

Quarterly Bulletin

Kwartaalblad

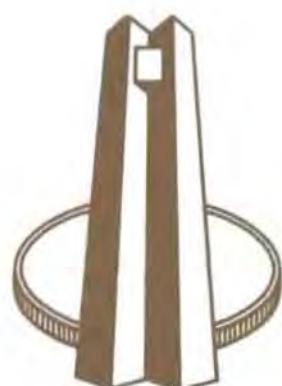


South African Reserve Bank
Suid-Afrikaanse Reserwebank

Quarterly Bulletin Kwartaalblad

September 1995

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

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Enquiries relating to this *Bulletin* should be addressed to:

The Head
Economics Department
S.A. Reserve Bank
PO Box 427
Pretoria
0001

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Die Hoof
Departement Ekonomie
S.A. Reserwebank
Posbus 427
Pretoria
0001

Quarterly economic review

Introduction

Poor weather conditions and the lower production of gold were responsible for a further slackening of economic growth in the second quarter of 1995. However, this slower growth in domestic production in the first six months of 1995 came after a period of brisk and accelerating growth. The level of economic activity was therefore relatively high as clearly reflected by the rate of capacity utilisation in manufacturing, which was only slightly lower than at its peak in the cyclical upturn of 1986-89.

Although the contraction in the output of agriculture and the gold mines had an adverse effect on the economy, activity in the non-primary sectors continued to expand strongly. In fact, the growth in the real value added by the secondary and tertiary sectors accelerated from an annualised rate of 3½ per cent in the first quarter of 1995 to 4½ per cent in the second quarter. This more robust economic growth was fairly widespread, but was particularly evident in manufacturing, commerce, transport and communication and financial services.

The higher level of activity in the non-primary sectors was accompanied by an acceleration in the growth of real gross domestic expenditure. The sharp increase in domestic expenditure was the result of further increases in inventories, gross domestic fixed investment and private consumption expenditure, while consumption expenditure of general government remained on the lower level reached in the first quarter of 1995. Inventory investment, which had increased throughout the current cyclical upswing, gained considerable momentum in the first half of 1995, probably reflecting business confidence in the continuation of the economic recovery phase. A broadening of investment activity in the private sector also seems to confirm that production capacity is being created in anticipation of further strong growth in aggregate demand.

A somewhat stronger growth in real personal disposable income in the second quarter of 1995 owing largely to an increase in dividend receipts, employment growth since the middle of 1994 and an improvement in the real wage per worker, supported further strong growth in consumer demand. The largest part of households' higher outlays on appliances, transport equipment, clothing and footwear and other durable and non-durable goods was, however, financed by means of consumer credit. Households made considerable use of direct credit facilities from retailers, mortgage advances, instalment sales credit and overdrafts to finance these purchases. Economic expansion based to an important extent on higher consumer demand financed by means

of increased household indebtedness is not a sound basis for sustainable economic development.

Reflecting the South African economy's high marginal propensity to import, the relatively limited excess production capacity in many economic sectors and the rise in capital formation, imports continued to respond to the rise in aggregate domestic demand in the second quarter of 1995. At the same time, the volume and value of net gold exports shrank further and a weaker export performance led to a decline in merchandise exports. Although these developments were partly offset by lower net payments for services and transfers to non-residents, the deficit on the current account of the balance of payments increased sharply to a ratio of approximately 2½ per cent of gross domestic product in the second quarter of 1995.

These developments clearly illustrate that the traditional balance of payments constraint on economic growth in South Africa has not yet been removed. With a relatively modest growth rate which averaged about 3 per cent per year in the current economic recovery, the surplus on the current account of the balance of payments was quickly transformed into a large negative balance. The structure of the South African economy therefore still leads to the emergence of large current account deficits at relatively low rates of economic growth. The only permanent solution to this problem is an effective and competitive production structure.

Fortunately, the low level of foreign debt of South Africa made it possible for the country to finance the shortfall on the current account of the balance of payments by means of a net inflow of capital from abroad. In the second quarter of 1995 more than 80 per cent of this net inflow of capital consisted of long-term capital. Indeed, over the past 2½ years South Africa has improved the maturity structure of its commitments to non-residents because of a sharp switch from short- to long-term net indebtedness. A large part of this long-term capital inflow could, however, in the end prove to be very volatile inasmuch as it embraced investments in securities on the Johannesburg Stock Exchange. Borrowing from foreign sources and non-direct investments by non-residents will in any case not solve the problem of achieving sustainable higher economic growth.

The large net inflow of capital outweighed the deficit on current account, with the result that the overall balance of payments position of the country improved further in the second quarter of 1995. However, the gross gold and other foreign reserves declined due to redemptions made on reserve-related liabilities. The healthy overall conditions on the balance of payments brought about a relatively stable nominal effective

exchange rate of the rand. In July and August 1995 the weighted average value of the rand actually increased.

In a statistical sense, the net foreign assets of the monetary institutions did not exert any pressure on the growth of the money supply in the second quarter of 1995. The growth in nearly all the monetary aggregates nevertheless accelerated and the broadly defined money supply moved sharply above the upper limit of the guideline range for 1995. This rapid rate of growth in the money supply reflected the sharp growth in gross domestic expenditure and reintermediation. The fact that an increasing proportion of domestic expenditure was financed by means of bank credit, also led to an almost uninterrupted rise in the credit extension of monetary institutions to the private sector.

In view of the rapid rise in the money supply and bank credit extension and after taking other economic developments into consideration, a much more conservative monetary policy stance was adopted by the monetary authorities from the beginning of 1995. In response to the tighter monetary measures, short-term interest rates moved higher while long-term yields declined somewhat. The yield curve accordingly flattened further in the five-month period ended August 1995. Most of the lending and deposit rates of financial institutions also moved to higher levels after the increase in Bank rate at the end of June 1995.

The money market was generally characterised by sharp fluctuations arising from changes in the net foreign assets of the Reserve Bank and in government deposits with the central bank in the period March to August 1995. The Reserve Bank's operations in the money market during this period were accordingly aimed mainly at neutralising liquidity in order to keep its refinancing facilities effective. Activity in the bond and equity market subsided further, while the stable environment in the foreign exchange market, a decline in non-resident participation, the increase in real estate prices and the high level of and expected further increases in interest rates, had a negative impact on the volume of transactions in other financial markets.

The public-sector borrowing requirement amounted to 7,8 per cent of gross domestic product in the first quarter of fiscal 1995/96, which, although still high, was considerably lower than in the corresponding period of the preceding year. A part of this lower level of the public-sector borrowing requirement in the first quarter of the fiscal year may have been due to special circumstances that were related to the constitutional changes in South Africa. The establishment of the nine new provinces and administrative problems encountered in this regard probably delayed some expenditure, with the result that the revenue and grants of the provincial governments exceeded their total expenditure. The transfer of certain powers from the central government to the provincial administrations also had a marked effect on the expenditure pattern of the Main Budget: transfer payments rose substantially while expenditure on goods

and services contracted.

On the inflation front, lower prices of fresh meat, vegetables and fruit were responsible for slower rates of increase in both the production and consumer price indices from April 1995. If the effect of the price changes of processed and unprocessed food is excluded from the production price index, the twelve-month rate of increase in other prices has shown a persistent upward movement since April 1994. Although the rate of increase in the underlying consumer price index (which measures changes in the overall consumer price index excluding food and non-alcoholic beverages, the costs of homeownership and value-added tax) recently slackened somewhat, factors such as the strong domestic demand, increases in labour costs and the attempts of business organisations to maintain profit margins are preventing a lasting decline in the rate of inflation. Important structural features, including an inflexible labour market, an uncompetitive production structure and large budget deficits, also still stand in the way of a sustainable abatement of the inflation rate. Against this background, excessive increases in the money supply accommodate and lead to a persistent rise in production and consumer prices.

Domestic economic developments

Domestic output

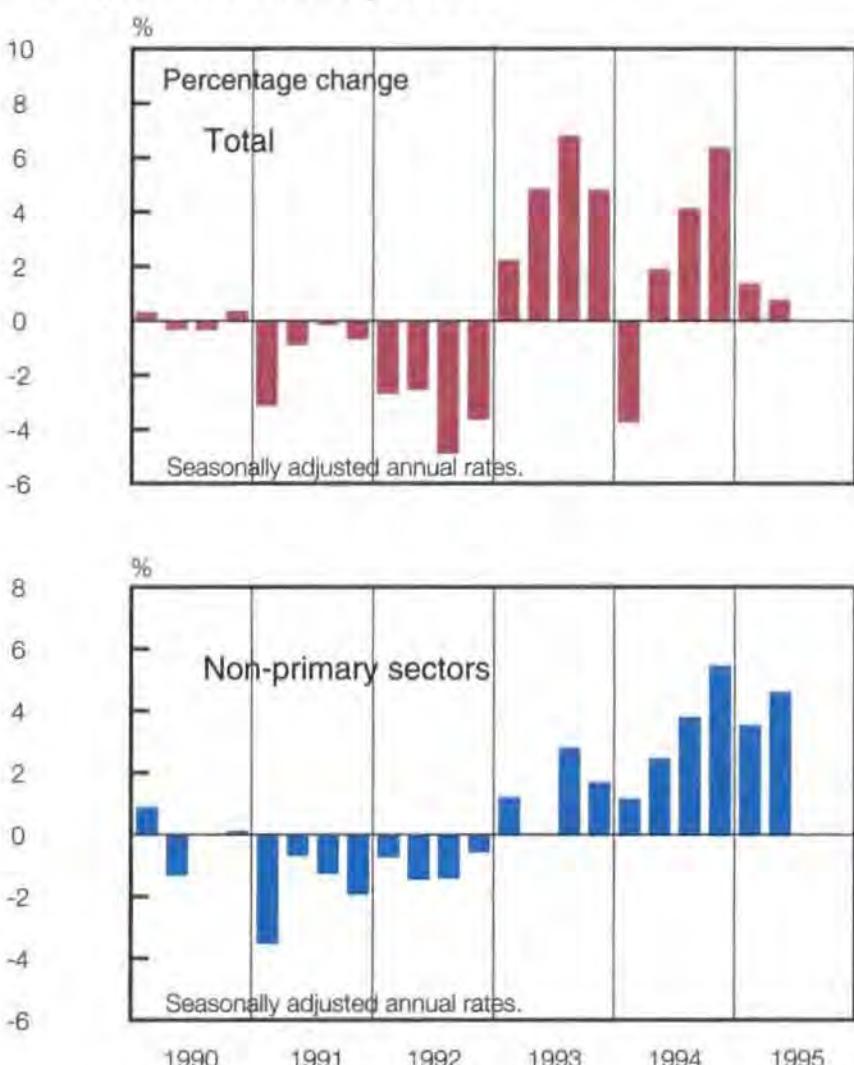
First estimates indicate that *aggregate real gross domestic product* rose at an annualised rate of approximately 1 per cent in the second quarter of 1995, after having increased at an annualised rate of 1½ per cent in the first quarter. Such growth was well below the average annualised growth rate of 5½ per cent attained in the second half of 1994. Despite the slower growth of economic activity in the first half of 1995, total output was still nearly 3 per cent higher in this period than in the first half of 1994.

The slowdown in economic growth during the first six months of 1995 could be attributed mainly to a marked decline in agricultural output on account of adverse weather conditions in the summer rainfall areas, and lower gold production. Although the lower output in the primary sectors had a detrimental effect on production in the other sectors of the economy through backward and forward linkages, the non-primary sectors grew strongly and cushioned the slowdown in the economic recovery. The growth of aggregate real value added by the secondary and tertiary sectors actually accelerated from an annualised rate of 3½ per cent in the first quarter of 1995 to 4½ per cent in the second quarter. In the case of the primary sectors, the total output in the first half of 1995 fell at an annualised rate of 10½ per cent from the second half of 1994.

Agricultural production, which had made a major contribution to economic growth in 1994, contracted sharply in the first six months of 1995. In particular, the poor grain harvests in the Highveld in the second quarter of 1995 brought about a negative year-on-year growth rate of 9 per cent in agriculture. It is generally expected that the maize crop in 1995 will only be about one-third of the production in the preceding year.

Total output in the *mining sector* decreased at annualised rates of 10 and 11 per cent in the first two quarters of 1995; this followed a decline of 2½ per cent

Real gross domestic product



in calendar 1994. More specifically, gold production contracted sharply owing to an increase in the number of special and public holidays and labour disruptions, industrial action, sit-ins, go-slows and strikes. The gold content of ore milled also decreased further, *inter alia* because of the mining of lower quality ore and the milling of surface material to supplement underground production. All these factors compounded the problems

Table 1. Real gross domestic product

Percentage change at seasonally adjusted and annualised rates

Sectors	1994				1995	
	1st qr	2nd qr	3rd qr	4th qr	1st qr	2nd qr
Primary sectors	-30	-3	4	9½	-13	-23
Non-primary sectors.....	1	2½	4	5½	3½	4½
Secondary sectors.....	0	2½	6	8	4½	6
Tertiary sectors.....	2	2½	2½	4	3	4
Total	-3½	2	4	6½	1½	1

of the industry, with the result that current production equals output levels of 1957 and 1958 and is about half of the record output of 1 000 tons in 1970. In contrast, the mining of coal and some base metals benefited from a strong revival in international demand and the concomitant surge in export prices, improved labour relations and increased productivity in the first two quarters of 1995.

The growth in the output of the secondary sectors accelerated from an annualised rate of 4½ per cent in the first quarter of 1995 to 6 per cent in the second quarter. This stemmed mainly from the buoyancy of manufacturing output, while real value added by the sector supplying electricity, gas and water and the construction industry continued to grow steadily. In the manufacturing sector, the growth in real value added amounted to an annualised rate of 7 per cent in the second quarter of 1995. Over the first two years of the current economic upswing, the output of the manufacturing sector expanded at an average annualised rate of 4½ per cent. Manufacturers in both the domestic and export-oriented industries experienced strong growth. This was related to a strong export demand, a supply response to the higher international prices of manufactured goods, buoyant private consumption expenditure and the widespread improvement of investors' sentiment in the private sector.

An analysis of the performance of the tertiary sectors in the second quarter of 1995 shows that:

- The real value added by the commercial sector rose at an annualised rate of 4½ per cent, largely because of a

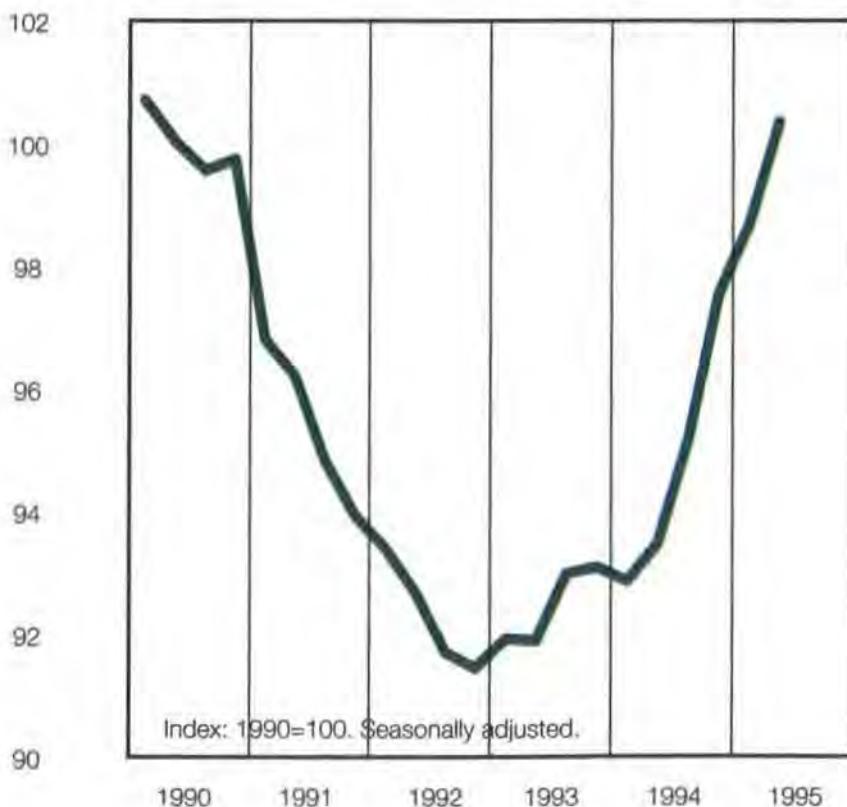
more positive sentiment among consumers after the relatively peaceful transition to a new political dispensation. The motor trade also grew strongly, underpinned by the significantly higher levels of fixed capital formation, a strong demand from car rental companies, more peaceful labour conditions with a concomitant improvement in productivity, and an expansion in the industry's export business.

- The real value added by transport and communication services rose strongly at an annualised rate of 6½ per cent. This could be attributed to a rise in international trade, increased tourism and the successful establishment of the cellular telephone network.
- The real output of the financial sector increased at an annualised rate of 5 per cent. This sector benefited from the growth in the securities and derivative markets and the generally sound financial conditions in the country.

Domestic expenditure

The growth in aggregate *real gross domestic expenditure* amounted to a seasonally adjusted and annualised rate of 5½ per cent in the second quarter of 1995; in the first quarter of 1995 the increase in domestic expenditure had slowed down to a rate of 2 per cent from 10 per cent in the second half of 1994. The sharp increase in domestic

Real gross domestic product of manufacturing



Main components of real gross domestic expenditure

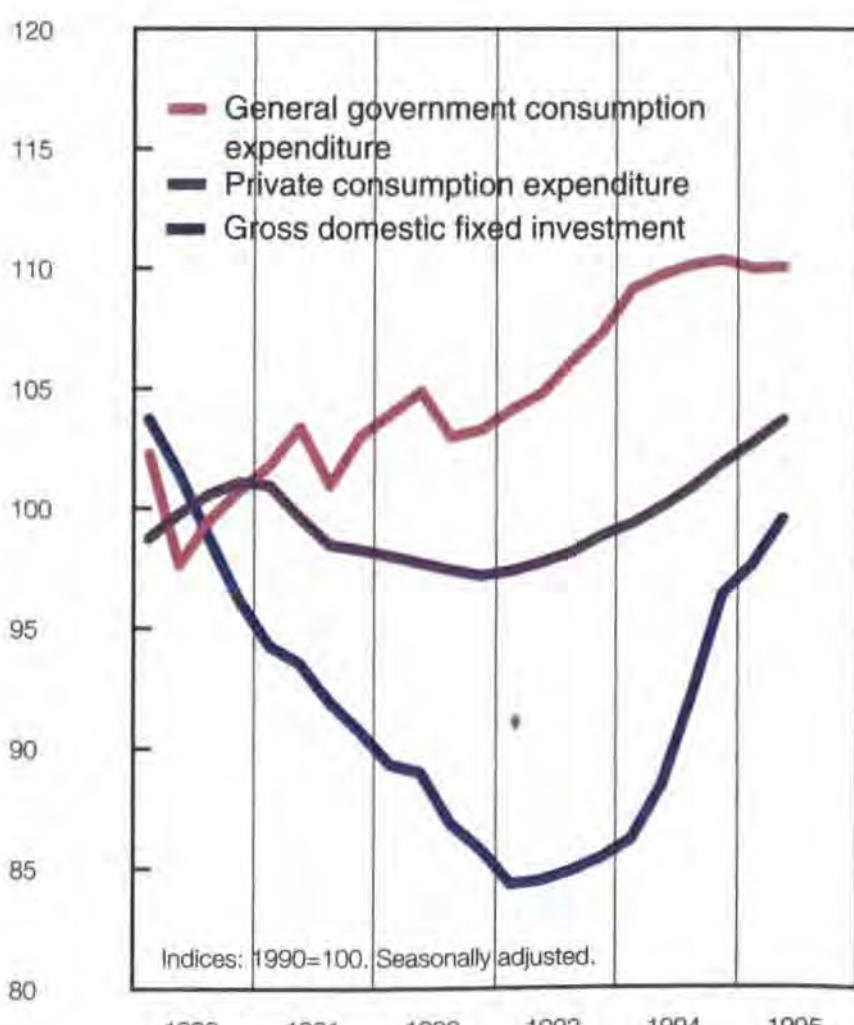


Table 2. Real gross domestic expenditure

Percentage change at seasonally adjusted and annualised rates

Components	1994				1995	
	1st qr	2nd qr	3rd qr	4th qr	1st qr	2nd qr
Private consumption expenditure	2	3	3½	4	3½	3½
Consumption expenditure by general government	7	2	1½	1	-1½	0
Gross domestic fixed investment	3½	10½	18	19½	5½	8
Change in inventories (R billions)	5,1	3,3	5,9	8,7	8,7	10,7
Gross domestic expenditure	4½	1½	10½	10	2	5½

expenditure was the result of further increases in private consumption expenditure, gross domestic fixed investment and inventories, while consumption expenditure by general government remained more or less on the level of the first quarter of 1995.

Real *private consumption expenditure* rose strongly in the first half of 1995, increasing in both the first and second quarter at an annualised rate of 3½ per cent. The sturdy growth in real outlays on consumer goods and services by households largely reflected increased expenditure on durable and semi-durable goods such as household appliances, transport equipment and clothing and footwear. Real household spending on non-durable goods edged slightly higher in the second quarter of 1995, while the growth in real spending on services moderated significantly on account of lower tourist spending abroad.

The sustained high rate of increase in the real outlays by households on consumer goods and services was supported by a somewhat stronger growth in real personal disposable income, owing, among other things, to an increase in dividend receipts from the corporate sector, some employment growth since the middle of 1994 and an improvement in the real wage per worker. The wider availability of consumer credit also encouraged household spending on goods and services.

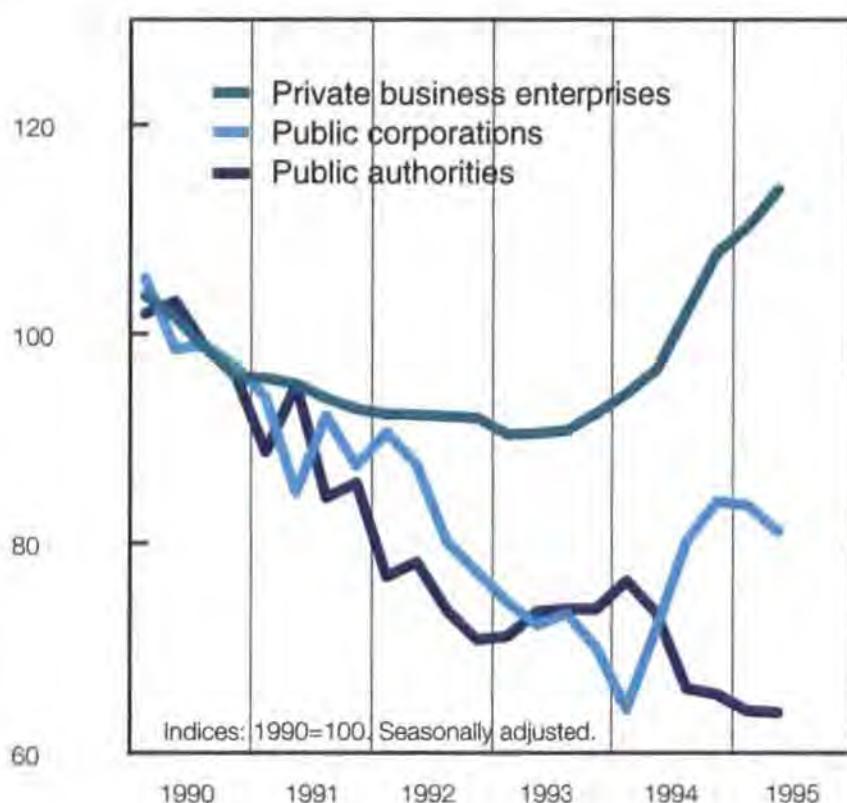
After having contracted at an annualised rate of 1½ per cent in the first quarter of 1995, real *consumption expenditure by general government* remained on this lower level in the second quarter of 1995. Measured over a period of twelve months, real consumption expenditure by general government in the first half of 1995 was only ½ per cent higher than in the corresponding period of the previous year; in calendar 1994 this expenditure still rose by 4 per cent.

Total real *gross domestic fixed investment* is estimated to have increased at an annualised rate of 8 per cent in the second quarter of 1995; this growth rate was higher than the 5½ per cent in the first quarter, but considerably lower than the 19 per cent in the second half of 1994. As a ratio of gross domestic product, fixed

capital formation has now increased from a lower turning-point of 15 per cent in the fourth quarter of 1993 to nearly 17 per cent in the second quarter of 1995. This additional increase in fixed investment was brought about by a significant expansion in the real outlays on capital goods by the private sector, while the capital expenditure by the public sector contracted.

The rate of increase in real *private-sector fixed investment* rose from an annualised level of 9½ per cent in the first quarter of 1995 to approximately 13½ per cent in the second quarter. In the initial stages of the current upswing of the fixed-investment cycle capital expenditure was mainly limited to a number of major projects, spurred by tax concessions relating to depreciation allowances.

Real gross domestic fixed investment



In the second quarter of 1995 increased capital outlays were evident in nearly all sectors of the economy. The expansion of investment activity seems to indicate that production capacity is being created in anticipation of continued growth in aggregate demand.

The ongoing increases in capital formation by the private sector could also be attributed to the direct and indirect effects of the major capital projects, a strong replacement demand and capacity expansions to capitalise on the relatively strong domestic and foreign demand for certain base metals, minerals and manufactured goods. Real fixed investment in the financial sector was boosted by the further increase in real outlays on private residential buildings, while capital expenditure on machinery and transport equipment, financed through instalment sale agreements and leasing contracts, remained brisk.

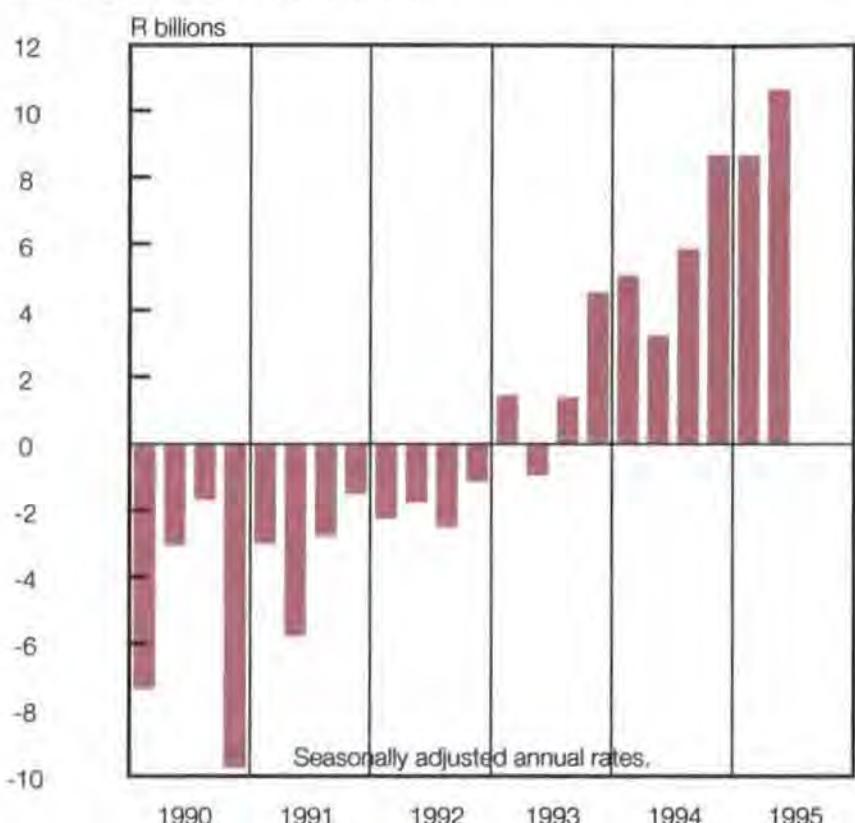
Real fixed investment by *public corporations* decreased at an annualised rate of 11½ per cent in the second quarter of 1995. A decline in the fixed investment by Eskom more than neutralised increases in investment expenditure by corporations involved in transportation and telecommunication services. Increases in real fixed investment by the central and provincial governments could not fully match the decline in investment expenditure by local authorities, but succeeded in slowing down the decline in total real fixed investment by all *public authorities* from an annualised rate of 9 per cent in the first quarter of 1995 to 1 per cent in the second quarter.

After having turned positive in the third quarter of 1993, inventory investment rose persistently throughout the current cyclical upswing of the economy. In the first two quarters of 1995 the real value of inventories rose very strongly mainly due to the accumulation of stocks in the mining sector, private manufacturing and wholesale, retail and motor trade. Agricultural stocks-in-trade, however, declined owing to the poor maize harvest. As a result of the further increase in industrial and commercial inventories, the level of these stocks relative to gross domestic product rose from a record low of 16 per cent in the fourth quarter of 1993 to more than 18½ per cent in the second quarter of 1995.

Factor income and saving

The growth in aggregate *nominal factor income* at market prices over a period of twelve months slowed down from 13 per cent in the first quarter to 11 per cent in the second quarter of 1995. This decline was due to lower growth in the total gross operating surplus; the year-on-year rate of increase in this aggregate contracted from 13½ per cent in the first quarter of 1995 to 10½ per cent in the second quarter owing to a deterioration in the profitability of the agricultural and mining sectors. In addition, the growth in total nominal labour remuneration over twelve months rose only slightly from 11½ per cent to not quite 12 per cent over the same period.

Change in real inventories



Despite the decline in factor-income growth, the ratio of *gross domestic saving* to gross domestic product in the second quarter of 1995 remained unchanged at 18 per cent for the third consecutive quarter. This compares favourably with an average ratio of 17½ per cent in 1994, but is still substantially lower than the long-term average of 23 per cent.

The recent more favourable development in domestic saving could be ascribed to a moderate improvement in net corporate saving and the lower level of net dissaving by general government. In contrast, the net saving by households declined somewhat from 2½ per cent of gross domestic product in the second quarter of 1994 to 1 per cent in the second quarter of 1995; as a ratio of personal disposable income, household saving contracted from 4 to 2 per cent over the same period. This could be attributed to the robust increase in households' real consumption expenditure, which exceeded the increase in total real personal disposable income.

Employment

The economic recovery took some time before it gathered sufficient momentum to reverse the downward movement in *total employment* in the non-agricultural sectors of the economy. Having reached a lower turning-point of the business cycle in the second quarter of 1993, it was only four quarters later that total employment showed any sign of responding to the improvement in overall economic activity. A modest increase in employment at a seasonally adjusted and annualised rate

Non-agricultural employment

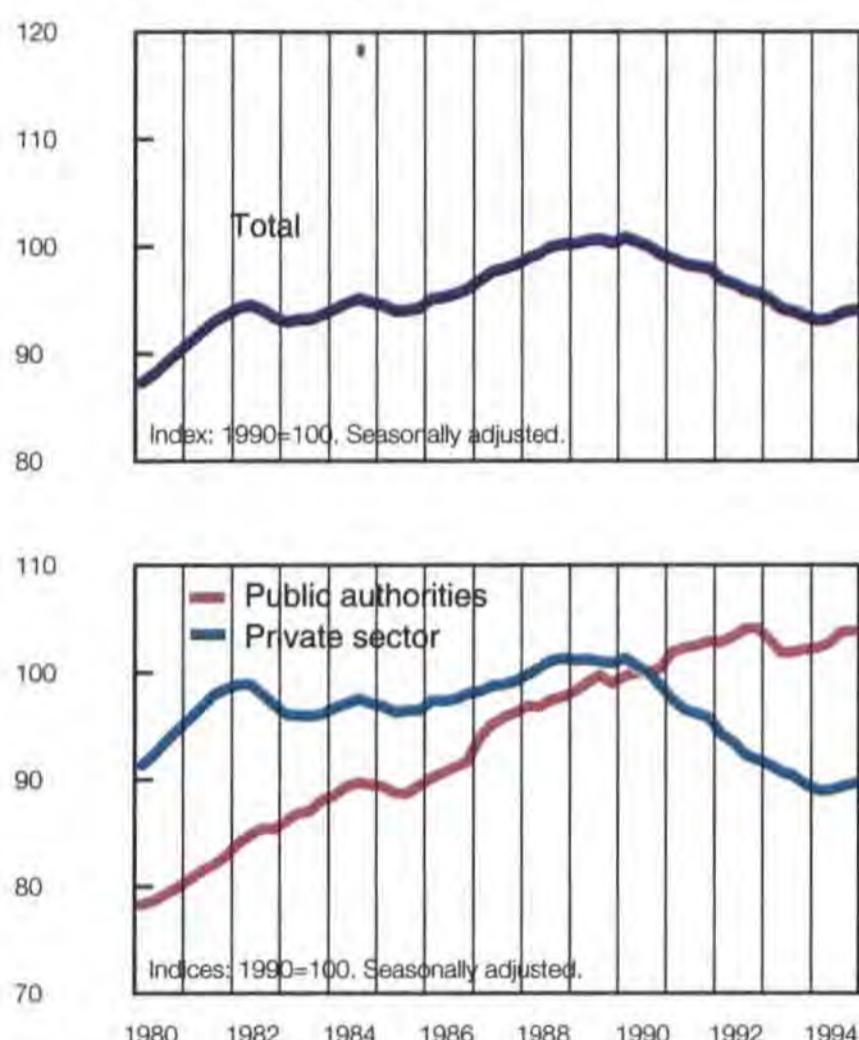


Table 3. Change in employment in the non-agricultural private sector from the second quarter of 1993 to the fourth quarter of 1994 by main economic sector

Sector	Employees (thousands)
Mining	-22,4
Manufacturing	10,4
Construction	-2,5
Electricity supply	-2,9
Wholesale trade	2,4
Retail trade	-31,5
Motor trade	3,1
Private road transport	-1,1
Banks	2,9
Other	0,9
Total	-41,3

quarter. The average level of employment in the private sector nevertheless still declined by 1,4 per cent in 1994 as a whole. As a result, total employment in the private sector was still some 41 300 persons less than at the end of the recession in the second quarter of 1993.

Table 3 clearly illustrates the reluctance of private business undertakings in many of the major *non-agricultural economic sectors* to increase employment. The levels of employment in the retail trade and the mining sector, in particular, were far below those at the end of the recent recession. No net gains in employment were registered in construction, electricity supply and private road transportation in the first six quarters of the economic recovery, while the number of people employed in manufacturing, wholesale and motor trade, banks and other services increased moderately.

In sharp contrast to these changes in private-sector employment, employment by *public authorities* advanced further by 34 400 net new jobs from the second quarter of 1993 to the fourth quarter of 1994. Employment by public authorities increased persistently throughout the recession of 1989-93, except in the first half of 1993. More recently, the quarter-to-quarter increase in total employment by public authorities accelerated from a seasonally adjusted and annualised rate of 0,4 per cent in the first quarter of 1994 to 4,2 per cent in the third quarter; this rate then declined slightly to 0,3 per cent in the fourth quarter of 1994. An increase of 0,9 per cent was recorded in calendar 1994 in the average level of employment by public authorities.

Labour costs and productivity

The many imperfections in South Africa's labour market kept on preventing wage demands and settlements from reflecting the growing excess supply of labour. This can

of 0,6 per cent in the second quarter of 1994 was then followed by a stronger increase of 2,5 per cent in the third quarter and 0,9 per cent in the fourth quarter of 1994 (latest information made available by the Central Statistical Service). Despite these quarterly increases, the average level of employment in the calendar year was still 0,6 per cent lower than in 1993 – the fifth consecutive annual decline in aggregate employment.

During this period the economically active population advanced at a rate of 2,5 per cent per year. The number of *unemployed people* accordingly increased substantially, while the so-called informal sector became progressively larger. According to official statistics, no less than 43 out of every 100 economically active persons were either unemployed or involved in the informal sector in October 1994. These figures clearly illustrate the urgency of improving the labour-absorption capacity of the economy to maintain internal stability.

The sluggish reaction of total employment to the upturn in economic activity was caused by the unwillingness of *private-sector* employers to expand the size of their work-force. Increases in private-sector employment only took place in the second half of 1994; employment rose at seasonally adjusted and annualised rates of 1,6 and 1,2 per cent in the third and fourth

be seen from the year-to-year rate of increase in *nominal remuneration per worker*, which rose from a lower turning-point of 10,5 per cent in 1993 to 11,9 per cent in 1994. Moreover, the year-on-year rate of increase in nominal remuneration per worker accelerated sharply from a low point of 9,0 per cent in the fourth quarter of 1993 (the first single-digit rate of increase since the fourth quarter of 1985) to 14,6 per cent in the second quarter of 1994; it then declined somewhat to 11,6 per cent in the fourth quarter of 1994.

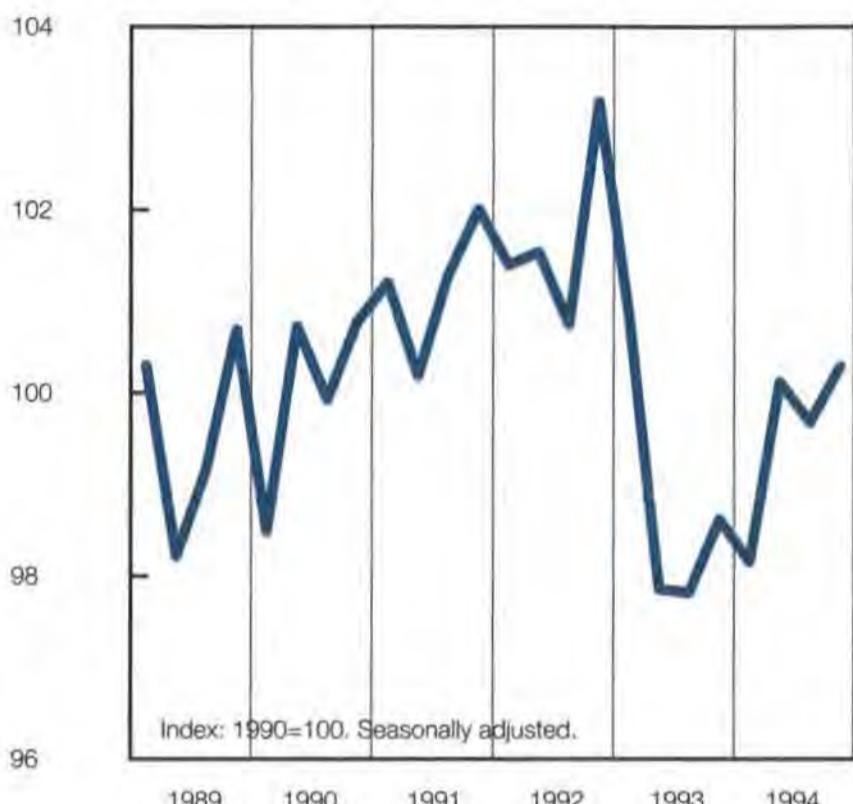
Wage increases in the *private sector* were driven to a significant extent by demands for a living wage. The year-to-year rate of increase in nominal remuneration per worker in the non-agricultural private sector nevertheless decreased from a high point of 17,0 per cent in 1990 to 10,2 per cent in 1994. Measured over a period of four quarters, the rate of increase in nominal remuneration per worker in the private sector declined uninterruptedly from 15,4 per cent in the fourth quarter of 1992 to 9,5 per cent in the first quarter of 1994; it then rose to 11,4 per cent in the third quarter of 1994 before slowing down to 9,5 per cent in the fourth quarter.

The nominal remuneration per worker employed by *public authorities*, which had contracted from 21,6 per cent in 1989 to only 9,2 per cent in 1993, advanced to 14,6 per cent in 1994. On a quarterly basis, the year-on-year rate of increase in nominal remuneration per worker employed by public authorities rose even more sharply from only 5,6 per cent in the fourth quarter of 1993 to 21,4 per cent in the second quarter of 1994. This exceptionally high rate of expansion was, however, caused by special circumstances at the time of the general election in April 1994. The rate of increase in the nominal wage per worker employed by public authorities then declined somewhat to 14,6 and 15,2 per cent in the last two quarters of 1994.

The inability of the domestic labour market to adapt meaningfully to underlying labour-market conditions is confirmed by the changes observed in *real remuneration per worker*. The real remuneration per worker increased by no less than 3,0 per cent in 1994. The year-on-year rate of change in real remuneration per worker also accelerated sharply from a negative 0,6 per cent in the fourth quarter of 1993 to positive figures of 4,9, 3,8 and 3,6 per cent in the last three quarters of 1994, respectively.

The rate of increase in *labour productivity* in the non-agricultural sectors of the economy moved ahead from 0,4 per cent in 1991 to 2,8 and 2,4 per cent in 1993 and 1994 largely owing to the reduction in the number of workers employed in the formal sectors of the economy. The average annual rate of increase of 1,7 per cent since 1991 was significantly higher than the 0,3 per cent per annum during the 1980s. However, the year-on-year rate of increase in the real production per worker declined from a high point of 4,0 per cent in the fourth quarter of 1993 to 1,9 per cent in the third and fourth quarter of 1994. These lower rates of increase in labour productivity were partly the result of a significant increase

Non-agricultural real unit labour costs



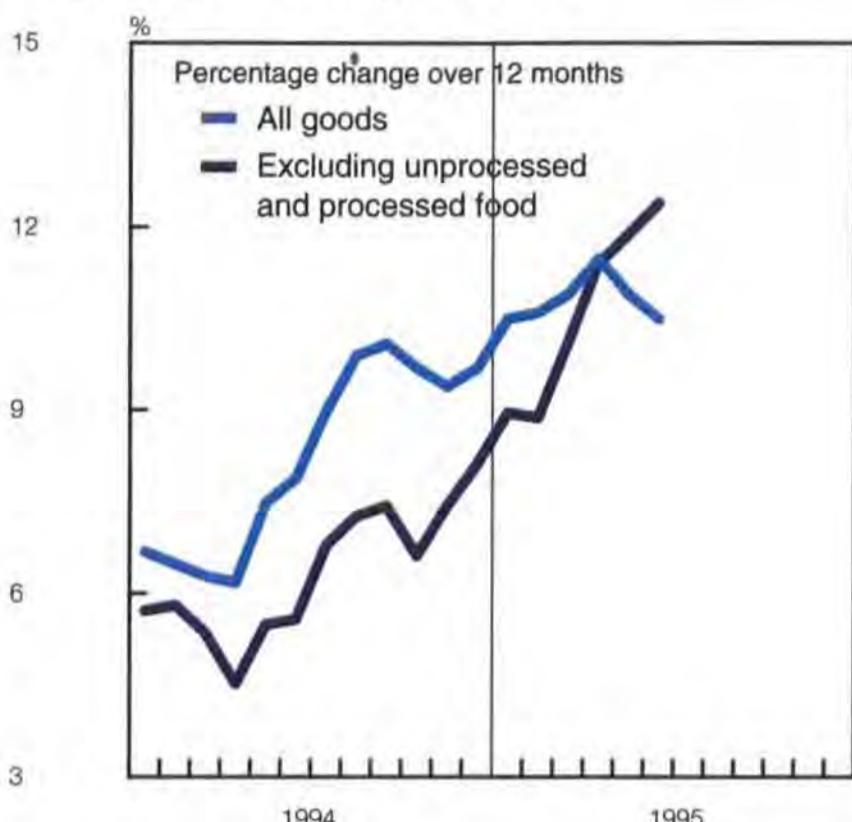
in the number of man-days lost on account of strikes and other work stoppages in the second half of 1994. These conditions improved significantly in the first half of 1995.

Seeing that the rise in labour productivity was lower than the increase in real remuneration per worker, *real unit labour costs* (measured over four quarters) began to increase again at rates of 2,3, 1,9 and 1,7 per cent in the last three quarters of 1994. For the year as a whole it rose by 0,7 per cent; in 1993 real unit labour costs had declined by 2,9 per cent. The rise in real unit labour costs, of course, has serious implications for inflation and the capacity of the economy to create jobs.

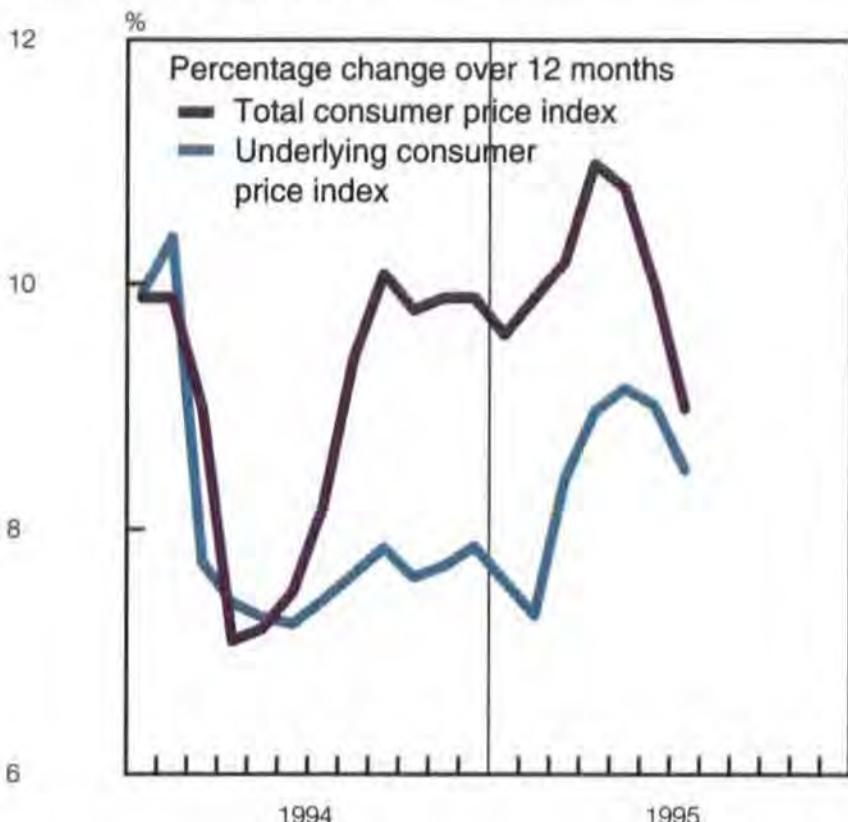
Prices

Despite the upward movement in real unit labour costs, the rate of increase in both the production and the consumer price index declined somewhat from the second quarter of 1995. The better performance of these price indices was, however, mainly brought about by a decline in food prices, more specifically in the prices of fresh meat, vegetables and fruit. The rise in the so-called underlying rate of inflation in the South African economy, which had started from the second quarter of 1994, recently also abated somewhat. A strong demand-pull on inflation still exists, as is evident from rapid rates of increase in credit extension and the money supply, as well as the high rate of capacity utilisation in manufacturing. In the first quarter of 1995 the utilisation of production capacity in manufacturing was only 1,9 percentage points below the level recorded at the end of the economic upswing of 1986-89.

All-goods production price index



Consumer price index



The quarter-to-quarter rate of increase in the all-goods *production price index*, which had accelerated from 5.6 per cent in the fourth quarter of 1994 to 13.2 per cent in the first quarter of 1995, declined again to 11.1 per cent in the second quarter. Similarly, the rate of increase in the all-goods production price index measured over periods of twelve months also declined somewhat from a high point of 11.5 per cent in April 1995 to 10.5 per cent in June. This downward movement was mainly discernible in the prices of domestically produced goods, although the greater stability in the external value of the rand caused the rise in the prices of imported goods to level off. More specifically, the decrease in production price inflation was brought about by changes in food prices. If the prices of processed and unprocessed food are excluded from the production price index, the twelve-month rate of increase in other prices accelerated from a lower turning-point of 4.5 per cent in April 1994 to 11.4 per cent in April 1995 and further to 12.4 per cent in June 1995.

The rate of increase over periods of twelve months in the overall *consumer price index* also retreated significantly from a recent high of 11.0 per cent in April 1995 to 10.0 per cent in June and 9.0 per cent in July. However, the so-called underlying inflation rate (as measured by the overall consumer price index, excluding food and non-alcoholic beverages, the costs of home-ownership and value-added tax) did not decline to the same extent. Measured over a period of twelve months, the underlying rate of inflation rose sharply from a low of

7.3 per cent in February 1995 to 9.2 per cent in May and then receded to 8.5 per cent in July. This implies, of course, that other factors, such as strong aggregate domestic demand, increases in labour costs and the efforts by the private business community to restore their profit margins after the drawn-out recession, are preventing a prolonged decline in the rate of inflation. The quarter-to-quarter rate of increase in the overall consumer price index also rose from a seasonally adjusted and annualised rate of 8.5 per cent in the fourth quarter of 1994 to 10.9 per cent in the second quarter of 1995.

Foreign trade and payments

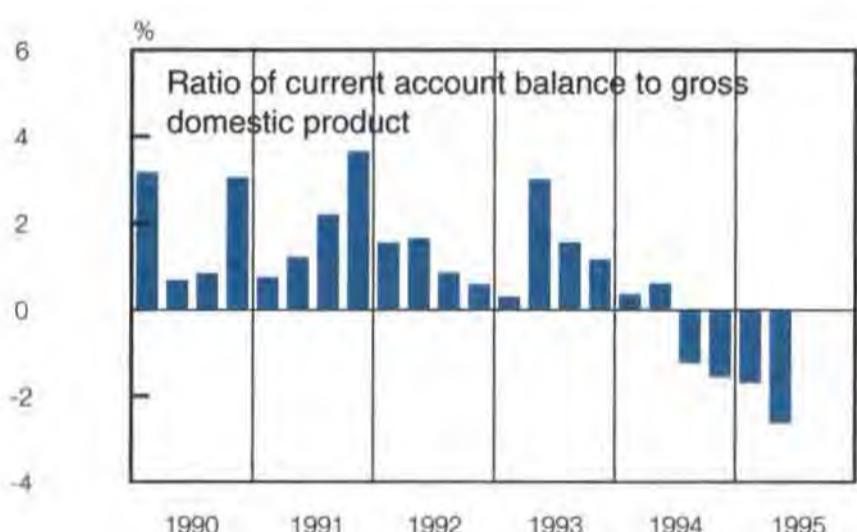
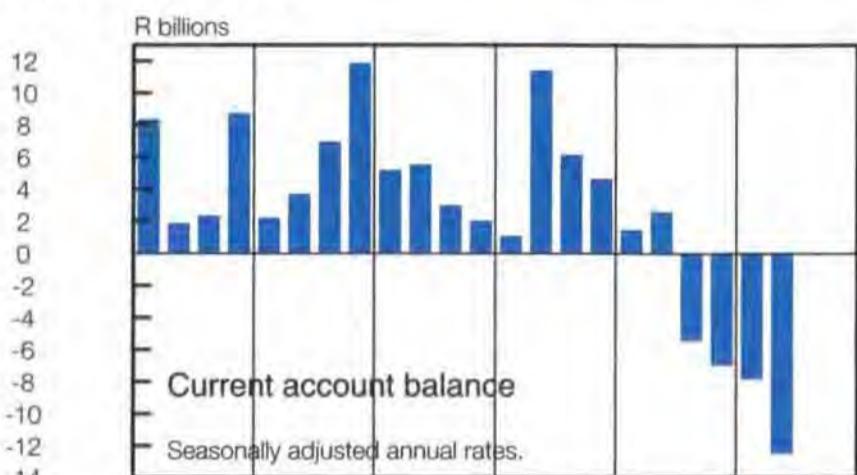
Current account

The balance on current account of the balance of payments (seasonally adjusted and annualised), which had moved into a deficit at a quarterly average of R6,2 billion in the second half of 1994, displayed further deficits of R7,8 billion in the first quarter of 1995 and R12,5 billion in the second quarter. As a percentage of gross domestic product, the deficit on current account rose from 1,7 per cent in the first quarter of 1995 to 2,6 per cent in the second quarter; during 1994 as a whole this ratio had averaged 0,5 per cent. The weaker current account balance in the second quarter of 1995 was the combined result of a strong increase in the value of merchandise imports and a decline in the value of merchandise exports and net gold exports. Net service and transfer payments to non-residents contracted in this quarter.

The value of merchandise imports advanced further from the already high seasonally adjusted and annualised rate of R94,4 billion in the first quarter of 1995 to R97,7 billion in the second quarter, or by 3½ per cent. Pronounced increases were recorded in the imports of manufactured goods, particularly in the categories machinery and electrical equipment, transport equipment and textiles. In addition, the imports of maize led to a significant increase in the import category vegetable products over this period. The value of mineral imports (mainly crude oil), on the other hand, declined marginally in the second quarter of 1995; the exceptionally high level of the preceding quarter was therefore more or less maintained.

The higher value of merchandise imports in the second quarter of 1995 was mainly the result of an increase in import prices together with a small increase in import volumes; the physical quantity of imported goods rose by about ½ per cent. Owing to moderately higher oil prices and other foreign production prices and a decline

Current account



in the average effective exchange rate of the rand, import prices rose by almost 3 per cent in the second quarter of 1995.

The value of merchandise exports (seasonally adjusted and annualised) contracted from R81,8 billion in the first quarter of 1995 to R79,4 billion in the second quarter. This decline was more than fully accounted for

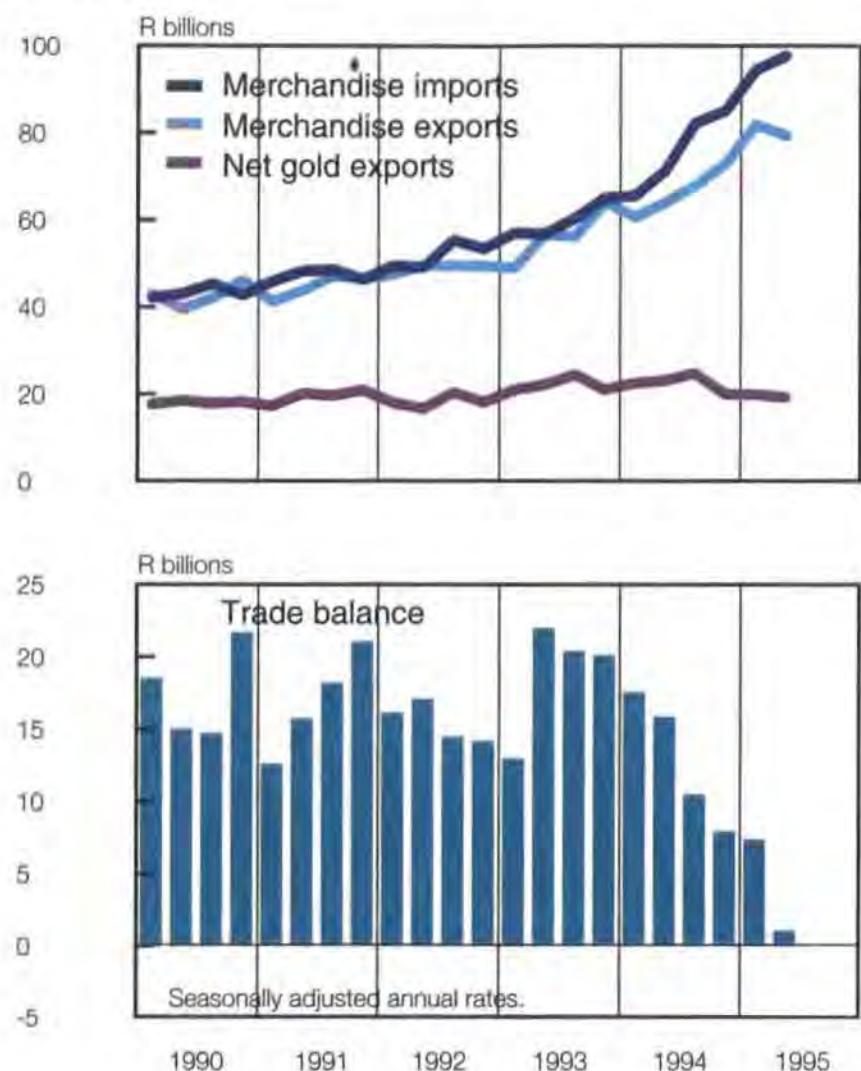
Table 4. Balance of payments on current account

Seasonally adjusted and annualised rates

R billions

	1994				1995	
	1st qr	2nd qr	3rd qr	4th qr	1st qr	2nd qr
Merchandise exports	60,6	64,0	67,9	73,0	81,8	79,4
Net gold exports.....	22,6	23,2	24,8	20,1	20,0	19,3
Merchandise imports	-65,6	-71,3	-82,3	-85,1	-94,4	-97,7
Net service and transfer payments.....	-16,1	-13,3	-15,8	-15,0	-15,2	-13,5
Balance on current account.....	1,5	2,6	-5,4	-7,0	-7,8	-12,5

Trade account



by a decrease of 5 per cent in the volume of goods exported, reflecting the weaker export performance of mining and manufactured exports. The exports of agricultural goods also receded somewhat because of the drought experienced in the course of 1994. The depreciation of the rand against the dollar caused export prices to advance by 2 per cent from the first to the second quarter.

