van 1993, 6 persent in die vierde kwartaal en 9½ persent in die eerste kwartaal van 1994 (hoofsaaklik vanweé die hoér besteding deur die provinsiale administrasies aan intermediére goedere en dienste as wat voorheen gerapporteer is). Hierdie versnelling kan grotendeels aan 'n betekenisvolle toename in die reële besteding aan intermediére goedere en dienste toegeskryf word, terwyl die reële vergoeding van werknemers slegs effens uitgebrei het. In die fiskale jaar 1993/94 in die geheel het die reële verbruiksbesteding van die algemene owerheid met ongeveer 3 persent gestyg; in die fiskale jaar 1992/93 is 'n toename van 1 persent aangeteken. Die owerheidsverbruiksbesteding in verhouding tot die bruto binnelandse produk het dus voortgegaan om oor dieselfde tydperk van 20½ tot 21 persent te styg.

Die totale reële bruto binnelandse vaste investering het na raming in die eerste kwartaal van 1994 verder toegeneem. Nadat die reële besteding aan vaste kapitaalvorming variaf die middel van 1988 awaarts geneig het, het dit in die laaste twee kwartale van 1993 teen jaarkoerse van 1 en 2½ persent en in die eerste kwartaal van 1994 teen 1½ persent gestyg. Die verdere

### Reële bruto binnelandse besteding



### Hoofkomponente van reële bruto binnelandse besteding



toename in die eerste kwartaal van 1994 is deur 'n uitbreiding in die reële besteding aan kapitaalgoedere deur die private sektor en openbare korporasies teweeggebring; die kapitaalbesteding deur die algemene owerheid het egter skerp gedaal.

'n Verdeling van die reële kapitaalbesteding deur die private sektor volgens die soort ekonomiese bedrywigheid dui daarop dat die toename in die eerste kwartaal van 1994 wydverspreid voorgekom het. Kapitaalbesteding van veral die landbou, die mynbou en ondernemings in die fabriekswese het merkbaar gestyg.

Hoëre reële vaste investering in die landbousektor is moontlik gemaak deur 'n styging in inkome wat deur verbeterde klimaatstoestande meegebring is. Die behoefte om verouderde landbou-equipement te vervang het ook tot groter kapitaalbesteding geleid. Die toename in kapitaalvorming deur die mynbou- en die fabriekswese sektor was, onder ander, hoofsaaklik 'n weer-spieeling van die besteding aan groot kapitaalprojekte waarmee gedurende 1993 begin is, die vervanging van bates, en uitbreidings in die produksievermoë in afwagting van 'n toename in die binnelandse en buitelandse vraag.

Die toename in die reële vaste kapitaalvorming deur die openbare korporasies het hoofsaaklik voorgekom in die sektor wat verantwoordelik is vir vervoer en kommunikasielawes en meer bepaald vanweë die infrastruktuurprojekte wat deur Telkom onderneem is. (Transnet, Telkom en die Suid-Afrikaanse Poskantoor is in die jongste hersiening van die nasionale rekeninge ingedeel as openbare korporasies pleks van sakeondernemings van die algemene owerheid.) Die surplus produksievermoë van die ander openbare korporasies was grotendeels vir die voortgesette traie reële vaste kapitaalbesteding deur hierdie instellings in die eerste kwartaal van 1994 verantwoordelik.

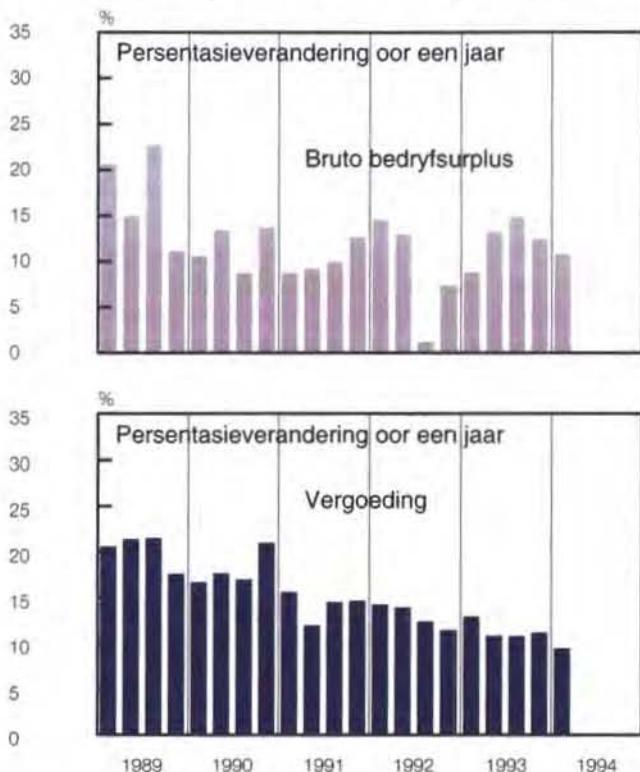
Die afname in die reële bruto binnelandse vaste investering deur die algemene owerheid is deur verdere besnoeiings in die kapitaalbesteding van die sentrale regering en plaaslike owerhede veroorsaak. Die vlak van die vaste investering deur die algemene owerheid was in die eerste kwartaal van 1994 21 persent onder die hoogtepunt in die eerste kwartaal van 1989.

Die matige toename in die reële *investering in voorrade* in die eerste kwartaal van 1994 was die derde agtereenvolgende kwartaalklike toename in hierdie totaal. Dit het gevolg op 'n feitlik ononderbroke vermindering in die voorrade sedert die begin van 1989 tot aan die einde van 1992. Die opbouwing van voorrade in die eerste kwartaal van 1994 het saamgeval met 'n toename in die hoeveelhede van die invoer en 'n betekenisvolle afname in die vraag na uitvoere, en was veral opvallend in die mynbou- en fabriekswese sektor sowel as in die landbouvoorraad in die handel. As gevolg van hierdie verdere toename, het die verhouding van die nywerheids- en handelsvoorraad tot die bruto binnelandse produk in die tweede helfte van 1993 uitgevlak teen die baie lae koers van 16 persent en in die eerste kwartaal van 1994 effens tot minder as 16% persent opgeskuif.

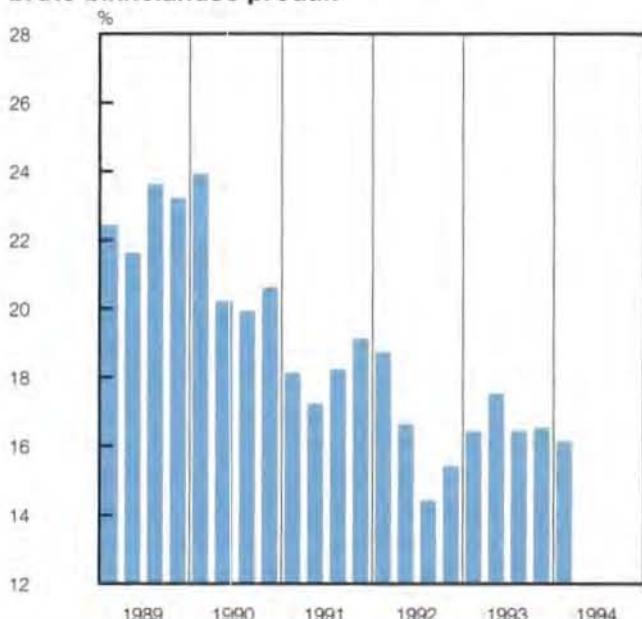
### Faktorinkome

Die groei in die totale *nominale faktorinkome* teen mark-pryse oor 'n tydperk van twaalf maande, wat van 'n lae koers van 9% persent in die vierde kwartaal van 1992 tot 12% persent in die vierde kwartaal van 1993 gestyg het, het in die eerste kwartaal van 1994 tot 12 persent verlengsaam. Hierdie laer groeikoers in die faktorinkome kan aan die stadiger groei in die totale arbeidsvergoeding sowel as in die totale bruto bedryfsurplusse toegeskryf word.

### Bruto bedryfsurplus en arbeidsvergoeding



### Bruto binnelandse besparing as persentasie van bruto binnelandse produk



### Binnelandse besparing

Die verhouding van die bruto binnelandse besparing tot die bruto binnelandse produk het in die eerste kwartaal van 1994 van die reeds laevlak van 17 persent in 1993 tot ongeveer 16 persent teruggesak. Die vernaamste rede vir hierdie laevlak van binnelandse besparing was nog steeds die groot ontsparing deur die algemene owerheid. Die ontsparing deur die algemene owerheid het in die eerste kwartaal van 1994 verder gestyg omdat die toename in die lopende besteding die toename in die lopende inkomme oorskry het. Die rente op staatskuld en verbruiksbesteding deur die owerheid in die besonder, het skerp gestyg.

Netto besparing deur die private sektor, wat gedurende 1993 betreklik stewig gebly het, het in die eerste kwartaal van 1994 effens verswak. As gevolg van die betreklik goeie vertoning van die bruto bedryfsurplus van die geïnkorporeerde sakeondernemings in die sektore van die ekonomie buite die landbou, het die netto besparing van die maatskappysektor in die eerste kwartaal van 1994 'n geringe verdere toename getoon. Hierdie toename is egter teengewerp deur die laer persoonlike besparing, as gevolg van die afname in die reële inkomme uit eiendom.

### Werkverskaffing

Die herstel in die ekonomiese bedrywigheid in 1993 was nie in staat om die afwaartse beweging in werkverskaffing om te keer nie. Die koers van afname in die gemiddelde vlak van die werkverskaffing in die formele sektore van die ekonomie buite die landbou het in werklikheid ietwat

versleg van 2,1 persent in sowel 1991 as 1992 tot 2,5 persent in die eerste drie kwartale van 1993 vergeleke met die ooreenstemmende tydperk van die voorafgaande jaar. Die getal werkgeleenthede in die formele sektor buite die landbou het van die eerste kwartaal van 1989 (die aanvang van 'n uitgerekte resessietydperk) tot die derde kwartaal van 1993 (die jongste inligting beskikbaar) met naastenby 410 000 afgeneem; bykans 8 uit elke 100 poste het derhalwe gedurende hierdie tyd oorbodig geraak.

Die gemiddelde vlak van die werkverskaffing in die private sektor was in die eerste drie kwartale van 1993 ongeveer 2,5 persent laer as in die ooreenstemmende tydperk van 1992; dit het in 1991 met 3,6 persent en in 1992 met 3,1 persent gedaal. Die koers van afname van kwartaal tot kwartaal in die werkverskaffing deur die private ondernemings (seisoensaangesuiwerd en tot 'n jaarkoers verhef) het aanvanklik verminder van 5,7 persent in die derde kwartaal van 1992 tot 1,0 persent in die vierde kwartaal; dit het daarna versnel tot 3,3 persent in die tweede kwartaal van 1993 voordat dit in die derde kwartaal weer tot 1,7 persent verlangsaam het.

As gevolg van 'n besnoeiing van die lopende besteding van die algemene owerheid en die rasionaliseringsprogramme wat deur die sakeondernemings in die openbare sektor ingestel is, het die totale werkverskaffing

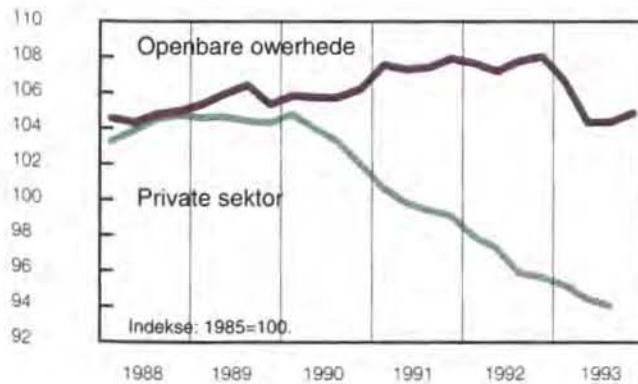
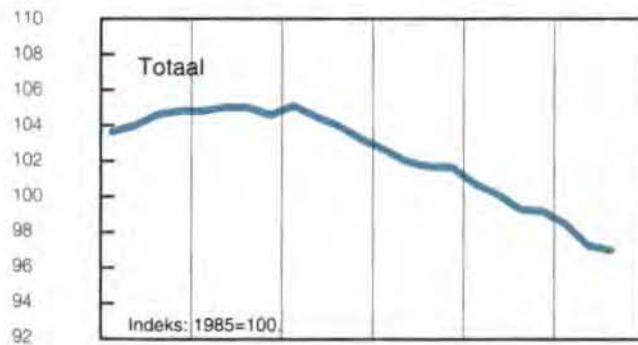
deur die openbare owerhede in 1993 met 2,4 persent afgeneem. Aansienlike dalings van kwartaal tot kwartaal teen seisoensaangesuiwerde jaarkoerse van 5,1 persent en 8,3 persent is in die eerste twee kwartale van 1993 aangeteken. In die derde kwartaal van 1993 het die werkverskaffing deur die openbare owerhede min of meer onveranderd op die vlak van die voorafgaande kwartaal gebly en daarna in die vierde kwartaal met 2,0 persent (seisoensaangesuiwerd en teen 'n jaarkoers) toegeneem as gevolg van 'n groot toename in die werkverskaffing deur die selfregerende gebiede.

Die daling in die werkverskaffing gedurende die resessie van 1989-1993 het aanleiding gegee tot 'n toenemende aantal geregistreerde werkloses. Die gemiddelde getal geregistreerde werkloses het in 1992 met 16,2 persent en in 1993 met 8,8 persent toegeneem. Dit het die totale getal geregistreerde werkloses in Desember 1993 op nagenoeg 290 000 te staan gebring.

#### Arbeidskoste en produktiwiteit

Die uitwerking van die uitgerekte resessie op werkverskaffing het in 1993 tot meer matige looneise aanleiding gegee. Die koers van toename in die *nominale vergoeding per werker* het aansienlik afgeneem van 15,4 persent in 1992 tot 'n koers oor vier kwartale van 11,1

#### Werkverskaffing in nie-landbousektore



#### Gemiddelde vergoeding per werker in nie-landbousektore



persent in die eerste nege maande van 1993. Hoewel hierdie koers steeds die huidige koers van die verbruikersprysinflasie oorskry, was dit nietemin die laagste styging sedert 1978 toe 'n toename van 10,6 persent aangeteken is. Die kwartaallikse koerse het selfs 'n meer betekenisvolle daling in die groei van die lone per werker getoon: gemeet oor tydperke van vier kwartale het dit afgeneem van 'n hoogtepunt van 19,4 persent in die tweede kwartaal van 1990 tot 10,2 persent in die derde kwartaal van 1993.

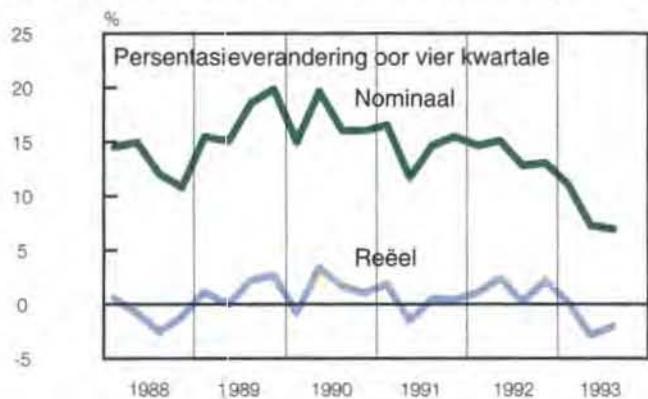
Die koers van toename in die gemiddelde nominale vergoeding per werker in die *private sektor* het in die eerste drie kwartale van 1993 11,3 persent beloop vergeleke met die ooreenstemmende tydperk van die voorafgaande jaar. Dit was aansienlik laer as die toename van 15,6 persent in 1992. Die koers van toename oor vier kwartale in die lone per werker in die private sektor het afgeneem van 'n hoogtepunt van 18,5 persent in die eerste kwartaal van 1990 tot 10,5 persent in die derde kwartaal van 1993. Hierdie aansienlike verlangsaaming in die toenames van die private sektor se lone was die gevolg van lae loonstygings in die meeste van die ekonomiese sektore. Voortgesette hoë koerse van toename in die lone per werker is egter in die kleinhandel, die private padvervoer, banke en die versekeringsbedryf aangeteken.

Die koers van toename in die gemiddelde maandelikse nominale salaris en lone per werker in diens van die *openbare owerhede* het selfs skerper verlangsaam van 21,9 persent in 1989 tot 14,8 persent in 1992 en tot 9,3 persent in 1993. Die koers van toename oor vier kwartale in die lone per werker in diens van die openbare owerhede het ook aansienlik gedaal, naamlik van 22,5 persent in die eerste kwartaal van 1991 tot 5,4 persent in die vierde kwartaal van 1993.

Omdat die groei in die nominale lone vinniger afgeneem het as die inflasiekoers, het die koers van toename in die *reële loon* per werker in die sektore van die ekonomie buite die landbou afgeneem van 2,8 persent in 1992 tot 0,9 persent in die eerste drie kwartale van 1993 vergeleke met die ooreenstemmende tydperk van 1992. Die koers van toename oor vier kwartale in die reële vergoeding per werker het selfs skerper gedaal van 'n hoogtepunt van 3,9 persent in die vierde kwartaal van 1992 tot 'n negatiewe vlak van 0,2 persent in die tweede kwartaal van 1993; daarna het dit egter weer toegeneem tot 'n positiewe vlak van 0,9 persent in die derde kwartaal.

Die *arbeidsproduktiwiteit* het gedurende die eerste nege maande van 1993 aansienlik verbeter toe dit 2,5 persent hoër was as in die ooreenstemmende tydperk van die voorafgaande jaar. Hierdie groei in produktiwiteit is 'n voortsetting van 'n opwaartse beweging wat reeds sedert die einde van 1991 waarneembaar was: die koers van toename oor vier kwartale in die produksie per werker in die sektore van die ekonomie buite die landbou het versnel van 0,5 persent in die vierde kwartaal van 1991 tot 1,8 persent in die eerste kwartaal van 1993 en

### Arbeidseenheidskoste in nie-landbousektore



selfs skerper tot 3,1 persent in die derde kwartaal van 1993. Die goeie vertoning van produktiwiteit gedurende die eerste nege maande van 1993 is gerugsteun deur die feit dat die aantal mandaie wat weens stakings en werkstopsettings verloor is, ongeveer 60 persent laer was as in die eerste drie kwartale van 1992.

Die stadiger groei in die nominale lone en 'n toename in die produksie buite die landbou het veroorsaak dat die *nominale arbeidseenheidskoste* stadiger toegeneem het. Nadat die koers van toename in die nominale arbeidseenheidskoste in die sektore van die ekonomie buite die landbou van 17,2 persent in 1989 tot 13,8 persent in 1992 afgeneem het, het dit gedaal tot 8,3 persent in die eerste drie kwartale van 1993 vergeleke met die ooreenstemmende tydperk van 1992. Die koers van toename oor vier kwartale in die nominale arbeidskoste per eenheid fisiese produksie het ewe betekenisvol afgeneem van hoogtepunte van 15,4 persent in die vierde kwartaal van 1991 en 15,0 persent in die tweede kwartaal van 1992 tot 6,9 persent in die derde kwartaal van 1993 – die laagste vlak sedert die tweede kwartaal van 1978.

As gevolg van die laer koerse van toename in die reële vergoeding per werker en 'n verbetering in die produktiwiteit, het die *reële arbeidseenheidskoste* in die sektore van die ekonomie buite die landbou in die eerste drie kwartale van 1993 met 1,6 persent gedaal teenoor die ooreenstemmende tydperk van 1992. Op 'n kwartaallikse grondslag, het die reële arbeidseenheidskoste, gemeet oor tydperke van vier kwartale, ook negatiewe koerse van verandering van onderskeidelik 2,9 persent en 2,1 persent in die tweede en derde kwartaal van 1993 getoon.

