

Quarterly Bulletin

Kwartaalblad



South African Reserve Bank
Suid-Afrikaanse Reserwebank

Quarterly Bulletin Kwartaalblad

December 1996 Desember

No. 202



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

Contents

Quarterly economic review.....	1
Statement on Bank rate, 20 November 1996.....	29
Developments in fixed capital stock: 1960-1995	31
Statistical tables: Contents	S-0
Key information.....	S-131

© South African Reserve Bank

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

The contents of this publication are intended for general information only and are not intended to serve as financial or other advice. While every precaution is taken to ensure the accuracy of information, the South African Reserve Bank shall not be liable to any person for inaccurate information or opinions contained in this publication.

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

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

Inhoudsopgawe

Kwartaallikse ekonomiese oorsig	45
Verklaring oor die Bankkoers, 20 November 1996	75
Ontwikkelings in vaste kapitaalvoorraad: 1960-1995	77
Statistiese tabelle: Inhoudsopgawe.....	S-1
Kerngegewens	S-131

© Suid-Afrikaanse Reserwebank

Alle regte voorbehou. Geen gedeelte van hierdie publikasie mag sonder die skriftelike toestemming van die uitgewer gereproduseer, in enige inligtingstelsel bewaar of in enige vorm deur enige elektroniese of meganiese middel weergegee word nie, hetsy deur fotokopiëring, plaat- of bandopnames of andersins.

Die inhoud van hierdie publikasie is slegs vir algemene inligting bedoel en nie om as finansiële of ander advies te dien nie. Alhoewel voorsorg getref is om die akkuraatheid van die inligting te verseker, aanvaar die Suid-Afrikaanse Reserwebank geen aanspreeklikheid vir die akkuraatheid van die inligting of die menings vervat in hierdie publikasie nie.

Navrae i.v.m. hierdie *Kwartaalblad* moet gerig word aan:

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

Quarterly economic review

Introduction

Growth in the economy, which for some time has been proceeding at a rate in excess of the economy's long-term potential as determined by the current domestic savings ratio, slackened somewhat in the third quarter of 1996. This slackening came about in spite of a major fillip arising from a sharp increase in agricultural production. Judging by growth in the economy outside the agricultural sector, it either seems as if the acceleration in the rate of recovery in overall economic activity since 1993 is now losing momentum, or that the upper turning-point of the business cycle might already have been passed. The slowdown in the rate of expansion, however, is likely to differ from preceding downturns during the 1980s in that it is expected to be a slowdown of output growth around a rising long-term trend, rather than an absolute decline in real output. For 1996 as a whole, growth in real gross domestic product of some 3 per cent is still projected.

The weakening of output growth in the third quarter of 1996 was more conspicuous in the non-agricultural goods-producing industries than in the service-providing sectors of the economy. Mining production, and more specifically gold-mining output, declined fairly strongly in the third quarter of 1996. Manufacturing production also lacked vigour in the first three quarters of 1996. Although exports of manufactured products responded positively to the depreciation-induced increase in the competitive strength of South African producers, the response of manufacturing output was rather placid. It seems as if the increases in manufacturing export volumes during 1996 came mostly as a substitute for inventory accumulation and final sales in the domestic market without any meaningful expansion of manufacturing output volumes. The lethargic output performance of the goods-producing industries was to some extent counteracted by slightly more energetic output growth in the services industries. The financial services sector, especially, benefited materially from high activity levels in the bond, equity and other financial markets.

The slowdown in domestic output growth coincided with an actual decline in aggregate gross domestic expenditure, thereby reducing the excess of domestic expenditure over domestic production and narrowing the deficit on the current account of the balance of payments. Growth in all the major components of aggregate final demand slowed down in the third quarter of 1996 and investment in inventories was reduced substantially from the second to the third quarter of 1996. Despite growing at a lower rate, private consumption expenditure

was still rising too rapidly and was financed to a significant extent by bank credit extension.

The low savings ratio of the South African economy, which is exacerbated by the rapid expansion of private consumption expenditure, remains a serious cause for concern. The experience of the latest recovery in the economy seems to confirm that the lack of sufficient domestic saving is one of the factors preventing the South African economy from growing on a sustainable basis at a rate of more than 2½ to 3 per cent per year. It would appear that growth beyond this range leads to unsustainable deficits on the current account of the balance of payments. In view of the fickleness of foreign capital movements, it remains risky to rely for too long on the inward movement of international capital to augment domestic saving. To overcome this serious savings constraint on South Africa's long-term economic growth and prosperity, it is important that the government's macroeconomic strategy for growth, employment and redistribution, with its strong emphasis on raising saving and improving macroeconomic stability, be implemented.

Up to the end of the second quarter of 1996, the recovery in economic activity was unable to lift the employment-creating capacity of the economy in a sustainable way. The gains in private-sector employment during the second half of 1994 and the first half of 1995 were reduced by sustained job losses since the middle of 1995. Economic growth without job creation has indeed become a very troubling aspect of the South African economy.

The growth in nominal salaries and wages per worker, which had progressively been brought under control during the first half of the 1990s, started to accelerate in the second half of 1995. Moreover, the growth in labour productivity since the middle of 1995 was not sufficient to prevent a quickening in the rise in nominal unit labour costs. These cost-raising forces began to show their impact, along with that of the weakening rand, when price inflation started to gather renewed momentum in the second quarter of 1996. This emphasised the need for maintaining a consistent and credible counter-inflationary monetary policy. Otherwise, the competitive gains of the recent decline in the exchange rate of the rand would soon be eroded by a spiral of domestic wage and price increases.

The high level of domestic expenditure and the desire to acquire imported intermediate goods and capital equipment before prices could be inflated by the depreciation of the rand, led to a continued upward movement in the value of merchandise imports in the third quarter of 1996. Fortunately, the strong demand for imports coincided with a reorientation of the domes-

tic production structure towards the export market. As could be expected, the currency depreciation had a marked effect on export prices. Total export earnings were also boosted by a sharp rise in the value of net gold exports, contributing to a decline in the deficit on the current account of the balance of payments.

Partly in reaction to the weakening of the rand, but also partly responsible for the slide in the value of the rand, the capital movements to South Africa changed from a net inward flow of funds in the second quarter of 1996 to a net outward flow in the third quarter. There were indications that some of the debt which had been renegotiated in terms of the foreign debt standstill arrangements and which fell due in the third quarter of 1996 was not extended and the proceeds repatriated. Inward investment through the Johannesburg Stock Exchange and the Bond Exchange of South Africa also declined well below levels that were attained in the first half of 1996.

The overall deficit on the balance of payments was responsible for a substantial decline in the gross gold and other foreign reserves of the country. The low level of the foreign reserves contributed to the weakness of the rand and limited the ability of the Reserve Bank to intervene in the foreign exchange market with the objective of stabilising the exchange rate of the rand. The decline in the external value of the rand has by now strengthened the international competitiveness of the South African economy to such an extent that the country should now be more attractive for inward foreign direct investment, provided inflation and cost increases can be contained.

Although it declined slightly during the third quarter of 1996, the still high level of aggregate domestic expenditure contributed to the continued rapid growth in the money supply. The growth rate of the money supply also declined slightly, but the monetary expansion is still too high compared with the long-term growth potential of the economy. It is also too early to judge from the slowdown in money-supply growth whether policy steps that had been taken earlier were successful in sustainably lowering the expansion of the money supply. The persistently high growth in the money supply provided no scope for complacency in the fight against inflation and justified the continued application of counter-inflationary monetary policies.

The strong demand for money on account of transaction purposes was augmented by an increase in the liquidity preference of the private sector which arose from concerns about political developments, uncertainties about the future course of financial policies and expectations of imminent adjustments in the bond and equity market. Institutional investors, especially, showed a clear preference for larger-than-usual holdings of demand and other short-term deposits. This preference for shorter-term deposits led to an even more rapid growth in the narrowly defined than in the broadly defined monetary aggregates.

Because a prominent part of the increase in private consumption expenditure and corporate capital expenditure was financed by means of domestic credit extension, the credit extended by monetary institutions to the non-bank private sector continued to increase at a high rate in the third quarter. A sizeable portion of the increase in credit extension to the private sector was destined for private households. This was an important factor responsible for the strong growth in private household expenditure in the third quarter of 1996. In a statistical or accounting sense, the potential impact of the growth in credit extended to the private sector on the overall money supply was partly counteracted by declines in the net foreign assets of the monetary sector and in net credit extended by the monetary institutions to the government sector.

The South African financial markets experienced a phase of major adjustment during the first five months of 1996 in response to an upward correction in long-term yields in the American bond market and the steep decline in the exchange rate of the rand since mid-February. Up to October 1996, the markets have not settled down completely, an undertone of uncertainty and nervousness still prevails, and the yields on long-term government bonds and money market rates fluctuated around a relatively flat trajectory. Both local and foreign investors appear to become uncomfortable whenever yields declined to below 15 per cent at a time when inflation is rising and the rand is weak, while the smaller demand for funds effectively prevented rates from rising substantially beyond 16 per cent. As yields on long-term and short-term securities have moved broadly in sympathy since May 1996, the yield curve shifted upwards and downwards with the changing sentiment in the markets, but retained its generally flat shape. The curve drifted downwards from May to September 1996, but was then restored in October to a level that was approximately equal to that of May. The yield curve at the end of October probably still reflected wide-spread uncertainty about future price movements in the financial markets and fears of a reversal of the progress made with the reduction of inflation.

Money market rates firmed in November, reflecting the persistently high money market shortage, the scarcity of liquid assets eligible for collateral for obtaining loans at the discount window of the Reserve Bank, renewed inflationary fears and the weakness of the rand. This culminated in an increase of one percentage point in Bank rate as from 21 November 1996, followed by a similar rise in the lending rates of banks on the same day.

Money market conditions, which became generally tight during the second quarter of 1996, tightened even further from the end of June 1996 to the end of October. At the end of October the amount of accommodation which the Reserve Bank had to provide to banks reached its highest level since April 1996 as the decline in the Bank's net foreign assets

continued to drain liquidity from the market. Throughout the second and third quarters of 1996 the Bank has taken no countervailing steps and allowed a growing money market shortage to generally reflect the underlying imbalance of demand and supply in the market. The Bank only provided temporary assistance on those occasions when market conditions became excessively tight. Assistance then took the form of adjustments in the portfolio of the Corporation for Public Deposits and foreign currency swap arrangements between the Reserve Bank and private banks.

The raising of funds by the public sector in the primary bond market was considerably smaller in the first half of the current fiscal year than the levels in the first half of the previous fiscal year. Private-sector companies raised funds in the primary bond market in the third quarter of 1996 for the first time since the third quarter of 1995. These companies also increased the amount of capital raised through equity issues in the first three quarters of 1996 relative to the amounts raised in the previous year.

The prices of all classes of shares listed on the Johannesburg Stock Exchange showed no distinct upward or downward trend since February 1996. Owing to the depreciation of the rand, the foreign-currency prices of shares declined steeply, causing the net purchases of South African shares by non-residents to decline progressively during the first three quarters of 1996. In October 1996 non-residents became net sellers of shares listed on the Johannesburg Stock Exchange for the first time since December 1994.

Despite a slight deterioration in the borrowing requirement of the overall public sector in the first half of the current fiscal year, there are strong indications that the government is likely to succeed in achieving its objective to reduce the Exchequer deficit before borrowing and debt repayment as a percentage of gross domestic product. The increase in Exchequer issues in the first half of fiscal 1996/97 was somewhat faster than envisaged by the budget projections in March 1996, but was well below the average increase in the first half of the previous five fiscal years. Fortunately, the increase in Exchequer receipts ran slightly ahead of the budgetary projections. The government also took a major stride forward with the implementation of its macroeconomic strategy when certain tax incentives were made available. To improve tax efficiency, a tax amnesty was announced, which is expected to be more encompassing than previous amnesties.

Domestic economic developments

Domestic output¹⁾

After having increased at a seasonally adjusted and annualised quarter-to-quarter rate of 3½ per cent in each of the first two quarters of 1996, *aggregate real gross domestic product* increased at a slightly lower but still sturdy rate of 3 per cent in the third quarter. These increases raised the level of gross domestic output in the first three quarters of 1996 to about 3 per cent above its level in the corresponding period of the preceding year.

If the agricultural sector is excluded, the real output of the other sectors increased by about 1 per cent in the third quarter of 1996 compared with 2 per cent in the second quarter. Output growth in the non-agricultural sectors also amounted to 1 per cent in the first

¹⁾ In accordance with normal practice, revisions have been made to national accounts and balance of payments data and are incorporated in this issue of the *Quarterly Bulletin*. These revisions are based on more detailed or more appropriate data available. In addition, seasonal factors have been updated.

Real gross domestic product

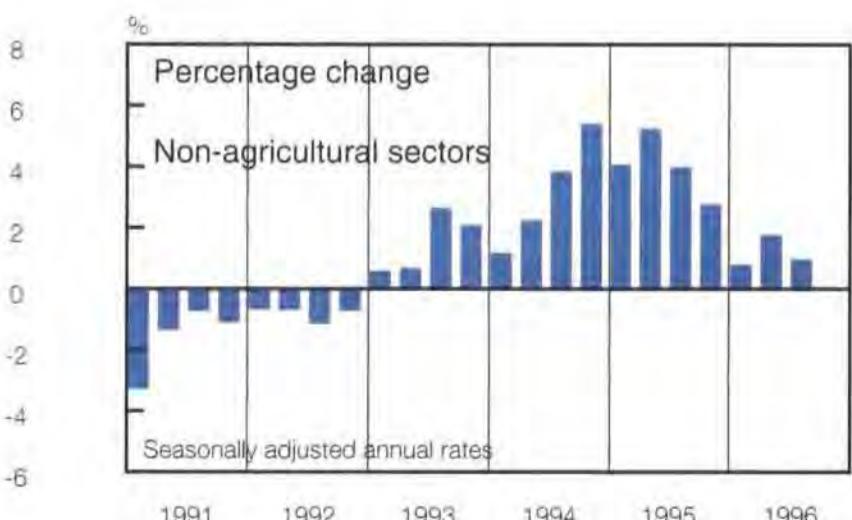
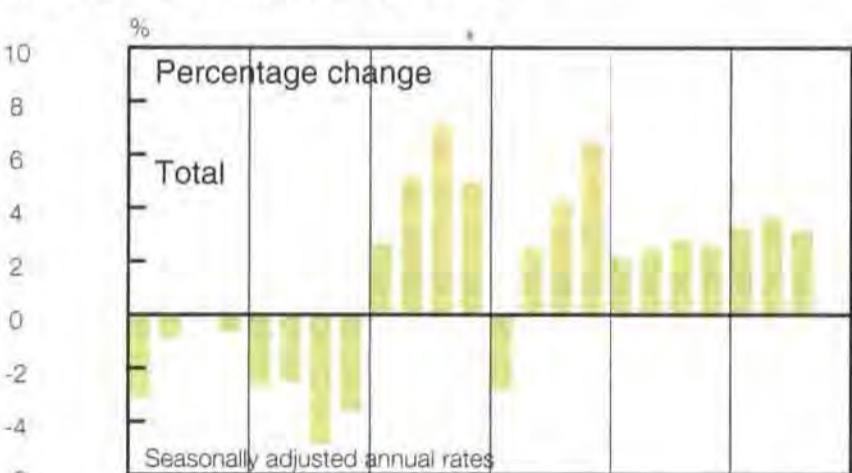


Table 1. Real gross domestic product by sector

Percentage change at seasonally adjusted and annualised rates

Sectors	1996		
	1st qr	2nd qr	3rd qr
Primary sectors.....	22%	13	13%
Agriculture.....	82%	52	54%
Mining	0	-5	-7
Secondary sectors.....	½	2	½
Manufacturing	-½	1½	-½
Electricity, gas and water	6%	5	5½
Tertiary sectors	½	3	2
Commerce	-3	5	½
Transport	1	2	2½
Financial services.....	3%	3	4
General government	1	1½	1
Total	3½	3½	3
Non-agricultural sectors	1	2	1

quarter of 1996, which means that the average compounded growth rate in the economy outside the agricultural sector was slightly more than 1 per cent over the first three quarters of 1996. This is significantly lower than the average quarter-to-quarter growth rate of 4 per cent in non-agricultural output which had been recorded in 1995. This decline in the output growth in the non-agricultural sector is broadly consistent with the downward tendency in the coincident business cycle indicator since the middle of 1995 and could be indicative of an economy which is already in the early stages of a period of relatively slower growth.

Agricultural production continued to increase at a very high rate in the third quarter of 1996 on account of exceptionally good weather conditions in most parts of the country which boosted the gross incomes of field-crop, horticultural and livestock farmers. The real output of field-crop farmers especially benefited from an "above-normal" maize crop, the bulk of which was harvested during the third quarter of 1996.

Total real output in the mining sector, which had shown almost no change in the first quarter of 1996, contracted at a seasonally adjusted and annualised rate of 5 per cent in the second quarter of 1996 and 7 per cent in the third quarter. The downward trend of mining output was the combined result of lower output in the gold-mining and other mining sectors, apart from diamond and coal mining. Gold-mining output was adversely affected in the third quarter of 1996 by isolated outbreaks of violence among workers, underground fires and

seismic activities in some of the larger mines. In the category "other mining", output was also held back by labour-related problems at some of the platinum mines. In contrast to these developments, the level of real output in the diamond-mining and coal-mining industries increased to a level in the first three quarters of 1996 that was 2½ per cent higher than in the corresponding period of 1995.

The real output of the *manufacturing industry* declined slightly in the third quarter of 1996. This meant that the real value added by manufacturing in the first three quarters of 1996 showed almost no increase compared with output levels in the corresponding period in 1995. The slowdown in manufacturing output growth is explained by the slowdown in the growth in real domestic final demand in the first three quarters of 1996. The poor output performance of manufacturing enterprises since the beginning of 1996 was also reflected in lower rates of production capacity utilisation, which declined from a recent high of 83½ per cent in the second quarter of 1995 to 81½ per cent in the first three quarters of 1996.

In the *other secondary sectors*, the real value added by the sector supplying electricity, gas and water rose further at a comparatively high rate because of factors such as the on-going programme of distributing electricity to lower-income groups and the strong demand for electricity for heating purposes during an extraordinarily cold winter.

The real value added by the *tertiary sectors* continued to increase in the third quarter of 1996 at a rate that was higher than the growth rate of the non-agricultural goods-producing sectors. Although increases in real value added occurred in all the main services sectors, these were particularly evident in the transport and financial services sectors. The growth in the value added by the transport, storage and communication sector was assisted by the need to move agricultural commodities in bulk and the persistently high and rising volumes of foreign trade. The continued high levels of activity in the equity, bond and other financial markets almost guaranteed strong growth in the sector finance, insurance, real estate and business services. In the sector commerce and accommodation the rate of increase in real value added slowed down considerably from 5 per cent in the second quarter to only ½ per cent in the third quarter. This was mainly caused by a steep decline in the real output of the motor trade which came on the heels of an even steeper increase in the second quarter.

Domestic expenditure

The comparatively strong growth in gross domestic product in the third quarter of 1996 was accompanied by a decline in *real gross domestic expenditure*. Following a small increase at a seasonally adjusted and annualised rate of ½ per cent in the first quarter of 1996, real gross domestic expenditure rose vigorously by 13

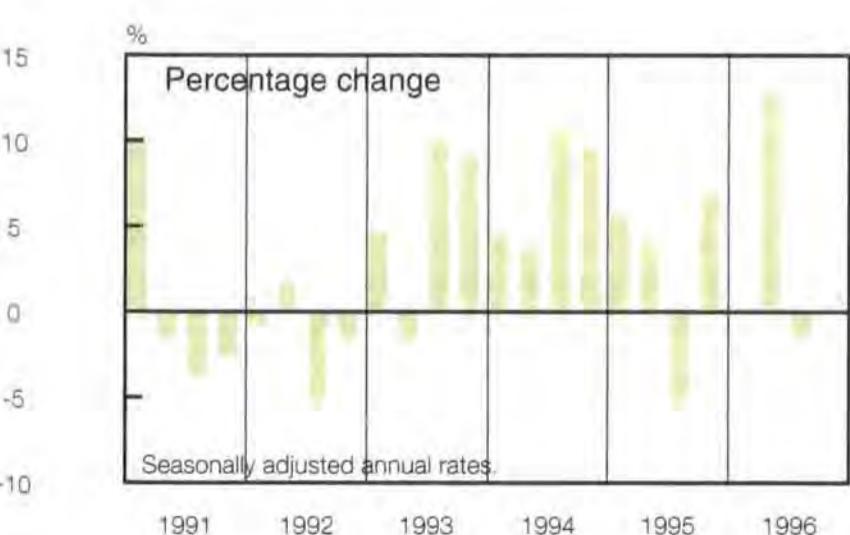
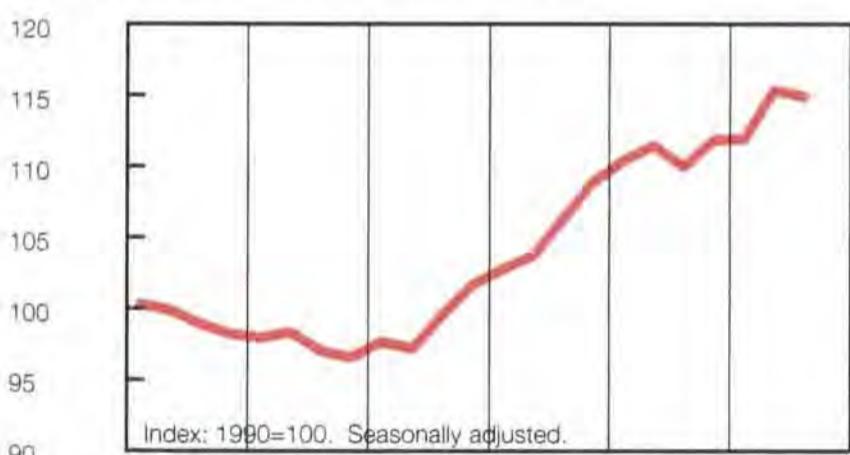
Table 2. Real gross domestic expenditure

Percentage change at seasonally adjusted and annualised rates

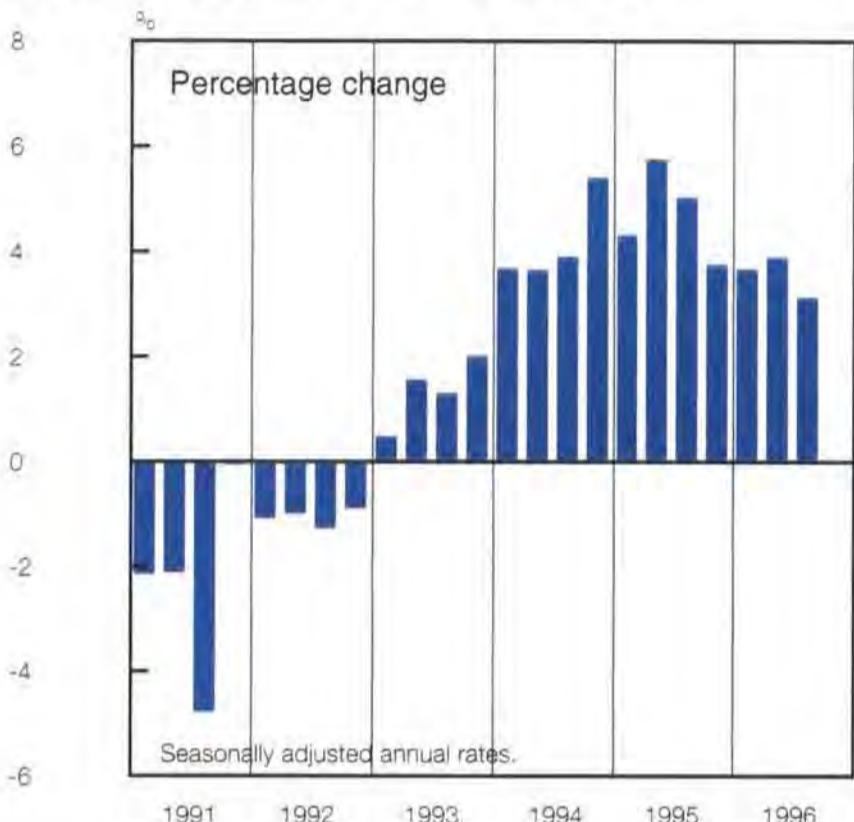
Components	1996		
	1st qr	2nd qr	3rd qr
Private consumption expenditure.....	3½	4	3
Government consumption expenditure.....	3	3	2
Gross domestic fixed investment	8	6½	3½
Change in inventories (R billions)	2.3	7.3	2.9
Gross domestic expenditure	%	13	-1½

per cent in the second quarter, but then declined by 1½ per cent in the third quarter. This turnaround can be attributed mainly to a substantial decline in the rate of inventory accumulation and a slowdown in real domestic

Real gross domestic expenditure



Real private consumption expenditure

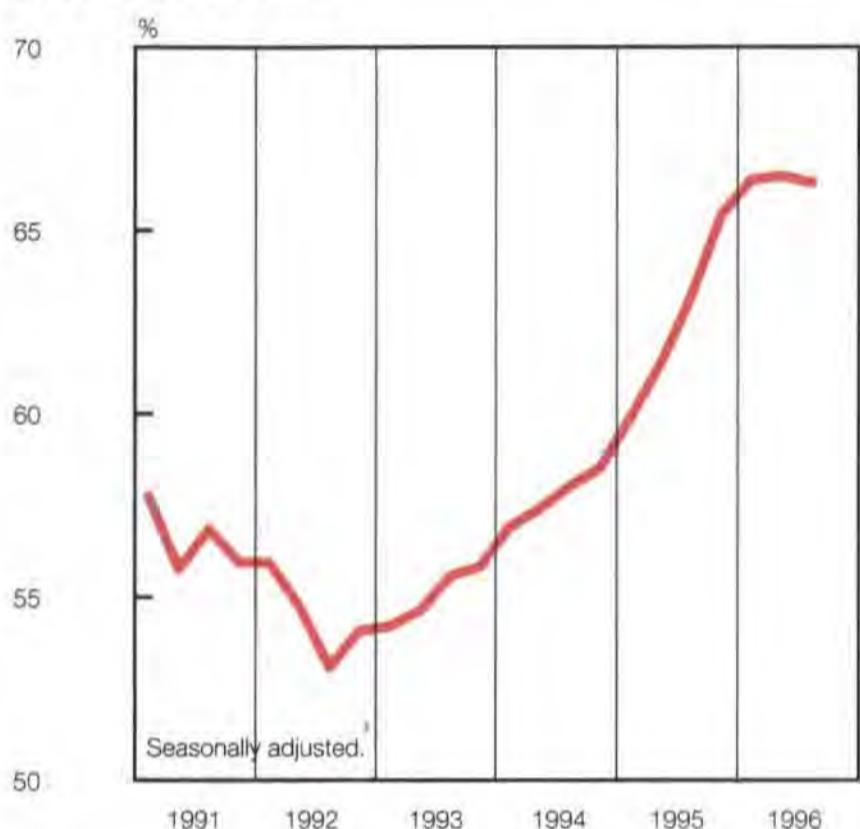


final demand. In the first three quarters of 1996 total real gross domestic expenditure was about 3 per cent higher than in the first three quarters of 1995.

Real outlays on *private consumption expenditure* increased sharply in the first three quarters of 1996 and the quarter-to-quarter rate of increase in this total accelerated from 3½ per cent in the first quarter to 4 per cent in the second quarter, before rising at a lower rate of 3 per cent in the third quarter. The relatively strong growth in real private consumption expenditure in the third quarter was realised despite a decline in real outlays on durable consumer goods. Real expenditure on personal transport equipment fell at an annualised rate of 18½ per cent in the third quarter of 1996 because motor vehicle sales returned to more sustainable levels after the exceptionally high sales volumes of the second quarter.

Apart from the role played by higher private household income, the rising spending levels of consumers were also made possible by the willingness of individuals to incur debt. Real household incomes were boosted by the strong rise in gross farm incomes and increases in salaries and wages, which continued to outpace the rise in the prices of consumer goods and services. Aggregate household debt still increased in the first three quarters of 1996, but at a rate that corresponded approximately with the growth in personal disposable income. The ratio of household debt to personal

Household debt as percentage of personal disposable income



disposable income accordingly stayed roughly unchanged at 66½ per cent over the first three quarters of 1996.

The rate of increase in *real consumption expenditure by general government* slowed down from an annualised level of 3 per cent in the first two quarters of 1996 to 2 per cent in the third quarter. This slower growth was the result of some curtailment in the rate of expenditure by general government departments on intermediate goods and services. The current outlays by general government in the first nine months of 1996 was still 2½ per cent higher than in the corresponding period of 1995. The increase in real consumption expenditure by general government was ½ per cent in the calendar year 1995.

The upward momentum in *real gross domestic fixed investment* since the third quarter of 1993 was maintained in the third quarter of 1996. Current estimates suggest that increases in total real gross domestic fixed investment, at an annualised rate of 8 per cent in the first quarter of 1996 and 6½ per cent in the second quarter, were followed by a further rise of 3½ per cent in the third quarter. Real gross domestic fixed investment in the first three quarters of 1996 was some 7½ per cent higher than in the first three quarters of 1995, compared with growth of 10½ per cent in 1995 as a whole. The further improvement in capital formation in the third quarter was brought about by an expansion of real capital expenditure by all three institutional sectors, namely the private sector, public corporations and public authorities.

Real fixed investment by the private sector increased at a seasonally adjusted and annualised rate of 5 per cent in the first quarter of 1996 and 8 per cent in the second quarter, but then slowed down to 4 per cent in the third quarter. A classification of capital spending in the private sector by type of economic activity shows that the whole sector, apart from the mining industry, participated in the creation of additional production capacity in the third quarter of 1996. Capital expenditure projects currently in progress in the private sector vary from large industrial developments in the metals industry and exhibition centres and entertainment complexes in the services sectors to the expansion and replacement of production capacity in the agricultural sector.

Real fixed capital formation by the public sector increased at an annualised rate of 2½ per cent in the third quarter. The investment activities of public corporations were mostly concentrated in the sectors supplying electricity, gas, water and telecommunication services. The increased amount of fixed investment spending by public authorities again indicated the high priority accorded to public-service delivery at the level of provincial governments and local authorities.

The gradual reduction in *inventory investment* since the third quarter of 1995, which was disrupted by a substantial increase in inventory accumulation in the second quarter of 1996, resumed its downward movement in the third quarter. Expressed at constant 1990 prices, inventories increased at an annualised rate of R2,3 billion in the first quarter of 1996 and R7,3 billion in the second quarter, against only R2,9 billion in the third quarter. Whereas the change in real inventory investment raised the growth of real gross domestic product by 7 percentage points in the second quarter of 1996, it reduced overall growth by 6 percentage points in the third quarter.

The smaller increase in aggregate inventory levels in the third quarter than in the second quarter was the result of lower levels of investment in industrial and commercial inventories than in the second quarter and declines in the level of inventory investment in the mining sector. This was partly countered by stockpiling of agricultural commodities at the end of the third quarter owing to the harvesting of a bumper maize crop. Despite the slower pace of inventory accumulation in the third quarter of 1996, the ratio of industrial and commercial inventories to gross domestic product in the non-agricultural sectors of the economy remained broadly unchanged at the level of 18½ per cent attained in the second quarter.

Factor income and saving

The growth over four quarters in *total nominal factor income* at market prices declined from an average of 12 per cent in the final two quarters of 1995 to 11 per cent in the first quarter of 1996, but then accelerated again to 12 per cent in the second and the third quarter. The

faster growth during 1996 could be ascribed to stronger growth in the operating surpluses of business enterprises and a slight acceleration in the rate of increase in total labour remuneration. The growth over four quarters in *aggregate remuneration of labour* amounted to 10 per cent in the first three quarters of 1996, which was some 3 percentage points higher than the average rate of consumer price inflation over this period. As aggregate employment was still declining in the early part of 1996, the accelerated growth in labour remuneration should be attributed to rising wages and salaries per worker.

Growth in the nominal *gross operating surpluses* of business enterprises, measured over periods of four quarters, edged higher from 13½ per cent in the first quarter of 1996 to an average of approximately 15½ per cent in the second and third quarter. This stronger growth was mainly due to an improvement in the gross income of farmers and the fillip given to the profitability of exporters in the mining and manufacturing sectors by the decline in the exchange rate of the rand.

The ratio of total *gross domestic saving* to gross domestic product in the third quarter of 1996 remained at the relatively low level of 17 per cent that was registered in the second quarter. This low saving ratio, which is totally inadequate in view of the country's investment and growth requirements, was the result of a sustained high level of dissaving by general government and a weak, though still positive, saving performance by the private sector. Owing mainly to

higher tax collections, the net dissaving by general government as a percentage of gross domestic product was reduced from 4 per cent in 1995 to 3½ per cent in the first three quarters of 1996. The corresponding ratio for the private sector declined slightly from 7½ per cent in 1995 to 7 per cent in the first three quarters of 1996.