After having declined persistently from a seasonally adjusted and annualised value of R24,8 billion in the third quarter of 1994 to R20,0 billion in the first quarter of 1995, the value of *net gold exports* shrank further to R19,3 billion in the second quarter. As in the previous two quarters, this decrease could mainly be attributed to a decline in the volume of net gold exports; the physical quantity of net gold exports dropped by a further 8½ per cent in the second quarter because of continued labour disruptions. The average fixing price of gold rose from \$379 per fine ounce in the first quarter of 1995 to \$388 in the second quarter, or from R1 352 to R1 413 per fine ounce. However, it then retreated to \$386 (R1 406) per fine ounce in July.

Net service and transfer payments to non-residents declined from a seasonally adjusted and annualised value of R15,2 billion in the first quarter of 1995 to R13,5 billion

in the second quarter. This relatively sharp decline was caused by a drop of R1,9 billion in service payments, which was well in excess of the decline of R0,2 billion in receipts for services rendered to non-residents. A decline in interest and dividend payments to non-resident investors and lower tourist spending by South Africans travelling abroad, were mainly responsible for the decrease in service payments.

Capital account

The total net inflow of capital not related to reserves declined from R5,4 billion in the first quarter of 1995 to R4,4 billion in the second quarter; in the first half of 1995 the net inflow of capital nevertheless amounted to R9,8 billion, which was somewhat higher than the inflow of R8,8 billion in the second half of 1994.

The inflow of capital in the second quarter of 1995 consisted largely of long-term funds: a net inflow of long-term capital of R3,7 billion was registered. The proceeds of the government debt issue on the Samurai market to the amount of R1,3 billion were responsible for the further net inflow of long-term funds to public authorities; in total, a net amount of R1,1 billion flowed to the public authorities in the second quarter. In addition, public corporations and the banking sector became small net borrowers to the amounts of R0,2 billion and R0,6 billion, respectively. At the same time, the net inflow of long-term capital to the private sector increased from R1,1 billion in the first quarter of 1995 to R1,9 billion in the second quarter. Included in the last-mentioned amount were net purchases by non-residents of securities listed on the Johannesburg Stock Exchange, as well as over-the-counter transactions, of R2,3 billion.

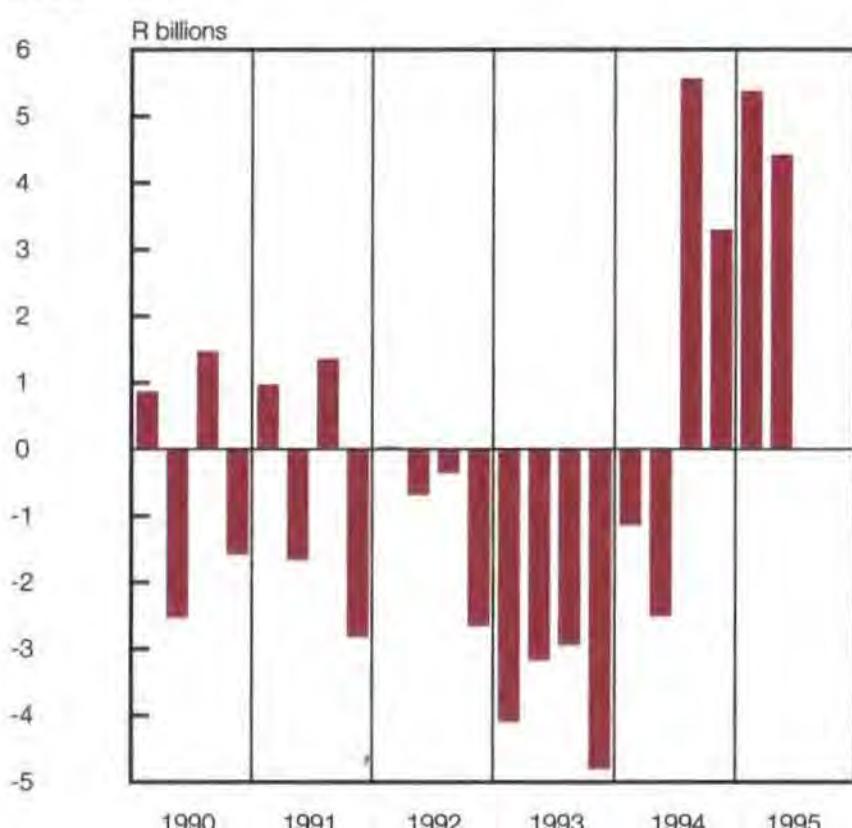
Short-term capital movements (excluding reserve-related liabilities, but including unrecorded transactions) decreased sharply from a net inflow of R4,8 billion in the first quarter of 1995 to an inflow of R0,7 billion in the second quarter. The full outstanding amount of R1,9

Table 5. Net capital movements not related to reserves

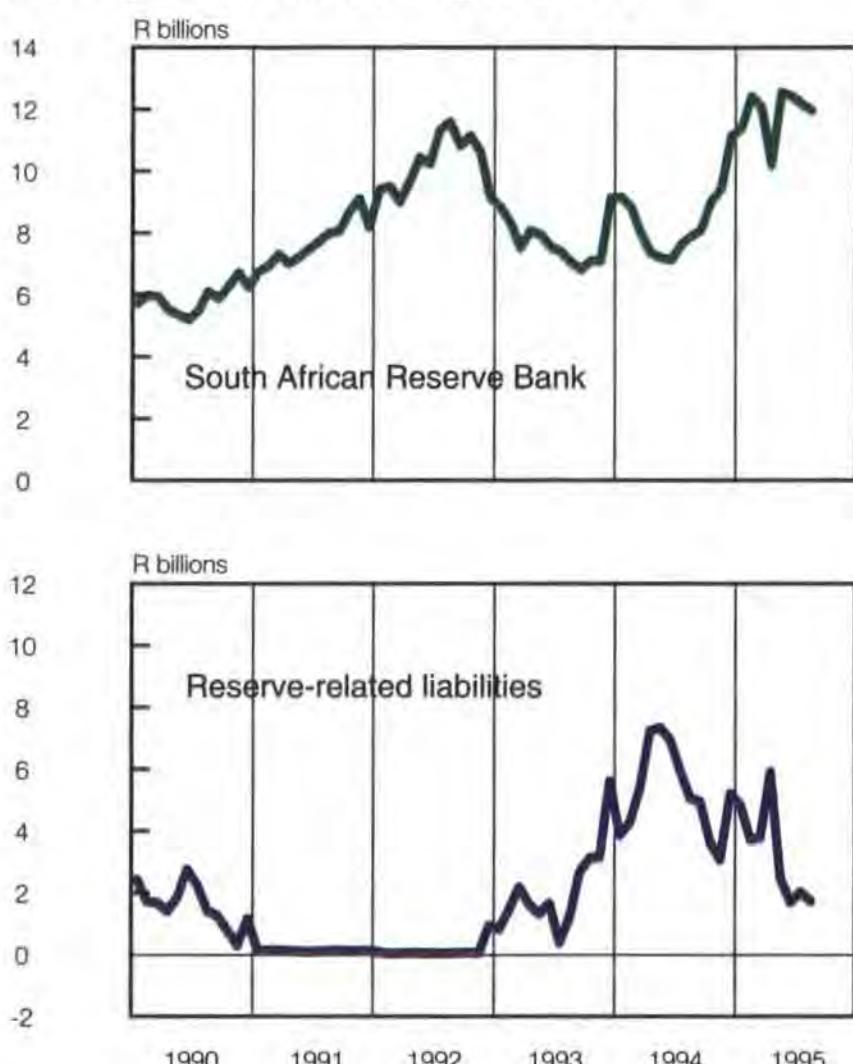
R billions

	1st qr 93 to 2nd qr 94	3rd qr 94 to 2nd qr 95	1st qr 93 to 2nd qr 95
Long-term capital			
Public authorities	-2,5	5,1	2,6
Public corporations..	-3,2	1,0	-2,2
Private sector	2,1	2,9	5,0
Total	-3,6	9,0	5,4
Short-term capital.....	-15,1	9,6	-5,5
Total capital	-18,7	18,6	-0,1

Total net capital movements not related to reserves



Gross gold and other foreign reserves



billion raised from sales of three-month Treasury bills to non-residents in the last quarter of 1994 and the first quarter of 1995 was repaid in the second quarter. Moreover, the somewhat more expensive cost of forward cover may possibly have encouraged importers to make less use of foreign trade financing. Banks, however, continued to borrow funds for the financing of their own activities to the amount of R2,3 billion during the second quarter of 1995.

The capital movements in the second quarter of 1995 brought the total net inflow of capital to R18,6 billion in the twelve months up to the end of June 1995. As shown in Table 5, this net inflow of capital was virtually equal to the net outflow of capital in the preceding eighteen months. However, over the whole period of 2½ years the maturity structure of South Africa's commitments to non-residents improved because of a sharp switch from short- to long-term net indebtedness. Furthermore, it is interesting to note from the table that public authorities and the private sector experienced a large net inflow of long-term capital over the whole period, while the net long-term indebtedness of public corporations was reduced.

Foreign reserves

The net result of the large deficit on the current account of the balance of payments and the even larger net inflow of capital not related to reserves was an increase of R1,1 billion in South Africa's *net gold and other foreign reserves* in the second quarter of 1995; in the twelve months to

June 1995 the net foreign reserves have now increased by R10,6 billion. This improved overall balance of payments position enabled the Reserve Bank to reduce its reserve-related liabilities from R8,5 billion at the end of April 1994 to only R1,7 billion at the end of June 1995.

South Africa's *gross gold and other foreign reserves* decreased by R0,9 billion in the second quarter to R15,2 billion at the end of June 1995. Although this level of foreign reserves was equivalent to only six weeks' imports of goods and services, it was considerably higher than the gold and other foreign reserves of R9,7 billion at the end of June 1994. Moreover, the foreign reserves at the end of June 1995 consisted mainly of "non-borrowed" reserves instead of the overwhelmingly "borrowed" reserves at the end of June 1994.

In July and August 1995 the *gross gold and other foreign reserves* of the Reserve Bank decreased by R0,5 billion to a level of R11,9 billion at the end of August, while the Bank's net foreign reserves declined by R0,3 billion.

Exchange rates

After having weakened by almost 6 per cent from the end of December 1994 up to 10 March 1995 (i.e. the period prior to the abolition of the dual exchange rate system), the *nominal effective exchange rate* of the rand

Table 6. Changes in the exchange rates of the rand

Per cent

	*31 Dec 1994 to 10 Mar 1995	10 Mar 1995 to 30 Jun 1995	30 Jun 1995 to 31 Aug 1995	31 Dec 1994 to 31 Aug 1995
Weighted average....	-5,8	-0,5	2,5	-3,8
US dollar	-2,4	-0,2	-0,5	-3,2
British pound.....	-5,3	0,7	2,3	-2,5
German mark.....	-11,7	-1,6	5,5	-8,3
Japanese yen.....	-10,7	-7,3	14,5	-5,3
Netherlands guilder..	-11,6	-1,7	5,6	-8,2
Italian lira	-0,1	-1,8	-1,6	-3,5

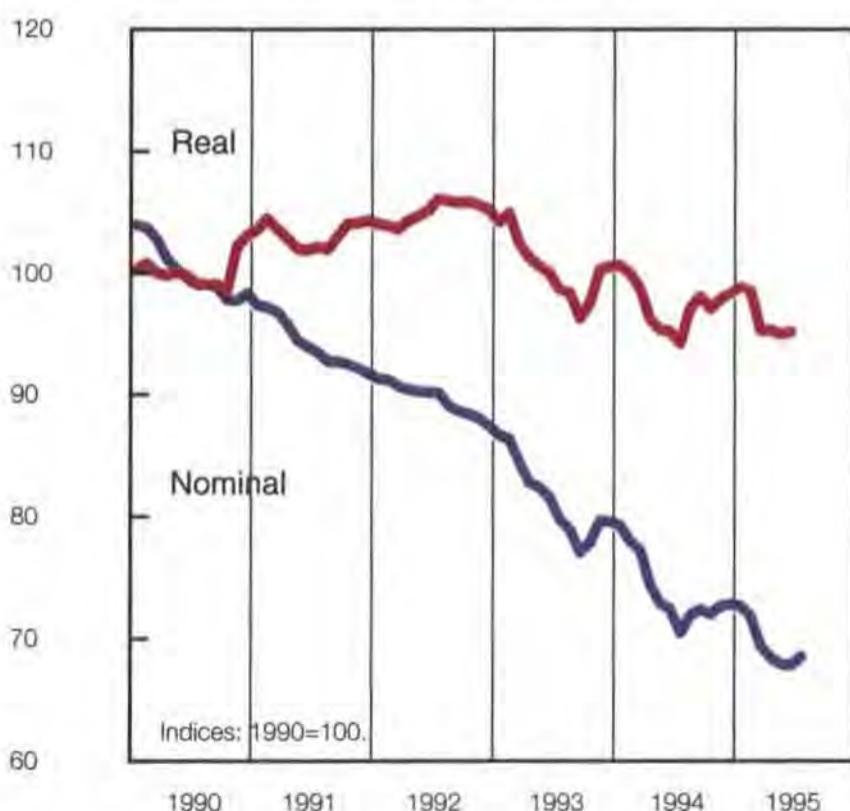
decreased by only 0,5 per cent in the ensuing period until 30 June 1995. This relatively steady performance of the average weighted exchange rate of the rand was the result of a marginal depreciation of the rand against all the main currencies, except the British pound. The rand, however, depreciated sharply against the Japanese yen over this period on account of the relative strength of this currency in the international foreign exchange markets.

In the period from the end of June 1995 to the end of August 1995, the rand appreciated again vis-à-vis all the major currencies, except the US dollar and the Italian lira.

The strength of the US dollar against the Japanese yen, German mark and Netherlands guilder in the last half of August 1995 caused a marked appreciation of the rand against these currencies. As a result of these changes, the nominal effective exchange rate of the rand rose by about 2½ per cent in July and August 1995. In the first eight months of 1995 the nominal effective exchange rate of the rand declined, on balance, by nearly 4 per cent.

The *real effective exchange rate* of the rand declined by 3½ per cent from December 1994 to June 1995. This brought the real effective exchange rate of the rand to nearly 10 per cent below its peak in July 1992.

Effective exchange rates of the rand



Monetary developments, interest rates and financial markets

Money supply

After having receded from a peak of 16,9 per cent in July 1994 to 11,8 per cent in February 1995, the twelve-month rate of increase in the *broadly defined money supply* (M3) accelerated again to 16,8 per cent in June 1995. The monthly values of M3 (seasonally adjusted), which had started the 1995 guideline year below the lower limits of the "cone" but within the "tunnel", accordingly moved above the upper limit of the cone in March 1995 and above the tunnel in April 1995. In fact, the preliminarily estimated seasonally adjusted monthly value of M3 in July 1995 was R12,8 billion, or 5,0 per cent, higher than the corresponding value of the upper limit of the guideline "cone". The growth rate in the seasonally adjusted value of M3 from the base of the guideline year amounted to an annualised rate of 17,9 per cent, compared with the upper limit of the guideline range of 10 per cent.

As shown in Table 7, the growth rates in the *narrower monetary aggregates*, with the notable exception of M1, broadly displayed the same growth pattern as M3. The twelve-month rate of increase in M1 continued to decline from a turning-point of as much as 32,7 per cent in July 1994 to 7,3 per cent in May 1995 and then rose only slightly to 7,8 per cent in June. This clearly reflected a

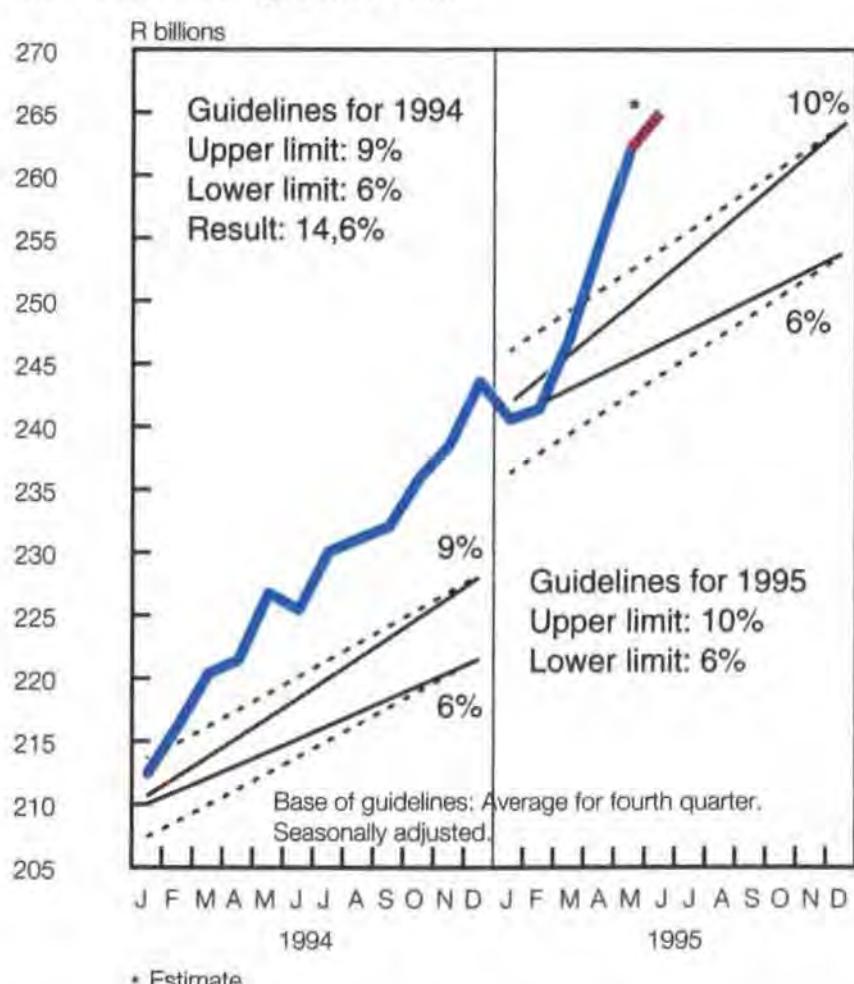
Table 7. Percentage change in money supply over twelve months

Period	M1A	M1	M2	M3
1994: July	28,2	32,7	19,5	16,9
December ...	24,8	23,7	20,6	15,7
1995: March.....	6,6	10,4	12,6	12,2
April.....	11,6	9,4	15,8	14,9
May.....	11,3	7,3	15,6	15,9
June.....	17,0	7,8	15,6	16,8

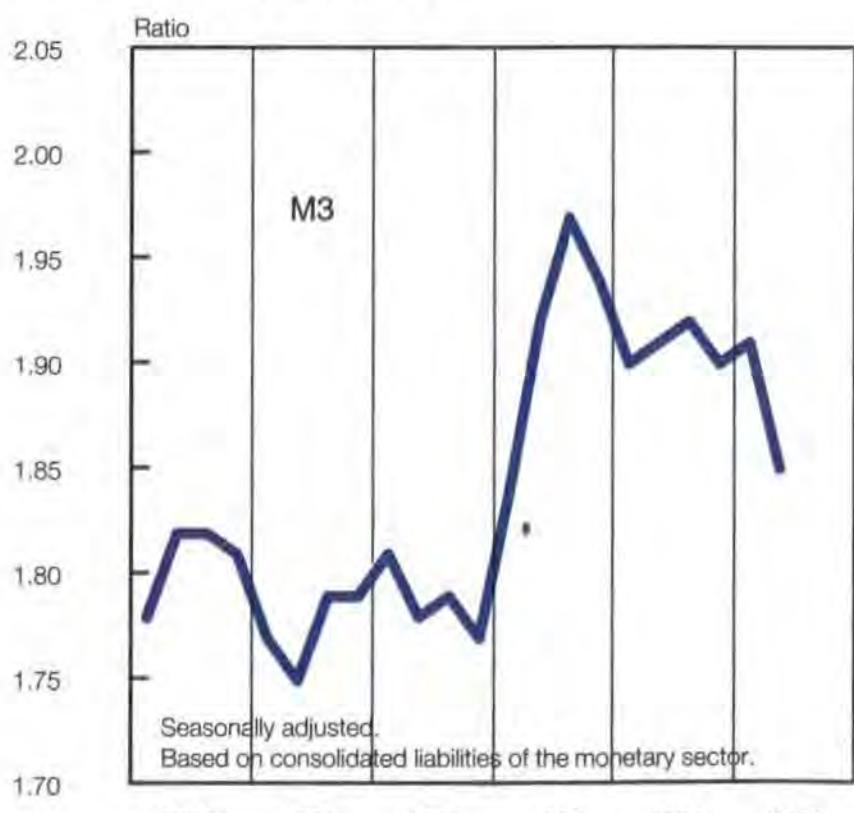
shift from demand deposits (other than cheque and transmission deposits) to medium- and long-term deposits, probably based on expectations that longer-term interest rates and yields had reached a peak and would start declining.

The quarter-to-quarter rates of increase in all the monetary aggregates also accelerated sharply in the second quarter of 1995. Because the money stock is demand-determined under the present monetary control system, this more rapid rate of increase in the monetary aggregates probably reflected mainly the sharp growth in real gross domestic expenditure. Reintermediation was another factor which could have contributed to the high rates of increase in the money supply in the second quarter of 1995. A narrowing of the margin between

Guidelines for growth in M3



Income velocity of money



banks' deposit and lending rates, as experienced in the first six months of 1995, normally favours the intermediation process. This is confirmed by developments in the *income velocity of circulation* of M3: after remaining fairly constant throughout 1994 and the first quarter of 1995, the income velocity of circulation declined by 3,0 per cent in the second quarter of 1995.

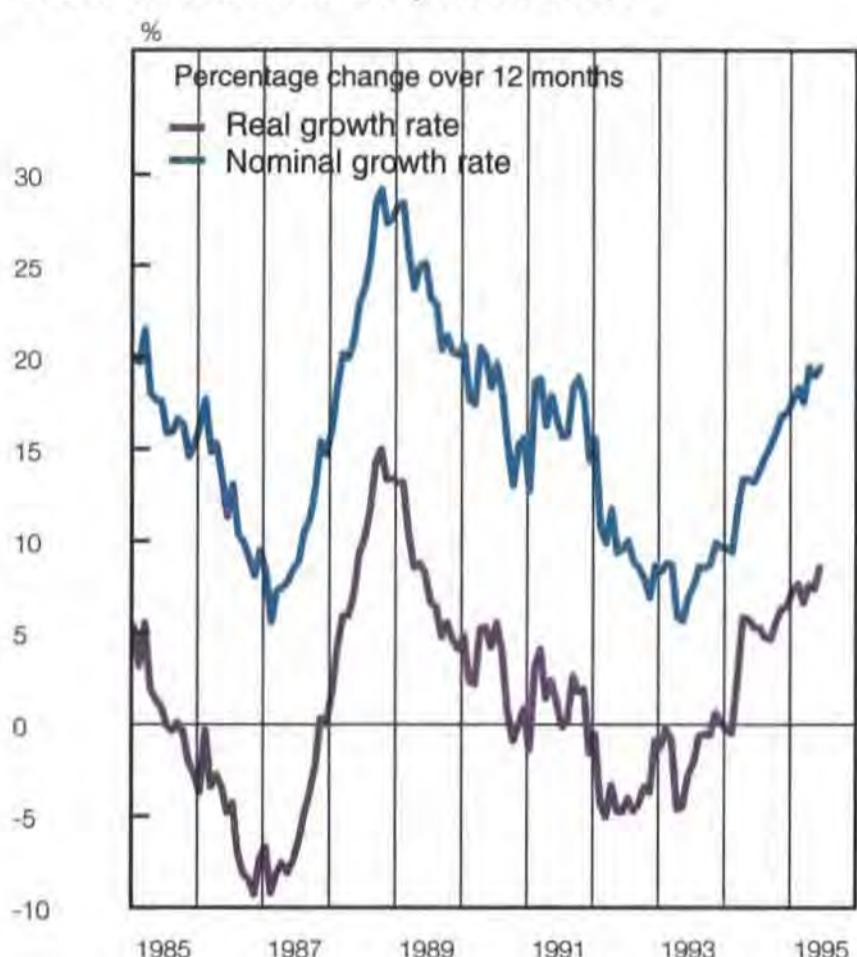
The *main counterparts* (in a statistical or accounting sense) of the R12,3 billion increase in M3 in the second quarter of 1995 were increases of R11,6 billion in total domestic credit extension and R4,2 billion in the so-called net other assets and liabilities of the monetary sector. In contrast to these developments, the net foreign assets of the monetary institutions decreased by R3,4 billion: a decline in the total gross gold and other foreign reserves and a substantial increase in the foreign loans of private banks more than offset the decline in the reserve-related liabilities of the Reserve Bank.

Credit extension

The growth in *total domestic credit extension* by the banking sector over twelve-month periods, which had receded from 19,9 per cent in December 1994 to 13,0 per cent in March 1995, rose again to 15,3 per cent in June 1995. This higher growth in credit extension by the monetary sector in the second quarter of 1995 was due to increases both in credit extension to the private sector and in the net claims on the government sector. The net credit extended to the *government sector* rose sharply, by R2,5 billion, as a result of an increase of R5,5 billion in the gross claims on the government, which was neutralised partly by a rise of R3,0 billion in government deposits with monetary institutions.

Credit extension to the *private sector* continued to grow at substantially higher twelve-month rates of increase than the broad money supply in the second quarter of 1995, largely because of a strengthening in consumer confidence following the successful outcome of the April 1994 elections and credit becoming available to individuals who did not previously qualify for bank loans. The fact that an increasing proportion of domestic expenditure was financed by means of bank credit led to

Credit extension to the private sector



an almost uninterrupted rise in the twelve-month growth rate in credit extended by monetary institutions to the private sector from a trough of 5,7 per cent in May 1993 to 19,5 per cent in April 1995; this rate then fluctuated around this high level in the next two months. These growth rates exceeded the rate of inflation as measured by changes in the consumer price index, with the result that real credit extension to the private sector increased by 8,6 per cent over the twelve months up to June 1995.

An analysis of monetary institutions' claims on the private sector by *type of credit* shows that the R9,2 billion

Table 8. Percentage change over twelve months in credit extension to the private sector by main type of credit

Period	Investments and bills	Instalment sales	Leasing finance	Mortgages	Other loans and advances	Total
1994: December	28,0	27,6	7,2	17,9	12,8	17,0
1995: March.....	33,6	25,4	7,9	19,6	12,2	17,6
April.....	28,1	26,8	9,0	19,3	18,2	19,5
May.....	23,2	28,1	9,5	19,6	16,7	19,1
June.....	27,0	27,8	13,8	19,5	16,7	19,5

increase in credit extension to the private sector in the second quarter of 1995 could largely be ascribed to increases of R4,6 billion in mortgage advances, R2,3 billion in instalment sales credit and R1,5 billion in so-called "other loans and advances" (including current account overdrafts). These three types of credit extension therefore represented about 92 per cent of the increase in credit extension to the private sector during the three months ended June 1995.

The rate of increase over twelve months in mortgage advances fluctuated around a level of 19½ per cent in the second quarter of 1995, notwithstanding a lower rate of expansion of activity in the real estate market. These accounts have been used increasingly by borrowers to finance purchases of durable and other consumer goods in view of the flexibility of some of the mortgage schemes of banks and the comparatively low interest rates on mortgage advances. Banks promoted this credit facility on account of the low capital requirements applicable to it and the low credit risk of such loans.

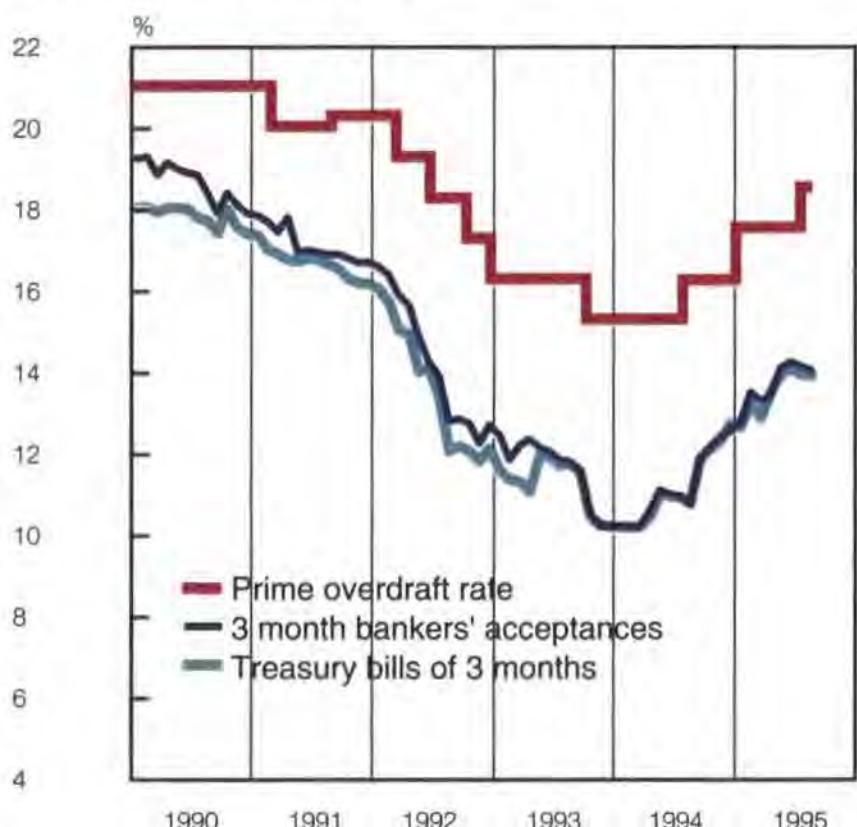
In contrast to the relative stability in the twelve-month growth rate of mortgage advances, the corresponding growth rates in instalment sales credit and "other loans and advances" rose in the second quarter of 1995. The buoyant demand for these types of credit was also due to the financing of outlays on consumer durables, particularly purchases of new and used motor vehicles. Leasing finance, which had remained subdued during 1994 and the first five months of 1995, rose sharply in June 1995 to a level above the rate of inflation recorded over a period of twelve months.

Interest rates and yields

The *yield curve* shifted to a slightly lower level during the first half of 1995 and flattened somewhat more as short-term rates moved higher in response to the tightening of the monetary policy stance while long-term yields declined slightly. The increase in Bank rate on 22 February 1995 by one percentage point from 13 to 14 per cent and by a further one percentage point on 30 June 1995 to 15 per cent did not have an immediate effect of the same magnitude on short-term interest rates, which had already firmed in anticipation of the tightening of monetary policy. On balance, the tender rate on Treasury bills with a maturity of three months firmed from 12,69 per cent at the end of December 1994 to 14,07 per cent on 1 July 1995, which represented an increase of 138 basis points against the 200 basis points increase in Bank rate over this period. The yield on long-term government bonds, on the other hand, declined by 21 basis points from the end of December 1994 to the end of July 1995.

Yields in the money as well as the capital market subsequently softened during July and August 1995. Yields on long-term government bonds decreased significantly in August 1995 when they fell back by 64 basis points; short-term yields decreased by 2 basis points over the same period. This softening in yields

Short-term interest rates



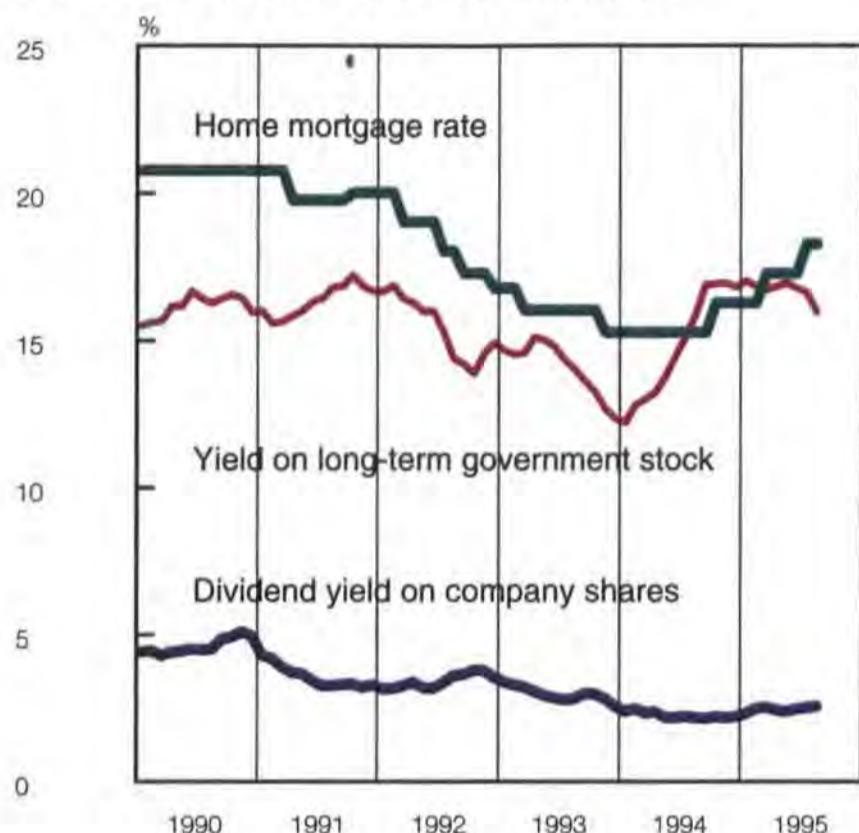
was brought about by renewed interest in South African bonds by non-residents, a decline in bond yields abroad and lower actual and expected domestic inflation. The tender rate on Treasury bills of three months declined to 13,88 per cent at the end of August 1995, while the yield on long-term bonds also fell from 16,69 per cent at the end of June 1995 to 15,76 per cent at the end of August.

Closely adhering to the Bank rate change at the end of June 1995, the *prime lending rates* of the banks were raised by one percentage point to 18,50 per cent on 3 July 1995. The banks also increased their predominant *rate on mortgage loans*, which had stood at 17,25 per cent from March 1995, to 18,25 per cent in August 1995 in reaction to the increase in Bank rate. The interest rates on the fixed rate mortgage bonds announced in June 1995 will, for instance, vary between 20 per cent in the case of loans of between R50 001 and R65 000 and 22,5 per cent in the case of loans between R10 000 and R25 000.

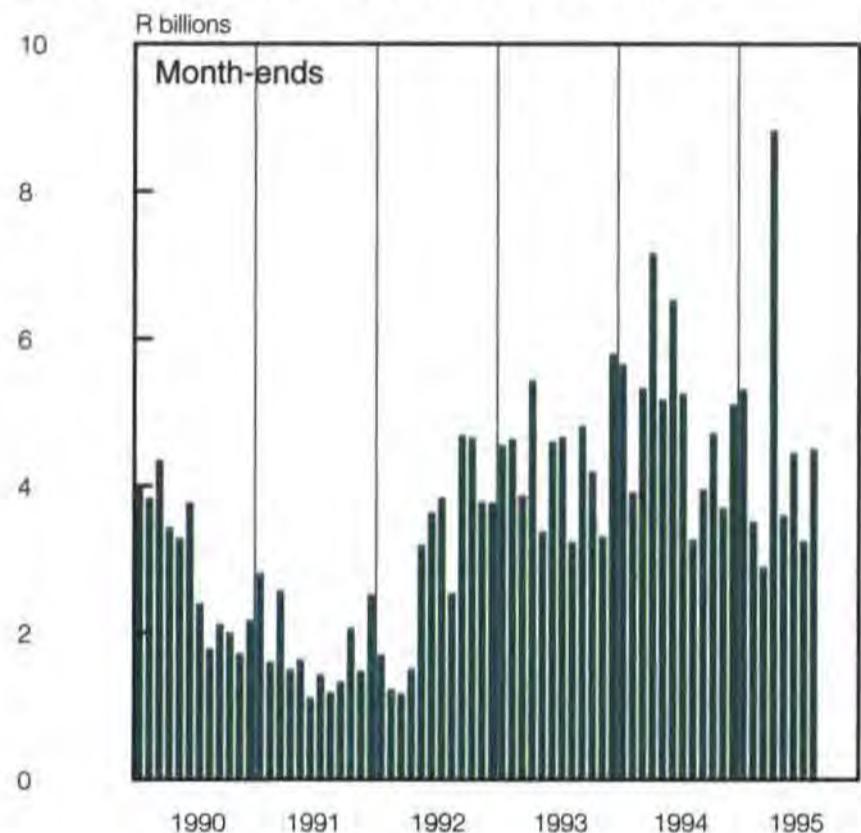
The predominant *rate on twelve-month fixed deposits* with banks was also raised by one percentage point to 14,5 per cent in June 1995. This brought the total increase in this rate since the middle of 1994 to 3 percentage points against an increase of 2,25 percentage points in prime lending rates. In July 1995 the twelve-month deposit rate provided investors with a real pre-tax yield of 5,0 per cent.

The maximum *rates laid down in terms of the Usury Act* were increased from 25,0 to 26,0 per cent in April 1995 in respect of money lending, credit and leasing

Capital market interest rates and yields



Accommodation at the discount window



transactions for amounts of more than R6 000 but not exceeding R500 000, and from 28,0 to 29,0 per cent in respect of amounts up to R6 000.

Money market

Money market conditions, which had tightened considerably in April 1995, eased significantly in the subsequent months up to the end of July 1995. This was clearly reflected in the amount of accommodation at month-ends, which initially increased from R2,9 billion at the end of March 1995 to R8,8 billion at the end of April before easing again to R3,2 billion at the end of July. This substantial decline in the money market shortage was mainly due to the sharp increase of nearly R7 billion in the net foreign assets of the Reserve Bank in May 1995. A sharp increase in government deposits with the Reserve Bank arising from the sales of government stock then caused the money market shortage to rise again to R4,5 billion at the end of August 1995.

Money market conditions since the second quarter of 1995 were characterised by very sharp fluctuations arising from changes in the net foreign assets of the Reserve Bank and in the government deposits with the Reserve Bank. Large capital flows between South Africa and the rest of the world led to more volatile changes in the net foreign assets of the Reserve Bank. This was aggravated by the transfer payments that are made at the beginning of each month by the central government to the nine provinces, which on certain occasions led to substantial changes in government deposits with the Reserve Bank.

The Reserve Bank's operations in the money market during this period were mainly aimed at neutralising liquidity in order to keep its refinancing facilities effective. The very large fluctuations in the money market shortages which occurred during the five months to August 1995 were counteracted by Reserve Bank transactions such as foreign exchange swaps, adjustments made in the asset portfolio of the Corporation for Public Deposits and the daily management of government deposits with the Reserve Bank.

Bond market

As in 1994 and in the first three months of 1995, activity in the domestic *primary bond market* was completely dominated by the public sector in the first four months of fiscal 1995/96 (i.e. the period April 1995 to March 1996). Net new issues of fixed-interest securities by the public sector came to R11,7 billion in this period; in the corresponding period of the preceding year the public sector raised R7,0 billion in this manner. The funds acquired by listed private-sector companies through new issues of fixed-interest securities (including convertible preference shares, debentures and corporate bonds) remained low. In the four months from April to July 1995 issues to the value of R0,9 billion were made by companies listed on the stock exchange.

A number of companies, however, continued to raise capital in foreign markets by means of convertible bonds to the amount of R0,7 billion in the second quarter of

1995. In total R2,1 billion was obtained in this manner by private companies in the eighteen months from January 1994 to June 1995, because international investors were willing to take up positions with the view that South African corporate earnings offer attractive growth prospects. Capital-raising operations took advantage of this demand, and in some instances exchange control approval was given that a certain percentage of the proceeds be held offshore by South African companies in order to fund international expansion. In July 1995 the Reserve Bank also announced that approval would be given on a case-by-case basis for insurance companies, pension funds and unit trusts to negotiate international asset swaps.

Activity in the secondary bond market subsided further in the second quarter of 1995. After having reached a peak monthly average of R98,2 billion in the third quarter of 1994, the value of public-sector stock traded on the Johannesburg Stock Exchange halved to a monthly average of R49,0 billion in the second quarter of 1995. In July and August 1995 the value of such transactions amounted to R49,2 billion and R111,8 billion, respectively. The higher level of public-sector stock traded in August was to a large extent affected by the sharp fall in long-term yields during this month.

The high level of liquidity facilitated a reduction in the Reserve Bank's role as market-maker in the secondary market for government stock. Gross sales of government stock by the Reserve Bank accordingly receded somewhat from a monthly average of R13,7

billion in 1994 to R6,9 billion in the first seven months of 1995. The Bank also reduced its trading in government stock options from a monthly average of R7,4 billion to R5,5 billion over the same period.

Non-residents were actively involved in the secondary bond market. In February 1995 they became net sellers of public-sector stock, probably in anticipation of the abolition of the dual exchange rate system. These sales increased significantly in the week before and after the dismantling of the financial rand. All in all, non-residents were net sellers of stock to the amount of R363 million in the first quarter of 1995. With the external value of the rand having remained relatively stable, the yield on long-term bonds was attractive to foreign investors and led to net purchases of government bonds by non-residents totalling R1,1 billion in the five-month period from April to August 1995.

Equity market

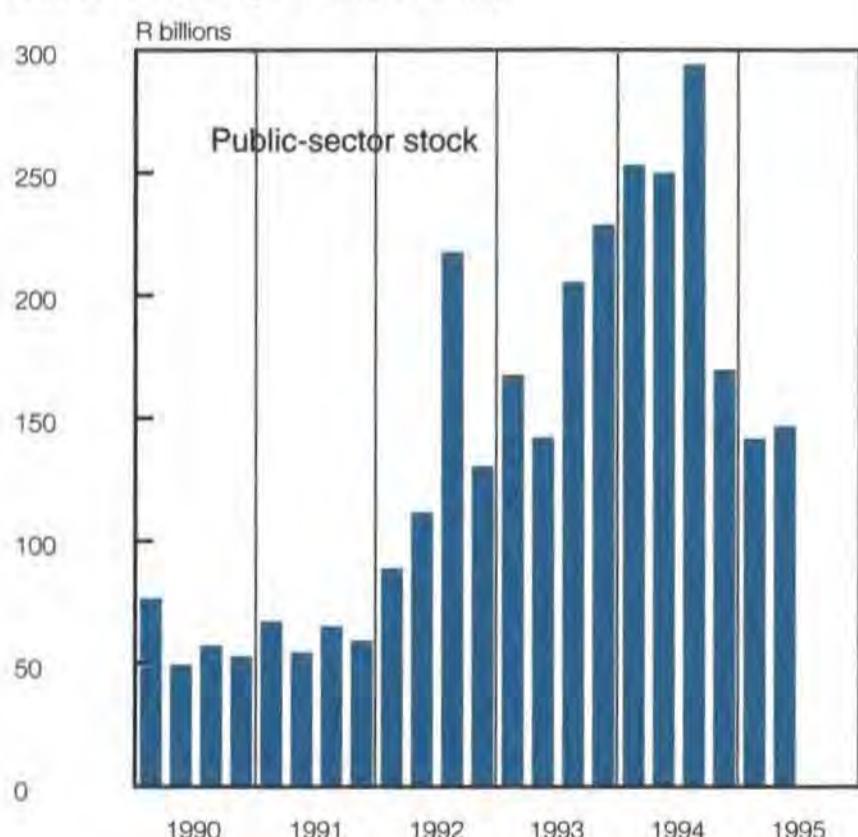
The demand for funds in the primary equity market remained firm in the first seven months of 1995 owing to high and increasing share prices and a shortage of scrip. After having raised R2,3 billion in the first quarter of 1995, the value of rights issues of ordinary shares came to R1,8 billion in the four months ended July 1995. The value of shares issued as scrip dividends also remained popular as a result of the Secondary Tax on Companies, which discouraged the declaration of cash dividends.

Turnover in the secondary equity market towards the end of 1994 and during most of the first seven months of 1995 was negatively affected by the high level of interest rates and a lacklustre performance of share markets world-wide. The monthly average value of shares traded on the Johannesburg Stock Exchange declined from R6,0 billion in 1994 to R4,3 billion from January to April 1995, but recovered somewhat in the ensuing four months to R5,4 billion, in response to recoveries on some of the major stock exchanges of the world.

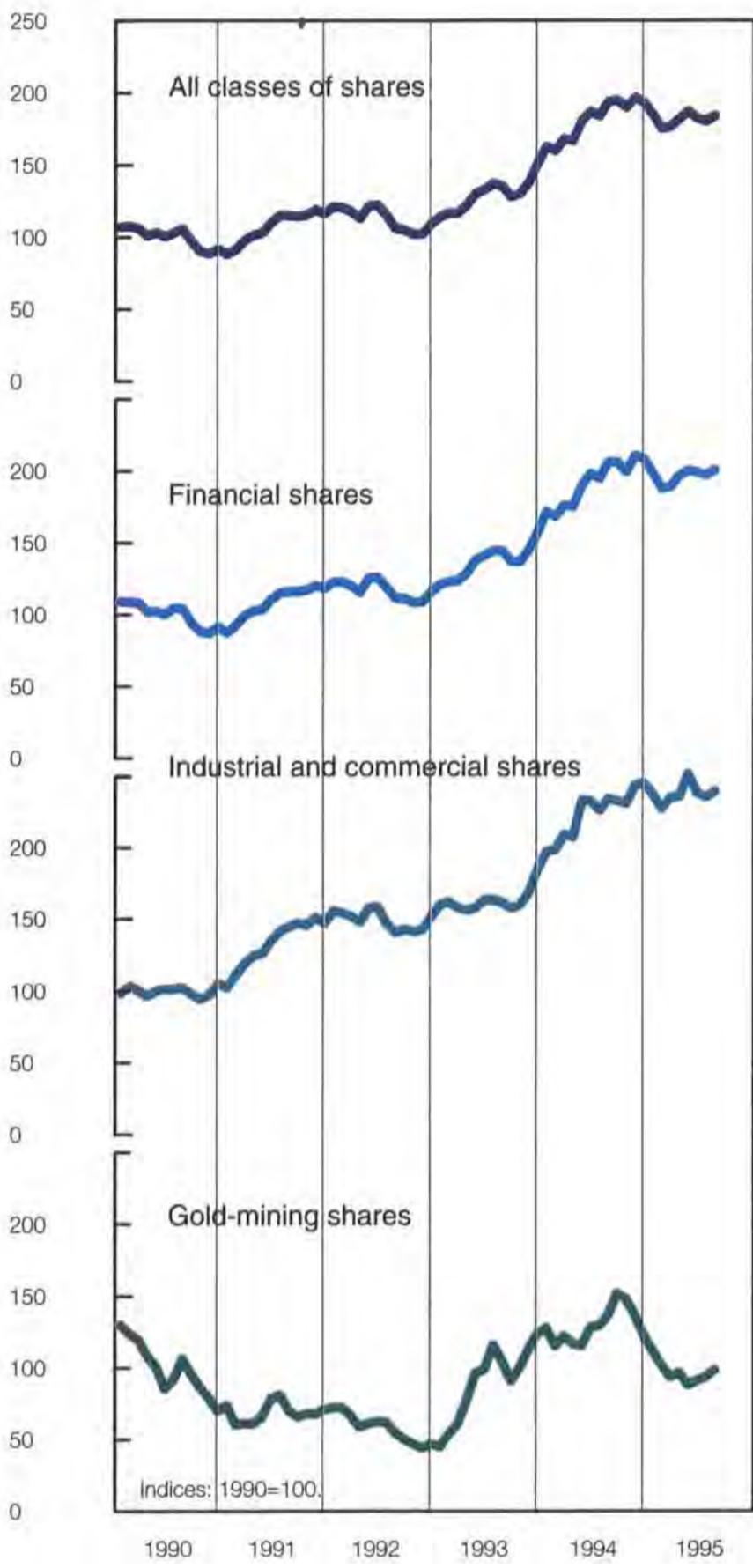
Spurred by the removal of exchange control on non-residents and the inclusion of the Johannesburg Stock Exchange in the International Finance Corporation's Emerging Market Index, the net purchases of equities by non-residents on the Johannesburg Stock Exchange increased from R0,8 billion in the first quarter of 1995 to R2,0 billion in the second quarter. In July and August they made further net purchases of R1,0 billion, which brought their total net purchases of equities to R3,8 billion in the first eight months of 1995. As a consequence, gross purchases by non-residents as a ratio of the total value of shares traded increased from 31,4 per cent in 1994 as a whole to 41,9 per cent in the first eight months of 1995.

The downward movement in share prices from November 1994 until February 1995 was subsequently reversed by factors such as higher company profits and attempts to encourage foreign investment in South Africa. The average price level of all classes of shares accordingly recovered by 6,9 per cent from February to

Stock exchange transactions



Share prices



May 1995, but then fell back by 1,6 per cent in the next three months. In August 1995 the level of all classes of share prices was 6,1 per cent below the upper turning-point in November 1994.

After having reached a new record high in September 1994, lower gold-mining profits, labour unrest on certain mines and the mining of lower grade gold-bearing ore continued to depress the prices of gold-mining shares

during 1995. Despite having recovered somewhat from April 1995, the level of gold-mining share prices in August was still 34,9 per cent below the high of September 1994.

Mirroring the changes in share prices, the average *dividend yield* on all classes of shares declined at first from 2,50 per cent in March 1995 to 2,35 per cent in May and then rose again to 2,54 per cent in August. The average *earnings yield* on all classes of shares (excluding gold-mining shares) increased from 5,95 per cent in March 1995 to 6,29 per cent in August.

Other financial markets

The stable environment in the foreign exchange market, a decline in non-resident participation and a greater wariness about futures transactions caused the level of activity on the South African Futures Exchange to decline in the second quarter of 1995. The turnover in *futures contracts* fell back from an all-time quarterly high of 1,4 million contracts in the first quarter of 1995 to 0,7 million contracts in the second quarter of 1995. An overwhelming part of these transactions consisted of equity futures contracts, while activity in interest rate contracts remained low and the volume of transactions in the Kruger Rand futures contract and a new Bank Bill futures contract were relatively insignificant. Trade in commodity futures contracts started in July 1995, with the beef future as the only contract being traded.

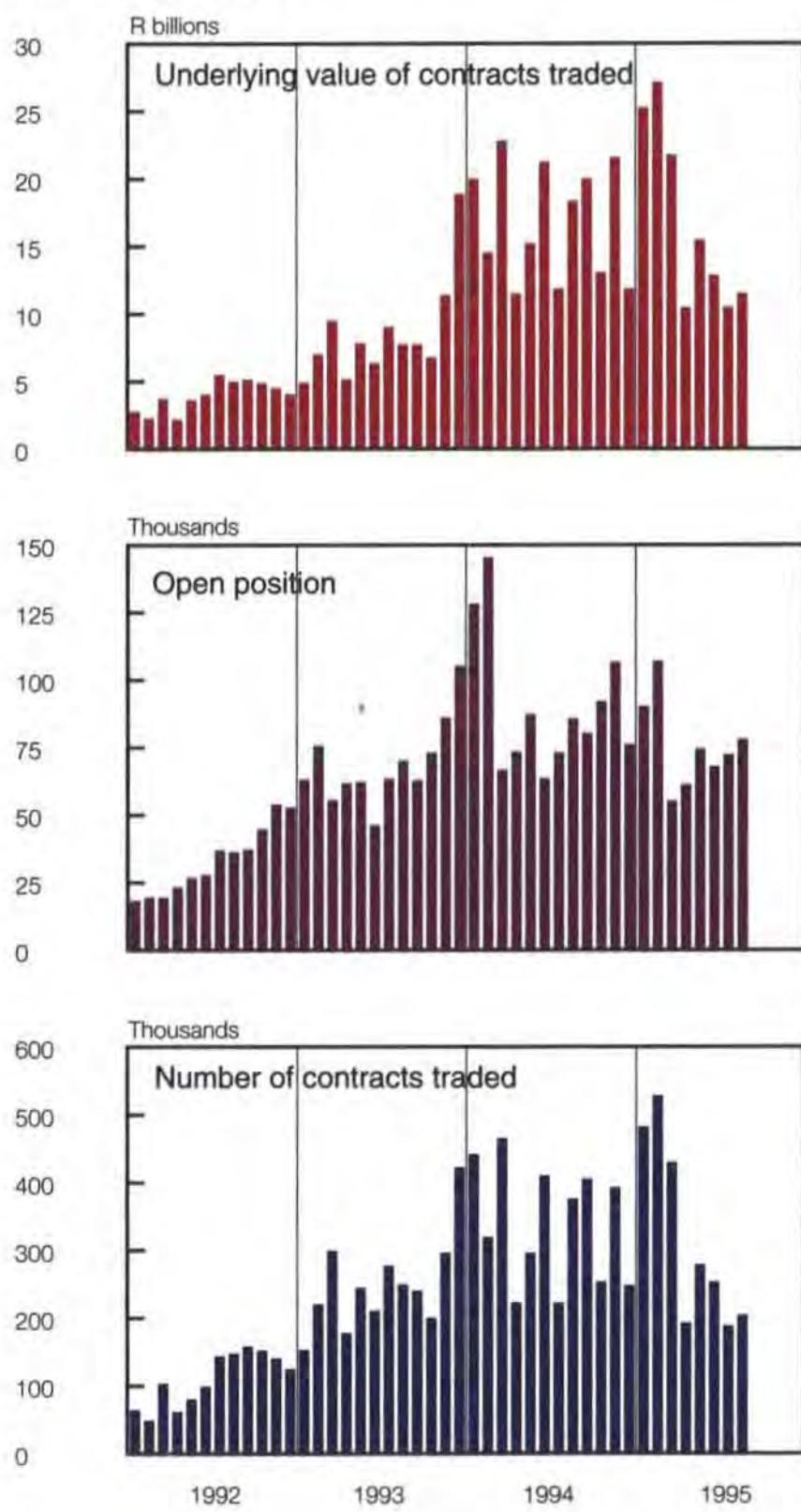
The number of options on equity futures receded from a record of 1,5 million contracts in the first quarter of 1995 to 0,6 million contracts in the second quarter. Equity options also dominated the total position in option contracts, with very little activity in interest-based options on futures contracts. Options on the new commodities futures contracts are not yet available in the formal market and are only traded in the over-the-counter market.

Open positions in futures contracts and options on futures contracts traded on the South African Futures Exchange increased significantly. Based on the mark-to-market prices of equity futures and options, the total open position was worth R4,8 billion at close of business on 31 August 1995.

As indicated before, the *mortgage market* was strong in the first six months of 1995 despite a somewhat less lively housing market and a lacklustre commercial and industrial letting market in the first quarter of 1995. Mortgage financing may in future be affected by the implementation of the government's mass housing programme, which got off the ground in June 1995.

Investors in property became more cautious towards the end of 1994 and the value of transactions in the *real estate market* receded from a peak of R8,4 billion in the third quarter of 1994 to R7,8 billion in the first quarter of 1995, before recovering somewhat to R8,2 billion in the second quarter. The increase in real estate prices, the

Futures exchange transactions: Futures contracts



continued high nominal and real mortgage rates and expectations of a further rise in interest rates were probably mainly responsible for the lower level of transactions in fixed property.

Public finance

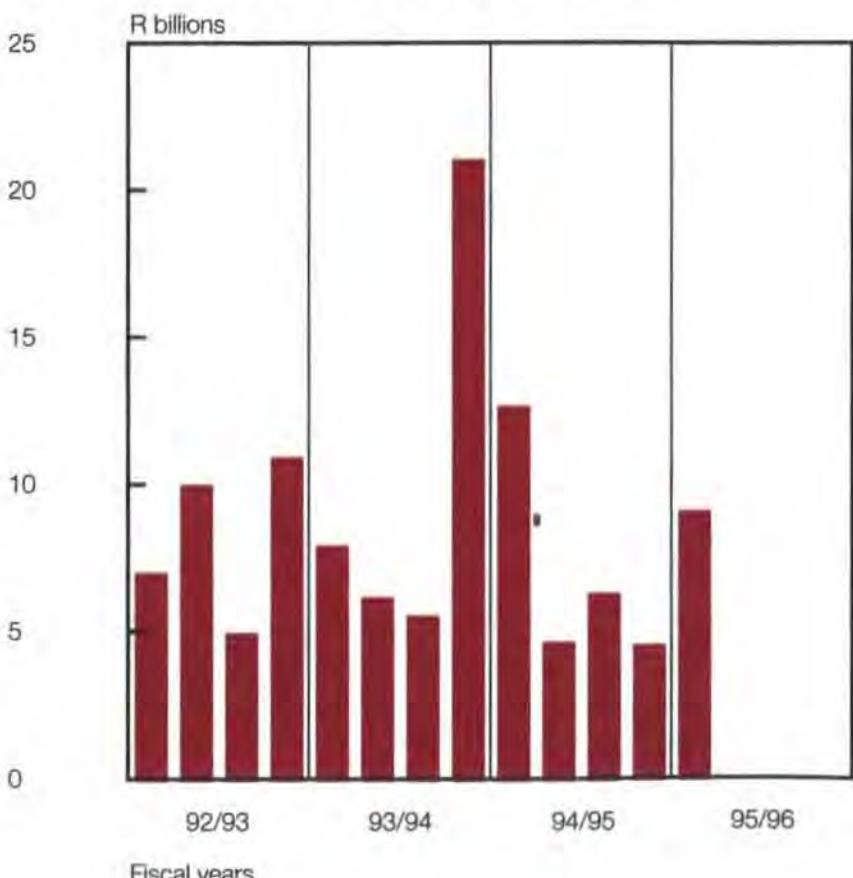
Public-sector borrowing requirement

The public-sector borrowing requirement (i.e. the deficit before borrowing and debt repayment of the consolidated central government, provincial governments, local authorities and non-financial public enterprises) amounted to R9,1 billion in the first quarter of fiscal 1995/96, or to 7,8 per cent of gross domestic product. This was considerably lower than the deficit of R12,7 billion, or 12,0 per cent of gross domestic product, recorded in the corresponding quarter of the preceding fiscal year. As illustrated in Table 9, this lower public-sector borrowing requirement may be due to special circumstances related to the constitutional changes in South Africa.