### Pryse

Sowel die omvattende produksieprysindeks as die omvattende verbruikersprysindeks neem oor die

algemeen reeds vir 'n geruime tyd teen enkelsyferkoerse toe. Eksogene faktore soos die betreklike bestendigheid van prysse in handelsvennootlande, laer internasionale olieprysse en beter landboutoestande het onteenseeglik tot hierdie laer inflasie bygedra. Die verhoogde finansiële bestendigheid moet egter in 'n groot mate toegeskryf word aan die konsekwente toepassing van 'n konserватiewe monetêre beleid wat inflasieverwagtings geleidelik gedemp het. 'n Toename in die buigsaamheid van lone het ook bygedra tot die verlangsing van die prysinflasie.

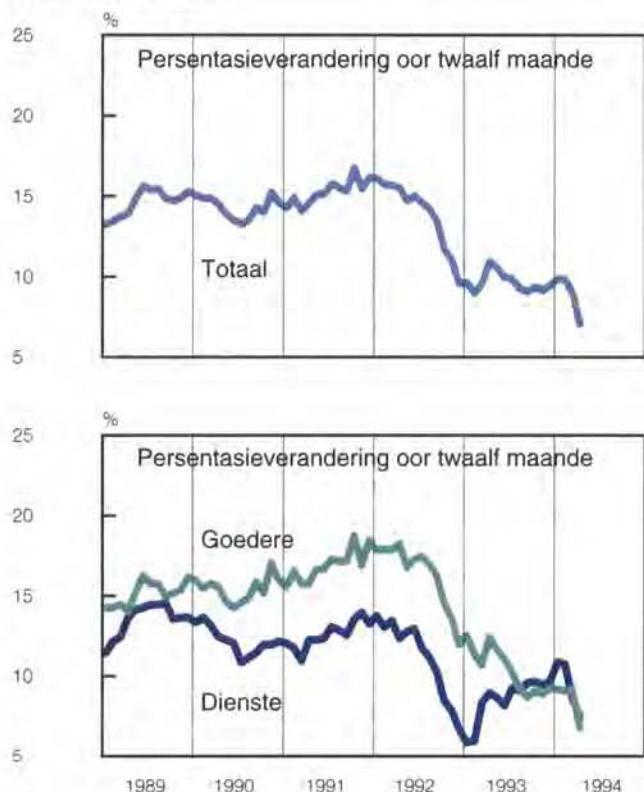
In nege-en-twintig agtereenvolgende maande tot en met Maart 1994 het die koers van toename oor twaalf maande in die omvattende produksieprysindeks op enkelsyfervlakte gebly. Hierdie koers van toename het boonop onlangs van 8,3 persent in Februarie 1993 tot 5,4 persent in Oktober gedaal – die laagstevlak sedert Januarie 1972 toe 'n toename van 4,8 persent aangeteken is. Daarna het dit weer opwaarts beweeg tot meer as 6 persent en in Maart 1994 het dit 6,3 persent beloop. Die uitvlakking in die afwaartse beweging van inflasie in die produksieprys was grotendeels die gevolg van 'n versnelling in landbou- en ander voedselprysse, in die besonder die prys van rooivleis. 'n Laer aanbod van lewende hawe op die mark as gevolg van die goele beskikbare weiding na die hoë reënval in die grootste gedeelte van die land, het die prys van vleis opgestoot.

Voedselprysse was ook verantwoordelik vir 'n ommekeer in die afwaartse beweging in die koers van toename in die prysse van binnelandse geproduceerde goedere. Nadat dit van 9,0 persent in Februarie 1993 tot 5,7 persent in Oktober verlangsaam het, het die koers van toename in hierdie prysse oor tydperke van twaalf maande vinnig gestyg tot 7,3 persent in Januarie 1994; daarna het dit weer ietwat afgeneem tot 6,9 persent in Maart.

Die koerse van toename oor tydperke van twaalf maande in die prysse van ingevoerde goedere was ook sedert Oktober 1991 minder as 10 persent en het die gemete inflasiekroes in die omvattende produksieprysindeks tot en met Maart 1994 by slegs een geleenthed oorskry, naamlik in Junie 1993. Ondanks die depresiasiie in die nominale effektiewe wisselkoers van die rand, het die koers van toename oor twaalf maande in die prysse van ingevoerde goedere afgeneem van 'n jongste hoogtepunt van 6,8 persent in Junie 1993 tot 2,7 persent in Maart 1994. Hierdie betreklik lae koerse van toename is aangeteken hoofsaaklik as gevolg van die voortgesette bestendigheid van prysse in Suid-Afrika se vernaamste handelsvennootlande en 'n daling in die internasionale ruolieprysse. Die koers van toename oor twaalf maande in die geweegde gemiddelde groot-handelsprysindeks van Suid-Afrika se ses vernaamste handelsvennootlande het afgeneem van 1,9 persent in Junie 1993 tot slegs 0,9 persent in Maart 1994.

Die koers van toename van kwartaal tot kwartaal in die omvattende produksieprysindeks en in die prysindeks van binnelandse geproduceerde goedere het in 1993 ook 'n duidelik afwaartse beweging getoon voordat dit in die

## Verbruikerspryse



eerste kwartaal van 1994 weer aansienlik toegeneem het. Die koers van toename van kwartaal tot kwartaal in die prysse van ingevoerde goedere het egter van die tweede kwartaal van 1993 af skerp afgeneem en daarna in die vierde kwartaal van 1993 negatief geword. In die eerste kwartaal van 1994 is 'n klein koers van toename in invoerpryse weer aangeteken ofskoon die rand aansienlik gedepresieer het. 'n Daling in internasionale oliepryse het die uitwerking van 'n laer randwisselkoers op invoerpryse in 'n mate teenwerk.

Die koers van toename oor twaalf maande in die omvattende verbruikersprysindeks het afgeneem tot 'n enkelsyfervlak van 9,6 persent in Desember 1992 – die eerste keer sedert Junie 1978 dat hierdie koers tot laer as 10 persent gedaal het. Met die uitsondering van die tydperk van April tot Junie 1993, het hierdie koers van toename in die daaropvolgende maande tot en met April 1994 ook in enkelsyfers gebly. Van September 1993 tot Januarie 1994 het hierdie groeikoers effens opwaarts beweeg van 9,1 persent tot 9,9 persent voordat dit weer afgeneem het tot 9,0 persent in Maart. In April 1994 het die koers van toename in die verbruikerspryse oor 'n tydperk van twaalf maande tot 7,1 persent gedaal toe hierdie prys nie meer verder beïnvloed is deur die verhoging in April 1993 van die belasting op toegevoegde waarde en ander indirekte belastings nie.

Van Augustus 1993 tot Maart 1994 was die koers van toename in die prysen van verbruikersgoedere oor tydperke van twaalf maande betreklik bestendig rondom 'nvlak van ongeveer 9 persent; dit het daarna egter afgeneem tot 6,8 persent in April 1994. Aan die ander kant het die koers van toename oor twaalf maande in die prysen van verbruikersdienste 'n duidelik opwaartse beweging getoon van 9,5 persent in November 1993 tot 10,8 persent in Februarie 1994. In Maart het dit gedaal tot 8,6 persent toe die aansienlike stygging in skoolgeld in die ooreenstemmende maand van die voorafgaande jaar nie meer hierdie koers van toename in die prysen van dienste beïnvloed het nie, en in April tot 7,5 persent toe die uitwerking van die verhogings van indirekte belastings in 1993 verdwyn het.

Die koers van toename van kwartaal tot kwartaal in die omvattende verbruikersprysindeks het ook na die Begroting skerp afgeneem van 'n hoë seisoensaangesuiwerde jaarkoers van 16,8 persent in die tweede kwartaal van 1993 tot slegs 5,3 persent in die vierde kwartaal; daarna het dit versnel tot 9,2 persent in die eerste kwartaal van 1994. Hierdie hoë koers van toename in die eerste kwartaal van 1994 is grotendeels teweeggebring deur 'n aansienlike stygging in voedselprysen en in 'n mindere mate ook in die koste van vervoer, kommunikasie- en mediese dienste.

## Buitelandse handel en betalings

### Lopende rekening

Die oorskot op die lopende rekening van die betalingsbalans het opmerklik afgeneem van R1,2 miljard in die vierde kwartaal van 1993 tot ongeveer R0,2 miljard in die eerste kwartaal van 1994. Na aanpassing vir seisoenale invloede en teen 'n jaarkoers gemeet, het die oorskot op die lopende rekening oor dieselfde tydperk van R5,3 miljard tot R2,3 miljard gekrimp. In verhouding tot die bruto binnelandse produk, het die oorskot op die lopende rekening in die eerste kwartaal van 1994 0,6 persent bedra; hierdie verhouding was gemiddeld 1,5 persent vir 1993 in die geheel. Die aansienlike verswakkering in die oorskot op die lopende rekening was die gesamentlike gevolg van laer goedere-uitvoer, hoë goedere-invoer en 'n verdere toename in netto dienste- en oordragbetalings aan nie-inwoners, wat nie deur 'n stygging in die waarde van die netto gouduitvoer geneutraliseer kon word nie.

Die waarde van die goedere-uitvoer (seisoensaangesuiwerd en tot 'n jaarkoers verhef), wat in 1993 'n belangrike bydrae tot die oplewing in die ekonomiese bedrywigheid gemaak het, het in die eerste kwartaal van 1994 met 3,7 persent tot R61,3 miljard teruggesak. Skerp afnames is in die uitvoer van vervaardigde produkte aangeteken, in die besonder in die kategorieë masjinerie en elektriese toerusting, vervoertoerusting en chemiese produkte. Die uitvoer van edel- en half-edelstene het ook verminder, terwyl die uitvoer van mineraalprodukte en landbouprodukte bly styg het.

'n Daling van 5% persent in die hoeveelhede van die goedere-uitvoer was hoofsaaklik vir die laer waarde van die uitvoer in die eerste kwartaal van 1994 verantwoordelik; 'n buitengewoon skerp toename van bykans 11 persent is in die vierde kwartaal van 1993 in die hoeveelhede van die uitvoer aangeteken. Die hoeveelheid van die goedere-uitvoer was derhalwe in die eerste kwartaal van 1994 steeds ongeveer 12 persent bo die

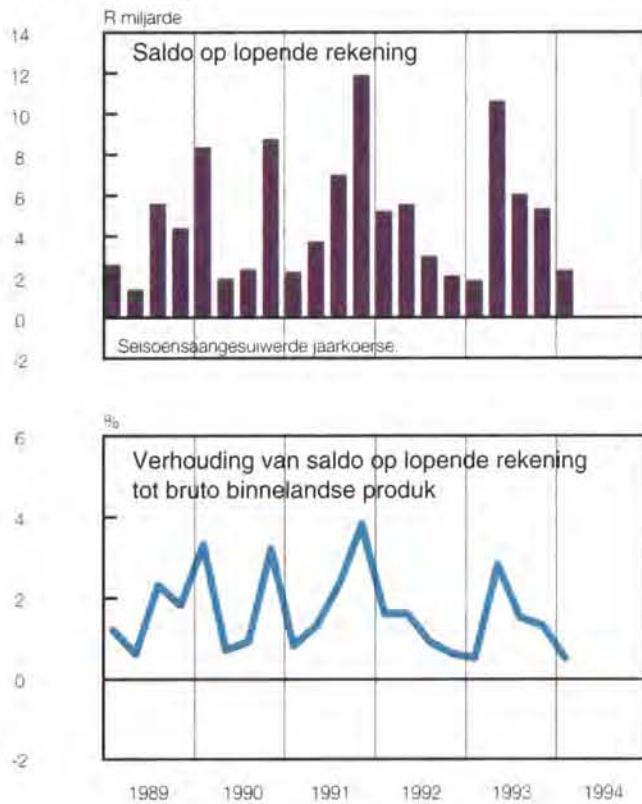
### Lopende rekening van die betalingsbalans

Seisoensaangesuiwerde jaarkoerse

R miljarde

	1993				1994
	1e kw	2e kw	3e kw	4e kw	Jaar
Goedere-uitvoer .....	48,6	56,2	55,8	63,6	56,1
Netto gouduitvoer .....	21,0	22,2	24,5	21,2	22,2
Goedere-invoer .....	-56,1	-55,8	-59,3	-64,0	-58,8
Netto dienste- en oordragbetalings .....	-11,7	-12,0	-15,0	-15,5	-13,6
<b>Saldo op lopende rekening .....</b>	<b>1,8</b>	<b>10,6</b>	<b>6,0</b>	<b>5,3</b>	<b>5,9</b>
					2,3

## Betalingsbalans



vlak van die eerste kwartaal van 1993. Uitvoerpryse in rand het van die vierde kwartaal van 1993 tot die eerste kwartaal van 1994 met 2 persent gestyg, dit wil sê teen min of meer die gemiddelde koers van toename in die voorafgaande jaar. Hierdie bestendige toename in uitvoerpryse is hoofsaaklik meegebring deur die depresiasi van die rand. Internasionale grondstofpryse, wat aan die einde van 1993 effens opwaarts begin beweeg het, het egter in die eerste kwartaal van 1994 verder gestyg.

Nadat die waarde van die *netto gouduitvoer* van 'n seisoensaangesuiwerde jaarkoers van R24,5 miljard in die derde kwartaal van 1993 tot R21,2 miljard in die vierde kwartaal gedaal het, het dit in die eerste kwartaal van 1994 weer tot R22,6 miljard herstel. Hierdie toename kan aan die hoér goudprys toegeskryf word. Die randprys van goud per fyn ons het van 'n gemiddeld van R1 262 in die vierde kwartaal van 1993 tot R1 321 in die eerste kwartaal van 1994 gestyg; die gemiddelde vasstellingsprys van goud per fyn ons het oor dieselfde tydperk effens gestyg van VSA\$374 tot \$384. In die daaropvolgende twee maande het die gemiddelde randprys van goud nog verder toegeneem tot R1 383 per fyn ons in Mei, terwyl die dollarprys tot \$381 per fyn ons teruggesak het. Die hoeveelhede van die netto gouduitvoer het daarenteen in die eerste kwartaal van 1994

met ongeveer 5 persent gedaal uit hoofde van die laer binnelandse produksie van goud.

Die waarde van die *goedere-invoer* (seisoensaangesuiwerd en tot 'n jaarkoers verhef), wat vanaf die tweede kwartaal van 1993 skerp gestyg het, het in die eerste kwartaal van 1994 verder met 2½ persent tot R65,7 miljard toegeneem. Hierdie toename was die gevolg van sowel hoér invoerpryse as hoeveelhede. Die prys van ingevoerde goedere het ondanks die depresiasi van die rand, slegs met ½ persent gestyg. Soos reeds aangedui is 'n skerp styging in die invoerpryse (uitgesonderd olie) deels teengewerk deur die daling in die internasionale oliepryse en die betreklik bestendige prys in Suid-Afrika se handelsvennootlande. Invoerhoeveelhede het in die eerste kwartaal van 1994 met 2 persent gestyg, hoofsaaklik vanweé die skerp toename in die invoer van masjinerie en elektriese toerusting, edelstene en edelmetale.

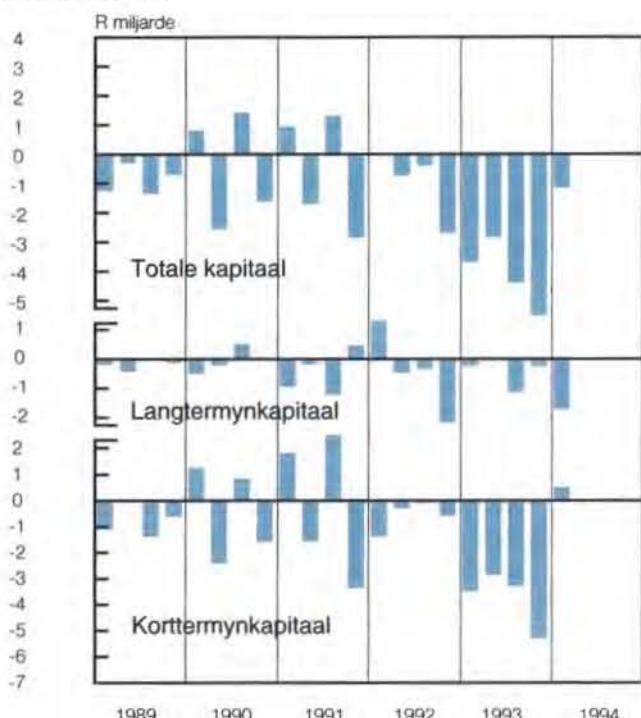
*Netto dienste- en oordragbetalings* (seisoensaangesuiwerd en tot 'n jaarkoers verhef), het in die eerste kwartaal van 1994 ietwat verder tot R15,9 miljard gestyg; hierdie betalings het in 1993 van R11,7 miljard in die eerste kwartaal tot R15,5 miljard in die vierde kwartaal toegeneem. Bruto betalings vir dienste het in die eerste kwartaal van 1994 toegeneem, hoofsaaklik vanweé hoér rentebetalings aan nie-inwoners en 'n verdere toename in reis- en toeristebesteding deur Suid-Afrikaners in die buiteland, terwyl bruto ontvangste vir dienste vanweé laer toerisme-ontvangste van nie-inwoners gedaal het.

## Kapitaalbewegings

Die kapitaalrekening van die betalingsbalans is in die eerste kwartaal van 1994, dit wil sê in 'n oorgangstydperk na 'n nuwe politieke bedeling waarin geweld en onsekerheid steeds geheers het, gekenmerk deur 'n verrassende klein *totale netto uitvloeiing van kapitaal*. Na groot netto uitvloeiinge van R4,4 miljard en R5,5 miljard in die laaste twee kwartale van 1993, het die netto uitvloeiing van kapitaal nie verwant aan reserwes nie, maar insluitende onaangetekende transaksies, in die eerste kwartaal van 1994 tot R1,1 miljard gedaal. Hierdie kleiner netto uitvloeiing van kapitaal het die terugbetaling van vaste verpligtinge op buitelandse skuld beide binne en buite die stilstandnet ingesluit, 'n aanduiding dat sommige van hierdie verpligtinge omgerol kon gewees het of dat Suid-Afrika nuwe lenings in die buiteland bekom het. In April 1994 het die kapitaalrekening ongelukkig weer aansienlik verswak namate die verkiesing nader gekom het en sekere politieke partye nog nie aangedui het of hulle sou deelneem nie. Die verandering in die netto buitelandse reserwes van die land toon dat 'n groot netto uitvloeiing van kapitaal waarskynlik weer gedurende hierdie maand voorgekom het. Sommige van hierdie uitvloeiinge is egter moontlik in Mei 1994 omgekeer.

Soos wat verwag kon word, het die dramatiese verbetering in die kapitaalrekening hoofsaaklik voorgekom in *korttermynkapitaal* nie verwant aan reserwes nie

## Netto kapitaalbewegings nie verwant aan reserwes nie

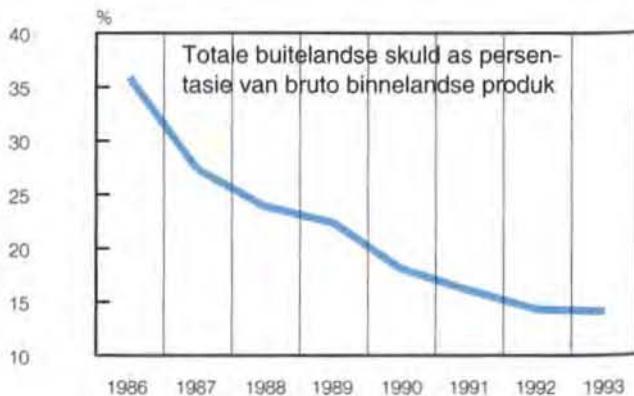
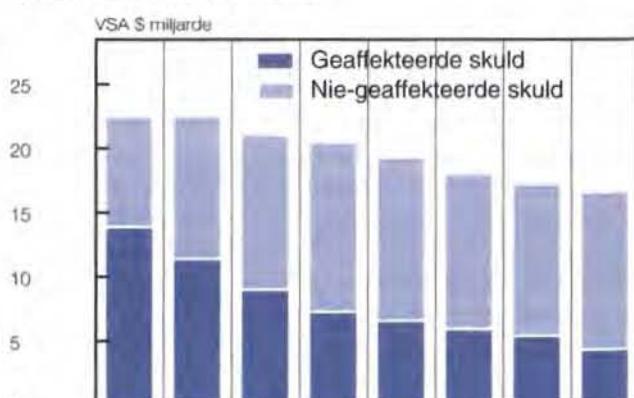


nie-inwoners van sekuriteite wat op die Johannesburgse Effektebeurs genoteer is ten bedrae van R1,2 miljard. Hierdie aankope is egter geneutraliseer deur die netto verkope van effekte van R1,3 miljard deur nie-inwoners by gemagtigde banke, dit wil sê die sogenaamde "oor-die-toonbank" transaksies in plaas van regstreeks op die Beurs. Hoewel hierdie transaksies in sekuriteite deur nie-inwoners nie die vlak van die bruto reserwes van die land beïnvloed nie omdat dit deur die finansiélerand-meganisme plaasgevind het, toon dit aan dat die netto uitvloeiing van ander langtermynkapitaal in die eerste kwartaal van 1994 op ongeveer R1,6 miljard te staan gekom het. Hierdie netto uitvloeiing van kapitaal is beïnvloed deur die aanvangsbetaling van R1,6 miljard ingevolge die Skuldreëlingsooreenkoms van 1994 met buitelandse krediteurbanke, die terugbetaling van R0,8 miljard op skuld wat na medium- en langtermynlenings buite die stilstandnet omgeskakel is, sowel as die aflossing van lenings van R0,5 miljard wat deur buitelandse regerings gewaarborg is.