Employment

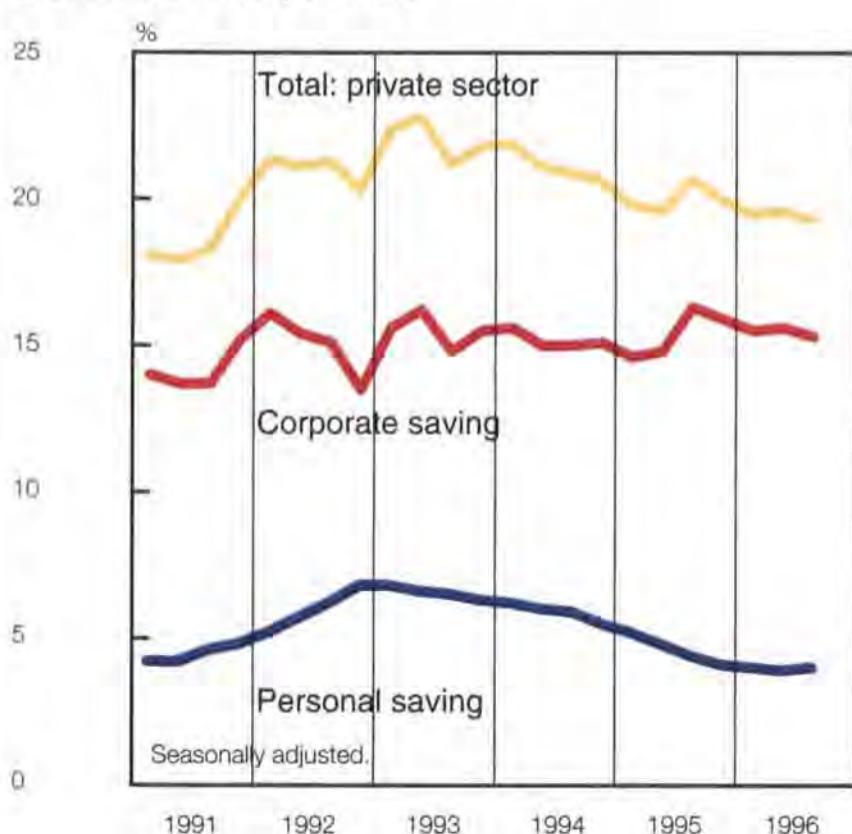
The recovery in overall economic activity since the middle of 1993 has not succeeded in improving the employment-creating potential of the South African economy. The *average annual employment in the formal non-agricultural sectors* of the economy increased only once during the past six years, when it rose at a year-to-year rate of 0,7 per cent in 1995. This increase was followed by a sharp decline of 3,6 per cent, at a seasonally adjusted and annualised rate, in the first quarter of 1996 and a further decline of 2,1 per cent in the second quarter. (The second quarter of 1996 is the most recent period for which information has been released by the Central Statistical Service.)

Against the backdrop of the increasingly competitive international economic environment, employers facing persistently strong demands for higher real wages can adjust their employment practices in response to these demands in three different ways:

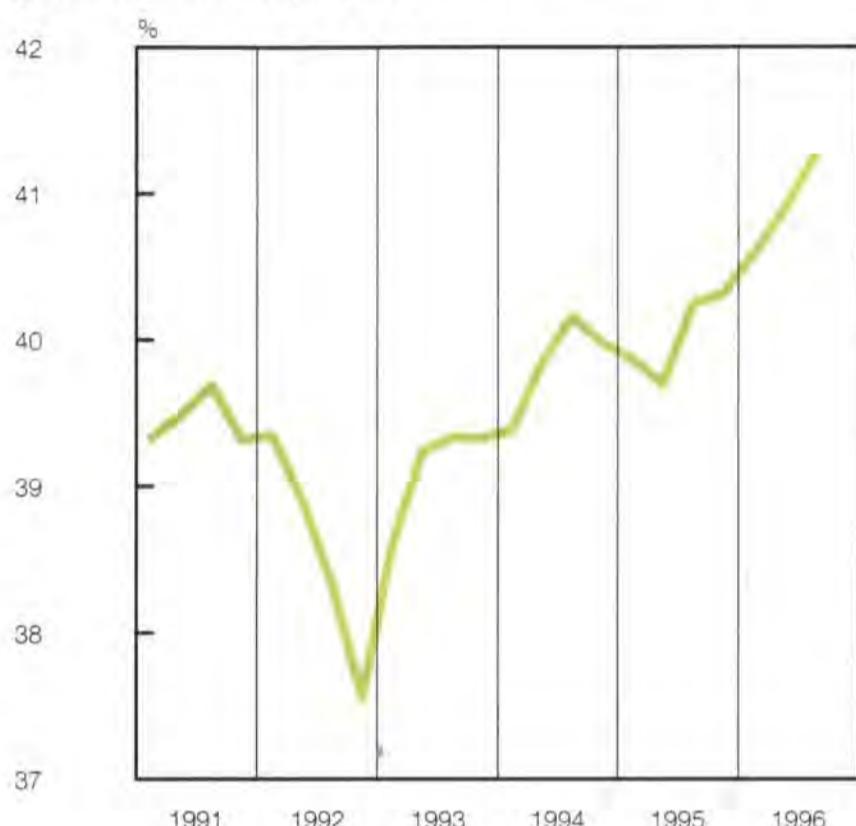
- (i) resist the wage demands and reduce wages to restore profitability and by so-doing create new or preserve existing employment opportunities;
- (ii) improve productivity by investing in new equipment or retrenching workers, thereby increasing the capital-intensity and reducing the labour-intensity of production methods; or
- (iii) procrastinate and take no corrective steps to resist higher real wages or improve productivity. Under this scenario businesses incur losses, which they subsequently attempt to recover by increasing their output prices. Ultimately they lose competitiveness to such an extent that they are forced out of existence.

The "improvement in productivity" seems to be the approach adopted by most businesses in South Africa since the end of the 1980s. Faced by persistent demands for higher real wages and salaries, producers responded by retrenching workers and introducing more capital-intensive methods of production. The outcome was a decline in aggregate employment instead of in the level of real wages. In fact, real wages have been rising since the end of the 1980s, while total employment has been falling. This labour shedding has succeeded in restoring gross operating surpluses: as a percentage of the aggregate value of output, the share of operating surpluses has been rising steadily from 37,6 per cent in the fourth quarter of 1992 to 41,3 per cent in the third quarter of 1996.

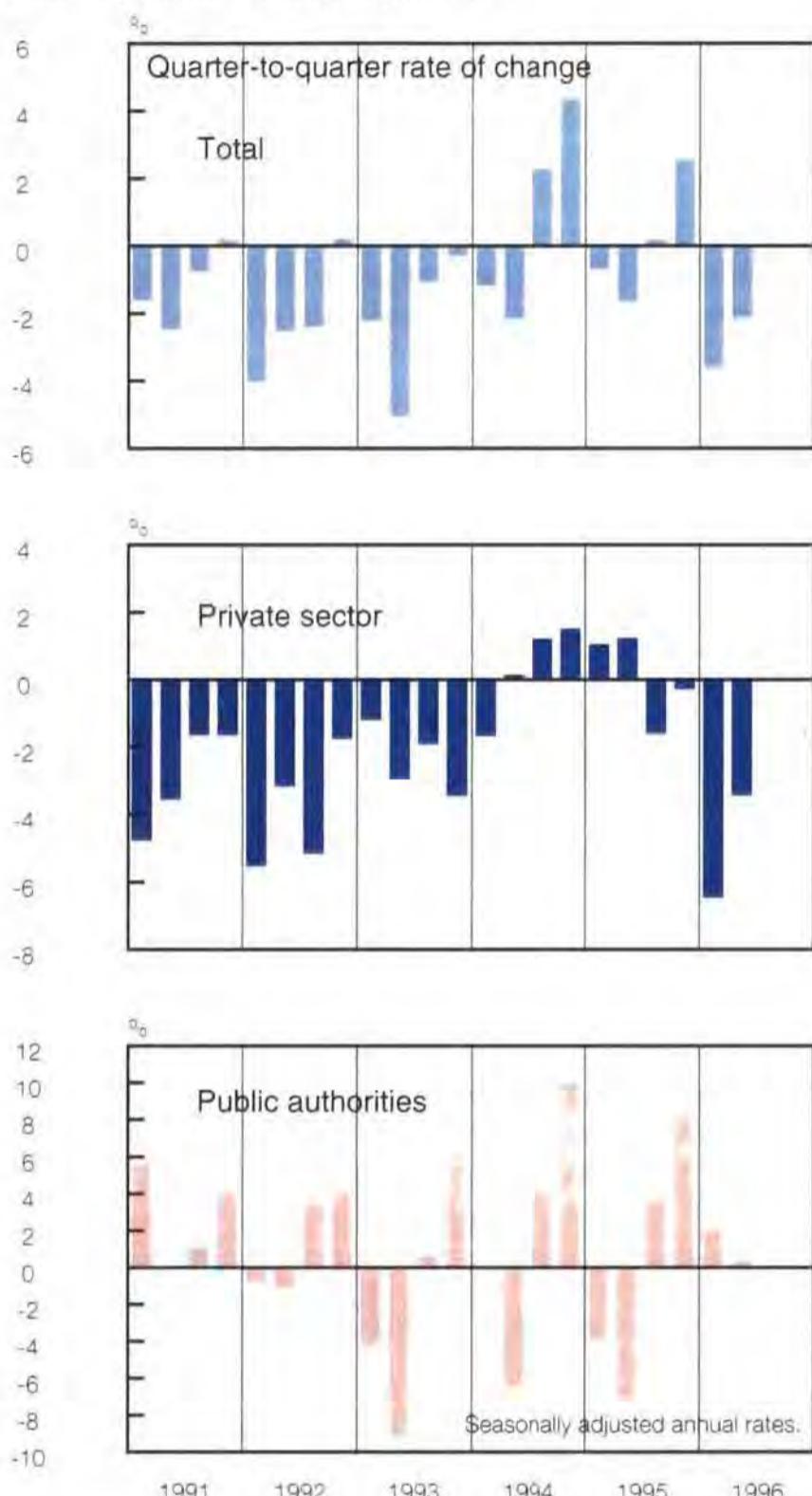
Private-sector saving as percentage of gross domestic product



Gross operating surpluses as percentage of gross domestic product



Non-agricultural employment



Total employment by private-sector organisations in the formal non-agricultural sectors of the economy declined consecutively by seasonally adjusted and annualised rates of 1.6 per cent, 0.3 per cent, 6.4 per cent and 3.4 per cent in the four quarters since the third quarter of 1995. As a result, about 104 000 employment opportunities in the private sector were lost between the second quarter of 1995 and the second quarter of 1996. Fragmentary information for July 1996 indicates further declines in employment totals in the manufacturing, mining and quarrying, construction and the electricity-generating sectors.

Despite falling back in the first two quarters of 1995, total employment by the public authorities increased by 0.5 per cent in 1995 and further at seasonally adjusted and annualised rates of 2.2 per cent in the first quarter of 1996 and 0.4 per cent in the second quarter. Total employment in the public sector consequently showed virtually no sign of a reduction in the overall size of the public service as is envisaged in the government's recently adopted macroeconomic strategy. On the contrary, the ratio of employment by public authorities to total employment in the formal non-agricultural sectors has now increased from 30.3 per cent in the first quarter of 1990 to 34.6 per cent in the second quarter of 1996.

The recent decrease in employment in the formal sectors of the economy led to a rising number of registered unemployed workers. On average, the monthly number of unemployed workers rose by 7.7 per cent from the first six months of 1995 to the first six months of 1996. This brought the total number of the

registered unemployed to almost 320 000 in June 1996 as against 244 000 in October 1995.

Labour costs and productivity

The rate of increase in the average nominal remuneration per worker declined from a year-to-year rate of 11.9 per cent in 1994 to 9.4 per cent in 1995. As shown in Table 3, the downward trend in the nominal remuneration per worker was reversed in the third quarter of 1995. The higher growth in salaries and wages per worker since the second quarter of 1995 was recorded in the remuneration of persons employed by both the private sector and the public authorities. Despite this recent acceleration in the increases in

Table 3. Changes in labour costs and productivity

Percentage change over four quarters

Period	Remuneration per worker			
	Nominal	Real	Labour productivity	Nominal unit labour cost
1995: 1st qr.....	10,7	2,3	2,7	7,9
2nd qr....	7,3	-0,7	3,3	3,9
3rd qr	8,9	0,6	3,7	5,0
4th qr.....	10,1	1,0	3,4	6,5
1996: 1st qr.....	11,7	2,4	3,2	8,3
2nd qr....	10,9	1,0	2,6	8,1

nominal remuneration per worker, the growth in the average remuneration per worker in the current economic recovery was still less than in other upward phases of the business cycle since the 1970s.

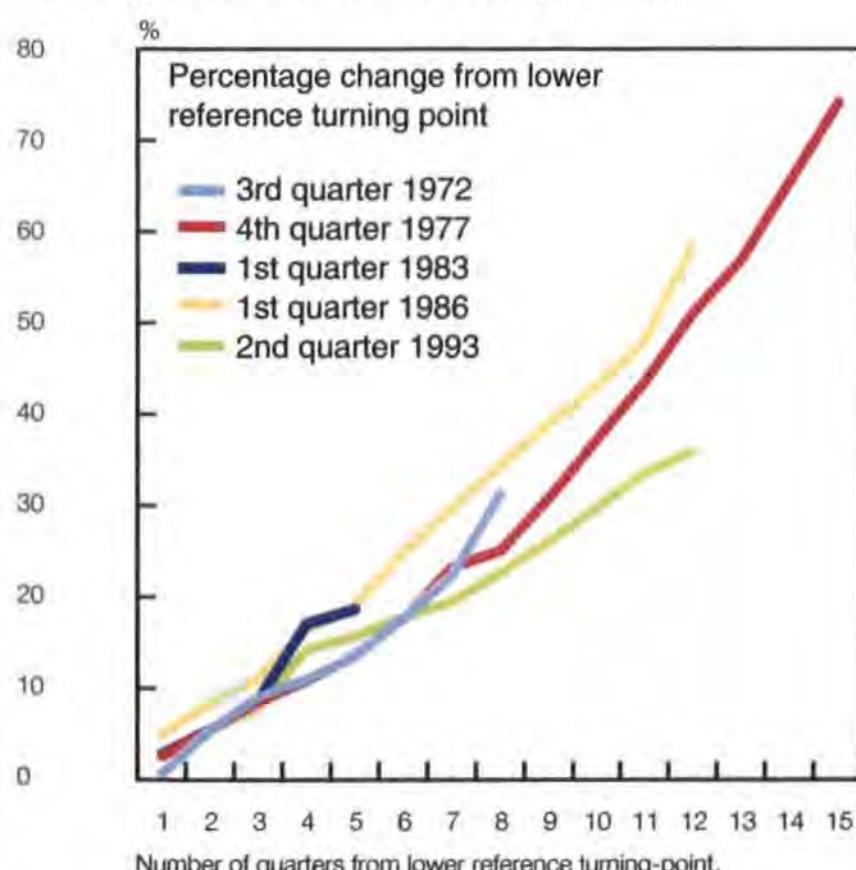
The year-to-year increase in *real remuneration per worker* in the sectors of the economy outside agriculture (defined as the nominal remuneration per worker divided by the price deflator for the non-agricultural gross domestic product) fell from 3,2 per cent in 1994 to 0,9 per cent in 1995. In a fashion similar to the year-on-year

increase in the nominal remuneration per worker, the year-on-year growth in real remuneration per worker accelerated since the third quarter of 1995. In the second quarter of 1995, the real remuneration of workers was 0,7 per cent below its level of a year earlier, owing mainly to the abnormally high levels of worker remuneration at the time of the general election in the second quarter of 1994. Real worker remuneration then increased in the year to the third quarter of 1995 and accelerated further in the fourth quarter and the first quarter of 1996. The growth over four quarters in real remuneration per worker then subsided somewhat in the second quarter of 1996.

The general upward trend in real wages was accompanied by higher *labour productivity*. The year-to-year growth in real output per worker amounted to 3,3 per cent in 1995 – this was the highest year-to-year growth since 1978, when a rate of 3,9 per cent was registered. Productivity growth came to 2,6 per cent in the year to the first quarter of 1996. This improvement in productivity was partly at the expense of employment and was not entirely accounted for by an increase in work effort.

As could be expected with lower increases in labour remuneration and rising productivity, the rate of increase in *nominal unit labour costs* in the non-agricultural sectors of the economy declined from 9,0 per cent in 1994 to 5,9 per cent in 1995. This slowdown in the rate of increase in nominal unit labour costs contributed to the deceleration of year-on-year consumer-price inflation during 1995 and in the early months of 1996. The faster growth in nominal remuneration per employee, without a commensurate acceleration in productivity growth, resulted in accelerated year-on-year rates of increase in nominal unit labour costs since the third quarter of 1995. This higher rate of growth in average labour cost per unit of output contributed to the quickening of inflation in both producer and consumer price indices.

Non-agricultural remuneration per worker



Prices

The rate of inflation, as measured by changes over twelve months in the production and consumer price indices, declined since the beginning of 1995 and took the average inflation in consumer prices to 8,7 per cent in the calendar year 1995 – the lowest year-to-year rate recorded since 1972. However, in the months since March 1996 the changes from month to month in the consumer price index moved to a higher average level. Similarly, the month-to-month changes in the production price index, on average, moved to a higher level as from April 1996. These movements could mean that year-to-year inflation is moving higher from the levels that prevailed in the early months of 1996. Factors such as the

- depreciation of the rand since mid-February 1996,
- persistently strong growth in the money supply and domestic credit extension,
- faster growth in nominal unit labour costs since the second half of 1995, and

- rising food prices, seem to point towards some setback in the progress made with reducing inflation during the 1990s.

Measured from quarter to quarter and annualised, the rate of increase in both the production and consumer price indices reached a lower turning point in the third quarter of 1995. The rise in the *all-goods production price index* accelerated from 2,8 per cent in the third quarter of 1995 to 7,9 per cent in the fourth quarter and to 5,1 per cent, 6,3 per cent and 9,6 per cent consecutively in the first three quarters of 1996. This quickening in the pace of production price inflation was largely driven by the prices of *domestically produced goods*, which rose much faster than the prices of imported goods. The quarter-to-quarter rate of increase in the prices of domestically produced goods, at a seasonally adjusted and annualised rate, accelerated from 3,7 per cent in the third quarter of 1995 to 9,8 per cent in the fourth quarter, 4,9 per cent in the first quarter of 1996 and 6,2 per cent in the second quarter. The robust growth in aggregate domestic demand, which was financed to a significant extent by credit extension to the private sector, together with the higher growth in nominal unit labour cost since the second half of 1995, were probably the main reasons for

the higher increase in the prices of domestically produced goods. In the third quarter of 1996 the prices of domestically produced goods accelerated further to 11,5 per cent when the prices of food also rose quite sharply from month to month.

The seasonally adjusted index of the *prices of imported goods* declined at an annualised rate of 0,5 per cent from the second quarter of 1995 to the third quarter. The prices of imported goods then increased at a seasonally adjusted annualised rate of 2,8 per cent in the fourth quarter of 1995 and 6 per cent in the first quarter of 1996. Despite the steep depreciation of the rand, the quarter-to-quarter increase in the prices of imported goods stayed relatively subdued in the second and third quarters of 1996: an increase at an annualised rate of 7,0 per cent was recorded in the second quarter and 2,6 per cent in the third quarter when there were hardly any changes from month to month in the prices of imported goods from July to September. The small increases in the prices of imported goods that followed in the wake of the steep decline in the exchange rate of the rand were probably related to the lowering of import tariffs, competition among suppliers of imported goods and declines in the prices of imported mining and quarrying products.

Like the movements in the all-goods production price index, the seasonally adjusted and annualised quarter-to-quarter rate of increase in the *overall consumer price index* accelerated from 2,2 per cent in the third quarter of 1995 to 9,5 per cent in the first quarter of 1996, 7,0 per cent in the second quarter and 8,9 per cent in the third quarter. Measured over periods of twelve months, the rate of increase in the overall consumer price index has remained below 10 per cent since July 1995 and reached its lowest level since June 1972 when it declined to 5,5 per cent in April 1996. It subsequently accelerated to 6,9 per cent

Production and consumer price indices

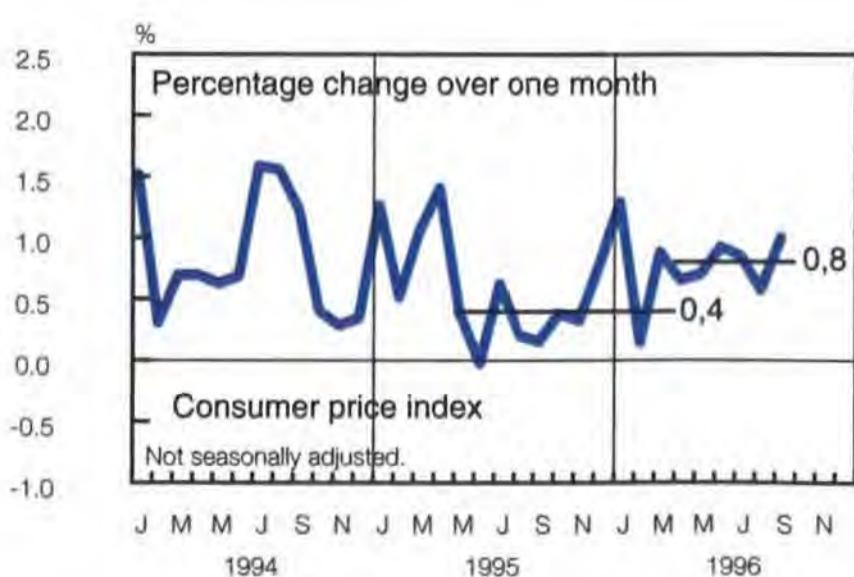
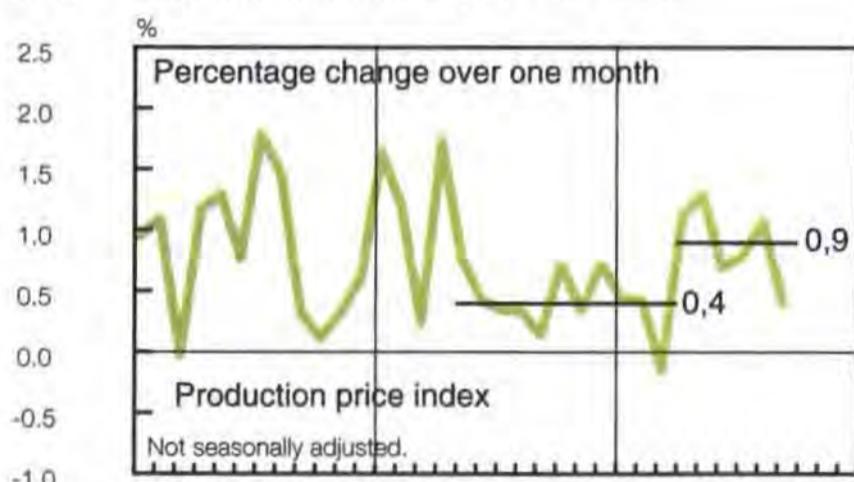


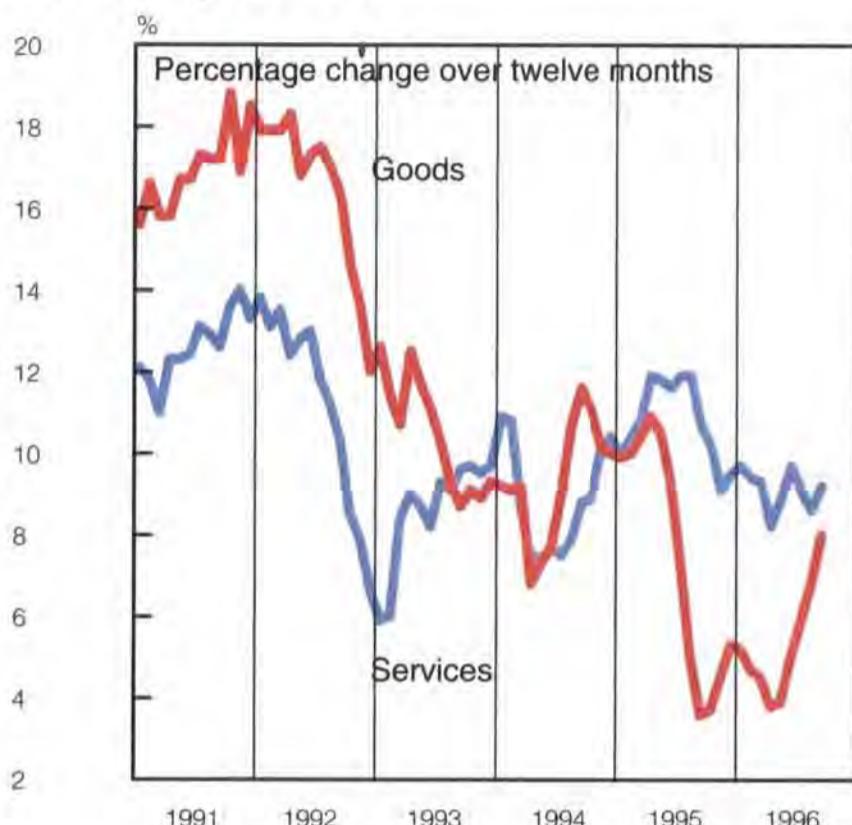
Table 4. Consumer price inflation over twelve months

Per cent

Period	Overall inflation	Underlying inflation
1996: Jan.....	6,9	7,3
Feb	6,5	7,1
Mar	6,3	6,8
Apr.....	5,5	6,6
May.....	5,9	6,8
Jun.....	6,9	7,3
Jul.....	7,1	7,6
Aug.....	7,5	7,5
Sep.....	8,4	8,0
Oct.....	9,1	8,5

Foreign trade and payments

Consumer price index



in June 1996, 8,4 per cent in September and 9,1 per cent in October. The prices of consumer goods, which are strongly influenced by increases in domestic production costs, contributed more than the prices of consumer services to the recent acceleration of overall consumer price inflation. Whereas the prices of consumer goods accelerated by 4,9 percentage points from 3,8 per cent in April 1996 to 8,7 per cent in October, the prices of consumer services accelerated by 1,6 percentage point from 8,2 per cent in April 1996 to 9,8 per cent in September.

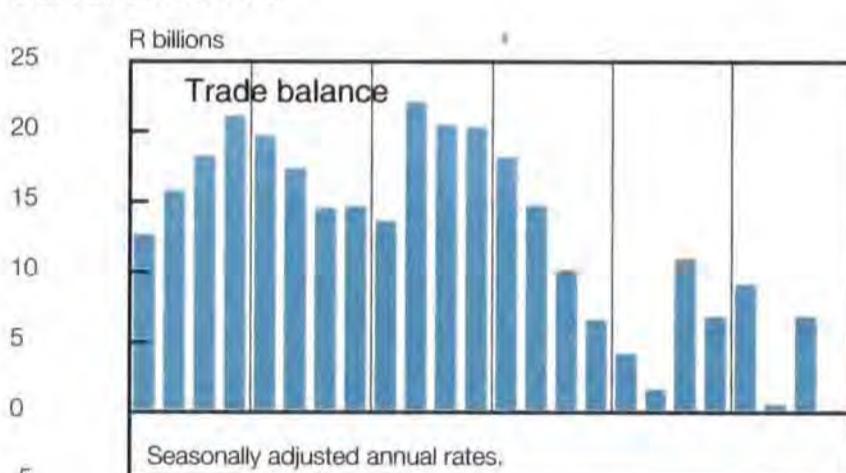
Underlying inflation (i.e. the rate of increase over periods of twelve months in the overall consumer price index excluding the prices of food and non-alcoholic beverages, home owners' cost and value-added tax) has been below 10,0 per cent for an uninterrupted period of 31 months. It has, nonetheless, accelerated from 6,6 per cent in April 1996 – its lowest point since February 1979 – to 8,0 per cent in September and 8,5 per cent in October. This acceleration in underlying inflation clearly signals that policy-makers cannot relax in their vigil against price inflation.

Current account

The deficit on the current account of the balance of payments, which had widened from R2,3 billion in the first quarter of 1996 to R4,7 billion in the second quarter, shrank to R3,5 billion in the third quarter. In the first three quarters of 1996 the cumulative deficit on the current account accordingly totalled R10,5 billion. After adjustment for seasonal influences and measured at an annualised rate, the deficit on the current account contracted from R16,8 billion in the second quarter to R11,0 billion in the third quarter. As a ratio of gross domestic product, the deficit on the current account declined from 3,1 per cent in the second quarter to 2,0 per cent in the third quarter.

Sharp increases in the value of merchandise exports and in net gold exports were the main factors responsible for the improvement in the balance on the current account in the third quarter of 1996. Part of the increase in the value of exports during the third quarter of 1996 was probably due to the depreciated exchange rate of the rand. The value of imports, of course, also increased as a result of the depreciation of the rand, but this increase could not fully offset the increase in export values.

Current account



R billions

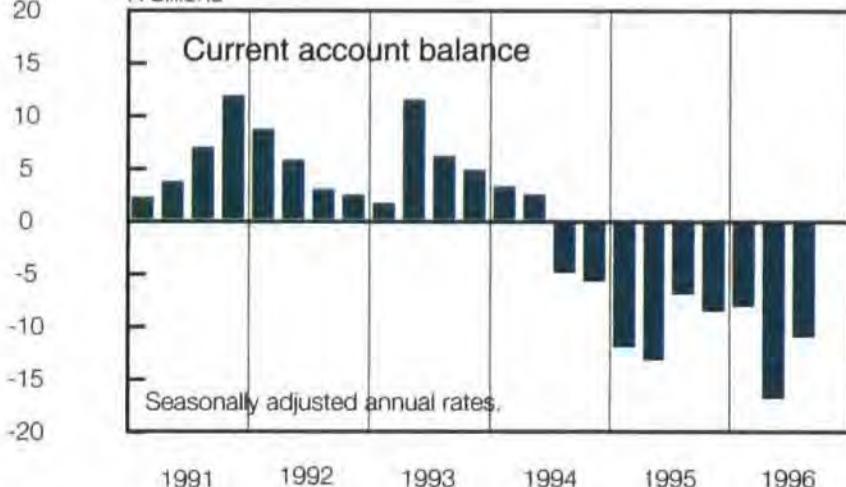


Table 5. Balance of payments on current account

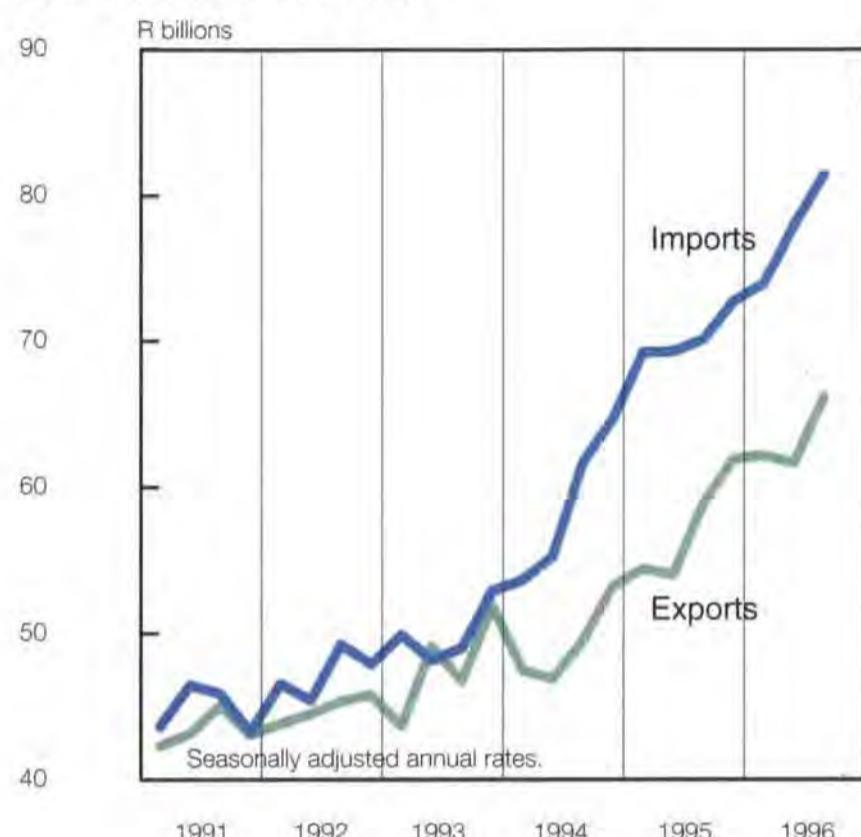
Seasonally adjusted and annualised rates

R billions

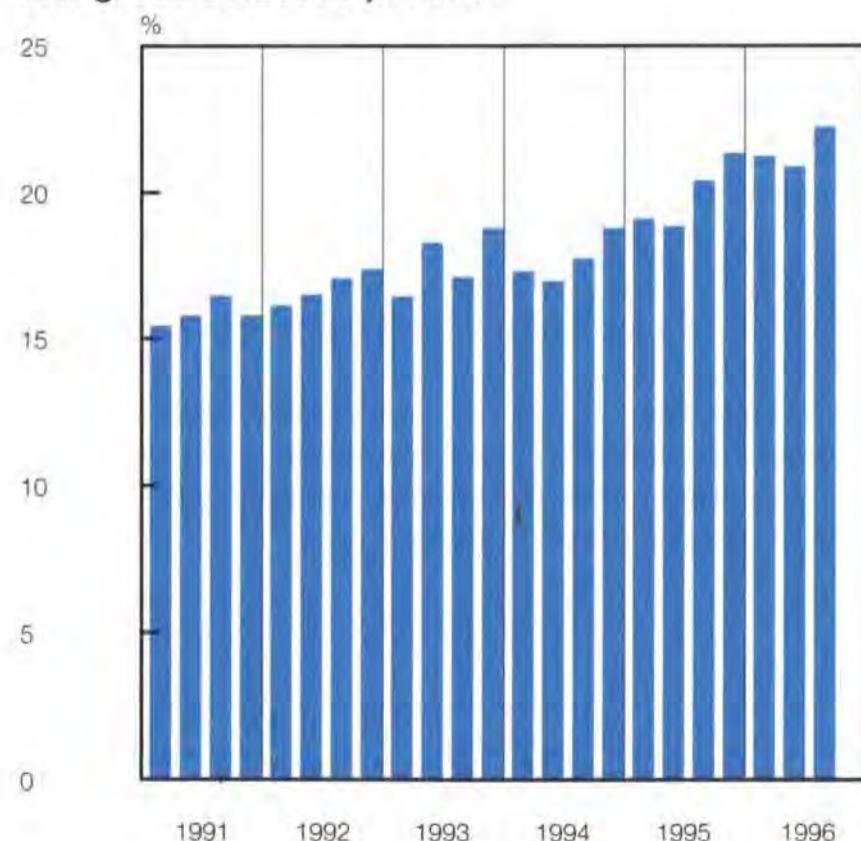
	1995		1996	
	Year	1st qr	2nd qr	3rd qr
Merchandise exports.....	81,3	90,0	94,3	102,8
Net gold exports.....	22,5	23,4	20,8	26,5
Merchandise imports.....	-98,0	-104,3	-114,5	-122,5
Net service and transfer payments	-16,0	-17,2	-17,4	-17,8
Balance on current account	-10,2	-8,1	-16,8	-11,0

The value of *merchandise exports* rose from a seasonally adjusted and annualised value of R94,3 billion in the second quarter of 1996 to R102,8 billion in the third quarter. This represents a quarter-to-quarter increase of 9 per cent. The value of exports of mining products and manufactured goods rose strongly in the third quarter of 1996. The export values of mining products, many of which are determined in foreign currency, benefited from the decline in the exchange rate of the rand. The price elasticity of the export demand for South Africa's manufactured goods is also estimated to exceed the value of unity; it is therefore not entirely surprising to see the export quantities of manufactured goods responding positively to the increased competitiveness of local producers. Chemical products, machinery and electrical equipment and transport equipment showed a strong increase in export values in the third quarter. The exports of agricultural goods also began to rise on account of the high level of agricultural production that followed from the excellent climatic conditions experienced in the first half of the year.