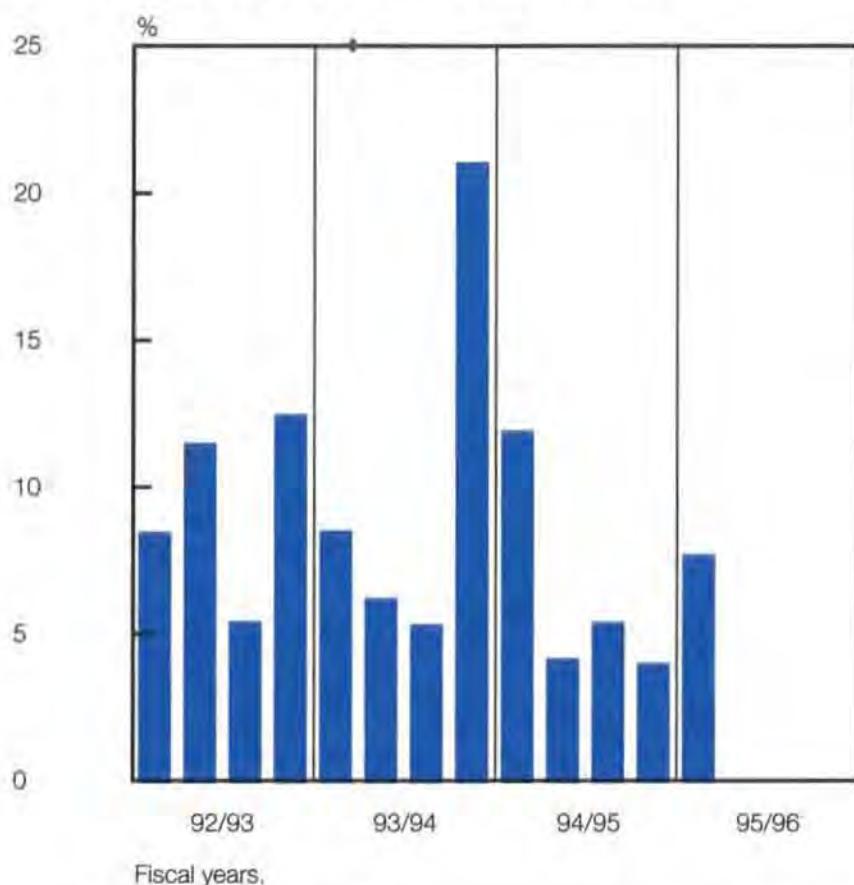
Administrative problems experienced by the newly established *provincial governments* restrained their expenditure. Whereas the total expenditure by provincial governments has normally exceeded their total revenue and grants, a surplus of R2,0 billion was registered in the first quarter of fiscal 1995/96. This surplus offset to a large extent the deterioration in the finances on the *Main Budget*, where the deficit came to R11,0 billion notwithstanding the additional proceeds of R1,2 billion from the sale of strategic oil reserves in April 1995.

The devolution of certain powers from the central government to the provincial governments also had a marked effect on the expenditure on the *Main Budget*.

Public-sector borrowing requirement



Public-sector borrowing requirement as percentage of gross domestic product



These constitutional changes in intergovernmental fiscal relations led to a sharp increase in the transfer payments from the Main Budget to the provincial governments. As a result, transfer payments in the Main Budget in the first quarter of fiscal 1995/96 were no less than 60,5 per cent higher than in the first quarter of fiscal 1994/95. On the other hand, the Main Budget expenditure on goods and services decreased by 32,3 per cent over the same period.

In comparison with the first quarter of fiscal 1994/95, the finances of local authorities and other public-sector entities improved in the first quarter of fiscal 1995/96. The *local authorities* continued to maintain relatively small borrowing requirements because of considerable

increases in tariffs imposed on their inhabitants. The surplus on the income and expenditure accounts of the *other public-sector entities* was mainly due to a favourable outcome in the finances of extra-budgetary institutions and non-financial public corporations and central-government enterprises.

Exchequer account

Exchequer issues to government departments (adjusted to reflect cash flows) in the first four months of fiscal 1995/96 were 17,5 per cent higher than comparable figures in the first four months of the preceding year. This rate of increase was well above the average year-on-year rate of increase of 13,9 per cent over the corresponding

Exchequer receipts and issues

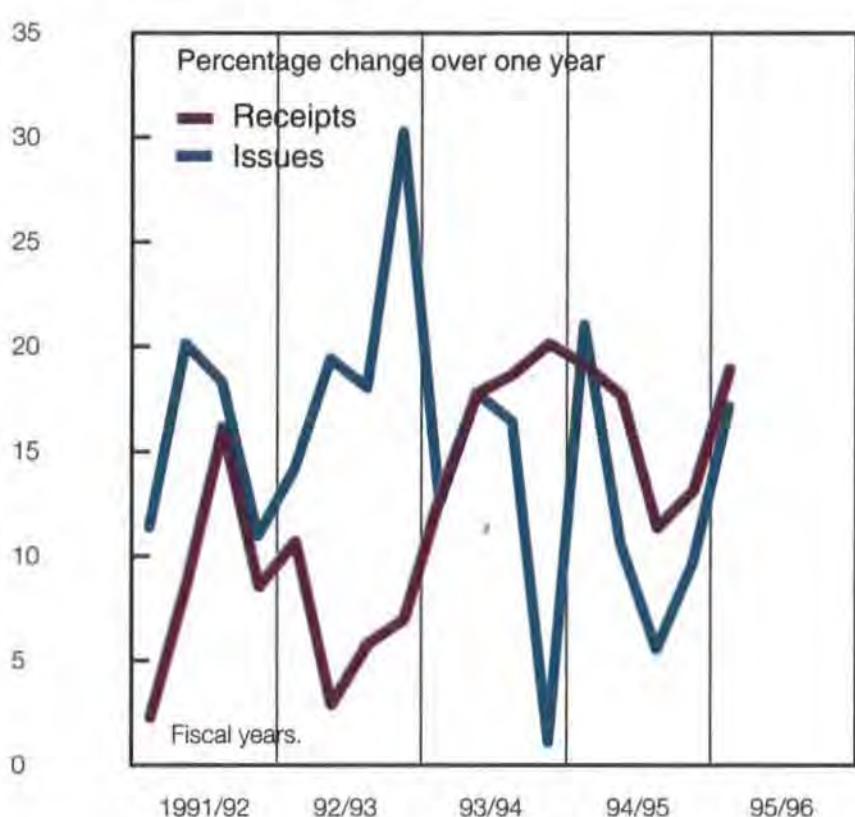


Table 9. Public-sector borrowing requirement

R billions

Fiscal years	Main Budget	Provincial governments	Local authorities	Other public sector	Total	
1994/95	1st qr.....	10,9	1,1	0,8	0,0	12,7
	2nd qr.....	4,8	0,5	-0,6	-0,1	4,7
	3rd qr	4,3	0,6	0,1	1,5	6,4
	4th qr.....	4,7	0,2	0,3	-0,5	4,6
1995/96	1st qr.....	11,0	-2,0	0,7	-0,5	9,1

period of the preceding five fiscal years and was also substantially higher than the growth rate of 9,0 per cent provided for in the Budget for fiscal 1995/96. A large part of this increase was due to a shift in the interest payments pattern to the first four months of the fiscal year, which resulted from new interest payment dates on debt issued during the previous fiscal year. As a ratio of the total budgeted expenditure of R152,7 billion for the fiscal year 1995/96, Exchequer issues of R51,9 billion in the first four months of this year came to 34,0 per cent.

Exchequer receipts in the first four months of fiscal 1995/96 amounted to R39,0 billion, or 13,5 per cent more than the comparable level in the corresponding period of the preceding year. This increase in the first four months was substantially higher than the budgeted increase of 10,3 per cent in government revenue for the full fiscal 1995/96.

The receipts of Inland Revenue were mainly responsible for the higher-than-expected increase in government receipts during the first four months of fiscal 1995/96. Income tax receipts rose more rapidly than envisaged in the Budget on account of the high level of economic activity, fairly sharp increases in salary and wage adjustments and relatively large net profits of business undertakings. Income tax receipts could continue to perform well in the rest of the fiscal year because the transition levy introduced during the previous year was effectively incorporated in the individual income tax rates applicable in fiscal 1995/96, and the last part of the transition levy (1,67 per cent) is being collected throughout the fiscal year. The proceeds from value-added tax were also higher than foreseen in the Budget owing to the continued high growth in domestic expenditure.

Government revenue from customs and excise duties decreased by 6,0 per cent in the first four months of fiscal 1995/96 against the first four months of the preceding year. The Budget provided for an increase of 4,3 per cent in this source of revenue for fiscal 1995/96 as a whole. This relatively poor performance of the receipts from customs and excise duties was due to the partial

abolition of the surcharge in the preceding year, which only began to have an impact on these receipts from August 1994. The income receipts from the surcharge therefore were reduced by over one half from the first four months of fiscal 1994/95 to the first four months of fiscal 1995/96.

The higher-than-budgeted Exchequer issues and receipts resulted in an *Exchequer deficit* before borrowing and debt repayment of R12,9 billion for the first four months of fiscal 1995/96. This deficit was equal to 43,3 per cent of the budgeted deficit of R29,7 billion for the year as a whole. The deficit for the corresponding period of fiscal 1994/95 came to 37,7 per cent of the deficit budgeted for that year.

The deficit of R12,9 billion, plus the discount on new government stock issues of R3,6 billion, was financed by means of the following *borrowing instruments*:

	R millions
Government stock.....	16 746
Treasury bills.....	1 566
Foreign loans	1 301
Non-marketable securities.....	-38
Money market instruments.....	7
Extraordinary receipts.....	1 203
Change in available cash balances at the:	
Reserve Bank	-1 208
Banks	-2 081
Total financing	16 496
Less: discount on new government stock ..	3 621
Total net financing	12 875

As a result of this financing of the Exchequer deficit, outstanding *government debt* increased from R245,3 billion at the end of March 1995 to R264,0 billion at the end of July 1995. As a ratio of gross domestic product, government debt amounted to 57,8 per cent at the end of July 1995.

Table 10. Percentage increase in Exchequer receipts, 1995/96

	Budgeted increase	Increase in first four months*
Exchequer receipts	10,3	13,5
Customs and excise duties	4,3	-6,0
Inland revenue	11,2	19,7
Income tax.....	11,4	12,7
Value-added tax.....	13,0	15,9

*Year-on-year rate

Statement on monetary policy

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

29 June 1995

The Reserve Bank was in recent months reluctant to increase its lending rates because of ambiguous signals emitted by financial and real economic indicators of current trends in the economy. Against the background of the slow-down in both gross domestic production and gross domestic expenditure during the first quarter of 1995, there were perhaps dubious indications that the rate of increase in domestic bank credit extension and in the money supply could follow the slow-down in the rate of expansion in total real economic activity. At the same time, the daily money market shortages recently remained fairly stable at a relatively low level of between R1 and R2 billion, indicating the presence of ample liquidity in the banking sector. There was, therefore, no undue upward pressure on interest rates.

Figures for total bank credit extension during April 1995, and for the money supply as at the end of May 1995, however, now indicate a further significant increase in these two important financial aggregates after the end of the first quarter. Over the twelve months up to April 1995, total claims of the banking sector on the domestic private sector increased by 19,5 per cent, up from 17,5 per cent in March. The rate of increase in the M3 money supply rose from 14,9 per cent in April to 15,8 per cent in May.

Both producer and consumer price inflation also increased further during recent months. Over the twelve months up to April 1995, the total producer price index rose by 11,5 per cent, and the index for consumer prices increased by 11 per cent. In May 1995, however, the twelve months' rate of increase in consumer prices receded slightly to 10,8 per cent.

Volatile changes in the net gold and foreign exchange reserves in recent months contributed to the complexity of the current financial situation. In April 1995, the total net foreign reserves of the Reserve Bank declined by R4,1 billion, followed by an increase of R5,8 billion in May. Indications are that the Reserve Bank's net foreign reserves will again increase in June, albeit by less than the R1,3 billion proceeds of the Samurai loan issued by the Government earlier this month.

Underlying inflationary pressures are undoubtedly increasing again in the South African economy, stimulated *inter alia* by wage increases, the depreciation of the exchange rate of the rand over the past year, the acceleration in the rates of increase in the major monetary aggregates and the growing expectation of a continuous rising rate of inflation. If left unchecked, this trend will eventually force the abortion of the welcome improvement over the past year in real economic growth, and will frustrate the objectives of the Reconstruction and Development Programme. The Reserve Bank's tolerance with the untenable large increases in bank credit

extension and in the money supply, which has already been criticised very widely recently, can no longer be defended. Delaying corrective action now could risk the danger of more painful adjustment in future.

The Bank has therefore decided to raise the Bank rate and related lending rates with immediate effect by one percentage point. As from 30 June 1995, the Bank rate, that is the rate at which the Reserve Bank is prepared to make loans available to banking institutions at the discount window, will be raised from 14 to 15 per cent. The effective cost of Reserve Bank accommodation for all banking institutions is therefore increased by one percentage point. As is customary, each banking institution will decide on its own deposit and lending rates, taking account of the increase of one percentage point in the Bank rate.

Statement issued by Dr C.L. Stals, Governor of the South African Reserve Bank, on exchange control and on the forward foreign exchange market

13 July 1995

1. Foreign investment by South African institutional investors

In announcing the abolition of the financial rand system on 10 March 1995, the Minister of Finance alluded to the demand for foreign assets by various types of institutional investors to enable them to achieve a wider spread of their assets. The Reserve Bank subsequently made a submission to the Government and proposed some further relaxations of the exchange controls, which were recently approved by the Cabinet.

In order to assist insurance companies, pension funds and unit trusts in achieving this goal, it has been decided to allow such institutions at this juncture to invest a portion of their assets abroad. This will enable the relevant institutional investors to better serve the interests of their clients, that is, the wider public. It should be noted that these institutions, on a combined basis, at present administer approximately R500 billion of funds, with negligible investments in foreign assets. Having regard to the relatively low level of the country's foreign reserves, currently around R12,5 billion, approval cannot be granted at this stage for an open-ended transfer abroad of foreign currency for investment purposes.

On the advice of the South African Reserve Bank, the Government has therefore decided, as a first step, to allow institutions of the nature outlined above to put forward to the exchange control authorities proposals whereby they can obtain foreign investments by way of swap arrangements providing for the exchange with foreign investors of part of their existing asset portfolios for foreign assets. The principles involved will also be discussed with the Financial Services Board to ensure that all legal requirements, for example, in respect of domestic asset cover, are adhered to. Proposals by these institutions, incorporating measures to safeguard the foreign exchange reserves against the subsequent withdrawal from South Africa of the reciprocal non-resident investments, may now be submitted for consideration to the Exchange Control Department of the South African Reserve Bank. Each application will be dealt with on its own merit. If permitted by future increases in the foreign reserves, these swaps may also be supplemented by cash allocations to the South African institutional investors for the purpose of acquiring foreign assets.

This arrangement should be seen as a further step in the process of gradually easing exchange control.

2. Forward foreign exchange market

In terms of long-standing arrangements, the Reserve Bank has for many years provided forward cover in

foreign exchange for both payers and recipients of foreign exchange, linked to South Africa's international transactions in goods, services and capital. The Reserve Bank has determined rates for forward cover of different maturities, based on the differences between South African and comparable international interest rates. Profits and losses on these transactions have been for the account of the Treasury.

Both the Department of Finance and the Reserve Bank have from time to time expressed a desire for the Reserve Bank to reduce its involvement in the forward foreign exchange market when circumstances allow. Owing to the foreign exchange problems that South Africa has experienced since 1985, including large obligations to redeem foreign debt and the low level of the country's net foreign reserves, no progress has been made during this period towards achieving this objective.

In view of the political changes that have taken place in South Africa, followed by the normalisation of South Africa's international economic and financial relationships and the improvement in the foreign reserve position, it has now become desirable to reassess the Reserve Bank's role in the forward foreign exchange market. Steps are now being considered to start decreasing the Bank's involvement in the short-term forward market. It is the intention of the Bank in future:

- (a) only to provide forward cover to authorised dealers against documentary evidence of foreign financing transactions; and
- (b) to leave it to exporters and importers of goods and services to develop a "private" forward market in conjunction with the authorised dealers – the Reserve Bank may from time to time decide to participate in this market, but then at its own initiative.

The market has already been encouraged to develop along these lines, and the Reserve Bank's quoted rates for forward cover will soon be restricted to underlying offshore financing transactions approved by the Bank. Details of acceptable transactions will be made available by the Bank to the authorised dealers in foreign exchange within the next few days. Follow-up steps will be taken in due course to further reduce the Reserve Bank's involvement in the forward foreign exchange market, for example, by gradually quoting less favourable rates for foreign financing transactions.

Where necessary, the exchange control rules and regulations pertaining to asset swaps and to the

forward market will be amended in due course. Once the private market, supported by the authorised dealers, has been more firmly established and can function without regular Reserve Bank participation, the further revision of the relevant rules and regulations will be considered.

The functions of the South African Reserve Bank and closer financial co-operation in Southern Africa

Address by Dr C.L. Stals, Governor of the South African Reserve Bank, at the Annual Award Dinner of the Botswana Institute of Bankers, Gaborone, 7 July 1995

1. Introduction

The major political reforms in South Africa that culminated in the democratic election for a new Government of National Unity in April 1994, introduced a new era of economic relations between South Africa and other countries on the African continent. These relations were for many years constrained by political differences and both South Africa and the other countries were frustrated in their efforts to benefit from the normal development of extended economic relations between nations.

The removal of these barriers by the events of 1994 brought South Africa face to face with the harsh realities of Africa. Many South Africans only now recognised that on the African continent, stretching from Cape Town to Casablanca, there were more than 50 countries; there existed massive poverty and there was a desperate need for enhanced economic development. Furthermore, the new South African situation itself, perhaps better understood and better exposed in the light of a new realism, also fostered new expectations and reared more urgent demands for an improvement in the living conditions of the millions of South African people living below the poverty line.

Initially, the challenge seemed to be an overwhelming one. The complexities of the situation were further deepened by the existence of a number of associations or groupings of countries on the continent created in previous initiatives towards greater economic co-operation amongst the African nations. The new South African Government was confronted with the difficult decision of where South Africa belonged in this myriad of associations and arrangements.

The Organisation for African Unity (OAU) provides a useful forum for political co-operation over the whole spectrum of African nations. The African Development Bank (ADB) provides a convenient vehicle, although in need of a major overhaul, for participation in the economic development process in all African countries. There are the Lomé Convention, establishing a firm relationship between a number of African countries and the European Union; the Preferential Trade Area (now Comesa); the Southern Africa Development Community (SADC) and the Southern Africa Customs Union (SACU), all providing for some form of regional trade co-operation. In the financial sphere, South Africa was invited to join the Association of Governors of African Central Banks, with its three regional subdivisions providing *inter alia* for an Eastern and Southern Africa Group; the future of the Common Monetary Area, consisting of four countries in Southern Africa, had to be reconsidered, and the opportunity arose for South Africa to join either the English or the

French speaking African Groups on the Boards of Executive Directors of the International Monetary Fund and the World Bank. South Africa had to find a niche for itself in all these arrangements, and had to determine its role in the economic development process of the continent.

The South African Government of National Unity has made good progress over the past year in extensive negotiations over a wide front on South Africa's future Africa relations. The Government has, for example, in principle decided to join the African Development Bank and difficult negotiations are now in progress on the terms and conditions for South Africa's membership of this important institution. Negotiations with the European Commission on a Lomé-type of association for South Africa with the European Union have reached an advanced stage. Late last year, the South African Government also took the important decision to join the Southern Africa Development Community (SADC)*.

The decision to join the SADC is perhaps, at this stage, one of the more important indications of South Africa's keen desire to participate in economic co-operation in Africa. The SADC is confined to a number of countries in Southern Africa that are already within the existing ambit of the expanding South African economic contacts with Africa. It consists of a manageable core group of countries from which the process of economic co-operation can gradually be extended to incorporate also other countries further north on the continent. It includes all the members of both the South African Customs Union and the Common Monetary Area, and also other countries with which South Africa has, even in the adverse climate of the past, established extended trade and other economic relationships. It brings together a number of countries that can hopefully all benefit from greater co-operation in almost all spheres of economic activity.

South Africa has now been tasked with the responsibility of drafting a Financial Protocol for SADC. This Protocol must provide a basis for the financial co-operation amongst the members of this community, and must provide the necessary guidelines for the immediate and longer-term actions needed to achieve the objective of greater economic co-operation amongst the countries of the Southern Africa region.

The South African Reserve Bank has been actively involved in finding and defining a role for itself in the Africa initiative. The Reserve Bank believes that, against the

* South Africa has now become the eleventh member of SADC. The other ten members are: Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe.

background of the political developments of recent years and in support of the decisions recently taken by the South African Government, the Bank should now as a beginning concentrate its attention on the role that it can play in the active expansion of greater financial co-operation within the Southern Africa Development Community. This does not, of course, exclude closer financial co-operation with other non-SADC African countries where the Reserve Bank will also continue to extend relations, but then more on an *ad hoc* and bilateral basis.

2. A framework for regional financial co-operation

Total financial activities in countries with more advanced financial systems are conducted at three distinctly different levels:

- At the top, the monetary authorities govern the system through their monetary policy actions. The monetary authorities will normally include the Finance Department of Government, the central bank and supportive regulatory and supervisory authorities.
- In the middle, financial markets serve the function of price determination and resource allocation. The financial markets usually include a capital market, a money market and a foreign exchange market. These markets are often further divided in specialised sub-markets such as an equity market, a bond market and a market for derivatives to provide more specialised services in the capital market.
- At the third tier there are the individual specialised institutions such as banks, insurers, finance houses and securities dealers to provide financial services to governments, businesses and the general public.

Cross-border financial co-operation amongst more advanced economies, for example within the European Union, will proceed simultaneously at all three levels, for example at the top level through the synchronisation of macro-economic monetary and fiscal policies, at the middle level through the integration of financial markets, and at the third level through the harmonisation of financial regulation and supervision.

Major divergencies in the stage of development reached at all three levels in the different participating members of any multi-national association can, however, create serious difficulties for both the more advanced and the less developed members of the community in the process of economic integration. Even within the European Union there is therefore continuous pressure for a more differentiated approach, or a multi-speed approach, in which the more advanced members can reach the ultimate objectives of economic integration much quicker than others that may need more time to

bring particularly the second and third tiers of their financial systems to a more competitive level before moving into the integration phase.

In the eleven member countries of the Southern Africa Development Community there are at this stage still major differences in the structure of the overall financial system. These differences apply to all three levels of the system, that is, the monetary authorities, the markets and the financial institutions operating in each one of the eleven countries. Monetary authorities do not always have the same objectives; financial markets do not even exist in some of the members, and independent and competitive financial institutions must still be established, nurtured and developed in some countries.

Without pre-empting the Financial Protocol and decisions that Ministers of Finance of the SADC countries will have to take in the near future on financial co-operation amongst these countries, pragmatism leads to the conclusion that, at least in the initial stages, financial co-operation in Southern Africa will have to adopt a "bottom-up" approach. The attention must at first be focused on the establishment, the development and the improvement of financial institutions that can provide the basic financial services needed by both the private and public sectors of any developing economy. In those countries where such institutions already exist, the attention may shift more towards the improvement of financial markets where prices for financial services can be determined by underlying forces of supply and demand. Co-operation at the level of macro-economic policies, such as the harmonisation of interest and exchange rate policies, will not at this early stage be easy to achieve. As an objective for the longer term, this kind of co-operation should of course not be discarded and should continue to remain a major objective of the Community. The emphasis should, however, for the time being, rather fall on a reduction of the existing vast differences in the stage of development of the financial structures of the participating countries*.

3. Closer co-operation amongst the central banks of the region

If the foregoing analysis is accepted as a realistic point of departure, the programme of action in the short term for the central banks of the region must clearly be concentrated on co-operation at the micro or institutional level, rather than at the more ambitious level of macro-economic integration. A regular exchange of views on macro-economic trends and policies amongst members will be useful in support of the strategy, but should not form the main objective of the co-operation programme at this juncture.

In preparing the way for closer financial co-operation

* This approach is in line with the findings of the African Development Bank as published in its study "*Economic Integration in Southern Africa*" (1993).

amongst the SADC countries, the central banks of the region may be advised, by way of introduction, to acquaint themselves with the structures, philosophies and objectives of each other. The governors of the central banks of the eleven members of SADC can undoubtedly learn a lot from each other by exchanging views on a number of basic issues related to their own institutions, such as:

- the institutional framework within which each central bank operates;
- the relationship between the central bank and its government;
- the organisational structure of the institution;
- the human resource management and development policies;
- the accounting and internal financial management practices;
- the main objectives of monetary policy and the monetary policy model applied in each country;
- the responsibilities for bank regulation and supervision;
- the participation of the central bank in areas such as commercial banking, export promotion and development financing; etc.

The South African Reserve Bank is known to be a relatively independent institution. It is privately-owned and is fully autonomous as far as its staff and internal administration is concerned. Its link with Government is through its Board of Directors where Government has the right to appoint 7 out of 14 members, including the Governor and three Deputy Governors. The Bank works closely with the Minister of Finance, but has been given a full mandate by Parliament to manage domestic monetary policy issues on its own. The Bank therefore has been made accountable to Parliament. The Reserve Bank's main objective is to protect the value of the currency.

This is not necessarily the ideal structure for all central banks in the SADC community. Before we can proceed to the higher level of macro-economic monetary policy harmonisation, however, some convergence on the basic philosophy of central bank functions and operations may be necessary.

The South African Reserve Bank has over many years supported and contributed to the development of the money and capital markets in South Africa. The Reserve Bank was, for example, instrumental in the creation of the National Finance Corporation (NFC) way back in 1949. The NFC represented the first specialised money market institution in the country and paved the

way for the development of an active inter-bank market in call money and short-term surplus cash funds of the public and the private sectors. Today, South Africa is known for its sophisticated and well developed financial markets and the role of the Reserve Bank in these markets has become more detached. As a second area for discussion, and following the normal standard structure of financial systems in the more advanced economies, the role of the central bank in the development of domestic money and capital markets can be pursued.

Important changes are now being introduced to the structure of the capital market in South Africa. The Johannesburg Stock Exchange will, for example, in November this year undergo major changes to provide *inter alia* for corporate ownership, for dual capacity trading and for electronic screen trading to supplement, or replace, the conventional open-outcry system on the floor. Plans are also afoot for the separation of the equity and the bond markets.

From the official side, the Reserve Bank is now giving attention to the need for minimum capital adequacy requirements against risk exposures arising from securities dealing transactions. This is of particular importance now because of the possible large-scale direct involvement of banking institutions in the stock exchanges. The South African authorities are also committed to a further relaxation of the exchange controls which could have interesting implications for the money and capital markets.

Part of the objective of the Southern Africa Development Community with closer financial co-operation is, of course, to remove restrictions on the flow of funds between its members. Developments in the South African money and capital markets at this stage are, therefore, of vital importance for the other members of the Community.

The role of each central bank in the establishment of sound and well-managed banking institutions in its own country provides a third important subject for discussion by the governors of the central banks of the SADC countries. For private banks to extend their activities across borders, there must be some harmonisation in the central bank approaches towards bank regulation and supervision.

Work already done within the East and Southern Africa Banking Supervisors Group (ESAF) provides a basis for the extension of co-operation in this area amongst the SADC members. The South African Reserve Bank already committed itself to co-operation in this field by presenting a course on Bank Supervision for ESAF members in Pretoria during September last year. The South African approach with bank supervision and regulation is based on international standards as laid down by the Basle Committee on Bank Supervision and is directed mainly towards the management of risk exposures in individual institutions. In allowing South African banks to establish branches or subsidiaries in

other countries, the Bank Supervision Department of the Reserve Bank will be comforted by the knowledge that their counterparts in host countries apply at least the same minimum financial disciplines in their supervision as we do.

A fourth area for exploration amongst the central bankers of the region is the involvement of these institutions in international financial relations. In this regard, a number of items can be placed on the agenda for discussion, such as:

- the management of the foreign reserves;
- the exchange rate system followed by each country;
- the role of private banks in the management of the foreign reserves; and
- the use of and repatriation facilities for the bank notes of other members in the region.

South Africa has the advantage (or is it a disadvantage?) of having a relatively well-developed foreign exchange market with an average daily turnover of more than 6 billion US dollar. The exchange rate of the rand is determined mainly by market forces, but with fairly regular intervention by the Reserve Bank with the intention to smooth out undue short-term fluctuations. The Reserve Bank does not fix spot exchange rates and does not quote rates by itself – intervention takes place on the initiative of the Bank at ruling market rates. The Bank does, however, still quote a rate for forward foreign exchange transactions but is in the process of withdrawing itself at least partly from the forward foreign exchange market. In view of the SADC objectives of closer economic co-operation amongst the member countries, the foreign exchange rate practices and policies followed by the individual countries in the region will eventually become a crucial part of the proposed Protocol for Financial Co-operation. The South African Reserve Bank is keen to share its experiences in this area with other central banks in the Community.

A closely related area for negotiation is the exchange controls still applicable in the various member states. A number of the member countries of SADC are now involved in serious programmes of exchange control liberalisation. In the case of South Africa, no exchange controls are applied to current account transactions and no restrictions exist on capital movements by non-residents. South Africa does, however, still apply fairly extensive controls on the outward investment of capital by residents. These controls also apply to investments by South African residents in other African countries, with the exception of the members of the Common Monetary Area Agreement*.

In the longer term, exchange controls will not be reconcilable with the objectives of the SADC agreement,

and will have to be removed for all economic transactions between the member countries.

A fifth area for useful discussion amongst the central banks at this early stage in the search for closer financial co-operation in Southern Africa is the development of national and intra-country clearing and settlement arrangements for financial transactions. The South African Reserve Bank is now in the process of a major revision of the South African national payments system. The intention is to provide for real-time settlement of large financial transactions on a gross basis, and for an improvement of the existing inter-bank clearing system through the extension of the uses of advanced modern electronic data processing techniques. The task team responsible for this project has the intention to design a final system that will be capable of also handling cross-border and intra-country settlements. It will be most useful for this team, led by senior Reserve Bank officials, to explore the potential needs of a future extended multi-currency clearing and settlement arrangement for use within the context of the SADC agreement.

In recent years, the South African Reserve Bank experienced an increasing need for training and education facilities, concentrated mainly on the development of central banking skills for the Bank's own internal staff. In the process, a South African Reserve Bank Training Institute was established with a small specialised full-time teaching staff where a number of courses in advanced central banking techniques and policies have been presented over the past eighteen months. The time has perhaps come to make these facilities available also to interested central bankers from neighbouring countries.

In addition, the Reserve Bank has extended its in-house training facilities to include a special cadet-scheme providing an opportunity for beginners in the banking world to gain some experience of the practical world of banking over a two-year period in the Bank's various Departments. The Bank has also introduced an enhanced management development programme with the intention to reduce the normal period of advancement from junior clerical to management level from an average of about 10 years, based on past experiences, to about 4 years. The staff of the Economics Department of the Bank also presented various courses to improve the basic economic literacy of the non-economic staff of the Bank with courses such as "Inflation and how to constrain it", "Wealth creation" and "Justice for all". The Reserve Bank is prepared to share its experiences in this regard with other central banks in the region.

A further area of inter-central bank co-operation at this juncture that will contribute to the laying of the foundation for future more ambitious schemes of economic integration, could be the exchange of basic economic data and information. Governor Hermans has in the past raised the need for some form of a joint data

*South Africa plus Lesotho, Namibia and Swaziland.

base, easily accessible for all central bankers in the region, and providing a comprehensive library of information that will be of use for all of those responsible for the implementation of monetary policy in their countries. Modern communication systems, such as the world-wide Internet System, make this ideal of the past an easier reality for the future.

This is not an exhaustive list of all the items for possible action on the agenda for closer financial co-operation at the central bank level in the Southern Africa Development Community. This is also by no means intended to be a finite strategy or declaration of intent for financial co-operation in Southern Africa. There are obviously more ambitious and more grandiose objectives behind the drive for closer economic co-operation in the region. We must, however, begin somewhere and a discussion on the existing functions, practices and policies of central banks provide to my mind a better "somewhere" to depart from than most of the theoretical, textbook models of regional integration or common market approaches that may, within the harsh realities of Africa, remain just objectives and ideals for many years to come.

4. Concluding remarks

Governments have now paved the way for closer economic co-operation amongst the eleven member countries of the Southern Africa Development Community. Initiatives are on the way for more formalised co-operation arrangements covering trade and labour relations, whilst South Africa is working on a draft Financial Protocol to cover financial and investment arrangements.

The central banks of the region will obviously have to play a very important part in the future development of SADC. Indeed, the success of financial co-operation will to an important extent be determined by the ability of the central banks to guide their national financial structures towards some convergence in a harmonised regional framework that could eventually lead to a more integrated system.

A number of common responsibilities of central banks in the region can be identified for inclusion in an advance programme intended to prepare the countries for closer financial co-operation. Some of these activities were mentioned in this address. Other central banks will surely be able to add some more. To facilitate this discussion, a formal Committee of Governors of the central banks of the members of the Southern Africa Development Community should now be established to serve as a forum for a continuing process of co-ordination of the actions needed to lead the countries of Southern Africa towards closer financial co-operation. I hope this Committee will be established soon to further develop the existing ties between the financial sectors of South Africa and Botswana, and between our two countries and all the other members of the Southern Africa Development Community.

Inventory investment in South Africa

by H. Smith and J.P. van den Heever

Introduction

Inventory investment makes a significant contribution to short-run changes in gross domestic product. In South Africa relatively little research has gone into a better understanding of inventory changes and their influence on aggregate output and expenditure. The objective of this article is to explore and explain a number of prominent changes in inventory investment in South Africa since the beginning of the 1960s.

Firstly, the role and measurement of inventory investment in the national accounts are described. Secondly, the motives for the holding of inventories are discussed. Then the structural changes that took place in inventory investment in South Africa are analysed, before the relationship between inventory changes and business cycle movements is examined. The article concludes with the specification and estimation of an econometric model of inventory investment.

Inventories in the national accounts

Participants in the processes of production and expenditure can be divided into four sectors, namely business enterprises, general government, households, and non-residents. The basic processes or forms of economic activity are production, consumption, capital formation and transactions with the rest of the world. The transactions relating to each of these processes for the respective sectors are recorded in the different sub-accounts of the national accounts.

Capital formation, or gross domestic investment, represents an increase or decrease in inventories and gross additions to fixed assets. The *change* in inventories and not their *book value* is recorded in the

national accounts. Gross domestic product is the value of all final goods and services that are produced during a certain period, e.g. a year, within the boundaries of a country. Existing inventories at the beginning of the period are thus excluded, because they were produced in previous periods. Only the additions to and withdrawals from inventories, in other words the change in inventories during a specific period, form part of the gross domestic product of that period. Inventories consist of raw materials, work in progress and finished products.

Table 1 shows the gross domestic product and expenditure account, in other words the consolidated production account of the economy as a whole. The sum of the expenditure items on the right-hand side of Table 1 is, by definition, equal to the gross domestic product on the left-hand side. The gross domestic product and the different expenditure items are estimated from many different sources of information of which the accuracy and reliability may differ significantly. Because of measurement errors, it is unlikely that the estimate of total production will be exactly equal to the estimate of total expenditure. The difference between these estimates is designated as a residual item and included in the right-hand side of the account. This residual, or balancing item, is seen as part of gross domestic expenditure because the estimated domestic expenditure totals are deemed to be subject to a higher degree of error than the estimates of the gross domestic product and the transactions with the rest of the world.

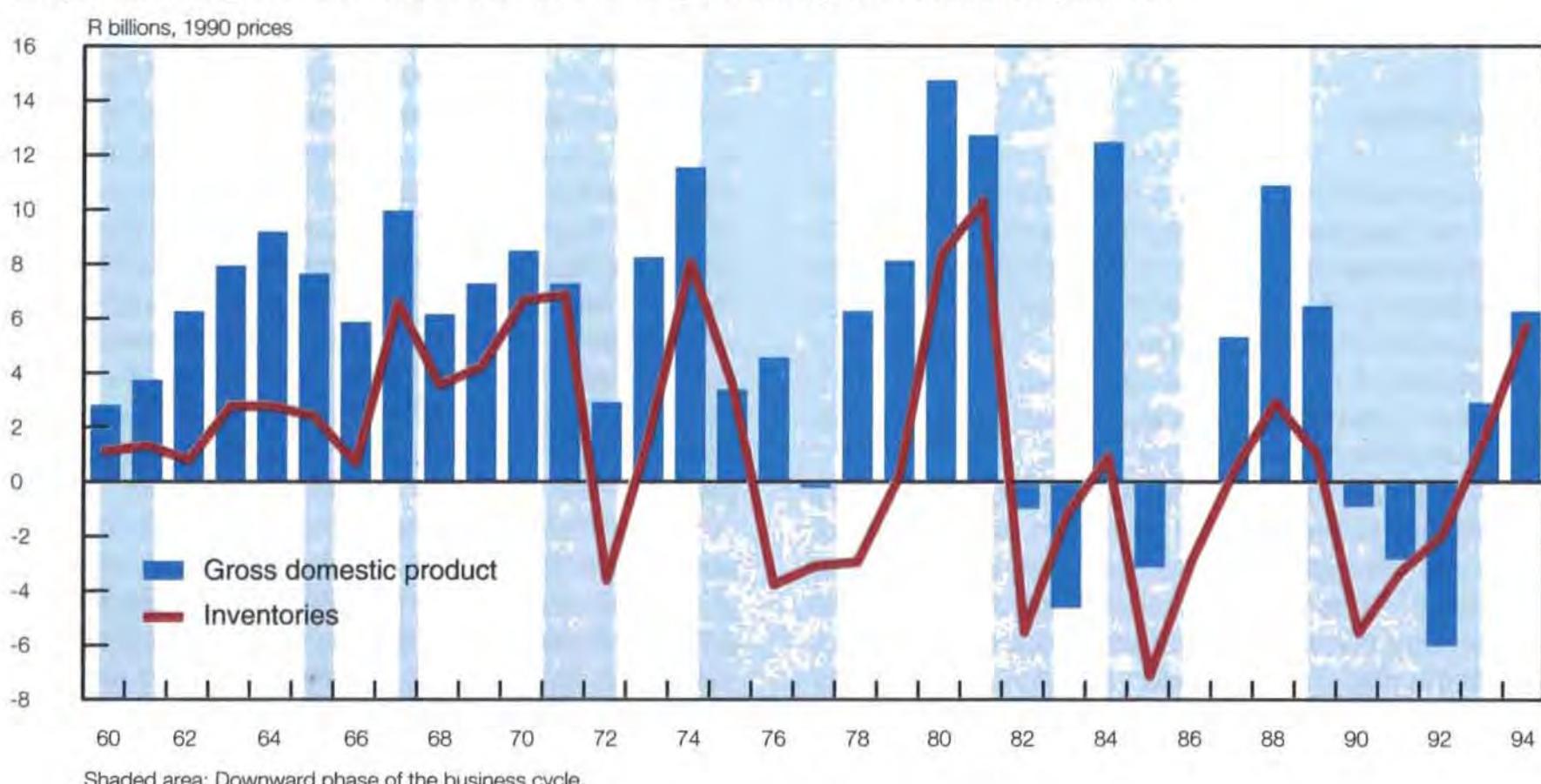
Inventory investment, together with private consumption expenditure, consumption expenditure by the general government and gross domestic fixed investment, forms part of total gross domestic expenditure. Inventory investment therefore contributes,

Table 1. Gross domestic product and expenditure, 1994

R millions

Net domestic product at factor cost (factor income).....	323 024	Private consumption expenditure.....	256 320
Provision for depreciation	59 537	Government consumption expenditure.....	91 349
Indirect taxes.....	57 736	Gross domestic fixed investment	68 101
<i>less:</i> Subsidies.....	7 544	Change in inventories	10 209
		Residual item.....	-1 493
		Gross domestic expenditure.....	424 486
		Exports of goods and non-factor services	102 682
		<i>less:</i> Imports of goods and non-factor services	94 415
Gross domestic product at market prices	432 753	Expenditure on gross domestic product	432 753

Graph 1: Change in real inventories and change in real gross domestic product



at least in an *ex post*-sense, to the size of the gross domestic product through its direct influence on aggregate demand (see Graph 1).

The change in inventories is also reflected in the consolidated capital finance account for the economy as a whole (see Table 2). It forms part of gross domestic investment on the left-hand side of the account. The right-hand side of the account shows the internal and external financing sources which, lumped together, form the gross saving available to the economy. Inventory

investment therefore has a direct influence on the appropriation of investable funds in the economy.

While production and sales are economic processes that adjust continuously depending on supply and demand conditions, they are seldom exactly equal to each other in a specific period. The difference between supply and demand is reflected in a change in inventories. An increase in the level of inventories implies that part of production was not sold. Conversely, when inventory levels decrease, sales exceed production.

Table 2. Gross domestic investment and financing, 1994

R millions

Gross domestic fixed investment	68 101	Net saving	
Change in inventories.....	10 209	Personal saving	9 717
		Corporate saving	24 957
		Government saving	-17 990
		Depreciation	59 537
		Gross domestic saving	76 221
		Net capital inflow from the rest of the world	5 209
		Change in gold and other foreign reserves ¹	-3 120
Gross domestic investment	78 310	Financing of gross domestic investment	78 310

1. Increase -, decrease +.

Changes in inventories can be planned or unplanned. In Keynesian models, unplanned inventory investment often plays a central role in explaining economic expansions and contractions. Empirically, however, the planned and unplanned components of inventory investment are not measured separately.

For national accounts purposes, the change in inventories during a given period should be calculated as the physical change in inventories valued at market prices prevailing during that period. The standard period of accounting in South Africa is a calendar quarter. To obtain the closest feasible approximation of the desired estimate for national accounts purposes, the difference between the physical levels of inventories at the beginning and at the end of a quarter is valued at the price ruling in the quarter. Reported values of inventories at the beginning and end of a quarter, i.e. the current book values of inventories, are revalued to reflect constant price levels. The difference between the revalued inventories at the end and the beginning of the quarter measures the physical change in inventories over the quarter. This physical change in inventories for a quarter is revalued at an average price that prevailed in the quarter. The difference between the revalued physical changes in inventories and the changes in the current book values represents the inventory valuation adjustment, i.e. the change in the value of inventories because of price changes.

As illustrated in Table 3, inventory changes can be calculated from quantity or book value data. Where the

actual physical quantities of inventories held by a business enterprise or a sector at the end of each quarter are known, the estimation of inventory investment is straightforward. The change in physical quantity during a quarter is multiplied by the average price of the product concerned for that quarter. This method of calculation is in fact used for livestock and gold inventories.

More often, however, only end-of-quarter book values of inventories are available. Book values may change because of changes in quantities or because of the changes in the prices at which inventories are valued. To obtain the national accounts concept of inventory investment, the change in book values due to price changes should be separated from the total change. To do so, book values are deflated by an appropriate component of the production price index. In this way book values at constant prices are obtained from which the change at constant prices is calculated, i.e. the change in the quantity of inventories. By multiplying the change in quantity with the average price index level for the particular quarter, inventory investment at current prices is obtained.

Quarterly estimates of the book values of inventories at current prices are compiled from information obtained from various sources, such as directly from the Department of Agriculture, from statistical releases and censuses of the Central Statistical Service, and from surveys undertaken by the Reserve Bank for this purpose where information is collected from public corporations, business enterprises of general government and some private business enterprises.

Table 3. The calculation of inventory investment

(a) From quantity data			
Quantity at end of period 0			20 units
Quantity at end of period 1			35 units
Change in quantity.....			15 units
Average price per unit.....			R1 000
Inventory investment.....			R15 000
(b) From book value data			
	Current price book value	Price index (period 0 prices)	Constant price book value
(i) Value at end of period 0	R4 000	100	R4 000
(ii) Value at end of period 1	R5 500	110	R5 000
(iii) Change in book value.....	R1 500		R1 000
Inventory valuation adjustment:			
(iv) Change in constant price book value (real inventory investment).....		R1 000	
(v) Average price index during period 1		105	
(vi) Inventory investment at current prices ((iv) multiplied by (v)).....		R1 050	
(vii) Inventory valuation adjustment (current price (iii) less (vi))		R450	

A definite pattern of seasonality is discernible in the quarterly estimates of inventory investment. For purposes of inter-quarter comparisons it is necessary to identify those inventory changes that can be attributed to purely seasonal variation. The well-known X-11 Variant of the Census Method II Seasonal Adjustment Programme is used to compute patterns of seasonality in the book value of inventories and the seasonally adjusted book values are then applied to calculate seasonally adjusted inventory changes. In the trade sector of private business enterprises, wholesale, retail, motor trade and agricultural stocks-in-trade are adjusted separately for seasonality. Because of the large seasonal variation in agricultural production, maize inventories are treated as a separate category. The influence of early and late maize crops is taken care of by calculating separate seasonal indices for late and early crops. An early crop is defined as one where 60 per cent of the crop is harvested before 30 June.

Motives for holding inventories

Three motives for holding inventories can be identified:

- Firstly, a so-called *transactions motive* arises to hold inventories when businesses cannot synchronise the receipts of raw materials and components, the processing of the materials and the sale of the finished goods. There are also scale advantages if production, storage, transport and transactions are conducted on a large scale.
- Secondly, a *production smoothing* or buffer-stock motive arises where inventories are held in order to allow for changes in the demand for products. Production can then be carried on relatively smoothly, despite changes in demand. The smooth flow of the production of goods reduces the unit costs of production. Inventories can also be held to provide for any changes in the supply of raw materials, components or finished goods. Inventories decrease the risk of loss of income because of the inability to meet demand. This motive suggests that the inventories of finished goods serve primarily to smooth production levels when sales are variable and the marginal cost of production is rising. A steeply rising marginal cost curve provides a strong motive to smooth production, while high storage costs act as disincentive to such behaviour.
- Thirdly, a *speculation motive* to hold inventories originates from expected price and cost changes. More inventories will be accumulated if a price rise is expected. The speculation motive is usually supported by the gathering and analysis of information.

Various models of inventory behaviour have been developed on the basis of these motives. An important development has been to allow for a target of a specific inventory-to-sales ratio. This procedure is followed because it is expensive for businesses if inventories deviate from the desired ratio to actual or expected sales.

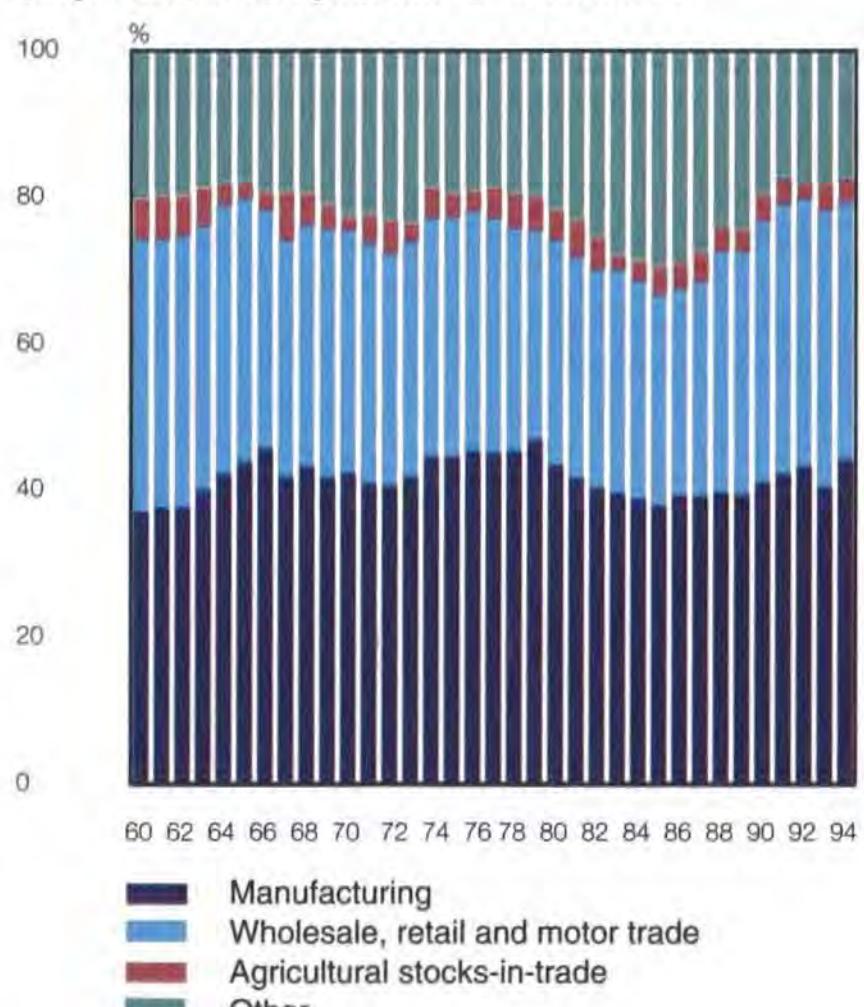
When a business is attempting to maintain a desired inventory-to-sales ratio, an unanticipated change in sales will inevitably lead to a change in inventories to re-adjust to the desired inventories-to-sales ratio. The accelerator principle may also be at work – the change in sales may lead to a bigger change in production as the business attempts to re-adjust its inventories to the desired inventories-to-sales ratio. Cost shocks can also be introduced into the model to allow for an inventory build-up to occur when production costs are relatively low. Conversely, inventories will be run down when production costs are high. Rather than smoothing the level of production, businesses according to this line of thought smooth the costs of production. It can be argued that cost shocks play at least as important a role as demand shocks in determining the behaviour of inventory investment if production costs are variable.

Structural changes in inventory investment

Changing economic conditions and technological developments have led to structural changes in inventory investment in South Africa. These structural changes in inventory investment are analysed by examining the composition of inventories, the ratio of the level of inventories to gross domestic product and the inventory-to-sales ratio.

An analysis of the composition of total real inventories by type of economic activity shows no major changes in

Graph 2: The composition of inventories



the long run (see Graph 2). It is also clear that industrial and commercial inventories (i.e. inventories in the sectors manufacturing and wholesale, retail and motor trade) form the major part of total inventories. The ratio of manufacturing inventories as a percentage of total inventories remained broadly unchanged during the period 1960 to 1980, and since 1980 has declined only moderately. On the other hand, the ratio of wholesale, retail and motor-trade inventories declined somewhat from 1960 to the middle of the 1980s and increased again from about 1986. The increased importance of other inventories in the periods 1966 to 1975 and 1980 to 1985 can be ascribed to increases in strategic inventories and diamond stocks-in-trade. The graph clearly shows that the ratio of agricultural stocks-in-trade to total inventories is very small and that it did not change much over time. The low level of these inventories can, *inter alia*, be ascribed to the fact that a surplus of agricultural stocks-in-trade is exported, while shortages are usually made good through imports.

The level of industrial and commercial inventories as a percentage of the non-agricultural gross domestic product for the period from the first quarter of 1960 to the second quarter of 1995 is shown in Graph 3. Two periods can clearly be distinguished in this graph, namely 1960 to 1975 and 1976 onwards. The main feature of the first period is a relatively stable average ratio of industrial and commercial inventories to non-agricultural gross domestic product of about 30 per cent. A high point of 35 per cent was reached in the

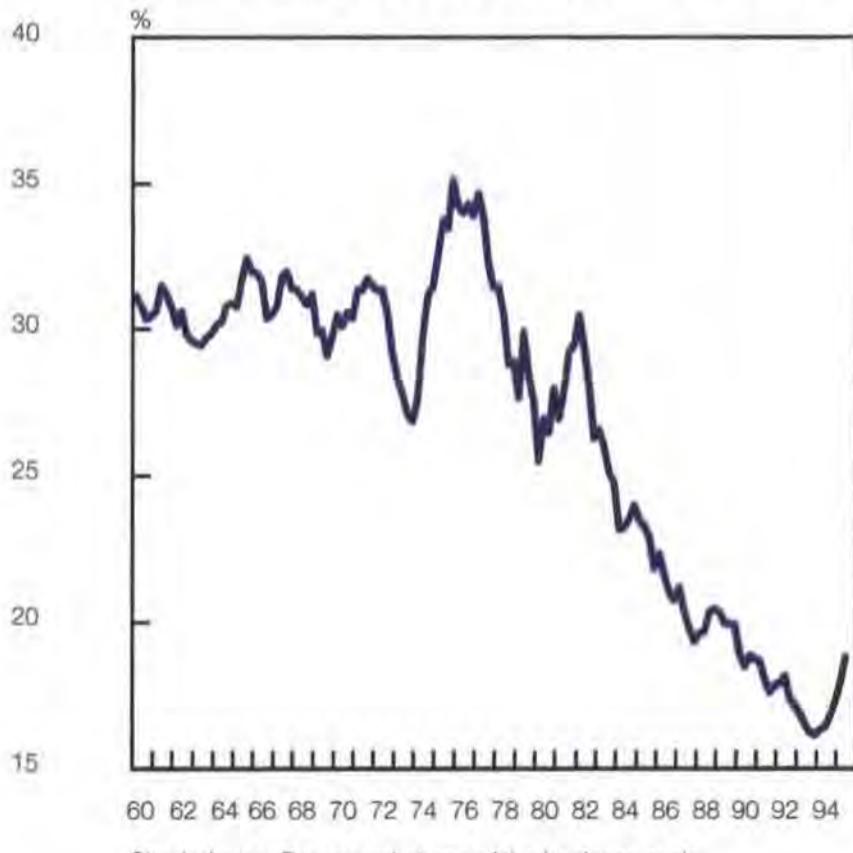
fourth quarter of 1975. From 1976 onwards this ratio showed a steadily declining long-term tendency. A historical low of 16 per cent was recorded in the fourth quarter of 1993.

Graph 4 shows the industrial and commercial inventory-to-sales ratio for the period from the first quarter of 1966 to the second quarter of 1995. This ratio was calculated by dividing the average inventory level per quarter by the average monthly sales per quarter, obtaining the average number of months it would take to sell off all inventories. From Graph 4 it can be seen that this ratio has displayed a persistently declining long-term trend since the second half of the 1970s. During the period 1966 to 1975 the average ratio was about 2½ months. From 1975 the ratio declined steadily to an average of 2 months in 1980 and 1½ months in 1990. It then fluctuated around the last-mentioned level in the first half of the 1990s.