### Buitelandse skuld

Ondanks die groot netto uitvloeiing van kapitaal nie verwant aan reserwes nie (die geïdentifiseerde kapitaalvloeiinge plus foute en onaangetekende transaksies), is

### Totale buitelandse skuld



maar insluitende onaangetekende transaksies. Nadat uitvloeiinge sedert die vierde kwartaal van 1991 aangegeteken is, het korttermynkapitaalbewegings verander van 'n netto uitvloeiing van R5,3 miljard in die vierde kwartaal van 1993 tot 'n netto invloeiing van R0,6 miljard in die eerste kwartaal van 1994. Die merkwaardige ommekaer in die korttermynkapitaalvloeiinge kan toegeskryf word aan die ommeswaai van 'n netto uitvloeiing van R0,6 miljard na 'n netto invloeiing van R2,2 miljard in die buitelandse korttermynlaste van private banke gedurende dieselfde tydperk. Hierdie omskakeling was deels 'n weerspieëling van 'n terugwaartse vloeiing in Januarie 1994 van 'n besondere groot bedrag korttermynfondse wat in Desember 1993 uit die land beweeg het. Die strammer toestande in die binnelandse geldmark het banke waarskynlik ook gedwing om meer van buitelandse kredietfaciliteite gebruik te maak om hul fondse aan te vul. 'n Netto uitvloeiing van R1,7 miljard in ander korttermynkapitaal is steeds in die eerste kwartaal van 1994 aangeteken; dit was egter aansienlik kleiner as die uitvloeiing in die tweede helfte van 1993.

In teenstelling met hierdie gunstige ontwikkelings het die netto uitvloeiing van *langtermynkapitaal* aansienlik toegeneem van R0,2 miljard in die vierde kwartaal van 1993 en 'n gemiddelde kwartaallikse uitvloeiing van R0,4 miljard vir die jaar in die geheel tot R1,7 miljard in die eerste kwartaal van 1994. Ingelui by hierdie bedrag in die eerste kwartaal van 1994 is die netto aankope deur

Suid-Afrika se totale uitstaande buitelandse skuld (uitgesonderd skuld onderhewig aan valutabeheer-regulasies ten opsigte van finansiële en geblokkeerde rand) in 1993 verder met slegs \$0,6 miljard tot \$16,7 miljard aan die einde van die jaar verminder. Dit was deels te wyte aan die feit dat Suid-Afrika se buitelandse lenings verwant aan reserwes R7,4 miljard bedra het, terwyl 'n deel van die kapitaaluitvloeiing toe te skryf was aan 'n toename in buitelandse bates. 'n Vergelyking van veranderings in buitelandse skuld en kapitaalvloeiinge bevestig egter dat 'n groot deel van die afgeleide kapitaaluitvloeiinge in 1993 nie geïdentifiseer kon word nie, dit wil sê die balanserende pos "foute en onaangetekende transaksies" was groot.

Gewaardeer teen die wisselkoerse van die VSA-dollar teenoor ander geldeenhede soos op 31 Augustus 1985, is Suid-Afrika se totale buitelandse skuld van \$23,7 miljard aan die begin van die stilstandreeëlings tot \$15,8 miljard aan die einde van 1993 verminder. In rand, het Suid-Afrika se buitelandse skuld oor dieselfde tyd van R65,8 miljard tot R56,7 miljard afgeneem. In verhouding tot die bruto binnelandse produk, het Suid-Afrika se buitelandse skuld aan die einde van 1993 slegs 14,2 persent bedra; hierdie verhouding was 42,5 persent aan die einde van Augustus 1985.

Die skuld wat ingevolge die skuldreeëlings met buitelandse krediteurbanke nie betaalbaar is nie, is van \$5,5 miljard aan die einde van 1992 tot \$4,4 miljard aan die einde van 1993 verminder; aan die begin van die skuldstilstand is \$13,6 miljard deur hierdie reëlings

#### Buitelandse skuld van Suid-Afrika\*

\$ miljarde

	31 Aug 1985	31 Des 1992	31 Des 1993
Geaffekteerde skuld			
Openbare sektor.....	2,7	1,8	1,3
Monetêre sektor.....	8,8	2,1	1,6
Ander.....	2,1	1,6	1,5
Totaal .....	13,6	5,5	4,4
Nie-geaffekteerde skuld			
Openbare sektor.....	7,3	5,0	6,3
Omgeskakelde lang-termynlenings .....	-	4,8	4,5
Ander.....	2,8	2,0	1,5
Totaal .....	10,1	11,8	12,3
<b>Totale buitelandse skuld</b>	<b>23,7</b>	<b>17,3</b>	<b>16,7</b>

\* Uitgesonderd geblokkeerde rand-rekeninge, gewone aandele en nie-aflosbare voorkeuraandele, genoteerde binnelandse skuldbriewe en genoteerde binnelandse leningseffekte.

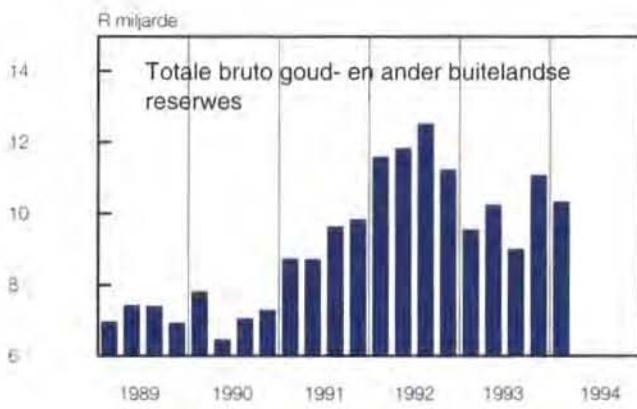
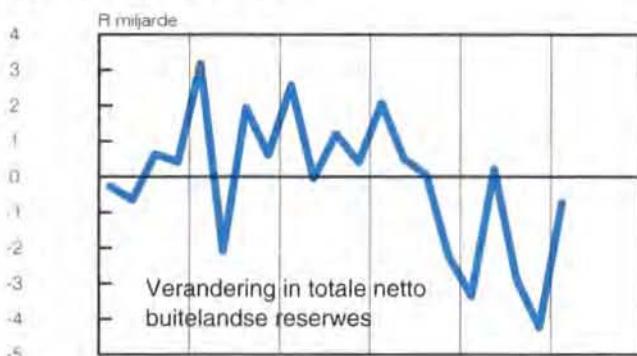
geaffekteer. Die skuld betaalbaar ingevolge die ooreenkoms het van \$11,8 miljard aan die einde van 1992 tot \$12,3 miljard aan die einde van 1993 gestyg, hoofsaaklik vanweë lenings wat deur die owerhede aangegaan is om die vlak van die buitelandse reserwes te steun.

#### Buitelandse reserwes

As gevolg van die betreklik klein netto uitvloeiing van kapitaal, het die totale netto goud- en ander buitelandse reserwes van Suid Afrika in die eerste kwartaal van 1994 met R0,9 miljard afgeneem, aansienlik minder as die daling van R4,3 miljard wat in die vierde kwartaal van 1993 aangeteken is. In April 1994 het die netto goud- en ander buitelandse reserwes van die Reserwebank egter in een maand met nie minder nie as R2,2 miljard geval, voordat dit verder met R0,4 miljard in Mei gedaal het.

Die afname in die netto buitelandse reserwes, aangepas vir waardasie-aansuiwerings van R0,2 miljard, het geleid tot 'n afname van ongeveer R0,7 miljard in die totale bruto goud- en ander buitelandse reserwes tot 'n vlak van R10,3 miljard aan die einde van Maart 1994. Hierdie reserwes was gelyk aan die waarde van ongeveer 5½ weke se invoer van goedere en dienste. In die daaropvolgende twee maande het die Reserwebank se bruto goud- en ander buitelandse reserwes verder met

#### Buitelandse reserwes



R0,8 miljard gedaal tot 'nvlak van R7,2 miljard aan die einde van Mei 1994. Die goudreserves van die Bank het 4,4 miljoen fyn onse aan die einde van Mei 1994 bedra, dit wil sê minder as die 4,8 miljoen fyn onse aan die einde van Desember 1993.

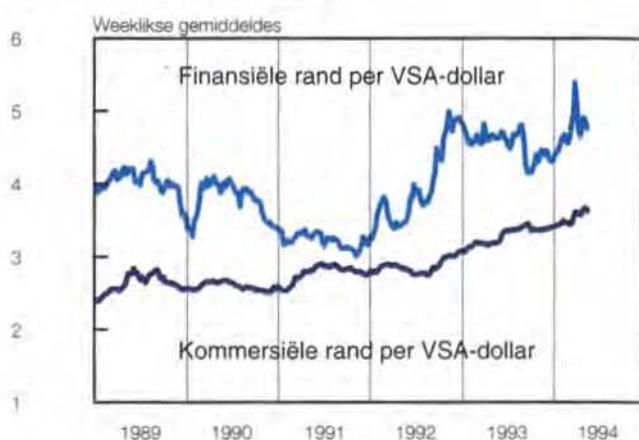
### Wisselkoerse

As gevolg van die politieke onsekerheid en voortslepende onrus in die aanloop tot die verkiesing in Suid-Afrika, het die *nominale effektiewe wisselkoers* van die rand gedurende die eerste drie maande van 1994 met 4,1 persent en tot 31 Mei 1994 met 'n verdere 4,4 persent gedaal. Dit het die daling in die nominale effektiewe wisselkoers in die eerste vyf maande van 1994 op 8,4 persent te staan gebring, vergeleke met die depresiasi van 8,7 persent gedurende 1993 in die geheel. Hoewel die rand gedurende die eerste vyf maande van 1994 skerp teenoor die meeste van die belangrikste geldeenheide gedepresieer het, is buitengewoon skerp dalings van 12,3 persent en 12,6 persent teenoor onderskeidelik die Japanse yen en Italiaanse lira aangeteken.

Die skerp daling in die nominale effektiewe wisselkoers van die rand in die eerste kwartaal van 1994 was meer as voldoende om te vergoed vir die inflasiedifferensiaal tussen Suid-Afrika en sy vernaamste handelsvennootlande; die *reële effektiewe wisselkoers* van die rand was in Maart 1994 derhalwe 2 persent laer as die vlak van Desember 1993. Vanaf die einde van 1992 het die reële effektiewe wisselkoers van die rand met bykans 6½ persent gedaal.

Nadat die wisselkoers van die *finansiële rand* gedurende die loop van 1993 per saldo met 13,1 persent geappresieer het, het dit gedurende die eerste kwartaal van 1994 met 12,4 persent gedepresieer. Kommer oor onrusverwante voorvalle, politieke onsekerheid en winsneming het egter daarná veroorsaak dat die finansiële rand in die daaropvolgende twee maande skerp gewissel het. Op 11 April 1994 het die finansiële rand teen 'n

### Wisselkoerse van die rand



wisselkoers van R5,58 teenoor die dollar verhandel – die laagstevlak sedert die instelling daarvan op 24 Januarie 1979 – voordat dit op 31 Mei 1994 tot R4,74 per dollar geappresieer het. Die diskonto op die finansiële rand het dienooreenkomsdig oor dieselfde tydperk van 35,7 persent tot 23,8 persent vernou.

### Veranderings in die wisselkoerse van die rand

%

	31 Des '92	31 Des '93	31 Mrt '94	31 Mei '94
tot	tot	tot	tot	
31 Des '93				
31 Mrt '94				
31 Mei '94				

#### Geweegde

gemiddelde.....	-8,7	-4,1	-4,4
VSA-dollar .....	-10,1	-2,1	-4,0
Britse pond .....	-7,7	-2,6	-5,6
Duitse mark .....	-3,4	-5,8	-5,5
Japanse yen .....	-19,4	-10,2	-2,2
Nederlandse			
gulden .....	-3,8	-5,4	-5,7
Italiaanse lira .....	4,2	-7,9	-5,1

## Finansiële markte

### Geldvoorraad

Die groei in die geldvoorraad, wat gedurende 1993 oor die algemeen traag was en slegs 'n matige opwaartse beweging in die tweede helfte van die jaar getoon het, het in die eerste drie maande van 1994 versnel. Die groeikoers oor twaalf maande in die *omvattend gedefinieerde geldvoorraad (M3)* het van 8,0 persent in Desember 1992 tot slegs 1,9 persent in Julie 1993 afgeneem; dit het daarna geleidelik tot 7,0 persent in Desember 1993 en tot 12,3 persent in Maart 1994 toegeneem. Die kwartaallike groeikoers in M3 (seisoensaangesuiwerd en tot 'n jaarkoers verhef) het egter matig van 18,1 persent in die vierde kwartaal van 1993 tot 15,5 persent in die eerste kwartaal van 1994 gedaal. Voorlopige ramings duif daarop dat die groei in M3 oor twaalf maande in April 1994 hoog gebly het, aangesien dit vanaf 'n laevlak in April 1993 gemeet is.

As gevolg van hierdie versnelling in die groei van die geldvoorraad, het die koers van toename in M3 gedurende die eerste vier maande van 1994 die boonste perk van die *nuwe geldvoorraadriglyne* oorskry. Die President van die Reserwebank het op 25 Maart 1994 aangekondig dat die owerhede besluit het om die geldvoorraadgroeiriglyne vir 1994 op hul koerse van die voorafgaande jaar te behou, dit wil sê riglyngrense van 6 tot 9 persent groei in M3 van die vierde kwartaal van

1993 tot die vierde kwartaal van 1994 sal van toepassing wees. Deur hierdie riglyne te behou, behoort monetêre beleid die vereistes vir monetêre bestendigheid en 'n herstel in die binnelandse ekonomie ten beste te dien, want hierdie groeikoerse in die geldvoorraad behoort:

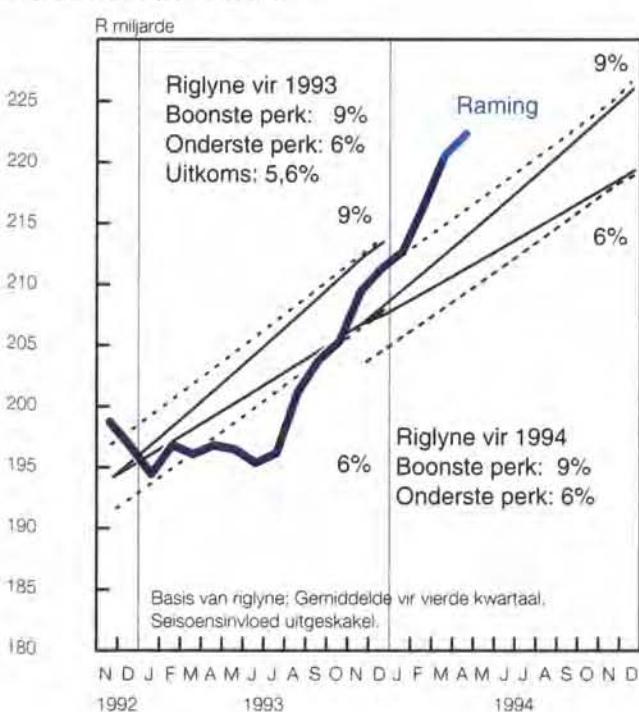
- nie die groei in die reële ekonomie, wat maar in 1993 'n aanvang geneem het, te beperk nie en dit ook nie kunsmatig te stimuleer nie;
- nie verdere kapitaaluitloeiinge in 'n reeds kwesbare betalingsbalanssituasie aan te help nie;
- voort te gaan met die afwaartse druk op inflasie, wat nog hoog is vergeleke met die inflasiekoerse van die meeste nywerheidslande; en
- genoegsame ruimte te laat vir totale monetêre besteding om toe te neem, met inagneming van die moontlike omvang van 'n verdere styging in inkomemoolloopsnelheid van geld.

Soos in die verlede het die monetêre owerhede beklemtoon dat hulle nie van plan is om 'n stram geldregel wat aan hierdie riglyne gekoppel is, te volg nie. Die Reserwebank sal eerder voortgaan om die groei in die geldvoorraad teen ander omvattender onderliggende toestande te beoordeel voordat besluit sal word of veranderings in die groei van die geldvoorraad 'n verskuiwing in die monetêre beleidsingesteldheid regverdig. In ooreenstemming met hierdie benadering het die jongste versnelling in die groei in die geldvoorraad nie tot 'n verhoging in die Bankkoers aanleiding gegee nie aangesien dit grotendeels deur 'n verskuiwing van regeringsdeposito's (nie deel van die geldvoorraad nie) na deposito's van die private sektor (by die geldvoorraad ingesluit) by monetêre instellings veroorsaak is. Hierdie verskuiwing in deposito's was ook hoofsaaklik verantwoordelik vir 'n daling van 2,0 persent in die inkomemoolloopsnelheid van M3 in die eerste kwartaal van 1994, ondanks die min of meer onveranderde gapings tussen uitleen- en gemiddelde depositokoerse van banke.

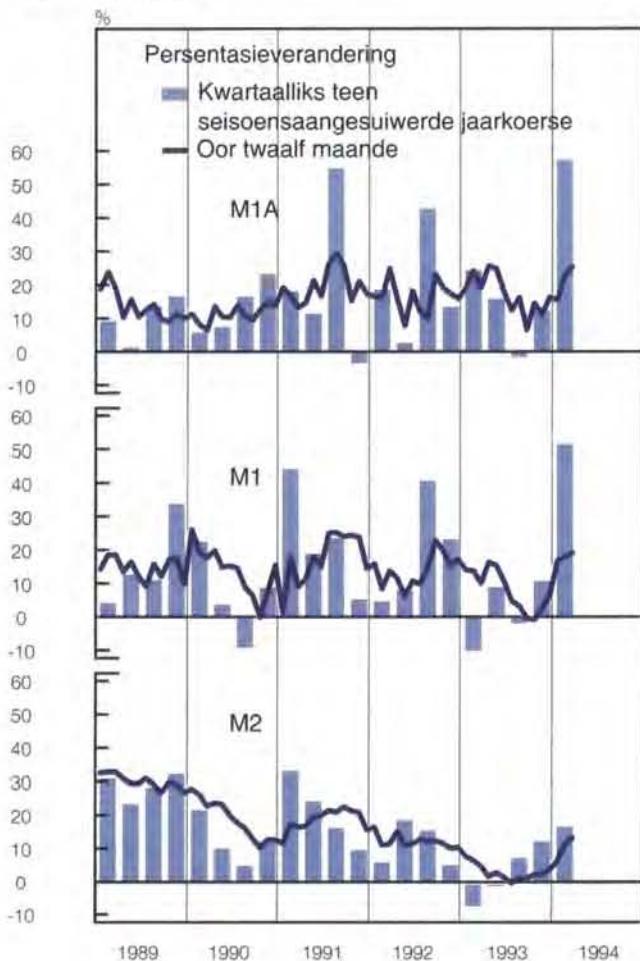
Die koers van toename oor tydperke van twaalf maande in die *enger monetêre totale* het ook in 1993 tot betreklik lae vlakke gedaal, maar daarna in die laaste maande van 1993 en in die eerste drie maande van 1994 weer op beweeg. Die groeikoers oor tydperke van twaalf maande in MIA het in 1993 merkbaar gewissel, maar per saldo van 16,2 persent in Desember 1992 tot 6,9 persent in September 1993 afgeneem; dit het daarna in Desember 1993 tot 16,6 persent en in Maart 1994 tot 25,7 persent gestyg. Die koers van toename in M1 oor tydperke van twaalf maande het van 17,5 persent in Desember 1992 tot -0,5 persent in Oktober 1993 gedaal, voordat dit in Desember 1993 tot 6,7 persent en in Maart 1994 tot 19,4 persent gestyg het. Op soortgelyke wyse het die groeikoers oor twaalf maande in M2 van 10,8 persent in Desember 1992 tot 0,1 persent in Julie 1993 gedaal, maar in Desember 1993 weer tot 3,9 persent en in Maart 1994 tot 13,6 persent gestyg.