The *volume of merchandise exports* rose by slightly more than 7 per cent in the third quarter of 1996. The physical quantity of exported goods in the first nine months of 1996 was no less than 13½ per cent above its level in the corresponding period of 1995. As this growth rate is likely to exceed that of aggregate world trade, it is conceivable that South Africa gained some market share in international trade during the first three quarters of 1996. As a percentage of real gross domestic product, merchandise exports, at constant prices, rose from 20,9 per cent in the second quarter of 1996 to 22,2 per cent in the third quarter. Although the movement in international commodity prices remained relatively uninspiring, the average price *level of merchandise exports* still rose by 2 per cent from the second to the third quarter of 1996 owing to the further decline in the nominal exchange rate of the rand.

Real merchandise trade

The value of *net gold exports*, at seasonally adjusted and annualised rates, fell from R23,4 billion in the first quarter of 1996 to R20,8 billion in the second quarter, but then recovered strongly to R26,5 billion in the third

Real merchandise exports as percentage of real gross domestic product

quarter. The increase in the third quarter of 1996 could be attributed to higher rand prices received for gold exports and to an increase in the volume of gold exported. Although the average fixing price of gold on the London market declined from US\$390 per fine ounce in the second quarter of 1996 to US\$385 in the third quarter, the rand equivalent of the gold price moved from R1 683 per fine ounce to R1 721 per fine ounce over the same period. The rand price of gold advanced to R1 744 per fine ounce in October 1996, while the dollar price retreated further to US\$381 per fine ounce. The selling of gold from inventories that had been accumulated over previous quarters resulted in an increase of 10% per cent in the physical quantity of gold exports from the second quarter of 1996 to the third quarter.

The persistently high level of aggregate domestic demand, the depreciation of the rand, the resultant rise in the prices of imported goods and expectations of further declines in the exchange rate of the rand which encouraged the early import of intermediate goods and capital equipment in order to beat higher prices later, were primarily responsible for the rise of 7 per cent in the *value of merchandise imports* between the second and the third quarter of 1996. The depreciation of the rand, rising international oil prices and modest price increases in trading partner countries caused the prices of merchandise imports to rise by 3 per cent in the third quarter of 1996. Mainly due to pronounced increases in the imports of agricultural products and manufactured goods, the volume of imports rose by 4 per cent from the second to the third quarter of 1996.

Net service and transfer payments to non-residents (seasonally adjusted and annualised), which had increased to R17,4 billion in the second quarter of 1996, rose again to R17,8 billion in the third quarter. This increase in the deficit on the services account of the balance of payments was the net result of a rise of R1,7

billion in payments for services to foreigners and a rise of R1,3 billion in receipts for services rendered to non-residents. More specifically, the higher payments for services resulted from the higher level of foreign trade and the associated payments for freight and insurance, and higher interest payments on account of the increased debt exposure of South African organisations to non-residents.

Capital account

Among the many ramifications of the depreciation of the rand was a drastic turnaround in the capital account of the balance of payments. As investors' perceptions of South Africa turned increasingly negative, the net inward movement of capital not related to reserves fell at first from an average quarterly figure of R4,8 billion in 1995 to R1,4 billion in the first two quarters of 1996 and then changed to a net outflow of R0,2 billion in the third quarter of 1996. Included in this net outflow of capital were various payment commitments in terms of the existing formal agreements for the repayment of foreign debt that was previously affected by the debt standstill arrangements, such as R575 million which had to be paid mostly to foreign creditor banks, R685 million of government-guaranteed loans and R760 million of previously affected debt which had been converted into long-term loans maturing in the third quarter of 1996.

The net movements of *long-term capital* experienced an abrupt reversal: inflows of long-term capital of R4,3 billion in the first quarter of 1996 and R1,9 billion in the second quarter changed to a net outflow of R0,1 billion in the third quarter. All the institutional sectors indicated in Table 7, apart from the private sector, recorded net outflows of long-term capital. The inflow of long-term capital to domestic private-sector entities was predominantly in the form of net purchases

Table 7. Net capital movements not related to reserves

R billions

	Year	1995			1996		
		1st qr	2nd qr	3rd qr	1st qr	2nd qr	3rd qr
Long-term capital							
Public authorities.....		4,6	1,3	0,1	-0,2		
Public corporations....		2,3	0,9	1,0	-0,8		
Monetary sector.....		1,8	-0,2	-0,4	-0,2		
Private sector.....		6,4	2,3	1,2	1,1		
Total.....		15,1	4,3	1,9	-0,1		
Short-term capital.....		4,1	-4,0	0,7	-0,1		
Total capital		19,2	0,3	2,6	-0,2		

Table 6. Merchandise imports and exports

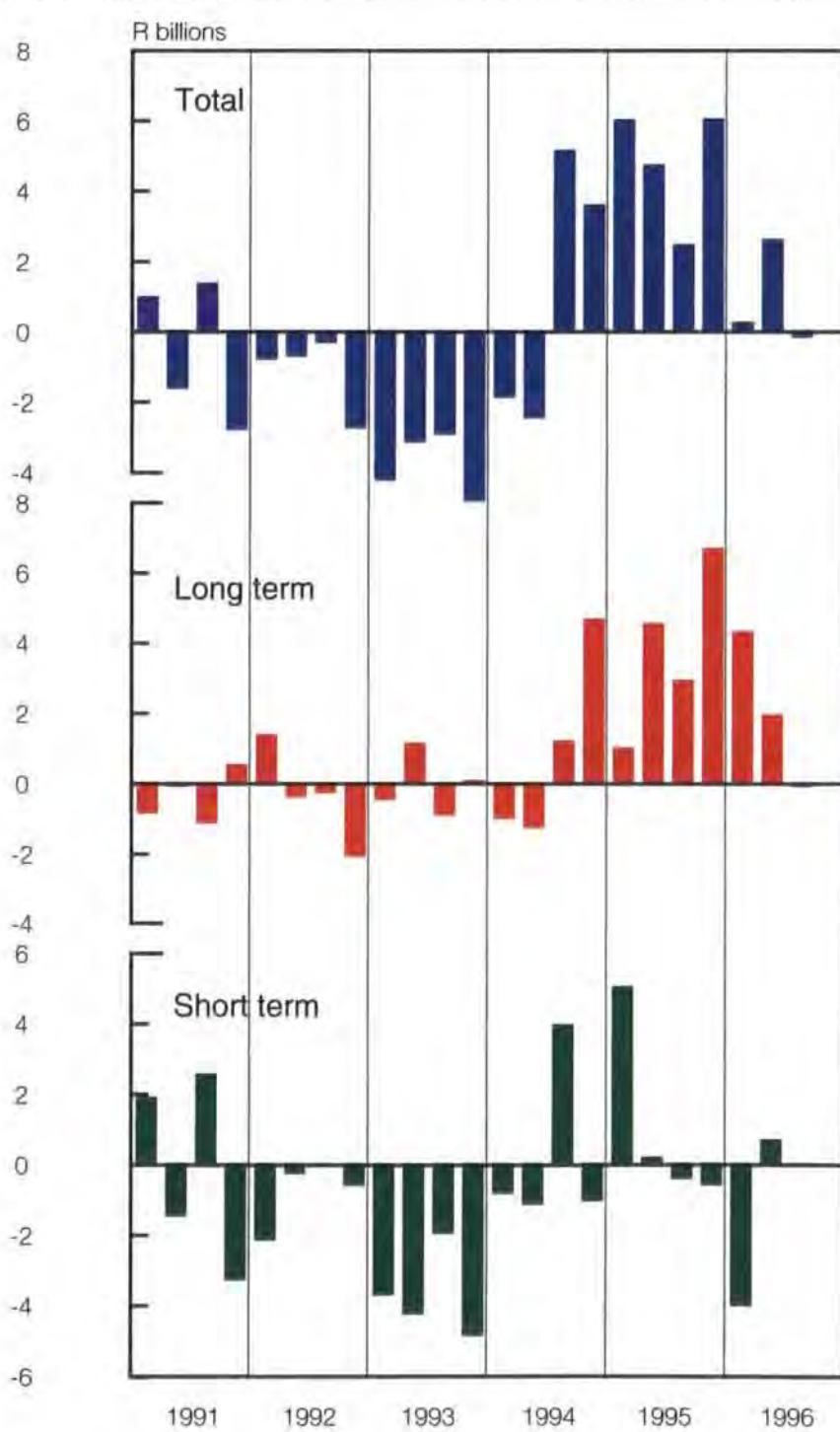
Seasonally adjusted quarter-to-quarter percentage change

	1996		
	1st qr	2nd qr	3rd qr
Merchandise imports			
Value.....	3	10	7
Price.....	1	4	3
Volume.....	2	6	4
Merchandise exports			
Value.....	2	5	9
Price.....	2	6	2
Volume.....	-	-1	7

by non-residents of shares listed on the Johannesburg Stock Exchange to an amount of R1,5 billion. However, non-residents became net sellers of shares to the value of R1,3 billion in October 1996.

Predictably, net movements of *short-term capital* became even more volatile than before the rand began to depreciate in February 1996. A net outflow of short-term capital, including unrecorded transactions, of R4,0 billion in the first quarter of 1996 turned into a net inflow of R0,7 billion in the second quarter, which was subsequently converted into a net outflow of R0,1 billion in the third quarter. Unlike previous quarters when the private banks were prominently involved in the inward or outward movement of short-term capital to and from the country, banks reduced their short-term foreign liabilities by a relatively small amount in the third quarter.

Net capital movements (not related to reserves)



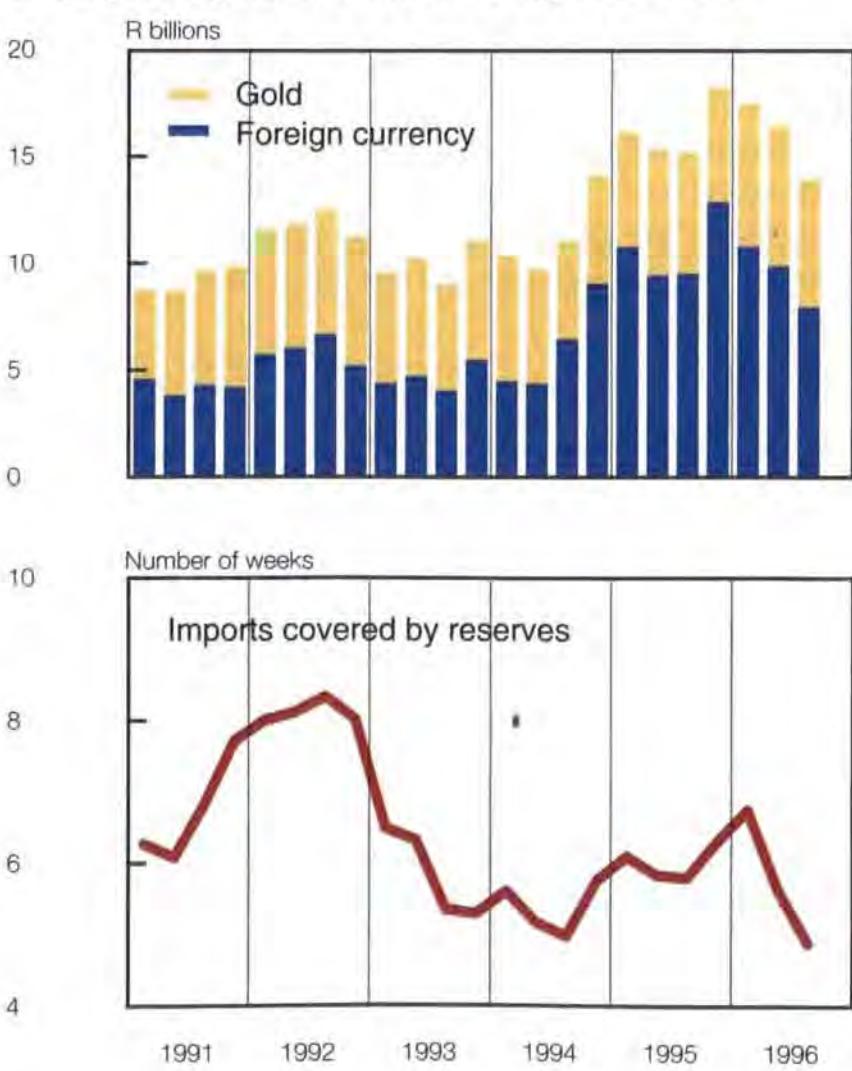
Owing to the strong inflow of short-term capital to the banking sector in the second quarter of 1996, the short-term foreign liabilities of the banks remained at a high level throughout the third quarter.

Foreign reserves

The joint effect of deficits on the current account and the capital account of the balance of payments was a decline of R3,7 billion in the country's net gold and other foreign reserves during the third quarter of 1996. The accumulated decline in the *net gold and other foreign reserves* came to R7,8 billion in the first three quarters of 1996. This decline compares with a buildup of the net gold and foreign reserves amounting to R4,7 billion in the first three quarters of 1995. In October 1996, however, the net gold and other foreign reserves of the Reserve Bank rose once again by R0,4 billion.

The country's *gross gold and other foreign reserves* declined by R2,6 billion in the third quarter of 1996, bringing the overall level of gross foreign reserves to R13,9 billion at the end of that quarter. This level of gross foreign reserves consisted of about 43 per cent gold reserves and 57 per cent foreign currency holdings. Included in the foreign currency holdings at the end of September 1996 was an amount of R0,6

Total gross gold and other foreign reserves



billion obtained through short-term borrowing to raise the level of gross foreign reserves; this amount was fully repaid in October 1996. The gross foreign reserves of the country at the end of September were equal to the value of imports for a period of only about 4½ weeks, compared with about 5½ weeks at the end of September 1995. Subsequently, the gross foreign reserves of the Reserve Bank improved slightly by R0,2 billion in October 1996.

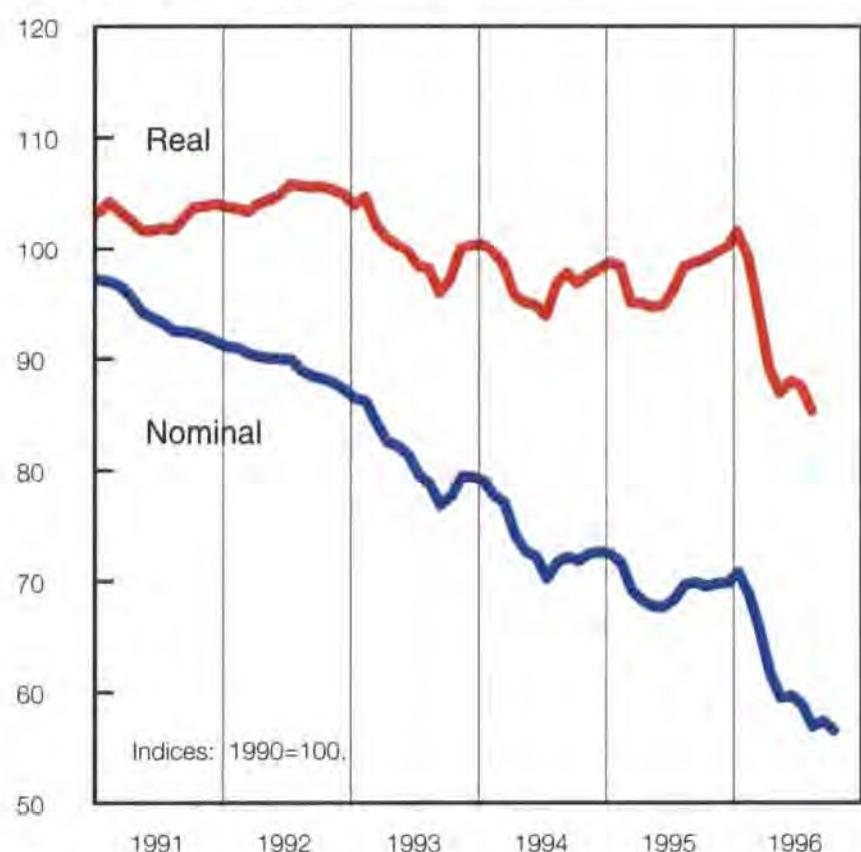
Exchange rates of the rand

The nominal effective exchange rate of the rand, which had declined by 14,6 per cent between the end of 1995 and the end of June 1996, declined further by 4,3 per cent over the three-month period to the end of September 1996. The index value of the nominal effective exchange rate declined steeply in July 1996, but relative tranquillity prevailed in the foreign currency market during the remaining months of the third quarter and, in fact, the rand appreciated marginally. This brief interlude of relative stability came to an end in October 1996 when the rand again became the target of speculative attacks which caused its nominal trade-weighted value to decline by 5,5 per cent from the end of September 1996 to the end of October. This brought the accumulated depreciation of the rand over the first ten months of 1996 to 22,7 per cent.

The real effective exchange rate of the rand declined by 12,1 per cent over the first half of 1996. A further decline of 3 per cent in July and August 1996 then took the index of the real exchange rate of the rand to a level that was 15,9 per cent lower than the recent upper turning-point in January 1996. This decline is a fair approximation of the extent to which the competitiveness of South African producers has improved since the beginning of 1996.

The value of the net daily turnover in foreign exchange (i.e. the gross purchases and sales of the major currencies in the spot and forward markets, adjusted for double counting arising from local interbank trans-

Effective exchange rates of the rand



actions) declined from an average daily turnover of US\$6,7 billion in the second quarter of 1996 to US\$4,9 billion in the third quarter. This overall decline occurred in both the spot and the forward exchange market. The value of transactions in the spot market involving non-resident institutions, including the offshore branches of South African banks, increased from an average of US\$1,5 billion per day in the second quarter of 1996 to US\$1,8 billion per day in the third quarter. These developments coincided with the slowdown in the pace of decline in the exchange rate of the rand during the third quarter of 1996.

Table 8. Changes in the exchange rates of the rand

Per cent

	31 Dec 1995 to 31 Mar 1996	31 Mar 1996 to 30 Jun 1996	30 Jun 1996 to 30 Sep 1996	30 Sep 1996 to 31 Oct 1996	31 Dec 1995 to 31 Oct 1996
Weighted average.....	-8,0	-7,2	-4,3	-5,5	-22,7
US dollar.....	-8,9	-7,6	-4,1	-4,6	-23,0
British pound.....	-7,5	-8,9	-5,0	-8,5	-26,8
German mark.....	-6,4	-4,6	-3,8	-5,6	-18,9
Japanese yen.....	-5,8	-4,5	-2,8	-3,0	-15,2
Netherlands guilder.....	-6,5	-4,4	-3,8	-5,6	-18,8
Italian lira.....	-9,9	-9,6	-4,6	-5,4	-26,4

The weakness of the rand since February 1996 was driven by persistent rumours about imminent changes in the exchange controls that still apply to South African residents, the weak overall balance of payments situation, the low level of foreign exchange reserves, rising inflation and somewhat one-sided expectations about future movements in the exchange rate which created opportunities for destabilising speculation. As indicated in Table 8, the decline in the exchange value of the rand was particularly severe against the British pound and the Italian lira. The rand equivalent of the US dollar rose from R3,65 at the end of December 1995 to R4,74 at the end of October 1996.

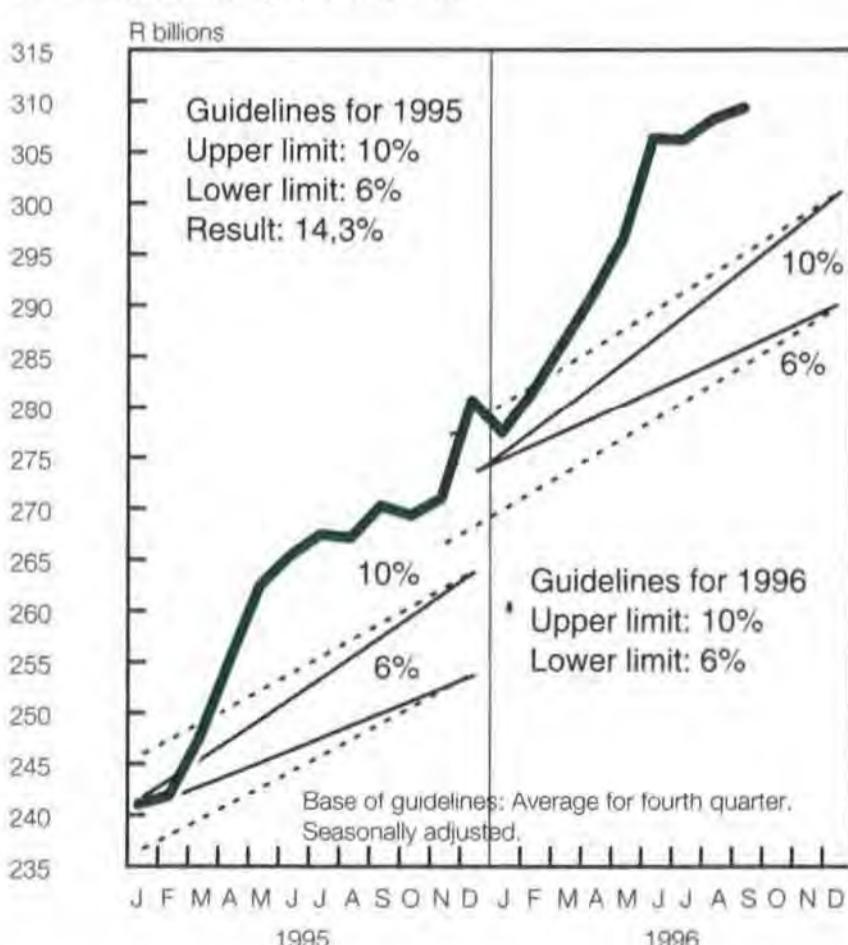
Monetary developments, interest rates and financial markets

Money supply

The broadly defined money supply ($M3$) expanded rapidly in the first nine months of 1996. The twelve-month growth rate of $M3$ fluctuated in a range between 16,1 per cent in February 1996 and 13,6 per cent in May. In the third quarter of 1996, the twelve-month growth rate seemed to have slackened slightly from 15,7 per cent in June to 14,5 per cent in September. The quarter-to-quarter growth in the quarterly average value of $M3$ (seasonally adjusted and annualised), which had accelerated from 6,9 per cent in the fourth quarter of 1995 to 13,7 per cent in the first quarter of 1996 and 21,2 per cent in the second quarter, also slowed down somewhat to 18,6 per cent in the third quarter of 1996.

As a result of the rapid monetary expansion in the first three quarters of 1996, the seasonally adjusted monthly values of $M3$ exceeded, by a substantial margin, the upper limit of the guideline range of 6-10 per cent for the current guideline year. The seasonally adjusted value of $M3$ in September 1996 was R13,8 billion or 4,7 per cent higher than the upper limit of the guideline cone. The growth in the seasonally adjusted value of $M3$, at an annualised rate and measured from the base of the guideline year, came to 15,9 per cent

Guidelines for growth in $M3$



in September 1996; this was well above the upper limit of 10 per cent for the current guideline growth range.

The rapid growth in the money supply during 1996 was related partly to the strong expansion in consumption and investment expenditure, including inventory accumulation. Apart from this transactions need for money, the private sector's liquidity preference might have been strengthened by political uncertainty during the second quarter of 1996.

The higher demand for money holdings was also motivated by a speculative need for money, founded on expectations of major adjustments in the bond and share markets. Institutional investors, such as long-term insurers and pension funds, showed strong preference to maintain larger-than-usual liquid balances with monetary institutions. The decline in the exchange rate of the rand and expectations of likely policy interventions also strengthened the private non-bank sectors' liquidity preference.

Lower inflation and consequently some increased confidence in money as a store of value added to the demand for depository-type investments during 1996. The margins between the banks' lending and deposit rates narrowed slightly in the third quarter of 1996. This normally gives rise to an increase in bank-intermediated activity, thereby adding to the M3 money supply.

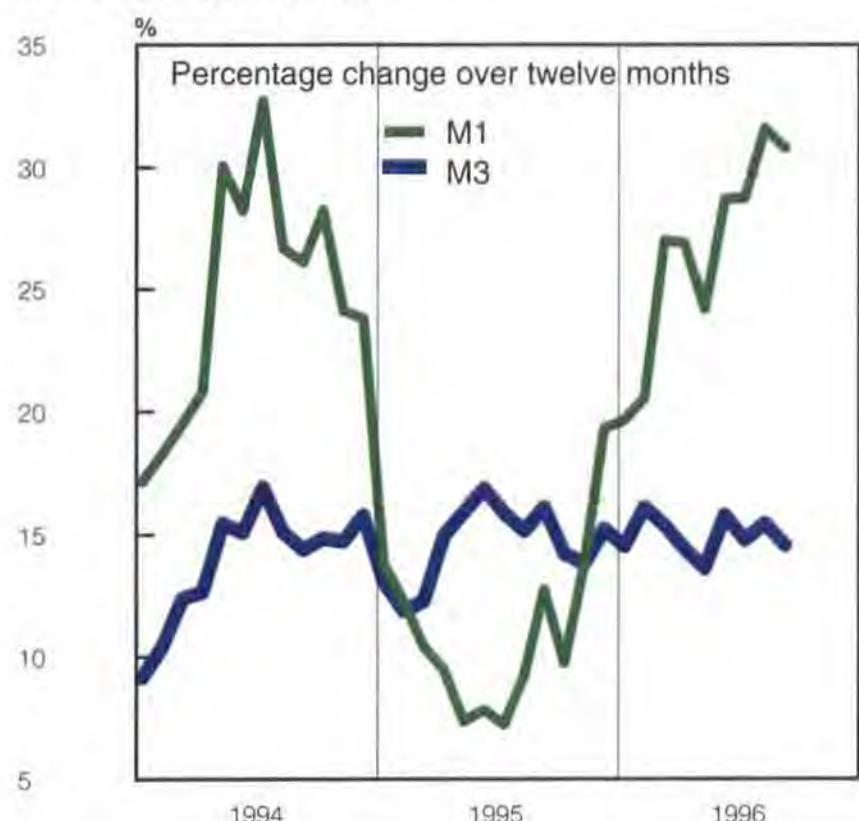
Evidence of the strong liquidity preference of the private sector during the first three quarters of 1996 is presented in Table 9. The changes in the components of M3 clearly reveal a preference for the holding of shorter-term deposits.

Table 9. Quarterly changes in components of monetary aggregates

R billions

Monetary aggregates	1996		
	1st qr	2nd qr	3rd qr
Notes and coin in circulation	0,3	0,5	-0,3
Cheque and transmission deposits.....	-2,4	4,5	3,7
M1A.....	-2,1	5,0	3,4
Other demand deposits.....	7,9	2,6	3,3
M1	5,8	7,6	6,7
Other short- and medium-term deposits.....	3,5	5,9	-3,6
M2	9,3	13,5	3,1
Long-term deposits	-1,3	1,7	1,0
M3	8,0	15,2	4,1

Monetary aggregates



Cheque and transmission deposits were highly popular in the second and third quarters of 1996, whereas other demand deposits maintained their popularity throughout the first three quarters of 1996. In total, these two categories of deposits contributed about 72 per cent to the growth in M3 in the first nine months of 1996. In contrast, long-term deposits either experienced relatively small increases or declined during each of the first three quarters of 1996 and contributed only about 5 per cent to the growth in M3 over the first three quarters of 1996.

The growth rates over twelve months in the narrower monetary aggregates also revealed the

Table 10. Twelve-month growth rates in M1 and M3

Per cent

Period	M1	M3
1996: Jan	19,6	14,5
Feb	20,5	16,1
Mar	27,0	15,3
Apr	26,9	14,4
May	24,1	13,6
Jun	28,7	15,7
Jul	28,7	14,7
Aug	31,6	15,4
Sep	30,7	14,5

preference for shorter-term deposits with monetary institutions. The twelve-month growth of M1 continuously outpaced the growth in M3 during the first nine months of 1996: the growth differential in favour of M1 was more than 16 percentage points in August and September 1996.

The *main counterpart* (in a statistical or accounting sense) of the R4,1 billion increase in M3 in the third quarter of 1996 was an increase in the monetary institutions' claims on the private sector. This was offset to a large extent by decreases in the monetary institutions' net foreign assets, their net claims on the government sector and their net other assets. The net claims of monetary institutions on the government sector showed a fairly drastic reversal from an increase of R8,9 billion in the second quarter of 1996 to a decline of R2,1 billion in the third quarter.

Credit extension

The rate of increase over twelve months in *total domestic credit extension* of the monetary sector increased from 13,2 per cent in December 1995 to 14,2 per cent in March 1996 and then to 16,4 per cent in June 1996. Total domestic credit growth over twelve months then remained at roughly 16 per cent in July and August 1996, but accelerated to 17,8 per cent in September. The relatively high rate of credit extension in the third quarter of 1996 was mainly the result of strong growth in credit extension to the non-bank private sector. As mentioned earlier, the net claims of the monetary institutions on the

government sector declined in the third quarter of 1996.

Credit extended by the monetary institutions to the non-bank *private sector* persisted to increase at an inordinately high rate during the first nine months of 1996. The twelve-month growth rate in credit extension to the private sector accelerated at first from 17,6 per cent in December 1995 to 18,9 per cent in July 1995; it then receded slightly to 18,1 per cent in September 1996. These monthly growth rates exceeded the inflation rate as measured by changes in the consumer price index and the increase in real credit extension over twelve months accelerated from 10,0 per cent in December 1995 to 11,6 per cent in March 1996. When consumer-price inflation began to accelerate in the second quarter of 1996, the rise in real private-sector credit extension declined to 11,0 per cent in June 1996 and 8,9 per cent in September.

An analysis of monetary institutions' claims on the private sector by *type of credit* shows that growth in credit extension to the private sector consisted mostly of increases in mortgage advances, instalment sales, leasing finance, overdrafts and "other loans and advances". Together the increase in these types of credit extension exceeded the overall increase in the monetary sector's claims on the private sector. The strong demand of private-sector entities for credit was boosted by firm increases in current expenditure by households and capital expenditure by companies. High external trade volumes and a switching of trade-based credit from foreign to domestic sources on account of the increased volatility of the exchange rate and recent rises in forward cover costs gave further impetus to private-sector credit growth in the third quarter of 1996.