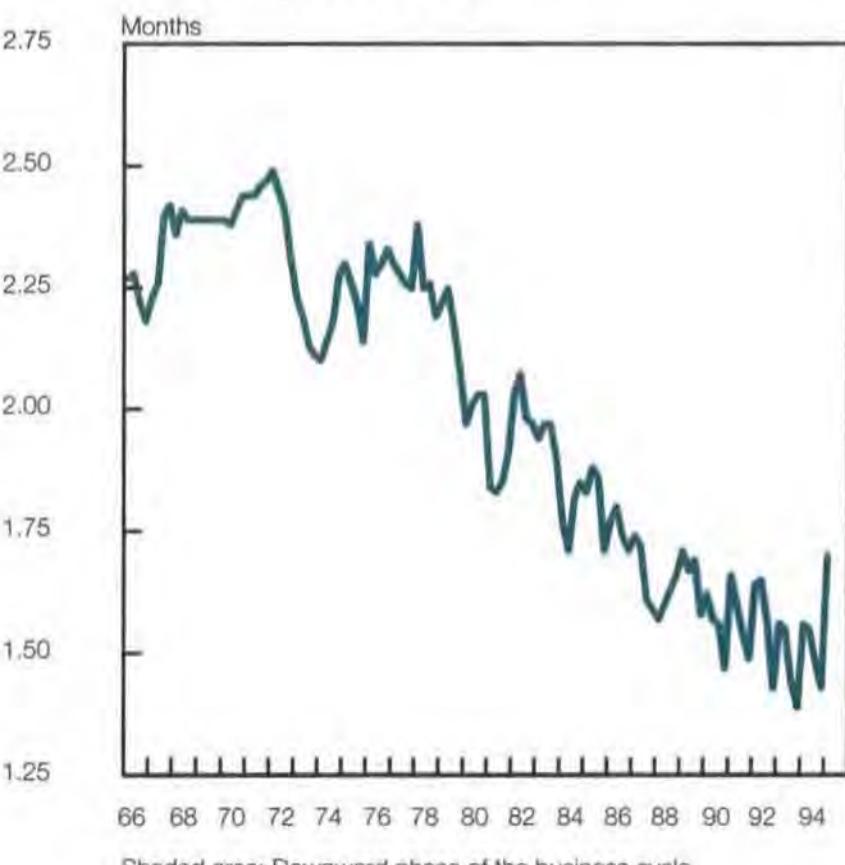
In Graph 5 the inventory-to-sales ratios of manufacturing, wholesale and retail trade are shown. From this graph it is apparent that the inventory-to-sales ratio of manufacturing has declined sharply since 1981. The sharp drop in the ratio in manufacturing in 1981 was probably caused by the simultaneous occurrence of a depreciation of the rand, an increase in interest rates and higher inflation, that caused a decrease in inventories. Declines in the corresponding ratios in the wholesale and retail trade were not as pronounced as that in manufacturing.

From this analysis it is apparent that a significant structural change occurred in inventory investment in

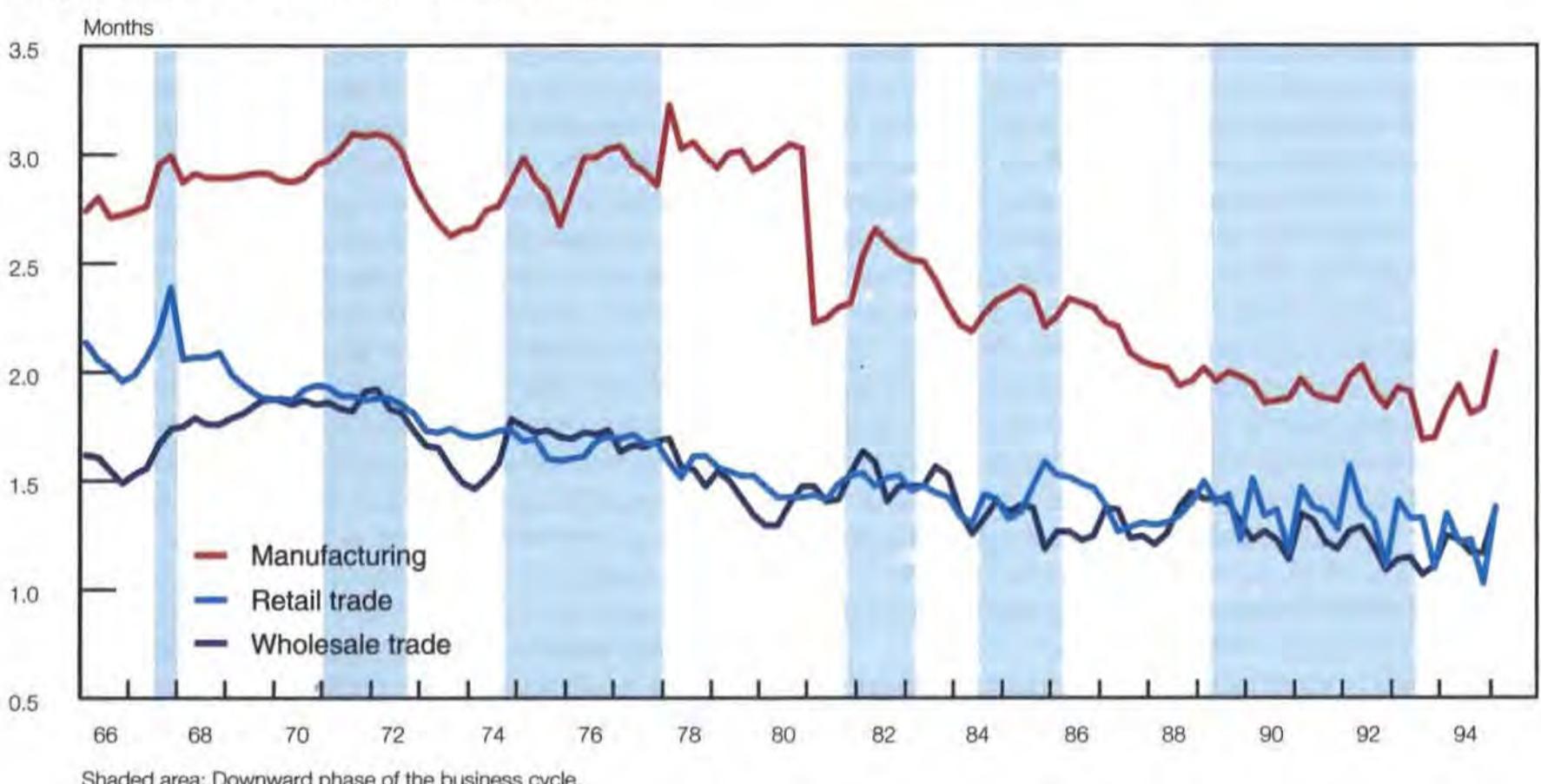
Graph 3: The ratio of industrial and commercial inventories to gross domestic product



Graph 4: The ratio of industrial and commercial inventories to sales



Graph 5: The ratio of inventories to sales



South Africa from the middle of the 1970s, and that additions to inventories rarely matched increases in aggregate output.

The following reasons for the declining trend in the inventory ratios, as shown in Graphs 3, 4 and 5, can be cited:

- Deteriorating economic growth and an increasingly competitive business environment, necessitating attempts to curtail the costs of holding inventories.
- More effective inventory management techniques made possible by, *inter alia*, advanced computer technology.
- More reliable delivery and transport systems, making it possible to economise on inventory holdings throughout the production and distribution network.
- The shifting of some inventory holdings to informal sector vendors, where it is no longer measured as inventories but as private consumption expenditure.
- Higher interest rates, which caused a rise in the cost of holding inventories. The cost of holding inventories was also affected by the depreciation in the external value of the rand because inventory investment in South Africa has a high import component.

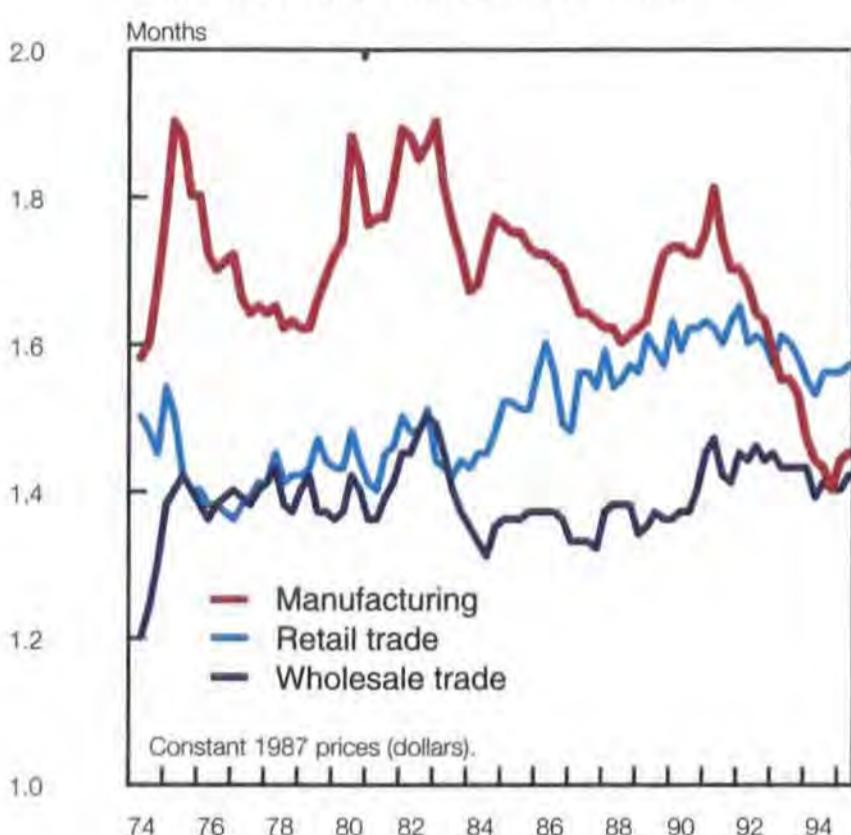
- The growing importance of the financial and general government services sectors in the total gross domestic product and the relatively small inventory holdings of these sectors strengthened the downward drift in the ratio of inventories to gross domestic product.

Inventory developments in other countries broadly followed a pattern similar to that recorded in South Africa. The inventory-to-sales ratios in the major sectors of the economy of the United States of America have fallen since 1982 – modestly for the economy as a whole but more sharply in manufacturing. By contrast, the inventory-to-sales ratio of the wholesale sector remained on more or less the same level, while retail inventories moved slightly upwards, but not enough to offset the decline in the ratio of the manufacturing sector.

During much of the 1960s and 1970s the ratio of inventories to output in the United Kingdom was fairly constant because inventory levels were raised in support of the growing volume of output and demand. During the 1980s, however, there was a strong and uninterrupted decline in the inventories-to-output ratio. This initially reflected a large fall in the level of inventories, but when inventory levels stabilised in 1983 growing output volumes made the major contribution to the declining trend.

Inventory-to-sales ratios in Australia displayed the same trend as that of the United States, viz. a more or less stable ratio for the 1960s and 1970s and a declining trend during the 1980s. A marked decline is particularly

Graph 6: The ratio of inventories to sales in the United States of America



evident in the inventory-to-sales ratio of the manufacturing sector in Australia, while the ratio of the retail sector declined only slightly.

This international comparison confirms that the structural changes in South Africa formed part of similar changes that took place in the rest of the world. The reasons given for the structural changes in the different countries are also broadly similar to those put forward for the declining ratio in South Africa.

Inventory investment and the business cycle

International studies of inventory behaviour over time seem to be in agreement on the importance of inventory investment in the description and explanation of post-war business cycles in industrialised countries. In Table 4 the average contributions of the major expenditure components to the growth in gross domestic product in South Africa are compared over the course of the business cycle. The contribution of each expenditure component to the growth in gross domestic product over the business cycle was obtained by first calculating the change in the constant-price values of that expenditure component over the relevant period. This change was then divided by the accumulated change in gross domestic product over the same period and multiplied by the percentage change of the gross domestic product over that period.

From this table it is apparent that the average contribution of inventory investment during the downswing phases of the business cycle was -3,5 per cent. This negative contribution of inventory investment to the growth in gross domestic product together with that of fixed investment exceeded the positive contributions by the other final demand components. For the upswing phases the average contribution of inventory investment to the growth in gross domestic product was 4,1 per cent, which compared well with those of the other aggregates. If the contribution of investment in industrial and commercial inventories (-2,3 per cent in downswings and 2,6 per cent in upswings) is excluded, the investment in other inventories made a relatively small contribution to changes in gross domestic product (-1,2 per cent in downswings and 1,5 per cent in upswings). The average contribution of inventory investment over the full business cycle was only 0,3 per cent. This means that the negative contribution over the

Table 4. The average contribution of major components of expenditure on gross domestic product to the growth in gross domestic product over the business cycle from 1960 to 1995¹

Percentages

Average during:	Private consumption expenditure	Consumption expenditure by general government	Gross domestic fixed investment	Final demand	Inventory investment				Other	
					Total	Industrial and commercial		Total		
						Manufacturing	Wholesale, retail and motor trade			
Downswings.....	1,0	1,2	-0,6	1,6	-3,5	-1,5	-0,8	-2,3	-1,2	
Upswings	7,2	2,0	3,9	13,1	4,1	1,6	1,0	2,6	1,5	
Full cycles.....	7,1	2,9	2,6	12,6	0,3	0,3	0,2	0,5	-0,2	

1. The upswing from June 1993 is not yet complete.

downtswing phases and the positive contribution over the upswing phases almost cancelled out over the full business cycle.

The conclusion can therefore be made that inventory investment strengthens the upswing and the downswing phases of the business cycle. The analysis also shows that industrial and commercial inventories are the most important component of inventory investment and that it dominates the long-term movement in inventory investment. If the amplitude of the inventory cycle can be dampedened, the variance of the business cycle will accordingly also be smaller.

The changes in real industrial and commercial inventories are depicted in Graph 7 together with the business cycle. In general, the inventory cycle and the business cycle are positively correlated. The inventory cycle rises during the upswing phases and decreases during the downswing phases of the business cycle. A more systematic measurement of the timing of turning-points and the correspondence between the inventory cycle for industrial and commercial inventory investment and the business cycle showed that *on average*, the turning-points of the industrial and commercial inventory investment cycle coincided with the business cycle and the lengths of the two cycles were about the same. However, the turning-points of the inventory cycle and the business cycle did not correspond consistently. The inventory cycle led at four peaks and four troughs and lagged at three peaks and three troughs, while it coincided at one peak and one trough. The differences

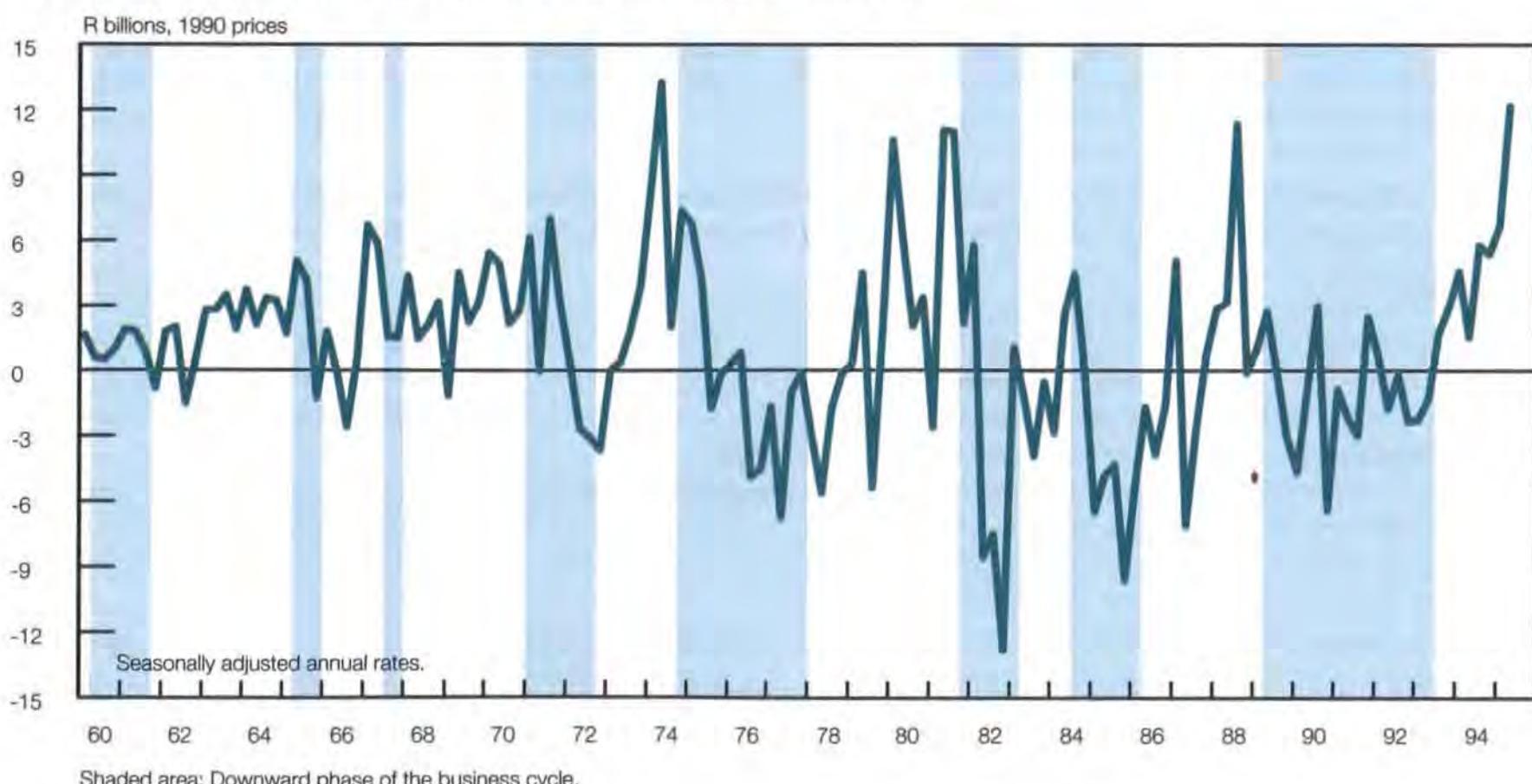
in timing could be attributed to the various lengths of the cycles and the unique circumstances shaping each inventory and business cycle.

Table 5 presents a summary of the timing of turning-points in different measures of the inventory cycle and the correspondence of these cycles with the business cycle. The *level* of inventories lagged behind the business cycle, while inventory *investment* tended to coincide with it. Inventory investment appears to have led the level of inventories by about two to four quarters.

A simple example illustrates why the turning-points of inventory investment lead the turning-points of the level of inventories (see Graph 8). If inventory investment is denoted as ΔN and the level of inventories as N , then $N_t = N_{t-1} + \Delta N$. If ΔN is positive, N rises. If ΔN reaches a maximum positive value and then recedes to a lower but still positive value, ΔN has moved past its upper turning-point. N , however, continues to rise. Only once ΔN has receded to a negative value, will N start to decline, moving past its upper turning-point.

From Table 5 it is clear that the lengths of the cycles of the different inventory series are almost the same and that it is also about the same length as the business cycle. A general conclusion is that the level of real inventories and inventory investment of the different sectors conform positively with the business cycle. On average, total inventory investment lagged the business cycle by one quarter at the peak and coincided at the trough. Industrial and commercial inventory investment coincided with the business cycle at the peak and the

Graph 7: Real industrial and commercial inventory investment



Graph 8: The relationship between inventory investment and the level of inventories



trough. It is apparent that inventory investment did not initiate the upswing. In the beginning of the upswing

phase businesses drew down existing inventories. Only when the surplus inventories were exhausted, an accelerated accumulation of inventories that strengthens the upswing phase took place. Because of its consistent performance as a lagging indicator, the level of industrial and commercial inventories is incorporated in the composite lagging business cycle indicator of the Reserve Bank.

Econometric modelling of inventory investment

Macro-econometric models usually endogenise the main components of final demand and inventory investment in order to analyse systematically the many complex interrelationships in an economy. Economists' understanding of how the economy works is thus assisted by an equation or set of equations summarising the determinants of inventory investment. The construction of a useful quarterly econometric model of inventory investment is quite taxing, given the considerable volatility displayed by this component of aggregate demand. For this reason, the variables used were restricted to those for which time-series data are readily available, in order to enable other researchers to replicate the model and to elaborate on the results obtained here.

The construction of an empirical model in which *total* inventory investment is explained as a single function of a number of macro-economic variables, was frustrated by the strong fluctuations in certain types of inventories that cannot readily be modelled. For example, changes in strategic inventories and inventories of agricultural

Table 5. The average timing and conformity of inventories and the business cycle, 1960-1993

	Timing ¹ (quarters)		Length of inventory cycle (quarters)			Number of quarters by which inventory cycle is longer than the business cycle		
	Peak	Trough	Peak	Trough	Full cycle	Peak	Trough	Full cycle
The level of total real inventories.....	3	4	8	9	17	-1	1	0
The level of real industrial and commercial inventories	4	4	9	8	17	0	0	0
The level of other real inventories	4	5	8	8	16	-1	0	-1
Total real inventory investment.....	1	0	9	6	15	0	-2	-2
Real inventory investment in manufacturing.....	0	0	9	8	17	0	0	0
Real inventory investment in wholesale, retail and motor trade .	0	-1	9	7	16	0	-1	-1
Real industrial and commercial inventory investment.....	0	0	9	8	17	0	0	0
Other real inventory investment.....	1	0	9	6	15	0	-2	-2

1. Lead (-), lag (+) of inventories relative to the business cycle.

products are determined largely by national policy considerations and weather conditions. In a macro-economic modelling framework such changes in inventories are best treated as exogenous. The widest inventory concept which can be modelled meaningfully as a function of other macro-economic variables, is *industrial and commercial inventories*. In the subsequent description, the change in such inventories (at constant 1990 prices) is denoted by ΔI , and its level at the end of the quarter by I ; ΔI is the dependent variable in the key equation developed below.

Inventories are normally held to accommodate sales and to minimise the cost of production. Excessive inventories would imply undesired interest and other holding costs; insufficient inventories could result in sales being forfeited. As a first approximation, a certain desired inventories-to-sales ratio may be pre-supposed. If lagged actual sales, S_{t-1} , are equated with expected current sales and I_d represents the desired level of inventories, then

$$I_d = k^* \cdot S_{t-1}, \quad (1)$$

with k^* the desired equilibrium inventories-to-sales ratio.

The desired inventory-to-sales ratio is not constant in the long run. Given the decline in the observed ratio of inventory levels to sales, it seems reasonable to assume that technological advances and cost considerations are pointing to a steady decline in the desired ratio. In the short run, changes in the holding costs of inventories will inevitably exert some influence on the optimal level of inventories that businesses are prepared to carry. Obvious candidates for the explanation of short-run changes in the desired ratio are interest rates and the relative prices of the goods that are held in store. Higher interest rates are likely to reduce the desired ratio, as would higher relative prices of the goods held as stocks-in-trade. Given the high import content of South Africa's industrial and commercial inventories, the real exchange rate can be used as a first approximation for the relative prices of stocks-in-trade. Without imposing any prior restrictions on the functional relationship between k^* and the explanatory variables, the optimal ratio can therefore be written as:

$$k^* = k^*(t, \text{Prime}, \text{Rex}), \quad (2)$$

where t = time variable to capture the systematic long-run change of k^* ,
 Prime = interest rate, and
 Rex = real exchange rate.

The adjustment of the observed ratio to the desired inventory-to-sales ratio is not instantaneous and can be distributed over more than one calendar quarter. Since sales may vary unpredictably, it is also necessary to provide for unplanned inventory changes by introducing overshooting, undershooting and attempts to return to

equilibrium. Using Metzler's approach as a point of departure, the lagged value of the level of inventories was introduced as a further explanatory variable to capture the partial and gradual nature of the adjustment process. Unexpected short-run fluctuations in sales, the empirical equivalent of which can be approached in numerous ways, was also added as an explanatory variable.

By allowing the data to determine the final form of the behavioural equation and after extensive experimentation with numerous alternative specifications, the following equation was estimated as the best approximation of the inventory-accumulation process in the South African economy:

$$\begin{aligned} \Delta I_t &= 1632,74 + 0,277 S_{t-1} - 0,000477 \cdot t \cdot S_{t-1} \\ &\quad (1,46) \quad (4,91) \quad (-2,26) \\ &\quad -0,266 I_{t-2} - 0,196 (S_t - \frac{1}{4} \sum_{i=1}^4 S_{t-i}) \\ &\quad (-6,52) \quad (-4,67) \\ &\quad -28,29 \text{ Prime}_{t-1} - 42,43 \text{ Prime}_{t-2} \\ &\quad (-3,51) \quad (-3,51) \\ &\quad -42,43 \text{ Prime}_{t-3} - 28,29 \text{ Prime}_{t-4} \\ &\quad (-3,51) \quad (-3,51) \\ &\quad +9,05 \text{ Rex}_{t-1} + 13,58 \text{ Rex}_{t-2} \\ &\quad (3,96) \quad (3,96) \\ &\quad +13,58 \text{ Rex}_{t-3} + 9,05 \text{ Rex}_{t-4} \end{aligned} \quad (3)$$

$R^2 = 0,59$; \bar{R}^2 (adjusted for degrees of freedom) = 0,56

F-statistic = 21,82

DW = 1,76

Estimation period = 1971Q1 to 1995Q1.

Estimated by ordinary least squares; t-values in brackets immediately below the estimated coefficients.

The coefficients of lagged values of Prime and Rex were estimated by assuming that these coefficients follow a second-degree polynomial distribution with both endpoints restricted to zero.

The variables involved are listed below. Those marked with * are measured in millions of rand at constant 1990 prices, and are seasonally adjusted.

- ΔI = change in industrial and commercial inventories*,
- S = aggregate sales* (defined below),
- t = time variable, 1960Q1 = 1, 1960Q2 = 2, etc.,
- I = quarter-end level of industrial and commercial inventories*,
- Prime = quarterly average prime interest rate of the clearing banks, per cent per annum
- Rex = quarterly average real effective exchange rate of the rand, 1990 = 100 (rising values signifying an appreciating rand and declining values signifying a depreciating rand).

Aggregate sales encompass gross domestic expenditure, excluding government consumption expenditure (largely services), the services component of private consumption expenditure and industrial and commercial inventory investment, but including exports of manufactured goods:

$$S = GDE - G - Cserv - \Delta I + Xm \quad (4)$$

where the variables which have not been defined previously are:

GDE = gross domestic expenditure*,
 G = government consumption expenditure*,
 Cserv = private consumption expenditure on services*,
 and
 Xm = exports of manufactured goods*.

The first three terms on the right-hand side of the estimated equation describe the evolution over time of the long-term desired inventory-to-sales ratio. The negative coefficient of the product term ($t.S_{t-1}$) signals that the optimal inventory ratio declines over time. The linearity of the relationship allows for negative values of the optimal inventory ratio at high values of t . This could cause a problem if the forecast horizon is extended too far into the future, but appears to be a workable assumption when the model is employed over a relatively short forecasting interval. The I_{t-2} variable, with its negative sign, captures the partial adjustment process in which inventory levels that are low relative to the desired level, lead with a time lag to a deliberate rebuilding of inventory levels; the opposite applies if the observed inventory level is high relative to the desired level. The $(S_t - \frac{1}{4} \sum_{i=1}^4 S_{t-i})$ term allows for unexpectedly high levels of sales in the current quarter to be met from decreases in inventories. Unplanned short-run changes in inventories are captured in this way, also underlining the need for buffer-stocks of inventories. Expected sales equal $\frac{1}{4} \sum_{i=1}^4 S_{t-i}$; in other words, sales expectations are based on the average sales of the previous four quarters. This seems to be an over-simplification, but experimentation with more complex expectation formation schemes yielded poor results.

The negative coefficient of Prime indicates that high interest rates encourage economising on inventory levels. Whereas a number of previous studies could find little evidence that interest rates have an impact on inventory investment, the estimated coefficient of the interest rate term in this study is well-behaved and statistically significant. The positive sign attached to Rex indicates that when imported goods, and therefore inventories, become less expensive on account of an appreciating currency, inventories are likely to be accumulated. Both Prime and Rex take a number of quarters to exert their full effect.

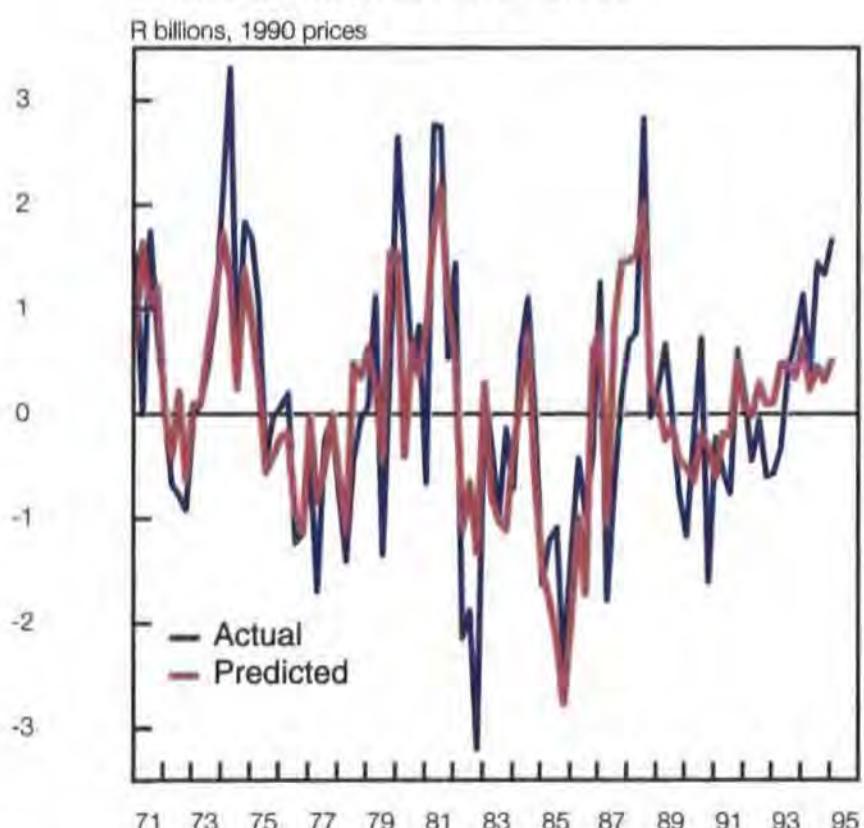
Testing and using the model

A first indication of the model's accuracy is provided by the goodness-of-fit statistics shown above. The signs and t-values of the various estimated coefficients are satisfactory and conform with *a priori* reasoning. The coefficient of determination, R^2 , seems reasonably high in the light of the high variance of inventory investment.

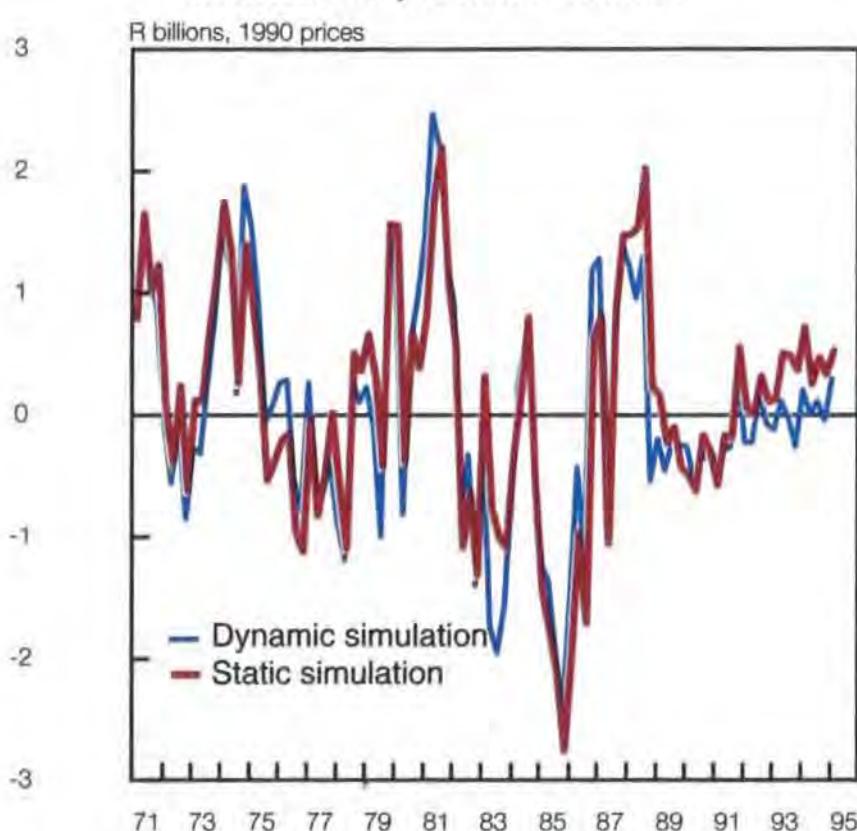
The outcome of an in-sample simulation exercise, obtained by inserting the actual values of all the explanatory variables into the equation and calculating predicted values for inventory investment, is depicted in Graph 9.

Graph 9 shows that observed inventory investment has been much higher than the values predicted by the model from the third quarter of 1994 to the first quarter of 1995. One possible explanation for this is that the more stable monetary policy environment, the withdrawal of sanctions and the more certain business outlook because of the more stable political situation in the country, fostered a willingness to hold more inventories than earlier patterns of behaviour would seem to indicate. Other possible explanations are that the long-term decline in the inventories-to-sales ratio has started to level out, that more inventories are held to contain the effects of expected labour action, or more generally that random forces in the economy produced a number of successive above-expected outcomes of inventory investment. Further investigation is required before this issue can be resolved conclusively.

Graph 9: The changes in industrial and commercial inventories: actual and predicted values



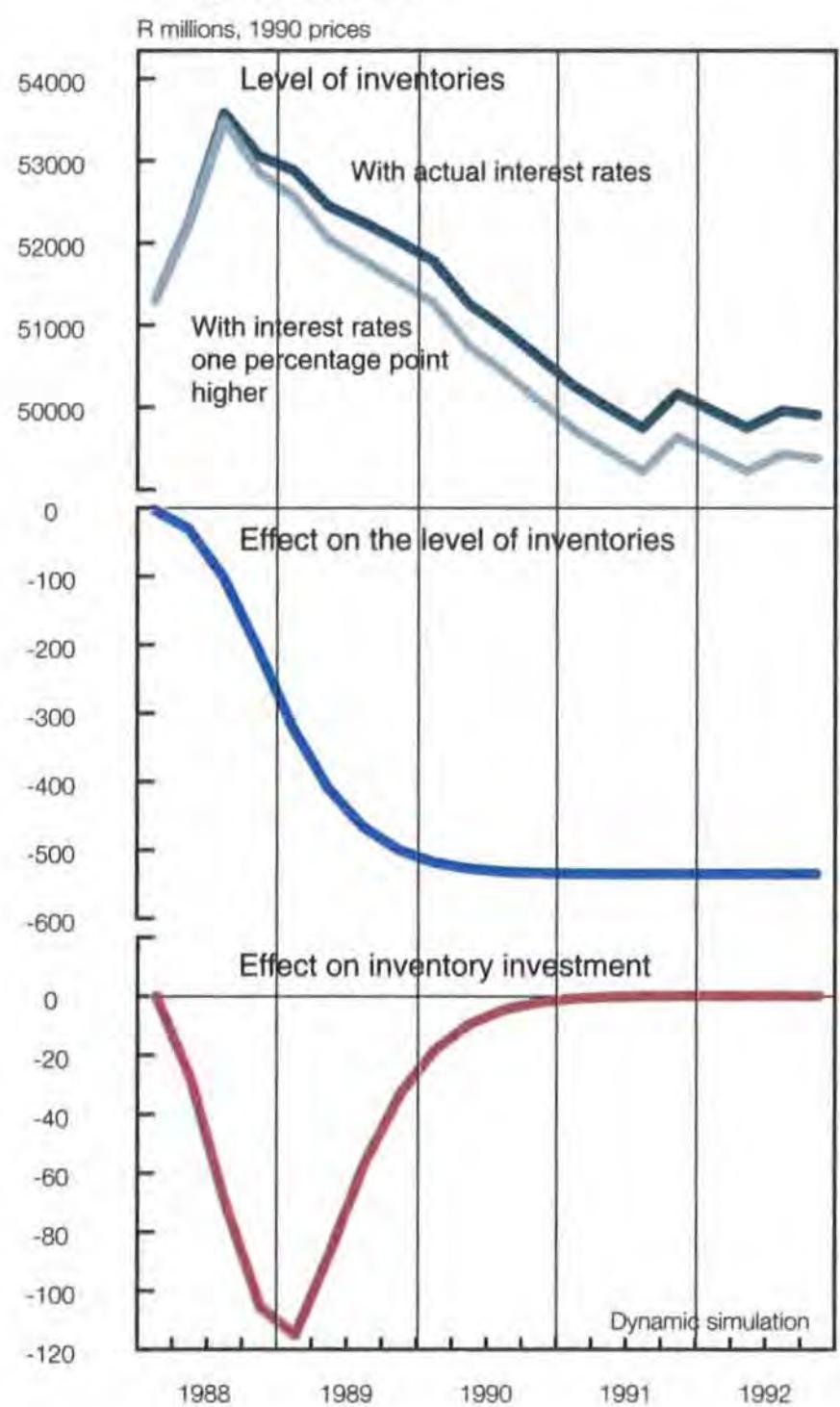
Graph 10: Changes in industrial and commercial inventories: predicted values



For the purpose of the in-sample simulation, the observed values of past levels of inventories were included as explanatory variables. A further simulation was then prepared by allowing the pre-determined values of the lagged level of inventories to be determined endogenously by the model. The simulated values of the change in inventories were used to calculate the cumulated level of inventories which then appear as an explanatory variable with a two-quarter lag. The results of this (dynamic) simulation are illustrated in Graph 10 along with the outcome of the previous in-sample (static) simulation.

Simulations can also be used to determine the response of inventory investment to changes in the variables exogenous to the model. As an example, the model was solved dynamically from the first quarter of 1971 to the fourth quarter of 1992, using the actual values of the exogenous variables and the endogenously determined values of the level of inventories. The procedure was repeated, but with the interest rate variable Prime increased by one percentage point from the first quarter of 1988 to the fourth quarter of 1992. The results are summarised in Graph 11. A permanent increase in interest rates reduces inventory *investment* for some 13 quarters, and reduces the *level* of inventories permanently. The strongest impact on inventory investment is recorded after four quarters have elapsed.

Graph 11: The effect on industrial and commercial inventories of a sustained increase of one percentage point in the prime overdraft rate



Summary

Through its direct influence on aggregate demand, inventory investment contributes to the size of gross domestic product. It also has a direct influence on the appropriation of investable funds in the economy. Inventories serve to breach the highly variable gap between aggregate supply and demand.

Economic conditions and changes in technology have brought about a structural decline in the level of inventories relative to the level of output. An international comparison of inventory ratios confirmed that structural changes in South Africa formed part of similar changes that took place in other countries. The reasons put

forward for the structural changes in the different countries are also broadly similar.

Inventory investment tends to coincide with the business cycle and does not initiate cyclical changes in the economy, while the level of inventories follows the business cycle with a time delay of about three to four quarters. Because of its consistency as a lagging aggregate behind overall economic activity, the level of industrial and commercial inventories forms part of the composite lagging business cycle indicator of the Reserve Bank.

An econometric investigation of quarterly changes in real industrial and commercial inventories has sales, unexpected changes in sales, the lagged level of inventories, interest rates and the real exchange rate as explanatory variables. The model performs reasonably well in ex post-forecasting. Of particular significance is that both interest rates and the exchange rate – variables well within the sphere of monetary policy – are shown to have a significant effect on inventory investment.

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Kwartaallikse ekonomiese oorsig

Inleiding

Swak weerstoestande en die laer produksie van goud was vir 'n verdere verlangsaming van die ekonomiese groei in die tweede kwartaal van 1995 verantwoordelik. Die stadiger groei in binnelandse produksie in die eerste ses maande van 1995 het egter na 'n tydperk van lewendige en toenemende groei plaasgevind. Die vlak van die ekonomiese bedrywigheid was gevoldlik betreklik hoog, soos weerspieël word in die koers van die benutting van die produksievermoë in die fabriekswese wat net effens laer was as by die hoogtepunt in die konjunkturele opwaartse fase van 1986-89.

Ofskoon die daling in die produksie van die landbou en die goudmyne 'n ongunstige uitwerking op die ekonomie gehad het, het die bedrywigheid in die nie-primêre sektore sterk bly uitbrei. Die groei in die reële toegevoegde waarde van die sekondêre en tersiêre sektore teen 'n jaarkoers het trouens van 3½ persent in die eerste kwartaal van 1995 tot 4½ persent in die tweede kwartaal versnel. Hierdie kragtiger ekonomiese groei het taamlik algemeen voorgekom, maar was veral opmerklik in die fabriekswese, handel, vervoer en kommunikasie en finansiële dienste.

Die hoër vlak van die bedrywigheid in die nie-primêre sektore het gepaardgegaan met 'n versnelling in die groei van die reële bruto binnelandse besteding. Die skerp toename in die binnelandse besteding was die gevolg van verdere toenames in voorrade, bruto binnelandse vaste investering en private verbruiksbesteding, terwyl die verbruiksbesteding van die algemene owerheid op die laer vlak gebly het wat in die eerste kwartaal van 1995 bereik is. Die investering in voorrade wat deur die loop van die huidige konjunkturele opwaartse fase toegeneem het, het in die eerste helfte van 1995 aansienlike stukrag verkry, moontlik as 'n weerspieëling van die sakevertroue in die voortsetting van die ekonomiese herstelfase. Die uitbreiding van investeringsbedrywigheid in die private sektor bevestig ook skynbaar dat produksievermoë tot stand gebring word in afwagting van verdere sterk toenames in die totale vraag.

'n Letwat sterker groei in die reële persoonlike beskikbare inkome in die tweede kwartaal van 1995, wat toegeskryf kon word aan 'n toename in dividendontvangste, 'n groei in werkverskaffing sedert die middel van 1994 en 'n verbetering in die reële loon per werker, het die verdere sterk groei in die verbruikersvraag onderskraag. Die grootste deel van die hoër uitgawes van huishoudings aan toestelle, vervoertoerusting, klerasie en skoeisel en ander duursame en nie-duursame goedere is egter deur middel van verbruikerskrediet gefinansier. Huishoudings het heelwat gebruik gemaak

van die regstreekse kredietgeriewe van kleinhandelaars, verbandvoorskotte, afbetalingsverkoopkrediet en oortrokke bankrekeninge om hierdie aankope te finansier. Ekonomiese uitbreiding wat in 'n belangrike mate berus op 'n hoër verbruikersvraag wat deur middel van toenames in die skuldverpligtinge van huishoudings gefinansier word, is nie 'n gesonde grondslag vir voortgesette ekonomiese ontwikkeling nie.

Vanweë die hoë grensinvoergeneigdheid van die Suid-Afrikaanse ekonomie, die beperkte oorskotproduksievermoë in talle ekonomiese sektore en die styging in kapitaalvorming, het die invoer in die tweede kwartaal van 1995 steeds gereageer op die styging in die totale binnelandse vraag. Tegelykertyd het die fisiese omvang en die waarde van die netto gouduitvoer verder afgeneem en het 'n swakker uitvoerprestasie tot 'n afname in die goedere-uitvoer aanleiding gegee. Hoewel hierdie ontwikkelings deels teengewerk is deur die laer netto betalings aan nie-inwoners vir dienste en oordragte, het die tekort op die lopende rekening van die betalingsbalans in die tweede kwartaal van 1995 skerp toegeneem tot 'n verhouding van ongeveer 2½ persent van die bruto binnelandse produk.

Hierdie ontwikkelings wys duidelik daarop dat die tradisionele betalingsbalansbeperking op ekonomiese groei in Suid-Afrika nog nie uit die weg geruim is nie. Met 'n betreklik beskeie ekonomiese groeikoers wat in die huidige ekonomiese herstelfase gemiddeld sowat 3 persent per jaar beloop het, is die oorskot op die lopende rekening van die betalingsbalans vinnig in 'n groot negatiewe saldo omskep. Die struktuur van die Suid-Afrikaanse ekonomie gee derhalwe nog steeds aanleiding tot die verskyning van groot tekorte op die lopende rekening teen betreklik lae koerse van ekonomiese groei. Die enigste blywende oplossing vir hierdie probleem is 'n doeltreffende en mededingende produksiestruktuur.

Gelukkig het die lae vlak van Suid-Afrika se buitelandse skuld dit vir die land moontlik gemaak om die tekort op die lopende rekening van die betalingsbalans deur middel van 'n netto invloeiing van kapitaal uit die buitenland te finansier. In die tweede kwartaal van 1995 het meer as 80 persent van hierdie netto kapitaal-invloeiing uit langtermynkapitaal bestaan. Suid-Afrika het oor die afgelope 2½ jaar weliswaar die looptydstruktuur van sy verpligtinge teenoor nie-inwoners verbeter deur 'n skerp omskakeling van kort- na langtermyn netto verpligtinge. 'n Groot deel van hierdie langtermynkapitaalvloeiing kan egter uiteindelik baie onbestendig wees omdat dit belegging in sekuriteite op die Johannesburgse Effektebeurs insluit. Buitelandse lenings en onregstreekse beleggings deur nie-inwoners is in elk geval geen oplossing vir die probleem om volgehoue hoër ekonomiese groei te bereik nie.

Die groot netto invloeiing van kapitaal het die tekort op die lopende rekening geneutraliseer, met die gevolg dat die algehele betalingsbalanspositie van die land in die tweede kwartaal van 1995 verder verbeter het. Die bruto goud- en ander buitelandse reserwes het egter as gevolg van die aflossing van laste verwant aan reserwes afgeneem. Die gesonde algehele toestand van die betalingsbalans het 'n betreklik bestendige nominale effektiewe wisselkoers van die rand tot gevolg gehad. In Julie en Augustus 1995 het die geweegde gemiddelde waarde van die rand inderdaad toegeneem.

In 'n statistiese sin het die netto buitelandse bates van die monetêre instellings nie in die tweede kwartaal van 1995 enige druk op die groei in die geldvoorraad uitgeoefen nie. Die groei in bykans al die monetêre groothede het nietemin versnel en die omvattende geldvoorraad het skerp opwaarts beweeg tot bo die boonste perk van die riglyngebied vir 1995. Hierdie vinnige groei in die geldvoorraad was 'n weerspieëling van die sterk groei in die bruto binnelandse besteding en herintermediasie. Die feit dat 'n toenemende deel van die binnelandse besteding deur middel van bankkrediet gefinansier is, het ook aanleiding gegee tot 'n byna ononderbroke styging in kredietverlening deur die monetêre instellings aan die private sektor.

In die lig van die vinnige styging in die geldvoorraad en kredietverlening deur die banke en nadat ander ekonomiese gebeure in aanmerking geneem is, het die monetêre owerhede aan die begin van 1995 'n baie meer konserwatiewe beleidsingesteldheid aanvaar. Korttermynrentekoerse het opwaarts beweeg in reaksie op die strenger maatreëls wat ingestel is, terwyl langtermynopbrengskoerse effens gedaal het. Die opbrengskoerskromme het dienooreenkomsdig gedurende die vyfmaande-tydperk wat in Augustus 1995 geëindig het, effens meer gelyk verloop. Die meeste van die uitleen- en depositokoerse van finansiële instellings het ook na die verhoging in die Bankkoers teen die einde van Junie 1995 na hoër vlakke beweeg.

Die geldmark is oor die algemeen gekenmerk deur skerp fluktuasies wat gedurende die tydperk Maart tot Augustus 1995 deur veranderings in die netto buitelandse bates van die Reserwebank en in regeringsdeposito's by die sentrale bank teweeggebring is. Die Reserwebank se optredes in die geldmark gedurende hierdie tydperk was gevolglik hoofsaaklik daarop gemik om likwiditeit te neutraliseer ten einde die effektiwiteit van die herfinansieringsgeriewe te verseker. Bedrywigheid in die effekte- en aandelemark het verder teruggesak, terwyl die bestendige toestande in die mark in buitelandse valuta, 'n daling in die deelname van nie-inwoners, 'n styging in die prys van vaste eiendom en die hoë vlak van en verwagte verdere stygings in rentekoerse, 'n negatiewe invloed op die omvang van transaksies in ander finansiële markte gehad het.

Die leningsbehoefte van die openbare sektor het in die eerste kwartaal van die fiskale jaar 1995/96 7,8 persent van die bruto binnelandse produk bedra.

Hoewel dit steeds hoog is, was dit aansienlik laer as in die ooreenstemmende tydperk van die voorafgaande jaar. Hierdie laer vlak van die leningsbehoefte van die openbare sektor in die eerste kwartaal van die fiskale jaar kon deels die gevolg gewees het van spesiale omstandighede wat met die konstitusionele veranderings in Suid-Afrika verband gehou het. Die daarstelling van die nege provinsies en die administratiewe probleme wat in dié verband ondervind is, het moontlik 'n deel van hul besteding vertraag, met die gevolg dat die inkomste en oordragte van die provinsiale regerings hulle totale besteding oorskry het. Die awenteling van sekere magte van die sentrale regering na die provinsiale administrasies het ook 'n duidelike invloed op die bestedingspatroon van die Hoofbegroting gehad: oordragbetalings het aansienlik gestyg, terwyl besteding aan goedere en dienste afgeneem het.

Op die gebied van inflasie was die laer prys van vars vleis, groente en vrugte vir stadiger koerse van toename in sowel die produksie- as die verbruikersprysindeks vanaf April 1995 verantwoordelik. Indien die uitwerking van prysveranderings van verwerkte en onverwerkte voedsel op die produksieprysindeks buite rekening gelaat word, toon die koers van toename oor twaalf maande van die ander prys sedert April 1994 'n voortgesette opwaartse beweging. Hoewel die koers van toename in die onderliggende verbruikersprysindeks (met veranderings meet in die omvattende verbruikersprysindeks uitgesonderd voedsel en nie-alkoholiese drank, die koste van huisbesit en belasting op toegevoegde waarde) onlangs ietwat verlangsaam het, verhinder faktore soos die sterk binnelandse vraag, stygings in arbeidskoste en pogings van sakeondernemings om winsgrense te handhaaf 'n blywende daling in die inflasiekoers. Belangrike strukturele faktore, waaronder 'n onbuigsame arbeidsmark, 'n onmededingende produksistruktuur en groot begrotingstekorte, staan ook nog in die weg van 'n standhoudende afname in die inflasiekoers. Teen hierdie agtergrond akkommodeer en gee 'n oormatige toename in die geldvoorraad aanleiding tot 'n voortdurende styging in produksie- en verbruikerspryse.

Binnelandse ekonomiese ontwikkelings

Binnelandse produksie

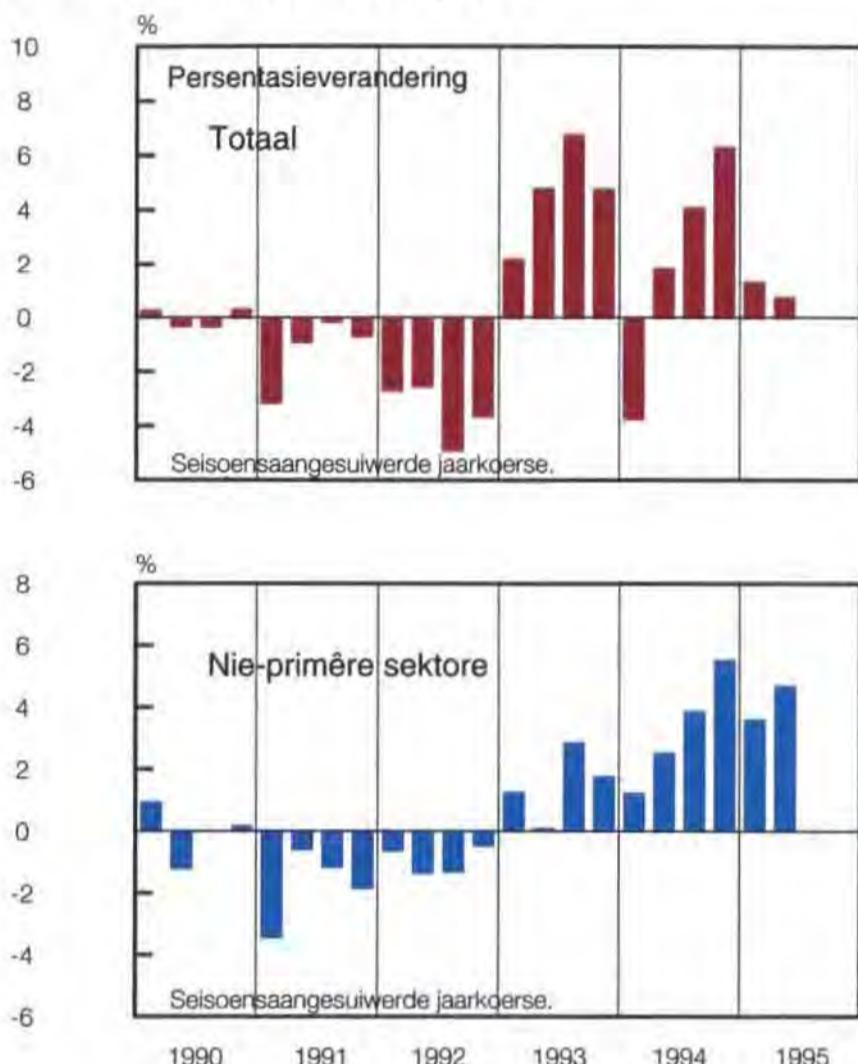
Die eerste ramings toon dat die totale reële bruto binnelandse produk in die tweede kwartaal van 1995 teen 'n jaarkoers van ongeveer 1 persent gestyg het, nadat dit in die eerste kwartaal teen 'n jaarkoers van 1½ persent toegeneem het. Hierdie groei was ver onder die gemiddelde jaarkoers van 5½ persent wat in die tweede helfte van 1994 behaal is. Ondanks die verlangsaming in die ekonomiese bedrywigheid in die eerste helfte van 1995, was die totale produksie in hierdie tydperk steeds bykans 3 persent hoër as in die eerste helfte van 1994.

Die verlangsaming in die ekonomiese groei gedurende die eerste ses maande van 1995 kon hoofsaaklik aan 'n merkbare afname in die landbouproduksie weens ongunstige weerstoestande in die somerreënvalgebiede en die laer goudproduksie toegeskryf word. Hoewel die laer produksie in die primêre sektore deur terugwaartse en voorwaartse skakelings 'n nadelige uitwerking op die produksie in die ander sektore van die ekonomie gehad het, het die nie-primêre sektore sterk gegroei en die verlangsaming in ekonomiese herstel gedemp. Die groei in die totale reële toegevoegde waarde van die sekondêre en tersiêre sektore het trouens van 'n jaarkoers van 3½ persent in die eerste kwartaal van 1995 tot 4½ persent in die tweede kwartaal versnel. In die primêre sektore was die totale produksie (teen 'n jaarkoers) in die eerste helfte van 1995 10½ persent laer as in die tweede helfte van 1994.

Landbouproduksie wat in 1994 'n aansienlike bydrae tot die ekonomiese groei gemaak het, het in die eerste ses maande van 1995 skerp afgeneem. Swak graanoeste op die Hoëveld het veral gedurende die tweede kwartaal van 1995 bygedra tot 'n negatiewe groeikoers van jaar tot jaar van 9 persent in die landbou. Dit word algemeen verwag dat die mielie-oes in 1995 slegs sowat een-derde van die produksie in die voorafgaande jaar sal beloop.

Die totale produksie in die mynbousektor het in die eerste twee kwartale van 1995 teen jaarkoerse van 10 en

Reële bruto binnelandse produk



11 persent gedaal; dit het op 'n afname van 2½ persent in die kalenderjaar 1994 gevvolg. Veral die goudproduksie het skerp afgeneem as gevolg van 'n toenemende aantal spesiale en openbare vakansiedae, ontwrigtings in die arbeidsmark, nywerheidsoptrede, besettings van die werkplek, sloerstakings en stakings. Die goudinhoud van erts wat gemaal is, het ook verder afgeneem, onder andere as gevolg van die ontginning van erts van 'n laer gehalte en die verwerking van bogrondse ontginningsmateriaal ter aanvulling van ondergrondse produksie. Al

Tabel 1. Reële bruto binnelandse produk

Persentasieverandering teen seisoensaangesuiwerde jaarkoerse

Sektore	1994				1995	
	1e kw	2e kw	3e kw	4e kw	1e kw	2e kw
Primêre sektore	-30	-3	4	9½	-13	-23
Nie-primêre sektore	1	2½	4	5½	3½	4½
Sekondêre sektore	0	2½	6	8	4½	6
Tersiêre sektore	2	2½	2½	4	3	4
Totaal	-3½	2	4	6½	1½	1

hierdie faktore het die probleme van die nywerheid vererger, met die gevolg dat die huidige produksie gelyk is aan die produksievlekke van 1957 en 1958 en sowat die helfte van die rekordproduksie van 1 000 ton in 1970 uitmaak. In teenstelling hiermee het die ontginning van steenkool en sommige onedele metale in die eerste twee kwartale van 1995 baat gevind by 'n sterk oplewing in die internasionale vraag en die gepaardgaande styging in uitvoerpryse, verbeterde arbeidsbetrekkinge en 'n toename in die produktiwiteit.