Die belangrikste teenhangers (in 'n statistiese of rekeningkundige sin) van die toename van R12,5 miljard

### Riglyne vir groei in M3



## Monetêre totale



in M3 gedurende die eerste drie maande van 1994 was toenames van R14,8 miljard in die monetêre instellings se netto eise teen die owerheidsektor en R7,1 miljard in hierdie instellings se eise teen die private sektor. In teenstelling met hierdie ontwikkelings, het die netto buitelandse bates (insluitend goud) en die "netto ander bates" van die monetêre sektor in die eerste kwartaal van 1994 met R3,1 miljard en R6,3 miljard afgeneem.

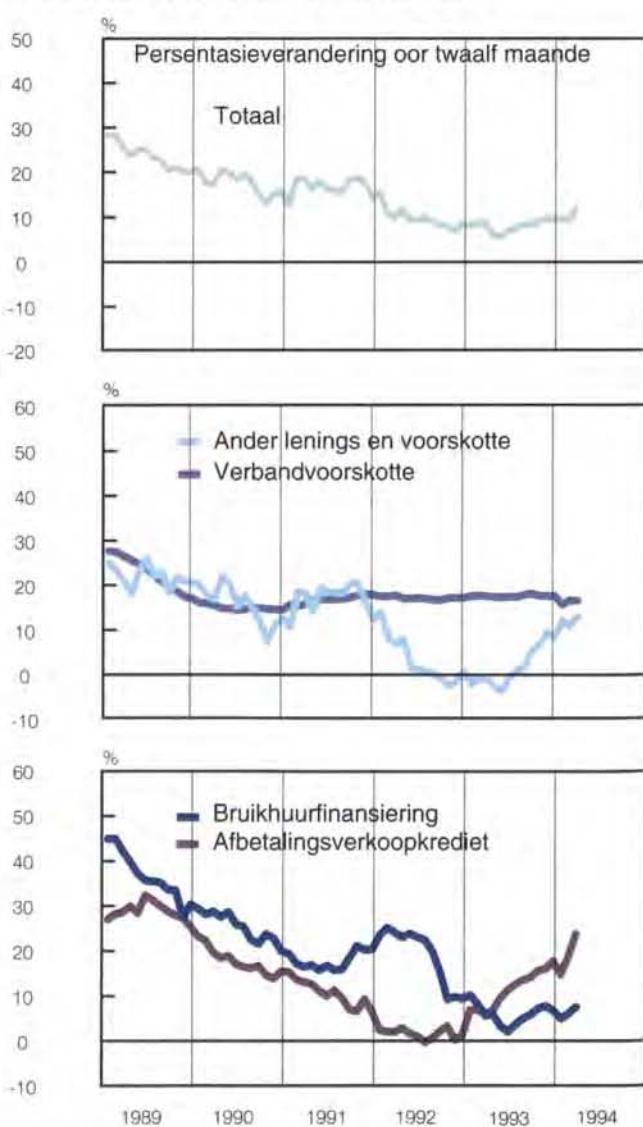
Die groot toename in die monetêre sektor se eise teen die regeringsektor en die groot afname in "netto ander bates" wat in die eerste kwartaal van 1994 aangeteken is, is in Maart 1994 deur die uitreiking van gestrooptekoepon-staatseffekte aan die Reserwebank verwring. Staatseffekte ten bedrae van R7,5 miljard is aan die Bank uitgereik (ingesluit in die monetêre sektor se netto eise teen die regering) om verliese wat vir die rekening van die Tesourie op die Goud-en-buitelandsevaluta-gebeurlikheidsreservewerekening (ingesluit in "netto ander bates") ontstaan het, af te los. Indien hierdie effekte-uitgifte nie in aanmerking geneem word nie, het

die monetêre sektor se eise teen die regeringsektor in die eerste kwartaal van 1994 nietemin steeds met R7,3 miljard gestyg, wat grotendeels aan 'n afname van R7,2 miljard in regeringsdeposito's by die monetêre sektor gedurende hierdie tydperk toegeskryf kan word.

## Kredietverlening

Die afname in regeringsdeposito's by banke was ook hoofsaaklik verantwoordelik vir die skerp versnelling in die groei van die *totale kredietverlening* (dit wil sê kredietverlening aan die private sektor en netto eise teen die regeringsektor) deur die monetêre instellings in die eerste drie maande van 1994. Nadat die koers van toename oor twaalf maande in totale binnelandse kredietverlening by banke van 'n laagtepunt van 6,7 persent in Mei 1993

## Kredietverlening aan die private sektor



tot 9,6 persent in Desember gestyg het, het dit aansienlik vinniger toegeneem tot 12,9 persent in Februarie 1994 en 19,2 persent in Maart. Laasgenoemde koers van toename is ook deur die uitreiking van die gestrooptekoepon-staatseffekte aan die Reserwebank beïnvloed.

Die groei in kredietverlening deur die monetêre instellings aan die *binnelandse private sektor* oor tydperke van twaalf maande het van 8,7 persent in Desember 1992 tot 'n laagtepunt van 5,7 persent in Mei 1993 gedaal, voordat dit in Desember 1993 tot 9,7 persent gestyg het. Hierdie groeikoers het toe in Februarie 1994 effens tot 9,4 persent teruggesak, maar daarna in Maart 1994 tot 11,8 persent versnel.

'n Ontleding van monetêre instellings se eise teen die private sektor volgens *soort krediet* toon dat die koers van toename oor twaalf maande in verbandvoorskotte op 'n betreklik hoë vlak gebly het. Sedert die begin van 1991 het die groeikoers oor twaalf maande in verbandvoorskotte gemiddeld 17,3 persent beloop. Hierdie merkwaardige vertoning in verbandlenings is tot 'n groot mate toe te skryf aan die banke se aktiewe bevordering van hierdie kredietfasilitet vanweë die lae kapitaalvereistes wat daarop van toepassing is. As gevolg van die buigsaamheid van sommige van die verbandskemas en die vergelykenderwys lae rentekoerse op verbandvoorskotte, word hierdie rekeninge in toenemende mate deur baie kliënte van banke gebruik om aankope van duursame en ander verbruiksgoedere te finansier.

Soos in die bygaande tabel aangetoon word, het krediet in die vorm van *afbetaalingsverkoop* sedert die tweede helfte van 1993 teen baie hoë koerse gestyg. Dit kan hoofsaaklik toegeskryf word aan stygende motorverkope, voertuigfinansieringskemas teen "spesiale koerse" wat deur banke in werking gestel is en hoër afbetaalingsverkoopkrediet aan boere. Die styging in "*ander lenings en voorskotte*" (hoofsaaklik oortrokke rekeninge) het in 'n sekere mate die opswaai in reële verbruiksbesteding weerspieël, maar was waarskynlik ook in 'n sekere mate die gevolg van lenings wat aangegaan is deur sommige kleiner en mediumgrootte ondernemings wat in nood verkeer het na 'n lang tydperk van negatiewe ekonomiese groei. Die styging in die groei

in *bruikhuurfinansiering* wat in die tweede helfte van 1993 waarnembaar was, het in die eerste drie maande van 1994 meer gelyk verloop.

### Geldmarktoestande

Nadat geldmarktoestande in Desember aansienlik vernou het, het dit in Februarie 1994 verruim, maar daarna in die volgende drie maande weer baie stram geword. Hierdie veranderings word in die vlakte van akkommodasie op maandeindes weerspieël wat van R5,8 miljard aan die einde van Desember 1993 tot R3,9 miljard aan die einde van Februarie 1994 afgeneem het voordat dit aan die einde van die volgende twee maande weer tot R5,3 miljard en R7,1 miljard gestyg het. Geldmarktoestande het in Mei betreklik stram gebly hoewel die vlak van akkommodasie aan die einde van Mei tot R5,2 miljard gedaal het. Die betreklike stram toestande in die geldmark het banke gedwing om teen 'n koers van 13 persent by die Reserwebank te leen (dit wil sê teen een persentasiepunt bo die Bankkoers) as gevolg van 'n tekort aan papier wat vir die laer koers kwalificeer.

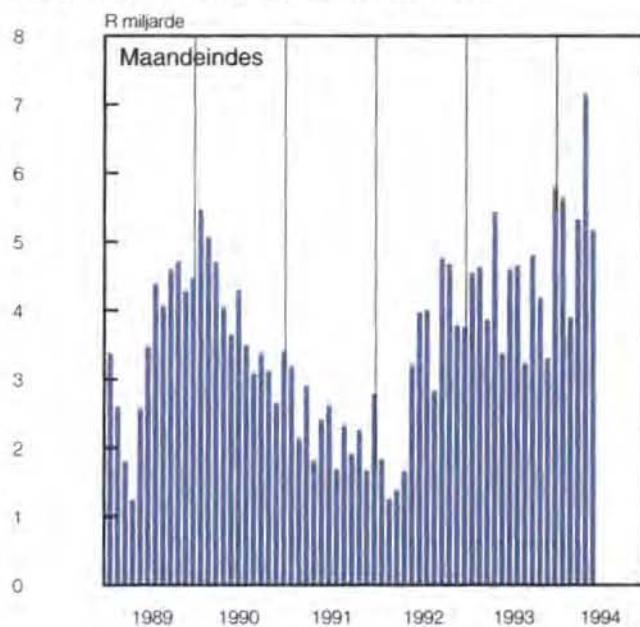
Die verruiming van geldmarktoestande in Februarie 1994 is hoofsaaklik deur 'n daling in regeringsdeposito's by die Reserwebank veroorsaak. Hoewel hierdie deposito's in Maart verder gedaal het, het 'n aansienlike toename van R2,0 miljard in munte en note in omloop in Maart en April en 'n afname van R3,0 miljard in netto buitelandse bates (goud ingesluit) van die Reserwebank die vernouing in geldmarktoestande meegebring. Albei hierdie ontwikkelings hou moontlik verband met die onsekerhede en vrese rakende die politieke bestendig-

### Kredietverlening aan die private sektor volgens vernaamste soort krediet

Persentasieverandering oor twaalf maande

	Des '92	Jun '93	Des '93	Mrt '94
Verbandvoorskotte.....	17,3	17,5	17,7	16,6
Afbetalingsverkoop- krediet .....	1,5	11,4	18,0	23,9
Bruikhuurfinansiering.....	9,6	2,2	6,8	7,7
Ander lenings en voorskotte.....	0,9	-0,7	8,4	13,1

### Akkommodasie by die diskontovenster



heid in Suid-Afrika wat tydens die aanloop tot die verkiezing van 'n regering van nasionale eenheid geheers het. Namate persepsies verbeter het, het die munte en note in omloop in Mei 1994 weer gedaal en het die Reserwebank se besit aan netto buitelandse bates met R0,2 miljard toegeneem.

#### Reserwebankoptrede in die geldmark

Die Reserwebank het oor die algemeen die geldmarktekort toegelaat om die onderliggende vraag- en aanbodtoestande te weerspieël. Deur hierdie beleidstandpunt in te neem, het die Bank dit vir private banke moeilik gemaak om binnelandse laste met buitelandse kredietfasilitete te vervang en het sodoende die kapitaaluitlewing uit die land ontmoedig. Sekere aanpassings is egter in die *bateportefeuille van die Korporasie vir Openbare Deposito's* gemaak deur die korporasie se finansiële bates in die geldmark te verkoop. Gedurende die eerste vyf maande van 1994 het hierdie transaksies 'n vernouende uitwerking van ongeveer R2,1 miljard op geldmarktoestande gehad. Daarbenewens is die netto verkope van Skatkiswissels in April en Mei tot R445 miljoen verhoog, wat 'n vernouende uitwerking op geldmarktoestande gehad het in die mate wat dit 'n toename in regeringsdeposito's by die Reserwebank veroorsaak het. Dit is bereik deur die verkope van Skatkiswissels van drie maande op die weeklikse tender op 8 April 1994 van R300 miljoen tot R400 miljoen te verhoog.

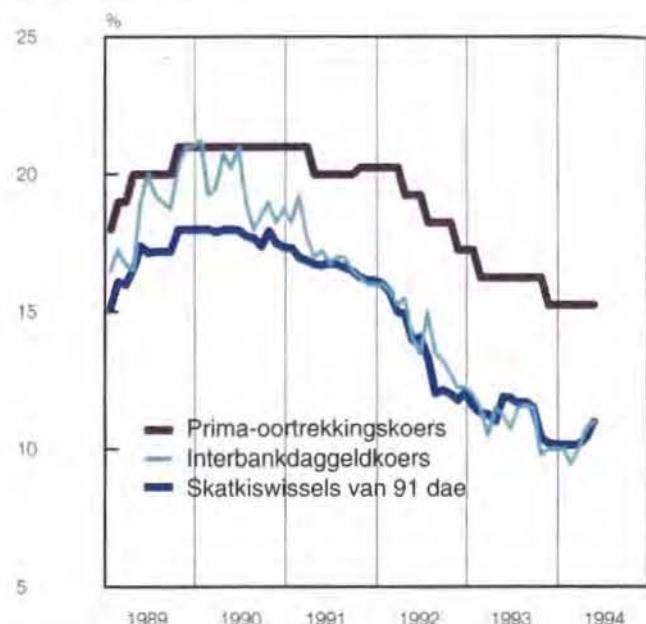
Die monetêre owerhede het egter ook die Reserwebank se *eie portefeuille van staatseffekte* gedurende die eerste vier maande van 1994 deur middel van normale opemarktransaksies tot 'n bedrag van R1,2 miljard verhoog wat geldmarktoestande weer effens verruum het. Die Bank se besit aan staatseffekte soos in sy balansstaat geraporteer word, het egter 'n baie meer opmerklike stijging getoon as gevolg van die reeds vermelde gestrooptekoepoen-staatseffekte wat van die regering verkry is.

Bruto verkope van staatseffekte deur die Reserwebank in die eerste vyf maande van 1994 het op R59 miljard te staan gekom, teenoor R71 miljard in die ooreenstemmende tydperk van 1993 en R178 miljard vir 1993 in die geheel. Netto verkope van hierdie effekte was gedurende die eerste vyf maande van 1994 R2,5 miljard; in die ooreenstemmende tydperk van 1993 was die netto verkope R7,6 miljard. Die Reserwebank se transaksies in *opsies op staatseffekte* het in die eerste vyf maande van 1994 van 'n maandelikse gemiddelde van R5,3 miljard in 1993 tot 'n maandelikse gemiddelde van R6,9 miljard toegeneem.

#### Geldmarkrentekoerse

Die algemeen afwaartse beweging in geldmarkrente-koerse het aan die einde van 1993 en in die eerste twee maande van 1994 momentum verloor; hierdie koerse het daarná gedurende Maart, April en Mei ietwat verstewig, wat die betreklike stram geldmarktoestande en onsekerheid rakende politieke ontwikkelings in Suid-

#### Korttermynrentekoerse



Afrika weerspieël het. Dit word duidelik deur die koers op *interbankdag-geld* weerspieël, wat van 12,25 persent aan die einde van Desember 1992 tot 10,00 persent aan die einde van Desember 1993 en 9,50 persent aan die einde van Februarie 1994 afgeneem het; dit het daarnaá aan die einde van April weer tot 10,75 persent toegeneem. Hierdie koers het vervolgens teen die einde van Mei ietwat tot 11,0 persent verstewig.

Die koers op *bankaksepte van drie maande* het 'n soortgelyke verloop getoon en van 12,65 persent aan die einde van Desember 1992 tot 10,15 persent aan die einde van Desember 1993 afgeneem; dit het gedurende die volgende drie maande op min of meer dieselfde vlak gebly. In April het dit begin om redelik skerp toe te neem tot 10,55 persent aan die einde van die maand en op 31 Mei 1994 het dit 11,05 persent bereik.

Beide die *Bankkoers* en private banke se *primakoers op oortrekkings* het gedurende die eerste vyf maande van 1994 onveranderd gebly. Banke se depositokoerse het gemiddeld ook nie gedurende die eerste kwartaal van 1994 verander nie, maar het gedurende die daarvolgende twee maande ietwat verstewig. Die gaping tussen die uitleen- en depositokoerse het derhalwe eers sywaarts beweeg, waarna dit in April en Mei 1994 vernou het. Hoewel die banke 'n onveranderde primakoers op oortrekkings van 15,25 persent gehandhaaf het, het die inflasie-aangepaste of reële primakoers op oortrekkings van 5,2 persent in Desember 1993 tot 7,7 persent in April 1994 toegeneem as gevolg van 'n afname in die inflasiekoeurs soos gemeet deur veranderings in die huidige verbruikersprysindeks.

## Kapitaalmarkbedrywigheid

Handelsbedrywigheid op die Johannesburgse Effektebeurs, wat in die loop van 1993 lewendig gebly het, het in die eerste kwartaal van 1994 verder skerp toegeneem. Nadat die nominale waarde van effekte van die openbare sektor wat op die effektebeurs verhandel is, van R168,3 miljard in die eerste kwartaal van 1993 tot R229,2 miljard in die vierde kwartaal toegeneem het, het dit in die eerste kwartaal van 1994 verder tot R253,5 miljard gestyg. Die hoër waarde van effekte wat verhandel is, is aansienlik beïnvloed deur onbestendigheid in langtermynrentekoerse as gevolg van onsekerhede op die politieke front en hoér-as-verwagte gemete inflasie. In April 1994 het die waarde van transaksies in effekte van die openbare sektor ietwat afgeneem tot R54,1 miljard van 'n gemiddelde maandelikse waarde van R84,5 miljard in die eerste kwartaal van die jaar. Hierdie afname kon hoofsaaklik toegeskryf word aan die kleiner aantal handelsdae in April. Nadat 'n nuwe regering op 'n betreklik vreedsame wyse verkies is, het die waarde van effekte van die openbare sektor wat verhandel is weer tot R93,0 miljard in Mei toegeneem.

Nie-inwoners was in die eerste kwartaal van 1994 netto verkopers van effekte van die openbare sektor op die Johannesburgse Effektebeurs. Hierdie netto verkope het op R0,6 miljard te staan gekom; in die vierde kwartaal van 1993 was nie-inwoners nog netto aankopers van effekte van die openbare sektor tot 'n bedrag van R0,3 miljard. Verkope van effekte van die openbare sektor deur nie-inwoners het betekenisvol toegeneem met die verstewiging van langtermynrentekoerse in

Februarie en Maart 1994, maar het in die daaropvolgende twee maande ietwat teruggesak toe verwagtinge begin ontstaan het dat koerse 'n hoogtepunt mag bereik het.

Die waarde van aandele wat op die Johannesburgse Effektebeurs verhandel is, het van R8,0 miljard in die eerste kwartaal van 1993 tot R14,1 miljard in die vierde kwartaal en R20,9 miljard in die eerste kwartaal van 1994 toegeneem. Die hoë omset in die eerste drie maande van 1994 was die gesamentlike gevolg van toenames in sowel die pryse as die aantal aandele wat verhandel is. In April 1994 het die waarde van aandele wat verhandel is van 'n gemiddelde maandelikse waarde van R7,0 miljard in die eerste drie maande van die jaar tot R5,5 miljard teruggeval. Hierdie afname het ook verband gehou met die kleiner aantal handelsdae en onsekerheid rakende politieke ontwikkelings. In Mei 1994 het die waarde van aandele wat verhandel is weer tot R6,1 miljard toegeneem.