Mortgage advances by the monetary sector to the non-bank private sector once again showed a strong rise in the third quarter of 1996. Considering the slowing of activity in the real estate market since May 1996, it seems obvious that a sizeable portion of

Credit extended by monetary institutions

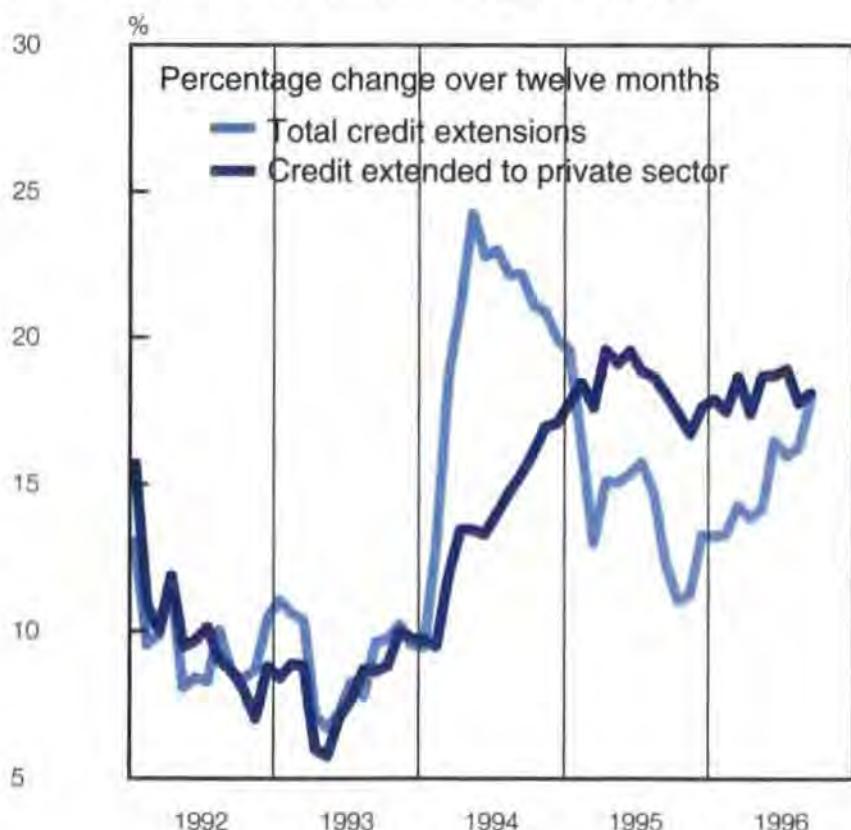


Table 11. Increases in credit extension to the private sector by main type of credit

Type of credit	1996		
	1st qr	2nd qr	3rd qr
Mortgages	5,3	5,1	6,5
Instalment sales	1,6	2,3	1,8
Leasing finance.....	0,7	0,9	1,7
Investments	1,0	-1,6	0,6
Bills discounted	-0,6	0,3	-1,2
Other loans and advances..	6,2	3,9	5,0
Total.....	14,2	10,9	14,4

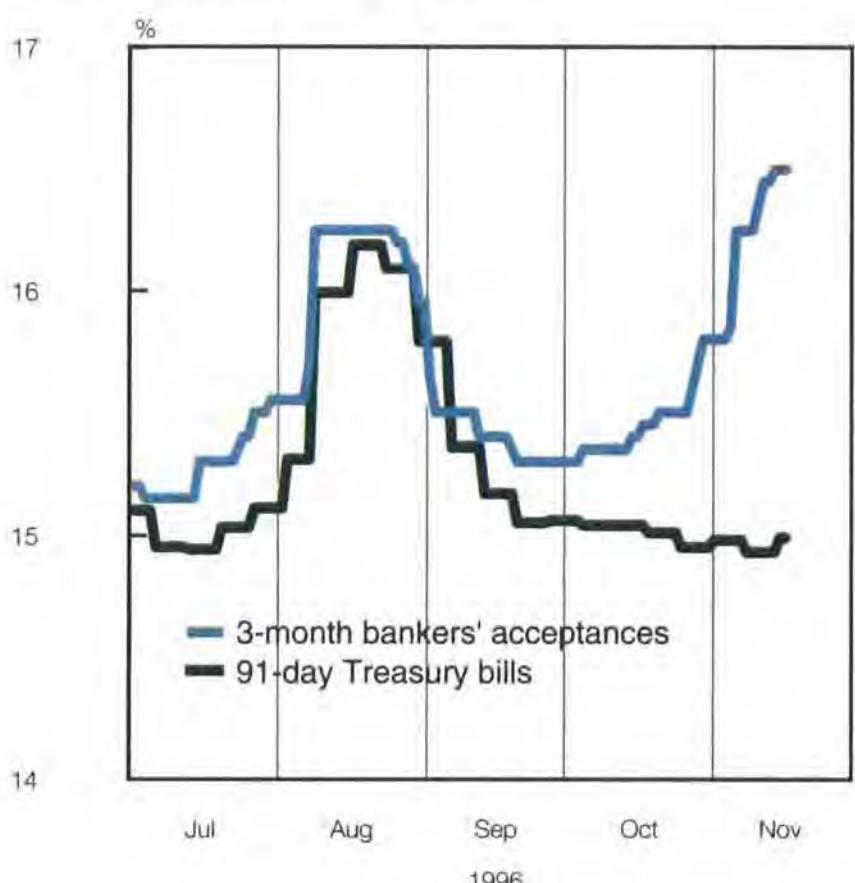
mortgage advances to the private sector must have been used for purposes other than the acquisition of real estate or the construction or improvement of residential buildings.

The shift in the relative importance of credit extended from the household to the private corporate sector in the second quarter of 1996 continued in the third quarter. Although the increment in credit extended to private households rose from R5,3 billion in the second quarter of 1996 to R6,1 billion in the third quarter, the increment in credit extended to the corporate sector rose even more from R4,5 billion in the second quarter to R6,3 billion in the third quarter. In terms of percentage changes, the growth over twelve months in credit extension to households at 16,0 per cent in September 1996 was well below the growth of 19,4 per cent in credit extension to the corporate sector over the same period.

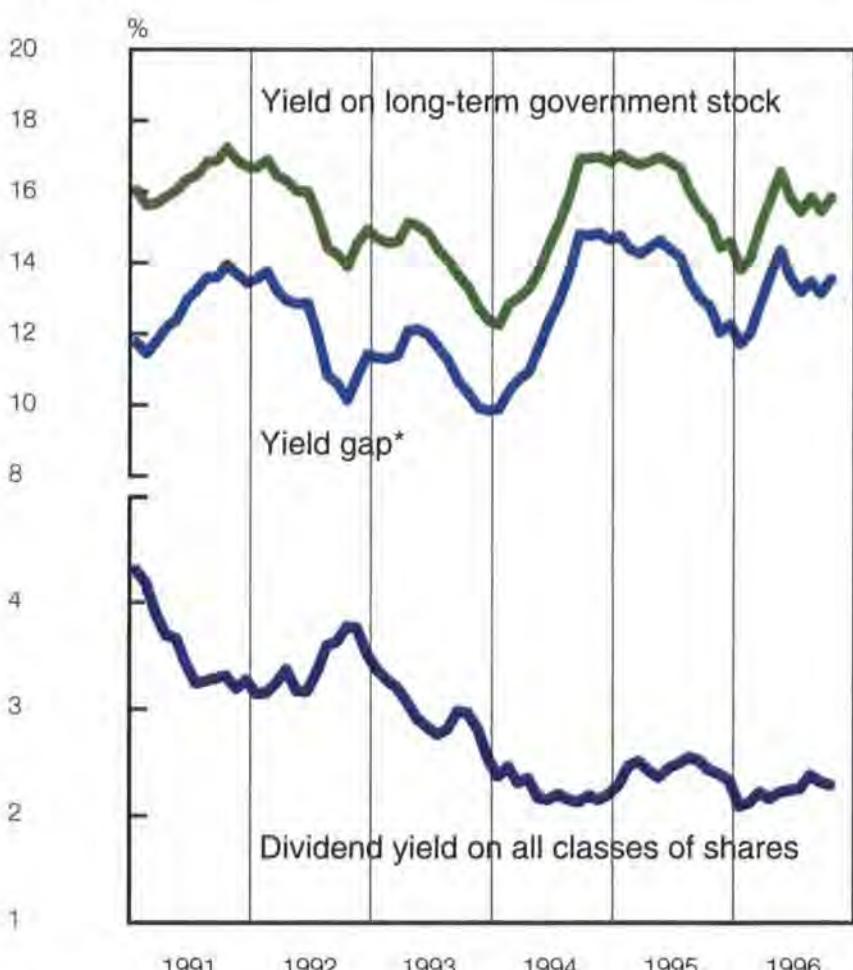
Interest rates and yields

Bond yields, which had risen steeply from January to May 1996, fluctuated in a relatively narrow range of about 15 to 16 per cent in the ensuing months. The upward movement in the monthly average yield on long-term government stock from 13,77 per cent in January 1996 to 16,53 per cent in May was set in

Money market interest rates



Yields



* The monthly average yield on long-term government stock less the dividend yield on all classes of shares measured in percentage points.

motion by an upward adjustment in bond yields in the American financial markets and the decline in the exchange rate of the rand from the middle of February 1996. Since June 1996 the trend movement of the yield on long-term government stock has lacked clear upward or downward direction. Both local and foreign investors appear to be uncomfortable with yields below the 15 per cent mark whilst inflation is rising and the rand remains weak. At the upper end of the range, it would appear that the relatively weak demand for funds by public-sector entities in the first half of fiscal 1996/97 prevented rates from rising substantially beyond the 16 per cent level.

In similar fashion, *rates in the money market* rose throughout the first five months of 1996. The rate on bankers' acceptances of three months, for example, increased from 14,10 per cent at the end of January 1996 and 14,05 per cent at the end of February to 16,40 per cent at the end of May 1996. This rate then declined to 15,20 per cent at the end of June 1996. In the course of the third quarter the rate on bankers' acceptances fluctuated around a level that was slightly higher than in June, but moved upwards to 15,80 per cent at the end of October in response to the weakening of the rand, higher inflation expectations and market speculation about an imminent tightening of monetary policy. The rate on bankers' acceptances moved even higher in November 1996 and came to 16,50 per cent on 15 November.

Unlike the upward movement in the rate on bankers' acceptances of three months during October and

November 1996, the tender rate on Treasury bills of three months gradually drifted lower from 15,06 per cent at the end of September to (14,99) per cent on 15 November. The special status enjoyed by short-dated Treasury bills, the limited availability of liquid assets in the market and the relatively strong demand by banks for liquid assets were the principal forces behind the somewhat contradictory behaviour of the tender rate on Treasury bills of three months in October and the first half of November 1996.

The level and the shape of the *yield curve* varied considerably during the first ten months of 1996. Between January and May 1996 the yield curve moved sharply upwards. In May the yield curve was not only higher than in January, but also slightly more inverted at the short end and steeper at the long end. As rates generally declined across the full maturity spectrum, the yield curve drifted downwards until September 1996. The upward movement of rates in October 1996 raised the yield curve to a level that was slightly higher than in May, but with an even flatter slope, signalling increased uncertainty about the future direction of financial policies and expectations of higher future inflation.

Against the backdrop of very tight money market conditions, *Bank rate* was raised from 15 to 16 per cent on 29 April 1996 in an attempt to create orderly trading conditions in the foreign exchange market. The money market remained generally tight in the period since the end of April and the tender rate on Treasury bills of three months occasionally increased to a level that was higher than *Bank rate*. Despite these upward pressures on official lending rates and the further weakening of the rand between April and October 1996, *Bank rate* remained unchanged until the end of October. The persistence of the money market shortage at a very high level in November 1996, the further increase of rates in the money market, the high rate of increase in the money supply and rising inflation expectations then

caused the Reserve Bank to raise *Bank rate* by one percentage point to 17 per cent on 21 November 1996.

The *prime overdraft rate of banks* was increased from 18,50 per cent to 19,50 per cent on 29 April 1996 in response to the rise in *Bank rate* on that day. The rising money market rates exerted upward pressure on the cost of funding banks' lending activities in May. To alleviate this downward pressure on the margin between their lending rates and the cost of funds, the banks raised their prime overdraft rates to 20,50 per cent on 20 May 1996, even though *Bank rate* was left unchanged at the time. With the decline of money market rates in June, thereby easing banks' funding costs, and after the Reserve Bank had announced a reduction of 0,75 percentage points in the cost of accommodation against collateral of second-tier assets, the banks lowered their prime overdraft rates to 19,50 per cent on 1 July 1996. Subsequent to the cancellation of the levy on financial services rendered, the banks again lowered their prime overdraft rates by 0,25 percentage points to 19,25 per cent on 1 October 1996. Following the rise in *Bank rate* on 21 November 1996, the banks raised their prime overdraft rates by one percentage point to 20,25 per cent on the same day.

The *real or inflation-adjusted prime overdraft rate of banks*, i.e. the nominal prime overdraft rate adjusted for the change in the consumer price index over twelve months, remained relatively high in the first nine months of 1996. This rate increased from 10,9 per cent at the end of December 1995 to 13,8 per cent at the end of May 1996; it subsequently fell back to 10,2 per cent at the end of September 1996. The decline in the real prime overdraft rate since May 1996 was more a reflection of the acceleration in the twelve-month rate of consumer price inflation rather than the decline in the nominal prime overdraft rate over this period.

The *predominant rate on mortgage loans of banks* traced the changes in the prime overdraft rate of banks

Table 12. Interest rates and yields

Per cent at month-end, unless specified otherwise

End of	Monthly average yield on long-term government stock	3-months bankers' acceptances	Prime overdraft rate		Predominant rate on mortgage loans	Predominant rate on 12-months fixed deposits
			Nominal	Real		
1996: Jan	13,77	14,10	18,50	10,85	18,25	14,00
Apr	15,78	15,20	19,50	13,24	18,25	13,50
May	16,53	16,40	20,50	13,83	19,25	14,50
Jun	15,78	15,20	20,50	12,77	20,25	15,00
Jul	15,39	15,55	19,50	11,57	19,25	14,25
Aug.....	15,82	15,95	19,50	11,16	19,25	14,25
Sep.....	15,42	15,30	19,50	10,21	19,25	15,00
Oct	15,80	15,80	19,25	9,31	19,00	15,00

closely. Mortgage rates were raised by one percentage point to 19,25 per cent in May 1996 and further to 20,25 per cent in June, but were subsequently reduced to 19,25 per cent in July and 19,00 per cent in October 1996.

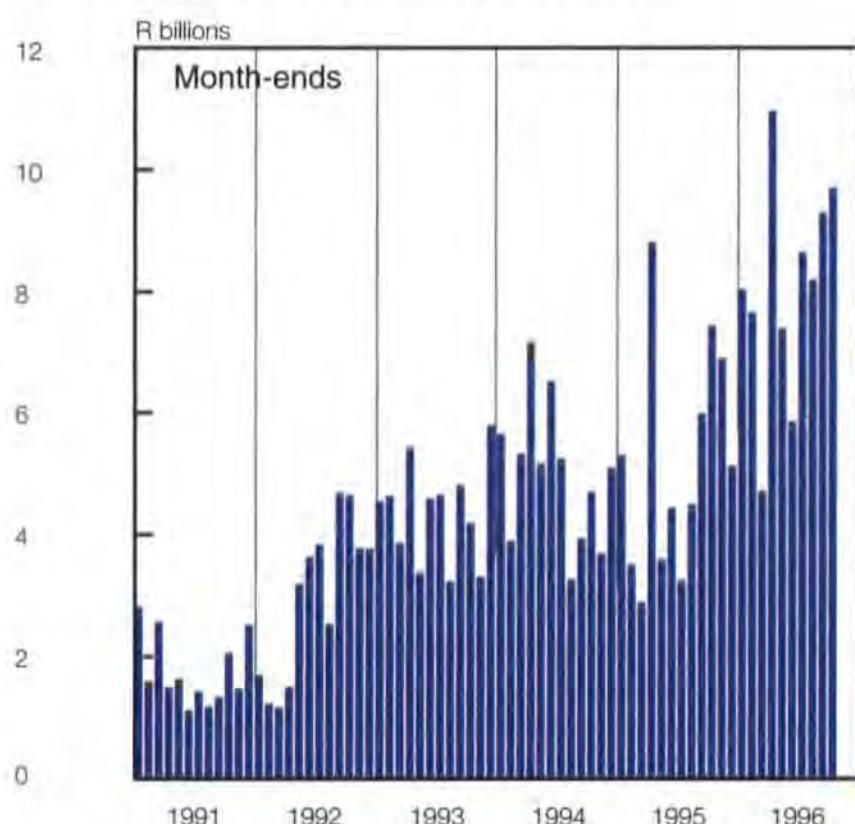
The predominant *'retail rate on twelve-month fixed deposits'* was increased by one percentage point to 14,50 per cent in May 1996 and to 15,00 per cent in June, but was lowered again to 14,25 per cent in July. The twelve-month fixed-deposit rate was increased to 15 per cent in September when money-market conditions once again became very tight.

Money market conditions

Money market conditions fluctuated widely in the first ten months of 1996, but remained generally tight since April. The amount that the Reserve Bank had to provide to banks at month-ends changed within a range of R4,7 billion at the end of March 1996 and R11,0 billion at the end of April. This "money market shortage" increased in the third quarter of 1996 from R5,8 billion at the end of June to R9,3 billion at the end of September. The amount of Reserve Bank accommodation increased once more in October 1996 to R9,7 billion at the end of the month.

The tightening of money market conditions during the third quarter of 1996 was mainly a consequence of a decline of R1,4 billion in the net foreign assets of the Reserve Bank, an increase of R0,8 billion in the notes and coin in circulation outside the Reserve Bank and an increase of also R0,8 billion in government deposits with the Reserve Bank.

Accommodation at the discount window



The Reserve Bank's operations in the money market during the third quarter of 1996 were intended to allow the money market shortage to reflect the underlying imbalance in demand and supply and to provide temporary assistance in times of extreme tightness. To this end, the Bank made appropriate adjustments to the asset portfolio of the Corporation for Public Deposits and also entered into swap arrangements with private banks in order to ease very tight money market conditions. Some banks had to utilise second-tier assets as collateral against part of the accommodation obtained from the Reserve Bank during October and November.

Bond market

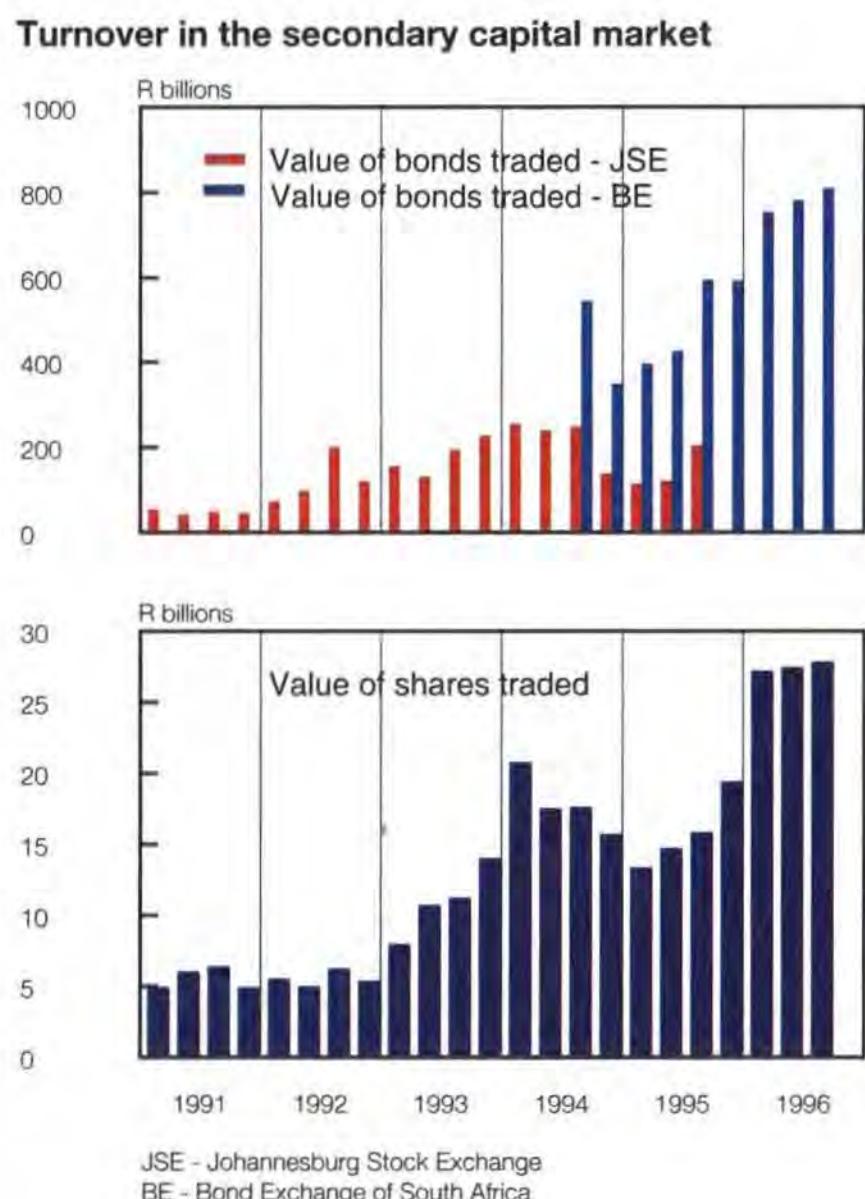
Net new borrowing by the public sector in the *domestic primary bond market* increased rapidly from R1,9 billion in the second quarter of 1996 to R9,8 billion in the third quarter. The total amount of funds raised by public-sector entities accordingly came to R11,7 billion in the first half of the current fiscal year, compared with the much larger amount of R19,6 billion in the first half of fiscal 1995/96.

Listed private-sector companies acquired funds through rights issues of fixed-interest securities (including convertible preference shares and debentures) amounting to R2,1 billion in the third quarter of 1996. These issues were the first of their kind since July 1995 and afforded the companies involved the opportunity to meet their financing needs at a cost below the prevailing high interest rates on other kinds of paper, while investors were attracted by the prospects of converting debt into equity at some future date.

The government raised funds in the *international primary bond market* in October 1996 through issues in the Eurobond market amounting to DM500 million (R1,5 billion) and in the United States market to an amount of \$300 million (R1,4 billion). The Eurobond issue was priced at 140 basis points above the comparable German government Bund maturing in 2003 and the dollar issue at 190 basis points above the prevailing yield on US government bonds with a maturity equal to that of the South African issue. These issues not only broadened the investor base, but also lengthened the maturity structure of South African government debt. No new funds were raised on the international bond markets by non-financial public-sector enterprises and private-sector companies during the third quarter of 1996. In fact, private-sector companies have not returned to the international bond market since the fourth quarter of 1995.

Activity in the *secondary bond market* remained very buoyant during the first three quarters of 1996. The value of bonds traded on the Bond Exchange increased from a quarterly average of R593 billion in the second half of 1995 to R753 billion in the first quarter of 1996 and R781 billion in the second quarter. Activity subsequently rose even further when the turnover reached R809 billion in the third quarter. In October

Table 13. Trading in the equity market



Quarter	Number of shares traded (millions)	Value of shares traded (R billions)	Net purchases by non-residents (R billions)
1995: 1st qr.....	1 119	13,3	0,8
2nd qr	1 158	14,7	2,0
3rd qr	1 348	15,8	1,2
4th qr	1 523	19,4	0,8
1996: 1st qr.....	1 990	27,2	2,4
2nd qr	1 912	27,4	2,0
3rd qr	2 370	27,8	1,4

increased moderately in 1996. Owing mainly to the relatively high level of share prices and the high cost of borrowing, the value of new capital raised increased to R16,4 billion, or by 7 per cent in the first nine months of 1996 compared with the first nine months of 1995.

The value of shares traded on the secondary equity market reached a record high of R27,8 billion in the third quarter of 1996. The average monthly value of shares traded then moved even higher from an average of R9,3 billion in the third quarter of 1996 to R12,6 billion in October. For the first ten months of 1996 as a whole, the overall value of shares traded on the Johannesburg Stock Exchange increased by 90 per cent. As share prices remained relatively flat in 1996, the increase in turnover must be attributed to a rise in the number of shares traded. Apart from lower marketable securities tax, turnover was also boosted by the introduction of computer-based and dual-capacity trading, the entry of financial institutions and foreign securities firms into the market and fierce competition within the broking community.

Non-residents remained active participants as buyers and sellers in the secondary equity market. Purchases of listed shares by non-residents amounted to R33,7 billion in the first ten months of 1996, or 70 per cent more than in the corresponding period of 1995. Sales of listed shares by non-residents came to R29,3 billion in the first ten months of 1996, leaving a net inward movement of non-residents' funds of R4,4 billion to the Johannesburg Stock Exchange. These net purchases, however, showed a distinct downward movement from R2,4 billion in the first quarter of 1996 to R2,0 billion in the second quarter and R1,4 billion in the third quarter; this was followed by net sales of equity amounting to R1,3 billion in October – the first time since December 1994 that non-residents were net sellers of shares.

The monthly average price level of all classes of shares fluctuated within a relatively narrow range from January to July 1996. The Johannesburg Stock

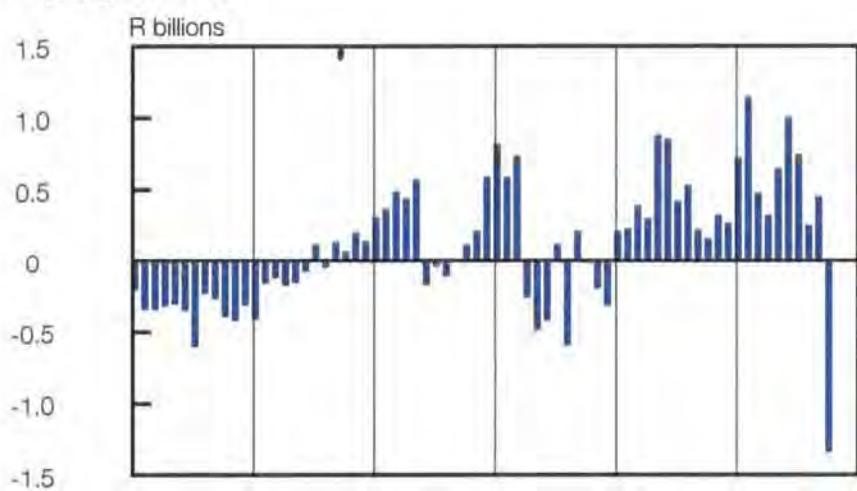
1996 the turnover declined marginally to R268 billion from a monthly average of R270 billion in the third quarter. The liveliness of the secondary bond market was prompted by the relatively high level of inflation-adjusted yields during 1996 which, together with a fair measure of yield variability, created opportunities for investors and speculators alike.

Non-residents were net purchasers of bonds to the amount of R2,0 billion in the first ten months of 1996. What is more, they increased their participation in the market by raising their purchases as a percentage of total turnover from 3,6 per cent in January 1996 to 7,6 per cent in October. Sales of bonds by non-residents also increased from 3,0 per cent of total turnover in January 1996 to 7,6 per cent in October 1996. Even though non-residents' participation in secondary bond trading is still rather modest, their trading activities have a significant effect on short-term price movements in the market. Whereas non-residents were net buyers of bonds from May to July 1996, they were net sellers in August and October.

Equity market

The demand for funds in the primary equity market by companies listed on the Johannesburg Stock Exchange

Net purchases by non-residents in the secondary equity market



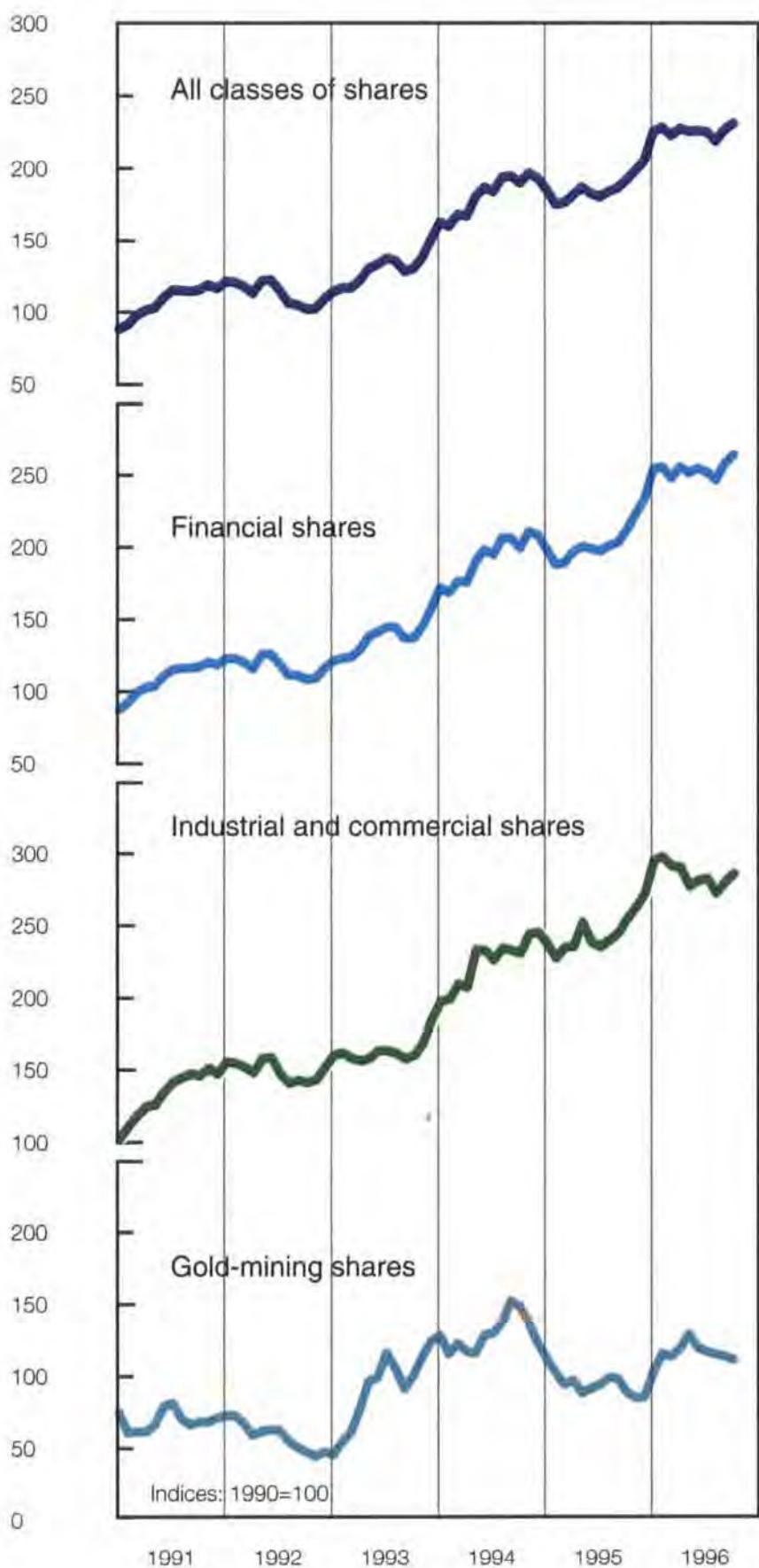
Share price indices of all classes of shares



Exchange reacted to the decline in share prices on Wall Street in mid-July and the monthly average level of the prices of all classes of shares receded in August to a level that was about 4 per cent below the high of February 1996. Share prices rallied again in September and the monthly average price level of all classes of shares increased by 3,6 per cent and again by 2,0 per cent in October 1996. The strengthening in share prices from August to October was the net outcome of a firm rise in the prices of financial shares, a slightly smaller rise in the prices of mining, other than gold, and industrial and commercial shares and a decline in the prices of gold-mining shares. Converted into a dollar index, the monthly average price level of all classes of shares declined by 18,3 per cent from January to October 1996. This decline may partly explain the waning of net purchases of shares by non-residents over the first ten months of 1996.

The *monthly average dividend and earnings yield of all classes of shares* (the earnings yield excludes gold-mining shares) receded slightly from August to October 1996 as share prices generally strengthened. The *price-earnings ratio* of all classes of shares,

Share prices



except the shares of gold-mining companies, increased slightly from 15,2 in August 1996 to 15,8 in October as share prices increased and earnings declined slightly. This upward movement, however, was preceded by a decline in the price-earnings ratio from 18,2 in January 1996 to 16,5 in May and then to 15,2 in August. With the yield on long-term government bonds tending modestly downwards since May 1996, the *yield gap* (i.e. the monthly average yield on long-term government stock less the

Table 14. Dividend yield, earnings yield, price-earnings ratio and yield gap on all classes of shares

Period	Dividend yield	Earnings yield*	Price- earnings ratio*	Yield gap Per- centage points
	Per cent	Per cent		
1995: Jan.....	2,08	5,50	18,17	11,69
May.....	2,21	6,05	16,54	14,32
Aug.....	2,37	6,57	15,22	13,45
Sept.....	2,31	6,40	15,64	13,11
Oct	2,28	6,31	15,84	13,52

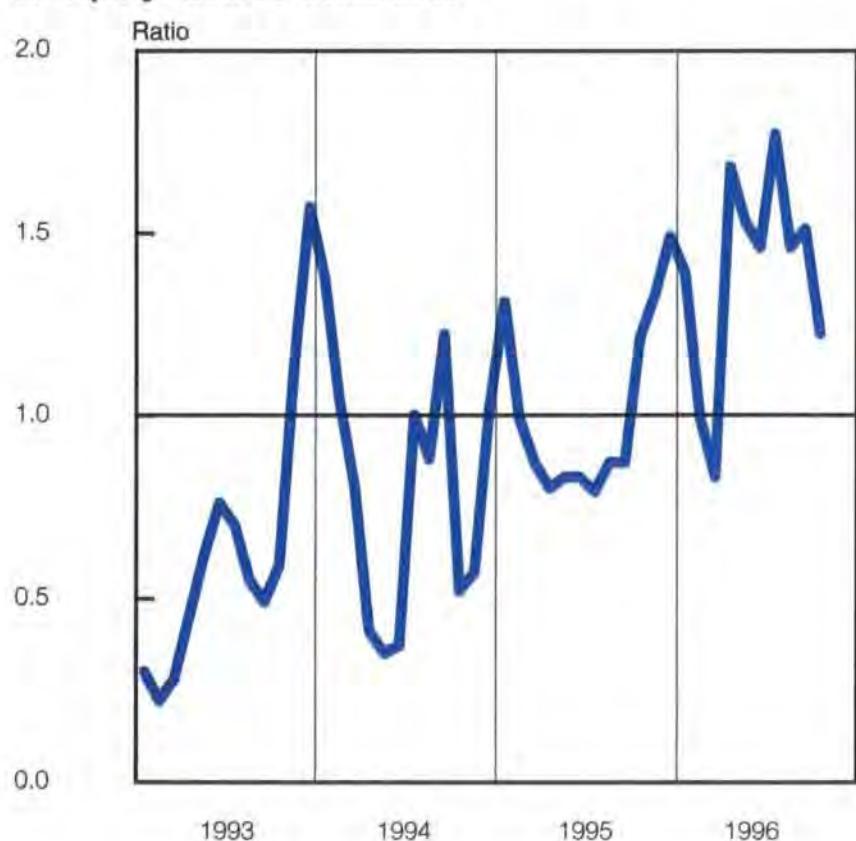
* Excluding gold-mining shares

dividend yield on all classes of shares) narrowed from 14,3 percentage points in May to 13,5 percentage points in October.