Die groei in die produksie van die sekondêre sektore het van 'n jaarkoers van 4½ persent in die eerste kwartaal van 1995 tot 6 persent in die tweede kwartaal versnel. Dit kon hoofsaaklik aan 'n oplewing in nywerheidsproduksie toegeskryf word, terwyl die reële toegevoegde waarde van die sektor wat elektrisiteit, gas en water voorsien en die konstruksiebedryf bestendig bly toeneem het. In die fabriekswese het die groei in die reële toegevoegde waarde in die tweede kwartaal van 1995, teen 'n jaarkoers bereken, 7 persent beloop. Gedurende die eerste twee jaar van die huidige ekonomiese opwaartse fase het die produksie van die fabriekswese teen 'n gemiddelde jaarkoers van 4½ persent uitgebrei. Vervaardigers in die binnelandse sowel as uitvoergerigte bedrywe het stewige groei ervaar. Dit hou verband met 'n sterk buitelandse vraag, produksieaanpassings vanweë die hoër internasionale prys van fabrieksgoedere, lewendige private verbruiksbesteding en die algemene verbetering van die beleggersvertroue in die private sektor.

'n Ontleding van die vertoning van die tersiêre sektore

in die tweede kwartaal van 1995 toon dat:

- Die reële toegevoegde waarde van die handelsektor teen 'n jaarkoers van 4½ persent toegeneem het, hoofsaaklik omdat verbruikers positief gereageer het op die betreklik vreedsame oorgang na 'n nuwe politieke bedeling. Die motorhandel het ook sterk gegroei en is gesteun deur aansienlik hoër vlakke van vaste kapitaalvorming, 'n sterk vraag deur motorverhuringsondernemings, vredesamer arbeidstoestande met 'n gepaardgaande verbetering in produktiwiteit, en 'n uitbreiding van die bedryf se uitvoer.
- Die reële toegevoegde waarde van die vervoer- en kommunikasiedienste sterk teen 'n jaarkoers van 6½ persent gestyg het. Dit kon aan 'n styging in die internasionale handel, 'n toename in toerisme en die suksesvolle vestiging van die netwerk van sellulêre telefone toegeskryf word.
- Die reële produksie van die finansiële sektor teen 'n jaarkoers van 5 persent toegeneem het. Hierdie sektor het voordeel getrek uit die groei in die effekte en afgeleide markte en die gesonde finansiële toestand van die land oor die algemeen.

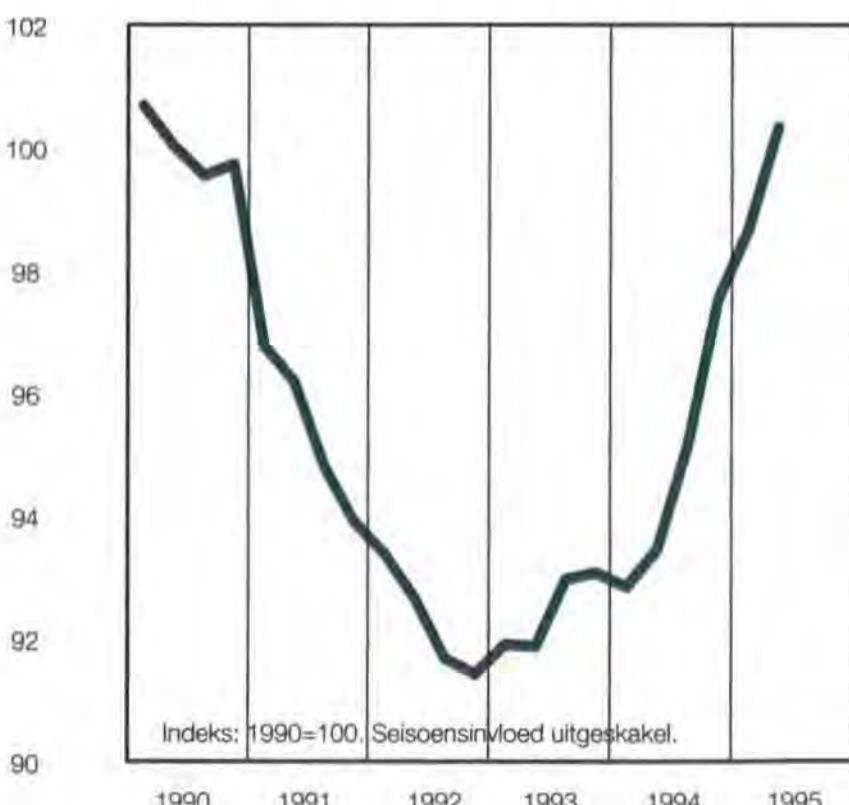
Binnelandse besteding

Die groei in die totale reële bruto binnelandse besteding teen 'n seisoensaangesuiwerde jaarkoers het in die tweede kwartaal van 1995 5½ persent bedra; in die eerste kwartaal van 1995 het die toename in binnelandse besteding tot 'n koers van 2 persent vanaf 10 persent in die tweede helfte van 1994 verlangsaam. Die skerp toename in die binnelandse besteding was die gevolg van verdere toenames in die private verbruiksbesteding, bruto binnelandse vaste investering en voorrade, terwyl verbruiksbesteding deur die algemene owerheid ongeveer op dievlak van die eerste kwartaal van 1995 gebly het.

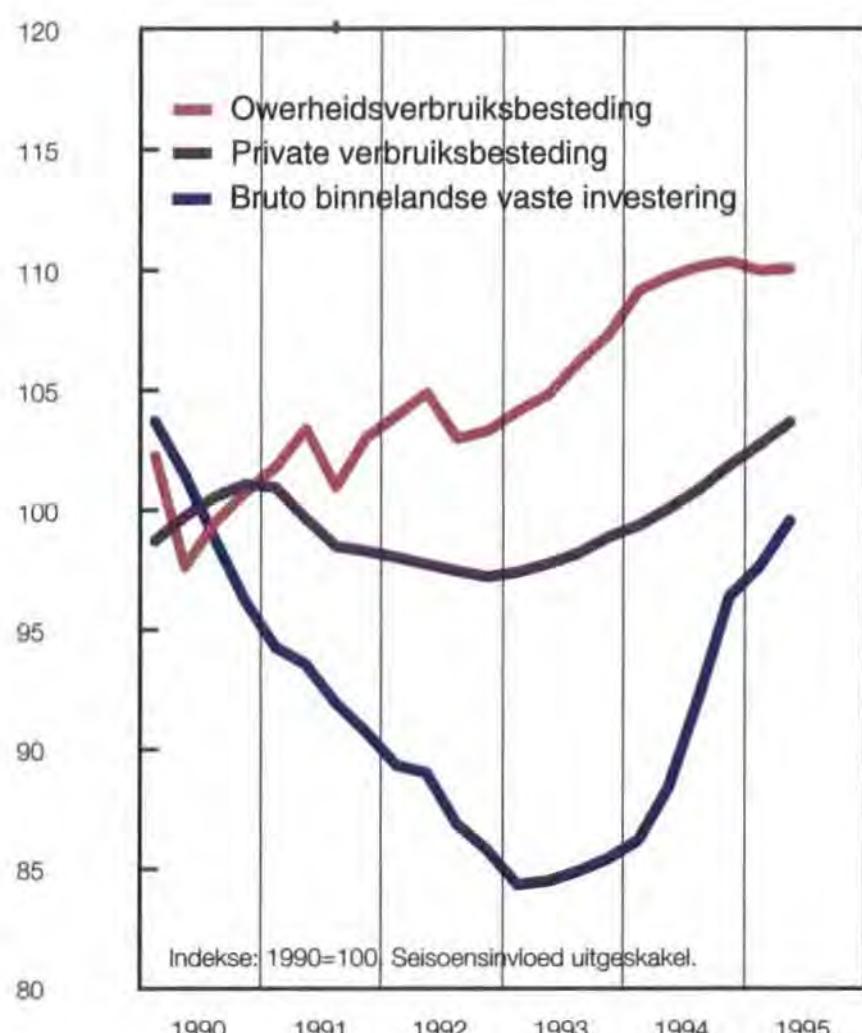
Die reële private verbruiksbesteding het in die eerste helfte van 1995 skerp gestyg; in die eerste sowel as die tweede kwartaal het dit teen 'n jaarkoers van 3½ persent toegeneem. Die sterk groei in die reële besteding aan verbruikersgoedere en -dienste deur huishoudings het hoofsaaklik 'n toename in die besteding aan duursame en semi-duursame goedere soos huishoudelike toestelle, vervoertoerusting, klerasie en skoeisel weerspieël. Die reële besteding deur huishoudings aan nie-duursame goedere het in die tweede kwartaal van 1995 effens toegeneem, terwyl die groei in die reële besteding aan dienste aansienlik verlangsaam het weens 'n daling in die besteding deur toeriste in die buiteland.

Die voortgesette hoë koers van toename in die reële besteding deur huishoudings aan verbruikersgoedere en -dienste is deur 'n ietwat sterker groei in reële persoonlike beskikbare inkomste gesteun, onder andere, as gevolg van 'n toename in dividendontvangste uit die maatskappysektor, effense groei in werkverskaffing sedert die middel van 1994 en 'n verbetering in die reële loon per werker. Die meer geredelike beskikbaarheid van verbruikerskrediet het huishoudings se besteding aan goedere en

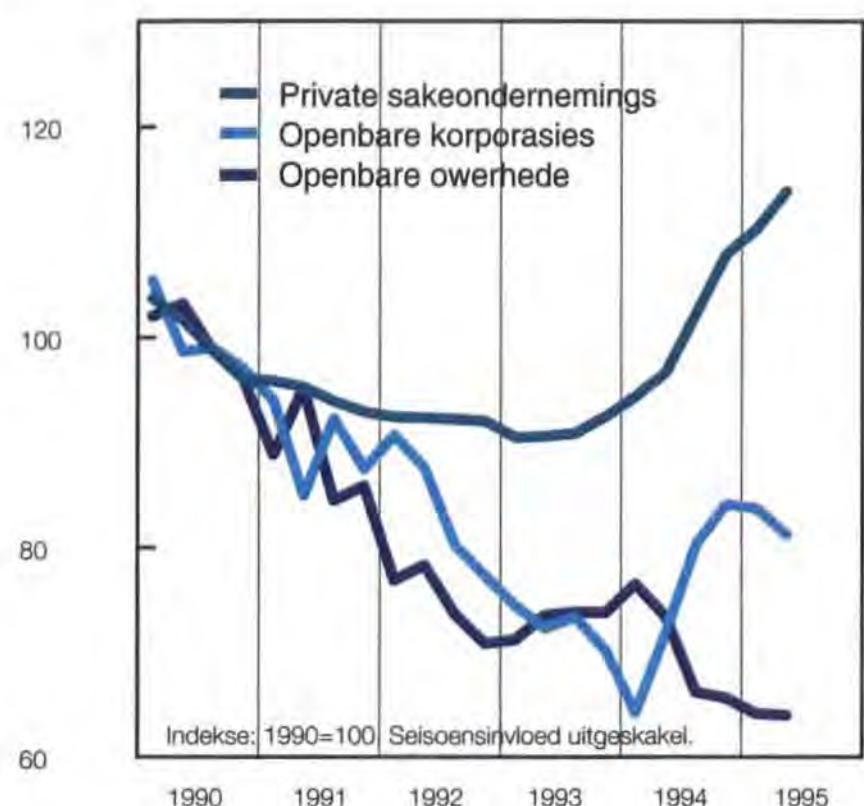
Reële bruto binnelandse produk van fabriekswese



Hoofkomponente van reële bruto binnelandse besteding



Reële bruto binnelandse vaste investering



kalenderjaar 1994 het hierdie besteding met nog 4 persent gestyg.

Die reële *bruto binnelandse vaste investering* het in die tweede kwartaal van 1995 na raming teen 'n jaarkoers van 8 persent toegeneem; hierdie groeikoers was hoër as die 5½ persent in die eerste kwartaal, maar aansienlik laer as die 19 persent in die tweede helfte van 1994. In verhouding tot die bruto binnelandse produk het die vaste kapitaalvorming van 'n onderste draaipunt van 15 persent in die vierde kwartaal van 1993 tot bykans 17 persent in die tweede kwartaal van 1995 gestyg. Hierdie verdere toename in vaste investering is deur 'n aansienlike uitbreiding in die reële besteding aan kapitaalgoedere deur die private sektor teweeggebring,

Tabel 2. Reële bruto binnelandse besteding
Percentasieverandering teen seisoensaangesuiwerde jaarkoerse

Komponente	1994				1995	
	1e kw	2e kw	3e kw	4e kw	1e kw	2e kw
Private verbruiksbesteding	2	3	3½	4	3½	3½
Verbruiksbesteding deur die algemene owerheid.....	7	2	1½	1	-1½	0
Bruto binnelandse vaste investering	3½	10½	18	19½	5½	8
Verandering in voorrade (R miljard)	5,1	3,3	5,9	8,7	8,7	10,7
Bruto binnelandse besteding	4%	1½	10½	10	2	5%

terwyl kapitaaluitgawes deur die openbare sektor afgeneem het.

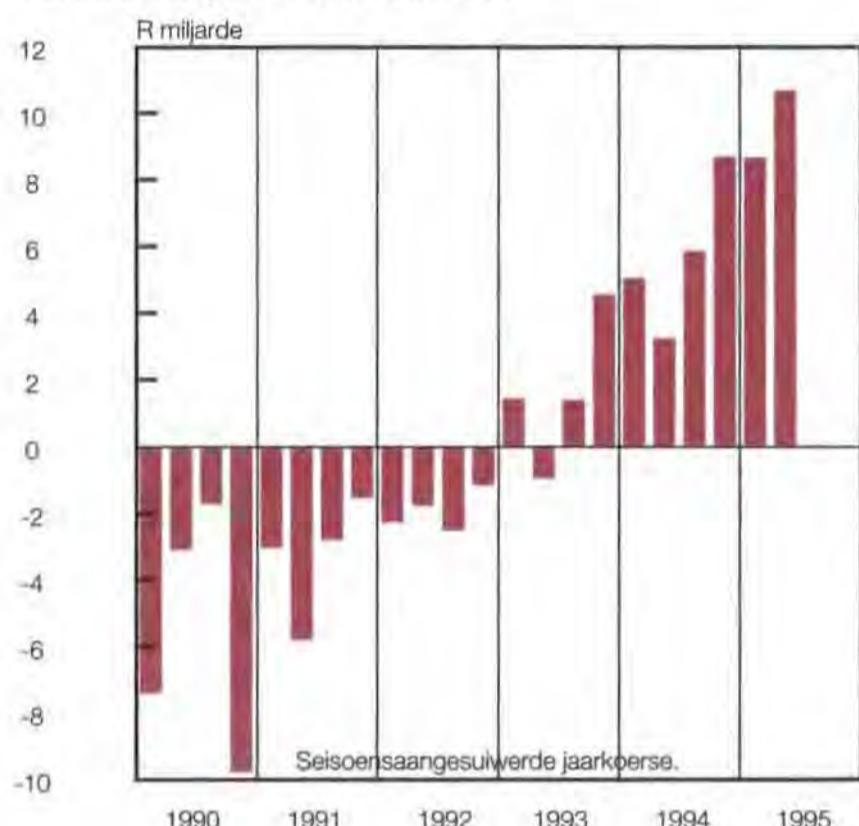
Die koers van toename in die reële vaste investering deur die private sektor het van 'n jaarkoers van 9½ persent in die eerste kwartaal van 1995 tot ongeveer 13½ persent in die tweede kwartaal gestyg. Met die aanvang van die huidige opwaartse fase van die vaste-investeringsiklus was kapitaalbesteding hoofsaaklik tot 'n paar groot projekte beperk wat aangemoedig is deur belastingkortings wat met waardeverminderingstoelaes verband gehou het. In die tweede kwartaal van 1995 het toenames in kapitaalbesteding in bykans al die sektore van die ekonomie voorgekom. Die uitbreiding in die investeringsbedrywigheid toon klaarblyklik dat produksievermoë geskep word in afwagting van voortgesette groei in die totale vraag.

Die voortdurende toenames in die kapitaalvorming van die private sektor kon ook toegeskryf word aan die regstreekse en onregstreekse uitwerking van die groot kapitaalprojekte, 'n sterk vervangingsvraag en uitbreidings van produksievermoë om munt te slaan uit die betreklike sterk binnelandse en buitelandse vraag na sommige onedele metale, minerale en vervaardigde goedere. Die reële vaste investering in die finansiële sektor is aangehelp deur die verdere toename in reële besteding aan private woongeboue, terwyl kapitaalbesteding aan masjinerie en vervoertoerusting, wat deur afbetalingsverkoopooreenkomste en bruikhuurkontrakte gefinansier is, kragtig uitgebrei het.

Die reële vaste investering van die openbare korporasies het in die tweede kwartaal van 1995 teen 'n jaarkoers van 11½ persent gedaal. 'n Daling in die vaste investering deur Eskom het toenames in die investeringsuitgawes van korporasies wat met die vervoerwese en telekommunikasiedienste gemoeid is, meer as geneutraliseer. Toenames in die reële vaste investering deur die sentrale en provinsiale regerings kon die afname in die besteding aan investering deur die plaaslike owerhede nie ten volle ewenaar nie, maar het daarin geslaag om die afname in die totale reële vaste investering deur al die openbare owerhede van 'n jaarkoers van 9 persent in die eerste kwartaal van 1995 tot 1 persent in die tweede kwartaal te laat verlangsaam.

Nadat investering in voorrade in die derde kwartaal van 1993 positief geword het, het dit deur die loop van die huidige konjunkturele opwaartse fase van die ekonomie bly styg. In die eerste twee kwartale van 1995 het die reële waarde van voorrade baie sterk gestyg, hoofsaaklik vanweë die opbouing van voorrade in die mynbousektor, private fabriekswese en die groot-, klein- en motorhandel. As gevolg van die swak mielie-oes, het landbouvoorraad in die handel egter afgeneem. Verdere toenames in die nywerheids- en handelsvoorraad het veroorsaak dat die vlak van hierdie soort voorraad in verhouding tot die bruto binnelandse produk van 'n rekordlaagtepunt van 16 persent in die vierde kwartaal van 1993 tot meer as 18½ persent in die tweede kwartaal van 1995 gestyg het.

Verandering in reële voorrade



Faktorinkome en besparing

Die groei oor 'n tydperk van twaalf maande in die totale nominale faktorinkome teen markpryse het van 13 persent in die eerste kwartaal van 1995 tot 11 persent in die tweede kwartaal verlangsaam. Hierdie afname was die gevolg van laer groei in die totale bruto bedryfsurplus; die koers van toename van jaar tot jaar in hierdie totaal het van 13½ persent in die eerste kwartaal van 1995 tot 10½ persent in die tweede kwartaal afgeneem omdat die winsgewendheid van die landbou- en die mynbousektore verswak het. Boonop het die groei oor twaalf maande in die nominale vergoeding van werknemers oor dieselfde tydperk slegs effens van 11½ persent tot bykans 12 persent gestyg.

Ondanks die afname in die groei in faktorinkome, het die verhouding van die bruto binnelandse besparing tot die bruto binnelandse produk in die tweede kwartaal van 1995 vir die derde opeenvolgende kwartaal onveranderd op 18 persent gebly. Dit vergelyk gunstig met die gemiddelde verhouding van 17½ persent in 1994, maar is steeds aansienlik laer as die gemiddelde van 23 persent oor die lang termyn.

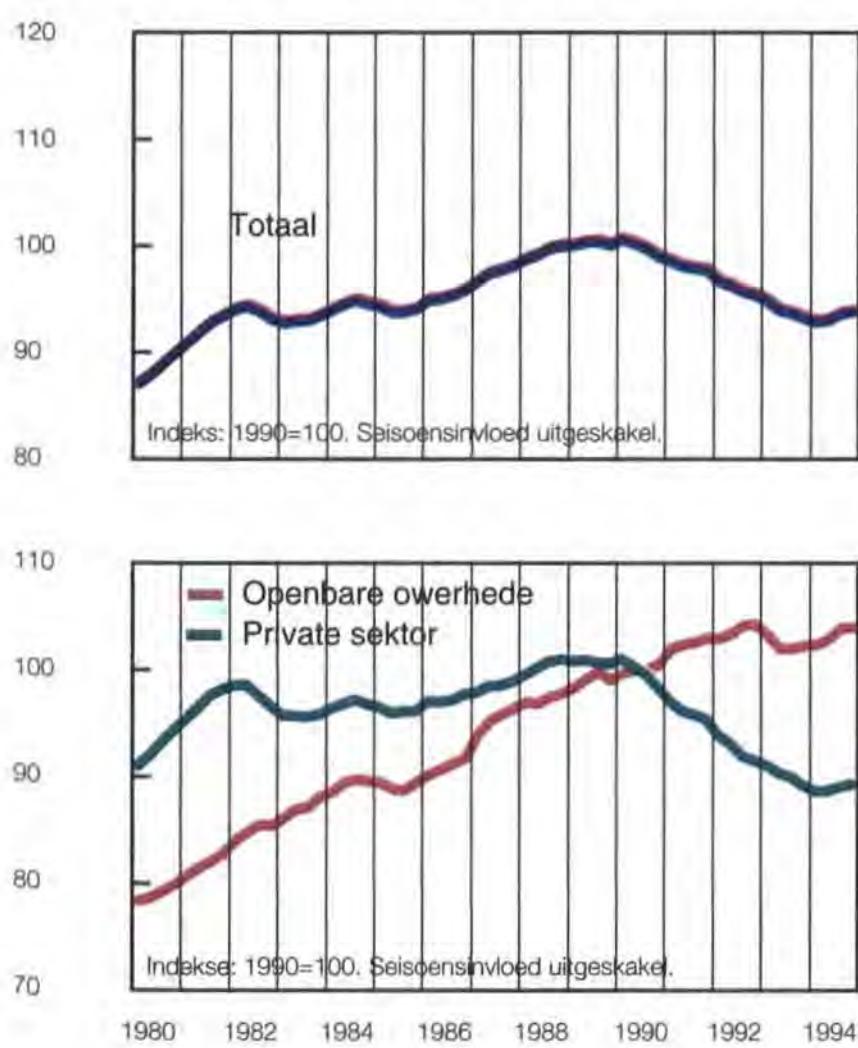
Die jongste gunstiger ontwikkeling in die binnelandse besparing kon aan 'n geringe verbetering in die netto maatskappybesparing en die laer vlak van netto ontsparing deur die algemene owerheid toegeskryf word. In teenstelling hiermee, het die netto besparing van huishoudings ietwat gedaal van 2½ persent van die bruto binnelandse produk in die tweede kwartaal van 1994 tot 1 persent in die tweede kwartaal van 1995; in verhouding tot die persoonlike beskikbare inkomme het

besparing deur huishoudings oor dieselfde tydperk van 4 tot 2 persent afgeneem. Dit was te wye aan die sterk toename in die reële verbruiksbesteding van huishoudings, wat die toename in die totale reële persoonlike beskikbare inkome oofskry het.

Werkverskaffing

Die oplewing in die ekonomiese bedrywigheid het 'n geruime tyd geduur voordat dit die nodige stukrag gekry het om die afwaartse beweging in die totale werkverskaffing in die sektore van die ekonomie buite die landbou om te keer. Nadat 'n onderste draaipunt van die konjunktuur in die tweede kwartaal van 1993 bereik is, was dit nog vier kwartale voordat die totale werkverskaffing enigsins gereageer het op die verbetering in die algehele ekonomiese bedrywigheid. 'n Beskeie toename in die werkverskaffing teen 'n seisoensaangesuiwerde jaarkoers van 0,6 persent in die tweede kwartaal van 1994 is gevvolg deur 'n sterker toename van 2,5 persent in die derde kwartaal en 0,9 persent in die vierde kwartaal van 1994 (die jongste inligting wat deur die Sentrale Statistiekdiens beskikbaar gestel is). Die gemiddelde vlak van die werkverskaffing in die kalenderjaar was ondanks hierdie kwartaallike toenames nog 0,6 persent laer as in 1993 – die vyfde agtereenvolgende jaarlikse daling in die totale werkverskaffing.

Werkverskaffing in nie-landbousektore



Tabel 3. Die verandering in die werkverskaffing in die private sektor buite die landbou van die tweede kwartaal van 1993 tot die vierde kwartaal van 1994 volgens die vernaamste ekonomiese sektore

Sektor	Werknemers (duisende)
Mynbou	-22,4
Fabriekswese.....	10,4
Konstruksie.....	-2,5
Elektrisiteitsvoorsiening	-2,9
Groothandel.....	2,4
Kleinhandel	-31,5
Motorhandel	3,1
Private padvervoer	-1,1
Banke	2,9
Ander.....	0,9
Totaal	-41,3

Die ekonomiese bedrywige bevolking het gedurende hierdie tydperk teen 'n koers van 2,5 persent per jaar toegeneem. Die aantal werklose persone het gevvolglik aansienlik gestyg, terwyl die sogenaamde informele sektor toenemend groter geword het. Volgens amptelike gegewens was nie minder nie as 43 uit elke 100 ekonomies bedrywige persone in Oktober 1994 werkloos of in die informele sektor betrokke. Hierdie gegewens toon duidelik hoe dringend dit is om die arbeidsabsorberingsvermoë van die ekonomie te verbeter ten einde binnelandse bestendigheid te handhaaf.

Die traie reaksie van die totale werkverskaffing op die oplewing in die ekonomiese bedrywigheid is veroorsaak deur die onwilligheid van werkgewers in die private sektor om hul arbeidsmag uit te brei. Toenames in die werkverskaffing in die private sektor het eers in die tweede helfte van 1994 gerealiseer; werkverskaffing het in die derde en die vierde kwartaal teen seisoensaangesuiwerde jaarkoers van 1,6 en 1,2 persent toegeneem. Die gemiddelde vlak van die werkverskaffing in die private sektor het nietemin nog met 1,4 persent in 1994 in die geheel verminder. Die gevolg hiervan was dat die totale werkverskaffing in die private sektor steeds sowat 41 300 persone minder was as aan die einde van die resessie in die tweede kwartaal van 1993.

Tabel 3 wys duidelik hoe huiwerig ondernemings in die private sektor in baie van die vernaamste ekonomiese sektore buite die landbou was om hul werkverskaffing te verhoog. Die vlakte van die werkverskaffing inveral die kleinhandel en die mynbousektor was heelwat laer as aan die einde van die onlangse resessie. Geen netto toenames in die werkverskaffing is gedurende die eerste ses kwartale van die ekonomiese oplewing in die konstruksiebedryf, die elektrisiteitsvoorsieningsbedryf en die private padvervoer aangeteken nie, terwyl die aantal

personne in diens van die fabriekswese, die groothandel en die motorhandel, banke en ander dienste, matig toegeneem het.

In skerp teenstelling met hierdie veranderings in die werkverskaffing deur die private sektor, het die werkverskaffing deur die *openbare owerhede* van die tweede kwartaal van 1993 tot die vierde kwartaal van 1994 verder met 34 400 nuwe werkgeleenthede toegeneem. Met die uitsondering van die eerste helfte van 1993, het die werkverskaffing deur die openbare owerhede tydens die resessie van 1989-93 deurloop gestyg. Die toename van kwartaal tot kwartaal in die totale werkverskaffing deur die openbare owerhede het meer onlangs versnel van 'n seisoensaangesuiwerde jaarkoers van 0,4 persent in die eerste kwartaal van 1994 tot 4,2 persent in die derde kwartaal; daarna het hierdie koers afgeneem tot 0,3 persent in die vierde kwartaal van 1994. 'n Toename van 0,9 persent in die gemiddelde vlak van die werkverskaffing deur die openbare owerhede is in die kalenderjaar 1994 aangeteken.

Arbeidskoste en produktiwiteit

Die verskeie onvolmaakthede in die Suid-Afrikaanse arbeidsmark het voortdurend verhinder dat looneise en -skikkings die toenemende ooraanbod van arbeid weerspieël. Dit kan gesien word in die koers van toename van jaar tot jaar in die *nominale vergoeding per werker* wat van 'n onderste draaipunt van 10,5 persent in 1993 tot 11,9 persent in 1994 gestyg het. Die koers van toename oor vier kwartale in die nominale vergoeding per werker het boonop versnel van 'n laagtepunt van 9,0 persent in die vierde kwartaal van 1993 (die eerste enkelsyferkoers van toename sedert die vierde kwartaal van 1985) tot 14,6 persent in die tweede kwartaal van 1994; daarna het dit ietwat afgeneem tot 11,6 persent in die vierde kwartaal van 1994.

Loontoenames in die *private sektor* is in 'n groot mate aangewakker deur eise vir 'n bestaansloon. Die koers van toename van jaar tot jaar in die nominale vergoeding per werker in die private sektor buite die landbou het nietemin afgeneem van 'n hoogtepunt van 17,0 persent in 1990 tot 10,2 persent in 1994. Die koers van toename oor vier kwartale in die nominale vergoeding per werker in die private sektor het ononderbroke gedaal van 15,4 persent in die vierde kwartaal van 1992 tot 9,5 persent in die eerste kwartaal van 1994; daarna het dit toegeneem tot 11,4 persent in die derde kwartaal van 1994 voordat dit tot 9,5 persent in die vierde kwartaal verlangsaam het.

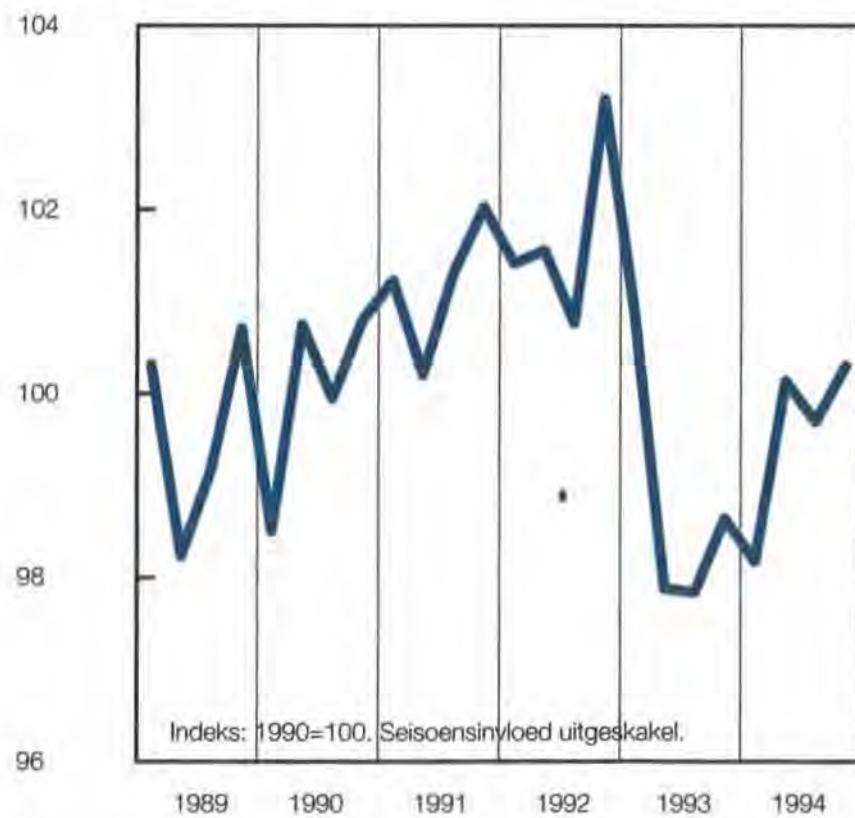
Die nominale vergoeding per werker in diens van die *openbare owerhede*, wat gedaal het van 21,6 persent in 1989 tot slegs 9,2 persent in 1993, het in 1994 tot 14,6 persent gestyg. Op 'n kwartaallikse basis het die koers van toename oor vier kwartale in die nominale vergoeding per werker in diens van die openbare owerhede selfs skerper toegeneem van slegs 5,6 persent in die vierde kwartaal van 1993 tot 21,4 persent in die tweede kwartaal van 1994. Hierdie buitengewoon hoë koers van toename is egter veroorsaak deur spesiale omstandig-

hede ten tye van die algemene verkiesing in April 1994. Die koers van toename in die nominale loon per werker in diens van die openbare owerhede het toe ietwat gedaal tot 14,6 en 15,2 persent in die laaste twee kwartale van 1994.

Die onvermoë van die binnelandse arbeidsmark om betekenisvol by die onderliggende arbeidsmarktoestande aan te pas, word gestaaf deur die veranderings wat in die *reële vergoeding per werker* waargeneem is. Die reële vergoeding per werker het in 1994 met nie minder nie as 3,0 persent gestyg. Die koers van verandering oor vier kwartale in die reële vergoeding per werker het ook skerp versnel van 'n negatiewe 0,6 persent in die vierde kwartaal van 1993 tot positiewe syfers van 4,9, 3,8 en 3,6 persent in die laaste drie kwartale van 1994.

Die koers van toename in die *arbeidsproduktiwiteit* in die sektore van die ekonomie buite die landbou het versnel van 0,4 persent in 1991 tot 2,8 en 2,4 persent in 1993 en 1994, grotendeels as gevolg van die afname in die aantal werkers in diens van die formele sektore van die ekonomie. Die gemiddelde jaarlikse koers van toename van 1,7 persent sedert 1991 was beduidend hoër as die 0,3 persent per jaar gedurende die tagtigerjare. Die koers van toename oor vier kwartale in die reële produksie per werker het egter afgeneem van 'n hoogtepunt van 4,0 persent in die vierde kwartaal van 1993 tot 1,9 persent in die derde en die vierde kwartaal van 1994. Hierdie laer koerse van toename in die arbeidsproduktiwiteit was deels die gevolg van 'n beduidende toename in die aantal mandaie wat verlore gegaan het as gevolg van stakings en ander werkstop-

Reële arbeidseenheidskoste in nie-landbousektore



settings in die tweede helfte van 1994. Hierdie toestande het in die eerste helfte van 1995 opmerklik verbeter.

Aangesien die toename in die arbeidsproduktiwiteit laer was as die toenames in die reële vergoeding per werker, het die *reële arbeidseenheidskoste* (gemeet oor vier kwartale) weer begin toeneem teen koerse van 2,3, 1,9 en 1,7 persent in die laaste drie kwartale van 1994. In die kalenderjaar in die geheel het dit met 0,7 persent gestyg; in 1993 het die reële arbeidseenheidskoste met 2,9 persent gedaal. Die toename in die reële arbeidseenheidskoste hou uiteraard ernstige gevolge in vir inflasie en die vermoë van die ekonomie om werkgeleenthede te skep.

Pryse

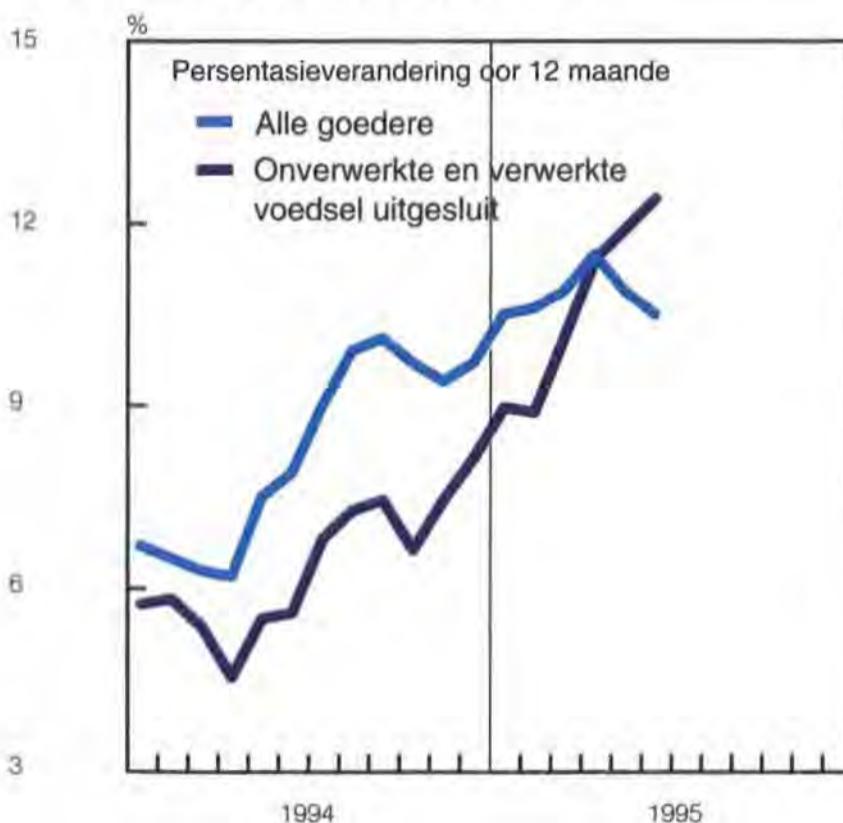
Ondanks die opwaartse beweging in die reële arbeidseenheidskoste, het die koers van toename in die produksie- sowel as die verbruikersprysindeks in die tweede kwartaal van 1995 ietwat afgeneem. Die beter verloop in hierdie prysindekse is egter hoofsaaklik teweeggebring deur 'n daling in voedselprysse, veral in die prys van vars vleis, groente en vrugte. Die toename in die sogenaamde onderliggende inflasiekoers in die Suid-Afrikaanse ekonomie, wat in die tweede kwartaal van 1994 begin het, het onlangs ook ietwat afgeneem. 'n Sterk vraagtrekinflasie is steeds teenwoordig, soos blyk uit die hoë koerse van toename in kredietverlening en die geldvoorraad, sowel as die hoë benutting van produksievermoë in die fabriekswese. In die eerste kwartaal van 1995 was die benutting van produksievermoë in die fabriekswese slegs 1,9 persentasiepunte

onder die vlak wat aan die einde van die ekonomiese oplewing van 1986-89 aangeteken is.

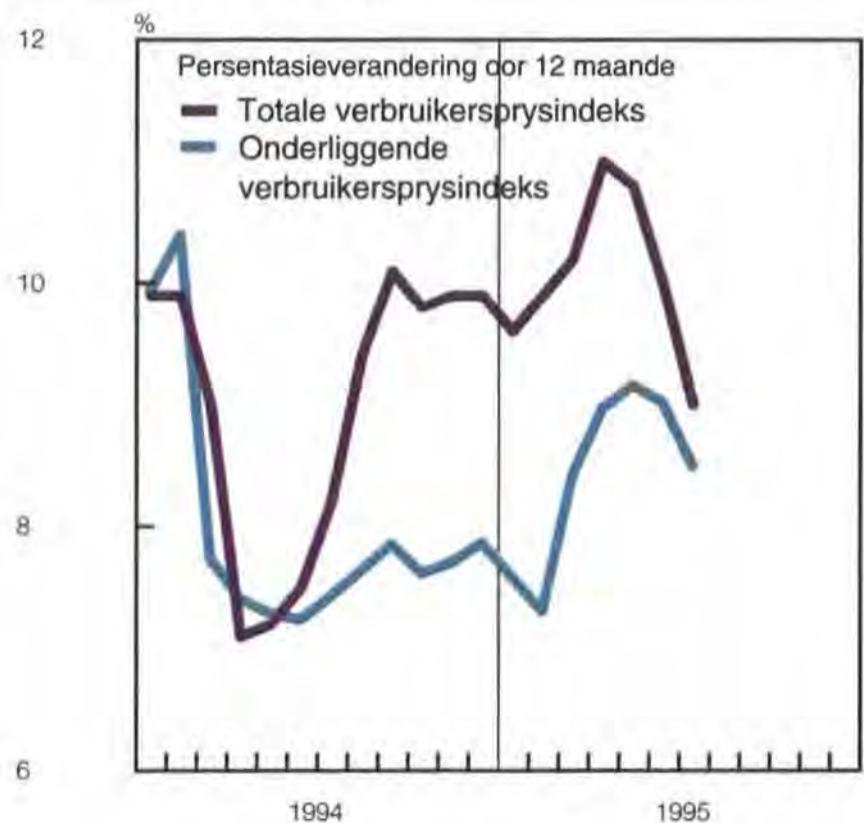
Die koers van toename van kwartaal tot kwartaal in die omvattende *produksieprysindeks*, wat versnel het van 5,6 persent in die vierde kwartaal van 1994 tot 13,2 persent in die eerste kwartaal van 1995, het weer in die tweede kwartaal tot 11,1 persent gedaal. Die koers van toename in die omvattende produksieprysindeks oor 'n tydperk van twaalf maande het insgelyks ook ietwat afgeneem van 'n hoogtepunt van 11,5 persent in April 1995 tot 10,5 persent in Junie. Hierdie afwaartse beweging is hoofsaaklik waargeneem in die prys van binnelandse geproduseerde goedere, hoewel die groter bestendigheid in die buitelandse waarde van die rand veroorsaak het dat die koers van toename in die prys van ingevoerde goedere gelyk verloop het. Die daling van inflasie in produksiepryse is veral teweeggebring deur veranderings in voedselprysse. Indien die prys van verwerkte en onverwerkte voedsel uit die produksieprysindeks gelaat word, het die koers van toename oor 'n tydperk van twaalf maande in die ander prys versnel van 'n onderste draaipunt van 4,5 persent in April 1994 tot 11,4 persent in April 1995 en verder tot 12,4 persent in Junie 1995.

Die koers van toename oor tydperke van twaalf maande in die omvattende *verbruikersprysindeks* het ook aansienlik teruggesak van 'n onlangse hoogtepunt van 11,0 persent in April 1995 tot 10,0 persent in Junie en 9,0 persent in Julie. Die sogenaamde onderliggende inflasiekoers (soos bepaal deur die omvattende verbruikersprysindeks met die uitsluiting van voedsel en nie-

Omvattende produksieprysindeks



Verbruikersprysindeks



alkoholiese drank, die koste van huisbesit en die belasting op toegevoegde waarde) het egter nie in dieselfde mate gedaal nie. Die onderliggende inflasiekoers, gemeet oor 'n tydperk van twaalf maande, het skerp toegeneem van 'n laagtepunt van 7,3 persent in Februarie 1995 tot 9,2 persent in Mei, waarna dit in Julie tot 8,5 persent afgeneem het. Dit beteken natuurlik dat ander faktore, soos die sterk totale binnelandse vraag, toenames in arbeidskoste en die pogings van die private sakegemeenskap om hul winsmarges na die uitgerekte resessie te herstel, in die pad staan van 'n voortgesette daling in die inflasiekoers. Die koers van toename van kwartaal tot kwartaal in die omvattende verbruikersprysindeks het ook van 'n seisoensaangesuiwerde jaarkoers van 8,5 persent in die vierde kwartaal van 1994 tot 10,9 persent in die tweede kwartaal van 1995 gestyg.

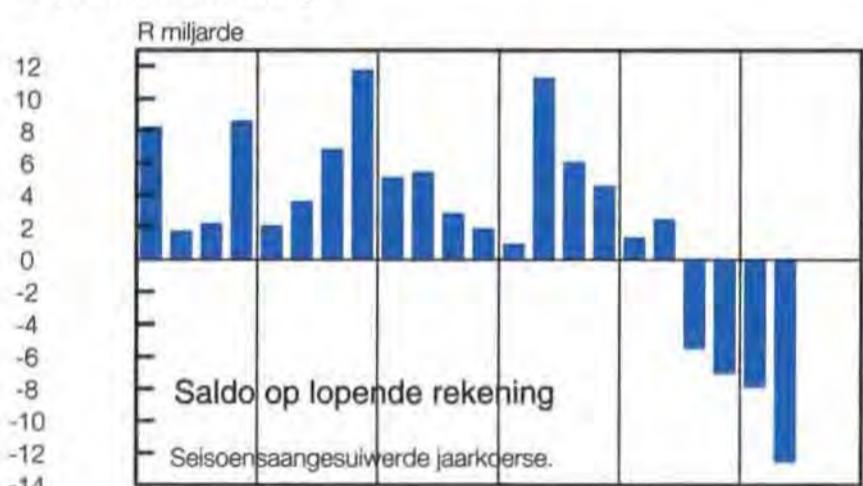
Buitelandse handel en betalings

Lopende rekening

Die saldo op die lopende rekening van die betalingsbalans (seisoensaangesuiwerd en teen 'n jaarkoers gereken) wat in die tweede helfte van 1994 na 'n kwartaallikse gemiddelde tekort van R6,2 miljard beweeg het, het verdere tekorte van R7,8 miljard in die eerste kwartaal van 1995 en R12,5 miljard in die tweede kwartaal getoon. In verhouding tot die bruto binnelandse produk het die tekort op die lopende rekening van 1,7 persent in die eerste kwartaal van 1995 tot 2,6 persent in die tweede kwartaal gestyg; gedurende 1994 in die geheel was die verhouding gemiddeld 0,5 persent. Die swakker saldo op die lopende rekening in die tweede kwartaal van 1995 was die gesamentlike gevolg van 'n skerp toename in die waarde van die goedere-invoer en 'n daling in die waarde van goedere- en netto gouduitvoer. Netto dienste- en oordragbetalings aan nie-inwoners het in hierdie kwartaal verminder.

Die waarde van *goedere-invoer* het verder toegeneem van die alreeds hoë seisoensaangesuiwerde jaarkoers van R94,4 miljard in die eerste kwartaal van 1995 tot R97,7 miljard in die tweede kwartaal, of met 3½ persent.

Lopende rekening



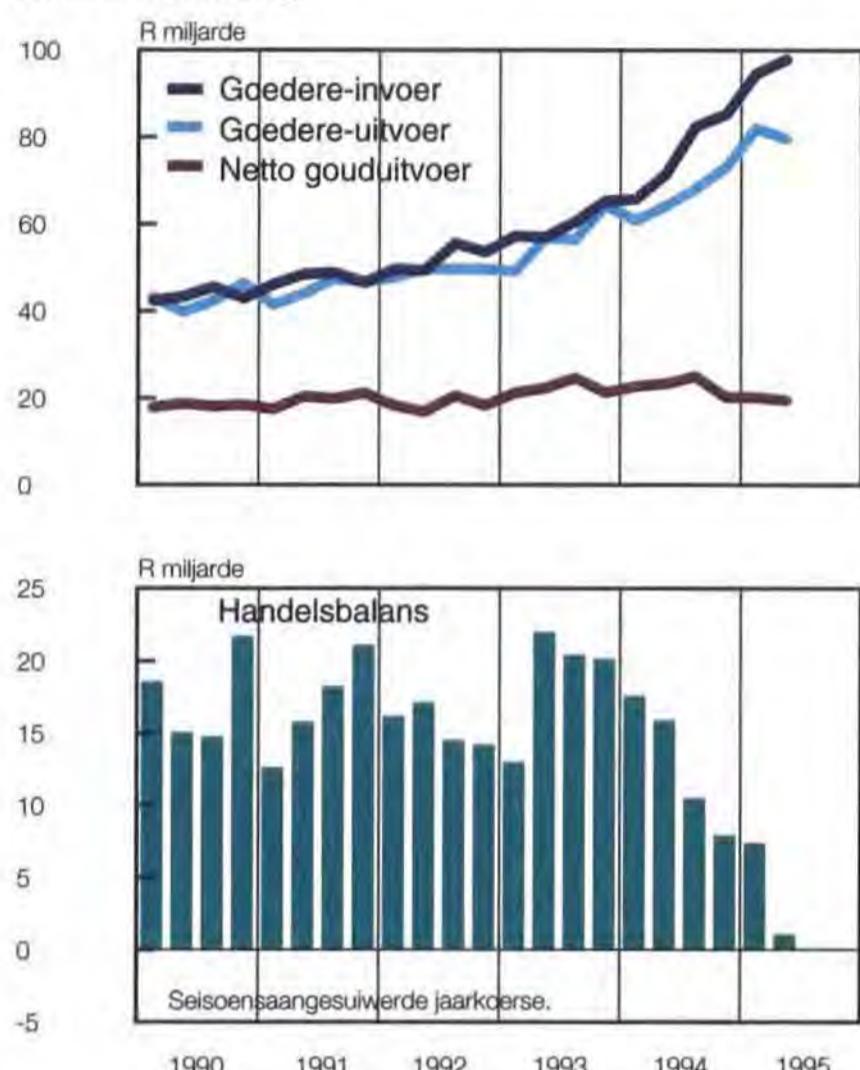
Skerp toenames is in die invoer van vervaardigde goedere aangeteken, veral in die kategorieë masjinerie en elektriese toerusting, vervoertoerusting en tekstiele. Bowendien het die invoer van mielies oor hierdie tydperk tot 'n betekenisvolle toename in die kategorie plant-aardige produkte gelei. Daarenteen het die waarde van mineraalinvoer (hoofsaaklik ruolie) in die tweede kwartaal van 1995 marginaal gedaal; die buitengewoon hoë vlak van die voorafgaande kwartaal is gevoldiglik min of meer gehandhaaf.

Die hoër waarde van goedere-invoer in die tweede kwartaal van 1995 was hoofsaaklik die gevolg van 'n toename in invoerpryse tesame met 'n klein toename in invoerhoeveelhede; die fisiese hoeveelheid van ingevoerde goedere het met ongeveer $\frac{1}{2}$ persent gestyg. Vanweë matig hoër oliepryse en ander buitelandse produksiepryse en 'n daling in die gemiddelde effektiewe wisselkoers van die rand, het invoerpryse in die tweede kwartaal van 1995 met bykans 3 persent toegeneem.

Die waarde van goedere-uitvoer (seisoensaangesuiwerd en teen 'n jaarkoers gereken) het van R81,8 miljard in die eerste kwartaal van 1995 tot R79,4 miljard in die tweede kwartaal gekrimp. Hierdie daling was ten volle te wye aan 'n afname van 5 persent in die hoeveelheid van uitgevoerde goedere wat die swakker uitvoerprestasie van mynbou- en vervaardigde uitvoerprodukte weerspieël het. As gevolg van die droogte wat in die loop van 1994 geheers het, het die uitvoer van landbouprodukte ook effens teruggesak. Die depresiasie van die rand teenoor die dollar het meegebring dat uitvoerpryse van die eerste tot die tweede kwartaal met 2 persent toegeneem het.

Nadat die waarde van die netto gouduitvoer aanhouwend gedaal het van 'n seisoensaangesuiwerde jaarkoers van R24,8 miljard in die derde kwartaal van 1994 tot R20,0 miljard in die eerste kwartaal van 1995, het dit in die tweede kwartaal verder tot R19,3 miljard verminder. Soos in die voorafgaande twee kwartale, kon hierdie afname toegeskryf word aan 'n daling in die hoeveelheid van die netto gouduitvoer; die fisiese omvang van die netto gouduitvoer het as gevolg van voortgesette

Handelsrekening



arbeidsonrus in die tweede kwartaal met 'n verdere $8\frac{1}{2}$ persent afgeneem. Die gemiddelde vasstellingsprys van goud het gestyg van \$379 per fyn ons in die eerste kwartaal van 1995 tot \$388 in die tweede kwartaal, of van R1 352 tot R1 413 per fyn ons. Dit het egter daarná in Julie tot \$386 (R1 406) per fyn ons teruggesak.

Netto dienste- en oordragbetalings aan nie-inwoners het van 'n seisoensaangesuiwerde jaarkoers van R15,2

Tabel 4. Lopende rekening van die betalingsbalans

Seisoensaangesuiwerde jaarkoerse

R miljarde

	1994				1995	
	1e kw	2e kw	3e kw	4e kw	1e kw	2e kw
Goedere-uitvoer	60,6	64,0	67,9	73,0	81,8	79,4
Netto gouduitvoer.....	22,6	23,2	24,8	20,1	20,0	19,3
Goedere-invoer.....	-65,6	-71,3	-82,3	-85,1	-94,4	-97,7
Netto dienste- en oordragbetalings.....	-16,1	-13,3	-15,8	-15,0	-15,2	-13,5
Saldo op lopende rekening	1,5	2,6	-5,4	-7,0	-7,8	-12,5

miljard in die eerste kwartaal van 1995 tot R13,5 miljard in die tweede kwartaal gedaal. Hierdie betreklike skerp daling is meegebring deur 'n afname van R1,9 miljard in betalings vir dienste wat aansienlik meer was as die daling van R0,2 miljard in ontvangste vir dienste aan nie-inwoners gelewer. 'n Afname in rente- en dividend-betalings aan buitelandse beleggers en laer toeristebesteding deur Suid-Afrikaners wat in die buitenland gereis het, was hoofsaaklik vir die afname in dienstebetalings verantwoordelik.

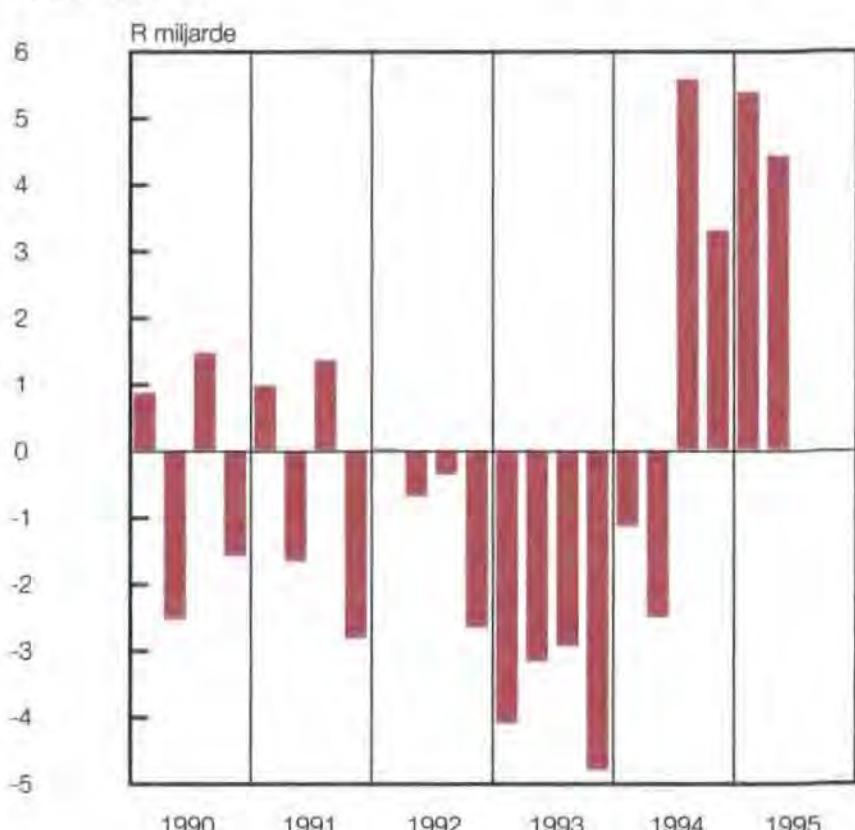
Kapitaalrekening

Die totale netto invloeiing van kapitaal nie verwant aan reserwes nie het van R5,4 miljard in die eerste kwartaal van 1995 tot R4,4 miljard in die tweede kwartaal gedaal; in die eerste helfte van 1995 het die netto invloeiing van kapitaal steeds R9,8 miljard beloop, wat ietwat hoër was as die invloeiing van R8,8 miljard in die tweede helfte van 1994.

Die invloeiing van kapitaal in die tweede kwartaal van 1995 het grotendeels uit langtermynfondse bestaan: 'n netto invloeiing van langtermynkapitaal van R3,7 miljard is aangeteken. Die opbrengs van die regering se leningsuitgifte in die Samurai-mark ten bedrae van R1,3 miljard was vir die verdere netto invloeiing van langtermynfondse na die openbare owerhede verantwoordelik; in totaal het 'n netto bedrag van R1,1 miljard in die tweede kwartaal na die openbare owerhede gevloeи. Hierbenewens het openbare korporasies en die banksektor klein netto leners ten bedrae van onderskeidelik R0,2 en R0,6 miljard geword. Die netto invloeiing van langtermynkapitaal na die private sektor het terselfdertyd van R1,1 miljard in die eerste kwartaal van 1995 tot R1,9 miljard in die tweede kwartaal toegeneem. Netto aankope deur nie-inwoners van sekuriteite wat op die Johannesburgse Effektebeurs genoteer is sowel as oor-die-toonbank-transaksies van R2,3 miljard is by laasgenoemde bedrag ingesluit.