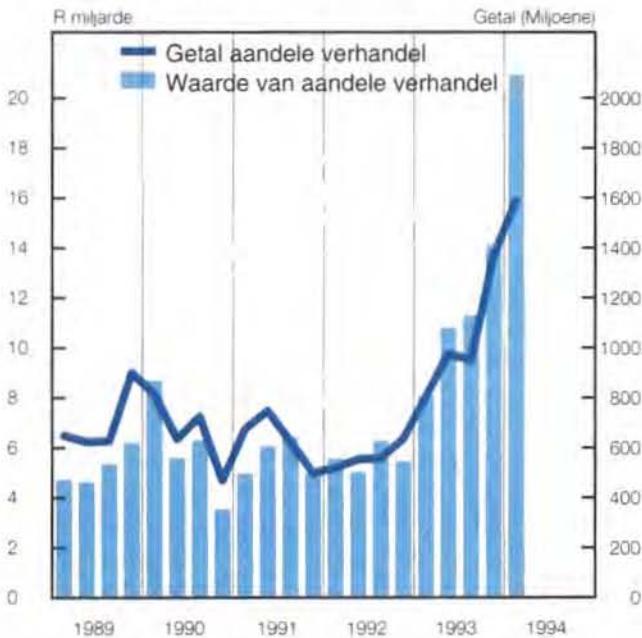
Die gemiddelde maandelikse pryse van alle klasse van aandele het in die eerste vyf maande van 1994 met 19,6 persent toegeneem. In Mei 1994 was die vlak van aandelepryse dus 77,3 persent bo die laagtepunt in Oktober 1992. Nywerheids-, handels- en finansiële aandele het steeds goed presteer. Die pryse van goudaandele het egter met 9,5 persent afgeneem vanaf 'n hoogtepunt in Januarie 1994 tot Mei.

Die voortgesette opwaartse beweging in aandelepryse, die swak finansiële rand en die toenemende belangstelling van buitelandse beleggingsfondse in Suid-Afrika se opkomende mark het in die eerste kwartaal van 1994 gelei tot 'n hoë vlak van aankope van aandele deur

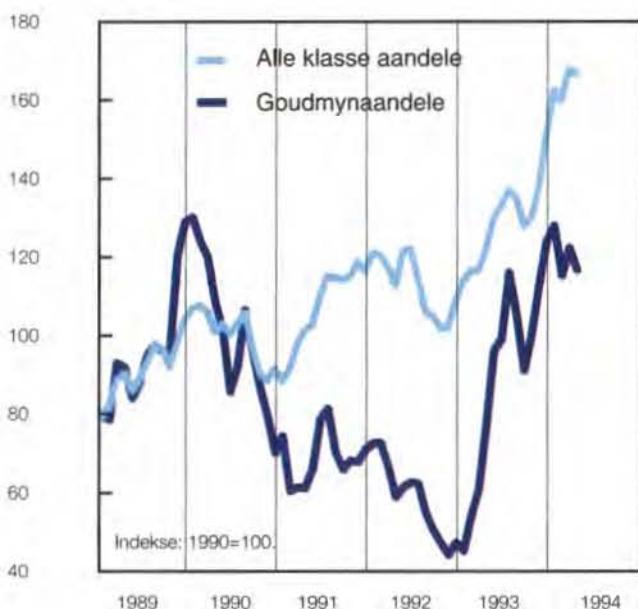
## Effektebeurstransaksies



## Effektebeurstransaksies



## Aandelepryse



nie-inwoners op die Johannesburgse Effektebeurs. Nie-inwoners se netto aankope van aandele het trouens van R0,9 miljard in die laaste kwartaal van 1993 tot R2,1 miljard in die eerste kwartaal van 1994 toegeneem. Afwaartse aanpassings op sommige van die groter effektebeurse in nywerheidslande en onsekerheid oor die sosio-politiese toestand in Suid-Afrika, het egter meegebring dat nie-inwoners in April en Mei 1994 netto verkopers van aandele op die Johannesburgse Effektebeurs tot 'n waarde van R0,7 miljard geword het.

In die primêre kapitaalmark is betreklik lae vlakte van bedrywigheid ten opsigte van nuwe uitgifte in die eerste kwartaal van 1994 deur leners in sowel die openbare as die private sektor getoon. Die openbare sektor het in die eerste kwartaal van 1994 geen fondse deur uitgiftes van vaste-rentedraende sekuriteite opgeneem nie, maar inderdaad eie sekuriteite ten bedrae van R2,0 miljard teruggekoop. Die bedrag aan fondse wat maatskappye in die private sektor opgeneem het deur uitgiftes van vaste-rentedraende sekuriteite (met inbegrip van omskepbare voorkeuraandele, skuldbrieue en maatskappy-obligasies), het van R0,3 miljard in die vierde kwartaal van 1993 tot die klein bedrag van R25 miljoen in die eerste kwartaal van 1994 afgeneem. Nuwe aandele-uitgifte het in die eerste kwartaal van 1994 traag gebly omdat baie genoteerde maatskappye 'n oorvloed aan kontant gehad het en betreklik vry van skuld was, dikwels as 'n uitvloeisel van baie lae voorraadvlakke en 'n verouderende kapitaalvoorraad. Nuwe uitgiftes van aandele het van R1,0 miljard in die vierde kwartaal van 1993 tot R0,9 miljard in die eerste kwartaal van 1994

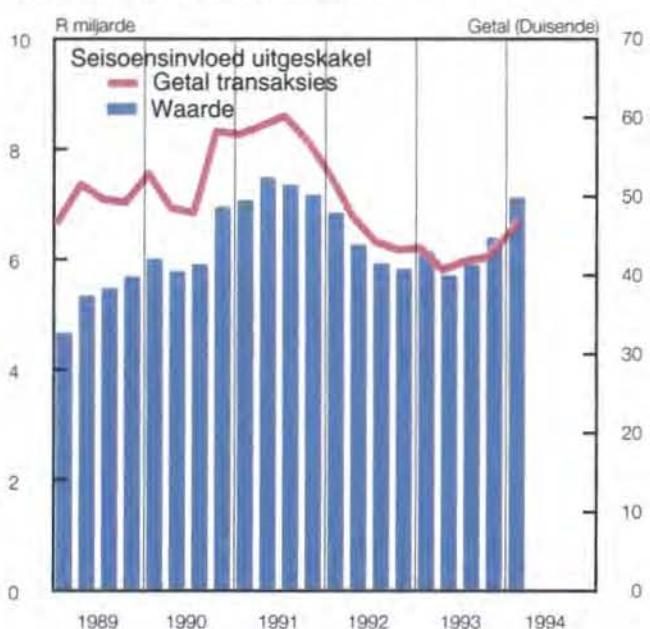
gedaal, ook omdat die meeste genoteerde maatskappye nog nie met betekenisvolle investeringsprogramme begin het nie.

In die verbandmark het die gemiddelde maandelike bedrag aan verbandlenings wat deur banke uitbetaal is, effens afgeneem van R3,5 miljard in die vierde kwartaal van 1993 tot R3,2 miljard in die eerste kwartaal van 1994. Die banke se totale besit aan verbandlenings het verder toegeneem van R92,9 miljard aan die einde van Desember 1993 tot R96,1 miljard aan die einde van Maart 1994. Soos reeds aangedui, weerspieël hierdie toename nie noodwendig 'n styging in konstruksiebedrywigheid of vaste-eiendomstransaksies nie, aangesien dit ook aangewend kon word om gewone verbruiksbesteding te finansier.

Die seisoensaangesuiwerde waarde van transaksies in vaste eiendom het nietemin van R6,4 miljard in die vierde kwartaal van 1993 tot R7,1 miljard in die eerste kwartaal van 1994 toegeneem. Hoewel dit deels toeskryf kan word aan 'n klein toename in die gemiddelde prys van sodanige transaksies, het die aantal transaksies in vaste eiendom gedurende dieselfde tydperk ook met 10 persent toegeneem. Die hoër vlak van transaksies in vaste eiendom was die gevolg van 'n toename in die vraag na kommersiële eiendom sowel as residensiële eiendom in sekere gebiede.

Toenemende onsekerheid met betrekking tot toekomstige prysbewegings in aandele en kommoditeite was hoofsaaklik verantwoordelik vir die toename van 69,3 persent in die aantal termynkontrakte wat gedurende die eerste vier maande van 1994 verhandel is,

## Transaksies in vaste eiendom



vergeleke met die ooreenstemmende tydperk van die vorige jaar. In Maart 1994 het die getal sodanige kontrakte 'n rekord maandelikse hoogtepunt van sowat 468 000 bereik, voordat dit in April tot 226 000 en in Mei tot 299 000 teruggesak het. Kontrakte in aandeleindekse het steeds die grootste deel van die aantal termynkontrakte verteenwoordig. Die vlak van opsigte op indekstermynkontrakte was in die eerste vier maande van 1994 meer as vier keer hoër as die vlak in die ooreenstemmende tydperk van die vorige jaar. Aan die einde van Mei 1994 was die oop posisie in indekstermynkontrakte en in opsigte op indekstermynkontrakte onderskeidelik 87 500 en 363 500 kontrakte.

#### Opbrengs- en rentekoerse op die kapitaalmark

Nadat die gemiddelde maandelikse opbrengskoers op langtermynstaatseffekte van 15,03 persent in April 1993 tot 12,07 persent in Januarie 1994 afgeneem het, het dit in April tot 12,97 persent en in Mei tot 13,02 persent toegeneem. Hierdie toename was waarskynlik 'n weer-spieëeling van onsekerheid wat verband gehou het met politieke ontwikkelings, netto verkope van binnelandse leningseffekte deur nie-inwoners, 'n verstewiging in langtermynrentekoerse in sekere van die belangrikste ekonomiese en die mark se bekommernis oor die staat se finansieringsbehoefte wat die herkonstruksie- en ontwikkelingsprogram moontlik mag meebring. As gevolg van hierdie hoër langtermynkoerse en 'n afname in die inflasiekoers soos gemeet deur veranderings in die verbruikersprysindeks, het die reële opbrengskoers op staatseffekte skerp toegeneem van 2,0 persent in Januarie 1994 tot 5,5 persent in April.

Ondanks die feit dat die oorheersende koers op huisverbandlenings sedert November 1993 onveranderd op 15,25 persent gebly het, het banke hulle koerse op

langtermyndeposito's verlaag. Die koers op deposito's van twaalf maande is byvoorbeeld in Februarie 1994 met 0,5 persent tot 10,5 persent verlaag. Hierdie laer koers het aan deposante in April 1994 'n positiewe reële opbrengs voor belasting van 3,2 persent gelewer.

Die hoër gemiddelde vlak van aandelepryse gedurende die eerste vyf maande van 1994 het die gemiddelde dividendopbrengskoers op alle klasse van aandele verder van 2,53 persent in Desember 1993 tot 2,16 persent in Mei 1994 afgedruk. Die gemiddelde verdienste-opbrengskoers op alle klasse van aandele (goudmynaandele uitgesonderd) het ook van 5,95 persent in Desember 1993 tot 5,18 persent in Mei 1994 afgeneem.

Die maksimum toelaatbare koerse op finansieringskoste soos dit ingevolge die Woekerwet vasgestel is, is met ingang van 24 Desember 1993 van 25 tot 23 persent verlaag in die geval van geldlenings, krediet- en bruikhuurtransaksies vir bedrae van meer as R6 000 (maar nie meer as R500 000 nie), en van 28 tot 26 persent in die geval van bedrae tot en met R6 000. Dit het die totale verlaging in hierdie koerse gedurende 1993 op 3,0 persentasiepunte te staan gebring.

Die standaardrentekoers van toepassing op lenings deur die staat uit die Staatsinkomstefonds (Skatkiswet, Wet no. 66 van 1975) is op 1 November 1993 van 14,75 persent tot 13,5 persent, en in drie verdere stappe tot 12,5 persent op 1 Februarie 1994 verlaag. Hierdie rentekoers is met ingang van 1 Maart 1994 tot 13,25 persent verhoog, en daarna met ingang van 1 April 1994 tot 13,00 persent verlaag. Dit is weer met ingang van 1 Mei 1994 tot 13,75 persent verhoog.

Die amptelike rentekoers, soos omskryf in die Inkomstebelastingwet, is met ingang van 1 Februarie 1994 met 1 persentasiepunt tot 14 persent verlaag.

#### Kapitaalmarkrente- en opbrengskoerse



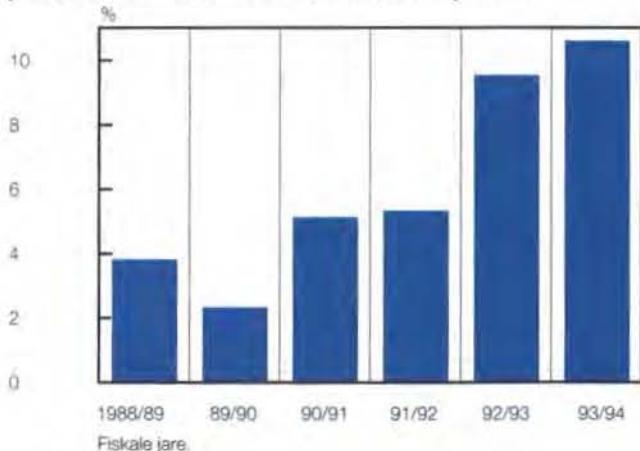
## Openbare finansies

### Leningsbehoefte van die openbare sektor

Die leningsbehoefte van die openbare sektor (dit wil sê die tekort voor lenings en skuldaflossing van die gekonsolideerde Sentrale Regering, provinsiale administrasies, plaaslike owerhede en nie-finansiële owerheidsondernehemings), wat 'n afwaartse beweging getoon het van R7,9 miljard in die Junie-kwartaal van 1993 tot R6,2 miljard in die Desember-kwartaal, het in die Maart- of finale kwartaal van die fiskale jaar 1993/94 skerp tot R21,1 miljard gestyg. Vir die fiskale jaar in die geheel het die leningsbehoefte van die openbare sektor dus R41,9 miljard bedra, of 26 persent meer as die reeds hoë vlak van R33,3 miljard in die voorafgaande jaar. In verhouding tot die bruto binnelandse produk, was die leningsbehoefte van die openbare sektor in die fiskale jaar 1993/94 gelyk aan 10,6 persent.

Die buitengewoon groot leningsbehoefte van die openbare sektor in die fiskale jaar 1993/94 was hoofsaaklik die gevolg van spesiale oordragte van die regering om laste af te los wat oor 'n redelike lang tydperk ontstaan het, dit wil sê nie net in die fiskale jaar 1993/94 nie. 'n Oordrag van R7,5 miljard is naamlik aan die Goud-en-buitelandsevaluta-gebeurlikheidsreserwerekening gemaak om tekorte wat uit die laat tagtigerjare dateer op hierdie rekening te verminder. Hierbenewens is oordragte van R6,9 miljard aan die regeringsdienspensioenfondse en R0,4 miljard aan die geslote pensioenfondse gemaak ten opsigte van verpligte wat ontstaan het uit afleggings en aktuariële tekorte. Indien hierdie oordragte van R14,8 miljard van die leningsbehoefte van die openbare sektor uitgesluit word, was die leningsbehoefte van die openbare sektor vir die fiskale jaar 1993/94 gelyk aan R27,0 miljard, of 6,8 persent van die bruto binnelandse produk.

### Leningsbehoefte van die openbare sektor as persentasie van bruto binnelandse produk



Die nie-finansiële owerheidsondernehemings het in die fiskale jaar 1993/94 'n klein oorskot op hulle inkomste- en bestedingsrekening aangeteken; die groot leningsbehoefte van die openbare sektor is in hierdie jaar dus in die geheel veroorsaak deur die tekort voor lenings en skuldaflossing van die algemene owerheid. Proviniale administrasies was die enigste owerheidsondernehemings wat in die fiskale jaar 1993/94 'n oorskot op hulle gekonsolideerde inkomste- en bestedingsrekening gehad het. Soos in die vorige jaar, het die leningsbehoefte van die plaaslike owerhede in die fiskale jaar 1993/94 R0,9 miljard bedra. In teenstelling hiermee, het die leningsbehoefte van die buitebegrotingsentiteite (met inbegrip van die TBVC-lande en die selfregerende state) van slegs R0,1 miljard in die fiskale jaar 1992/93 tot R2,9 miljard in die fiskale jaar 1993/94 gestyg. Die agteruitgang in die finansiële posisie van die buitebegrotingsinstellings is hoofsaaklik meegebring deur 'n aansienlike afname in netto oordragontvangste vanaf die Hoofbegroting. Die leningsbehoefte van die Hoofbegroting het nietemin aansienlik toegeneem as gevolg van die bogenoemde buitengewone oordragte wat in die finale kwartaal van die fiskale jaar 1993/94 gemaak is.

### Skatkisrekening in die finale kwartaal van die fiskale jaar 1993/94

Die vlak van die skatkisuitrekings (insluitende verandering in die saldo op die Betaalmeester-generaalrekening en ander aansuiwerings wat gemaak is om die werklike kontantvloei te weerspieël) was in die finale kwartaal van die fiskale jaar 1993/94 0,5 persent laer as

### Skatkisuitrekings en -ontvangste



die vlak in die finale kwartaal van 1992/93, vergeleke met koers van toename van jaar tot jaar wat van 12,7 persent in die Junie-kwartaal van 1993 tot 16,2 persent in die Desember-kwartaal gestyg het. Die afname in hierdie koers in die finale kwartaal van 1993/94 kan hoofsaaklik toegeskryf word aan die uitsonderlik hoë koers van toename in die skatkisuitreikings wat in die ooreenstemmende kwartaal van die voorafgaande jaar ondervind is vanweë droogtehulp wat aan die boeregemeenskap verskaf is. Gemaat van kwartaal tot kwartaal, het die toename in skatkisuitreikings tot 'n jaarkoers verhef nie minder nie as 18,7 persent bedra, dit wil sê die koers van toename van kwartaal tot kwartaal was in die finale kwartaal aansienlik hoër as in die voorafgaande drie kwartale van die jaar.

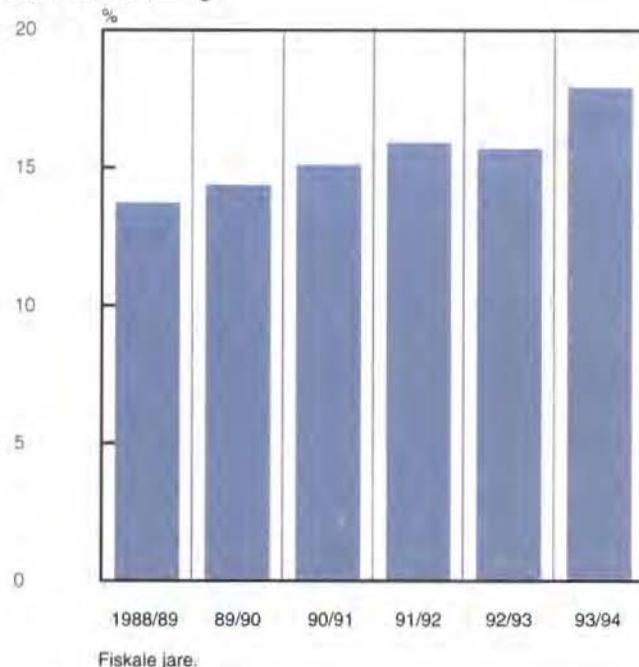
Die koers van toename van jaar tot jaar in die *skatkisontvangste* (uitgesonder die opbrengs uit privatisering), wat van 13,0 persent in die Junie-kwartaal van 1993 tot 18,4 persent in die Desember-kwartaal toegeneem het, het in die finale kwartaal van die fiskale jaar 1993/94 nog verder tot 19,7 persent gestyg. Hierdie voortgesette goeie prestasie van die staatsinkomste was hoofsaaklik te danke aan die herstel van die binnelandse ekonomie, wat tot hoër ontvangste in byna al die belangrike kategorieë van belasting gelei het.