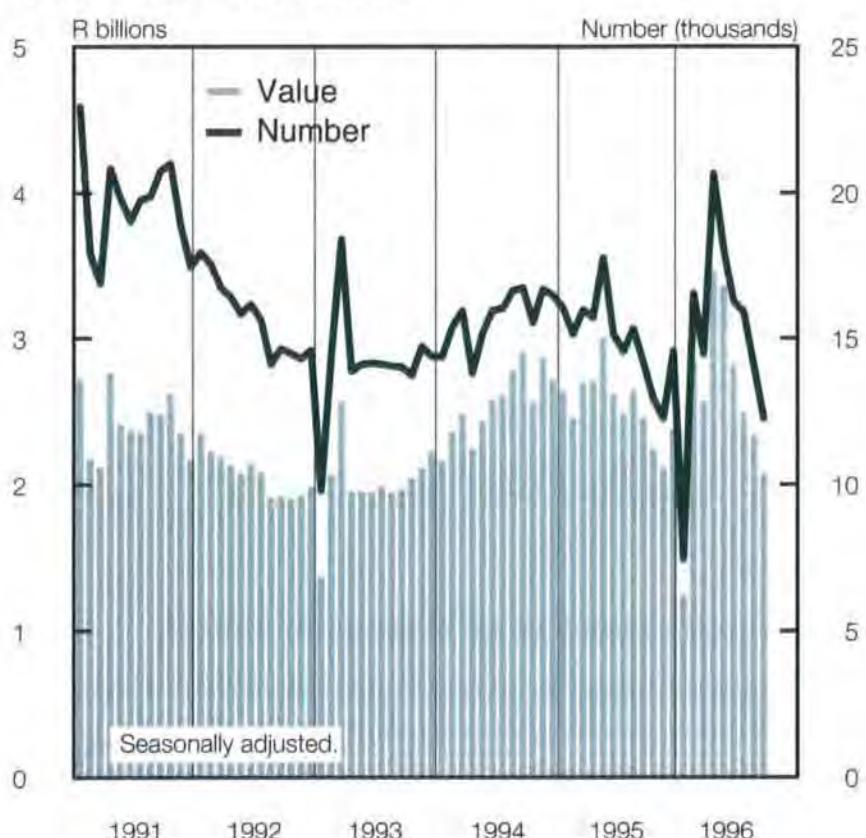
Other financial markets

Uncertainty and the absence of a clear trend in the financial markets and the persistent weakening of the rand since February 1996 had their ramifications in the formal market for derivative instruments. The number of equity option contracts traded accordingly rose by as much as 51 per cent in the first ten months of 1996

The ratio of the number of equity option contracts to equity futures contracts



Real estate transactions



compared with the corresponding period in the previous year. In contrast, the number of equity futures contracts traded increased by only 7,6 per cent in the first ten months of 1996 over the corresponding period of 1995. The faster growth in the number of equity option contracts traded resulted in the trading in this type of contract consistently exceeding trading in equity futures contracts since April 1996. The increasing popularity of option contracts relative to that of futures contracts can be attributed to the volatility and uncertainty in the equity market during 1996.

The value of transactions in the *real estate market*, which had receded from R8,3 billion in the second quarter of 1995 to R6,7 billion in the first quarter of 1996, increased to R9,6 billion in the second quarter. Increases in the predominant rate on mortgage loans in May and June 1996, together with unprecedented steep increases in local government rates and taxes, adversely affected the real estate market towards the middle of 1996, causing the monthly value of real estate transactions to fall from an all-time high of R3,5 billion in April 1996 to R2,1 billion in September. Measured over a period of one year, the average nominal value per transaction in real estate declined by 0,9 per cent in the third quarter of 1996. This was the first such decline since the fourth quarter of 1986 and implied, of course, a steep decline in the inflation-adjusted price of real estate.

Although financing in the *mortgage market* remained buoyant, some levelling off in the growth rate became discernible in the first nine months of 1996. The rate of

increase over twelve months in mortgage advances receded to 17,1 per cent in September 1996, compared with 18,9 per cent in September 1995. Monetary institutions' total mortgage loans outstanding nevertheless increased from R134,6 billion in December 1995 to R151,6 billion in September 1996. The growth in mortgage advances continued to be concentrated in conventional rather than flexible automatically accessible mortgage bonds.

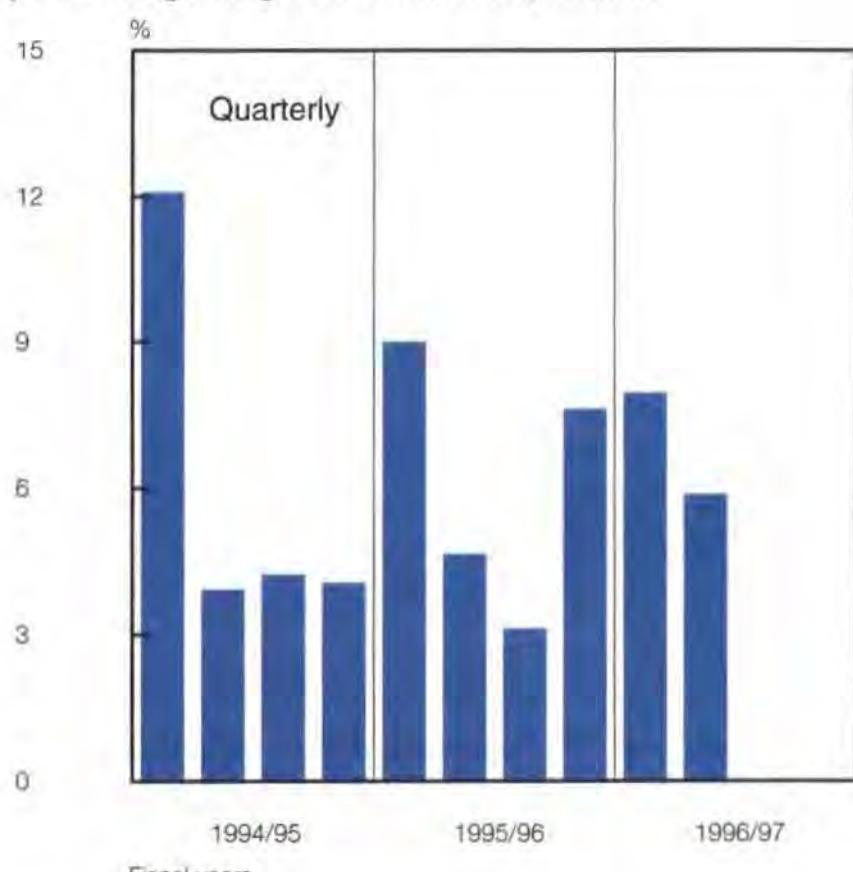
Public finance

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 the non-financial government business enterprises and public corporations) increased by R2,3 billion from R16,4 billion in the first half of fiscal 1995/96 to R18,7 billion in the first half of fiscal 1996/97. This took the total public-sector borrowing requirement to 6,9 per cent of the gross domestic product in the first half of fiscal 1996/97, which is marginally worse than the 6,8 per cent registered in the first half of the previous fiscal year.

The slight deterioration in the public-sector borrowing requirement in the first half of fiscal 1996/97 could be attributed to a turnaround in the finances of the provincial governments from a surplus of R1,6 billion in the first half of fiscal 1995/96 to a deficit of R0,5 billion in the first half of fiscal 1996/97. The financial shortfall of provincial governments bears testimony to the improvement in the capacity to render social services at the level of provincial government. The finances of local authorities and extra-budgetary institutions also deteriorated from the first half of fiscal 1995/96 to the first half of fiscal 1996/97, but this was partly countered by a reduction in the borrowing requirements of the non-financial public enterprises, the Main Budget and the social security funds.

Public-sector borrowing requirement as percentage of gross domestic product



At the level of general government (i.e. the total public sector without the non-financial public enterprises) the deterioration in the borrowing requirement was occasioned by, among others, a sharp acceleration in spending on goods and services and interest payments. The year-on-year increase in expenditure on goods and services by general government accelerated from 9,2 per cent in the first half of fiscal 1995/96 to 17,9 per cent in the first half of fiscal 1996/97. Interest paid by general government, which had increased by 22,5 per cent in the first half of fiscal 1995/96 compared with the corresponding period of the previous year, increased by 23,6 per cent in the first half of fiscal 1996/97 over the first half of fiscal 1995/96.

Exchequer account

The fiscal accounts for the first half of fiscal 1996/97 indicate that the government will be able to achieve its objective of reducing the deficit before borrowing and debt repayment relative to gross domestic product as envisaged in the Budget of March 1996. Both Exchequer issues and Exchequer receipts, however, increased somewhat more than had been foreseen in the Budget.

The year-on-year rate of increase in *Exchequer*

issues to government departments (adjusted to reflect cash flows) in the first half of fiscal 1996/97 amounted to 11,3 per cent, which was less than 1 percentage point higher than the budgetary provision of 10,4 per cent for the fiscal year as a whole. As a manifestation of government's commitment to fiscal prudence the rate of increase in Exchequer issues in the current fiscal year was well below the average year-on-year rate of increase of 14,9 per cent in the first six months of the preceding five fiscal years. As a ratio of gross domestic product, Exchequer issues to government departments declined from 32,7 per cent in the first half of fiscal 1995/96 to 32,5 per cent in the first half of the current fiscal year.

Exchequer issues in October 1996 took the year-on-year rate of increase in such issues to 14,2 per cent in the first seven months of fiscal 1996/97. Exchequer issues for the first seven months of fiscal 1996/97 equalled 59,5 per cent of the total expenditure of R173,7 billion which had been foreseen by the Minister of Finance for fiscal 1996/97 as a whole.

Exchequer receipts (excluding extraordinary or non-recurring revenue) in the first half of fiscal 1996/97 were 14,7 per cent more than in the first half of fiscal 1995/96. This means that the year-on-year growth in Exchequer receipts in the first half of fiscal 1996/97 is 1,1 percentage points higher than the projected growth rate of 13,6 per cent for the full fiscal year; the average year-on-year rate of increase in Exchequer receipts in the first half of the previous five fiscal years was 11,1 per cent. As a percentage of gross domestic product, Exchequer receipts increased from 24,9 per cent in the first half of fiscal 1995/96 to 25,5 per cent in the first half of the current fiscal year.

The higher-than-budgeted rate of increase in government revenue could be attributed to inland revenue receipts which outperformed the budgetary projections. Inland revenue receipts rose faster than envi-

Cumulative Exchequer issues and receipts

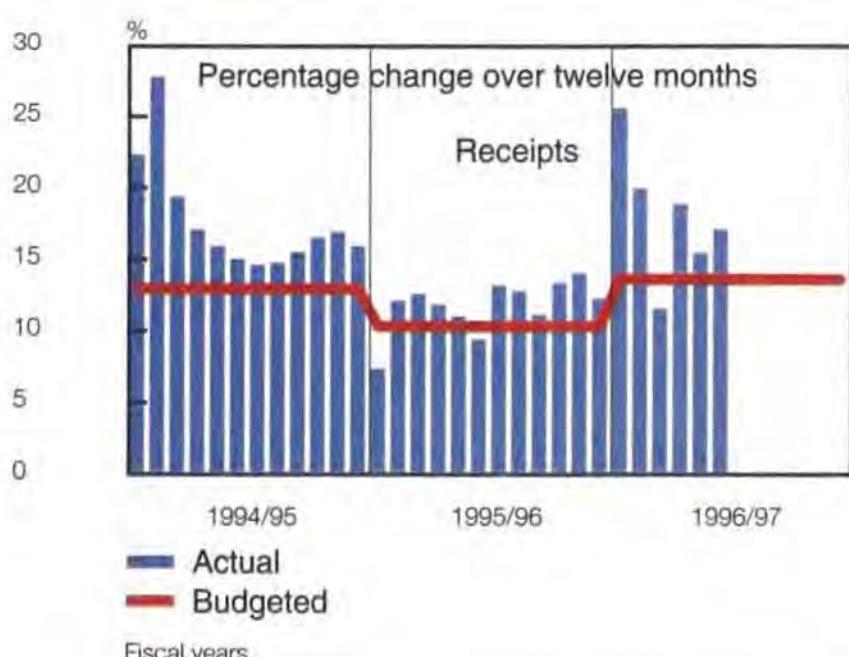
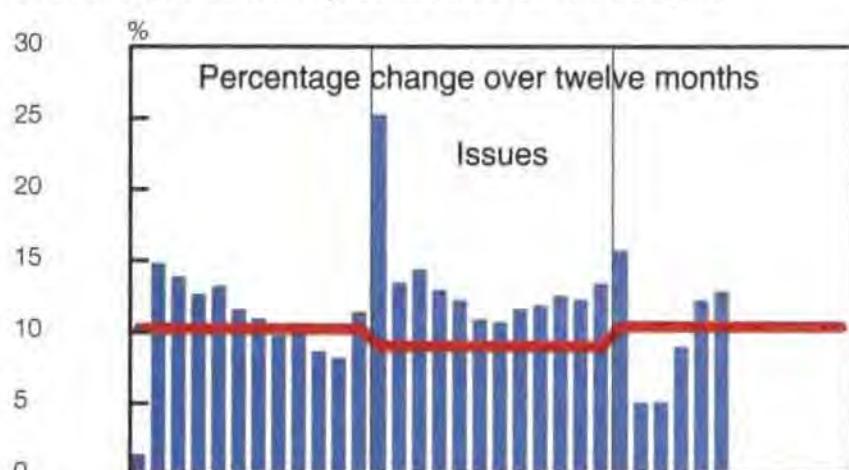


Table 15. Increase in government revenue

Percentage change over same period of previous year

Revenue source	Budgeted increase in fiscal 1996/97	Realised increase: first six months of fiscal 1996/97
Customs and excise duties	9,7	11,1
Inland revenue	14,2	18,1
Income tax	17,5	21,2
Value-added tax	13,3	10,9
Total Exchequer receipts	13,6	14,7

saged in the Budget because of a sharper rise in income tax collections than had been included in the budget estimates. In contrast, the increase in value-added tax receipts fell short of the budget projections. The sustained high level of aggregate domestic demand and the accompanying high level of merchandise imports helped revenue from customs and excise duties to rise by 11,1 per cent in the first half of fiscal 1996/97, compared with a budgeted increase of 9,7 per cent for the fiscal year as a whole.

The revenue collected by the government in October 1996 was boosted, among others, by income collected in September, but only accounted for in the Exchequer account at the beginning of October. The year-on-year rate of increase in Exchequer receipts accordingly came to 17,1 per cent in the first seven months of fiscal 1996/97. As a percentage of the projected revenue collections for the current fiscal year as a whole, the revenue collected in the first seven months amounted to 60,1 per cent.

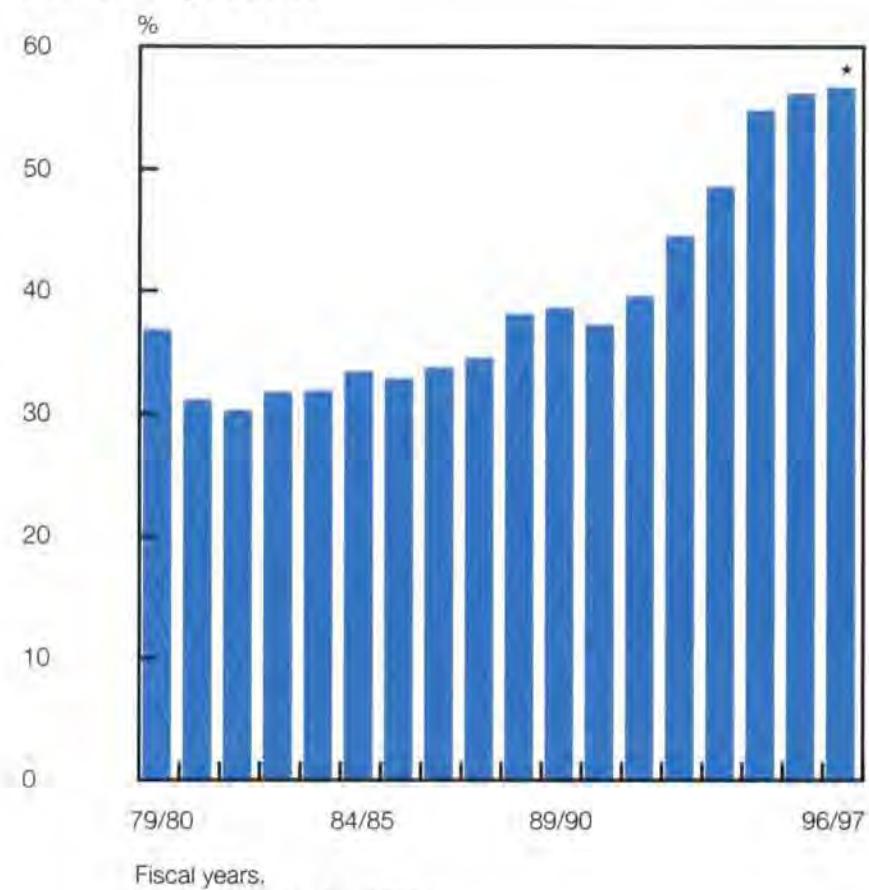
The net result of the higher-than-budgeted revenue and expenditure was a *deficit* of R18,8 billion on the Exchequer account before borrowing and debt repayment in the first half of fiscal 1996/97. As a ratio of gross domestic product, the deficit is calculated at 6,9 per cent for the first half of fiscal 1996/97; for the full fiscal year a ratio of 5,5 per cent had been foreseen and in the first half of the previous fiscal year a deficit of 7,8 per cent was recorded. The deficit for the first half of fiscal 1996/97 amounted to 61,4 per cent of the budgeted deficit for the year as a whole, which was less than the ratio of 63,4 per cent for the corresponding period of the previous fiscal year.

As shown in Table 16, the deficit for the first half of fiscal 1996/97 was financed largely through the issue of long-term government stock. The deficit which had to be financed, together with discount on new government stock issues, gave rise to an increase in *government debt* from R279,8 billion at the end of March 1996 to

Table 16. Financing of Exchequer deficit in the first half of fiscal 1996/97

	R millions
Government stock (including discount)	17 415
Less: Discount on new government stock	3 974
Net receipts from government stock issued....	13 441
Treasury bills	3 618
Foreign loans	-6
Non-marketable securities	-138
Money market instruments	-2 981
Extraordinary receipts	1 878
Decrease in available cash balances	3 033
Total net financing	18 845

Total government debt as percentage of gross domestic product



R299,0 billion at the end of September. As a percentage of the gross domestic product, government debt rose from 56,2 per cent at the end of March 1996 to 56,7 per cent at the end of September.

As a step towards the implementation of the government's macroeconomic strategy for growth, employment and redistribution, a number of changes to the tax structure were announced during the third quarter of 1996. The new accelerated depreciation allowances, which form part of government's industrial support measures indicated in the strategy, became available on 1 July 1996. This allowance permits a depreciation write-off on the expansion of existing manufacturing plant and equipment over a period of three years, instead of five years as was previously stipulated. A tax holiday scheme came into effect on 1 October 1996 for new manufacturing projects which comply with certain criteria pertaining to employment intensity, location in specially designated areas and the kind of industry.

To improve the efficiency of tax collection in the country, the government announced another tax amnesty on 22 October 1996. The new amnesty, which is intended to last from 1 November 1996 to 28 February 1997, will be applicable to a wider range of taxpayers with payments in arrears than previous amnesties.

Statement on Bank rate

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

20 November 1996

Since February 1996, the exchange rate of the rand has now depreciated by more than 20 per cent. The average weighted value of the rand, measured against a basket of the currencies of South Africa's major trading partners, from 31 December 1995 declined by 14,6 per cent up to the end of June, by 18,1 per cent up to the end of July and by 22,2 per cent up to 20 November 1996.

Although the initial depreciation in February 1996 could be explained in terms of the underlying economic developments of 1995 and the early weeks of 1996, subsequent adjustments, and particularly the further depreciation of about 5 percentage points in October 1996, no longer reflected basic economic developments such as changes over time in purchasing power parity, the international competitiveness of the South African economy or cyclical trends in the current account of the balance of payments. The cumulative and excessive depreciation of the rand has reached a stage where it now holds the serious threat of an escalation of inflation next year and has forced the need for a more cautious monetary policy to protect the internal value of the rand.

On the side of the domestic economy, significant adjustments took place in the third quarter of 1996 when a further slow-down in the rate of increase in total domestic expenditure reduced pressure on the overall balance of payments. National accounts statistics for the third quarter are not yet available, but preliminary estimates indicate that, on a seasonally adjusted and annualised basis, the current account deficit declined by approximately R6 billion to about R10 billion from a revised deficit of about R16 billion in the second quarter of 1996.

These developments in real economic activity have not yet been reflected in the financial situation. Both bank credit extension and the money supply continued to increase at unacceptably high rates. The deficit on the current account of the balance of payments was again not covered by net capital inflows and the net foreign reserves of the Reserve Bank declined by R1,8 billion from the end of June up to the end of October 1996.

The continuous deficit on the overall balance of payments drained liquidity from the banking system and the money market deficit rose from R5,8 billion at the end of June to R9,3 billion at the end of September and R9,7 billion at the end of October 1996. During the first twenty days of November, the average daily money market shortage exceeded R9 billion.

The shortage of liquidity forced almost all money market interest rates to higher levels. Short-term interest rates in general increased by about 1½ percentage

points from the end of September up to the third week of November 1996. The call money rate, for example, rose from 15,50 per cent on 30 September to 17,00 per cent on 20 November, and the rate on short-term negotiable certificates of deposit from 15,80 per cent to 17,15 per cent. The yield on long-term government bonds also rose by 1 percentage point to 16,12 per cent on 14 November, before declining again slightly to 15,92 per cent on 20 November.

The persistent money market shortage at a high level has created an additional demand for liquid assets eligible as collateral for obtaining loans at the discount window of the Reserve Bank. This increased the demand for Treasury bills at the weekly tender and kept the rate on 91 days Treasury bills artificially low. The level of the Reserve Bank's rate for loans to banking institutions at 16 per cent has now fallen out of line with other market interest rates, and the banks are increasingly relying on this source of relatively cheap funds for balancing their cash requirements.

In the circumstances, the Reserve Bank has two options, either to increase liquidity by injecting more money into the system, or to raise Bank rate. The former approach will obviously increase the already high rate of increase in the money supply and will add fuel to the rising pressures on inflation. The rate of increase in average consumer prices measured over a twelve-month period rose from 5,5 per cent in April 1996 to 9,1 per cent in October 1996. Taking account of the expected further pressures emanating from the depreciation of the rand, it will be a suicidal approach for the Reserve Bank to create even more central bank money in this situation.

The unstable conditions in the market for foreign exchange, recent developments in the domestic financial markets and the growing upward pressures on inflation all dictate a need for a tightening of monetary policy at this stage. The Reserve Bank has therefore decided to follow recent interest rate trends in the financial markets and to raise Bank rate, that is the rate at which the Bank is prepared to make loans to banking institutions on an overnight basis, from 16 to 17 per cent as from tomorrow, 21 November 1996. Other related interest rates of the Reserve Bank will also be raised by 1 per cent from their present levels.

Recent developments in real economic activity indicate that, after more than three years of increasing growth rates, the South African economy is now moving into a phase of consolidation. During this consolidation period rates of growth in some of the more important macroeconomic aggregates such as gross domestic expenditure will decline to lower but more sustainable levels. The period of consolidation

also provides an opportunity for the restoration of equilibrium in the overall balance of payments, which should support a more stable exchange rate for the rand. At the same time, there is an opportunity now to achieve the necessary reduction in the rates of increase in financial aggregates such as bank credit extension and the money supply. Unless this opportunity is grasped, South Africa will have to face the tribulation of lower economic growth with higher inflation, a situation that will make the successful implementation of the Government's Strategy for Growth, Employment and Redistribution impossible.

To depress the unavoidable inflationary pressures arising from the excessive depreciation of the rand over the past year, decisive action is now necessary to restore both external and internal financial stability. The further depreciation of the rand in October represented a step in the wrong direction that now begs for action. The increasing tightness in money market conditions and the rising interest rates represent essential elements of the adjustment process during the phase of consolidation. By accepting the disciplines of these market forces, the way will be prepared for an early commencement of the next expansionary phase, during which the longer term economic growth potential of the country will hopefully move to a higher level.

Developments in fixed capital stock: 1960-1995

by J.W. Prinsloo and H. Smith

1. Introduction

An important structural change in the South African economy since the mid-1980s has been the sharp decline in the share of gross domestic fixed investment relative to gross domestic product. This ratio fell from an average of 24 per cent in the period 1960 to 1985 to 18½ per cent in the period 1986 to 1995. Owing to this decline, the rate of increase in real fixed capital stock deteriorated from an average annual increase of 5½ per cent between 1960 and 1985 to about 1 per cent over the last ten years.

Standard growth theory holds the view that the level of fixed investment, and hence the growth rate of capital stock, has a material influence on an economy's labour productivity, business competitiveness and ultimately the rate of increase in the standard of living. Estimates of capital formation and the stock of physical capital are therefore key indicators for assessing macro-economic performance.

The purpose of this article is to describe the developments in South Africa's fixed capital stock since 1960. As a general background to this discussion, the first section gives an overview of the methodology used in measuring the capital stock for national accounts purposes. This is followed by a brief discussion of the influence of privatisation on the institutional classification of capital stock. The next three sections deal with the growth in fixed capital stock, changes in the composition of capital stock and capital-output ratios. The last section contains a summary and some concluding remarks.

2. Measurement and methodology

In an analysis of production, the effect of capital accumulation on output and productivity is not so much determined by the growth in the capital stock, but rather by changes in the flow of services generated by that stock. Unfortunately, the flow of services from capital is difficult to obtain. In the absence of direct measures of capital services, analyses of production usually assume that such flows are to some extent proportional to the changes in capital stock. In reality, this need not be the case. For example, in an economy that emerges from a recession, the use of existing plant and equipment becomes more intensive and the flow of services from capital rises faster than the increase in capital stock. Strict proportionality does not apply. The change in capital stock therefore serves only as an approximate indicator of the actual flow of capital services.

An estimate of the capital stock refers to a value that is attached to the total physical capital in existence at a specific point in time in an economy. In contrast, the value of capital services is a flow and has a specific time period dimension because it reflects the changing capital inputs over a period of time. However, irrespective of whether the focus is on the capital stock or on the flow of capital services, the estimates relate in principle to a physical measure: estimates of the value of capital stock reflect the actual physical capacity available for repeated use in the production of other goods and services. In practice, it is usually calculated as gross or net capital stock in real terms and the "perpetual inventory method" is used to produce estimates of the stock of tangible reproducible assets.

In order to calculate the real value of fixed capital stock, the gross domestic fixed investment at current prices must be deflated by appropriate price indices. Estimates of gross domestic fixed investment are made for five types of assets, namely residential buildings, non-residential buildings, construction works, transport equipment, and machinery and other equipment. The gross fixed investment in buildings and construction works is deflated by price indices which reflect the construction costs of these assets. Investment in transport equipment and machinery and other equipment is deflated by the specific production price indices for these assets. The same price indices are used for the assets of nearly all the different economic sectors and institutions. The only exception is the agricultural sector, for which machinery and transport equipment are deflated with appropriated indices compiled for farming requisites.

2.1 The definition of fixed capital stock

According to the guidelines of the 1993 United Nations System of National Accounts (SNA), the capital account records the values of non-financial assets and distinguishes between the following five classifications:

- gross fixed capital formation;
- consumption of fixed capital;
- changes in inventories;
- acquisitions less disposals of valuables; and
- acquisitions less disposals of non-produced, non-financial assets (e.g. mineral deposits).

Gross fixed capital formation, which is important for calculating the fixed capital stock, comprises the value of acquisitions less disposals of new or existing fixed assets. Fixed assets consist of tangible and intangible assets produced as outputs from production processes and used repeatedly or continuously in other production

processes over periods of more than one year. However, in the calculation of the fixed capital stock for the South African economy a narrow definition of fixed assets is used: the stock of capital is defined as consisting of durable and reproducible tangible assets. It excludes tangible assets such as land and sub-soil mineral deposits as these kinds of assets are not producible. Other kinds of "fixed assets", such as computer software, are also excluded because they are intangible. In addition, the transactions in existing assets between sectors are not taken into account in the current national accounts estimates of gross capital formation and the calculation of fixed capital stock. The value of transactions in existing assets is relatively small in relation to total gross domestic fixed investment and should therefore not affect the reliability and usefulness of the sectoral estimates of the capital stock unduly.

2.2 The perpetual inventory method

As already indicated, the perpetual inventory method is normally used in the calculation of fixed capital stock. The perpetual inventory method used for estimating the gross capital stock consists of an accumulation of past flows of gross fixed capital expenditure, after the deduction of the estimated value of retirements from the stock, but before taking the deduction of any allowances for the consumption of fixed capital into account. Estimates of net capital stock (as published in the *Quarterly Bulletin* of the South African Reserve Bank) are obtained by applying a capital consumption function based on the expected economic lives of the various assets. Consumption of fixed capital may be defined as that part of the gross domestic product which is required to replace fixed capital used up in the production process during an accounting period. It is based on the concept of the expected economic lifetime of an asset and is designed to cover the loss in value due to normal wear and tear, expected obsolescence, and the normal amount of irreparable accidental damage. Unforeseen obsolescence is treated as a capital loss rather than as consumption of fixed capital.

Estimates of net capital stock in South Africa are based on a straight line retirement function. Although different survival retirement functions can be identified, all these methods have some drawbacks. These shortcomings stem mainly from differences in the extent to which assets are either retained or discarded in economic recessions or cyclical upswings. The issue is complicated further by changes in the economically useful lives of assets caused by monetary or fiscal policies, such as investment incentives and the scrapping of capital subsidies or grants.

The difference between the gross and net calculation of fixed capital stock and the calculation of the average age of capital stock according to type of asset is dealt with briefly in the following section.

2.3 The lifetime and age of capital stock

To calculate the value of the net capital stock according to the perpetual inventory method, it is essential to estimate the economic lifetimes of assets. The Reserve Bank's estimates of economic lifetimes of the different types of assets vary between an indefinite period for government construction works and a maximum of 80 years for construction works in the agricultural sector, and a minimum of 8 years for transport equipment (see Table 1). An international comparison of the economic lifetime of assets shows that the Bank's estimates generally correspond with those used in industrial countries such as the United States of America, United Kingdom, Germany, Italy and Belgium. Although the level of capital stock at a specific point in time will differ depending on the economic lifetime used in the calculation of fixed capital stock for a specific type of asset, a trend analysis, as illustrated in Graph 1, shows that the difference in the general trend over time between estimates of capital stock based on different lifetimes is relatively small.

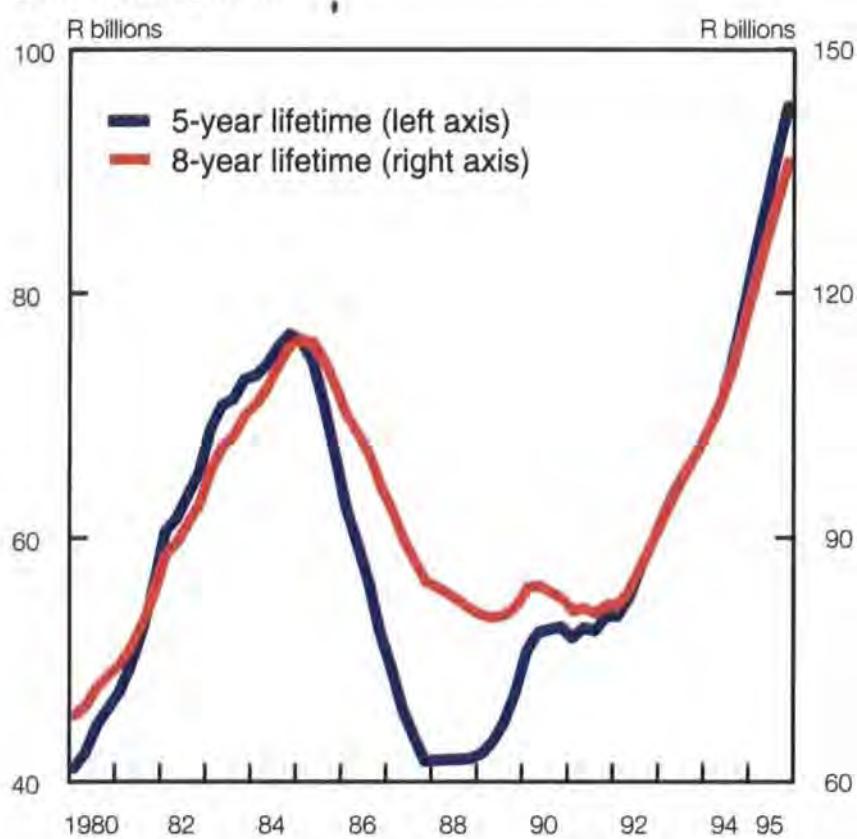
The calculated net capital stock is essentially a weighted average of past real investment spending. The weights assigned to real investment spending in past periods decline with an increase in the age of the assets. In contrast, "gross" capital stock is calculated using weights of which the values remain fixed at the value of one until the capital good is retired. The gross stock therefore represents cost of the total investment over time in a specific asset that is still used in the production process.