Korttermynkapitaal/bewegings (uitgesonderd laste

Totale netto kapitaalbewegings nie verwant aan reserwes nie



verwant aan reserwes maar met inbegrip van onaange-tekende transaksies) het skerp afgeneem van 'n netto invloeiing van R4,8 miljard in die eerste kwartaal van 1995 tot 'n invloeiing van R0,7 miljard in die tweede kwartaal. Die volle uitstaande bedrag van R1,9 miljard wat deur die verkoop van skatkiswissels met 'n looptyd van drie maande aan nie-inwoners in die laaste kwartaal van 1994 en die eerste kwartaal van 1995 gevorder is, is in die tweede kwartaal terugbetaal. Verder kon die ietwat duurder koste van termyndekking invoerders moontlik aangespoor het om minder van buitelandse handelsfinansiering gebruik te maak. Banke het egter voortgaan om in die tweede kwartaal van 1995 fondse ten bedrae van R2,3 miljard vir die finansiering van hul eie bedrywigheide te leen.

Die kapitaalbewegings in die tweede kwartaal van 1995 het die totale netto invloeiing van kapitaal in die twaalf maande tot die einde van Junie 1995 op R18,6 miljard te staan gebring. Soos tabel 5 aandui, was hierdie netto invloeiing van kapitaal feitlik gelykstaande aan die netto uitvloeiing van kapitaal in die voorafgaande agtien maande. Oor die hele tydperk van 2½ jaar het die aflossingstruktuur van Suid-Afrika se verpligtinge teenoor nie-inwoners egter verbeter as gevolg van die skerp ommakeer van kort- na langtermyn netto verpligtinge. Dit is verder interessant om in die tabel te merk dat die openbare owerhede en die private sektor oor die hele tydperk 'n groot netto invloeiing van langtermynkapitaal ondervind het, terwyl die netto langtermynverpligtinge van openbare korporasies afgeneem het.

Tabel 5. Netto kapitaalbewegings nie verwant aan reserwes nie

R miljarde

	1e kw 93 tot	3e kw 94 tot	1e kw 93 tot
	2e kw 94	2e kw 95	2e kw 95
Langtermynkapitaal			
Openbare owerhede	-2,5	5,1	2,6
Openbare korporasies	-3,2	1,0	-2,2
Private sektor.....	2,1	2,9	5,0
Totaal	-3,6	9,0	5,4
Korttermynkapitaal.....	-15,1	9,6	-5,5
Totale kapitaal	-18,7	18,6	-0,1

miljard in die eerste kwartaal van 1995 tot R13,5 miljard in die tweede kwartaal gedaal. Hierdie betreklike skerp daling is meegebring deur 'n afname van R1,9 miljard in betalings vir dienste wat aansienlik meer was as die daling van R0,2 miljard in ontvangste vir dienste aan nie-inwoners gelewer. 'n Afname in rente- en dividendbetalings aan buitelandse beleggers en laer toeristebesteding deur Suid-Afrikaners wat in die buitenland gereis het, was hoofsaaklik vir die afname in dienstebetalings verantwoordelik.

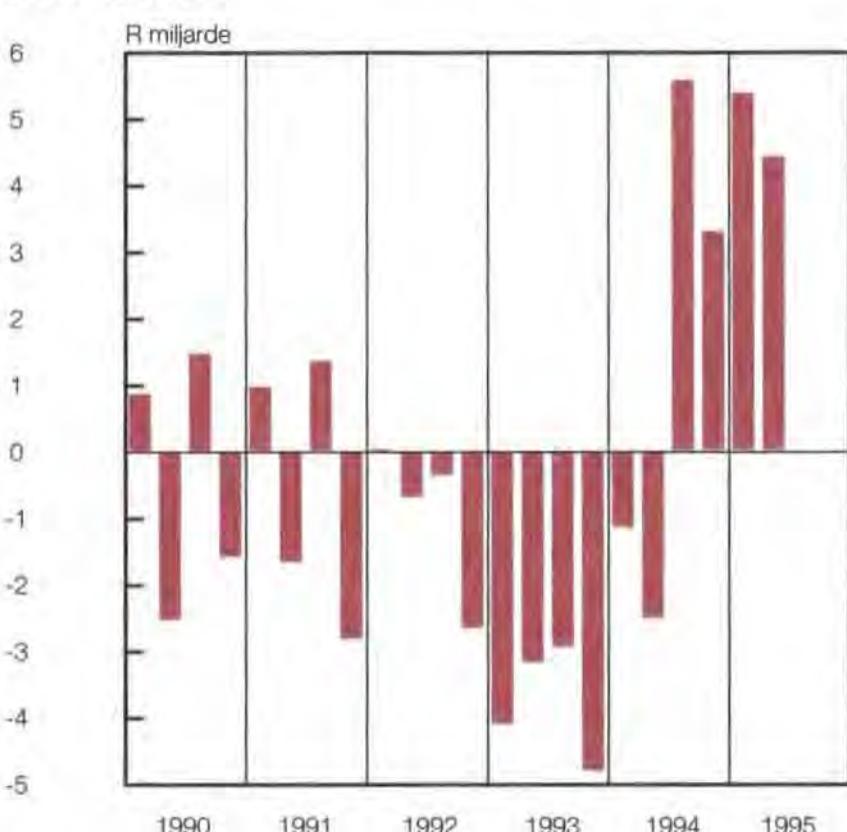
Kapitaalrekening

Die totale netto invloeiing van kapitaal nie verwant aan reserwes nie het van R5,4 miljard in die eerste kwartaal van 1995 tot R4,4 miljard in die tweede kwartaal gedaal; in die eerste helfte van 1995 het die netto invloeiing van kapitaal steeds R9,8 miljard beloop, wat ietwat hoër was as die invloeiing van R8,8 miljard in die tweede helfte van 1994.

Die invloeiing van kapitaal in die tweede kwartaal van 1995 het grotendeels uit langtermynfondse bestaan: 'n netto invloeiing van langtermynkapitaal van R3,7 miljard is aangeteken. Die opbrengs van die regering se leningsuitgifte in die Samurai-mark ten bedrae van R1,3 miljard was vir die verdere netto invloeiing van langtermynfondse na die openbare owerhede verantwoordelik; in totaal het 'n netto bedrag van R1,1 miljard in die tweede kwartaal na die openbare owerhede gevloei. Hierbenewens het openbare korporasies en die banksektor klein netto leners ten bedrae van onderskeidelik R0,2 en R0,6 miljard geword. Die netto invloeiing van langtermynkapitaal na die private sektor het terselfdertyd van R1,1 miljard in die eerste kwartaal van 1995 tot R1,9 miljard in die tweede kwartaal toegeneem. Netto aankope deur nie-inwoners van sekuriteite wat op die Johannesburgse Effektebeurs genoteer is sowel as oor-die-toonbank-transaksies van R2,3 miljard is by laasgenoemde bedrag ingesluit.

Korttermynkapitaalbewegings (uitgesonderd laste

Totale netto kapitaalbewegings nie verwant aan reserwes nie



verwant aan reserwes maar met inbegrip van onaange-tekende transaksies) het skerp afgeneem van 'n netto invloeiing van R4,8 miljard in die eerste kwartaal van 1995 tot 'n invloeiing van R0,7 miljard in die tweede kwartaal. Die volle uitstaande bedrag van R1,9 miljard wat deur die verkoop van skatkiswissels met 'n looptyd van drie maande aan nie-inwoners in die laaste kwartaal van 1994 en die eerste kwartaal van 1995 gevorder is, is in die tweede kwartaal terugbetaal. Verder kon die ietwat duurder koste van termyndekking invoerders moontlik aangespoor het om minder van buitelandse handelsfinansiering gebruik te maak. Banke het egter voortgaan om in die tweede kwartaal van 1995 fondse ten bedrae van R2,3 miljard vir die finansiering van hul eie bedrywigheede teleen.

Die kapitaalbewegings in die tweede kwartaal van 1995 het die totale netto invloeiing van kapitaal in die twaalf maande tot die einde van Junie 1995 op R18,6 miljard te staan gebring. Soos tabel 5 aandui, was hierdie netto invloeiing van kapitaal feitlik gelykstaande aan die netto uitvloeiing van kapitaal in die voorafgaande agtien maande. Oor die hele tydperk van 2½ jaar het die aflossingstruktuur van Suid-Afrika se verpligtinge teenoor nie-inwoners egter verbeter as gevolg van die skerp oommekeer van kort- na langtermyn netto verpligtinge. Dit is verder interessant om in die tabel te merk dat die openbare owerhede en die private sektor oor die hele tydperk 'n groot netto invloeiing van langtermynkapitaal ondervind het, terwyl die netto langtermynverpligtinge van openbare korporasies afgeneem het.

Tabel 5. Netto kapitaalbewegings nie verwant aan reserwes nie

R miljarde

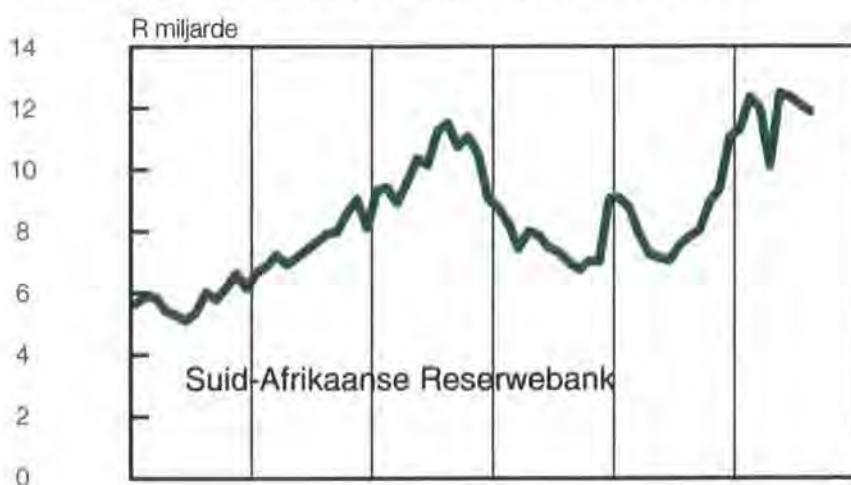
	1e kw 93 tot 2e kw 94	3e kw 94 tot 2e kw 95	1e kw 93 tot 2e kw 95
Langtermynkapitaal			
Openbare owerhede	-2,5	5,1	2,6
Openbare korporasies	-3,2	1,0	-2,2
Private sektor.....	2,1	2,9	5,0
Totaal	-3,6	9,0	5,4
Korttermynkapitaal.....	-15,1	9,6	-5,5
Totale kapitaal	-18,7	18,6	-0,1

Buitelandse reserwes

Die groot tekort op die lopende rekening van die betalingsbalans en die selfs groter netto invloeiing van kapitaal nie verwant aan reserwes nie het 'n toename van R1,1 miljard in Suid-Afrika se *netto goud- en ander buitelandse reserwes* in die tweede kwartaal van 1995 tot gevolg gehad; in die twaalf maande tot Junie 1995 het die netto buitelandse reserwes met R10,6 miljard toegenem. Hierdie verbetering in die algehele betalingsbalansposisie het die Reserwebank in staat gestel om sy laste verwant aan reserwes van R8,5 miljard aan die einde van April 1994 tot slegs R1,7 miljard aan die einde van Junie 1995 af te skaal.

Suid-Afrika se *bruto goud- en ander buitelandse reserwes* het in die tweede kwartaal met R0,9 miljard afgeneem tot R15,2 miljard aan die einde van Junie 1995. Hoewel hierdievlak van buitelandse reserwes gelykstaande was aan slegs ses weke se invoer van goedere en dienste, was dit aansienlik hoër as die goud- en ander buitelandse reserwes van R9,7 miljard aan die einde van Junie 1994. Bowendien het die buitelandse reserwes aan die einde van Junie 1995 hoofsaaklik uit "eie" reserwes bestaan in plaas van die oorwegend "geleende" reserwes soos aan die einde van Junie 1994.

Bruto goud- en ander buitelandse reserwes



In Julie en Augustus het die bruto goud- en ander buitelandse reserwes van die Reserwebank weer met R0,5 miljard tot 'n vlak van R11,9 miljard aan die einde van Augustus afgeneem, terwyl die Bank se netto buitelandse reserwes met R0,3 miljard gedaal het.

Wisselkoerse

Nadat die waarde van die *nominale effektiewe wisselkoers* van die rand van die einde van Desember 1994 tot 10 Maart 1995 (dit is die tydperk net voor die afskaffing van die tweeledige wisselkoersstelsel) met bykans 6 persent verswak het, het dit in die daaropvolgende tydperk tot 30 Junie 1995 met slegs 0,5 persent afgeneem. Hierdie betreklik bestendige vertoning van die geweegde gemiddelde wisselkoers van die rand was die gevolg van 'n marginale depresiasi van die rand teenoor al die belangrikste geldeenhede behalwe die Britse pond. Die rand het egter oor hierdie tydperk skerp teenoor die Japanse yen gedepresieer op grond van die betreklike stetige vertoning van hierdie geldeenheid in die internasionale markte in buitelandse valuta.

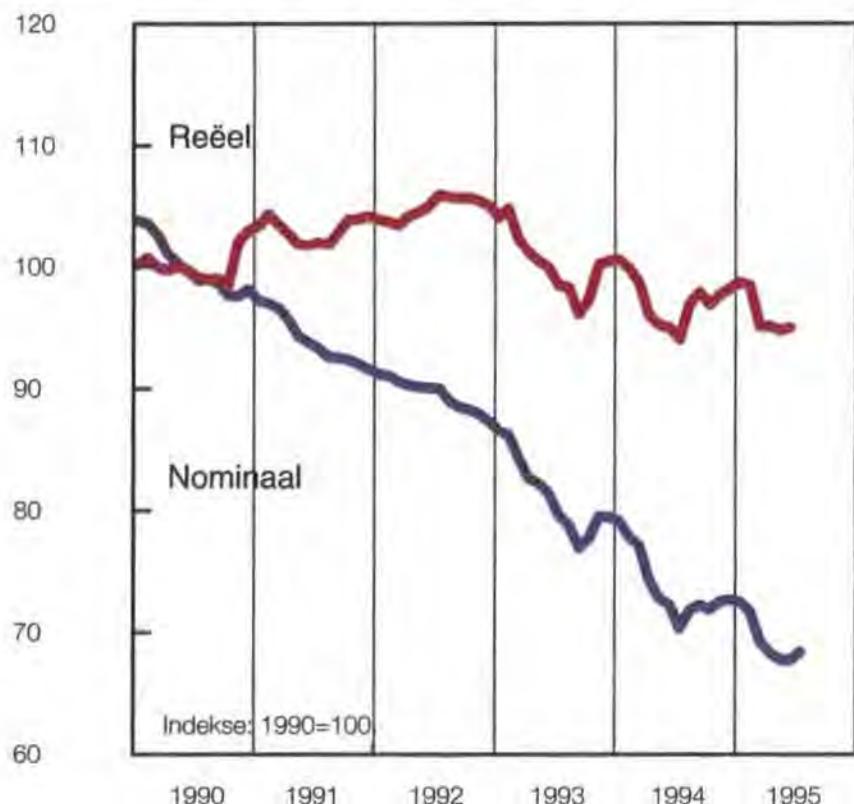
In die tydperk van die einde van Junie 1995 tot die einde van Augustus 1995 het die rand teenoor al die vernaamste geldeenhede, behalwe die VSA-dollar en die Italiaanse lira, geappresieer. Die sterkte van die VSA-dollar teenoor die Japanse yen, Duitse mark en Nederlandse gulden in die laaste helfte van Augustus 1995, het 'n merkbare appresiasi van die rand teenoor hierdie geldeenhede meegebring. As gevolg van hierdie veranderings het die nominale effektiewe wisselkoers van die rand in Julie en Augustus 1995 met ongeveer 2½ persent gestyg. In die eerste agt maande van 1995 het die nominale effektiewe wisselkoers van die rand per saldo met slegs 4 persent gedaal.

Tabel 6. Veranderings in die wisselkoerse van die rand

Percent

	31 Des 1994 tot 10 Mrt 1995	10 Mrt 1995	30 Jun 1995	31 Des 1994 tot 31 Aug 1995
Geweegde gemiddelde.....	-5,8	-0,5	2,5	-3,8
VSA-dollar.....	-2,4	-0,2	-0,5	-3,2
Britse pond.....	-5,3	0,7	2,3	-2,5
Duitse mark.....	-11,7	-1,6	5,5	-8,3
Japanse yen.....	-10,7	-7,3	14,5	-5,3
Nederlandse gulden.	-11,6	-1,7	5,6	-8,2
Italiaanse lira.....	-0,1	-1,8	-1,6	-3,5

Effektiewe wisselkoerse van die rand



Die reële effektiewe wisselkoers van die rand het van Desember 1994 tot Junie 1995 met $3\frac{1}{2}$ persent verminder. Hierdie daling het die reële effektiewe wisselkoers van die rand op bykans 10 persent onder sy hoogtepunt in Julie 1992 te staan gebring.

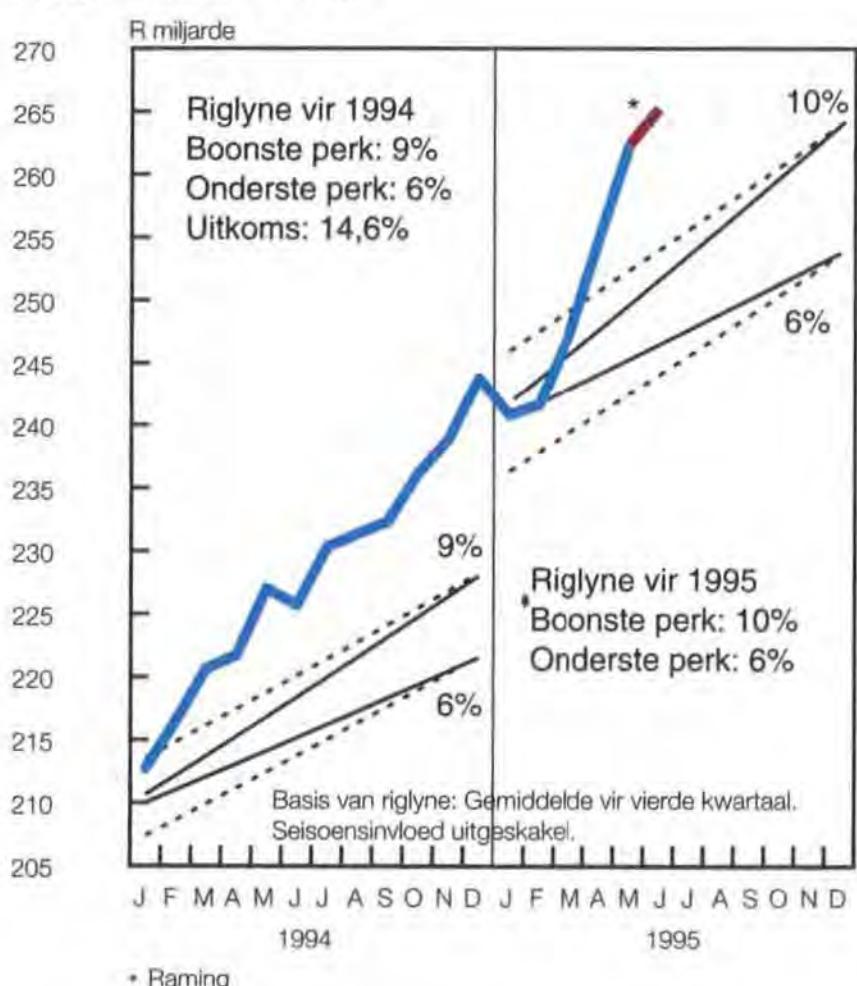
Monetäre ontwikkelings, rentekoerse en finansiële markte

Geldvoorraad

Nadat die koers van toename in die omvattende gedefinieerde geldvoorraad ($M3$) van 'n hoogtepunt van 16,9 persent in Julie 1994 tot 11,8 persent in Februarie 1995 afgeneem het, het dit weer tot 16,8 persent in Junie 1995 versnel. Die maandelikse waardes van $M3$ (seisoensaangesuiwerd), wat in die riglynjaar 1995 onder die onderste perke van die "kegel" maar in die "tonnel" begin het, het gevvolglik in Maart 1995 bokant die boonste perk van die "kegel" en in April 1995 bokant die "tonnel" beweeg. Die voorlopig geraamde seisoensaangesuiwerde maandelikse waarde van $M3$ was trouens in Julie 1995 R12,8 miljard, of 5,0 persent hoër as die ooreenstemmende waarde van die boonste perk van die riglyn- "kegel". Die groeikoers in die seisoensaangesuiwerde waarde van $M3$ vanaf die basis van die riglynjaar het 17,9 persent beloop, vergeleke met die boonste perk van die riglynjaar van 10 persent.

Soos in tabel 7 aangetoon word, het die groeikoers in die enger gedefinieerde monetäre totale, met die opmerklike uitsondering van $M1$, oor die algemeen dieselfde groeipatroon as $M3$ gevolg. Die koers van toename oor twaalf maande in $M1$ het bly krimp van 'n boonste draapunt van 32,7 persent in Julie 1994 tot 7,3 persent in Mei 1995 en daarna het dit slegs effens tot 7,8

Riglyne vir groei in $M3$



Tabel 7. Persentasieverandering in die geldvoorraad oor twaalf maande

Tydperk	M1A	M1	M2	M3
1994: Julie	28,2	32,7	19,5	16,9
Desember ...	24,8	23,7	20,6	15,7
1995: Maart	6,6	10,4	12,6	12,2
April.....	11,6	9,4	15,8	14,9
Mei.....	11,3	7,3	15,6	15,9
Junie	17,0	7,8	15,6	16,8

percent in Junie toegeneem. Dit weerspieël duidelik 'n verskuiwing vanaf onmiddellik opeisbare deposito's (tjek- en transmissie deposito's uitgesonder) na medium- en langtermyndeposito's, wat waarskynlik gegrond is op verwagtings dat langertermynrente en -opbrengskoerse 'n hoogtepunt bereik het en gaan begin afneem.

Die koerse van toename van kwartaal tot kwartaal in al die monetêre totale het ook in die tweede kwartaal van 1995 skerp toegeneem. Aangesien die geldvoorraad onder die huidige monetêre beheerstelsel deur die vraag bepaal word, was hierdie vinniger koers van toename in die monetêre totale waarskynlik 'n weerspieëeling van die skerp groei in die reële bruto binnelandse besteding. Herintermediasie was nog 'n faktor wat moontlik tot die hoë koerse van toename in die geldvoorraad in die tweede kwartaal van 1995 bygedra het. 'n Vernouing

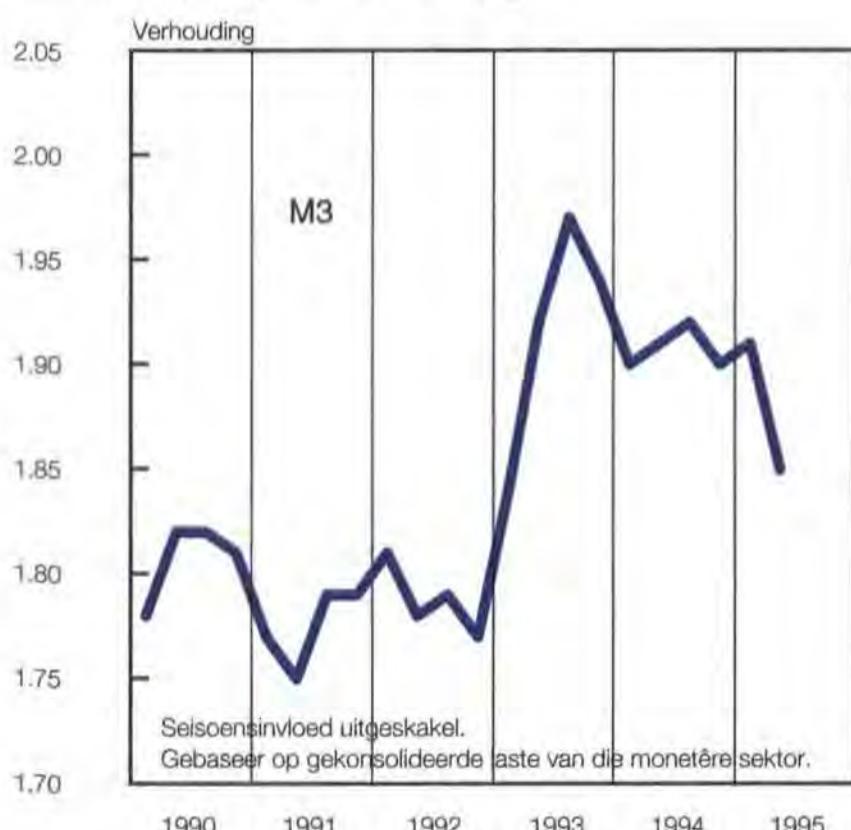
van die gaping tussen die deposito- en uitleenkoerse van banke soos dit in die eerste ses maande van 1995 ondervind is, bevoordeel gewoonlik die proses van intermediasie. Dit word deur ontwikkelings in die *inkome-omloopsnelheid* van M3 bevestig: nadat die inkome-omloopsnelheid gedurende 1994 en die eerste kwartaal van 1995 betreklik konstant gebly het, het dit in die tweede kwartaal van 1995 met 3,0 persent afgeneem.

Die vernaamste *teenhangers* (in 'n statistiese of rekeningkundige sin) van die toename van R12,3 miljard in M3 in die tweede kwartaal van 1995 was toenames van R11,6 miljard in die totale binnelandse kredietverlening en R4,2 miljard in die sogenaamde netto ander bates en laste van die monetêre sektor. In teenstelling met hierdie ontwikkelings het die netto buitelandse bates van die monetêre instellings met R3,4 miljard afgeneem: 'n afname in die totale bruto goud- en ander buitelandse reserwes en 'n aansienlike toename in die buitelandse lenings van private banke het meer as vergoed vir die afname in die laste verwant aan reserwes van die Reserwebank.

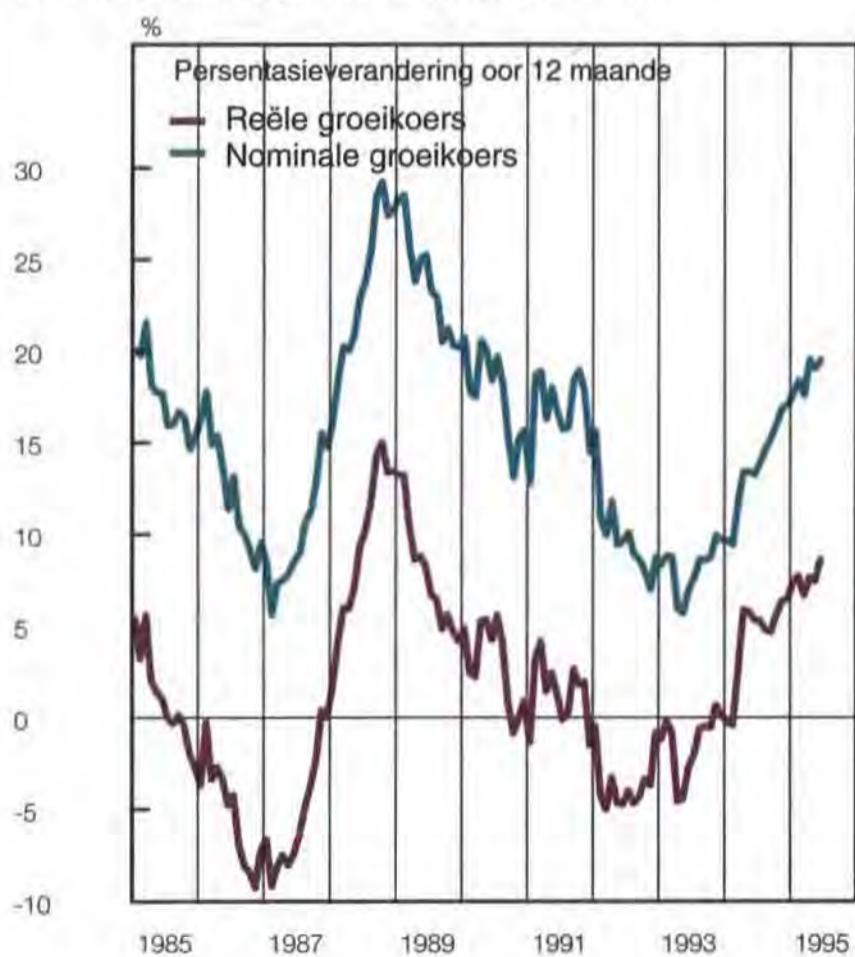
Kredietverlening

Die groei in *totale binnelandse kredietverlening* deur die banksektor oor 'n tydperk van twaalf maande, wat van 19,9 persent in Desember 1994 tot 13,0 persent in Maart 1995 afgeneem het, het in Junie 1995 weer tot 15,3 persent gestyg. Hierdie hoër groei in kredietverlening

Inkome-omloopsnelheid van geld



Kredietverlening aan die private sektor



Tabel 8. Persentasieverandering oor twaalf maande in kredietverlening aan die private sektor volgens soort krediet

Tydperk	Beleggings- en wissels	Afbetalings-verkope	Bruikhuur-finansiering	Verbande	Ander lenings en voorskotte	Totaal
1994: Desember	28,0	27,6	7,2	17,9	12,8	17,0
1995: Maart.....	33,6	25,4	7,9	19,6	12,2	17,6
April.....	28,1	26,8	9,0	19,3	18,2	19,5
Mei.....	23,2	28,1	9,5	19,6	16,7	19,1
Junie	27,0	27,8	13,8	19,5	16,7	19,5

deur die monetêre sektor gedurende die tweede kwartaal van 1995 kon aan toenames in sowel die kredietverlening aan die private sektor as in die netto eise teen die regeringsektor toegeskryf word. Die netto kredietverlening aan die *regeringsektor* het skerp met R2,5 miljard gestyg as gevolg van 'n toename van R5,5 miljard in die bruto eise teen die regering wat deels deur die styging van R3,0 miljard in regeringsdeposito's by monetêre instellings teengewerk is.

Kredietverlening aan die *private sektor* het steeds teen aansienlik hoër koerse van toename oor twaalf maande as die breë geldvoorraad gegroei grotendeels as gevolg van 'n verstewiging in verbruikersvertroue wat gevolg het op die suksesvolle uitkoms van die verkiesings in April 1994 en krediet wat beskikbaar gestel is aan individue wat nie voorheen vir banklenings gekwalifiseer het nie. Die feit dat 'n toenemende deel van binnelandse besteding by wyse van bankkrediet gefinansier is, het geleid tot 'n feitlik ononderbroke styging in die groeikoers oor twaalf maande in die kredietverlening van monetêre instellings aan die private sektor van 'n trog van 5,7 persent in Mei 1993 tot 19,5 persent in April 1995; hierdie koers het daarna in die volgende twee maande rondom hierdie hoëvlak gewissel. Hierdie groeikoers het die inflasiekoers soos gemeet deur veranderings in die verbruikersprysindeks oorskry, met die gevolg dat die reële kredietverlening aan die private sektor oor die twaalf maande tot Junie 1995 met 8,6 persent toegeneem het.

'n Ontleding van monetêre instellings se eise teen die private sektor volgens *soort krediet* toon dat die toename van R9,2 miljard in kredietverlening aan die private sektor in die tweede kwartaal van 1995 hoofsaaklik toegeskryf kan word aan toenames van R4,6 miljard in verbandvoorskotte, R2,3 miljard in afbetalingverkope en R1,5 miljard in sogenaamde "ander lenings en voorskotte" (met inbegrip van oortrokke lopende rekeninge). Hierdie drie soorte kredietverlening het derhalwe gedurende die drie maande tot Junie 1995 ongeveer 92 persent van die toename in kredietverlening aan die private sektor verteenwoordig.

Die koers van toename oor twaalf maande in verbandvoorskotte het in die tweede kwartaal van 1995 om 'n vlak van 19½ persent gewissel, ten spyte van 'n

laer koers van uitbreiding in die bedrywigheid in die vaste-eiendomsmark. Vanweë die buigsaamheid van sommige van die verbandskemas van banke en die vergelykenderwys lae rentekoerse op verbandvoorskotte word hierdie rekeninge toenemend deur leners gebruik om aankope van duursame en ander verbruiksgoedere te finansier. Banke het hierdie kredietfasilitet bevorder as gevolg van die lae kapitaalvereistes wat daarop van toepassing is en die lae kredietrisiko van sodanige lenings.

In teenstelling met die betreklike bestendigheid in die groeikoers oor twaalf maande van verbandvoorskotte, het die ooreenstemmende groeikoerse in afbetalingverkoopkrediet en "ander lenings en voorskotte" in die tweede kwartaal van 1995 gestyg. Die lewendige vraag na hierdie soorte krediet was ook die gevolg van die finansiering van uitgawes op duursame verbruiksgoedere, in besonder aankope van nuwe en gebruikte motorvoertuie. Bruikhuurfinansiering wat gedurende 1994 en die eerste vyf maande van 1995 traag gebly het, het in Junie 1995 skerp gestyg tot 'n vlak bo die inflasiekoers wat oor 'n tydperk van twaalf maande aangeteken is.

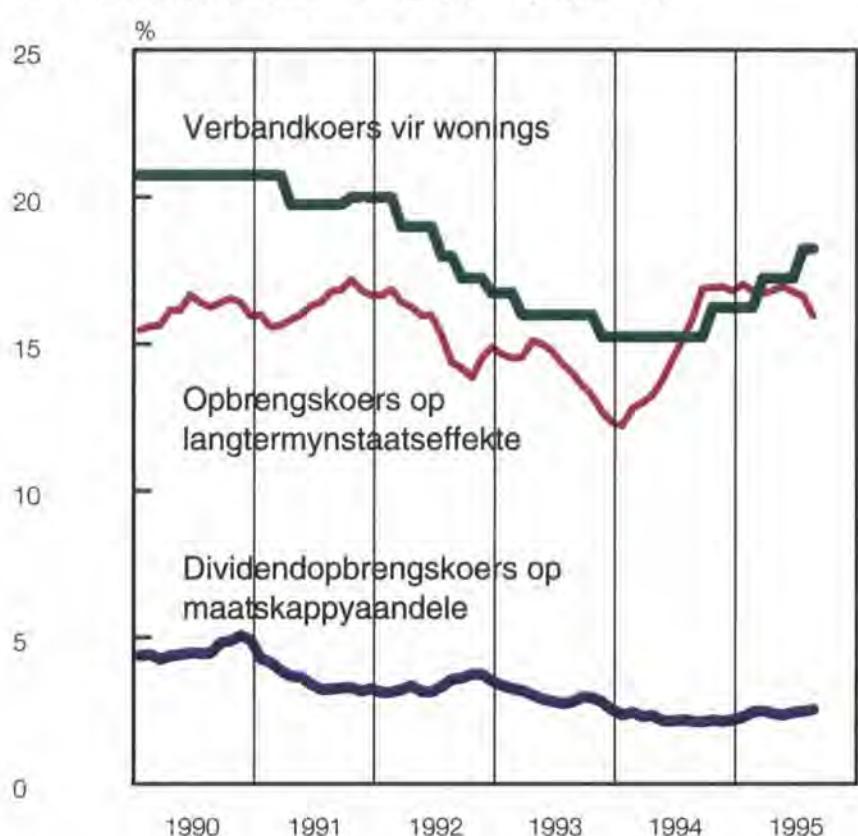
Rente- en opbrengskoerse

Die *opbrengskoerskromme* het in die eerste helfte van 1995 na 'n effens laer vlak verskuif en ietwat meer gelyk verloop namate korttermynkoerse vanweë die verskerping in die monetêre beleidsingesteldheid hoér beweeg het, terwyl langtermynopbrengskoerse effens gedaal het. Die verhoging in die Bankkoers op 22 Februarie 1995 met een persentasiepunt van 13 tot 14 persent en met 'n verdere een persentasiepunt op 30 Junie 1995 tot 15 persent het nie 'n onmiddellike uitwerking van dieselfde omvang op korttermynrentekoerse gehad nie wat reeds in afwagting van die verskerping in monetêre beleid verstewig het. Die tenderkoers op skatkiswissels met 'n looptyd van drie maande het per saldo van 12,69 persent aan die einde van Desember 1994 tot 14,07 persent op 1 Julie 1995 verstewig, wat 'n toename van 138 basispunte verteenwoordig het vergeleke met die styging van 200 basispunte in die Bankkoers oor hierdie tydperk. Hierteenoor het die opbrengskoers op langtermyn-

Korttermynrentekoerse



Kapitaalmarkrente- en opbrengskoerse



staatseffekte van die einde van Desember 1994 tot die einde van Julie 1995 met 21 basispunte gedaal.

Opbrengskoerse op die geld- sowel as die kapitaalmark het daarná in Julie en Augustus 1995 gedaal. Die opbrengskoerse op langtermynstaatseffekte het in Augustus 1995 opmerklik gedaal toe hulle met 64 basispunte teruggesak het; korttermynopbrengskoerse het oor dieselfde tydperk met 2 basispunte afgeneem. Hierdie daling in opbrengskoerse is hoofsaaklik veroorsaak deur hernieuwe belangstelling in Suid-Afrikaanse effekte deur nie-inwoners, 'n afname in opbrengskoerse op effekte in die buiteland en laer werklike en verwagte binnelandse inflasie. Die tenderkoers op skatkiswissels van drie maande het tot 13,88 persent aan die einde van Augustus 1995 afgeneem, terwyl die opbrengskoers op langtermyneffekte ook van 16,69 persent aan die einde van Junie 1995 tot 15,76 persent aan die einde van Augustus 1995 gevallen het.

In noue samehang met die verandering in die Bankkoers aan die einde van Junie 1995 is die *uiteenkoers op prima-oortrekings* van banke op 3 Julie 1995 met een persentasiepunt tot 18,50 persent verhoog. In reaksie op die verhoging in die Bankkoers, het banke ook hul oorheersende koers op *verbandlenings*, wat vanaf Maart 1995 op 17,25 persent gestaan het, in Augustus 1995 tot 18,25 persent verhoog. Die rentekoerse op verbandlenings teen vaste koerse wat in Junie 1995 aangekondig is, sal byvoorbeeld wissel van 20 persent in die geval van lenings tussen R50 001 en R65 000 tot 22,5 persent in die geval van lenings tussen R10 000 en R25 000.

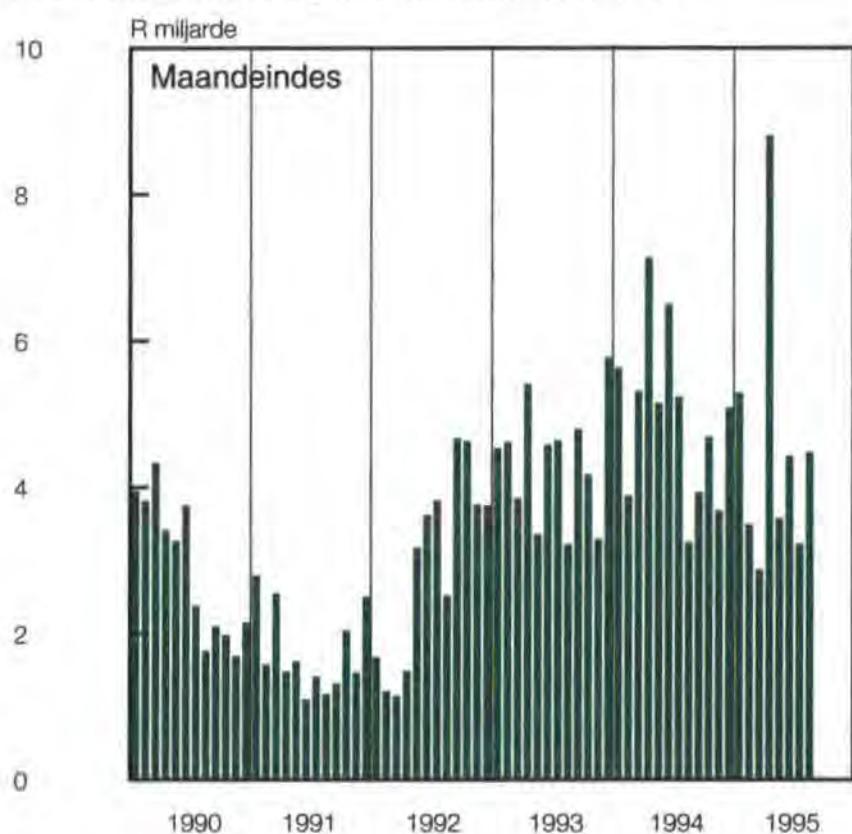
Die oorheersende koers op vaste deposito's van twaalf maande by banke is ook in Junie 1995 met een persentasiepunt tot 14,5 persent verhoog. Dit het die totale styging in hierdie koers sedert die middel van 1994 op 3 persentasiepunte te staan gebring, vergeleke met 'n toename van 2,25 persentasiepunte in die uiteenkoerse op prima oortrekings. In Julie 1995 het die koers op deposito's van twaalf maande aan beleggers 'n reële voorbelaste koers van 5,0 persent gebied.

Die maksimum koerse wat *ingevolge die Woekerwet vasgestel word*, is in April 1995 verhoog van 25,0 tot 26,0 persent ten opsigte van geldlenings, krediet- en verhuringstransaksies vir bedrae van meer as R6 000 maar wat nie R500 000 oorskry nie, en van 28,0 tot 29,0 persent ten opsigte van bedrae tot R6 000.

Geldmark

Geldmarktoestande wat in April 1995 heelwat vernou het, het in die daaropvolgende maande tot die einde van Julie 1995 aansienlik verruum. Dit word duidelik weerspieël deur die akkommodasie soos op maandeindes wat aanvanklik van R2,9 miljard aan die einde van Maart 1995 tot R8,8 miljard aan die einde van April 1995 gestyg het voordat dit aan die einde van Julie 1995 tot R3,2 miljard gedaal het. Hierdie aansienlike afname in die geldmarktekort is hoofsaaklik deur 'n skerp styging van bykans R7 miljard in die netto buitelandse bates van die Reserwebank in Mei 1995 teweeggebring. 'n Skerp toename in regeringsdeposito's by die Reserwebank as gevolg van die verkope van staatseffekte het die geldmarktekort daarná tot R4,5 miljard aan die einde van

Akkommodasie by die diskontovenster



Augustus 1995 laat styg.

Geldmarktoestande is vanaf die tweede kwartaal van 1995 gekenmerk deur hewige fluktusies wat veroorsaak is deur die veranderings in die netto buitelandse bates van die Reserwebank en in regeringsdeposito's by die Reserwebank. Groot kapitaalvloeiinge tussen Suid-Afrika en die res van die wêreld het tot 'n wisselvallige verloop in die netto buitelandse bates van die Reserwebank geleid. Dit is vererger deur die oordragbetalings wat aan die begin van elke maand deur die sentrale regering aan die nege provinsies gemaak word, en wat in sekere gevalle tot aansienlike veranderings in die regeringsdeposito's by die Reserwebank aanleiding gegee het.

Die optrede van die Reserwebank in die geldmark gedurende hierdie tydperk was hoofsaaklik daarop gemik om oormatige likwiditeit teen te werk ten einde die herfinansieringsfasiliteteite doeltreffend te hou. Die baie groot fluktusies in die geldmarktekorte wat in die vyf maande tot Augustus 1995 voorgekom het, is deur Reserwebankoptredes soos valutaruitransaksies, aanpassings in die bateportefeuille van die Korporasie vir Openbare Deposito's en die daaglikse bestuur van regeringsdeposito's by die Reserwebank teengewerk.

Effektemark

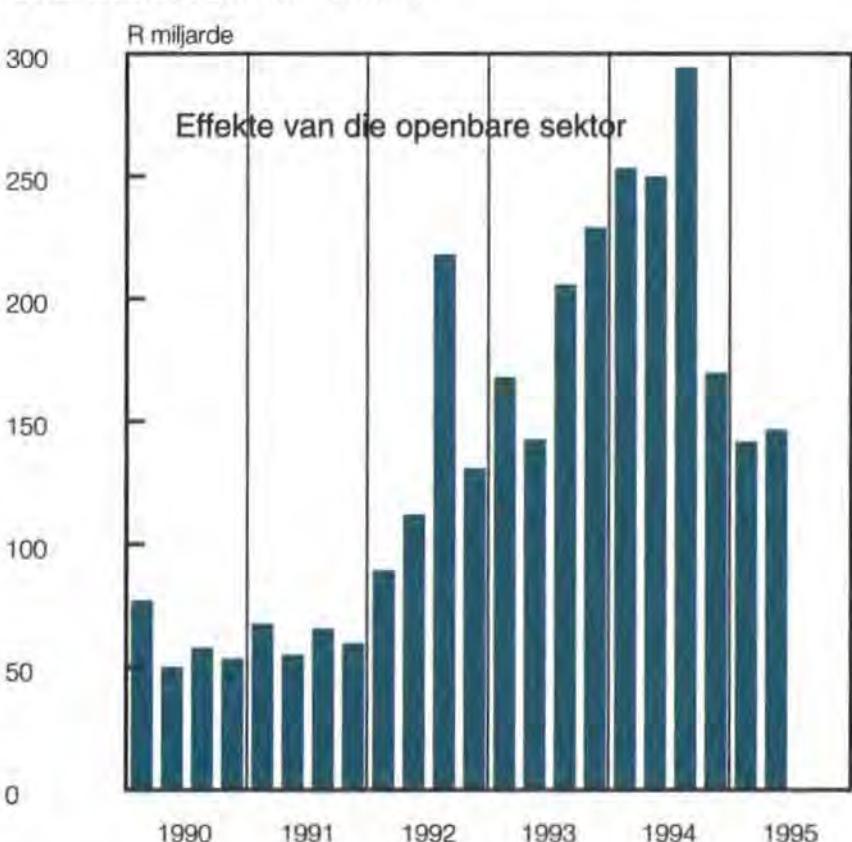
Net soos in 1994 en in die eerste drie maande van 1995, is die bedrywigheid in die binnelandse *primère effektemark* in die eerste vier maande van die fiskale jaar 1995/96 (dit wil sê die tydperk April 1995 tot Maart 1996) heeltemal deur die openbare sektor oorheers. Netto nuwe uitgifte van vaste-rentedraende sekuriteite deur

die openbare sektor het gedurende die tydperk R11,7 miljard beloop; in die ooreenstemmende tydperk van die voorafgaande jaar het die openbare sektor R7,0 miljard op hierdie manier ingesamel. Genoteerde private maatskappye het nie veel fondse deur nuwe uitgifte van vaste-rentedraende sekuriteite (met inbegrip van omskepbare voorkeuraandele, skuldbriewe en maatskappyobligasies) verkry nie. In die vier maande van April tot Julie 1995 is uitgifte ten bedrae van R0,9 miljard deur genoteerde maatskappye in die private sektor gemaak.

'n Aantal maatskappye het egter in die tweede kwartaal van 1995 voortgegaan om kapitaal ten bedrae van R0,7 miljard deur middel van uitgifte van omskepbare effekte in buitelandse markte op te neem. In die agtien maande van Januarie 1994 tot Junie 1995 het private maatskappye 'n totaal van R2,1 miljard op dié manier verkry omdat internasionale beleggers bereid was om posisies in te neem op basis van die siening dat die verdienste van Suid-Afrikaanse maatskappye aanloklike groeivoorsigte bied. Optredes om kapitaal te werf het hierdie vraag benut en in sommige gevalle is deviesebeheergoedkeuring verkry dat Suid-Afrikaanse maatskappye 'n sekere persentasie van die opbrengste in die buitenland mag hou om internasionale uitbreidings mee te finansier. In Julie 1995 het die Reserwebank ook aangekondig dat toestemming vir die uitriling van internasionale bates in sekere gevalle aan versekeringsmaatskappye, pensioenfondse en effektetrusts verleen sal word.

Die bedrywigheid in die sekondêre effektemark het in die tweede kwartaal van 1995 verder afgeneem. Nadat die maandelikse gemiddelde waarde van effekte wat op

Effektebeurstransaksies



die Johannesburgse Effektebeurs verhandel is in die derde kwartaal van 1994 'n hoogtepunt van R98,2 miljard bereik het, is dit in die tweede kwartaal van 1995 gehalveer tot R49,0 miljard. In Julie en Augustus 1995 het die waarde van hierdie transaksies onderskeidelik R49,2 miljard en R111,8 miljard bedra. Die hoër vlak van effekte van die openbare sektor wat in Augustus verhandel is, is in 'n groot mate beïnvloed deur die skerp daling in die langtermynopbrengskoerse gedurende hierdie maand.

Die hoë vlak van likwiditeit het die afskaling van die Reserwebank se rol as markmaker in die sekondêre mark vir staatseffekte moontlik gemaak. Bruto verkope van staatseffekte deur die Reserwebank het gevvolglik ietwat afgeneem van 'n maandelikse gemiddelde waarde van R13,7 miljard in 1994 tot R6,9 miljard in die eerste sewe maande van 1995. Die Bank het ook oor dieselfde tydperk sy verhandeling in opsigte op staatseffekte van 'n maandelikse gemiddeld van R7,4 miljard tot R5,5 miljard verminder.

Nie-inwoners was aktief in die sekondêre effektemark betrokke. In Februarie 1995 het hulle netto verkopers van effekte van die openbare sektor geword, waarskynlik in afwagting van die afskaffing van die tweeledige wisselkoersstelsel. Hierdie verkope het in die week voor en na die afskaffing van die finansiële rand betekenisvol toegeneem. Alles inaggenome, was nie-inwoners in die eerste kwartaal van 1995 netto verkopers van effekte ten bedrae van R363 miljoen. Met die betreklik bestendige eksterne waarde van die rand, was die opbrengskoers op langtermyneffekte vir buitelandse beleggers aantreklik en het dit tot totale netto aankope van staatseffekte deur nie-inwoners van R1,1 miljard gedurende die vyfmaandetydperk van April tot Augustus 1995 geleei.

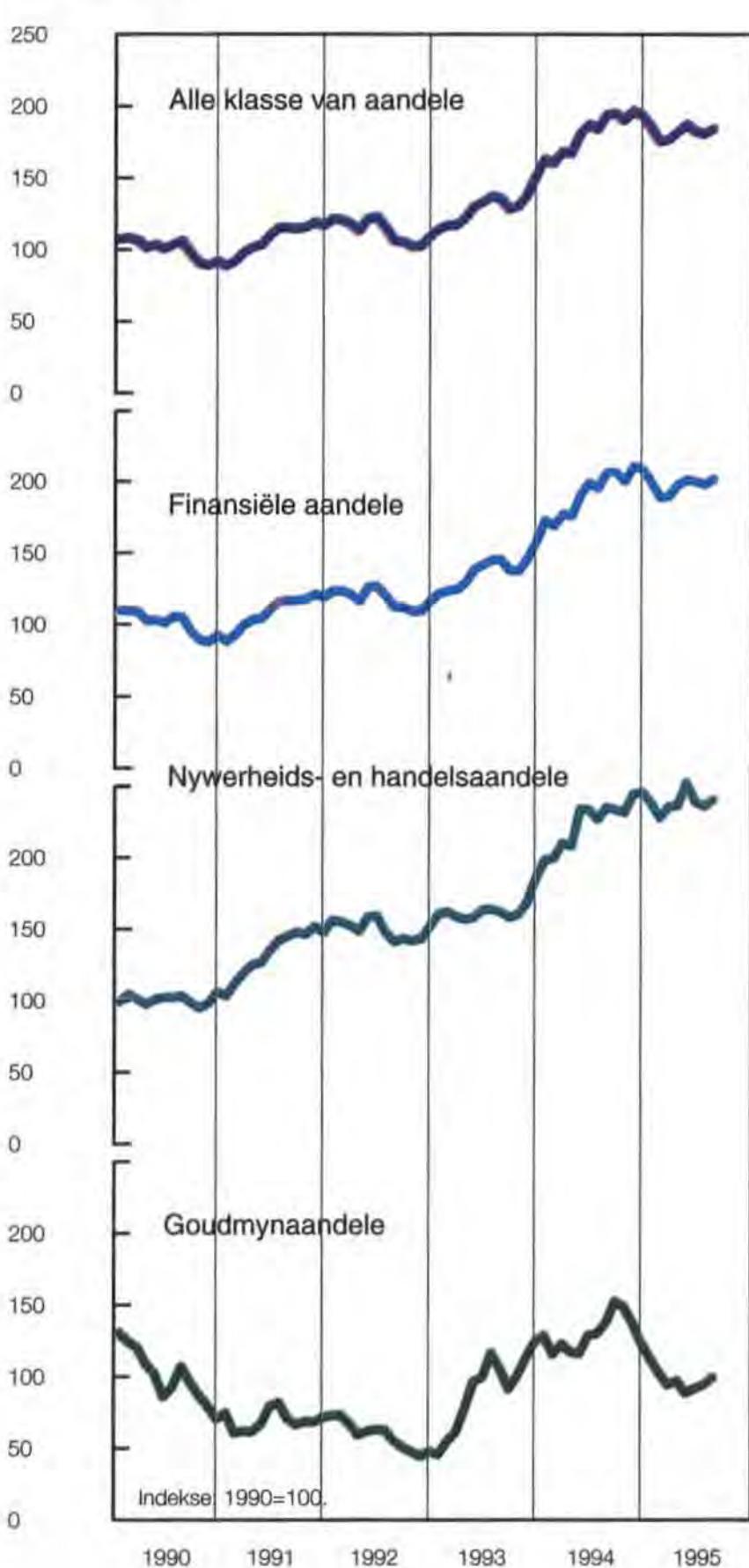
Aandelemark

Die vraag na fondse in die *primêre aandelemark* het in die eerste sewe maande van 1995 as gevolg van hoë en stygende aandelepryse en 'n tekort aan waardepapier bestendig gebly. Nadat R2,3 miljard in die eerste kwartaal van 1995 opgeneem is, het die waarde van regte-uitgiftes van gewone aandele in die vier maande tot Julie 1995 op R1,8 miljard te staan gekom. Die waarde van aandele wat in die plek van kontantdividende uitgereik is, het ook gewild gebly as gevolg van die Sekondêre Belasting op Maatskappye wat die verklaring van kontantdividende ontmoedig het.

Die omset in die sekondêre aandelemark is teen die einde van 1994 en gedurende die grootste deel van die eerste sewe maande van 1995 negatief beïnvloed deur die hoë vlak van rentekoerse en die swak vertoning van aandelemarkte wêreldwyd. Die maandelikse gemiddelde waarde van aandele wat op die Johannesburgse Effektebeurs verhandel is, het van R6,0 miljard in 1994 tot R4,3 miljard van Januarie tot April 1995 gedaal, maar in die daaropvolgende vier maande in samehang met die herstel van die belangrikste aandelemarkte in die wêreld ietwat tot R5,4 miljard herstel.

Aangespoor deur die afskaffing van valutabeheermaatreëls op *nie-inwoners* en die insluiting van die Johannesburgse Effektebeurs in die Internasionale Finansiële Korporasie se indeks vir opkomende markte, het die netto aankope van aandele deur nie-inwoners op die Johannesburgse Effektebeurs van R0,8 miljard in die eerste kwartaal van 1995 tot R2,0 miljard in die tweede kwartaal gestyg. Gedurende Julie en Augustus was daar verdere netto aankope van R1,0 miljard, wat die totale

Aandelepryse



netto aankope van aandele deur nie-inwoners gedurende die eerste agt maande van 1995 op R3,8 miljard te staan gebring het. Die bruto aankope deur nie-inwoners in verhouding tot die totale waarde van aandele wat verhandel is, het gevvolglik van 31,4 persent in 1994 in die geheel tot 41,9 persent in die eerste agt maande van 1995 toegeneem.

Die afwaartse beweging in *aandelepryse* van November 1994 tot Februarie 1995 is daarna omgekeer deur faktore soos die hoër maatskappywinstes en pogings om buitelandse belegging in Suid-Afrika aan te moedig. Die gemiddelde prysvlak van alle klasse aandele het dienooreenkomsdig van Februarie tot Mei 1995 met 6,9 persent verbeter, waarna dit in die volgende drie maande weer met 1,6 persent teruggesak het. In Augustus 1995 was die prysvlak van alle klasse aandele 6,1 persent onder die boonste draaipunt van November 1994.

Nadat die pryse van goudmynaandele in September 1994 'n nuwe rekordhoogtepunt bereik het, het die laer goudmynbouwinstes, arbeidsonrus op sekere myne en die ontginning van gouddraende erts van 'n laer graad, die pryse van goudmynaandele gedurende 1995 verder afgedruk. Ondanks 'n effense herstel in April 1995, was die vlak van die pryse van goudmynaandele in Augustus nog steeds 34,9 persent onder die hoogtepunt van September 1994.