Die *skatkistekort* voor lenings en skuldaflassing het in die laaste kwartaal van die fiskale jaar 1993/94 R4,8 miljard bedra, of 4,9 persent van die bruto binnelandse produk. Hierdie tekort, en die oordragte wat na die Goud-en-buitelandsevaluta-gebeurlikheidsreserwerekening, regeringsdienspensioenfondse en die geslote pensioenfondse gemaak is, is hoofsaaklik gefinansier deur middel van die uitreiking van staatseffekte (R14,8 miljard), 'n afname in die beskikbare kontantsaldo's van die regering (R5,3 miljard) en die oordragte wat vanaf die Landsvoorraadeverkrygingsfonds en die Sentrale Energiefonds (R1,4 miljard) gedoen is. Die regering het skatkiswissels ten bedra van R1,7 miljard afgelos en verder in die laaste kwartaal van die fiskale jaar 1993/94 klein netto terugbetaalings op buitelandse lenings en op nie-bemarkbare sekuriteite gemaak.

#### **Skatkisrekening vir die fiskale jaar 1993/94**

Die vinniger groei in *skatkisuitreikings* in die finale kwartaal van die fiskale jaar 1993/94 het die uitreikings vir die jaar in die geheel op R114,8 miljard te staan gebring of 0,6 persent meer as in die oorspronklike begrotingsraming. Die koers van toename in staatsbesteding in die fiskale jaar 1993/94 het 9,3 persent beloop, wat aansienlik laer was as die koers van toename van 21,7 persent in die fiskale jaar 1992/93. Indien droogteverwante hulpuitgawes van R3,4 miljard nie in die fiskale jaar 1992/93 in aanmerking geneem word nie, het die koers van toename in staatsbesteding in die fiskale jaar 1993/94 steeds slegs 12,9 persent bedra. Hierdie koers van toename in staatsbesteding was baie laer as die gemiddelde koers van toename van 17,0 persent in die voorafgaande vyf fiskale jare.

#### **Rente op staatskuld as persentasie van totale staatsbesteding**



Die gunstige uitkoms in totale skatkisuitreikings in die fiskale jaar 1993/94 is bereik ondanks 'n aansienlike toename in kontraktuele rentebetאלings op staatskuld. Rentebetאלings het in die fiskale jaar 1993/94 in totaal R20,6 miljard beloop, wat nie minder nie as 24,7 persent meer as in die voorafgaande fiskale jaar was. Indien hierdie rentebetאלings van die skatkisuitreikings uitgesluit word, was die ander uitreikings in die fiskale jaar 1993/94 slegs 10,6 persent hoër as in die fiskale jaar 1992/93 (ook aangesuiwer vir droogteverwante hulpuitgawes). In verhouding tot die totale staatsbesteding, het rentebetאלings in die fiskale jaar 1993/94 tot 17,9 persent gestyg; hierdie verhouding was in die voorafgaande jaar 15,7 persent en in 1975/76 3,9 persent. Wat hierdie verdere toename in rentebetאלings nog meer kommerwekkend maak, is die feit dat dit nie die diskonto insluit wat by die uitreiking van bemarkbare staatskuld toegestaan is nie.

Aangesien die toename in staatsbesteding laer as die toename in die nominale bruto binnelandse produk was, het die verhouding van staatsbesteding tot die bruto binnelandse produk van 30,1 persent in die fiskale jaar 1992/93 tot 29,1 persent in die fiskale jaar 1993/94 gedaal. Hierdie ontwikkeling is natuurlik in ooreenstemming met die regering se bestaande langtermyn-doelstelling om die aandeel van die owerheid in die ekonomie te verminder.

Totale staatsinkomste het in die fiskale jaar 1993/94 R88,0 miljard bedra. Dit was 16,1 persent hoër as die inkomste wat vir die fiskale jaar 1992/93 deur die owerheid ingesamel is, en slegs R0,2 miljard laer as die begrote bedrag. Nadat die staatsinkomste vir drie

## Skatkisontvangstes 1993/94

Persentasieverandering

	Begroot	Werklike uitslag
Belasting op toegevoegde waarde.....	43,1	44,5
Inkomstebelasting .....	11,6	6,4
Maatskappye .....	1,0	-6,7
Individue.....	15,5	11,6
Doeane en aksynsregte .....	10,0	10,6
Doeaneheffing (ingesluit bobelasting).....	5,9	14,9
Brandstofheffing .....	12,1	11,5
Aksynsreg .....	11,1	11,2

agtereenvolgende jare gedaal het, het dit in verhouding tot die bruto binnelandse produk van 21,7 persent in die fiskale jaar 1992/93 tot 22,3 persent in die fiskale jaar 1993/94 gestyg, hoofsaaklik te danke aan die toename in ontvangste van indirekte belasting. Indirekte belasting as persentasie van totale staatsinkomste, het van 40,3 persent in die fiskale jaar 1992/93 tot 45,3 persent in die fiskale jaar 1993/94 toegeneem.

Soos in die bygaande tabel aangetoon word, het die meeste van die hoofkomponente van staatsinkomste min of meer in ooreenstemming met of beter as die Begrotingsverwagtings presteer, met die opmerklike uitsondering van inkomstebelasting op individue en maatskappye. Die laer-as-verwagte inkomste vanaf persoonlike inkomstebelasting het hoofsaaklik verband gehou met 'n laer koers van toename in salaris en lone as wat in die Begroting voorsien is. Inkomstebelasting vanaf maatskappye was die enigste belastingkategorie wat in die fiskale jaar 'n werklike afname getoon het; hierdie afname is waarskynlik veroorsaak deur die betreklik lae winste in die jaar van aanslag en die verlaging in belastingkoers wat op maatskappye van toepassing is. Soos verwag is het die opbrengs op die belasting op toegevoegde waarde in die fiskale jaar skerp gestyg met die vier persentasiepunte wat by hierdie belastingkoers toegevoeg is.

Die netto resultaat van hierdie veranderings in besteding en inkome in die fiskale jaar 1993/94 was 'n tekort voor lenings en skuldaflassing van R26,8 miljard; in die Begroting is die tekort op R25,9 miljard geraam. In verhouding tot die bruto binnelandse produk, het die tekort voor lenings 6,8 persent beloop. Nadat netto oordragte van R13,4 miljard en die diskonto op nuwe uitgifte van staatseffekte van R2,7 miljard in berekening gebring is, het die totale finansieringsbehoefte van die Skatkis vir die fiskale jaar 1993/94 op R43 miljard te staan gekom.

Die leningsbehoefte van die regering is in die fiskale jaar 1993/94 grotendeels befonds deur staatseffekte tot

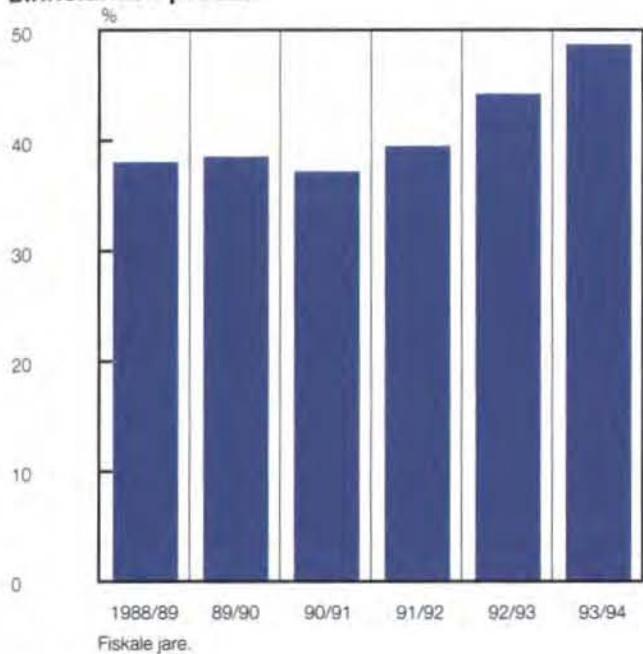
## Finansiering van die skatkistekort volgens tipe lener, 1993/94 fiskale jaar

Tipe lener	R miljoene
Openbare Beleggingskommissaris.....	14 528
Nie-monetäre private sektor .....	13 164
Monetäre instellings.....	15 625
Korporasie vir Openbare Deposito's.....	312
Ander monetäre instellings .....	15 313
Buitelanse sektor.....	-319
Totale bruto finansiering .....	42 998
Plus: Oordragte vanaf die Landsvoorrade-verkrygingsfonds en Sentrale Energie Fonds .....	1 406
Min: Oordragte na die Goud- en-buite-landsevaluta-gebeurlikheidsreserwerekening .....	7 500
Oordragte na die regeringsdiens-pensioenfondse en die gesloten pensioenfondse .....	7 340
Min: Diskonto op nuwe uitgifte van staatseffekte .....	2 722
<b>Totale netto finansiering .....</b>	<b>26 842</b>

'n netto bedrag van R41,8 miljard uit te gee en deur 'n afname van R1,8 miljard in beskikbare kontantsaldo's van die regering, terwyl klein netto terugbetaalings op uitstaande skatkiswissels, buitelandse lenings en nie-bemarkbare sekuriteite gemaak is. Soos in die bygaande tabel aangetoon word, is die fondse vir die finansiering van die tekort van die owerheid hoofsaaklik vanaf die Openbare Beleggingskommissaris en die nie-monetäre private sektor verkry. Die netto eise van die monetäre instellings teen die regering het egter ook met R15,3 miljard gestyg, vanweë die uitgifte van 'n gestrooptekoepon-staatseffek van R7,5 miljard aan die Reserwebank ten einde die tekort op die Goud-en-buitelandse-valuta-gebeurlikheidsreserwerekening te verminder, 'n afname van R0,2 miljard in die deposito's van die Skatkis en Betaalmeester-generaal by die monetäre sektor en die aankoop van staatseffekte (hoofsaaklik langtermynpapier) ten bedrae van R7,6 miljard.

Ondanks 'n totale bruto finansieringsbehoefte van R43,0 miljard, het die totale staatskuld van die einde van Maart 1993 tot aan die einde van Maart 1994 met R37,5 miljard tot R192,1 miljard toegeneem. Waardasie-aansuiwerings aan staatskuld was nie die enigste rede vir die verskil tussen die toename in staatskuld en die totale bruto finansieringsbehoefte nie. Hierdie verskil kan ook toegeskryf word aan 'n afname in die beskikbare kontantsaldo's van die regering, buitengewone oordragte wat ontvang is en 'n trekking op die Internasionale Monetäre Fonds (wat deel van staatskuld maar nie van finansiering is nie). Terselfdertyd het die tekort op die Goud-en-buitelandsevaluta-gebeurlikheidsreserwe-

### **Totale staatskuld as persentasie van bruto binnelandse produk**



rekening alreeds deel van die staatskuld (soos bereken deur die Reserwebank) uitgemaak. In verhouding tot die bruto binnelandse produk, het staatskuld nietemin gestyg van 44,2 persent aan die einde van die fiskale jaar 1992/93 tot 48,7 persent aan die einde van die fiskale jaar 1993/94.

#### **Skatkisrekening in April 1994**

In April 1994 was die skatkisuitreikings aan staatsdepartemente (aangesuiwer om kontantvloeie te weerspieël) 15,3 persent hoër as in April 1993, terwyl skatkisontvangste oor dieselfde tydperk met 36,7 persent toegeneem het. Hierdie aansienlike styging in skatkisontvangste kan egter toegeskryf word aan die buitengewoon laevlak van hierdie ontvangste wat in April 1993 aangeteken is. Die tekort voor lenings en skuldaflossing het in April 1994 R3,7 miljard bedra.

# Geldvoorraadriglyne vir 1994

Verklaring uitgereik deur dr C.L. Stals, President van die Suid-Afrikaanse Reserwebank

25 Maart 1994

## 1. Agtergrond

Dit is nou agt jaar sedert die Reserwebank in Maart 1986 vir die eerste keer voorafbepaalde mikpunte vir die groeikoers in die geldvoorraad ingestel het. In daardie stadium is 16 tot 20 persent as 'n aanvaarbare groeikoers in die M3-geldvoorraad vir 1986 aangekondig. Die koers van toename in M3 vir 1986 het in werklikheid slegs 9,3 persent beloop. Daarna het die groeikoers in M3 gedurende 1988, toe mikpuntgrense van 12 en 16 persent van toepassing was, tot 27,2 persent versnel.

Die Reserwebank se ervaring met die stelling van riglyne vir die groeikoers in die geldvoorraad sedert 1986 was wisselvallig. Die Bank het, soos dit aanvanklik voorsien is, nooit 'n onbuigbare of oorheersende "geldreël" toegepas nie – diskresie het steeds 'n rol gespeel. Daar moes van tyd tot tyd ook met bewegings in die rentekoersvlakke, die vlak van die buitelandse reserwes en wisselkoersveranderings rekening gehou word. Die "oorsake" van die veranderings in die geldvoorraad kon ook nie altyd maar net geïgnoreer word nie.

Die Bank is per slot van sake van mening dat die stel van geldvoorraadriglyne, ten minste in die huidige Suid-Afrikaanse bestel, die beste anker vir monetêre beleid bied. Dit gee ook goeie aanduidings aan die owerhede wanneer hulle besluite oor die uitvoering van hul verantwoordelikhede ten opsigte van monetêre beleid moet neem. Dit is waar dat die geldvoorraad in baie ander lande sy aantrekingskrag as 'n anker vir doeleindes van monetêre beleid verloor het, en in sommige gevalle is dit afgeskaf en met 'n ander basis, byvoorbeeld die wisselkoers, vervang. In sommige lande – byvoorbeeld in die Verenigde Koninkryk, Nieu-Seeland en Kanada – streef die owerhede nou inflasieteikens meer direk na in stede daarvan om inflasie deur middel van 'n intermediêre teiken soos die geldvoorraad te probeer bestry. Hierdie benadering vereis egter 'n mate van samewerking tussen die regering, private ondernemings, vakunies en die sentrale bank wat in die huidige fase van sosio-politieke hervorming in Suid-Afrika uiters moeilik bereikbaar sal wees.

Die Reserwebank sal gevvolglik op hierdie tydstip voortgaan met die bestaande beleid waarvolgens veranderings in die geldvoorraad as die belangrikste kontrole van sy besluite ten opsigte van die toepassing van monetêre beleid gebruik word.

## 2. Die bedreiging van die betalingsbalans vir finansiële stabilitet

Die algehele binnelandse finansiële toestand het gedurende die afgelope jaar betreklik stabiel gebly. Die groeikoers in die M3-geldvoorraad het van 8,0 persent in Desember 1992 tot slegs 1,9 persent in Julie 1993

gedaal; in die daaropvolgende ses maande het dit matig tot 7,0 persent in Desember 1993 en nog verder tot 'n geraamde 9,6 persent in Januarie 1994 gestyg. Die gemiddelde vlak van die M3-geldvoorraad gedurende die vierde kwartaal van 1993 was 5,6 persent hoër as die gemiddelde vlak van M3 gedurende die vierde kwartaal van 1992. Die koers van toename was dus ietwat laer as die onderste perk van die mikpunttriglyne van 6 tot 9 persent wat deur die Reserwebank aan die begin van verlede jaar aangekondig is.

Die groeikoers oor twaalf maande in binnelandse kredietverlening deur monetêre instellings aan die niebank privaatsektor het eweneens vanaf 8,7 persent in Desember 1992 tot 5,7 persent in Mei 1993 afgeneem voordat dit in Desember 1993 tot 9,6 persent gestyg het.

Geldmarktoestande het egter regdeur die jaar betreklik stram gebly. Dit is in hoofsaak toe te skryf aan 'n feitlik deurlopende afname in die Reserwebank se netto buitelandse bates. As gevolg van 'n groot netto kapitaaluitvloei wat vir die kalenderjaar op R16,3 miljard bereken is en wat wesentlik hoër is as die beraamde oorskot van R5,9 miljard op die lopende rekening van die betalingsbalans, het die land se netto buitelandse reserwes in 1993 met R10,3 miljard gedaal. Die Reserwebank se verkoop van buitelandse valuta aan die mark het gevvolglik heelwat likwiditeit uit die stelsel ontrek. Die Bank het egter tussenbeide getree en deur middel van 'n aantal ander optredes 'n groot hoeveelheid bykomstige likwiditeit geskep ten einde te voorkom dat rentekoerse styg. Hierdie optredes was selfs voldoende om 'n verdere daling in markrentekoerse te ondersteun. Die Bank het in die proses:

- gedurende April 1993 en weer gedurende Augustus 1993 die minimum kontantreserwevereiste vir bankinstellings verminder. Hierdie verminderings het nagenoeg R2,2 miljard kontantreserwes wat voorheen by die Reserwebank gehou is, in die mark vrygelaat;
- al die uitstaande Reserwebankwissels ten bedrae van R0,5 miljard afgelos. Hierdie wissels is aanvanklik uitgereik ten einde 'n gedeelte van die kontantoorskot in die geldmark te neutraliseer;
- vanaf 31 Desember 1992 tot 31 Desember 1993 sy eie staatseffekteportefeuille met 'n netto bedrag van R0,7 miljard vergroot. Hierdie addisionele effekte is deur middel van die Bank se normale openmarktransaksies uit die mark verkry;
- die bateportefeuille van die Korporasie vir Openbare Deposito's aangepas deur meer van die Korporasie se beskikbare fondse in die geldmark en minder by die

Tesourie te belê. Hierdie transaksies het 'n verruimende effek van nagenoeg R1,6 miljard op die geldmark-toestande gehad; en

- kontantbalanse van die Tesourie wat voorheen as deposito's by die Reserwebank gehou is na private bankinstellings oorgeplaas. Hierdie nuwe prosedure is in Junie 1993 ingestel in afwagting op die voorgestelde stelsel van belasting- en leningsrekenings vir Tesouriefondse wat gedurende 1994 gefinaliseer en geïmplementeer sou word.

Hierdie intervensie-optredes van die Reserwebank in die geldmark het dus 'n kardinale rol gespeel in die handhawing van finansiële stabilitet gedurende 1993 en het 'n verdere afwaartse neiging van rentekoerse, alhoewel teen 'n stadiger tempo, ondersteun. Die koers op interbankdaggeld het byvoorbeeld van 16,00 persent aan die einde van 1991 tot 12,25 persent aan die einde van 1992, tot 10,00 persent aan die einde van Desember 1993 en tot 9,50 persent aan die einde van Februarie 1994 afgeneem.

Die Reserwebank het die Bankkoers by twee geleenthede gedurende 1993 met een persentasiepunt tot sy huidigevlak van 12 persent verlaag. In totaal is die Bankkoers nou met 6 persentasiepunte verlaag, of met eenderde vanaf die hoogtepunt van 18 persent wat laat in 1989 bereik is. Ander markverwante rentekoerse, byvoorbeeld die primakoers van banke, het die Bankkoers gevvolg en is ook gedurende 1993 verder verlaag.

Die Bank se ondersteuning van die buitelandse valutamark het terselfdertyd voorkom dat die wisselkoers van die rand oormatig depresieer. Die nominale effektiewe wisselkoers van die rand het nietemin gedurende 1993 met 8,7 persent gedaal, in teenstelling met 4,4 persent gedurende 1992. Die depresiasi van die rand gedurende 1993 het die differensiaal in die inflasiekoerse tussen Suid-Afrika en sy belangrikste handelsvennote oorskry, met die gevvolg dat die reële effektiewe wisselkoers gedurende 1993 met 4,9 persent gedaal het.

### 3. Gunstige resultate ten opsigte van inflasie

Ná 'n tydperk van betreklike finansiële stabilitet en 'n jaarkoers van toename in die geldvoorraad van ruim onder 10 persent in elk van die afgelope twee jare, het die inflasione druk in die ekonomie uiteindelik begin kwyn. Die koers van toename in die omvattende produksieprysindeks het van 15,2 persent in 1989 tot slegs 6,6 persent in 1993 afgeneem – die laagste vlak sedert 1971.

Die koers van toename in die verbruikersprysindeks het ook verlede jaar tot onder 10 persent gedaal. Met hierdie koers op 9,7 persent verteenwoordig 1993 die eerste jaar sedert 1973 dat 'n enkelsyferkoers in verbruikersprysinflasie aangeteken is. Vanaf April 1993, die

maand waarin die toegevoegdewaarde belasting en ook ander indirekte belastings verhoog is, tot Januarie 1994 het die seisoensaangesuiwerde jaarkoers van toename in die verbruikersprysindeks slegs 7,4 persent beloop.