Graph 2 illustrates the estimated values of gross and net capital stock of machinery and equipment. From the graph it is clear that the cyclical movement in the two series is almost identical. However, in the example the gross capital stock lags the net capital stock by two quarters at the peak of the cycle and by five quarters at the lower turning-point of the cycle. In some studies it is argued that it is important to use the concept of gross stock to determine the relationship between fixed capital

Table 1. The economic lifetime according to type of asset

Type of asset	Sector	Lifetime
Residential buildings		50 years
Non-residential buildings		50 years
Construction works	Agriculture	80 years
	Mining	30 years
	Other	50 years
	General government	Indefinite
Transport equipment		8 years
Machinery and other equipment	Manufacturing	8 years
	Mining and electricity, gas and water	16 years
	Other	10 years

Graph 1. Fixed capital stock of machinery and equipment with economic lifetimes of 5 and 8 years



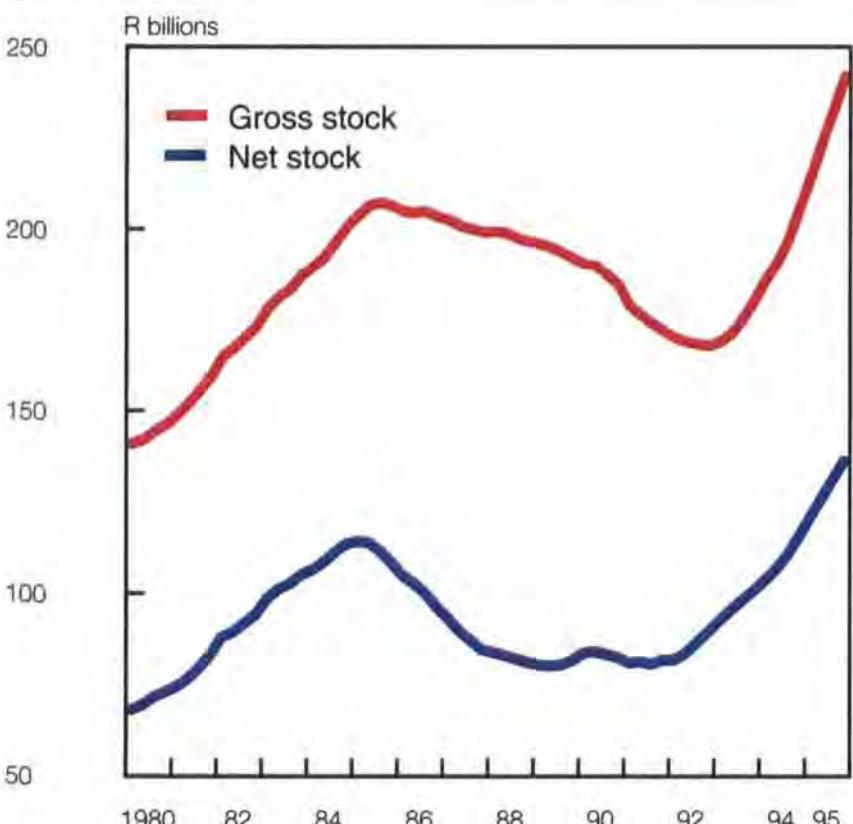
stock and current output. Over a fairly short period of time it is meaningful to compare current output with capital input, measured as a function of all assets still in operation. However, over a longer period of time the capacity of the

stock measured by its unexpired life expectation becomes more relevant, because the regularity in the depreciation of the capital stock is in keeping with the declining production capacity of assets as time moves on.

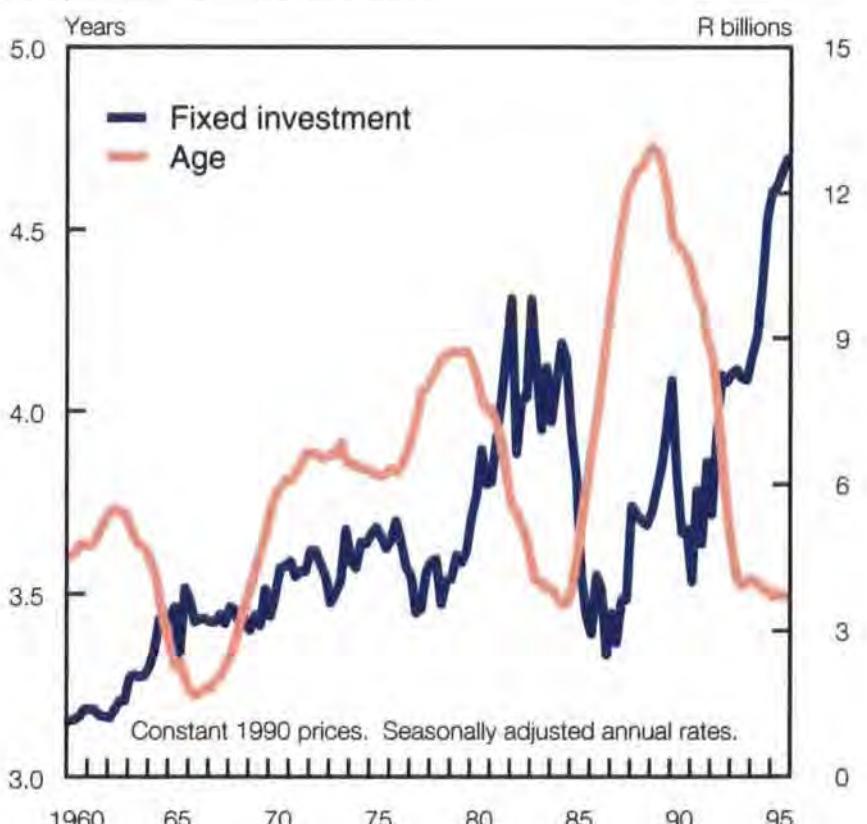
The perpetual inventory method also makes it possible to calculate the *average age of the capital stock* for assets with the same lifetime. An analysis of the average age of capital stock evaluates the necessity for replacement demand. Over the lifetime of an asset the capital expenditure which took place in each period is multiplied by the period of investment and the sum of the weighted investment is divided by the capital stock to reflect the average age of the capital stock.

Graph 3 shows the relationship between the age in years of real gross fixed capital stock and real fixed investment in machinery and equipment by the private manufacturing sector. The average age of the asset and fixed investment cycles are negatively correlated. The general ageing of capital equipment carries an obvious risk of technological obsolescence and backwardness and, potentially, a loss of competitiveness of a country's products in the international markets. The historical high age of machinery and equipment in South Africa in the first quarter of 1989 reflected the need for the replacement of obsolete stock at that point in time. The general upward trend in real outlays on machinery and equipment, which had started in the first quarter of 1986, brought the average age of machinery and equipment down from 4.72 years in the first quarter of 1989 to 3.49 years in the fourth quarter of 1995, i.e. below the long-term average of 4 years.

Graph 2. Gross and net fixed capital stock of machinery and equipment with a lifetime of 8 years



Graph 3. Age of real fixed capital stock and gross fixed investment in machinery and equipment by private manufacturing



3. Privatisation and the institutional classification of capital stock

Owing to the privatisation of some public corporations and the commercialisation of some business enterprises of the general government, adjustments had to be made to the institutional classification of the capital stock. Sasol and its subsidiaries, excluding Sasol III, were reclassified from public corporations to private business enterprises from the first quarter of 1987. Alusaf, Gaskor, Iscor and Iscor's subsidiaries, were similarly reclassified in the first quarter of 1990, while Sasol III was classified as a private-sector entity in the first quarter of 1991. Transnet was reclassified from a government enterprise to a public corporation in the first quarter of 1990 and the S A Post Office and Telkom were similarly reclassified in the first quarter of 1992.

The reclassification was made from the beginning of the quarter closest to the actual date of privatisation or commercialisation. The capital stock for each of the enterprises was calculated as at 31 December of the year prior to the reclassification. This capital stock was then subtracted from the one institutional aggregate and added to the other. This means that the values of the capital stock of the institutional sectors are not consistent over time. However, the value of capital stock classified according to economic sector is still consistent.

4. Growth in real fixed capital stock

Total real fixed capital stock in South Africa grew substantially in the immediate post-war period. The average rate of increase in the real fixed capital stock amounted to nearly 7 per cent per annum during the period 1946 to 1954. This could mainly be attributed to the need for the expansion of production capacity by the private manufacturing sector as a result of the high post-war level of consumer and investment demand. Likewise, real fixed investment rose strongly on account of the development of the then newly discovered gold-fields in the Free State and Western Transvaal. Public corporations also made a substantial contribution to the growth in fixed capital stock as a result of the construction of Sasol I and Iscor's Vanderbijlpark works.

During the following years up to 1963 the increase in real fixed capital stock slowed down to an average annual growth rate of 4½ per cent. This slower rate of increase can partly be ascribed to economic factors such as the continued existence of surplus production capacity in certain sub-sectors of the manufacturing sector, competition from abroad and a general slowdown in economic activity. The uncertainty and decline in confidence engendered by political

developments in the beginning of the 1960s also contributed to the slowdown. However, for the remainder of the 1960s the growth in real fixed capital stock rose to an annual average rate of 6 per cent. As confidence improved and surplus capacity declined, fixed capital outlays in both the private and public sectors recorded pronounced increases in the second half of the 1960s. The real fixed capital stock of the public corporations increased at an average rate of 11½ per cent per annum in the period 1965 to 1969, compared with an average growth rate of 5 per cent in the preceding five years. The main contributions to this rapid growth were made by Eskom and Iscor. On the other hand, the rise in the fixed capital stock of the public authorities was boosted by increases in fixed capital outlays by the general departments of central government, mainly on water works, housing and development of the railway and harbour networks.

Although the private fixed capital stock, which represents the most important component of the total fixed capital stock, increased at a lower rate than the capital stock of the public sector during the 1960s, an acceleration in the growth rate was noticeable from 1963 to the beginning of the 1970s. This better performance of the private fixed capital stock was the net result of a strong upward movement in the capital stock of manufacturing, construction, commerce and finance, as against lower growth of the capital stock in agriculture and mining.

For the period 1970 to 1979 the growth in the total real fixed capital stock maintained an average rate of 6 per cent per annum. This could mainly be ascribed to an average growth rate of 13½ per cent per year in the real fixed capital stock of public corporations, while the average annual growth in the fixed capital stock of the public authorities and private business enterprises amounted to 6 per cent and 4½ per cent, respectively.

A sectoral analysis shows that the higher growth in fixed capital stock during the 1970s stemmed from exceptionally large average annual growth rates in a number of sectors, including manufacturing, electricity, gas and water, construction, transport, storage and communication, and community, social and personal services. The sustained strong increase in the real fixed capital stock of the manufacturing sector during most of the 1970s was mainly brought about by projects such as Alusaf, Natref, Iscor's Newcastle works, the Sasol II plant and expansion programmes at Iscor's Pretoria and Vanderbijlpark works. While these developments supported the expansion in the real fixed capital stock of manufacturing concerns of public corporations, the average annual rate of increase in the real fixed capital stock of private manufacturing slowed down from about 8 per cent during the 1960s to only 4 per cent in the 1970s. This slowdown could be attributed partly to the low level of domestic demand that prevailed during the 1974-77 downswing of the economy and the consequent existence of surplus production capacity.

Table 2. Growth in total real fixed capital stock by kind of economic activity

Percentage change

Period	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Construction	Wholesale and retail trade, catering and accommodation	Transport, storage and communication	Finance, insurance, real estate and business services	Community, social and personal services	Total
1960	1,5	3,9	3,0	4,1	2,4	4,5	4,6	3,7	10,2	4,9
1961	1,7	4,9	3,2	3,7	2,7	4,2	3,6	2,5	6,7	3,9
1962	1,6	1,9	3,7	3,6	4,2	3,6	3,1	2,0	6,5	3,4
1963	2,0	1,0	10,3	3,8	27,7	4,1	4,5	3,2	6,3	4,5
1964	2,5	2,4	16,3	2,6	23,4	5,2	4,9	5,0	6,7	5,7
1965	2,0	2,8	15,3	4,8	19,8	6,5	6,7	6,0	8,1	6,8
1966	1,6	-0,1	11,2	7,4	14,5	5,4	5,7	5,4	7,7	5,9
1967	2,1	0,1	6,6	7,6	5,8	5,7	5,9	6,1	6,9	5,6
1968	3,5	0,6	4,2	9,6	3,4	4,2	5,1	5,8	7,1	5,4
1969	3,8	1,4	4,5	8,1	11,6	6,4	4,1	7,2	8,3	6,0
1970	3,5	2,6	8,2	7,2	11,0	9,3	4,2	8,1	8,3	6,8
1971	3,9	2,1	7,9	7,2	6,5	9,0	6,1	7,6	9,0	7,1
1972	2,9	1,5	8,1	5,7	20,8	7,9	8,4	6,1	9,0	7,0
1973	2,4	3,2	10,3	5,0	24,9	7,5	7,1	6,9	7,2	6,8
1974	2,9	5,9	9,3	4,6	18,3	6,8	7,5	6,2	7,4	6,8
1975	5,0	11,4	7,8	7,2	13,4	5,3	9,1	5,0	7,2	7,1
1976	2,4	10,8	4,9	9,1	7,1	4,8	9,2	4,0	6,1	6,2
1977	1,9	6,5	5,3	11,7	4,2	3,8	5,6	2,5	5,1	4,9
1978	1,0	5,4	6,8	11,1	2,7	1,1	2,9	2,5	4,1	4,1
1979	0,7	8,0	8,3	9,7	1,9	0,5	2,2	2,0	4,0	4,1
1980	2,9	10,6	13,3	8,4	3,7	0,7	2,2	3,5	3,7	5,1
1981	4,9	10,0	10,3	7,7	3,8	2,8	3,3	4,6	3,7	5,4
1982	0,8	7,6	6,8	8,5	1,8	4,0	4,3	3,9	3,1	4,6
1983	-0,9	5,3	5,3	8,3	1,5	2,8	2,5	4,1	2,9	3,8
1984	-2,2	5,1	2,6	8,7	1,6	3,6	1,2	4,4	2,8	3,3
1985	-2,8	5,4	-1,1	6,6	-0,6	4,5	1,7	3,2	2,7	2,5
1986	-3,6	4,8	-3,2	1,5	-4,1	0,2	0,6	1,8	2,6	1,0
1987	-3,7	4,8	-3,1	0,2	-4,9	-0,3	0,0	2,0	2,4	0,8
1988	-2,8	5,3	-1,5	-1,3	-3,6	1,7	-0,3	3,1	2,4	1,2
1989	-1,5	4,3	2,4	-0,9	-3,1	0,1	-0,4	2,7	2,6	1,6
1990	-1,8	3,1	4,4	-1,4	-1,4	0,4	-0,6	1,5	2,4	1,4
1991	-2,2	2,1	3,0	-2,9	-0,5	0,7	0,1	1,0	1,9	0,9
1992	-2,4	0,1	2,5	-3,0	-2,1	1,0	-0,3	0,8	2,1	0,6
1993	-2,2	-2,0	2,8	-3,5	-3,2	1,0	-0,2	0,7	2,0	0,5
1994	-1,0	-1,0	3,2	-2,8	-1,8	1,7	-0,4	1,3	1,9	0,9
1995	-0,6	-0,5	4,6	-1,7	-0,3	2,4	0,0	1,7	1,7	1,3

Average for the period

1960-1969	2,2	1,9	7,7	5,5	11,2	5,0	4,8	4,7	7,4	5,2
1970-1979	2,6	5,7	7,7	7,8	10,8	5,6	6,2	5,1	6,7	6,1
1980-1989	-0,9	6,3	3,0	4,7	-0,4	2,0	1,5	3,3	2,9	2,9
1990-1995	-1,7	0,3	3,4	-2,6	-1,5	1,2	-0,2	1,1	2,0	0,9

In the sector supplying electricity, gas and water, the real fixed capital stock increased at an average annual rate of nearly 8 per cent during the 1970s, compared with a rate of 5½ per cent in the preceding decade. This acceleration in the growth rate of fixed capital stock reflected increased capital outlays by Eskom on its nuclear and other power stations.

The sector transport, storage and communication showed a marginally higher percentage increase in real fixed capital stock than that of the overall economy during the 1970s. This development stemmed from capital expenditure by the former South African Railways and Harbours Administration and the Department of Posts and Telecommunications to provide an adequate transportation and communications infrastructure. This expenditure also included the acquisition of new aircraft for the South African Airways and the construction of the Richards Bay railway line and harbour. The expansion of the fixed capital stock by the private transport sector during the mid-1970s could be attributed entirely to the acquisition of ships and containers for the containerisation programme and the exportation of iron ore, following the completion of the Sishen-Saldanha railway line.

The sustained high rate of increase in real fixed capital stock of the sector community, social and personal services during the period 1970 to 1979, which amounted to an average annual rate of more than 6½ per cent, was largely brought about by the relatively high level of capital formation by the public sector on economic and social infrastructural development, such as roads, bridges, water schemes, schools, hospitals and the establishment of a television service.

During the 1970s the average annual growth in real fixed capital stock of the mining, commercial and financial services sectors varied between 5 and 5½ per cent. Although this was below the average annual growth rate in fixed capital stock for the economy as a whole, it exceeded the average growth rate in capital stock for these sectors in the preceding decade. In the mining sector the growth rate accelerated from an average of 2 per cent per year during the 1960s to 5½ per cent in the 1970s. This could be attributed to the relatively high level of investment at several gold mines, uranium plants and platinum mines during that period. The somewhat higher rate of increase in the real fixed capital stock of finance, insurance, real estate and business services during the 1970s was mainly accounted for by a high level of capital expenditure by leasing organisations and strong growth in real investment in private residential buildings.

Growth in real fixed capital stock slowed down substantially in the 1980s. A sectoral analysis shows that this slowdown was evident in all the major sectors of the economy apart from mining. In the case of the agricultural and construction sectors, the level of real fixed capital stock actually decreased at average annual rates of 1 per cent and ½ per cent respectively, while for the economy as a whole the growth in real fixed capital stock subsided to an average annual rate of 3 per cent.

The decline in the capital stock of the agricultural sector reflected the recurring drought conditions that obviously had a negative influence on investment, while the increase in the cost of agricultural finance to more market-related levels may also have contributed to the lower rate of capital formation in agriculture.

In the mining sector, the real fixed capital stock rose at an average rate of 6½ per cent per annum during the 1980s. This was partly the result of new developments and capacity expansions in the gold as well as the non-gold-mining industry at the beginning of the 1980s. Fixed investment activity in the mining sector accelerated during the mid-1980s on account of increased export demand for metals and minerals as well as the beneficial effect of the depreciation of the rand on mining profitability.

Most of the sub-sectors in the secondary and tertiary sectors of the economy experienced low or even negative growth in their real fixed capital stock during the second half of the 1980s. These developments were largely the result of various extraneous factors and developments which began to affect overall economic performance at about the same time. They included the negative effect of successive years of drought and the forward and backward linkages of the lower agricultural production on the rest of the economy, the completion of large expansion projects by Sasol and the decision by certain public corporations and business enterprises of general government to raise the cost-effectiveness of their operations and to become more responsive to market forces. The latter involved programmes of planned reduction in fixed capital expenditure by institutions such as Eskom, Transnet, Telkom and the South African Post Office to benefit fully from excess capacity brought about by substantial investment programmes during the late 1970s and the beginning of the 1980s. In addition, an increase in civil unrest, growing negative foreign perceptions of the South African socio-economic and political situation, trade sanctions and boycotts, disinvestment by foreign business concerns and South Africa's exclusion from the international capital markets, as well as a "diffused" lack of confidence and a generally enhanced sense of uncertainty about the future, adversely affected fixed capital formation during those years.

Real fixed capital stock in the manufacturing sector recorded noticeable declines in the second half of the 1980s and receded at an average annual rate of 1½ per cent between 1985 and 1989. Large declines in gross fixed capital formation in the manufacturing sector during this period could, among other things, be attributed to an increase in the level of the relative "user cost" of capital goods¹. After it had reached a lower turning-point

¹ The user cost of capital comprises elements of costs (or benefits) such as the price of new capital goods, depreciation allowances, long-term interest rates and various taxes (or tax concessions) pertaining to the purchase, leasing or operation of the capital goods concerned. The relative user cost of capital is the ratio of the user cost of capital to the general level of manufacturing output prices.

in 1979 (see Graph 4), the relative user cost of capital rose moderately in the first four years of the 1980s. However, from 1983 to 1986 it increased strongly to a level that was about 185 per cent higher than in 1979. This reflected the cost-raising effect of successive declines in the effective exchange rate of the rand on the domestic prices of capital goods during this period. In addition, the relative user cost of capital also increased in 1984 and 1985 because of the higher level of domestic interest rates arising from the adverse balance of payments developments in those years and from the authorities' strict countervailing monetary policies.

From 1987 to 1991 the relative user cost of capital fluctuated along an upward trend to reach a historical high in 1991. Consequently, the growth in real fixed capital stock in the manufacturing sector was fragile during this period on the whole and only turned positive in 1989, mainly as a result of stepped-up investment outlays on projects such as Mossgas and Mossref. As the relative user cost of capital receded from 1992 to 1995, the growth in real fixed capital stock in the manufacturing sector accelerated from 2½ per cent in 1992 to 4½ per cent in 1995.

In the period 1990 to 1995 expansion in the real fixed capital stock of the economy as a whole slowed down considerably to an average of 1 per cent per annum against the long-term average of 4 per cent. This was the net result of declines in the level of the real fixed capital stock in the sectors agriculture, construction, transport, storage and communication and the sector

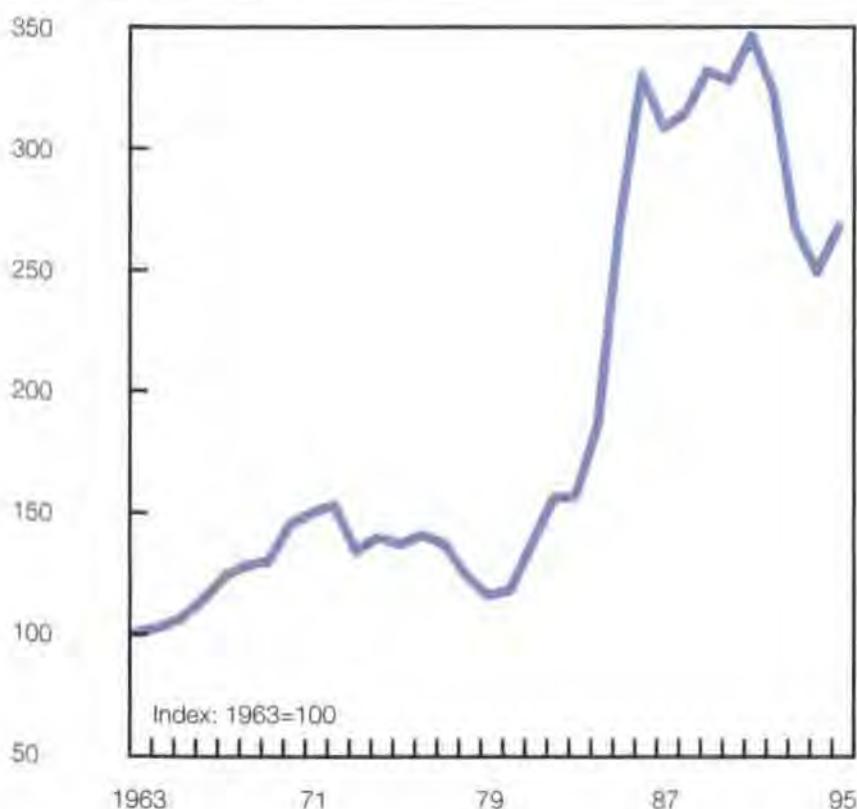
supplying electricity, gas and water, which almost neutralised increases in the real fixed capital stock of the other sectors of the economy.

A contributing factor to the decline in the growth in real fixed capital stock during the 1990s is that the increase in gross fixed investment fell short of the growth in the depreciation allowance from 1989 to 1993. The ratio of net fixed investment and depreciation allowances relative to gross domestic fixed investment remained fairly stable throughout the period 1960 to 1983 and the gap between net fixed investment and depreciation allowances as a ratio of gross domestic fixed investment never exceeded a range of 20 per cent. However, from 1984 the gap between these two ratios widened and reached a high of about 80 per cent in 1987, before it decreased to less than 60 per cent in 1989. During the 1989-1993 downswing of the economy the gap increased again to 80 per cent in 1993, and then improved again to 60 per cent in 1995.

The gap between the above-mentioned ratios and the resultant weak growth in real fixed capital stock can be seen as part of the secular decline in capital formation that dates back to the early 1980s. Many of the causal factors behind the slowdown in the growth of fixed capital stock have turned around since 1993 and worked towards a strengthening of investment. These factors included:

- Financial sanctions imposed a binding balance-of-payments constraint from 1985. Lack of access to international capital markets forced South Africa to maintain current account surpluses to meet scheduled amortisations. This was achieved by more restrictive domestic financial policies than would have been necessary under other circumstances, thereby limiting investment to the amount of available domestic savings. Meanwhile, an expansion in government spending on social services led to reduced public saving.
- Uncertainty about South Africa's political future was pervasive. Investors apparently adopted a wait-and-see approach on account of such uncertainty.
- Factor price developments over the past decade were inimical to growth and employment creation. The South African labour market was dominated by strong and militant labour unions that negotiated successfully for high real wages that were not matched by productivity growth. The consequent distortion of relative factor prices undermined the economy's long-term growth potential and the inducement to invest waned.
- The user cost of capital rose strongly between 1983 and 1991, reflecting higher real (and expected real) lending rates, higher corporate taxes and fewer tax rebates as investment allowances were phased out and initial allowances reduced.
- The fact that the profitability of the corporate sector showed a downward trend, especially in the late 1980s and the beginning of the 1990s, contributed to the reluctance of the private sector to expand its fixed investment.

Graph 4. The relative user cost of capital in the manufacturing sector



- During the 1989-1993 recession the percentage utilisation of production capacity in the manufacturing sector dropped from about 85 per cent in the second quarter of 1989 to a historical low of 77 per cent in the third quarter of 1992. Excess production capacity is not, of course, conducive to the creation of additional capacity.

The reversal of many of these factors after 1993 was largely responsible for the stronger growth in fixed investment that then developed. This better performance of investment was particularly due to:

- the lifting of trade sanctions, the reduction in political uncertainty and the decline in the aggregate level of politically inspired violence in the country, which encouraged investment expenditure by domestic and foreign investors;
- the unsolved problems in the labour market and the high level of real unit labour costs which still benefited the production factor capital relative to labour;
- the decline in the user cost of capital in 1993 and 1994;
- the sharp rise in the percentage utilisation of production capacity in the manufacturing sector during the current economic upswing;
- the noticeable rise in the profitability of the corporate sector from the beginning of 1992;
- the recent shift in the composition of the capital stock towards machinery and equipment which depreciate comparatively rapidly, away from fixed structures which depreciate comparatively slowly, accelerated investment demand for asset replacement; and
- a temporary tax incentive system in terms of section 37E of the Income Tax Act, which allowed for notable depreciation concessions in order to encourage fixed investment in metals and minerals beneficiation projects.

These developments mainly had an impact on the manufacturing sector, with the result that the growth in this sector's real fixed capital stock increased from an average annual rate of about 1 per cent between 1982 and 1989 to 3½ per cent in the first half of the 1990s. The continued slow growth of the fixed capital stock in the rest of the economy can, among other things, be attributed to the fact that the above-mentioned positive factors have not yet fully worked through to these sectors. In addition, the relative weakness of real fixed capital formation by the public authorities on account of the longer-term downward trend in investment expenditure by the general government also contributed to the slowdown in the growth of aggregate real fixed capital stock. The average annual growth rate in the real fixed capital stock of the general government slowed down from 7 per cent in the 1960s to only 2 per cent in the 1990s. This decline was mainly caused by deliberate attempts from time to time to curtail public spending, which invariably had a strong effect on capital rather than on current expenditure.

5. The composition of fixed capital stock

As already indicated, the privatisation and commercialisation of a number of public corporations and business enterprises of general government between 1987 and 1992 have affected the comparability of the value of fixed capital stock classified according to institution and function over time. In the period before the privatisation of public corporations there was some distortion in the allocation of the total fixed capital stock in the sense that investment was increasingly channelled towards public-sector activities, with a much lower direct productivity than the private sector. The share of the private sector in the total fixed capital stock receded from an average of more than 51 per cent in the 1960s to 43½ per cent in the first half of the 1980s. As a result of the substantial decline in fixed investment by public corporations since 1984, the private sector has increased its share of the country's capital stock, but this ratio was also influenced by privatisation. On account of these developments, the changes in the composition of the capital stock in the South African economy are described in the following section according to the kind of economic activity and by type of asset only.

5.1 Fixed capital stock by kind of economic activity

A sectoral analysis of the distribution of the fixed capital stock by kind of economic activity shows that the

Table 3. The composition of total fixed capital stock by kind of economic activity

Sectors	Average for the period			
	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1995
Agriculture, forestry and fishing	10,3	7,5	5,5	4,2
Mining and quarrying	7,7	5,8	7,4	8,4
Manufacturing.....	9,1	10,7	12,5	12,5
Electricity, gas and water	6,5	7,0	9,4	8,5
Construction	0,5	0,8	0,7	0,5
Wholesale and retail trade, catering and accommodation.....	5,4	5,4	4,7	4,6
Transport, storage and communication	17,2	17,0	15,7	14,2
Finance, insurance, real estate and business services	20,8	20,4	19,3	20,3
Community, social and personal services	22,5	25,4	24,8	26,8
Total	100,0	100,0	100,0	100,0

proportionate share of the sectors responsible for construction works, commerce and financial and related services registered very little change between the 1960s and the first half of the 1990s. The relative stability of these sectors' contribution to the level of total fixed capital stock can mainly be ascribed to the generally subsidiary role played by the services sector in the process of economic development.

The mining sector's share in total fixed capital stock declined from 7½ per cent in the 1960s to 6 per cent during the 1970s, but then rose again to 8½ per cent in the beginning of the 1990s. The recent recovery in the mining sector's share in aggregate fixed capital stock mainly reflected investment in new diamond, coal and "other" mining developments in the late 1980s and the early 1990s.

The proportionate share of the fixed capital stock of agriculture and the sector transport, storage and communication declined almost without interruption since 1960. Fixed capital stock in the agricultural sector, as a percentage of total fixed capital stock receded from an average of 10½ per cent in the 1960s to 4 per cent from 1990 to 1995. Likewise, the transport, storage and communication sector's share in the fixed capital stock shrank from 17 per cent in the 1960s to 14 per cent in the first half of the 1990s. The decline in the relative importance of the agricultural sector in total fixed capital stock is broadly consistent with the process of economic development, typified firstly by a reduction in the share of agriculture in total production and secondly by the consolidation of farming units and the subsequent cut-down on physical infrastructural developments and investment outlays per farming unit. In addition, the decline in the proportionate share of the sector transport, storage and communication is also not unexpected. Initially, large amounts were invested in the railway and road transport systems to establish an efficient transportation network. During the 1980s, the deregulation of transportation and the subsequent downsizing of unprofitable transport systems by Transnet also contributed to the diminishing share of transportation services in the total fixed capital stock.

The share of manufacturing and the sectors providing electricity, gas and water and community, social and personal services, to total fixed capital stock rose noticeably between the 1960s and the first half of the 1990s. The ratio of manufacturing increased from an average of 9 per cent in the period 1960 to 1969 to 12½ per cent in the years 1990 to 1995. This increase was the net result of moderate growth in the share of the fixed capital stock of private manufacturing, which was strengthened in the first half of the 1990s by investment in large capital projects such as the Columbus stainless steel plant and the Alusaf aluminium smelter, as well as investment by public corporations in strategically important industries.

The share of the fixed capital stock of the sector electricity, gas and water rose from an average of 6½ per

cent in the 1960s to a peak of 9½ per cent during the 1980s, before falling back to an average of 8½ per cent between 1990 and 1995. This increase can mainly be attributed to an intensive capital expansion programme of Eskom between 1974 and 1984, which was based on an overly optimistic assessment of South Africa's future growth prospects and, more recently, the expansion of the electricity distribution network to lesser developed regions in the country.

5.2 Fixed capital stock by type of asset

The asset composition of the real fixed capital stock between 1960 and 1995 is presented in Table 4. On average, the proportionate share of buildings and construction works in total fixed capital stock of about 80 per cent and machinery and transport equipment of about 20 per cent showed little change since the 1960s. In the 1970s and 1980s the share of buildings and construction works receded to 77½ and 76 per cent respectively for the two periods, while the share of machinery and transport equipment rose to 22½ and 24 per cent. These increases in the relative share of accumulated investment in machinery and equipment resulted mainly from an increase in the capital intensity of the production processes of public corporations.

A breakdown according to type of asset shows that the share of residential buildings relative to total fixed capital stock declined from an average of 20½ per cent in the 1960s to 17 per cent in the period between 1990 and 1995, while the corresponding ratio for non-residential buildings for the same periods rose from about 18½ per cent to 22 per cent. The increase in the relative importance of investment in non-residential buildings was related to sustained increases in the real fixed capital

Table 4. The composition of total fixed capital stock by type of asset

Type of asset	Average for the period			
	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1995
Residential buildings	20,3	18,4	17,0	17,1
Non-residential buildings..	18,7	19,2	19,1	21,9
Construction works.....	37,3	36,7	37,0	36,6
Transfer costs	3,9	3,4	3,0	3,4
Total: Buildings and construction works..	80,2	77,7	76,1	79,0
Transport equipment	8,0	8,5	7,9	6,5
Machinery and other equipment.....	11,8	13,8	16,0	14,5
Total: Equipment	19,8	22,3	23,9	21,0
Total	100,0	100,0	100,0	100,0

stock of the sectors commerce, finance and community, social and personal services. Broadly similar trends were recorded in the distribution of the fixed capital stock between machinery and equipment and transport equipment. In the case of transport equipment the ratio receded from an average of 8 per cent in the 1960s to 6½ per cent in the first half of the 1990s, while for machinery and equipment the ratio increased from 12 per cent to 14½ per cent for the corresponding periods.

The decline in the proportionate share of the fixed capital stock of transport equipment was particularly evident since 1985. This decline can be attributed to the sustained higher level of real interest rates since 1985, the sharp rise in the relative prices of transport equipment from the middle of the 1980s, the very long recessionary period experienced by the South African economy between 1989 and 1993 and smaller investment by Transnet in transport equipment as part of their rationalisation programmes during the second half of the 1980s. In contrast, the increase in the share of the fixed capital stock of machinery and equipment came from the growth in real fixed investment in these types of assets since the late 1980s, which has outpaced that of all other major classes of assets. In addition, the increase also reflects a shift from structures to equipment in the composition of the total fixed capital stock. This shift was most likely occasioned by the faster growth in the efficiency of equipment relative to that of structures. In particular, the revolution in computer and communications technology improved the price-performance ratio for equipment far more than the recent improvement in this ratio for structures.

6. The efficiency of fixed investment

The efficiency of investment is normally evaluated by the size and changes in the capital-output ratio, i.e. the proportion of the real gross domestic product to real fixed capital stock. This ratio gives an indication of the amount of capital utilised per unit of output.