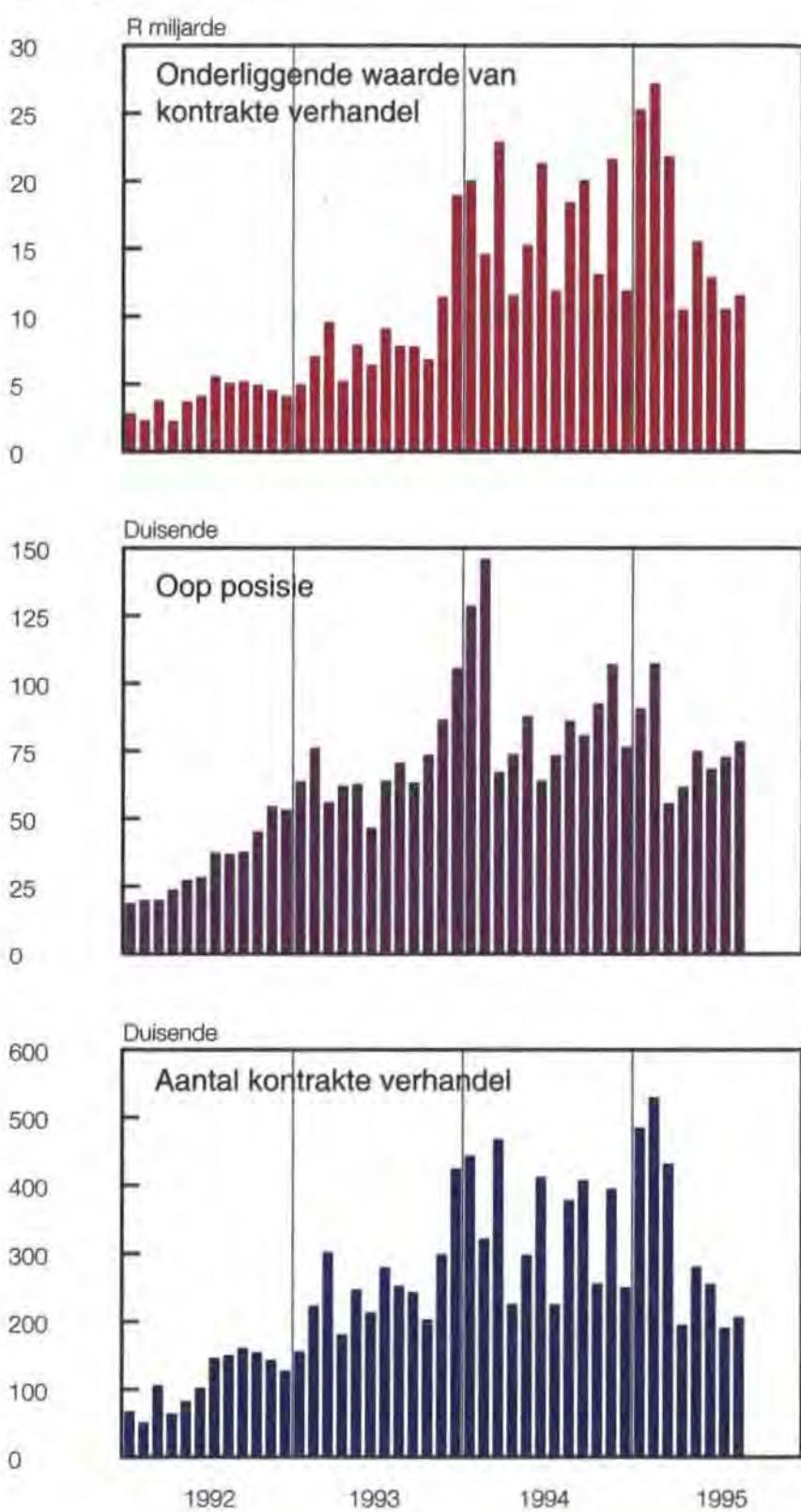
Die gemiddelde *dividendopbrengskoers* op alle klasse aandele, wat veranderings in *aandelepryse* weerspieël het, het eers van 2,50 persent in Maart 1995 tot 2,35 persent in Mei afgeneem en toe tot 2,54 persent in Augustus gestyg. Die gemiddelde *verdienste-opbrengskoers* op alle klasse aandele (uitgesonderd goudmynbou-aandele) het van 5,95 persent in Maart 1995 tot 6,29 persent in Augustus toegeneem.

Ander finansiële markte

Die bestendige toestande in die mark in buitelandse valuta, 'n afname in die betrokkenheid van nie-inwoners en 'n groter omsigtigheid ten opsigte van termynbeurstransaksies het veroorsaak dat die vlak van bedrywigheid op die Suid-Afrikaanse Termynbeurs in die tweede kwartaal van 1995 begin afneem het. Die omset in *termynkontrakte* het teruggesak van 'n nuwe kwartaalklike rekordhoogtepunt van 1,4 miljoen kontrakte in die eerste kwartaal van 1995 tot 0,7 miljoen kontrakte in die tweede kwartaal van 1995. Die grootste deel van hierdie transaksies het bestaan uit *aandeletermynkontrakte*, terwyl bedrywigheid in *rentekoerskontrakte* laag gebly het en die omvang van transaksies in die Krugerrandtermynkontrak en die nuwe Bankakseptermynkontrak betreklik onbeduidend was. Die verhandeling in kommoditeits-termynkontrakte het op 31 Julie 1995 begin met die beesvleistermynkontrak as enigste kontrak wat aanvanklik verhandel word.

Die aantal opsies op termynkontrakte het van 'n rekord 1,5 miljoen kontrakte in die eerste kwartaal van 1995 tot 0,6 miljoen kontrakte in die tweede kwartaal gekrimp. Aandele-opsies het ook die totale posisie in

Termynbeurstransaksies: Termynkontrakte



opsiekontrakte oorheers, met weinig bedrywigheid in opsies op termynkontrakte wat op rentekoerse gebaseer is. Opsies op die nuwe kommoditeitstermynkontrakte is nog nie in die formele mark beskikbaar nie en word slegs in die oor-die-toonbank-mark verhandel.

Oop posisies in termynkontrakte en opsies op termynkontrakte wat op die Suid-Afrikaanse Termynbeurs verhandel word, het aansienlik toegeneem. Op die grondslag van merk-tot-mark-pryse het die totale oop posisie van aandeletermynkontrakte en opsies soos met afsluiting van sake op 31 Augustus 1995, R4,8 miljard beloop.

Soos reeds aangedui is, het die *verbandmark* gedu-

rende die eerste ses maande van 1995 sterk vertoon, ten spyte van 'n ietwat meer gedempte huismark en 'n dooierige handels- en nywerheidsverhuringsmark in die eerste kwartaal van 1995. Die finansiering van die verbandmark kan in die toekoms beïnvloed word deur die owerheid se massabehuisingsprogram wat in Junie 1995 geloods is.

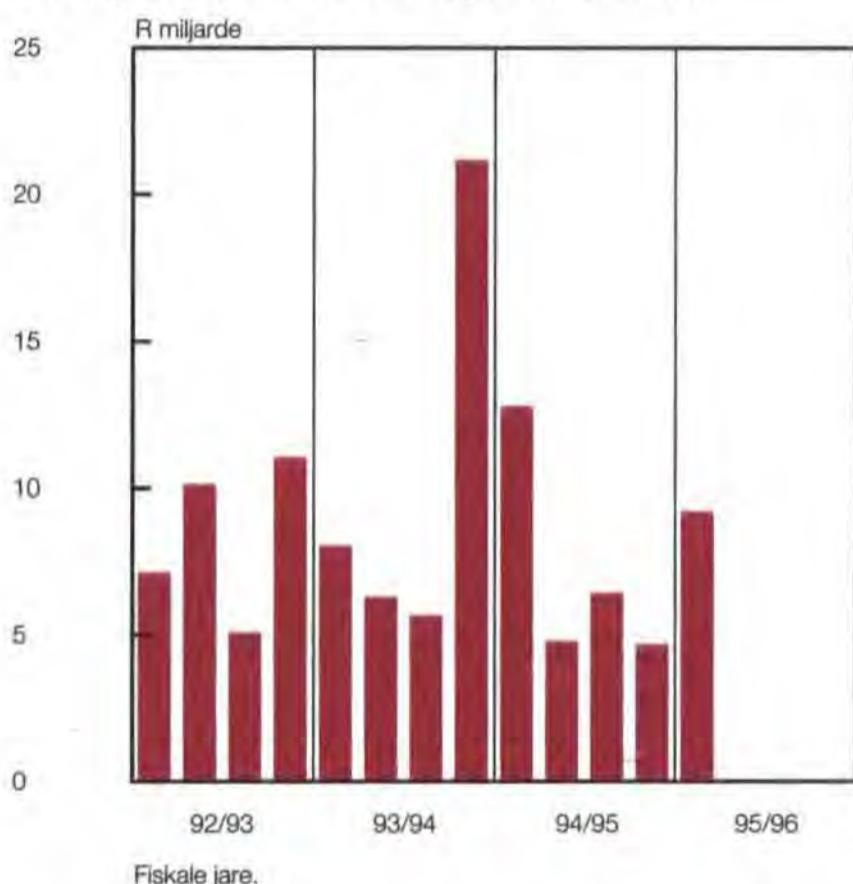
Beleggers in vaste eiendom het teen die einde van 1994 versigtiger geword en die waarde van transaksies in die *vaste-eiendomsmark* het van 'n hoogtepunt van R8,4 miljard in die derde kwartaal van 1994 tot R 7,8 miljard in die eerste kwartaal van 1995 verminder voordat dit in die tweede kwartaal van 1995 tot R8,2 miljard herstel het. Die verhoging in die prys van vaste eiendom, die voortgesette hoë nominale en reële verbandkoers en verwagtings van 'n verdere styging in rentekoerse was waarskynlik hoofsaaklik vir die laer vlak van transaksies in vaste eiendom verantwoordelik.

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 regerings, plaaslike owerhede en die nie-finansiële openbare ondernemings) het R9,1 miljard in die eerste kwartaal van die fiskale jaar 1995/96 beloop, of 7,8 persent van die bruto binnelandse produk. Dit was betekenisvol laer as die tekort van R12,7 miljard, of 12,0 persent van die bruto binnelandse produk, wat in die ooreenstemmende kwartaal van die voorafgaande fiskale jaar aangeteken is. Soos in tabel 9 aangetoon word, was hierdie laer leningsbehoefte van die openbare sektor moontlik die

Leningsbehoefte van die openbare sektor



Tabel 9. Leningsbehoefte van die openbare sektor

R miljarde

Fiskale jare		Hoof-begroting	Provinsiale regerings	Plaaslike owerhede	Ander openbare sektor	Totaal
1994/95	1e kw.....	10,9	1,1	0,8	0,0	12,7
	2e kw.....	4,8	0,5	-0,6	-0,1	4,7
	3e kw.....	4,3	0,6	0,1	1,5	6,4
	4e kw.....	4,7	0,2	0,3	-0,5	4,6
1995/96	1e kw.....	11,0	-2,0	0,7	-0,5	9,1

gevolg van spesiale omstandighede wat met die konstitusionele veranderinge in Suid-Afrika verband gehou het.

Administratiewe probleme waarmee die nuutgestigte provinsiale regerings te kampe gehad het, het hul besteding aan bande gelê. Waar die totale besteding deur die provinsiale regerings gewoonlik hul totale inkomse en oordragte oorskry het, is 'n oorskot van R2,0 miljard in die eerste kwartaal van die fiskale jaar 1995/96 aangeteken. Hierdie oorskot het in 'n groot mate die verswakking in die finansies van die Hoofbegroting teengewerp, waar die tekort ondanks die addisionele opbrengs van R1,2 miljard uit die verkoop van strategiese oliereserwes in April 1995 op R11,0 miljard te staan gekom het.

Die afwenteling van sekere magte van die sentrale regering na die provinsiale regerings het ook 'n merkbare invloed op die besteding van die Hoofbegroting gehad. Hierdie konstitusionele veranderings in die fiskale betrekkinge tussen owerhede het tot 'n skerp toename in die oordragbetalings vanaf die Hoofbegroting na die provinsiale regerings geleid. Die oordragbetalings in die Hoofbegroting was in die eerste kwartaal van die fiskale jaar 1995/96 gevoldig nie minder nie as 60,5 persent hoër as in die eerste kwartaal van die fiskale jaar 1994/95. Daarteenoor het die besteding van die Hoofbegroting op goedere en dienste oor dieselfde tydperk met 32,3 persent afgeneem.

In vergelyking met die eerste kwartaal van die fiskale jaar 1994/95, het die finansies van die plaaslike owerhede en ander entiteite in die openbare sektor in die

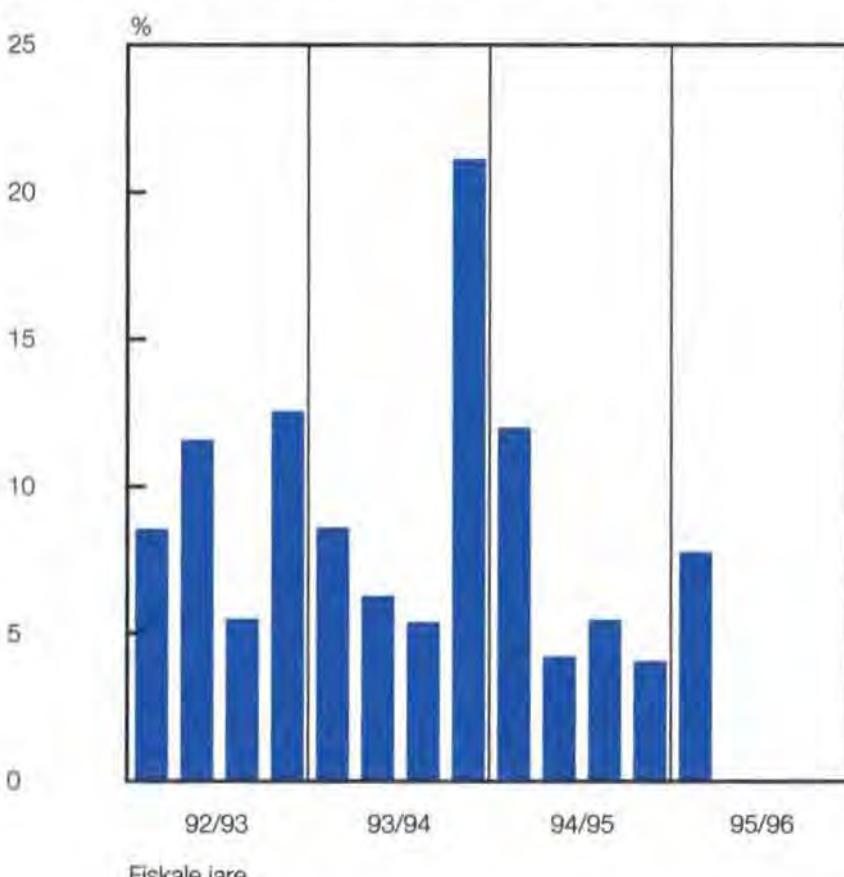
eerste kwartaal van die fiskale jaar 1995/96 verbeter. Die plaaslike owerhede het steeds 'n betreklik lae leningsbehoefte gehandhaaf as gevolg van groot toenames in die heffings wat op hul inwoners ingestel is. Die oorskot op die inkomse- en bestedingsrekeninge van die ander entiteite in die openbare sektor was hoofsaaklik te danke aan die gunstige resultate in die finansies van die buitebegrottingsinstellings, die nie-finansiële openbare korporasies en die ondernemings van die sentrale owerheid.

Skatkisrekening

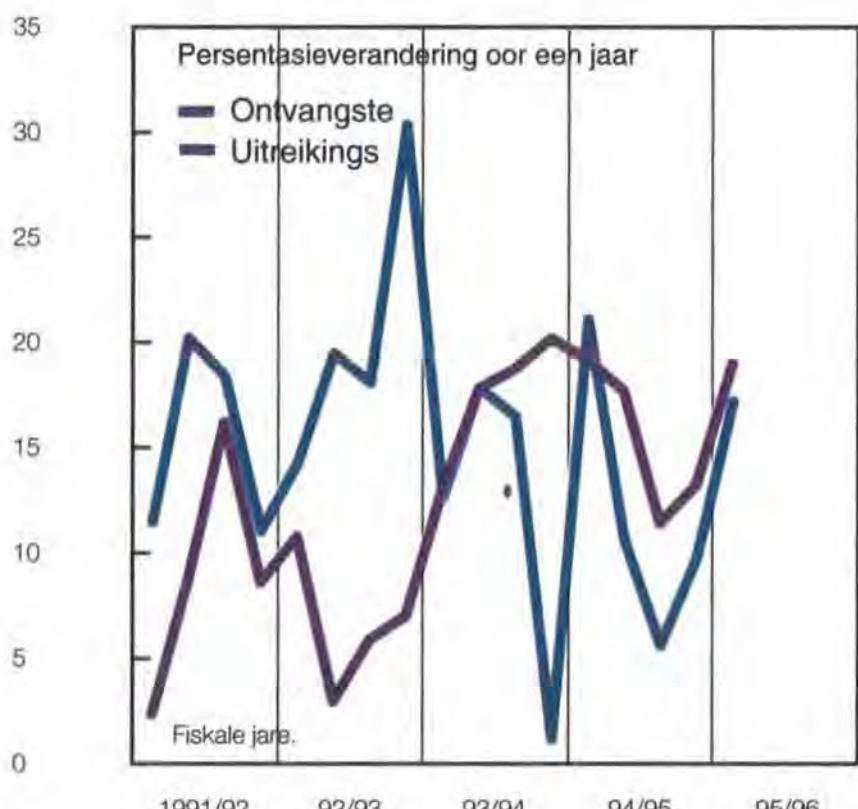
Skatkisuitreikings aan staatsdepartemente (aangepas om kontantvloeiinge te weerspieël) was in die eerste vier maande van die fiskale jaar 1995/96 17,5 persent hoër as die vergelykbare syfers in die eerste vier maande van die voorafgaande jaar. Hierdie koers van toename was heelwat hoër as die gemiddelde koers van toename van 13,9 persent in die ooreenstemmende tydperk van die voorafgaande vyf fiskale jare en ook aansienlik hoër as die koers van toename van 9,0 persent wat in die Begroting vir die fiskale jaar 1995/96 voorsien is. 'n Groot deel van hierdie toename was die gevolg van 'n verskuiwing in die patroon van rentebetalings na die eerste vier maande van die fiskale jaar vanweë nuwe rentebetalingsdatums op skuld wat in die voorafgaande fiskale jaar uitgereik is. In verhouding tot die totale begrote besteding van R152,7 miljard vir die fiskale jaar 1995/96, het die skatkisuitreikings van R51,9 miljard in die eerste vier maande van die jaar 34,0 persent beloop.

Skatkisontvangste het in die eerste vier maande van die fiskale jaar 1995/96 R39,0 miljard of 13,5 persent

Leningsbehoefte van die openbare sektor as persentasie van bruto binnelandse produk



Skatkisontvangste en -uitreikings



meer as die vergelykbare vlak in die ooreenstemmende tydperk van die voorafgaande fiskale jaar bedra. Hierdie toename in die eerste vier maande was ook aansienlik hoër as die begrote toename van 10,3 persent in die staatsinkomste vir die volle fiskale jaar 1995/96.

Die invorderings van Binnelandse Inkomste was in die eerste vier maande van die fiskale jaar 1995/96 grotendeels verantwoordelik vir die hoér-as-verwagte toename in staatsinkomste. As gevolg van die hoë vlak van ekonomiese bedrywigheid, die betreklike skerp stygings in salaris- en loonaanpassings en die relatiewe groot netto winste van sake-ondernemings, het die ontvangste uit inkomste vinniger gestyg as wat in die Begroting in die vooruitsig gestel is. Inkomstebelasting-invorderings kan moontlik hierdie goeie prestasie in die oorblywende deel van die fiskale jaar handhaaf omdat die oorgangsheffing wat in die vorige fiskale jaar ingestel is in die individuele belastingkoerse van toepassing op die fiskale jaar 1995/96 geïnkorporeer is, en die laaste deel van die oorgangsheffing (1,67 persent) deur die hele fiskale jaar gevorder sal word. Die opbrengs van belasting op toegevoegde waarde was ook hoër as wat in die Begroting voorsien is weens die voortgesette hoë toename in die binnelandse besteding.

Staatsinkomste uit doeane- en aksynsregte het in die eerste vier maande van die fiskale jaar 1995/96 met 6,0 persent teenoor die eerste vier maande van die voorafgaande jaar afgeneem. In die Begroting is voorsiening gemaak vir 'n toename van 4,3 persent uit hierdie bron van inkomste vir die volle fiskale jaar 1995/96. Hierdie betreklike swak prestasie van die ontvangste uit doeane- en aksynsregte was te wyte aan die gedeeltelike afskaffing van die bo-belasting in die voorafgaande jaar wat eers vanaf Augustus 1994 'n invloed op hierdie ontvangstes begin toon het. Die inkomste-ontvangste uit bo-belasting het dus van die eerste vier maande van die fiskale jaar 1994/95 tot die eerste vier maande van die fiskale jaar 1995/96 met meer as die helfte verminder.

Die hoér-as-verwagte skatkisuitreikings en -ontvangstes het 'n tekort voor lenings en skuldaflossing van R12,9 miljard vir die eerste vier maande van die fiskale jaar 1995/96 veroorsaak. Hierdie tekort was gelyk aan 43,3 persent van die begrote tekort van R29,7 miljard vir die volle jaar. Die tekort vir die ooreenstemmende tydperk van die fiskale jaar 1994/95 het 37,7 persent van die begrote tekort vir daardie jaar beloop.

Die tekort van R12,9 miljard, plus die diskonto op die uitreiking van nuwe staatseffekte van R3,6 miljard, is deur middel van die volgende *leningsinstrumente* gefinansier:

	R miljoene
Staatseffekte.....	16 746
Skatkiswissels.....	566
Buitelandse lenings	1 301
Nie-bemarkbare sekuriteite.....	-38
Geldmarkinstrumente	7
Buitengewone ontvangste	1 203
Verandering in beskikbare kontantsaldo's by die:	
Reserwebank.....	-1 208
Banke	-2 081
Totale finansiering	16 496
Min: diskonto op nuwe staatseffekte	3 621
Totale netto finansiering	12 875

As gevolg van hierdie finansiering van die Skatkis-tekort het die uitstaande *staatskuld* van R245,3 miljard aan die einde van Maart 1995 tot R264,0 miljard aan die einde van Julie 1995 toegeneem. In verhouding tot die bruto binnelandse produk het staatskuld aan die einde van Julie 1995 57,8 persent beloop.

Tabel 10. Persentasietoename in skatkis-ontvangste, 1995/96

	Begrote toename	Toename in eerste vier maande*
Skatkisontvangste.....	10,3	13,5
Doeane- en aksynsregte ...	4,3	-6,0
Binnelandse inkomste	11,2	19,7
Inkomstebelasting	11,4	12,7
Belasting op toegevoegde waarde.....	13,0	15,9

* Koers van jaar tot jaar

Verklaring oor monetêre beleid

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

29 Junie 1995

Die Reserwebank was in onlangse maande traag om sy uitleenkoerse te verhoog weens die dubbelsinnige seine wat deur die finansiële en reële ekonomiese aanwysers van heersende neigings in die ekonomie uitgestuur is. Teen die agtergrond van die verlangsaming in beide die bruto binnelandse produksie en die bruto binnelandse besteding gedurende die eerste kwartaal van 1995, was daar moontlik twyfelagtige aanduidings dat die koers van toename in die binnelandse kredietverlening deur banke en in die geldvoorraad die verlangsaming in die koers van uitbreiding in totale reële ekonomiese bedrywigheid sou volg. Terselfdertyd het die daagliks geldmarktekort onlangs redelik stabiel op 'n relatief laevlak van tussen R1 en R2 miljard gebly, 'n aanduiding van die aanwesigheid van voldoende likwiditeit in die banksektor. Daar was gevoldig geen oormatige opwaartse druk op rentekoerse nie.

Syfers oor die totale kredietverlening deur banke gedurende April 1995 en oor die geldvoorraad soos aan die einde van Mei 1995, toon egter nou 'n verdere aansienlike toename in hierdie twee belangrike finansiële groothede ná die einde van die eerste kwartaal. Oor die twaalf maande tot April 1995 het die totale eise van die banksektor teen die binnelandse private sektor met 19,5 persent toegeneem, vergeleke met 17,5 persent in Maart. Die koers van toename in die M3-geldvoorraad het van 14,9 persent in April tot 15,8 persent in Mei gestyg.

Beide die produksieprys- en verbruikersprysinflasie het ook gedurende onlangse maande verder toegeneem. Oor die twaalf maande tot April 1995 het die totale produksieprysindeks met 11,5 persent gestyg, terwyl die indeks vir verbruikerspryse met 11 persent toegeneem het. In Mei 1995 het die koers van toename oor twaalf maande in verbruikerspryse egter effens tot 10,8 persent teruggesak.

Onbestendige veranderings in die netto goud- en buitelandse valutareserves gedurende onlangse maande het tot die ingewikkeldheid van die huidige finansiële toestand bygedra. In April 1995 het die totale netto buitelandse reserves van die Reserwebank met R4,1 miljard gedaal, gevolg deur 'n toename van R5,8 miljard in Mei. Die aanduidings is dat die Reserwebank se netto buitelandse reserves in Junie weer sal toeneem, hoewel met minder as die opbrengs van R1,3 miljard van die Samurai-leningsuitgifte wat vroeër hierdie maand deur die Regering gemaak is.

Die onderliggende inflasiedruk is ongetwyfeld weer besig om in die Suid-Afrikaanse ekonomie toe te neem, aangemoedig deur onder andere loonstygings, die depresiasie van die wisselkoers oor die afgelope jaar, die versnelling in die koerse van toename in die belangrikste monetêre totale en die groeiende verwagting dat die

inflasiekoers voortdurend gaan styg. Indien dit ongehinderd voortgaan, sal hierdie neiging uiteindelik die welkome verbetering oor die afgelope jaar in reële ekonomiese groei dwing om op nijs uit te loop nie, en ook die doelstellings van die Heropbou- en Ontwikkelingsprogram in die wiele ry. Die Reserwebank se verdraagsaamheid teenoor die onhoudbare groot toenames in bankkredietverlening en in die geldvoorraad, wat onlangs alreeds wyd gekritiseer is, kan nie langer verdedig word nie. Die risiko bestaan dat indien regstellende optrede nou vertraag word, die gevaar van 'n pynliker aanpassing in die toekoms geloop sal word.

Die Bank het gevoldig besluit om die Bankkoers en verwante uitleenkoerse onmiddellik met een persentasiepunt te verhoog. Vanaf 30 Junie 1995 word die Bankkoers, dit wil sê die koers waarteen die Reserwebank bereid is om lenings aan bankinstellings by die diskontovenster beskikbaar te stel, van 14 tot 15 persent verhoog. Die effektiewe koste van Reserwebankakkommodasie word dus vir alle bankinstellings met een persentasiepunt verhoog. Soos die gebruik is, sal elke bankinstelling self oor sy eie deposito- en uitleenkoerse besluit, met inagneming van die styging van een persentasiepunt in die Bankkoers.

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

13 Julie 1995

1. Belegging in die buiteland deur Suid-Afrikaanse institusionele beleggers

In die aankondiging oor die afskaffing van die finansiëlerandstelsel op 10 Maart 1995 het die Minister van Finansies melding gemaak van die vraag na buitelandse bates deur verskeie soorte institusionele beleggers ten einde hulle in staat te stel om 'n wyer verspreiding van hul bates te bewerkstellig. Die Reserwebank het daarna 'n voorlegging aan die Regering gedoen en sekere verdere verslappings in valutabeheer voorgestel, wat onlangs deur die Kabinet goedgekeur is.

Ten einde versekeringsmaatskappye, pensioenfondse en effektetrusts te help om hierdie doel te bereik, is daar besluit om sodanige instellings in hierdie stadium toe te laat om 'n deel van hul bates in die buiteland te belê. Dit sal die betrokke institusionele beleggers in staat stel om die belang van hul kliënte, naamlik die breër publiek, beter te dien. Daar moet op gelet word dat hierdie instellings tans in totaal fondse ten bedrae van ongeveer R500 miljard administreer met slegs geringe beleggings in buitelandse bates. Met inagneming van die betreklik laevlak van die land se buitelandse reserwes wat tans ongeveer R12,5 miljard beloop, kan daar in hierdie stadium nie goedkeuring vir die vrye oordrag van buitelandse valuta vir beleggingsdoeleindes verleen word nie.

Op advies van die Suid-Afrikaanse Reserwebank het die Regering dus besluit om, as 'n eerste stap, dié soort instellings waarna hierbo verwys is, toe te laat om voorstelle aan die deviesebeheerowerhede voor te lê waarvolgens hulle buitelandse bates kan bekom by wyse van ruilreëlings wat vir die uitruil van 'n deel van hul bestaande bateportefeuilles vir buitelandse bates met buitelandse beleggers voorsiening maak. Die beginsels hierby betrokke sal ook met die Raad op Finansiële Dienste bespreek word om te verseker dat aan alle wetsvereistes, byvoorbeeld ten opsigte van binnelandse batedekking, voldoen word. Voorstelle deur hierdie instellings, wat maatreëls insluit om die buitelandse valutareserwes te beskerm teen die daaropvolgende onttrekking uit Suid-Afrika van die wederkerige nie-inwoner beleggings, kan nou vir oorweging aan die Departement Deviesebeheer van die Suid-Afrikaanse Reserwebank voorgelê word. Elke aansoek sal op sy eie meriete oorweeg word. Indien toenames in die buitelandse reserwes dit in die toekoms sou toelaat, kan hierdie bateruilings moontlik ook deur kontanttoewysings aan Suid-Afrikaanse institusionele beleggers vir doeleindes van die verkryging van buitelandse bates aangevul word.

Hierdie reëling moet as 'n verdere stap in die proses van geleidelike verslapping van valutabeheer beskou word.

2. Termynvalutamark

Ingevolge die reëlings wat reeds vir 'n geruime tyd geld, het die Reserwebank vir baie jare valutatermyndekking verskaf aan sowel betalers as ontvangers van buitelandse valuta ten opsigte van Suid-Afrika se internasionale transaksies in goedere, dienste en kapitaal. Die Reserwebank het die koerse vir termyndekking vir verskillende looptye vasgestel op grond van die verskille tussen Suid-Afrikaanse en vergelykbare internasionale rentekoerse. Winste en verliese op hierdie transaksies was vir die rekening van die Tesourie.

Sowel die Departement van Finansies as die Reserwebank het van tyd tot tyd die wens uitgespreek om die Reserwebank se betrokkenheid by die termynvalutamark te verminder wanneer omstandighede dit sou toelaat. As gevolg van die buitelandse valutaprobleme wat Suid-Afrika sedert 1985 ondervind het, insluitende groot verpligtings om buitelandse skuld terug te betaal en die lae vlak van die land se netto buitelandse reserwes, is geen vordering gedurende hierdie tydperk met die bereiking van hierdie doelwit gemaak nie.

In die lig van die politieke veranderings wat in Suid-Afrika plaasgevind het, gevolg deur die normalisering van Suid-Afrika se internasionale ekonomiese en finansiële betrekkinge en die verbetering in die buitelandse reserwepositie, het dit nou wenslik geword om die Reserwebank se rol in die termynvalutamark te heroorweeg. Stappe word nou in die vooruitsig gestel om die Reserwebank se betrokkenheid in die korttermyn-termynvalutamark te begin verminder. Die Reserwebank is van voorneme om in die toekoms:

- (a) slegs termyndekking aan gemagtigde valutahandelaars teen dokumentêre bewys van buitelandse financieringstransaksies te verskaf; en
- (b) om dit aan uitvoerders en invoerders van goedere en dienste oor te laat om 'n "private" termynmark in samewerking met die gemagtigde valutahandelaars te ontwikkel – die Reserwebank kan van tyd tot tyd besluit om aan hierdie mark deel te neem, maar dan op sy eie inisiatief.

Die mark is reeds aangemoedig om in hierdie rigting te begin ontwikkel en die koerse wat deur die Reserwebank vir termyndekking gekwoteer word, sal binnekort beperk word tot onderliggende buitelandse financieringstransaksies wat deur die Reserwebank goedgekeur is. Besonderhede oor aanvaarbare transaksies sal binne enkele dae deur die Reserwebank aan die gemagtigde valutahandelaars beskikbaar gestel word. Opgolgappe

sal mettertyd gedoen word om die Reserwebank se betrokkenheid by die termynvalutamark te verminder, byvoorbeeld deur geleidelik minder gunstige koerse vir buitelandse finansieringstransaksies te kwoteer.

Waar nodig, sal die valutabeheerreëls en -regulasies wat op bateruiltransaksies en die termynmark betrekking het, mettertyd aangepas word. Sodra die private mark wat deur die gemagtigde valutahandelaars ondersteun word, stewig gevestig is en sonder die gereelde deelname deur die Reserwebank funksioneer, sal 'n verdere hersiening van die betrokke reëls en regulasies oorweeg word.

Voorraadinvestering in Suid-Afrika

deur H. Smith en J.P. van den Heever

Inleiding

Voorraadinvestering lewer 'n aansienlike bydrae tot die korttermynveranderings in die bruto binnelandse produk. In Suid-Afrika is tot dusver betreklik min navorsing gedoen om 'n beter begrip van die veranderings in voorrade en die invloed daarvan op totale produksie en besteding te verkry. Die doel met hierdie artikel is om 'n aantal belangrike veranderings in voorraadinvestering in Suid-Afrika sedert die begin van die sestigerjare te ondersoek en te verklaar.

Eerstens word die rol en meting van voorraadinvestering in die nasionale rekeninge beskryf. Tweedens word die beweegredes om voorrade te besit, bespreek. Daarna word die strukturele veranderings ontleed wat in voorraadinvestering in Suid-Afrika plaasgevind het alvorens die verwantskap tussen voorradaveranderings en die konjunktuur ondersoek word. Die artikel word afgesluit met die spesifikasie en skatting van 'n ekonometriese model van voorraadinvestering.

Voorrade in die nasionale rekeninge

Deelnemers aan die prosesse van produksie en besteding kan in vier sektore verdeel word, naamlik sakeondernemings, die algemene owerheid, huishoudings en nie-inwoners. Die grondliggende prosesse of vorme van ekonomiese bedrywigheid is produksie, verbruik, kapitaalvorming en transaksies met die res van die wêreld. Die transaksies wat betrekking het op elkeen van hierdie prosesse vir die onderskeie sektore word in die verskillende sub-rekeninge van die nasionale rekeninge aangeteken.

Kapitaalvorming, of bruto binnelandse investering, verteenwoordig 'n toename of 'n afname in voorrade en

bruto toevoegings tot vaste bates. Die *verandering* in voorrade, en nie die *boekwaarde* nie, word in die nasionale rekeninge aangeteken. Die bruto binnelandse produk is die waarde van alle finale goedere en dienste wat gedurende 'n sekere tydperk, byvoorbeeld 'n jaar, binne die grense van 'n land geproduseer word. Bestaande voorrade aan die begin van die tydperk word derhalwe uitgesluit omdat dit in vorige tydperke geproduseer is. Slegs die toevoegings tot en onttrekings uit voorrade, met ander woorde die verandering in voorrade gedurende 'n bepaalde tydperk, maak deel uit van die bruto binnelandse produk van daardie tydperk. Voorrade bestaan uit grondstowwe, halfklaar- en klaarprodukte.

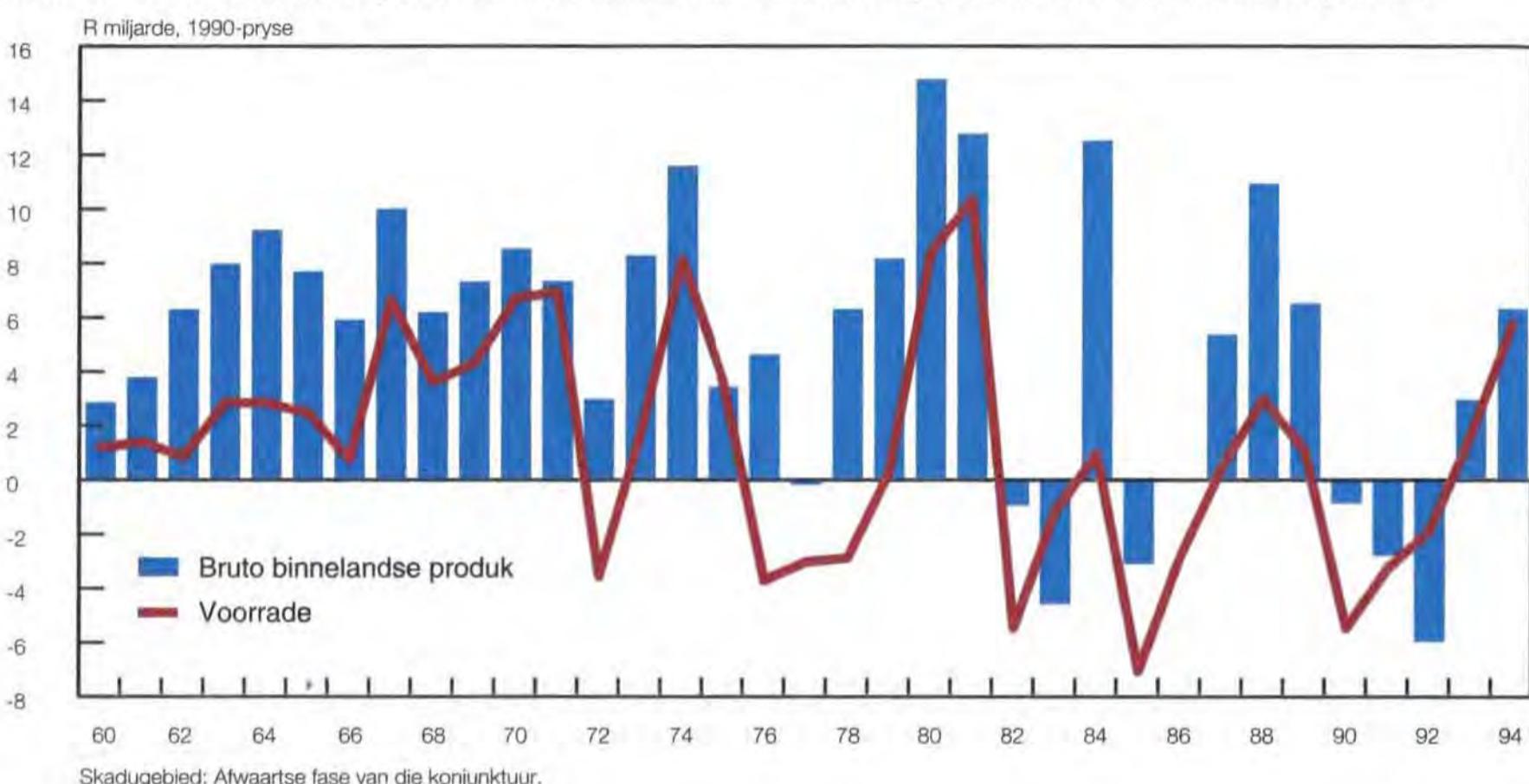
Tabel 1 toon die bruto binnelandse produk- en bestedingsrekening, met ander woorde die gekonsolideerde produksierekening vir die ekonomie in die geheel. Die som van die bestedingstotale aan die regterkant van tabel 1 is, per definisie, gelyk aan die bruto binnelandse produk aan die linkerkant. Die bruto binnelandse produk en die verskillende bestedingstotale word geraam op grond van 'n groot aantal inligtingsbronne waarvan die akkuraatheid en betroubaarheid aansienlik kan verskil. As gevolg van metingsfoute, is dit onwaarskynlik dat die raming van totale produksie presies gelyk aan die raming van totale besteding sal wees. Die verskil tussen hierdie twee ramings word as 'n respos aangedui en word aan die regterkant van die rekening ingesluit. Hierdie respos, of balanseringstotaal, word as deel van die bruto binnelandse besteding beskou omdat aanvaar word dat die geraamde totale van die binnelandse besteding aan 'n groter foutegrens onderhewig is as die ramings van die bruto binnelandse produk en die transaksies met die res van die wêreld.

Tabel 1. Bruto binnelandse produk en besteding, 1994

R miljoene

Netto binnelandse produk teen faktorkoste (faktorinkome)	323 024	Private verbruiksbesteding	256 320
Voorsiening vir waardevermindering	59 537	Owerheidsverbruiksbesteding	91 349
Indirekte belasting	57 736	Bruto binnelandse vaste investering	68 101
min: Subsidies	7 544	Verandering in voorrade	10 209
		Respos	-1 493
		Bruto binnelandse besteding	424 486
		Uitvoer van goedere en nie-faktordienste ..	102 682
		min: Invoer van goedere en nie-faktordienste ..	94 415
Bruto binnelandse produk teen markpryse	432 753	Besteding aan bruto binnelandse produk	432 753

Grafiek 1: Die verandering in reële voorrade en die verandering in reële bruto binnelandse produk



Voorraadinvestering, saam met private verbruiksbesteding, verbruiksbesteding deur die algemene owerheid en bruto binnelandse vaste investering, maak deel uit van die totale bruto binnelandse besteding. Voorraadinvestering dra daarom by, ten minste agterna gesien, tot die omvang van die bruto binnelandse produk deur sy regstreekse invloed op die totale vraag (kyk grafiek 1).

Die verandering in voorrade word ook in die gekonsolideerde kapitaalfinansieringsrekening vir die

ekonomiese in die geheel weerspieël (kyk tabel 2). Dit maak deel uit van die bruto binnelandse investering aan die linkerkant van die rekening. Die regterkant van die rekening toon die interne en eksterne bronne van finansiering aan, wat gesamentlik die bruto besparing uitmaak wat tot die beskikking van die ekonomie is. Voorraadinvestering het daarom 'n regstreekse uitwerking op die aanwending van investeerbare fondse in die ekonomie.

Hoewel produksie en verkope ekonomiese prosesse

Tabel 2. Bruto binnelandse investering en finansiering, 1994

R miljoene

Bruto binnelandse vaste investering	68 101	Netto besparing	
Verandering in voorrade	10 209	Persoonlike besparing	9 717
		Maatskappybesparing	24 957
		Owerheidsbesparing	-17 990
		Waardevermindering	59 537
		Bruto binnelandse besparing	76 221
		Netto kapitaalinvloei vanaf die res van die wêreld	5 209
Bruto binnelandse investering	78 310	Verandering in goud- en ander buitelandse reserwes ¹	-3 120
		Finansiering van bruto binnelandse investering	78 310

1. Toename -, afname +.

is wat deurlopend op grond van die vraag- en aanbodtoestande aanpas, is hulle selde in 'n bepaalde tydperk presies gelyk aan mekaar. Die verskil tussen vraag en aanbod word in die verandering in voorrade weerspieël. 'n Toename in die vlak van voorrade beteken dat 'n deel van produksie nie verkoop is nie. Omgekeerd, geld dat waar voorraadvlakte afneem, verkope meer is as produksie.

Veranderings in voorrade kan beplan of onbeplan wees. In Keynesiaanse modelle speel onbeplante voorraadinvestering dikwels 'n sentrale rol in die verklaring van ekonomiese uitbreidings en inkrimpings. Empiries word die beplante en onbeplante dele van voorraadinvestering egter nie afsonderlik gemeet nie.

Vir doeleindeste van die nasionale rekeninge moet die verandering in voorrade gedurende 'n gegewe tydperk bereken word as die fisiese verandering in voorrade gewaardeer teen die markpryse wat gedurende daardie tydperk geheers het. Die standaardverslagdoeningstydperk in Suid-Afrika is 'n kalenderkwartaal. As die mees praktiese benadering vir die verkryging van die beste raming vir doeleindeste van die nasionale rekeninge, word die verskil tussen die fisiese vlakke van voorrade aan die begin en aan die einde van 'n kwartaal gewaardeer teen die prys wat in die kwartaal geld. Die aangetekende waardes van voorrade aan die begin en die einde van 'n kwartaal, dit wil sê die heersende boekwaardes van voorrade, word herwaarde om vlakke teen konstante pryse te weerspieël. Die verskil tussen die herwaardeerde voorrade aan die einde en aan

die begin van die kwartaal meet die fisiese verandering in voorrade oor die kwartaal. Hierdie fisiese verandering in voorrade vir die kwartaal word herwaardeer teen die gemiddelde prys wat gedurende die kwartaal geheers het. Die verskil tussen die herwaardeerde fisiese veranderings in voorrade en die veranderings in die heersende boekwaardes is die aansuiwing vir voorradawaardering, oftewel die verandering in die waarde van voorrade as gevolg van prysveranderings.

Soos in tabel 3 aangetoon word, kan veranderings in voorrade vanaf hoeveelheids- of boekwaardegegewens bereken word. Indien die werklike fisiese hoeveelhede van voorrade wat aan die einde van 'n kwartaal deur 'n sakeonderneming of 'n sektor gehou word, bekend is, is die raming van voorraadinvestering eenvoudig. Die verandering in fisiese hoeveelheid gedurende 'n kwartaal word met die gemiddelde prys van die betrokke produk vir daardie kwartaal vermenigvuldig. Hierdie metode van berekening word trouens gebruik vir die bepaling van die veestapel en goudvoorraade.

In meeste gevalle is slegs boekwaardes van voorrade aan die einde van 'n kwartaal egter beskikbaar. Boekwaardes kan verander as gevolg van veranderings in hoeveelhede of as gevolg van veranderings in die prys waarteen voorrade waardeer word. Om voorraadinvestering vir die doeleindeste van die nasionale rekeninge te verkry, moet die verandering in boekwaardes as gevolg van prysveranderings geskei word van die totale verandering. Om dit te kan doen, word die boekwaardes met 'n gepaste komponent van die produksieprysindeks

Tabel 3. Die berekening van voorraadinvestering

(a) Uit hoeveelheidsgegewens			
Hoeveelheid aan die einde van tydperk 0.....			20 eenhede
Hoeveelheid aan die einde van tydperk 1.....			35 eenhede
Verandering in hoeveelheid			15 eenhede
Gemiddelde prys per eenheid.....			R1 000
Voorraadinvestering.....			R15 000
(b) Uit boekwaardegegewens			
	Heersende boekwaarde	Prysindeks (tydperk 0-pryse)	Konstanteprys-boekwaarde
(i) Waarde aan die einde van tydperk 0.....	R4 000	100	R4 000
(ii) Waarde aan die einde van tydperk 1.....	R5 500	110	R5 000
(iii) Verandering in boekwaarde	R1 500		R1 000
Aansuiwing vir voorradawaardering:			
(iv) Verandering in konstanteprys-boekwaarde (reële voorraadinvestering)		R1 000	
(v) Gemiddelde prysindeks gedurende tydperk 1.....		105	
(vi) Voorraadinvestering teen heersende pryse ((iv) vermenigvuldig met (v))		R1 050	
(vii) Aansuiwing vir voorradawaardering (heersende prys (iii) min (vi))		R450	

gedefleer. Op hierdie manier word boekwaardes teen konstante pryse verkry en kan die verandering teen konstante pryse daaruit bereken word, dit wil sê die verandering in die hoeveelheid voorrade. Deur die verandering in die hoeveelheid met die gemiddelde prysindekswaarde vir die besondere kwartaal te vermenigvuldig, word voorraadinvestering teen heersende pryse verkry.

Kwartaallikse ramings van die boekwaardes van voorrade teen heersende pryse word saamgestel uit inligting wat uit verskillende bronne verkry word, byvoorbeeld regstreeks van die Departement van Landbou, uit statistiese vrystellings en sensusse van die Sentrale Statistiekdiens en uit opnames wat die Reserwebank maak om toepaslike gegewens van openbare korporasies, sakeondernemings van die algemene owerheid en 'n aantal private sakeondernemings in te win.

'n Vaste seisoenspatroon is in die kwartaallikse ramings van voorraadinvestering waarneembaar. Vir die doel van vergelykings van kwartaal tot kwartaal is dit nodig om daardie verandering in voorraad vas te stel wat aan suiwer seisoensveranderings toegeskryf kan word. Die bekende "X-11 Variant of the Census Method II Seasonal Adjustment Programme" word gebruik om seisoenspatrone van die boekwaardes van voorrade te bereken en die seisoensaangesuiwerde boekwaardes word dan gebruik om seisoensaangesuiwerde voorraadveranderings te bereken. In die handelsektor word die voorrade van private sakeondernemings in die groothandel, kleinhandel, motorhandel en die landbouvoorraade in die handel, afsonderlik vir seisoensinvloede aangesuiwer. As gevolg van die groot seisoensveranderings in landbouproduksie word mielieovoorraad as 'n afsonderlike kategorie beskou. Voorsiening word gemaak vir die invloed van vroeë en laat mielieoeste deur afsonderlike seisoensindekse te bereken. 'n Vroeë oes word gedefinieer as een waar 60 persent van die oes voor 30 Junie ingesamel is.

Die beweegredes vir die besit van voorraad

Drie beweegredes vir die besit van voorrade kan onderskei word:

- Eerstens ontstaan 'n sogenaamde *transaksiemotief* om voorrade te besit wanneer ondernemings nie die ontvangs van grondstowwe en onderdele, die verwerking van die grondstowwe en die verkoop van die klaarvervaardigde goedere kan sinkroniseer nie. Daar is ook skaalvoordele wanneer produksie, opberging, vervoer en transaksies op 'n groot skaal geskied.
- Tweedens ontstaan 'n *motief om produksie te bestendig*, oftewel 'n buffervoorraadmotief, wanneer voorrade gehou word om vir die veranderings in die vraag na goedere voorsiening te maak. Produksie kan dan betreklik gelykmatig voortgaan, ondanks veranderings in

vraag. 'n Gelykmatige vloei van die produksie van goedere verminder die eenheidskoste van produksie. Voorrade kan ook gehou word om vir enige verandering in die aanbod van grondstowwe, onderdele of klaarprodukte te voorsien. Voorrade verminder die risiko van 'n verlies aan inkomste as gevolg van 'n onvermoë om in die vraag te voorsien. Hierdie motief veronderstel dat die voorrade van klaarprodukte hoofsaaklik dien om produksievlekke te bestendig wanneer verkope wissel en die grenskoste van produksie 'n stygende verloop het. 'n Skerp styging in die grenskostekromme bied 'n sterk aansporing om produksie te bestendig, terwyl hoë bergingskoste sulke gedrag ontmoedig.

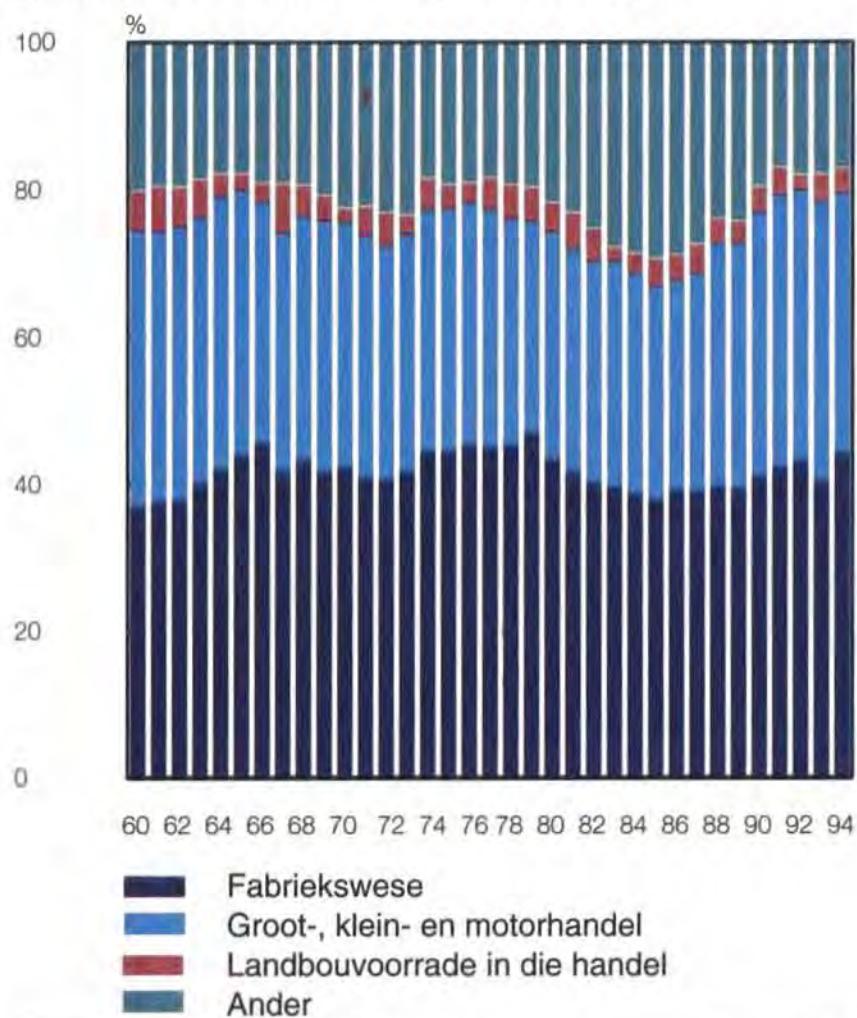
- Derdens ontstaan 'n *spekulasiemotief* om voorraad te besit vanuit 'n verwagte verandering in pryse en koste. Meer voorrade sal opgebou word wanneer 'n styging in pryse verwag word. Die spekulasiemotief word gewoonlik deur die insameling en ontleding van inligting gerugsteun.

Verskeie modelle van voorraadgedrag is op grond van hierdie drie beweegredes ontwikkel. 'n Belangrike ontwikkeling was om vir 'n bepaalde mikpuntverhouding van voorrade tot verkope voorsiening te maak. Hierdie benadering word gevvolg omdat dit vir sakeondernemings duur is as voorrade afwyk van die gewenste verhouding tot werklike of verwagte verkope. Wanneer ondernemings probeer om 'n gewenste voorrade-verkope-verhouding te handhaaf, sal 'n onverwagte verandering in verkope noodwendig tot 'n verandering in voorrade lei sodat voorrade weer by die gewenste voorrade-verkope-verhouding aanpas. Die versnellerbeginsel kan ook hier ter sake wees – die verandering in verkope mag tot 'n groter verandering in produksie lei terwyl 'n onderneming besig is om sy voorrade by die gewenste voorrade-verkope-verhouding aan te pas. Kosteskokke kan ook in die model ingebou word om te verseker dat 'n opbou van voorrade sal plaasvind wanneer die koste van produksie betreklik laag is. Daarteenoor sal voorrade afgebou word wanneer produksiekoste hoog is. In plaas van om die vlak van produksie te bestendig sal ondernemings volgens hierdie benadering die koste van produksie bestendig. Daar kan aangevoer word dat wanneer produksiekoste veranderlik is, kosteskokke ten minste net so 'n groot rol as vraagskokke speel in die bepaling van voorraadinvestering.

Strukturele veranderings in voorraadinvestering

Veranderende ekonomiese toestande en tegnologiese ontwikkelings het tot strukturele veranderings in voorraadinvestering in Suid-Afrika geleid. Hierdie strukturele veranderings in voorraadinvestering is ontleed deur die samestelling van voorrade, die verhouding van die vlak van voorrade tot die bruto binnelandse produk

Grafiek 2: Die samestelling van voorrade



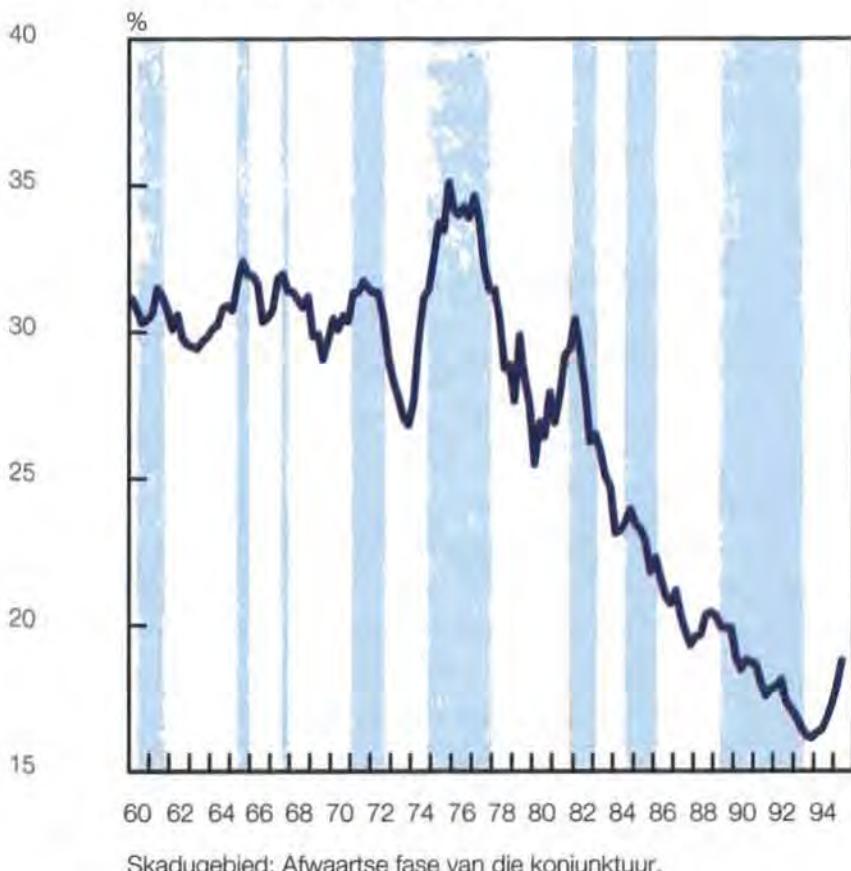
en die voorrade-verkope-verhouding te ondersoek.