Normaalweg kom daar lang tydsloerings voor tussen veranderings in die onderliggende ekonomiese kragte wat tot inflasie lei en die uiteindelike verandering in verbruikerspryse. Terwyl dit dus met 'n mate van vertroue voorspel kan word dat die inflasiekoers gedurende die res van hierdie jaar matig behoort te bly, moet ons nou waak teen stappe wat oor die langer duur tot die herlewning van sterker inflasiekragte in die ekonomie aanleiding sal gee. Die ervaring van die afgelope paar jaar het bewys dat dit uitermate moeilik is om inflasie af te bring wanneer dit eers in die denke van mense vasgesteek het.

### 4. Geldvoorraadriglyne vir 1994

Die Reserwebank moet nou oor geldvoorraadriglyne vir 1994 besluit sonder die voordeel daarvan om vooraf insae in die Regering se Begrotingsprogram vir 1994/95 te hê. Dit is egter vanselfsprekend noodsaklik dat monetêre en fiskale beleid gekoördineer moet word en daar is dus, soos gebruiklik, met die Minister van Finansies ooreleg gepleeg oor die riglyne vir 'n aanvaarbare koers van toename in M3 vir 1994.

Ná die gunstige resultate van die vorige jaar, is die versoeking groot om die stryd teen inflasie nou te versnel en om die monetêre beleid wat vir hierdie doel aangewend word, selfs verder te verskerp. Daar sal egter meer as bloot net 'n stram monetêre beleid nodig wees om hierdie skadelike siekte totaal uit die stelsel te weer. In die huidige fase van grootskaalse sosio-politieke hervorming sal dit uiters moeilik wees om 'n totale ekonomiese pakket saam te stel wat in hierdie stadium inflasie in Suid-Afrika tot 'n einde sal bring, ten spyte van die ooglopende en verreikende voordele wat so 'n beleid vir toekomstige ekonomiese ontwikkeling mag inhoud.

Die Reserwebank is gevvolglik deur die volgende oorwegings in sy besluit oor aanvaarbare riglyne vir die toename in die geldvoorraad in 1994 beïnvloed:

- Die huidige ontluikende ekonomiese oplewing mag nie toegelaat word om momentum te verloor nie. Monetêre beleid moet nie gebruik word om die oplewing kunsmatig te stimuleer nie, maar behoort dit ook nie te beperk nie. Die toename in die geldvoorraad behoort voldoende te wees om reële ekonomiese groei van ten minste 3 persent in die bruto binnelandse produk gedurende 1994 te akommodeer.
- Die betalingsbalanspositie wat steeds kwesbaar is, behoort beskerm te word. 'n Oormatige toename in die geldvoorraad in hierdie stadium sal die verdere uitvloei van kapitaal uit die land vergemaklik.
- Die onderliggende inflasiekoers, wat tans rondom die vlak van 7 persent beweeg, is steeds betreklik hoog

indien dit met die heersende inflasiekoerse in bykans alle nywerheidslande vergelyk word. Monetêre beleid moet dus voortgaan om steeds afwaartse druk op inflasie in Suid-Afrika uit te oefen.

- Vanweë die betreklik lae vlak van die omloopsnelheid van die bestaande geldvoorraad, is daar verdere ruimte vir 'n toename in monetêre besteding, selfs sonder enige toename in die geldvoorraad.

Teen hierdie agtergrond het die Reserwebank besluit om die riglyne van 6 tot 9 persent vir 1993 as 'n aanvaarbare perk vir die koers van toename in M3 in 1994 te behou. Dit sal versoenbaar wees met die Bank se doelwitte ten opsigte van die handhawing van algehele finansiële stabiliteit indien die gemiddelde vlak van die M3-geldvoorraad in die vierde kwartaal van 1994 binne 'n 6 tot 9 persent perk bokant die gemiddelde vlak van M3 gedurende die vierde kwartaal van 1993 sal val.

Alhoewel dit weer eens beklemtoon moet word dat dit nie die Bank se bedoeling is om te alle tye 'n onbuigsame geldreël wat aan hierdie riglyne gekoppel is na te volg nie, behoort wesenlike afwykings van hierdie riglyne tot proaktiewe monetêre beleidsoptrede deur die Bank aanleiding te gee. Tydelike afwykings van die riglynperke mag weer voorkom, soos dikwels in die verlede die geval was. Sodanige afwykings kan veroorsaak word deur veranderings in die betalingsbalans, of deur ander tydelike skommelings in die oorsaaklike faktore wat onderliggend aan die geldvoorraadstatistiek is. Die Bank sal egter tydig moet optree sodra bepaalde langertermynneigings ontwikkel in die geldvoorraad om buiten die grense van die "kegel" wat deur die aanvaarde riglyn van 6 tot 9 persent groei in M3 in 1994 bepaal word, te wil beweeg.

# Die modellering van inflasieverwagtings

deur C.J. Pretorius

## 1. Inleiding

Soos breedvoerig beskryf in 'n artikel in die Kwartaalblad van Maart 1994<sup>1</sup>, is die prysvormingsproses in Suid-Afrika by uitstek afhanklik van die veranderinge in arbeidskoste, wat op hul beurt weer grotendeels deur inflasieverwagtings beïnvloed word, dit wil sê die inflasiekoers wat mense verwag in die toekoms sal bestaan. Ongelukkig is daar geen eenstemmigheid oor die eenduidigheid van inflasieverwagtings nie, dit wil sê oor die manier waarop sulke verwagtings gevorm word en hoe dit gemeet behoort te word. In ekonometriese ontledings word 'n subjektiewe aanname derhalwe gemaak oor die vorming van verwagtings, wat dan as 'n ondersteunende hipotese in die raming van gedragsvergelykings gebruik kan word.

Ekonometriese ontledings kan natuurlik aansienlik verbeter word indien inflasieverwagtings regstreeks waarneembaar en meetbaar sou wees. In sommige lande word opnames van prysverwagtings op 'n gereeld grondslag gedoen. Die opnamegegewens kan dan regstreeks in struktuurverwantskappe gebruik word as 'n aanduiding van die ware onderliggende verwagtings. Hoewel enkele meningspeilings oor inflasieverwagtings in Suid-Afrika gedoen word, is daar geen konsekwente tydreeks van prysverwagtings beskikbaar wat in die skattung van vergelykings gebruik kan word nie.

Die oogmerk met hierdie artikel is dus om sommige van die formuleringe van inflasieverwagtings te bestudeer en om die toepaslikheid daarvan te toets op grond van Suid-Afrikaanse gegevens. Hierdie hipoteses oor die vorming van inflasieverwagtings word in afdeling 2 van hierdie artikel beskryf en daarna empiries in afdeling 3 getoets. Die voorspellingsresultate, sowel as 'n toets vir die akkuraatheid van die verskillende inflasieverwagtingshipoteses, word in afdeling 4 in tabelle opgesom. 'n Paar samevattende opmerkings word ten slotte in afdeling 5 gemaak.

## 2. Modelle van inflasieverwagtings.

Die volgende inflasieverwagtingshipoteses is in hierdie studie ondersoek:

- verwagtings gegrond op die jongste waargenome inflasiekoerse;
- verwagtings gegrond op verspreide sloerings van

waargenome inflasiekoerse;

- aanpasbare verwagtings;
- geékstrapoleerde verwagtings;
- rationele verwagtings;
- verwagtings gebaseer op tydreeksontledings.

### Waargenome inflasiekoers van vorige tydperk

Een van die mees elementêre metodes om inflasieverwagtings te beskryf, is om aan te neem dat die koers van toename in die algemene prysvlak in tydperk "t" na verwagting gelyk sal wees aan die waargenome inflasiekoers van die vorige tydperk, "t-1". Hierdie metode kan deur die volgende vergelyking voorgestel word:

$$\begin{aligned} p_t^* &= p_{t-1}, \text{ waar} \\ p_t^* &= \text{inflasieverwagtings in tydperk "t", en} \\ p_{t-1} &= \text{die inflasiekoers in die onmiddellik} \\ &\quad \text{voorafgaande tydperk.} \end{aligned}$$

Een van die nadelle van hierdie benadering is dat dit heeltemal te veel klem plaas op die inflasiekoers van een bepaalde tydperk. Daar word byvoorbeeld aanvaar dat die negatiewe uitwerking van eenmalige gebeurtenisse (soos die instelling van die stelsel van belasting op toegevoegde waarde) op die inflasiekoers in 'n besondere tydperk ten volle deurgevoer word na die verwagte inflasiekoers van die onmiddellik daaropvolgende tydperk, selfs al is dit onwaarskynlik dat sulke gebeure in die daaropvolgende tydperk herhaal sal word.

### Verspreide sloerings van waargenome inflasiekoerse

Met inagneming van die nadelle verbonde aan verwagtings wat op die gebeure in 'n enkele tydperk gegrond is, is 'n ander benadering gevolg waarin veronderstel word dat die verwagte inflasiekoers 'n geweegde gemiddelde is van die voorafgaande inflasiekoerse. Daar word gewoonlik aangeneem dat die gewigte met die verloop van tyd afneem, wat beteken dat inflasieverwagtings stelselmatig aanpas. Hierdie metode om inflasieverwagtings te bereken kan op die volgende wyse voorgestel word:

$$p_t^* = \sum_{i=1}^n w_i p_{t-i}$$

Daar word dikwels aangeneem dat die som van die koëffisiënte ( $w$ ) gelyk is aan een. Dit beteken dat voortgesette inflasie teen 'n konstante koers uiteindelik ten volle verwag sal word.

### Aanpasbare verwagtings

Een van die gewildste en wydtoegepaste hipoteses met betrekking tot die vorming van inflasieverwagtings is die

1 Pretorius, C.J. en Smal, M.M.: "'n Makro-ekonomiese beskouing van die prysvormingsproses in die Suid-Afrikaanse ekonomie", Kwartaalblad van die Suid-Afrikaanse Reserwebank, Maart 1994.

aanpasbare verwagtingsformule, soos dit deur Cagan<sup>2</sup> gebruik is in sy studies oor hiperinflasie. Hierdie benadering behels dat inflasieverwagtings as 'n geweegde gemiddelde van vorige inflasie met meetkundig afnemende gewigte uitgedruk kan word. Die Koyck-transformasietechniek kan dan op die vergelyking toegepas word om dit om te skakel na die volgende vergelyking:

$$\hat{p}_t^* = a_0 + a_1 \hat{p}_{t-1}^* + a_2 \hat{p}_t$$

As aangeneem word dat  $a_1 + a_2 = 1$  en  $a_0 = 0$ , kan die aanpasbare verwagtings ook aangedui word deur:

$$\hat{p}_t^* - \hat{p}_{t-1}^* = a_2(\hat{p}_t - \hat{p}_{t-1}^*), 0 < a_2 < 1$$

Hierdie vergelyking gee te kenne dat verwagtings opwaarts of afwaarts aangepas word na gelang van die jongste fout in die vooruitskatting van die inflasiekoers. In die geval van 'n stygende neiging in inflasie behoort hierdie definisie van inflasieverwagtings egter tot 'n voortgesette onderskatting van die waargenome inflasiekoers te lei. Omgekeerd behoort verwagte inflasie altyd hoer te wees as die waargenome inflasie wanneer inflasie besig is om te daal.

### Geekstrapoleerde verwagtings

Die hipotese van geekstrapoleerde verwagtings soos deur Hirsch en Lovell<sup>3</sup> beskryf, kan soos volg aangedui word:

$$\hat{p}_t^* = a_0 + a_1(\hat{p}_{t-1}^* - \hat{p}_{t-2}^*) + a_2 \hat{p}_{t-1}$$

Inflasieverwagtings word in hierdie vergelyking beskryf as 'n funksie van die vorige waargenome inflasiekoers sowel as die verskil tussen die inflasiekoers van die vorige twee tydperke. Een kenmerk van hierdie hipotese is die regressiwiteit van verwagtings. As  $a_1 > 0$  word die vorige veranderings van die waargenome koers geekstrapoleer en word verwag dat dit in die toekoms sal voortduur. As  $a_1 < 0$  word daarenteen verwag dat die vorige neiging omgekeer sal word.

### Rationale verwagtings

Die rationeleverwagtingsmodel van inflasie dui aan dat die verwagte inflasiekoers in enige besondere tydperk gegrond word op al die inligting wat op daardie oomblik vir besluitnemers beskikbaar is. Hierdie inligting omvat die vorige werkverrigting van die ekonomie, sowel as verwagtings van toekomstige beleidsrigtings wat moontlik deur die owerhede gevolg kan word. Veranderings in uitgesoekte sleutelveranderlikes, soos die geldvoorraad,

die wisselkoers van die geldeenheid en die begrotingstekort van die owerheid, kan beskou word as aanwysers van ekonomiese beleidsrigtings wat inflasieverwagtings kan beïnvloed.

Gegrond op die aannname dat veranderings in die geldvoorraad 'n aanwyser is van die monetêre beleid en van die huidige of toekomstige inflasie, sal ekonomiese besluitnemers hulle rationele verwagtings van inflasie in tydperk "t" bepaal volgens die koers van verwagte monetêre uitbreiding vir tydperk "t". Dit gee aanleiding tot die volgende vergelyking vir prysverwagtings:

$$\hat{p}_t^* = \hat{m}_t^*$$

Die veranderlike  $\hat{m}_t^*$  verteenwoordig die verwagte koers van monetêre uitbreiding. Die verwagte koers van monetêre uitbreiding word bepaal deur die opvatting van ekonomiese besluitnemers oor die faktore waarop die monetêre owerhede ag slaan wanneer hulle  $\hat{m}_t$  bepaal en die waarskynlike gevolge van die owerhede se optrede. Die sentrale bank mag byvoorbeeld 'n reël of riglyn hê waarvolgens die koers van monetêre uitbreiding bepaal word. Ekonomiese besluitnemers sal die optrede van die monetêre owerhede bestudeer en hierdie inligting dan gebruik om die sistematiese komponente van die sentrale bank se beleidsmaatreëls te voorspel. Die werklike koers van monetêre uitbreiding wat gerealiseer word, sal afhang van die gemiddelde groeikoers in die geldvoorraad en 'n ewekansige veranderlike wat 'n voorstelling is van die onreëlmatige wisseling in die groeikoers van die geldvoorraad en wat nie deur die sentrale bank beheer kan word nie. Dit kan deur die volgende vergelyking voorgestel word:

$$\hat{m}_t = m + e_t$$

waar  $m$  die gemiddelde koers van monetêre uitbreiding voorstel en  $e_t$  die toevallige komponent in die groeikoers van die geldvoorraad.

Die opvatting dat ekonomiese besluitnemers in staat is om die sistematiese gedrag van die sentrale bank te identifiseer en die gevolge daarvan te voorspel, kan ook van toepassing gemaak word op hul vermoë om enige ander sistematiese beleidsoptrede en die gevolge daarvan te voorspel. Prysverwagtings kan ook beïnvloed word deur waargenome veranderings in die fiskale beleid sowel as waargenome en verwagte veranderings in die wisselkoers.

### Tydreeksmodelle

Die kenmerkende eienskap van 'n tydreeksmodel, in teenstelling met 'n ekonometriese model, is dat daar normaalweg geen poging aangewend word om 'n spesifieke tydreeks met ander veranderlikes in verband te bring nie; die bewegings van die tydreeks word slegs aan die hand van sy eie historiese waardes verklaar. 'n Ewekansige proses kan gebruik word om die beweging van 'n tydreeks rondom sy gemiddelde soos volg te beskryf:

<sup>2</sup> Cagan, P. en Lipsey, R.: *The Financial Effects of Inflation*, Cambridge, Massachusetts, National Bureau of Economic Research, 1978.

<sup>3</sup> Hirsch, A.A. en Lovell, M.C.: *Sales Anticipation and Inventory Behaviour*, New York, John Wiley and Sons.

$$y_t - \mu = \phi(y_{t-1} - \mu) + \varepsilon_t$$

waar  $y_t$  die waarneming van die tydreeks in tydperk "t" is,  $\mu$  die rekenkundige gemiddelde van die reeks en  $\varepsilon_t$  'n ewekansige fouteterm voorstel.

'n Model wat gesloerde waardes van sowel die waargenome as die fouteterm bevat, staan bekend as 'n outoregressiewe-bewegende-gemiddelde (ARMA) proses. As  $|\phi| < 1$ , wissel die waarnemings rondom die gemiddelde van die reeks en is die reeks stasionêr. Hoewel baie min tydreekse op sigself stasionêr is, is hierdie begrip van wesenlike belang vir tydreeksontledings. Stasionêre ARMA-prosesse vorm die grondslag waarop 'n tydreeks met meer algemene elenskappe gebou kan word. Die meeste tydreekse wissel nie rondom 'n konstante vlak nie, maar toon eerder 'n sistematiese opwaartse of afwaartse neiging. Ten einde 'n tydreeks stasionêr te maak, kan dit omvorm word deur byvoorbeeld van logaritmes van waarnemings en verskille tussen opeenvolgende waarnemings gebruik te maak.

As 'n klassieke lineêre regressiemodel (met tyd as die onafhanklike veranderlike) op die waarnemings van 'n tydreeks gepas word, word konstante parameters geraam en 'n neiging oor al die waarnemings van die tydreeks bereken. Daar word aanvaar dat hierdie neiging onveranderd sal bly. Die ARMA-proses is daarenteen 'n vooruitskattingsprosedure wat die parameters toelaat om by veranderings in die gegewens aan te pas. Meer gewig word aan die jongste waarnemings verleen, en vooruitskattings word op die skatting van die jongste neiging in plaas van die neiging oor die hele skattings-tydperk gebaseer.

Box en Jenkins het gebruik gemaak van die veronderstelling dat die optimale vooruitskatting vir 'n tydreeks oorwegend afhang van die spesifieke vorm van die stochastiese proses van die reeks wat vooruitgeskat word. As die reeks beskryf word deur 'n ARIMA-proses ('n outoregressieve-geïntegreerde-bewegende-gemiddelde proses), is die huidige tydperk se vooruitskatting die eindresultaat van 'n geweegde gemiddelde van al die vorige waarnemings.

### 3. Statistiese skatting van vergelykings van inflasieverwagtings

Die empiriese resultate van die geskattede vergelykings word in hierdie afdeling beskryf. Al die ekonometriese berekeninge is gedoen met kwartaallikse seisoensaangepaste gegewens. T-waardes van die geskattede koëffisiënte, sowel as die volgende opsommende gegewens word verstrekk:

$$\begin{aligned}\bar{R}^2 &= \text{Aangepaste bepaalheidskoëffisiënt;} \\ D-W &= \text{Durbin-Watson d-statistiek;} \\ RHO &= \text{Outokorrelasie-koëffisiënt.}\end{aligned}$$

Die skattingstydperk word onder aan die opsommende gegewens vir elke vergelyking getoon.

Die persentasieverandering oor vier kwartale in die aangeleide deflator vir private verbruiksbesteding word gebruik as 'n aanwyser van inflasie en van verwagte inflasie.

#### Waargenome inflasiekoers van vorige tydperk

Indien inflasieverwagtings slegs deur die vorige tydperk se waargenome inflasiekoers bepaal word, kan die funksie op die volgende wyse voorgestel word:

$$\hat{p}_t^* = 1,0 \cdot p_t$$

Hierdie manier om verwagtings te definieer is duidelik ontoepaslik wanneer die waargenome inflasie baie onbestendig is. In Suid-Afrika, met sy betreklik bestendige inflasiekoers in die tagtigerjare, kon hierdie koers deur baie besluitnemers in daardie tydperk gebruik word as 'n aanvaarbare metode vir die vooruitskatting van inflasie.

**Verspreide sloerings van waargenome inflasiekoers**  
'n Almon-sloeringstruktur is gebruik om die patroon van die waargenome inflasiekoers in die betrokke tydperk te beskryf. Daar is aanvaar dat die gewigte van die gesloerde veranderlike 'n patroon volg wat voorgestel word deur 'n tweedegraadse polinoom met 'n eindpuntbeperking, met ander woorde die gewigte word nul na 'n aantal tydperke.