An international comparison between the incremental capital-output ratio² (ICOR) in South Africa and some East Asian countries (see Table 5) clearly indicates the decline that took place in the efficiency of investment in South Africa relative to investment in the East Asian countries. In the beginning of the 1970s the incremental capital-output ratios for the selected countries varied between 1,54 and 2,51, while the ratio for South Africa was somewhat higher at 3,13. Although the ratio then increased in all the countries in the second half of the 1980s, it rose much more substantially in South Africa than in the East Asian economies.

Table 5. The incremental capital-output ratio for South Africa and some East Asian countries

Period	Korea	Singa-pore	Thai-land	Malay-sia	South Africa
1971-74	1,54	2,51	2,12	1,62	3,13 ¹
1975-79	1,98	2,81	1,86	1,99	5,34
1980-84	3,22	3,26	2,09	2,63	4,42
1985-88	1,96	4,30	1,88	2,99	6,56 ²
1990-95					5,24

1) 1970-74

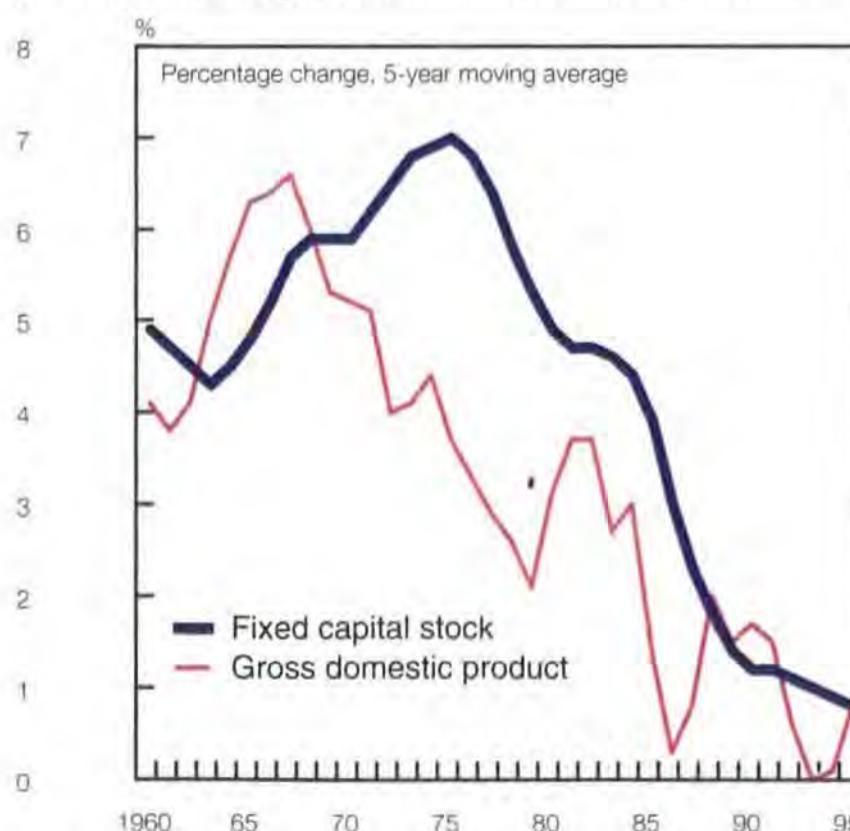
2) 1985-89

Source: Larrain & Vergara (1993: 263)

In Table 6 the average capital-output ratios are provided for selected sectors and for the economy as a whole. The average capital-output ratio generally increased in all the main sectors, except agriculture, between 1960 and 1995. The rate of increase in the aggregate capital-output ratio nevertheless slowed down and then receded somewhat in the 1990s, when some sectors recorded declines in their capital-output ratios.

As shown in Graph 5, the growth rates of the total real gross domestic product and the aggregate real fixed capital stock broadly corresponded in the beginning of

Graph 5. Growth in total real gross domestic product and aggregate real fixed capital stock



² The average change in real fixed capital stock relative to the increase in real gross domestic product.

Table 6. The capital-output ratio by kind of economic activity

Period	Agriculture, forestry and fishing	Mining and quarrying	Manu- facturing	Electricity, gas and water	Con- struction	Wholesale and retail trade, catering and accommodation	Transport, storage and communi- cation	Finance, insurance, real estate and business services	Com- munity, social and personal services	Total
1960	4,10	0,92	0,98	7,52	0,21	1,06	7,05	4,21	29,01	2,41
1961	4,02	0,91	0,97	7,42	0,22	1,09	7,24	4,20	30,02	2,41
1962	3,87	0,88	0,94	7,29	0,22	1,06	7,07	4,10	30,63	2,36
1963	3,81	0,84	0,88	7,10	0,23	0,99	6,88	3,98	31,75	2,29
1964	4,40	0,80	0,86	6,80	0,23	0,95	6,66	3,87	32,03	2,23
1965	4,46	0,79	0,93	6,57	0,23	0,93	6,58	3,89	33,88	2,23
1966	4,20	0,78	0,98	6,68	0,28	0,96	6,75	3,97	35,17	2,27
1967	3,42	0,78	0,98	6,72	0,28	0,93	6,86	3,96	35,52	2,26
1968	3,99	0,76	0,99	6,80	0,27	0,88	6,81	3,85	35,85	2,27
1969	3,95	0,76	0,93	6,99	0,26	0,88	6,63	3,73	38,63	2,26
1970	4,39	0,74	0,93	6,81	0,25	0,87	6,23	3,84	40,25	2,28
1971	3,83	0,80	0,95	6,83	0,24	0,89	6,17	4,03	41,34	2,33
1972	3,99	0,85	0,98	6,67	0,25	0,94	6,39	4,14	44,52	2,44
1973	4,69	0,87	0,98	6,44	0,31	0,92	6,40	4,13	47,11	2,49
1974	3,69	0,99	1,02	6,22	0,33	0,91	6,11	4,23	47,81	2,52
1975	4,20	1,13	1,06	6,21	0,38	0,89	6,43	4,36	49,77	2,62
1976	4,46	1,18	1,10	6,48	0,43	0,93	6,86	4,45	51,18	2,73
1977	4,09	1,25	1,19	6,75	0,48	1,04	7,23	4,58	52,17	2,89
1978	3,99	1,32	1,18	7,04	0,55	1,07	7,22	4,58	52,59	2,93
1979	4,10	1,36	1,17	7,29	0,55	1,12	6,82	4,46	52,29	2,94
1980	3,79	1,52	1,18	7,42	0,52	1,01	6,47	4,31	52,43	2,88
1981	3,74	1,69	1,24	7,19	0,51	0,94	6,25	4,28	50,50	2,88
1982	4,21	1,85	1,39	7,33	0,55	0,97	6,73	4,35	49,22	3,05
1983	5,42	1,95	1,59	7,95	0,59	0,97	7,42	4,36	47,36	3,24
1984	4,80	1,97	1,57	8,14	0,58	0,92	6,97	4,40	45,61	3,19
1985	3,89	2,08	1,70	8,20	0,62	0,99	7,00	4,48	46,04	3,31
1986	3,53	2,25	1,65	8,31	0,66	1,06	7,19	4,49	46,37	3,37
1987	3,32	2,62	1,55	8,09	0,67	1,03	7,17	4,41	46,14	3,35
1988	3,11	2,58	1,43	7,63	0,63	1,00	6,83	4,42	45,94	3,24
1989	2,67	2,73	1,41	7,29	0,56	1,00	6,51	4,48	46,22	3,21
1990	2,83	2,84	1,52	7,09	0,54	0,99	6,48	4,57	46,72	3,29
1991	2,65	2,99	1,64	6,80	0,56	1,02	6,63	4,56	47,06	3,36
1992	3,56	2,98	1,74	6,56	0,59	1,05	6,48	4,58	47,31	3,47
1993	2,80	2,87	1,79	6,11	0,61	1,05	6,30	4,59	47,66	3,43
1994	2,46	2,91	1,78	5,71	0,59	1,03	6,07	4,50	48,00	3,37
1995	2,87	3,00	1,72	5,41	0,58	0,99	5,78	4,40	47,90	3,31

Average for the period

1960-1969	4,02	0,82	0,94	6,99	0,24	0,97	6,85	3,98	33,25	2,30
1970-1979	4,14	1,05	1,06	6,68	0,38	0,96	6,59	4,28	47,90	2,62
1980-1989	3,85	2,12	1,47	7,76	0,59	0,99	6,85	4,40	47,58	3,17
1990-1995	2,86	2,93	1,70	6,28	0,58	1,02	6,29	4,53	47,44	3,37

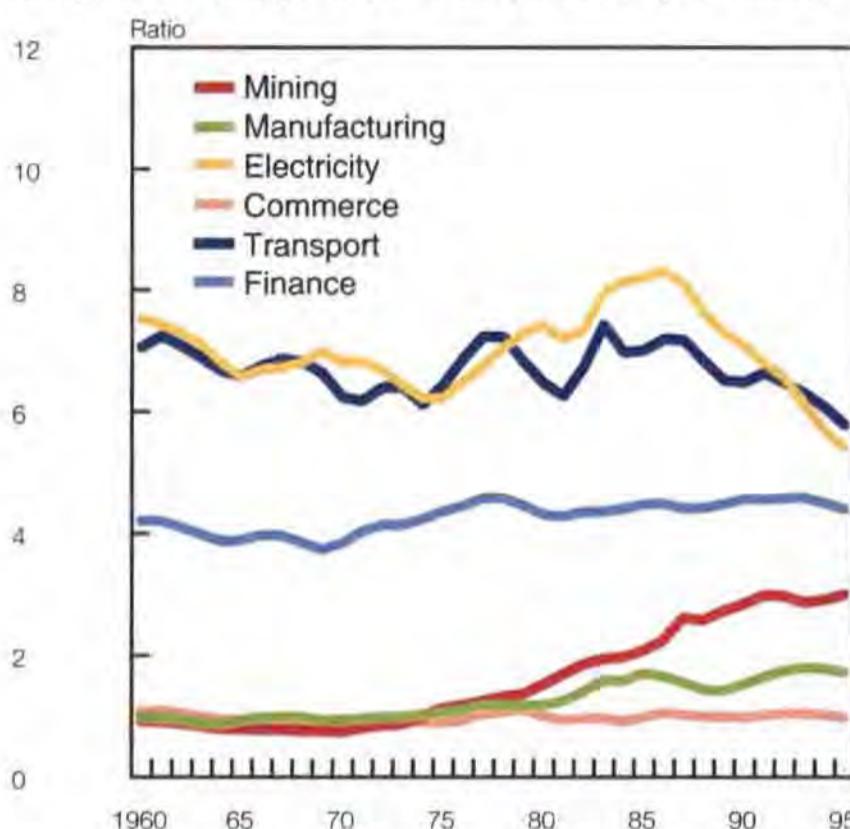
the 1960s. The total capital-output ratio thus remained reasonably constant. After 1967 this situation changed significantly and the two growth rates began to diverge noticeably. The capital-output ratio of the economy as a whole increased at an average annual rate of 1½ per cent from the middle of the 1960s to 1995. The cyclical recovery in the economy after the gold-price boom of 1979-80, the economic upswing of 1987-88 and the recovery since the middle of 1993 had the effect of increasing the growth rate of the gross domestic product to become more on par with that of the capital stock.

During the 1990s the growth in South Africa's real gross domestic fixed capital stock declined to an average annual rate of less than 1 per cent, compared with an average annual growth of 5 per cent in the 1960s, 6 per cent in the 1970s and 3 per cent in the 1980s. The rate of increase in real gross domestic product exceeded the rate of increase in total real fixed capital stock during the economic recovery from the middle of 1993. Consequently, the aggregate capital-output ratio declined by 4½ per cent between 1992 and 1995, following an increase of 8 per cent in the period 1989 to 1992.

The recent improvement in capital productivity was discernible in all the major sectors of the economy, with the notable exception of the mining industry. As shown in Graph 6, the capital-output ratios of the electricity and transport sectors have already improved since the late 1980s, reflecting the better utilisation of the production capacity that had been created in these sectors in the early 1980s. The recent levelling-off in the decline of the capital-output ratio of the manufacturing sector was occasioned by stronger output growth arising from the buoyancy of export demand for manufactured goods and the commissioning of the Columbus stainless steel and the Alusaf aluminium plants. The decline in the capital productivity of the mining sector was the combined effect of an increase in capital intensity and the decline in the grade of gold-bearing ore mined. The improvement in the capital-output ratio of the agricultural sector was broadly consistent with the increased competitive pressures faced by the sector and rationalisation of farming units.

From Graph 6 it is also apparent that the capital productivity of the various production sectors differed markedly: the average amount of capital invested to produce one unit of output is between three and seven times higher in sectors such as electricity, gas and water, transport, storage and communication and the financial services sectors than in the mining, manufacturing and commerce sectors. Graph 7 shows the difference between the capital-output ratios of the "parastatal sector" (i.e. the business enterprises of general government and the public corporations) and the private sector. Although the expansion of infrastructural investment had a stimulatory effect on activity in the private sector, it also had the effect of increasing the

Graph 6. Average capital-output ratio per sector

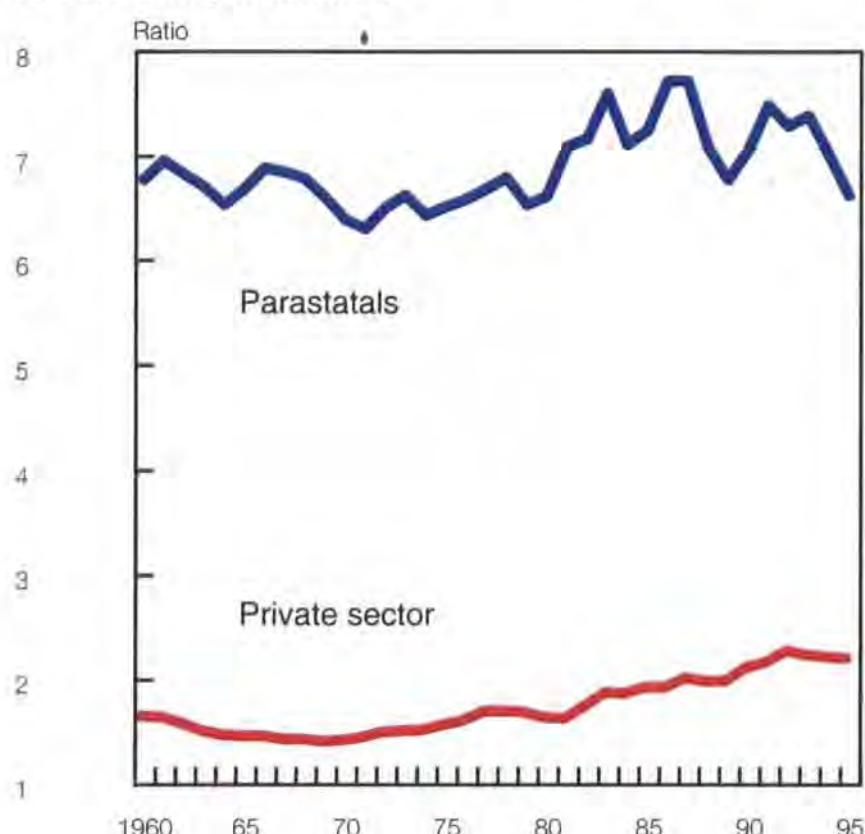


share in the capital stock of sectors with low-yielding assets and thus reduced the growth and employment-creating potential of the economy.

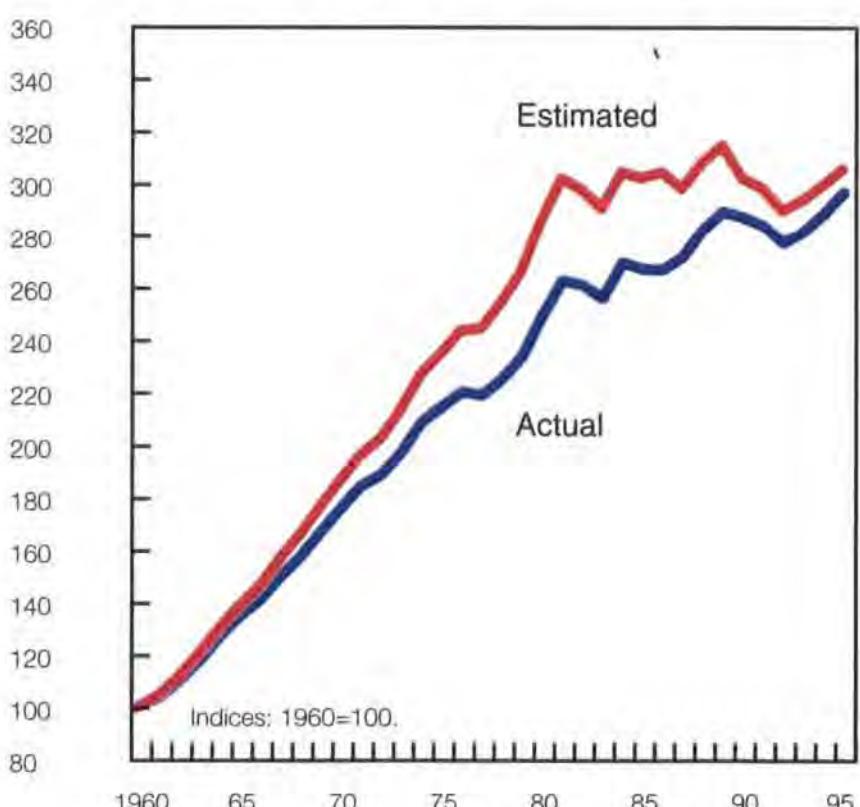
In the period before 1987 when the privatisation of public corporations began, the private sector's share in the total capital stock gradually dwindled. In the period 1960 to 1969 the private sector accounted for 51 per cent of the total real fixed capital stock, while the parastatal sector accounted for 28 per cent. These proportions changed to 43 per cent for the private sector and 34 per cent for the parastatals in the first half of the 1980s. The share in the capital stock of the private sector subsequently rose to an average of 48 per cent at the beginning of the 1990s; privatisation is estimated to have contributed about 4 percentage points to this increase.

Graph 7 shows that the productivity of capital, as measured by the capital-output ratio, is much higher in the private sector than in the parastatal sector. The average capital-output ratio of the parastatals amounted to about 6.9 between 1960 and 1995, which is about four times the size of the average capital-output ratio of 1.7 of the private sector. The shift of the capital stock from the private sector to the parastatals has had a marked impact on the growth of the real gross domestic product. To illustrate this, the level of real gross domestic product was estimated for each year since 1960 under the assumptions that the relative proportions of total fixed capital stock in the private and parastatal sectors remained unchanged at 1960 levels

Graph 7. The capital-output ratios for the private sector and parastatals



Graph 8. Potential real gross domestic product



and that the respective sectors' capital-output ratios remained as actually recorded in each year. Although the effect of the reallocation in the composition of capital stock was marginal during the 1960s, it increased significantly during the second half of the 1970s and the early 1980s. At its peak in 1981, the reallocation effect accounted for a difference of approximately 15 per cent between the actual and the estimated level of output. This means that 15 per cent of potential output was forfeited on account of the diversion of the nation's resources in favour of parastatals. The negative impact of the reallocation of fixed investment after the mid-1980s declined, but this can be attributed, at least partly, to the privatisation referred to earlier.

7. Summary and conclusions

This article presented a brief overview of the measurement and methodology used in South Africa for the calculation of the domestic fixed capital stock and to analyse the growth and changes in the composition of this stock of physical assets. The estimates show that the growth in aggregate real fixed capital stock rose rapidly during the 1960s and 1970s, but then slowed down in the 1980s and 1990s.

In the period prior to the privatisation of public corporations there had been a shift in the allocation of total fixed capital stock as investment was increasingly

channelled towards public-sector activities. The share of the private sector in total fixed capital stock consequently declined substantially between 1960 and the beginning of the 1980s. Since the second half of the 1980's, however, the private sector has increased its share of total capital stock. The estimates of the average age of machinery and equipment shows that the age of this type of asset reached a high towards the end of the 1980s, before it declined to a recent low during 1996. This brought the average age of the stock of machinery and equipment to a level that is notably lower than its long-term average.

Despite the lower growth in aggregate real fixed capital stock, the rate of increase in total real fixed capital stock still exceeded the long-term growth in real gross domestic product. As a result, the total capital-output ratio rose from the 1960s to the 1990s, signalling a deterioration in the efficient usage of capital. An important reason for this development was the shift in the composition of the fixed capital stock from the private sector with a relatively low capital-output ratio to the parastatal sector with a comparatively high capital-output ratio. This had the effect of suppressing both the level and the growth of aggregate real gross domestic output.

In comparison to other countries, particularly some East Asian economies, the South African economy experienced a significant decline in fixed investment rates and a parallel slowdown in gross domestic product growth over the last one and a half decades. The

effective use of scarce investment resources to improve the utilisation of the existing capital stock and future additions to this stock will be of great importance in bringing about a higher rate of economic growth and an improvement in the quality of life of all South Africans.

8. Bibliography

- Belgium. 1980. Statistieken ten dienste van de bedrijven, hun beschrijving en methodologie. *Statistische studiën nummer 58*, Nationaal Instituut voor de Statistiek.
- Blades, D. 1983. Service lives of fixed assets. *OECD Working paper*, No. 4.
- De Cindio, G. 1993. Average service life of fixed capital in Italy: Results of an ISCO special survey. *21st CIRET conference*.
- De Jager, B.L. 1973. The fixed capital stock and capital output ratio of South Africa from 1946 to 1972. *South African Reserve Bank Quarterly Bulletin*, June.
- Du Piesanie, C.J. 1968. Die bepaling en die gebruik van kapitaalopbrengsverhoudings. Unpublished M.A. Econ dissertation, Pretoria: University of Pretoria.
- Fallon, P. & Pereira de Silva, L.A. 1994. South Africa: Economic performance and policies. *Informal discussion papers on aspects of the economy of South Africa*, The World Bank Southern Africa Department, Discussion paper 7.
- Hibbert, J., Griffen, T.J. & Walker, R.L. 1977. Development of estimates of the stock of fixed capital in the United Kingdom. *Review of Income and Wealth*, Vol. 23, p. 117-137.
- Inter-Secretariat Working Group on National Accounts. 1993. *System of National Accounts*. Brussels: Eurostat, New York: UN, Paris: OECD, Washington D.C: IMF.
- Larrain, F. & Vergara, R. 1993. Investment and macroeconomic adjustment: The case of East Asia, in Serven, L. & Solimano, A. (Eds) 1993. *Striving for growth after adjustment: The role of capital formation*. Washington D.C: World Bank.
- Oliner, S.D. 1989. The formation of private business capital: Trends, recent developments, and measurement issues. *Federal Reserve Bulletin*, December.
- Prais, S.J. 1986. Some international comparisons of the age of the machine stock. *Journal of Industrial Economics*, Vol. 34, No. 3.
- Serven, L. & Solimano, A. 1993. Private investment and macroeconomic adjustment: A survey, in Serven, L. & Solimano, A. (Eds). 1993. *Striving for growth after adjustment: The role of capital formation*. Washington D.C: World Bank.
- Serven, L. & Solimano, A. 1993. Economic adjustment and investment performance in developing countries: The experience of the 1980s, in Serven, L. & Solimano, A. (Eds). 1993. *Striving for growth after adjustment: The role of capital formation*. Washington D.C: World Bank.
- South African Reserve Bank. 1991. South Africa's national accounts, 1946 to 1990. Supplement to *Quarterly Bulletin*, June.
- Swanepoel, C.J. & Van Dyk, J. 1978. The fixed capital stock and sectoral capital-output ratios of South Africa, 1947 to 1977. *South African Reserve Bank Quarterly Bulletin*, September.
- Ward, M. 1976. *The measurement of capital: The methodology of capital stock estimates in OECD countries*. Paris: OECD.

Kwartaallikse ekonomiese oorsig

Inleiding

Die groei in die ekonomie, wat vir 'n geruime tyd voortgeduur het teen 'n hoër koers as die langtermynvermoë soos bepaal deur die heersende binnelandse besparingsverhouding, het in die derde kwartaal van 1996 ietwat verlangsaam. Hierdie verlangsaming het voorgekom ondanks 'n hupstoot deur die skerp toename in landbouproduksie. Te oordeel na die groei in die ekonomie buite die landbousektor, lyk dit asof die versnelling in die koers van herstel in die algehele ekonomiese bedrywigheid sedert 1993 besig is om óf stukrag te verloor, óf dat die boonste draaipunt van die konjunktuur reeds verbygesteek is. Die verlangsaming in die koers van uitbreiding sal waarskynlik van vorige afwaartse fases van die tagtigerjare verskil in die opsig dat dit na verwagting 'n verlangsaming in die groei in produksie om 'n stygende langtermynneiging sal wees eerder as 'n werklike daling in reële produksie. Vir 1996 in die geheel word 'n groeikoers van sowat 3 persent in die reële bruto binnelandse produk steeds in die vooruitsig gestel.

Die swakker groei van produksie in die derde kwartaal van 1996 was meer opvallend in die nie-landbousektore wat goedere produseer as in die sektore van die ekonomie wat dienste voorsien. Mynbouproduksie, en meer bepaald goudmynn-bouproduksie, het in die derde kwartaal van 1996 betreklik skerp afgeneem. Fabrieksproduksie het ook in die eerste drie kwartale van 1996 'n gebrek aan groekrag getoon. Hoewel die uitvoer van vervaardigde goedere gunstig gereageer het op die verbetering in die mededingingskrag van Suid-Afrikaanse produsente as gevolg van die depresiasie van die rand, was die reaksie van die fabrieksproduksie taamlik gematig. Dit lyk asof die toename in die hoeveelheid vervaardigde goedere wat gedurende 1996 uitgevoer is hoofsaaklik die gevolg van 'n vervanging van voorraadopbouing en finale verkope in die binnelandse mark was sonder enige betekenisvolle uitbreiding in die fisiese omvang van die fabrieksproduksie. Die traie reaksie van die sektore wat goedere produseer is in 'n mate teengewerk deur 'n effens energieker groei in produksie in die dienstesekture. Die finansiëledienstesektor het by uitstek gebaat by die hoë vlakke van bedrywigheid in die effekte-, aandele- en ander finansiële markte.

Die verlangsaming in die groei van binnelandse produksie het met 'n werklike afname in totale bruto binnelandse besteding saamgeval en daardeur die oorskot van binnelandse besteding bo binnelandse produksie verminder en die tekort op die lopende rekening van die betalingsbalans verklein. Die toename

in al die belangrikste komponente van totale finale vraag het in die derde kwartaal van 1996 verlangsaam en investering in voorrade is vanaf die tweede tot die derde kwartaal aansienlik verminder. Ondanks die stadiger groei van private verbruiksbesteding, het dit steeds te vinnig gestyg en is dit in 'n aansienlike mate deur bankkredietverlening gefinansier.

Die lae besparingsverhouding van die Suid-Afrikaanse ekonomie, wat deur die vinnige uitbreiding van private verbruiksbesteding vererger word, bly steeds 'n ernstige rede tot kommer. Die ondervinding gedurende die jongste oplewing in die ekonomie bevestig klaarblyklik dat die tekort aan voldoende binnelandse besparing een van die faktore is wat die Suid-Afrikaanse ekonomie verhinder om op 'n volgehoudende grondslag teen 'n koers van meer as 2½ tot 3 persent per jaar te groei. Dit wil voorkom asof groei bokant hierdie perk tot tekorte op die lopende rekening van die betalingsbalans lei wat nie volgehoud word nie. In die lig van die wispelturigheid van buitelandse kapitaalbewegings bly dit riskant om vir te lank op die inwaartse beweging van internasionale kapitaal staat te maak om binnelandse besparing aan te vul. Ten einde hierdie ernstige besparingsbelemmering op Suid-Afrika se langtermyn ekonomiese groei en welvaart die hoof te bied, is dit belangrik dat die regering se makro-ekonomiese strategie vir groei, werkverskaffing en herverdeling, wat sterk klem op die verhoging van besparing en die verbetering van makro-ekonomiese bestendigheid plaas, in werking gestel moet word.

Tot aan die einde van die tweede kwartaal van 1996 was die oplewing in die ekonomie nie in staat om die werkverskaffingsvermoë van die ekonomie op 'n volhoubare wyse te verhoog nie. Die winste in werkverskaffing in die private sektor in die tweede helfte van 1994 en die eerste helfte van 1995 is sedert die middel van 1995 deur volgehoud verliese aan werkgeleenthede verminder. Ekonomiese groei sonder werkskepping het inderdaad 'n netelige aspek van die Suid-Afrikaanse ekonomie geword.

Die toename in nominale salaris en lone per werker, wat gedurende die eerste helfte van die negentigerjare toenemend onder beheer gebring is, het in die tweede helfte van 1995 weer begin versnel. Boonop was die toename in arbeidsproduktiwiteit vanaf die middel van 1995 nie voldoende om 'n versnelling in die styging van nominale arbeidseenheidskoste te voorkom nie. Hierdie kosteverhogende kragte, tesame met dié van die verswakkende rand, het hul slag begin wys toe prysinflasie in die tweede kwartaal van 1996 opnuut begin het om momentum op te bou. Dit het die behoefté aan die handhawing van 'n konsekiente en geloofwaardige monetêre beleid teen inflasie beklemtoon. Andersins sal

die voordele van groter mededinging as gevolg van die onlangse daling in die waarde van die rand spoedig deur 'n kringloop van binnelandse loon- en prysstygings ongedaan gemaak word.

Die hoë vlak van binnelandse besteding en die begeerte om ingevoerde intermediêre goedere en kapitaaltoerusting te bekom voordat prysse deur die depresiasi van die rand opgejaag kon word, het tot 'n volgehoue opwaartse beweging in die waarde van ingevoerde goedere in die derde kwartaal van 1996 gelei. Gelukkig het die sterk vraag na invoer saamgeval met 'n heroriëntering van die binnelandse produksiestructuur na die uitvoermark. Soos verwag kon word, het die depresiasi van die geldeenheid 'n opmerklike invloed op uitvoerprysse gehad. Uitvoerverdienste in totaal is ook opgestoot deur 'n skerp styging in die waarde van gouduitvoer, wat tot 'n welkome daling in die tekort op die lopende rekening van die betalingsbalans bygedra het.

Deels in reaksie op die verswakkking van die rand, maar ook deels verantwoordelik vir die insinking in die waarde van die rand, het kapitaalbewegings na Suid-Afrika van 'n netto inwaartse beweging van fondse in die tweede kwartaal van 1996 tot 'n netto uitwaartse beweging in die derde kwartaal omgeswaaai. Daar was aanduidings dat 'n deel van die skuld wat ingevolge die buitelandse skuldstilstandreëlings heronderhandel is en wat in die derde kwartaal van 1996 betaalbaar geword het, nie verleng is nie en dat die opbrengs aan die buiteland terugbetaal is. Inwaartse beleggings deur middel van die Johannesburgse Aandelebeurs en die Effektebeurs van Suid-Afrika het ook aansienlik afgeneem tot ver onder die vlakte wat in die eerste helfte van 1996 behaal is.

Die algehele tekort op die betalingsbalans was verantwoordelik vir 'n aansienlike afname in die bruto goud- en ander buitelandsevalutareserves van die land. Die lae vlak van die buitelandse reserves het tot die swakheid van die rand bygedra en het die vermoë van die Reserwebank beperk om in die mark vir buitelandse valuta in te meng met die oogmerk om die wisselkoers van die rand te stabiliseer. Die daling in die eksterne waarde van die rand het teen dié tyd die internasionale mededingendheid van die Suid-Afrikaanse ekonomie in só 'n mate versterk dat die land nou aantrekliker behoort te wees vir inwaartse regstreekse belegging, mits inflasie en kostestygings in bedwang gehou word.

Hoewel die hoë vlak van totale binnelandse besteding in die derde kwartaal van 1996 effens afgeneem het, het dit steeds tot die vinnige groei in die geldvoorraad gedurende die derde kwartaal van 1996 bygedra. Die groeikoers van die geldvoorraad het ook effens afgeneem, maar die monetêre uitbreiding is steeds te hoog vergeleke met die langtermyn-groeivermoë van die ekonomie. Dit is ook te gou om uit die verlangsaming in die groei van die geldvoorraad te oordeel of die beleidstappe wat vroeër ingestel is, suksesvol was om die uitbreiding in die geldvoorraad

deurlopend te verlaag. Die volgehoue hoë groei in die geldvoorraad het geen ruimte vir selfvoldaanheid in die stryd teen inflasie gelaat nie en regverdig die volgehoue toepassing van teeninflasionêre monetêre beleid.

Die sterk vraag na geld vanweë transaksiedoeleindes is aangevul deur die toename in die private sektor se likiditeitsvoorkeur vanweë kommer oor politieke verwikkellings en onsekerhede oor die toekomstige verloop van finansiële beleid en verwagtings dat aanpassings in die effekte- en aandeemark op hande is. Veral institutionele beleggers het 'n duidelike voorkeur getoon om groter bedrae as gewoonlik in kontant en kortertermyndeposito's te hou. Hierdie voorkeur vir kortertermyndeposito's het daartoe gelei dat die groei in die enger gedefinieerde monetêre groothede selfs vinniger was as in die breed gedefinieerde groothede.

Omdat 'n groot deel van die toename in private verbruiksbesteding en kapitaalbesteding van maatskappye deur middel van binnelandse kredietverlening gefinansier is, het die krediet wat monetêre instellings aan die private nie-banksektor verleen in die derde kwartaal teen 'n hoë koers bly groei. 'n Groot deel van die toename in kredietverlening aan die private sektor was vir private huishoudings bestem. Dit was moontlik 'n belangrike faktor wat vir die sterk groei in die besteding van private huishoudings in die derde kwartaal verantwoordelik was. In 'n statistiese of rekeningkundige sin is die moontlike invloed van die groei in kredietverlening aan die private sektor op die algehele geldvoorraad deels teengewerk deur afnames in die netto buitelandse bates van die monetêre sektor en in die netto kredietverlening deur die monetêre instellings aan die owerheidsektor.