'n Ontleding van die samestelling van die totale reële voorrade volgens soort ekonomiese bedrywigheid toon

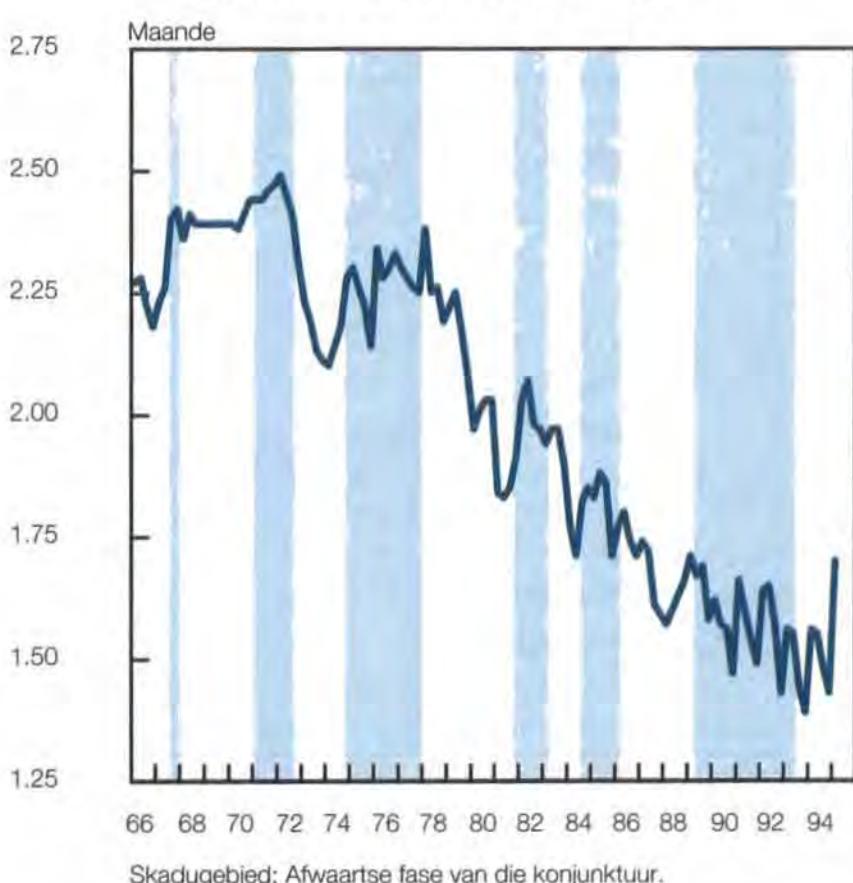
geen belangrike veranderings oor die lang termyn nie (kyk grafiek 2). Dit is ook duidelik dat die nywerheids- en handelsvoorraade (dit wil sê, voorrade in die sektore fabriekswese en die groot-, klein- en motorhandel) die grootste deel van die totale voorrade uitmaak. Die verhouding van die voorrade in die fabriekswese as 'n persentasie van die totale voorrade het in die tydperk 1960 tot 1980 min of meer onveranderd gebly, en sedert 1980 slegs matig gedaal. Aan die ander kant het die verhouding van voorrade in die groot-, klein- en motorhandel sedert 1960 tot die middel van die tagtigerjare effens gedaal en van ongeveer 1986 weer toegeneem. Die toenemende belangrikheid van die ander voorrade in die tydperk 1966 tot 1975 en 1980 tot 1985 kan aan toenames in die strategiese voorrade en die diamantvoorraad in die handel toegeskryf word. Die grafiek toon duidelik dat die verhouding van die landbouvoorraad in die handel tot die totale voorrade baie klein is en dat dit met verloop van tyd nie baie verander het nie. Die lae vlak van hierdie voorrade kan onder andere toegeskryf word aan die feit dat 'n oorskot van landbouvoorraad in die handel uitgevoer word, terwyl tekorte gewoonlik deur die invoer van produkte aangevul word.

Die vlak van die nywerheids- en handelsvoorraad as 'n persentasie van die bruto binnelandse produk buite die landbou vir die tydperk vanaf die eerste kwartaal van 1960 tot die tweede kwartaal van 1995 word in grafiek 3 getoon. Twee tydperke kan duidelik in hierdie grafiek onderskei word, naamlik 1960 tot 1975, en sedert 1976. Die belangrikste kenmerk van die eerste tydperk is 'n

Grafiek 3: Die verhouding van nywerheids- en handelsvoorraad tot die bruto binnelandse produk



Grafiek 4: Die verhouding van nywerheids- en handelsvoorraad tot verkope



betreklik bestendige gemiddelde verhouding van byna 30 persent van die nywerheids- en handelsvoorraade tot die bruto binnelandse produk buite die landbou. 'n Hoogtepunt van 35 persent is in die vierde kwartaal van 1975 bereik. Sedert 1976 het hierdie verhouding 'n bestendige afwaartse langtermynneiging getoon. 'n Historiese laagtepunt van 16 persent is in die vierde kwartaal van 1993 aangeteken.

Grafiek 4 toon die voorrade-verkope-verhouding van die nywerheid en handel vir die tydperk vanaf die eerste kwartaal van 1966 tot die tweede kwartaal van 1995. Hierdie verhouding is bereken deur die gemiddelde voorraadvlak in die kwartaal te deel deur die gemiddelde maandelikse verkope per kwartaal, om die gemiddelde aantal maande te bepaal wat dit sal duur om alle voorrade te verkoop. Uit grafiek 4 kan gesien word dat hierdie verhouding sedert die tweede helfte van die sewentigerjare 'n voortgesette afwaartse langtermynneiging toon. Gedurende die tydperk 1966 tot 1975 was die verhouding ongeveer $2\frac{1}{2}$ maande. Sedert 1975 het die verhouding geleidelik tot 'n gemiddelde van 2 maande in 1980 en $1\frac{1}{2}$ maande in 1990 gedaal. Daarna het dit in die eerste helfte van die negentigerjare rondom laasgenoemde vlak gewissel.

In grafiek 5 word die voorrade-verkope-verhouding van die fabriekswese, en die groot- en kleinhandel getoon. Uit hierdie grafiek is dit duidelik dat die voorrade-verkope-verhouding van die fabriekswese sedert 1981 skerp gedaal het. Die skerp daling in die verhouding van die fabriekswese in 1981 is waarskynlik veroorsaak deur

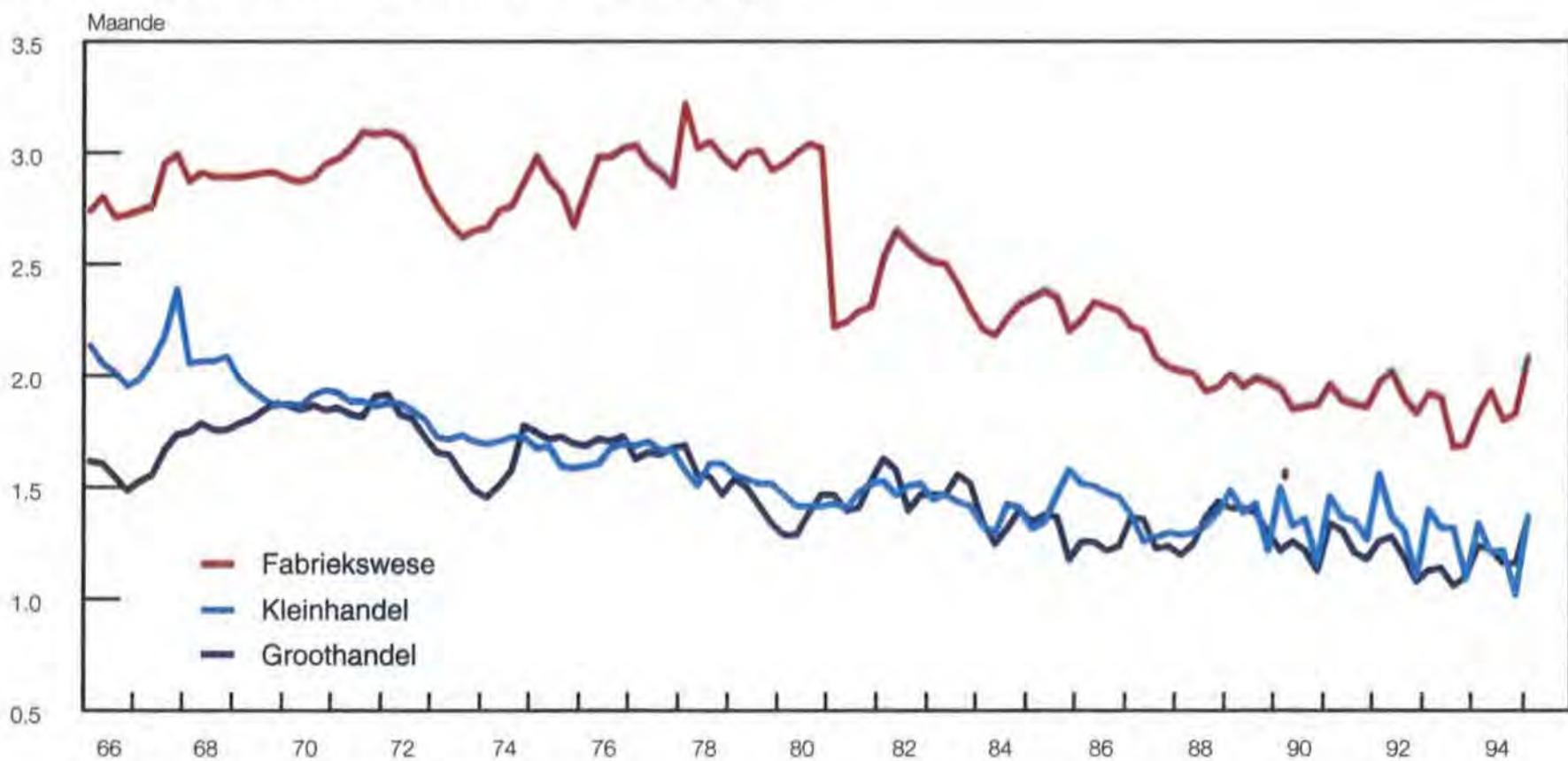
die sameloop van 'n depresiasi van die rand, 'n toename in rentekoerse en hoër inflasie, wat 'n afname in voorrade meegebring het. Dalings in die ooreenstemmende verhoudings in die groothandel en die kleinhandel was nie so duidelik soos dié in die fabriekswese nie.

Uit hierdie ontleding is dit duidelik dat 'n aansienlike struktuurverandering sedert die middel-sewentigerjare in voorraadinvestering in Suid-Afrika plaasgevind het, en dat die toevoegings tot die voorrade selde die toenames in die totale produksie geëwenaar het.

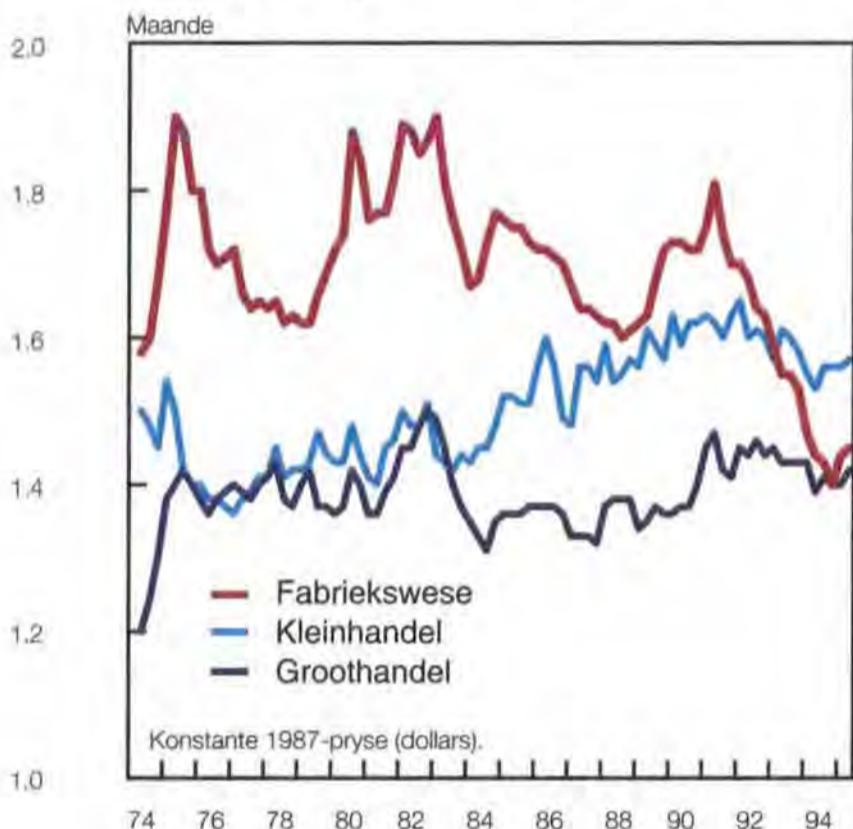
Die volgende redes kan vir die afwaartse neiging in die voorraadverhoudings in grafieke 3, 4 en 5 aangevoer word:

- 'n verswakking in ekonomiese groei en 'n toenemend mededingende sakeomgewing het pogings genoodsaak om die koste van voorraadbewaring te beperk;
- doeltreffender tegnieke om voorraad te beheer, wat onder ander deur gevorderde rekenaartegnologie moontlik gemaak is;
- meer betroubare aflewering- en vervoerstelsels, wat die vermindering van voorraadbewaring dwarsdeur die produksie- en verspreidingsnetwerk moontlik gemaak het;
- die verskuiwing van 'n deel van die voorraadbewaring na verkopers in die informele sektor waar dit nie meer as

Grafiek 5: Die verhouding van voorrade tot verkope



Grafiek 6: Die verhouding van voorrade tot verkope in die Verenigde State van Amerika



voorraade gemeet word nie, maar as private verbruiksbesteding;

- hoër rentekoerse, wat 'n styging in die koste van voorraadbesit meegebring het. Die koste van die voorraadbesit is ook deur die depresiasie van die eksterne waarde van die rand beïnvloed vanweë die hoë invoerinhoud van voorraadinvestering in Suid-Afrika; en
- die toenemende belangrikheid van die sektore finansiële dienste en algemene owerheidsdienste in die totale bruto binnelandse produk en die betreklike klein voorraadbesit van hierdie sektore, het die afwaartse neiging in die verhouding van voorrade tot die bruto binnelandse produk versterk.

Voorraadontwikkelings in ander lande het min of meer 'n soortgelyke patroon as in Suid-Afrika gevvolg. Die voorrade-verkope-verhouding in die hoofsektore van die ekonomie van die Verenigde State van Amerika het sedert 1982 gedaal – matig vir die ekonomie in die geheel maar skerper vir die fabriekswese. In teenstelling hiermee het die voorrade-verkope-verhouding van die groot-handelsektor op min of meer dieselfde vlak gebly, terwyl die kleinhandelsvoorraade effens opwaarts beweeg het, maar nie genoeg om die daling in die verhouding van die fabriekswesesektor uit te kanselleer nie.

Gedurende die grootste deel van die sestiger- en die sewentigerjare was die verhouding van voorrade tot produksie in die Verenigde Koninkryk betreklik bestendig omdat voorraadvlakte opgebou is om die toenemende

fisiese omvang van produksie en vraag te ondersteun. Gedurende die tagtigerjare was daar egter 'n sterk en ononderbroke daling in die verhouding van voorrade tot produksie. Dit het aanvanklik 'n groot daling in die vlak van voorrade weerspieël, maar toe die voorraadvlakte in 1983 bestendig het, het toenemende produksiehoeveelhede die belangrikste bydrae tot die dalende neiging gemaak.

In Australië het die voorrade-verkope-verhouding dieselfde neiging as dié van die VSA vertoon, naamlik 'n min of meer bestendige verhouding in die sestiger- en die sewentigerjare en 'n afwaartse neiging gedurende die tagtigerjare. 'n Merkbare daling is veral in die voorrade-verkope-verhouding van die fabriekswese in Australië merkbaar, terwyl die verhouding van die kleinhandelsektor slegs effens gedaal het.

Hierdie internasionale vergelyking bevestig dat die struktuurveranderings in Suid-Afrika deel vorm van soortgelyke veranderings wat in die res van die wêreld plaasgevind het. Die redes wat vir die strukturele veranderings in die onderskeie lande gegee word, is ook min of meer in ooreenstemming met dié vir die dalende verhouding in Suid-Afrika.

Voorraadinvestering en die konjunktuur

Internasionale studies oor die gedrag van voorrade oor tyd stem blykbaar ooreen wat betref die belangrikheid van voorraadinvestering in die beskrywing en verklaring van die na-oorlogse konjunktuur in die nywerheidslande. In tabel 4 word die gemiddelde bydraes van die belangrikste bestedingskomponente tot die groei in die bruto binnelandse produk oor die verloop van die konjunktuur in Suid-Afrika vergelyk. Die bydrae van elke bestedingskomponent tot die groei in die bruto binnelandse produk oor die konjunktuur is verkry deur eers die verandering in die waardes teen konstante pryse van daardie bestedingskomponent oor die betrokke tydperk te bereken. Hierdie verandering is daarna deur die gesommeerde verandering in die bruto binnelandse produk oor dieselfde tydperk gedeel, en met die persentasieverandering van die bruto binnelandse produk oor daardie tydperk vermenigvuldig.

Uit hierdie tabel is dit duidelik dat die gemiddelde bydrae van voorraadinvestering gedurende die afwaartse fases van die konjunktuur -3,5 persent was. Hierdie negatiewe bydrae van voorraadinvestering tot die groei in die bruto binnelandse produk tesame met dié van vaste investering, het die positiewe bydraes deur die ander komponente van finale vraag oorskry. Met die opwaartse fases was die gemiddelde bydrae van voorraadinvestering tot die groei in die bruto binnelandse produk 4,1 persent, wat goed met dié van die ander totale vergelyk. Indien die bydrae van investering in nywerheids- en handelsvoorraade (-2,3 persent in die afwaartse fases en 2,6 persent in die opwaartse fases) buite rekening gelaat word, het die investering in ander voorrade 'n betreklike klein bydrae tot veranderings in die

Tabel 4. Die gemiddelde bydrae van die belangrikste komponente van besteding aan die bruto binnelandse produk tot die groei in die bruto binnelandse produk oor die konjunktuur van 1960 tot 1995¹

Persentasies

Gemiddeldes gedurende:	Private verbruiks-besteding	Verbruiksbesteding deur die algemene owerheid	Bruto binne-landse vaste investering	Finale vraag	Totaal	Voorraadinvestering				Ander
						Nywerheid en handel				
						Fabrieks-wese	Groot-, klein- en motor-handel	Totaal		
Afwaartse fases	1,0	1,2	-0,6	1,6	-3,5	-1,5	-0,8	-2,3	-1,2	
Opwaartse fases.....	7,2	2,0	3,9	13,1	4,1	1,6	1,0	2,6	1,5	
Volle siklus	7,1	2,9	2,6	12,6	0,3	0,3	0,2	0,5	-0,2	

1. Die opwaartse fase vanaf Junie 1993 is nog nie voltooi nie.

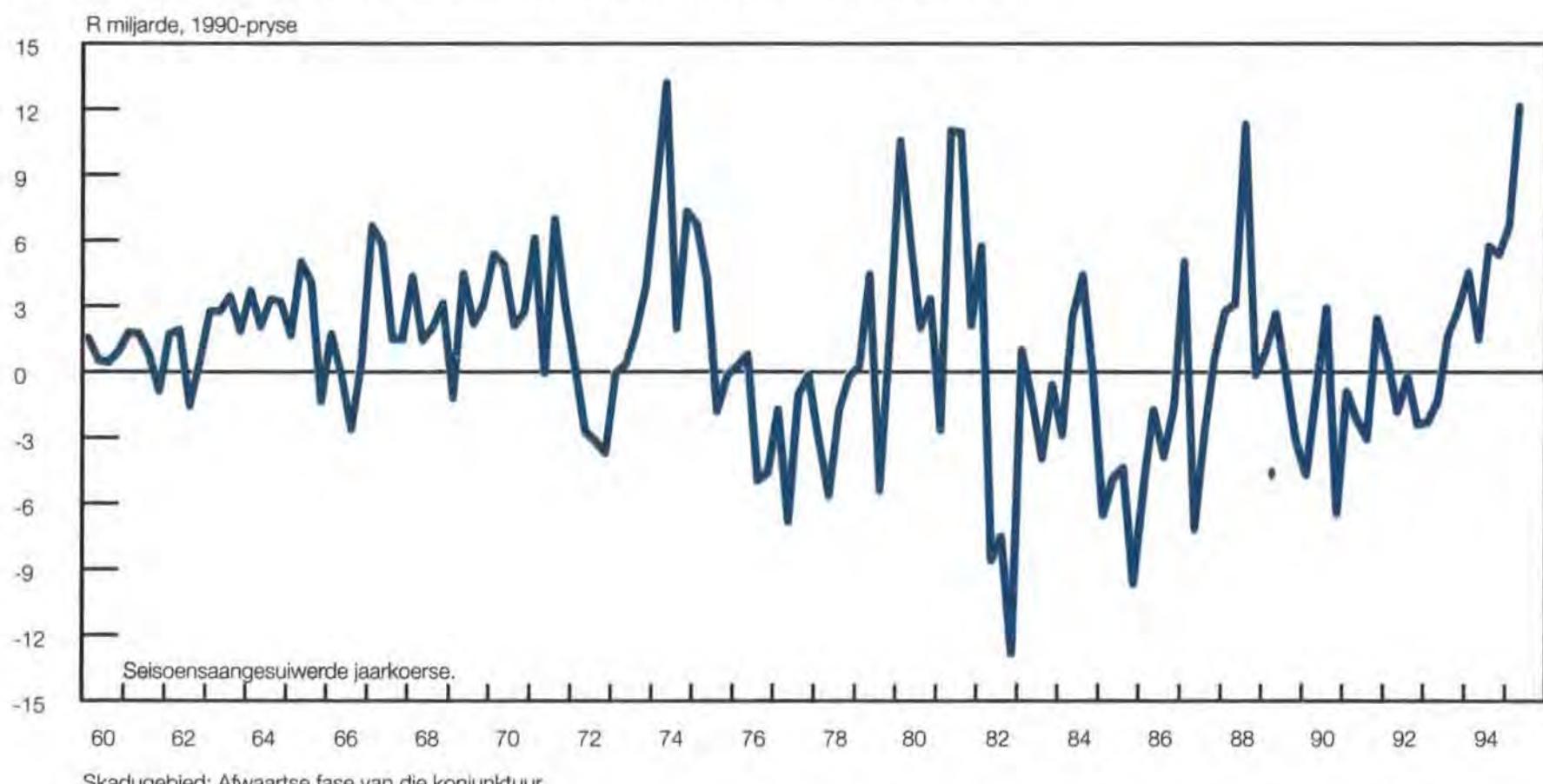
bruto binnelandse produk gemaak (-1,2 persent in die afwaartse fases en 1,5 persent in die opwaartse fases). Die gemiddelde bydrae van voorraadinvestering oor die volle konjunktuur was slegs 0,3 persent. Dit beteken dat die negatiewe bydrae oor die afwaartse fases en die positiewe bydrae oor die opwaartse fases mekaar oor die volle konjunktuur bykans uitkanselleer.

Die gevolgtrekking kan dus gemaak word dat voorraadinvestering die opwaartse en afwaartse fases

van die konjunktuur versterk. Die ontleding toon ook dat nywerheids- en handelsvoorraade die belangrikste komponent van voorraadinvestering is en dat dit die langtermynbeweging in voorraadinvestering oorheers. Indien die swaaiwydte van die voorraadsiklus beperk kan word, sal die afwyking van die konjunktuur ook dienooreenkomsdig kleiner wees.

Die veranderings in die reële nywerheids- en handelsvoorraade word in grafiek 7 saam met die

Grafiek 7: Die reële voorraadinvestering van die nywerheid en handel

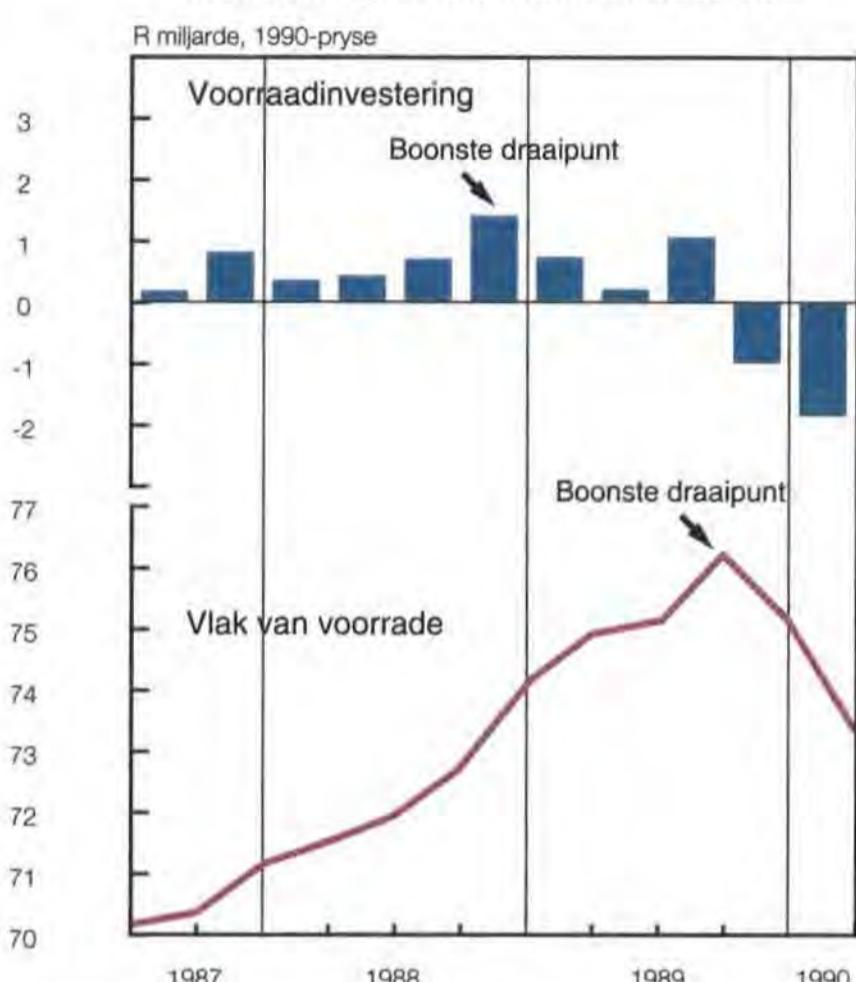


konjunktuur aangedui. Oor die algemeen is daar 'n positiewe korrelasie tussen die voorraadsiklus en die konjunktuur. Die voorraadsiklus styg gedurende die opwaartse fases en daal gedurende die afwaartse fases van die konjunktuur. 'n Meer stelselmatige meting van die tydsverband tussen die draaipunte en die ooreenstemming van die voorraadsiklus vir investering in die nywerheids- en handelsvoorraade met die konjunktuur het getoon dat die draaipunte van die investeringsiklus van die nywerheids- en handelsvoorraade *naastenby* met die konjunktuur saamval en dat die lengte van die twee sikelusse ongeveer dieselfde is. Die draaipunte van die voorraadsiklus en die konjunktuur stem egter nie konsekwent ooreen nie. Die voorraadsiklus het by vier pieke en vier trôe gelei en by drie pieke en drie trôe gesloer, terwyl dit by een piek en een trog saamgeval het. Die verskille in die tydsverband kan toegeskryf word aan die verskillende lengtes van die sikelusse en die besondere toestande wat eie aan elke voorraadsiklus en konjunktuurgolf is.

Tabel 5 gee 'n opsomming van die tydsverband tussen die draaipunte van die verskillende maatstawwe van die voorraadsiklus en hoe hierdie sikelusse met die konjunktuur ooreenstem. Die *vlak van voorrade* het ná die konjunktuur gevolg, terwyl voorraadinvestering geneig het om daarmee saam te val. Dit blyk dat voorraadinvestering die vlak van voorrade met ongeveer twee tot vier kwartale gelei het.

'n Eenvoudige voorbeeld toon waarom die draaipunte van voorraadinvestering die draaipunte van die vlak van voorrade voorafgaan (kyk grafiek 8). Indien voorraadinvestering as ΔN aangedui word en die vlak van voorrade

Grafiek 8: Die verwantskap tussen voorraad-investering en die vlak van voorrade



as N_t , dan is $N_t = N_{t-1} + \Delta N$. Indien ΔN positief is, styg N_t . Indien ΔN 'n maksimum positiewe waarde bereik en dan

Tabel 5. Die gemiddelde tydsverband en ooreenkoms van voorrade met die konjunktuur, 1960-1993

	Tydsverband ¹ (kwartale)		Lengte van die voorraad-siklus (kwartale)			Aantal kwartale wat die voorraadsiklus langer is as die konjunktuur		
	Piek	Trog	Piek	Trog	Volle siklus	Piek	Trog	Volle siklus
Die vlak van totale reële voorrade....	3	4	8	9	17	-1	1	0
Die vlak van reële nywerheids- en handelsvoorraade	4	4	9	8	17	0	0	0
Die vlak van ander reële voorrade ...	4	5	8	8	16	-1	0	-1
Totale reële voorraadinvestering.....	1	0	9	6	15	0	-2	-2
Reële voorraadinvestering in fabriekswese.....	0	0	9	8	17	0	0	0
Reële voorraadinvestering in groot-, klein- en motorhandel	0	-1	9	7	16	0	-1	-1
Reële voorraadinvestering in die nywerheid en handel	0	0	9	8	17	0	0	0
Ander reële voorraadinvestering	1	0	9	6	15	0	-2	-2

1. Lei (-), sloer (+) van voorrade met betrekking tot die konjunktuur.

na 'n laer maar steeds positiewe waarde terugsak, het ΔN verby sy boonste draaipunt beweeg. N hou egter aan om te styg. Eers wanneer ΔN tot 'n negatiewe waarde teruggesak het, sal N begin daal en dus verby sy boonste draaipunt beweeg.

Uit tabel 5 is dit duidelik dat die lengtes van die siklusse van die verskillende voorraadreekse byna dieselfde is en dat dit ook ongeveer net so lank soos die konjunktuur is. 'n Algemene gevolgtrekking is dat die vlak van die reële voorrade en voorraadinvestering van die verskillende sektore positief met die konjunktuur ooreenkoms. Gemiddeld het totale voorraadinvestering by die piek met 'n sloering van een kwartaal op die konjunktuur gevolg en by die trog saamgeval. Investering in nywerheids- en handelsvoorraade het by die piek en die trog met die konjunktuur saamgeval. Dit is duidelik dat voorraadinvestering nie die aanvanklike dryfveer is om die opwaartse fase te begin nie. Aan die begin van die opwaartse fase verminder sakeondernemings nog hul bestaande voorrade. Eers wanneer oorskotvoorraade uitgeput is, vind 'n versnelde opbouing van voorrade plaas wat die opwaartse fase versterk. As gevolg van sy bestendigheid as 'n sloerende aanwyser, word die vlak van nywerheids- en handelsvoorraade by die saamgestelde sloerende konjunktuur-aanwyser van die Reserwebank ingerekken.

Ekonometriese modellering van voorraadinvestering

Makro-ekonometriese modelle bou gewoonlik die hoofkomponente van die finale vraag en voorraadinvestering in as endogene veranderlikes om die talte ingewikkelde onderlinge verwantskappe in 'n ekonomiese stelselmatig te ontleed. Ekename se begrip van die werking van die ekonomiese word dus gerugsteun deur 'n vergelyking of stel vergelykings wat die bepalende faktore vir voorraadinvestering opsom. Die samestelling van 'n bruikbare kwartaallikse ekonometriese model van voorraadinvestering word bemoeilik deur die sterk wisselings wat die verloop van hierdie komponent van die totale vraag kenmerk. Om hierdie rede is die veranderlikes wat gebruik is beperk tot dié met geredelik beskikbare tydreeksinligting, om ander navorsers sodoende in staat te stel om die model te herskep en om die resultate wat hier verkry is, aan te vul.

Die samestelling van 'n empiriese model waarin totale voorraadinvestering in 'n enkele funksie deur 'n aantal makro-ekonomiese veranderlikes verklaar word, is bemoeilik deur die sterk wisselings in sekere soorte voorrade wat nie geredelik gemodelleer kan word nie. Die veranderings in strategiese voorrade en voorrade van landbouprodukte word byvoorbeeld hoofsaaklik deur nasionale beleidsoorwegings en weerstoestande bepaal. Binne die raamwerk van 'n makro-ekonomiese model is dit beter om sulke veranderings in voorrade as eksogene gebeure te beskou. Die omvattendste voorradebegrip wat sinvol as 'n funksie van ander makro-ekonomiese

veranderlikes gemodelleer kan word, is *nywerheids- en handelsvoorraade*. In die beskrywing wat volg word die verandering in hierdie voorrade (teen konstante 1990-pryse) deur ΔI aangedui en die vlak daarvan aan die einde van die kwartaal deur I ; ΔI is die afhanglike veranderlike in die sleutelvergelyking wat hieronder ontwikkel word.

Voorrade word normaalweg gehou om verkope te vergemaklik en om die koste van produksie so klein as moontlik te hou. Oortollige voorrade sal ongewenste rente- en ander besikoste tot gevolg hê; onvoldoende voorrade kan veroorsaak dat verkope verbeur word. As 'n eerste benadering kan 'n bepaalde gewenste voorrade-verkope-verhouding veronderstel word. As gesloerde werklike verkope, S_{t-1} , aan verwagte huidige verkope gelykgestel word en I_d die gewenste vlak van voorrade voorstel, is

$$I_d = k^* \cdot S_{t-1}, \quad (1)$$

met k^* die gewenste ewewigsverhouding van voorrade tot verkope.

Die gewenste verhouding van voorrade tot verkope is nie oor die lang termyn konstant nie. Gegewe die daling in die waargenome verhouding van voorraadvlakte tot verkope, kan geredelik aanvaar word dat tegnologiese vooruitgang en koste-oorwegings op 'n bestendige daling in die gewenste verhouding dui. Op die kort termyn sal veranderings in die besikoste van voorrade noodwendig 'n invloed uitoefen op die optimale vlak van voorrade wat sakeondernemings bereid is om te hou. Rentekoerse en die relatiewe pryse van die goedere wat opgeberg word is voor die hand liggende faktore om korttermynveranderings in die gewenste verhouding te verklaar. Hoër rentekoerse sal waarskynlik die gewenste verhouding verminder; eweneens ook hoër relatiewe pryse van die goedere wat as handelsvoorraad gehou word. Gegewe die hoë invoerinhoud van Suid-Afrika se nywerheids- en handelsvoorraade, kan die reële wisselkoers gebruik word om die relatiewe pryse van handelsvoorraad te benader. Sonder om vooraf enige beperkings op die funksionele verwantskap tussen k^* en die verklarende veranderlikes te plaas, kan die gewenste verhouding soos volg geskryf word:

$$k_t^* = k^*(t, \text{Prima}, \text{Rew}), \quad (2)$$

waar t = tydveranderlike om die stelselmatige langetermynverandering in k^* voor te stel,
 Prima = rentekoers, en
 Rew = reële wisselkoers.

Die aanpassing van die waargenome verhouding by die gewenste voorrade-verkope-verhouding geskied nie oombliklik nie en kan langer as een kalenderkwartaal duur. Omdat verkope onvoorspelbare wisselings kan toon, is dit ook noodsaaklik om vir onbeplante

veranderings in voorrade voorsiening te maak waarin te veel of te min voorraad opgebou word en daarna weer gepoog word om ewewig te herstel. Met Metzler se benadering as 'n vertrekpunt, is die gesloerde waarde van die vlak van voorrade as 'n verdere verklarende veranderlike ingesluit om die gedeeltelike en geleidelike aard van die aanpassingsproses te beskryf. Onverwagte korttermynfluktusies in verkope, wat empiries op baie maniere benader kan word, is ook as 'n verklarende veranderlike bygevoeg.

Deur die inligting toe te laat om die finale vorm van die gedragsvergelyking te bepaal en ná uitvoerige eksperimentering met verskeie alternatiewe spesifikasies, is die volgende vergelyking geskat as die beste benadering van die proses van voorraadoppotting in die Suid-Afrikaanse ekonomie:

$$\begin{aligned}
 \Delta I_t &= 1632,74 + 0,277 S_{t-1} - 0,000477 \cdot t \cdot S_{t-1} \\
 &\quad (1,46) \quad (4,91) \quad (-2,26) \\
 \\
 &-0,266 I_{t-2} -0,196 (S_t - \frac{1}{4} \sum_{i=1}^4 S_{t-i}) \\
 &\quad (-6,52) \quad (-4,67) \\
 \\
 &-28,29 \text{ Prima}_{t-1} -42,43 \text{ Prima}_{t-2} \\
 &\quad (-3,51) \quad (-3,51) \\
 \\
 &-42,43 \text{ Prima}_{t-3} -28,29 \text{ Prima}_{t-4} \\
 &\quad (-3,51) \quad (-3,51) \\
 \\
 &+9,05 \text{ Rew}_{t-1} +13,58 \text{ Rew}_{t-2} \\
 &\quad (3,96) \quad (3,96) \\
 \\
 &+13,58 \text{ Rew}_{t-3} +9,05 \text{ Rew}_{t-4} \\
 &\quad (3,96) \quad (3,96)
 \end{aligned} \tag{3}$$

$$R^2 = 0,59 ; \bar{R}^2 (\text{aangepas vir vryheidsgrade}) = 0,56$$

$$F\text{-waarde} = 21,82$$

$$DW = 1,76$$

$$\text{Skattungstydperk} = 1971K1 \text{ tot } 1995K1.$$

Geskatt met gewone kleinste vierkante; t-waardes is tussen hakies reg onder die geskatt koëffisiënte.

Die koëffisiënte van die gesloerde waardes van Prima en Rew is geskat deur te aanvaar dat hierdie koëffisiënte 'n tweede-orde polinoomverdeling volg waarin albei eindpunte tot nulwaardes beperk is.

'n Lys van die betrokke veranderlikes word hieronder gegee. Die wat met * gemerk is, word in miljoene rand teen konstante 1990-pryse gemeet, en is seisoensaangesuiwer.

- ΔI = verandering in nywerheids- en handelsvoorraade*,
- S = totale verkope* (word hieronder gedefinieer),
- t = tydveranderlike, 1960K1=1, 1960K2=2, ens.,
- I = die vlak van nywerheids- en handelsvoorraade aan die einde van die kwartaal*,
- Prima = kwartaallikse gemiddelde prima-uitleenkoers van die verrekeningsbanke, persent per jaar,

Rew = kwartaallikse gemiddelde reële effektiewe wisselkoers van die rand, 1990 = 100 (stygende waardes dui op 'n versterkende rand en dalende waardes dui op 'n verswakkende rand).

Totale verkope bestaan uit die bruto binnelandse besteding met uitsluiting van owerheidsverbruiksbesteding (hoofsaaklik dienste), die dienstekomponent van private verbruiksbesteding, en nywerheids- en handelsvoorraadinvestering, maar met inbegrip van die uitvoer van vervaardigde produkte:

$$S = BBB - G - Cdiens - \Delta I + Xm \tag{4}$$

waar die veranderlikes wat nog nie voorheen gedefinieer is nie, soos volg is:

- BBB = bruto binnelandse besteding*,
- G = owerheidsverbruiksbesteding*,
- Cdiens = private verbruiksbesteding aan dienste*, en
- Xm = uitvoer van vervaardigde goedere*.

Die eerste drie terme aan die regterkant van die geskattte vergelyking beskryf hoedat die langtermyn gewenste voorrade-verkope-verhouding met verloop van tyd verander. Die negatiewe koëffisiënt van die produkterm ($t \cdot S_{t-1}$) toon dat die gewenste voorradeverhouding met verloop van tyd daal. Die reglynige aard van die verwantskap sal lei tot negatiewe waardes vir die gewenste voorradeverhouding by hoë waardes van t . Dit kan 'n probleem veroorsaak as die vooruitskattungs-tydperk te ver in die toekoms strek, maar dit blyk 'n werkbare aanname te wees as die model vir 'n betreklike kort vooruitskattungstydperk gebruik word. Die I_{t-2} -veranderlike met sy negatiewe teken is 'n voorstelling van die gedeeltelike aanpassingsproses waarin voorradevlakke wat laag is met betrekking tot die gewenste vlak, met 'n tydsloering tot 'n doelbewuste aanvulling van voorradevlakke lei; die teenoorgestelde geld as die waargenome voorradevlak hoog is met be-trekking tot die gewenste vlak. Die term $(S_t - \frac{1}{4} \sum_{i=1}^4 S_{t-i})$ maak voorsiening daarvoor dat onverwagte hoë verkope in die huidige kwartaal behaal kan word deur voorrade te laat afneem. Op hierdie manier word vir onbeplande korttermyn-veranderings in voorrade voorsiening gemaak, terwyl die behoeftte aan 'n buffervorraad terselfdertyd benadruk word. Verwagte verkope is gelyk aan $\frac{1}{4} \sum_{i=1}^4 S_{t-i}$; met ander woorde verwagte verkope word op die gemiddelde verkope van die vorige vier kwartale gegrond. Dit blyk 'n oorvereenvoudiging te wees, maar eksperimentering met meer ingewikkeld verwagtings-vormingsformules het swak resultate gelewer.

Die negatiewe koëffisiënt van Prima dui daarop dat hoë rentekoerse 'n laer besit van voorrade aanmoedig. Waar in 'n aantal vorige studies min bewys gevind kon word dat rentekoerse 'n invloed op voorraadinvestering het, is die geskatt koëffisiënt van die rentekoersterm in

hierdie studie aanvaarbaar en statisties betekenisvol. Die positiewe koëffisiënt van Rew dui daarop dat wanneer ingevoerde goedere, en dus voorrade, goedkoper word as gevolg van 'n versterkende geldeenheid, voorrade na verwagting opgebou sal word. Prima sowel as Rew neem 'n aantal kwartale om hulle ten volle te laat geld.

Toetsing en gebruik van die model

'n Eerste aanduiding van die model se akkuraatheid word verkry uit die passingsmaatstawwe wat hierbo getoon is. Die tekens en die t-waardes van die onderskeie geskatte koëffisiënte is bevredigend en stem ooreen met voorafberedenering. Die bepaaldheidskoëffisiënt, R^2 , is betreklik hoog met inagneming van die sterk fluktuasies in voorraadinvestering.

Die resultaat van 'n simulasie-oefening binne die skattingstydperk, wat verkry is deur die werklike waardes van alle verklarende veranderlikes in die vergelyking te gebruik en dan die geskatte waardes vir voorraadinvestering te bereken, word in grafiek 9 uitgebeeld.

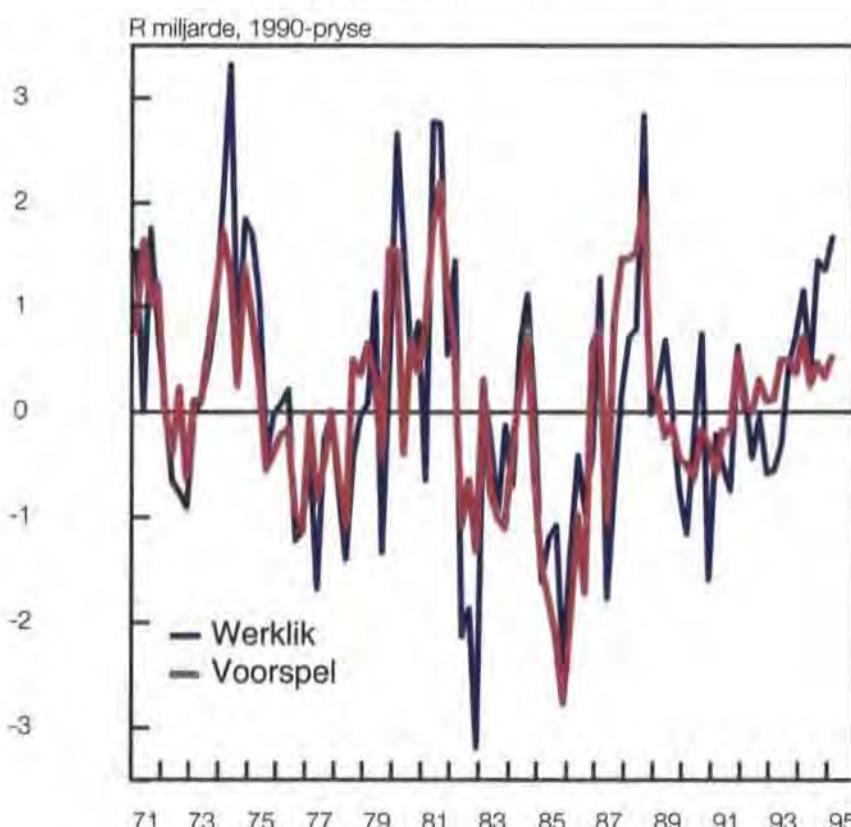
Grafiek 9 toon dat die waargenome voorraadinvestering vanaf die derde kwartaal van 1994 tot die eerste kwartaal van 1995 baie hoër was as die waardes wat deur die model voorspel word. Een moontlike verklaring hiervoor is dat die bestendiger monetêre beleidsomgewing, die opheffing van sanksies en die gunstiger vooruitsigte vir sakeondernemings as gevolg van die bestendiger politieke toestande in die land, 'n bereidwilligheid in die hand gewerk het om meer

voorraade te hou as wat uit vroeëre gedragspatrone blyk. Ander moontlike verklarings is dat die langtermynafname in die verhouding van voorrade tot verkope begin het om uit te vlak, dat meer voorrade gehou word om vir verwagte arbeidsoptredes voorsiening te maak, of dat ewekansige kragte in die ekonomie 'n paar keer na mekaar hoër-as-verwagte voorraadinvestering teweegbring het. Verdere ondersoeke word benodig voordat hierdie vraagstuk oortuigend opgelos kan word.

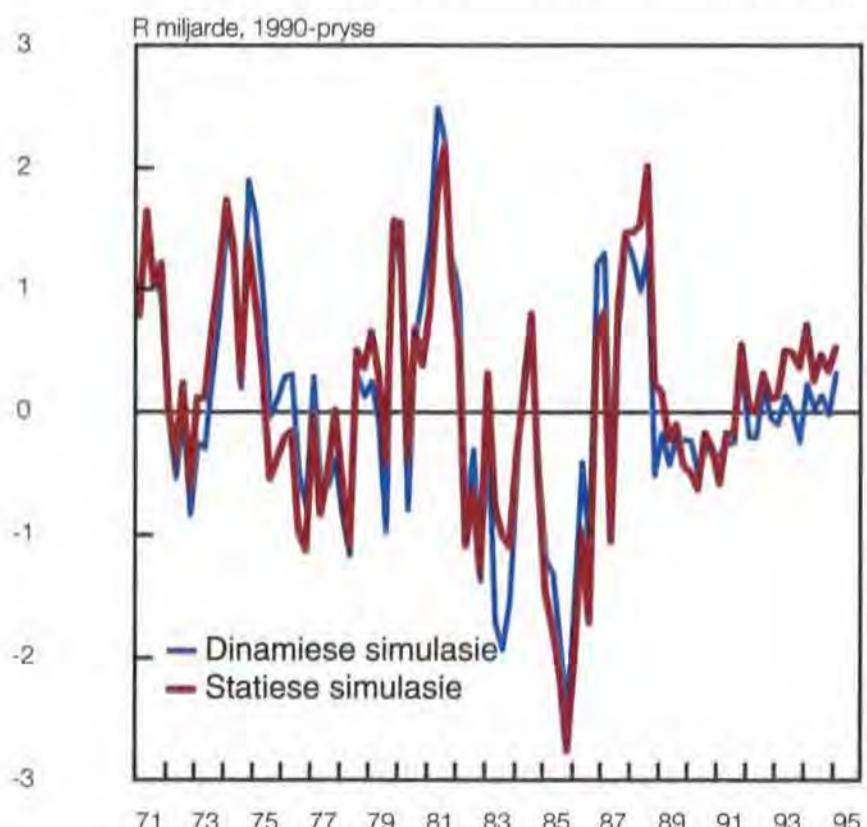
Vir doeleindes van die simulasie binne die skattingstydperk is die werklik waargenome waardes van die gesloerde vlak van voorrade as verklarende veranderlike ingesluit. 'n Verdere simulasie is daarna uitgevoer waarin die voorafbepaalde waardes van die gesloerde vlak van voorrade toegelaat is om endogeen deur die model bepaal te word. Die gesimuleerde waardes van die verandering in voorrade is gebruik om die opgelope vlak van voorrade te bereken, wat dan weer met 'n sloering van twee kwartale as 'n verklarende veranderlike gebruik is. Die resultate van hierdie (dinamiese) simulasie word in grafiek 10 getoon tesame met die resultaat van die vorige (statiese) simulasie binne die skattingstydperk.

Simulasies kan ook gebruik word om die reaksie van voorraadinvestering op veranderings in die eksogene veranderlikes van die model te bepaal. Die model is byvoorbeeld vanaf die eerste kwartaal van 1971 tot die vierde kwartaal van 1992 dinamies opgelos deur gebruik te maak van die eksogene veranderlikes en die waardes van die vlak van voorrade wat endogeen bepaal is. Die werkwyse is

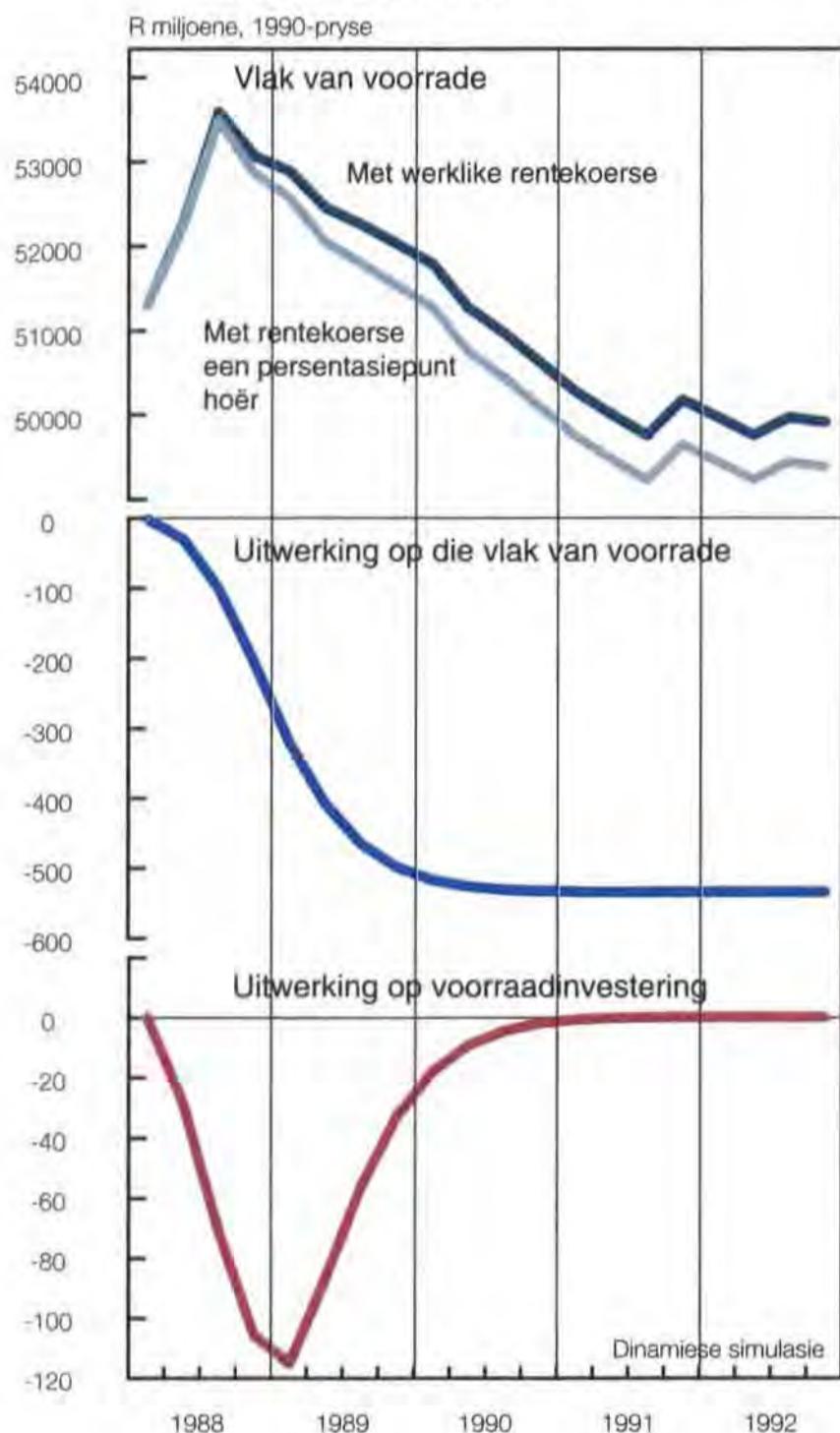
Grafiek 9: Die veranderings in nywerheids- en handelsvoorraade: werklike en voorspelde waardes



Grafiek 10: Die veranderings in nywerheids- en handelsvoorraade: voorspelde waardes



Grafiek 11: Die uitwerking van 'n volgehoue verhoging van een persentasiepunt in die prima-uitleenkoers op nywerheids- en handelsvoorraarde



herhaal, maar die rentekoersveranderlike Prima is vanaf die eerste kwartaal van 1988 tot die vierde kwartaal van 1992 met een persentasiepunt verhoog. Die resultate word in grafiek 11 opgesom. 'n Blywende toename in rentekoerse verminder voorraadinvestering vir ongeveer 13 kwartale en verminder die vlak van voorrade standhoudend. Die grootste uitwerking op voorraadinvestering word na verloop van vier kwartale aangeteken.

Opsomming

Vorraadinvestering se regstreekse uitwerking op die totale vraag dra by tot die omvang van die bruto binnelandse produk. Dit het ook 'n regstreekse

uitwerking op die aanwending van investeerbare fondse in die ekonomie. Voorrade oorbrug die baie wisselvallige gaping tussen die totale vraag en aanbod.

Ekonomiese toestande en veranderings in tegnologie het 'n strukturele daling in die vlak van voorrade relatief tot die vlak van produksie teweeggebring. 'n Internasionale vergelyking van die voorraadverhoudings bevestig dat die strukturele veranderings in Suid-Afrika deel uitmaak van soortgelyke veranderings wat in ander lande plaasgevind het. Die redes wat vir die strukturele veranderings in die verskillende lande aangevoer word, is ook naastenby dieselfde.

Vorraadinvestering neig om met die konjunktuur saam te val en is nie die aanvanklike dryfveer agter konjunkturele veranderings in die ekonomie nie, terwyl die vlak van voorrade die konjunktuur met 'n tydsloering van ongeveer drie tot vier kwartale volg. Vanweë die konsekwente sloering van die vlak van nywerheids- en handelsvoorraade ná die algemene ekonomiese bedrywigheid, is dié voorraadvlak 'n onderdeel van die saamgestelde sloerende konjunkturaanwyser van die Reserwebank.

In 'n ekonometriese funksie vir die verklaring van die kwartaallikse veranderings in reële nywerheids- en handelsvoorraade is verkope, onverwagte veranderings in verkope, die gesloerde vlak van voorrade, rentekoerse en die reële wisselkoers as verklarende veranderlikes gebruik. Die model vaar redelik goed in *ex post*- vooruitskattings. Van besondere belang is die bevinding dat die rentekoers sowel as die wisselkoers – veranderlikes wat sterk binne die gebied van monetêre beleid val – 'n beduidende invloed op voorraadinvestering uitoefen.

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