Die funksie is soos volg geskab:

$$\hat{p}_t^* = 0,54 + 0,48 \cdot \hat{p}_{t-1} + 0,32 \cdot \hat{p}_{t-2} + 0,16 \cdot \hat{p}_{t-3}$$

$$(2,06) (40,57) (40,57) (40,57)$$

$$\bar{R}^2 = 0,93$$

$$D-W = 1,30$$

Skattingstydperk: 1962.I tot 1993.IV

#### Aanpasbare verwagtings

Dit is nie moontlik om die hipoteese dat verwagtings aanpasbaar is (sien afdeling 2) empiries te toets nie vanweë die gebrek aan waarnemings van inflasieverwagtings. Die aanpasbare verwagtings kan nie gelyk gestel word aan die waargenome inflasiekoers nie, omdat die waargenome inflasiekoers dan aan albei kante van die vergelyking wat geskab word sal voorkom.

Op grond van die aanname dat verwagte inflasie proporsioneel gelyk is aan waargenome inflasie, kan die vergelyking vir aanpasbare verwagtings, naamlik:

$$\hat{p}_t^* = a_0 + a_1 \hat{p}_{t-1}^* + a_2 \hat{p}_t$$

herleid word na 'n funksie van slegs die vorige tydperk se inflasiekoers. Die funksie is soos volg geskab:

$$\hat{p}^e = 0,45 + 0,96 \cdot p_{t-1}$$

(1,88) (44,83)

$$\bar{R}^2 = 0,94$$

$$D-W = 2,22$$

Skattingstydperk: 1961.II tot 1993.IV

### Die hipotese van geékstrapoleerde verwagtings

Volgens die hipotese van geékstrapoleerde verwagtings word die verwagte inflasiekoers in 'n gegewe tydperk deur die waargenome inflasiekoers in die voorafgaande tydperk bepaal, soos aangepas vir die waargenome verandering in die inflasiekoers. Die funksie word soos volg geskat:

$$\hat{p}^e = 0,47 - 0,18 \cdot (\hat{p}_{t-1} - \hat{p}_{t-2}) + 0,96 \cdot \hat{p}_{t-1}$$

(1,98) (1,99) (45,15)

$$\bar{R}^2 = 0,94$$

$$D-W = 1,99$$

Skattingstydperk: 1961.III tot 1993.IV

### Rasionele verwagtings

Op die veronderstelling dat veranderings in die geldvoorraad verteenwoordigend is van monetêre beleid, dat veranderings in die prys van ingevoerde goedere 'n aanduiding is van wisselkoersveranderings en dat die begrotingstekort van die owerheid verteenwoordigend is van fiskale beleid, word aanvaar dat ekonomiese besluitnemers hulle rasionele verwagtings van inflasie in tydperk "t" grond op:

- die groeikoers oor vier kwartale in die M3-geldvoorraad per eenheid van produksie ( $M_3$ );<sup>4</sup>
- die persentasieverandering oor vier kwartale in die 'prys van ingevoerde goedere ( $pf$ );
- die inflasiekoers in die voorafgaande tydperk ( $p$ ); en
- 'n bewegende gemiddelde oor vier kwartale van die owerheid se begrotingstekort in verhouding tot die nominale bruto binnelandse produk ( $gd$ ).

$$\hat{p}^e = 0,03 \cdot M_{3,t-4} + 0,03 \cdot pf_{t-2} + 0,08 \cdot gd_{t-3} + 0,89 \cdot p_{t-1}$$

(2,34) (2,05) (1,70) (30,18)

$$\bar{R}^2 = 0,94$$

$$D-W = 2,27$$

Skattingstydperk: 1962.III tot 1993.II

As gevolg van die aansienlike toename in die begrotings-

<sup>4</sup> Proefnemings is gedoen met verskillende definisies van die geldvoorraad in die uiteenstelling van die rasionele verwagtingsvergelyking. Dit het uiteindelik duidelik gevlyk dat die geldvoorraaddefinisië van M3 die beste veranderlike is om in hierdie vergelyking te gebruik.

tekort van die owerheid gedurende die afgelope jare, het vooruitskattings met behulp van bogenoemde vergelyking geleid tot 'n aansienlike oorskating van inflasieverwagtings. Dit kan daaroor toegeskryf word dat die vergelyking oor 'n lang tydperk geskat is waartydens die begrotingstekort betreklik klein was, wat 'n betreklik groot geskatte koëffisiënt vir die begrotingstekort tot gevolg gehad het. Nadat die vergelyking oor 'n korter en meer onlangse tydperk herskat is, het die koëffisiënte aansienlik verander, maar hulle was nie meer statisties betekenisvol nie.

'n Ander rasionaleverwagtingsmodel wat die begrotingstekort van die owerheid bulte rekening laat is gevlyk gespesifiseer en dit het die vooruitskattingsvermoë van die model aansienlik verbeter. Die betrokke vergelyking is soos volg geskat:

$$\hat{p}^e = 0,04 \cdot M_{3,t-3} + 0,03 \cdot pf_{t-2} + 0,91 \cdot p_{t-1}$$

(3,04) (2,15) (37,23)

$$\bar{R}^2 = 0,94$$

$$D-W = 2,26$$

Skattingstydperk: 1962.III tot 1993.IV

### ARIMA-modelle

'n ARIMA-model vir inflasieverwagtings met behulp van die Box-Jenkins-metode is bereken, waarin aangeneem is dat verwagtings 'n geweegde funksie van hulle eie vorige waarnemings is.

Die inflasieverwagtingsproses is geïdentifiseer as 'n ARIMA(0,1,1) model, wat die volgende impliseer:

- dat geen outoregressiewe struktuur teenwoordig is nie;
- 'n differensiasiefaktor van een; en
- 'n bewegende gemiddelde-faktor  $\epsilon$ , met 'n sloering van vier tydperke.

Die berekende koëffisiënte van die ARIMA-model kan soos volg opgesom word:

$$\hat{p}^e - \hat{p}_{t-1}^e = 0,11 + (\epsilon - 0,6314\epsilon_{t-4})$$

(3,12) (8,91)

$$\bar{R}^2 = 0,95$$

Skattingstydperk: 1961.II tot 1993.II

## 4. Opsomming van resultate

### Opsomming van regressiereultate

In tabel 1 word die resultate van die verskillende hipoteses oor die vorming van verwagtings met mekaar vergelyk. Volgens hierdie tabel is dit duidelik dat die aangepaste bepaaldheidskoëffisiënt ( $\bar{R}^2$ ) van die verskillende hipoteses almal besonder hoog is. Die  $\bar{R}^2$  is dus nie 'n voldoende maatstaf om die verskillende

**Tabel 1**  
**Opsomming van regressieresultate**

Verwagtingshipotese	R <sup>2</sup>	D-W
Verspreide sloerings van waargenome inflasiekoerse.....	0,93	1,30
Aanpasbare verwagtings.....	0,94	2,22
Geekstrapoleerde verwagtings.....	0,94	1,99
Rationale verwagtings.....	0,94	2,27
Rationale verwagtings (begrotingstekort uitgesluit).....	0,94	2,26
ARIMA-model.....	0,95	-

hipoteses van mekaar te onderskei nie.

#### **Opsomming van voorspellingsresultate**

Daar is gevoldiglik besluit om die voorspellings wat met behulp van die verskillende hipoteses gemaak is met mekaar te vergelyk vir 'n tydperk waarvoor die werklike gegevens reeds beskikbaar is. Dinamiese simulasies is oor die tydperk van die eerste kwartaal van 1992 tot die vierde kwartaal van 1993 uitgevoer.

Die hipotese waarvolgens inflasievooruitskattinge gegrond word op die waargenome inflasiekoers van die verlede, was in staat om inflasie vir 1992 redelik akkuraat te voorspel omdat die waargenome inflasiekoers in 1992 deurgaans min of meer op dieselfde vlak gebly het as die waargenome inflasiekoers van die vierde kwartaal van 1991. Nadat die inflasiekoers in 1993 begin afneem het, het die persentasiefout aansienlik toegeneem. Dit bevestig dat die tydkeuse van die vooruitskatting, veral in die geval van 'n dinamiese vooruitskatting, 'n belangrike rol speel in die akkuraatheid van die vooruitskatting. As die vooruitskatting vir slegs een tydperk in die toekoms geprojekteer word, kan die waargenome inflasiekoers van die voorafgaande tydperk in plaas van die vorige

**Tabel 3**  
**Vooruitskattinge gegrond op die model met verspreide sloerings**

	Waargenome waarde	Vooruit- skatting	Persentasie- fout
1992 kw1	16,95	15,90	-6,2
1992 kw2	16,37	16,01	-2,2
1992 kw3	15,66	15,97	2,0
1992 kw4	15,71	15,87	1,0
1993 kw1	12,71	15,83	24,5
1993 kw2	11,14	15,77	41,6
1993 kw3	10,48	15,72	50,0
1993 kw4	8,21	15,66	90,7
Gemiddelde absolute persentasiefout			27,3

voorspelde waarde gebruik word. Dit maak dit makliker vir verwagtings om aan te pas by die waargenome veranderings in inflasie.

Die hipotese van verspreide sloerings was ook nie in staat om die draalpunt in die inflasiekoers gedurende die negentigerjare te voorspel nie (sien tabel 3). Hierdie tekortkoming in die vooruitskattingsvermoë van hierdie hipotese kan daaraan toegeskryf word dat die vergelyking gegrond is op die geweegde gemiddelde van die redelik bestendige inflasiekoerse van die verlede.

Die vereenvoudigde hipotese van aanpasbare verwagtings was in staat om die inflasiekoers vir 1992 redelik akkuraat vooruit te skat. Hierdie metode was egter ook nie in staat om die afname in die inflasiekoers gedurende 1993 te voorspel nie. Die akkuraatheid van die vooruitskatting op grond van die hipotese van aanpasbare verwagtings was egter effens beter as wat

**Tabel 2**  
**Vooruitskattinge gegrond op voorafgaande inflasie**

Waargenome waarde	Vooruit- skatting	Persentasie- fout
1992 kw1	16,95	-2,0
1992 kw2	16,37	1,5
1992 kw3	15,66	6,1
1992 kw4	15,71	5,7
1993 kw1	12,71	30,7
1993 kw2	11,14	49,1
1993 kw3	10,48	58,5
1993 kw4	8,21	102,3
Gemiddelde absolute persentasiefout		32,0

**Tabel 4**  
**Vooruitskattinge gegrond op die model met aanpasbare verwagtings**

Waargenome waarde	Vooruit- skatting	Persentasie- fout
1992 kw1	16,95	-3,3
1992 kw2	16,37	-1,2
1992 kw3	15,66	2,0
1992 kw4	15,71	0,5
1993 kw1	12,71	22,7
1993 kw2	11,14	38,5
1993 kw3	10,48	45,6
1993 kw4	8,21	83,8
Gemiddelde absolute persentasiefout		24,7

**Tabel 5**  
**Vooruitskattings gegrond op die model met geëkstrapoleerde verwagtings**

Waargenome waarde	Vooruit-skattung	Persentasie-fout
1992 kw1	16,95	16,32
1992 kw2	16,37	16,25
1992 kw3	15,66	16,15
1992 kw4	15,71	16,05
1993 kw1	12,71	15,96
1993 kw2	11,14	15,86
1993 kw3	10,48	15,78
1993 kw4	8,21	15,69
Gemiddelde absolute persentasiefout		27,4

met behulp van die ander twee metodes hierbo verkry is.

Soos in tabel 5 aangedui word, het die hipotese van geëkstrapoleerde verwagtings effens swakker gevaa as die hipoteses dat verwagtings aanpasbaar en deur verspreide sloerings beskryf kan word. Dit voorspel die inflasiekoers ook slegs op grond van vorige waarnemings van inflasie en was gevoldiglik nie in staat om die draaipunkt in die inflasiekoers gedurende 1993 te voorspel nie.

In tabelle 6 en 7 word vooruitskattings verstrek van die inflasiekoers, gegrond op twee weergawes van die rasioneleverwagtingsmodel. Aan die hand van die vooruitskattingsakkuraatheid van die inflasieverwagtings, is die resultate van albei weergawes van die rasioneleverwagtingsmodel aansienlik beter as die ander hipoteses wat slegs op historiese inflasiekoerse gegrond is. In tabel 6 word 'n rasioneleverwagtingsmodel gebruik wat die owerheid se tekort voor lenings as 'n veranderlike insluit wat fiskale beleid voorstel. Die resultate toon ook

**Tabel 7**  
**Vooruitskattings gegrond op die rasioneleverwagtingsmodel sonder fiskale beleid**

Waargenome waarde	Vooruit-skattung	Persentasie-fout
1992 kw1	16,95	16,0
1992 kw2	16,37	15,3
1992 kw3	15,66	14,7
1992 kw4	15,71	14,1
1993 kw1	12,71	13,4
1993 kw2	11,14	12,7
1993 kw3	10,48	12,2
1993 kw4	8,21	11,5
Gemiddelde absolute persentasiefout		13,0

'n merkbare oorskatting van die inflasiekoers vir 1993, wat aandui dat die waargenome laer inflasiekoers teweeggebring is ondanks 'n groot toename in die owerheid se tekort voor lenings en skuldterugbetaling. 'n Herskatting van hierdie vergelyking oor 'n korter steekproefydperk, met inbegrip van die jongste waarnemings, het die vooruitskattingsfout verminder omdat die koëffisiënt van die begrotingstekort merkbaar kleiner was as die een wat oor 'n langer tydperk bereken is.

Die beste vooruitskattingsresultate is egter verkry met die rasioneleverwagtingsmodel waarin die uitwerking van fiskale beleid op inflasieverwagtings nie in aanmerking geneem is nie (sien tabel 7). Die feit dat ander beleidsveranderlikes saam met die historiese inflasiekoerse by hierdie model ingesluit is, het die model in staat gestel om die afname in die werklike inflasiekoers gedurende 1993 te voorspel. Dit kom voor asof hierdie verbeterde vooruitskattingsakkuraatheid bevestig dat fiskale beleid nie ten volle deur ekonomiese besluitnemers in ag geneem is toe hulle verwagtings oor die toekomstige veranderings in die totale prysvlak gevorm het nie. Die uitwerking mag egter anders wees in die geval van 'n voortgesette toename in die tekort van die openbare sektor.

Die ARIMA-model beskryf inflasieverwagtings as 'n bewegende gemiddelde van die historiese waardes van die waargenome inflasiekoers (sien tabel 8). Soos in die geval van die ander hipoteses wat ook inflasieverwagtings verstaan op grond van die waargenome inflasiekoerse van die verlede, oorskot dit inflasie gedurende 1993 duidelik en was dit nie in staat om die afname in die inflasiekoers te voorspel nie.

Uit hierdie resultate blyk dit dat die meeste van die hipoteses nie daarin kon slaag om die afname in die inflasiekoers gedurende 1993 te voorspel nie. Dit kan onder andere daarvan toegeskryf word dat die vooruitskattings op 'n dinamiese wyse uitgevoer is. Die gesloerde waarde van die vooruitskattings en nie die waargenome

**Tabel 6**  
**Vooruitskattings gegrond op die rasioneleverwagtingsmodel met fiskale beleid ingesluit**

Waargenome waarde	Vooruit-skattung	Persentasie-fout
1992 kw1	16,95	16,1
1992 kw2	16,37	15,6
1992 kw3	15,66	15,1
1992 kw4	15,71	14,7
1993 kw1	12,71	14,3
1993 kw2	11,14	13,8
1993 kw3	10,48	13,5
1993 kw4	8,21	13,3
Gemiddelde absolute persentasiefout		18,4

**Tabel 8**  
**Vooruitskattings gegrond op die ARIMA-model**

	Waargenome waarde	Vooruit- skatting	Persentasie- fout
1992 kw1	16,95	16,5	-2,7
1992 kw2	16,37	16,8	2,6
1992 kw3	15,66	16,7	6,6
1992 kw4	15,71	16,6	5,7
1993 kw1	12,71	16,8	32,2
1993 kw2	11,14	16,9	51,7
1993 kw3	10,48	17,0	62,2
1993 kw4	8,21	17,1	108,3
Gemiddelde absolute persentasiefout		34,0	

gegewens van die voorafgaande tydperk nie, is met die uitvoer van die dinamiese simulasies gebruik. Dit beklemtoon in 'n mate die nadeel daarvan verbonde om 'n veranderlike deur slegs sy waardes in die voorafgaande tydperke te verklaar, omdat geen regstellings gemaak word wanneer die spesifieke veranderlike oor- of onderskat word nie. Aan die hand van hierdie resultate is dit ook duidelik dat die rationeleverwagtingsmodel (sonder die owerheid se begrotingstekort) beter gevaaar het as die ander hipoteses in soverre dit die vooruitskattingsakkuraatheid van inflasieverwagtings betref.

## 5. Gevolgtrekking

Die inflasieverwagtings van besluitnemers word bepaal deur die waargenome inflasiekoste in die verlede en die optrede van beleidmakers. Die resultate wat in hierdie artikel verstrek word, toon taamlik duidelik aan dat verwagtings wat op 'n rationele wyse gevorm word deur noukeurig die voornemens van die beleidmakers in ag te neem, neig om meer in die kol te wees as dié wat slegs op historiese inflasiekosteneigings gegrond is. Eersgenoemde metode word gevolglik toegepas in die Reserwebank se ekonomiese model om inflasieverwagtings in berekening te bring.

Wanneer sukses duidelik met die afname van waargenome inflasie behaal word, word die aanpassing van verwagtings in reaksie op beleidsveranderings versterk. Dit bevestig weer eens die belangrikheid van die konsekwente toepassing van monetêre beleidsmaatreëls om 'n hoër mate van prysstabiliteit te verkry. Indien beleidsmaatreëls op 'n reëlmaterige wyse toegepas word, sal dit as geloofwaardig beskou word en sal dit inflasieverwagtings in die verlangde rigting beïnvloed. Daarteenoor is dit onwaarskynlik dat beleidsmaatreëls wat nie op 'n konsekwente wyse toegepas word nie, enige afname in verwagtings sal meebring, aangesien dit

met agterdog bejeeën kan word. Sulke maatreëls mag selfs die teenoorgestelde reaksie by die private sektor ontlok as dit wat die beleidmakers in die openbare sektor beoog het.

## Verwysings

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# Notas tot tabelle

## Openbare finansies – tabel S-68

In hierdie uitgawe van die *Kwartaalblad* is tabel S-68 hersien deur die inligting wat vroeër onder die twee aparte opskrifte "openbare korporasies" en "sentrale owerheidsondernemings" was, onder een opskrif, naamlik "openbare korporasies en sentrale owerheidsondernemings" te kombineer. Hierdie verandering was noodsaaklik om gebruikers te voorsien van 'n reeks wat oor tyd vergelykbaar is, omdat sekere sentrale owerheidsondernemings as openbare korporasies herklassifiseer is. Transnet is van die begin van 1990 af en Telkom en Sapos van die begin van 1992 af as openbare korporasies herklassifiseer.

## Buitelandse laste en bates – tabelle S-78 tot S-83

Die tabelle wat gegewens ten opsigte van die buitelandse laste en bates van Suid-Afrika aantoon, is ook verander om inligting van sekere geselekteerde lande in te sluit. Voorheen is gegewens slegs vir groepes lande voorsien. Die publikasie van addisionele besonderhede ten opsigte van sekere lande het nou moontlik geword as gevolg van die opheffing van sanksies teen Suid-Afrika. In tabelle S-78 en S-79 word inligting met betrekking tot die totale buitelandse laste en bates van Suid-Afrika van 1986 tot 1992 voorsien. Gegewens van Suid-Afrika se buitelandse laste teenoor die geselekteerde lande word in tabelle S-80 tot S-82 aangetoon. Die buitelandse bates van Suid-Afrika in geselekteerde lande word in tabel S-83 aangetoon.

## Nasionale rekeninge – tabelle S-91 tot S-113

'n Volledige bespreking van die omvattende hersienings wat aan die gegewens met betrekking tot die nasionale rekeninge, soos aangebied in die tabelle S-91 tot S-113, aangebring is, verskyn in 'n spesiale bylaag tot hierdie uitgawe van die *Kwartaalblad*.