Die Suid-Afrikaanse finansiële markte het in die eerste vyf maande van 1996 'n belangrike aanpassingsfase ondervind in reaksie op die opwaartse aanpassing wat in langtermynopbrengskoerse in die Amerikaanse effektemark plaasgevind het en die skerp daling in die waarde van die rand vanaf middel-Februarie. Die markte het teen Oktober nog nie heeltemal tot bedaring gekom nie; 'n ondertoon van onsekerheid en senuagtigheid duur steeds voort en die opbrengskoerse op langtermynstaatseffekte en geldmarkkoerse het rondom 'n betreklike plat baan geskommel. Dit lyk asof plaaslike sowel as buitelandse beleggers telkens ongemaklik word as opbrengskoerse tot laer as 15 persent daal in 'n tyd van stygende inflasie en 'n swak rand, terwyl die kleiner vraag na fondse effektief voorkom het dat koerse tot aansienlik hoër as 16 persent styg. Aangesien opbrengskoerse op langtermyn- en kortermynsekuriteite vanaf Mei 1996 oor die algemeen eenders beweeg het, het die opbrengskoerskromme op en af geskuif namate die sentiment in die markte verander het, maar oor die algemeen sy gelyke verloop behou. Die kromme het vanaf Mei tot September geleidelik afwaarts verskuif, maar in Oktober het dit weer min of meer herstel tot die vlak waarop dit in Mei was. Die opbrengskoerskromme aan die einde van Oktober was waarskynlik 'n

weerspieëling van die steeds wydverspreide onsekerheid oor toekomstige prysbewegings in die finansiële markte, asook vrese dat die vordering wat met die verlaging van inflasie gemaak is, omgekeer kan word.

Geldmarkrentekoërs het in November verder verstewig in weerspieëling van die stram geldmarktoestande, 'n skaarste aan likiede waardepapier wat kwalifiseer as kolateraal vir die verkryging van lenings by die diskontovenster van die Reserwebank, hennude vrese vir inflasie en die swakheid van die rand. Dit het daartoe geleid dat Bankkoers vanaf 21 November 1996 met 1 persentasiepunt verhoog is en dat die banke op dieselfde datum met 'n soortgelyke verhoging in hul uitleenkoërs gevolg het.

Geldmarktoestande wat in die tweede kwartaal van 1996 oor die algemeen stram geword het, het van die einde van Junie 1996 tot aan die einde van Oktober 1996 selfs verder vernou. Die bedrag aan akkommodasie wat die Reserwebank aan banke moes verskaf, het aan die einde van Oktober sy hoogstevlak sedert April 1996 bereik aangesien die daling in die Bank se netto buitelandse bates voortdurend likiditeit uit die mark onttrek het. Die Bank het deur die loop van die tweede en derde kwartale van 1996 geen teenmaatreëls ingestel nie en het die groeiende geldmarktekort toegelaat om oor die algemeen die onderliggende wanbalans tussen vraag en aanbod in die mark te weerspieël. Die Bank het slegs by tye wanneer die marktoestande buitensporig stram was, tydelik hulp verleen. Die bystand was in die vorm van aanpassings in die portefeuilje van die Korporasie vir Openbare Deposito's en ruitransaksies in buitelandse geldeenhede tussen die Reserwebank en private banke.

Minder fondse is in die eerste helfte van die huidige fiskale jaar deur die openbare sektor opgeneem as wat in die eerste helfte van die vorige fiskale jaar die geval was. Maatskappye in die private sektor het in die derde kwartaal van 1996 vir die eerste keer sedert die derde kwartaal van 1995 fondse in die primêre effekemark opgeneem. Die maatskappye het ook die bedrag wat hulle gedurende die eerste drie kwartale van 1996 deur uitgifte van aandele verkry het, verhoog vergeleke met die bedrae wat in die vorige jaar opgeneem is.

Die pryse van alle klasse aandele wat op die Johannesburgse Aandelebeurs genoteer is, het sedert Februarie 1996 nie 'n duidelik opwaartse of afwaartse neiging getoon nie. As gevolg van die depresiasie van die rand het aandelepryse in buitelandse geldeenhede uitgedruk, skerp gedaal wat veroorsaak het dat die netto aankope van Suid-Afrikaanse aandele deur buitelanders gedurende die eerste drie kwartale van 1996 voortdurend afgeneem het. Buitelanders het in Oktober 1996 vir die eerste keer sedert Desember 1994 netto verkopers geword van aandele wat op die Johannesburgse Aandelebeurs genoteer is.

Ondanks 'n effense agteruitgang in die leningsbehoefte van die omvattende openbare sektor gedurende die eerste helfte van die huidige fiskale jaar, is daar sterk aanduidings dat die regering moontlik daarin

sal slaag om sy doelwit te behaal, naamlik om die tekort van die Skatkis voor lenings en skuldterugbetelings as 'n persentasie van bruto binnelandse produk te verminder. Die toename in skatkisuitreikings was in die eerste helfte van die fiskale jaar 1996/97 effens hoër as die begrotingsramings in Maart 1996, maar dit was aansienlik laer as die gemiddelde styging in die eerste helfte van die vorige vyf fiskale jare. Die toename in skatkisontvangstes was gelukkig ook effens hoër as die begrotingsramings. Die regering het ook aansienlike vordering met die implementering van sy makro-ekonomiese strategie gemaak toe sekere belastingaansporings ingestel is. Ten einde belastingdoeltreffendheid te verbeter, is 'n belastingamnestie aangekondig wat na verwagting meer omvattend as vorige amnesties sal wees.

Binnelandse ekonomiese ontwikkelings

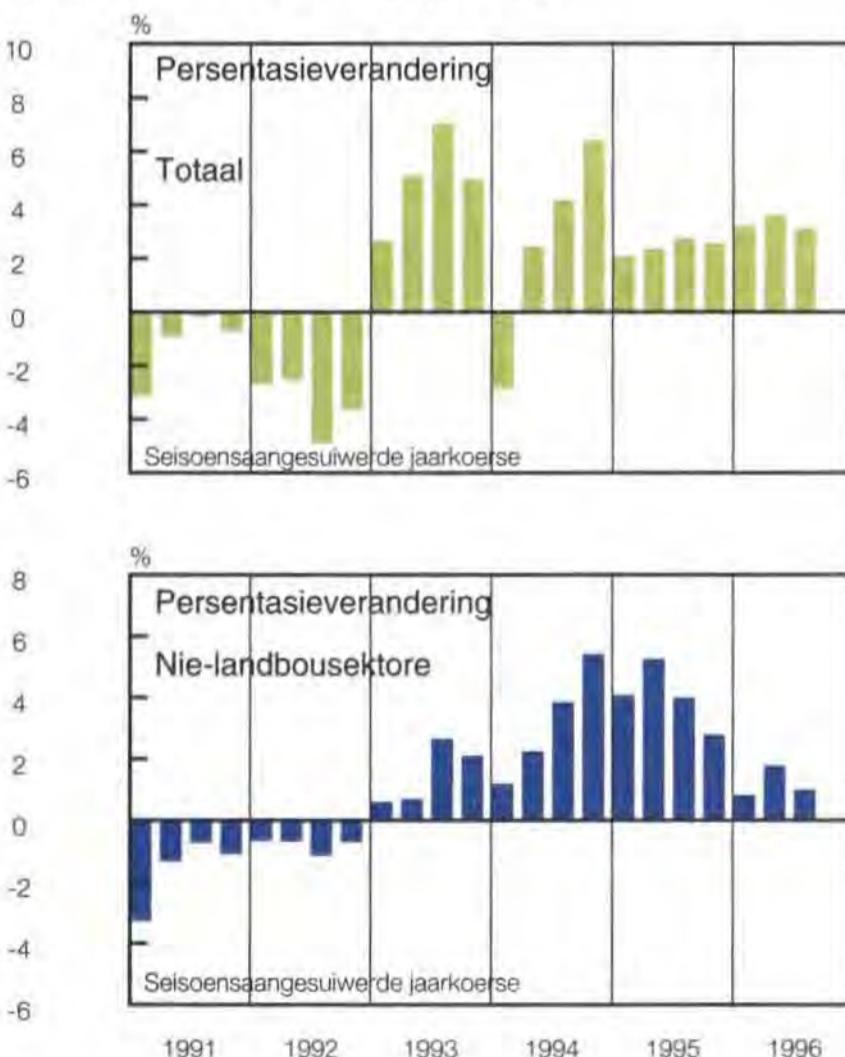
Binnelandse produksie¹⁾

Nadat die totale reële bruto binnelandse produk in elk van die eerste twee kwartale van 1996 teen 'n seisoensaangesuiwerde jaarkoers van 3½ persent van kwartaal tot kwartaal toegeneem het, het dit in die derde kwartaal teen 'n effens laer, maar steeds stetige koers van 3 persent toegeneem. Hierdie toenames het die vlak van die bruto binnelandse produk in die eerste drie kwartale van 1996 tot sowat 3 persent bokant die vlak in die ooreenstemmende tydperk van die voorafgaande jaar te staan gebring.

Indien die landbousektor buite rekening gelaat word, het die reële produksie van die nie-landbousektore in die derde kwartaal van 1996 met sowat 1 persent toegeneem vergeleke met 2 persent in die tweede kwartaal. Die groei in die produksie van die nie-landbousektore was in die eerste kwartaal van 1996 ook 1 persent, wat beteken dat

¹⁾ Soos gebruiklik is die gegewens van nasionale rekeninge en die betalingsbalans hersien en in hierdie uitgawe van die *Kwartaalblad* opgeneem. Hierdie hersienings is gebaseer op volledige of meer toepaslike gegewens. Daarbenewens is die faktore vir die aansuiwing van seisoensveranderings op datum gebring.

Reële bruto binnelandse produk



die gemiddelde saamgestelde groeikoers van die ekonomie buite die landbousektor gedurende die eerste drie kwartale van 1996 effens meer as 1 persent was. Dit is aansienlik minder as die gemiddelde groeikoers van kwartaal tot kwartaal van 4 persent in die nie-landbouproduksie wat in 1995 aangeteken is. Hierdie daling in die groei van produksie in die nie-landbousektor is breedweg in ooreenstemming met die afwaartse neiging in die samevallende konjunktuurwyser sedert die middel van 1995 en kan moontlik daarop dui dat die ekonomie reeds in die vroeë stadium van 'n tydperk van betreklik stadiger ekonomiese groei is.

Landbouproduksie het in die derde kwartaal van 1996 teen 'n baie hoë koers bly toeneem as gevolg van die uitsonderlik goeie weerstoestande in die meeste dele van die land wat die bruto inkomste van akkerbou-, tuinbou- en veeboere 'n hupstoot gegee het. Die reële produksie van akkerbouprodusente het veral voordeel getrek uit 'n mielie-oes wat groter as normaalweg was en waarvan die grootste deel gedurende die derde kwartaal van 1996 ingesamel is.

Die totale reële produksie van die mynbousektor wat in die eerste kwartaal van 1996 bykans geen verandering getoon het nie, het in die tweede kwartaal teen 'n seisoensaangesuiwerde jaarkoers van 5 persent en in die derde kwartaal met 7 persent gedaal. Die afwaartse neiging van mynbouproduksie was die gesamentlike gevolg van laer produksie deur die goudmynbou- en ander mynbousektore, met die uitsondering van diamant- en steenkoolmynbou. Goudmynproduksie by

Tabel 1. Reële bruto binnelandse produk volgens sektor

Persentasieverandering teen seisoensaangesuiwerde jaarkoerse

Sekture	1996		
	1e kw	2e kw	3e kw
Primêre sektore	22%	13	13½
Landbou.....	82%	52	54%
Mynbou.....	0	-5	-7
Sekondêre sektore.....	½	2	½
Fabriekswese	-½	1½	-½
Elektrisiteit, gas en water..	6%	5	5½
Tertiêre sektore	½	3	2
Handel.....	-3	5	½
Vervoer	1	2	2½
Finansiële dienste	3½	3	4
Algemene owerheid.....	1	1½	1
Totaal	3½	3½	3
Nie-landbousektore.....	1	2	1

sommige van die groter myne is in die derde kwartaal van 1996 ongunstig deur enkele gevalle van geweldpleging tussen werkers, ondergrondse brande en seismologiese bedrywighede geraak. In die indeling "ander mynbou" is produksie ook deur arbeidsverwante probleme by sommige platinummyne ingekort. In teenstelling met hierdie verwikkelinge het die vlak van reële produksie in die diamant- en steenkoolmynboubedryf toegeneem tot 'n vlak wat in die eerste drie kwartale van 1996 $2\frac{1}{2}$ persent hoër as in die ooreenstemmende tydperk van 1995 was.

Die reële produksie van die fabriekswese het in die derde kwartaal van 1996 effens gedaal. Dit beteken dat die reële toegevoegde waarde van die fabriekswese in die eerste drie kwartale van 1996 byna geen toename getoon het vergeleke met die produksievlekke in die ooreenstemmende tydperk in 1995 nie. Die verlangsameing in die groei van die fabrieksproduksie kan aan die verlangsameing in die groei van die reële binnelandse finale vraag in die eerste drie kwartale van 1996 toegeskryf word. Die swak produksievertoning van ondernemings in die fabriekswese sedert die begin van 1996 is ook deur die laer koerse van die benutting van produksievermoë weerspieël wat van 'n onlangse hoogtepunt van $83\frac{1}{2}$ persent in die tweede kwartaal van 1995 tot $81\frac{1}{2}$ persent in die eerste drie kwartale van 1996 gedaal het.

In die ander sekondêre sektore het die reële toegevoegde waarde van die sektor wat elektrisiteit, gas en water voorsien verder teen 'n betreklik hoë koers gestyg vanweë faktore soos die voortgesette program vir die verspreiding van elektrisiteit aan laerinkomstegroepe en die sterk vraag na elektrisiteit vir verhittingsdoeleindes gedurende 'n buitengewoon koue winter.

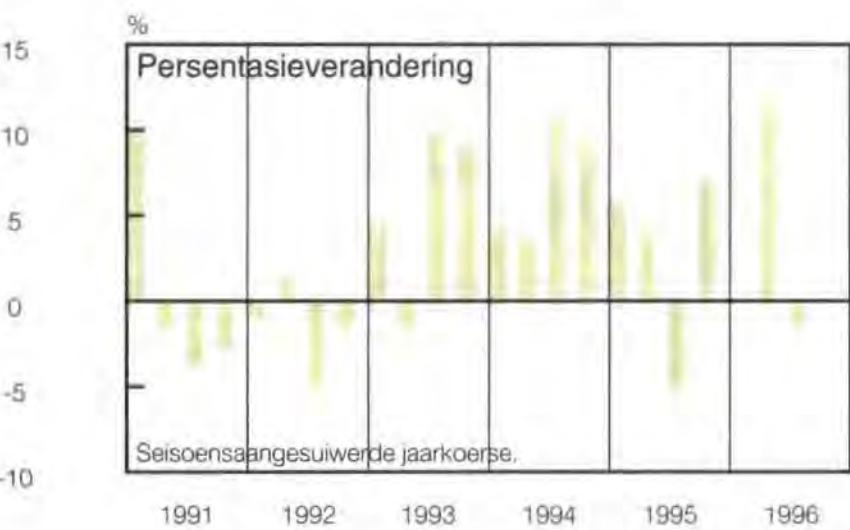
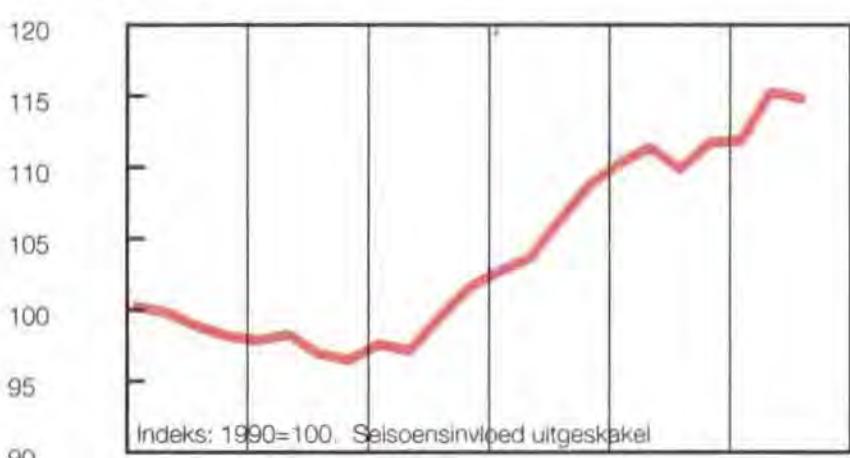
Die reële toegevoegde waarde van die tersiêre sektore het in die derde kwartaal van 1996 verder toegeneem teen 'n koers wat hoër was as die groei-koers van die sektore wat nie-landbougoedere produser. Hoewel toenames in die reële toegevoegde waarde in al die hoofsektore voorgekom het, was dit veral merkbaar in die vervoer- en finansiëledienstesektore. Die groei in die reële toegevoegde waarde van die sektor vervoer, opberging en kommunikasie is gehelp deur die nodigheid om landbouprodukte in grootmaat te vervoer en deur 'n volgehoud hoë en stygende omvang van die buitelandse handel. Die voortgesette hoë vlakke van bedrywigheid in die aandele-, effekte- en ander finansiële markte het die sterk groei in die sektor finansies, versekering, vaste eiendom en sakedienste bykans verseker. In die sektor handel en akkommodasie het die koers van toename in die reële toegevoegde waarde aansienlik van 5 persent in die tweede kwartaal tot slegs $\frac{1}{2}$ persent in die derde kwartaal verlangsaam. Dit was hoofsaaklik die gevolg van 'n skerp daling in die reële produksie van die motorhandel wat op die hakke van 'n nog skerper toename in die tweede kwartaal gevolg het.

Binnelandse besteding

Die betreklike sterk groei in die bruto binnelandse produk in die derde kwartaal van 1996 het met 'n daling in die reële bruto binnelandse besteding gepaardgegaan. Ná 'n klein toename teen 'n seisoensaangesuiwerde jaarkoers van $\frac{1}{2}$ persent in die eerste kwartaal van 1996, het die reële bruto binnelandse besteding in die tweede kwartaal sterk met 13 persent gestyg, maar daarna in die derde kwartaal met $1\frac{1}{2}$ persent gedaal. Hierdie ommekeer kan hoofsaaklik aan 'n aansienlike daling in die koers van voorraadopbouing en 'n verlangsaming in die reële binnelandse finale vraag toegeskryf word. In die eerste drie kwartale van 1996 was die totale reële bruto binnelandse besteding bykans 3 persent hoër as in die eerste drie kwartale van 1995.

Reële private verbruiksbesteding het in die eerste drie kwartale van 1996 skerp toegeneem en die koers van toename van kwartaal tot kwartaal in hierdie bestedingstotaal het van $3\frac{1}{2}$ persent in die eerste kwartaal tot 4 persent in die tweede kwartaal versnel, voordat dit in die derde kwartaal teen 'n laer koers van 3 persent gestyg het. Die betreklike sterk groei in reële private verbruiksbesteding in die derde kwartaal is bereik ondanks 'n daling in die reële besteding aan duursame goedere. Reële besteding aan persoonlike vervoertoe-

Reële bruto binnelandse besteding



Tabel 2. Reële bruto binnelandse besteding

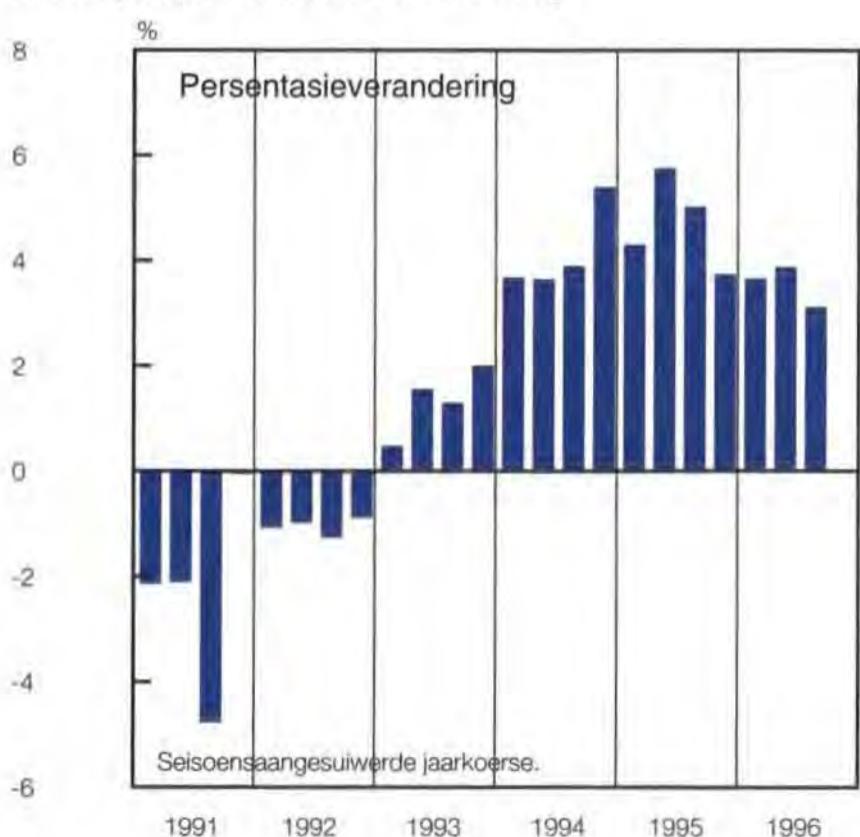
Persentasieverandering teen seisoensaangesuiwerde jaarkoerse

Komponente	1996		
	1e kw	2e kw	3e kw
Private verbruiksbesteding....	3½	4	3
Verbruiksbesteding deur die algemene owerheid	3	3	2
Bruto binnelandse vaste investering	8	6½	3½
Verandering in voorrade (R miljarde).....	2,3	7,3	2,9
Bruto binnelandse besteding	½	13	-1½

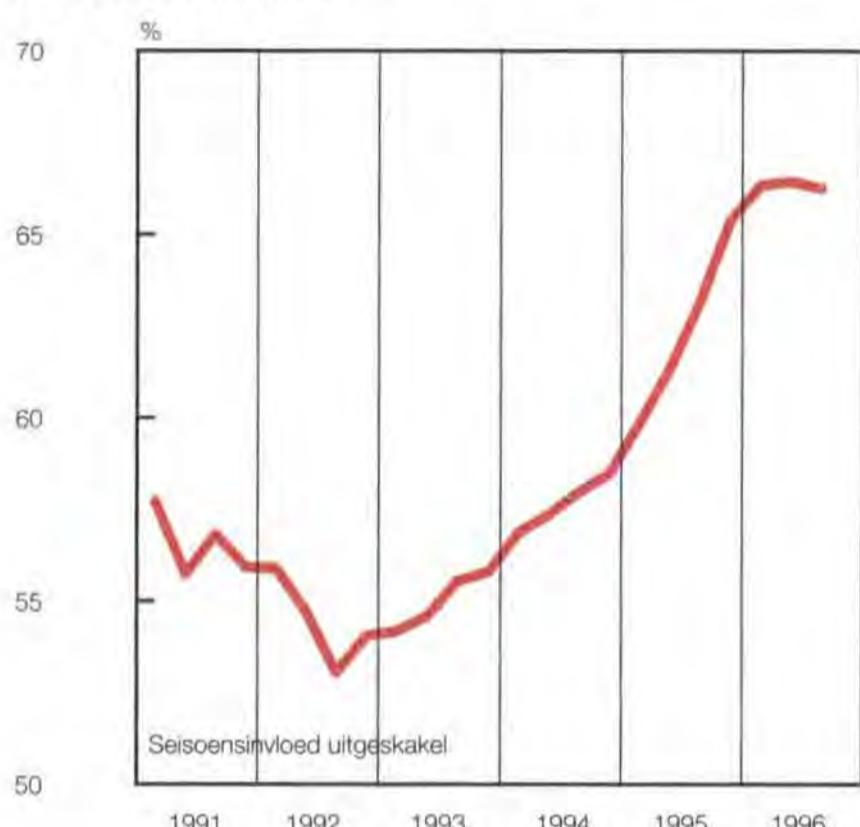
rusting het in die derde kwartaal van 1996 teen 'n jaarkoers van 18½ persent afgeneem aangesien motorverkope na meer handhaafbare vlakke teruggekeer het na die buitengewoon hoë verkope in die tweede kwartaal.

Afgesien van die rol wat die hoër inkome van private huishoudings gespeel het, is die stygende bestedingsvlakke van verbruikers ook moontlik gemaak deur die gewilligheid van individue om skuld aan te gaan. Die reële inkome van huishoudings is aangehelp deur die sterk styging in die bruto inkomste van boere en verho-

Reële private verbruiksbesteding



Huishoudingskuld as persentasie van persoonlike beskikbare inkome



nings in salaris en lone wat deurlopend vinniger as die pryse van verbruiksgoedere en -dienste toegeneem het. Totale huishoudingskuld het in die eerste drie kwartale van 1996 bly toeneem, maar teen 'n koers wat min of meer met die groei in persoonlike beskikbare inkome ooreengestem het. Die verhouding van huishoudingskuld tot persoonlike beskikbare inkome het gevvolglik in die eerste drie kwartale van 1996 naastenby onveranderd op 66½ persent gebly.

Die koers van toename in die *reële verbruiksbesteding deur die algemene owerheid* het van 'n jaarkoers van 3 persent in die eerste twee kwartale van 1996 tot 2 persent in die derde kwartaal verlangsaam. Hierdie matiger toename was die gevolg van 'n effens stadiger koers van besteding aan intermediêre goedere en dienste deur departemente van die algemene owerheid. Die lopende besteding deur die algemene owerheid in die eerste nege maande van 1996 is nog steeds 2½ persent hoër as in die ooreenstemmende tydperk van 1995. In die kalenderjaar 1995 was die toename in die reële verbruiksbesteding deur die algemene owerheid ½ persent.

Die opwaartse stukrag in die *reële bruto binnelandse vaste investering* sedert die derde kwartaal van 1993 is in die derde kwartaal van 1996 volgehou. Die jongste ramings toon dat die toenames in die totale reële bruto binnelandse vaste investering teen 'n jaarkoers van 8 persent in die eerste kwartaal van 1996 en 6½ persent in die tweede kwartaal deur 'n verdere styging van 3½ persent in die derde kwartaal gevolg is. Reële bruto binnelandse vaste investering was in die eerste drie

kwartale van 1996 ongeveer 7½ persent hoër as in die eerste drie kwartale van 1995, vergeleke met die groei van 10½ persent in 1995 in die geheel. Die verdere verbetering in kapitaalvorming in die derde kwartaal is deur 'n uitbreiding in die reële kapitaalbesteding deur al drie institutionele sektore, naamlik die private sektor, openbare korporasies en openbare owerhede, teweeggebring.

Reële vaste investering deur die private sektor het teen 'n seisoensaangesuiwerde jaarkoers van 5 persent in die eerste kwartaal van 1996 en 8 persent in die tweede kwartaal toegeneem, maar in die derde kwartaal tot 4 persent verlangsaam. 'n Indeling van kapitaalbesteding in die private sektor volgens soort ekonomiese bedrywigheid, toon dat die hele sektor, behalwe die mynboubedryf, in die derde kwartaal van 1996 tot die uitbreiding van bykomende produksievermoë bygedra het. Kapitaalbestedingsprojekte wat tans in die private sektor aan die gang is, wissel van groot nywerheidsontwikkelings in die metaalbedryf en vertoon- en vermaakklikeidsentra in die dienstesektor tot die uitbreiding en vervanging van die produksievermoë in die landbousektor.

Die reële vaste kapitaalvorming deur die openbare sektor het in die derde kwartaal teen 'n jaarkoers van 2½ persent toegeneem. Die investeringsbedrywigheide van die openbare korporasies was veral toegespits op die sektore wat elektrisiteit, gas en water, en telekommunikasiedienste verskaf. Die verhoogde hoeveelheid vaste kapitaalbesteding deur die openbare owerhede was weer eens 'n aanduiding van die hoë prioriteit wat openbare diensleweringsprogramme op die vlak van die provinsiale regerings en plaaslike owerhede geniet.

Die geleidelike verlaging in voorraadinvestering vanaf die derde kwartaal van 1995, wat deur 'n aansienlike toename in voorraadopbouing in die tweede kwartaal van 1996 onderbreek is, het sy afwaartse beweging in die derde kwartaal hervat. Uitgedruk in konstante 1990-pryse, het die voorrade teen 'n jaarkoers van R2,3 miljard in die eerste kwartaal van 1996, R7,3 miljard in die tweede kwartaal en slegs R2,9 miljard in die derde kwartaal toegeneem. Terwyl die verandering in reële voorraadinvestering die groei in die reële bruto binneelandse produk in die tweede kwartaal van 1996 met 7 persentasiepunte verhoog het, het dit die totale groei in die derde kwartaal met 6 persentasiepunte verlaag.

Die kleiner toename in die totale voorraadvlakte in die derde kwartaal teenoor die tweede kwartaal was die gevolg van laer vlakke van investering in nywerheids- en handelsvoorraad as in die tweede kwartaal, en dalings in die vlak van voorraadinvestering in die mynbousektor. Dit is deels teengetrek deur voorraadopbouing van landbouprodukte teen die einde van die derde kwartaal as gevolg van die insameling van 'n buitengewoon groot mielie-oes. Ondanks die stadiger pas van voorraadopbouing in die derde kwartaal van 1996, het die verhouding van nywerheids- en handelsvoorraad tot die bruto binneelandse produk in die nie-landbousektore van

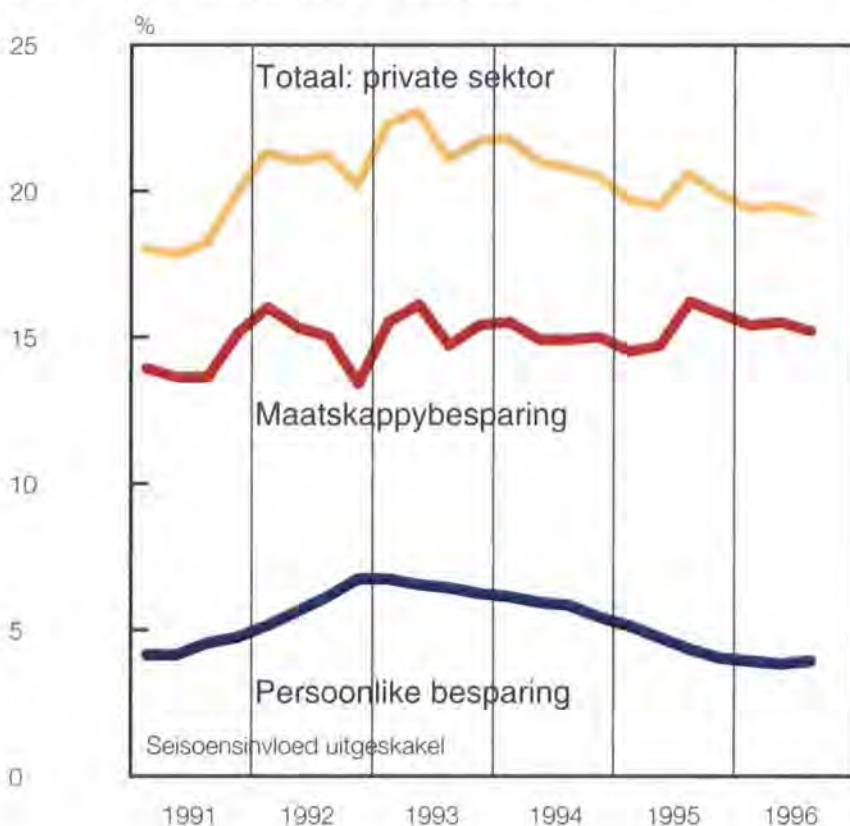
die ekonomie oor die algemeen onveranderd gebly op dievlak van 18½ persent wat in die tweede kwartaal behaal is.

Faktorinkome en besparing

Die groei oor vier kwartale in die *totale nominale faktorinkome* teen markpryse het van gemiddeld 12 persent in die laaste twee kwartale van 1995 tot 11 persent in die eerste kwartaal van 1996 gedaal, maar daarna tot 12 persent in sowel die tweede as derde kwartaal versnel. Die vinniger groei gedurende 1996 kan aan sterker groei in die bedryfsurplusse van sakeondernemings en 'n effense versnelling in die koers van toename in die totale vergoeding van werknekmers toegeskryf word. In die eerste drie kwartale van 1996 het die groei oor vier kwartale in die *totale vergoeding van werknekmers* 10 persent bedra, wat ongeveer 3 persentasiepunte hoër is as die gemiddelde koers van die verbruikersprysinflasie gedurende hierdie tydperk. Aangesien totale werkverskaffing in die vroeë deel van 1996 steeds gedaal het, moet die versnelde groei in die vergoeding van werknekmers aan die stygende lone en salaris per werker toegeskryf word.

Groei in die nominale *bruto bedryfsurplusse* van sakeondernemings, gemeet oor tydperke van vier kwartale, het van 13½ persent in die eerste kwartaal van 1996 tot 'n gemiddelde van ongeveer 15½ persent in die tweede en derde kwartaal opgeskuif. Hierdie sterker groei was hoofsaaklik die gevolg van 'n verbetering in die bruto inkomste van boere en die aansporing wat die swakker wisselkoers van die rand vir die winsgewendheid van uitvoerders in die mynbou en fabriekswese gegee het.

Private sektor-besparing as persentasie van bruto binnelandse produk



Die verhouding van die totale *bruto binnelandse besparing* tot die bruto binnelandse produk het in die derde kwartaal van 1996 op die betreklik laevlak van 17 persent gebly, wat ook in die tweede kwartaal aangeteken is. Hierdie lae besparingsverhouding, wat in die lig van die land se investerings- en groeibehoeftes heeltemal ontoereikend is, was die gevolg van 'n volgehoue hoëvlak van ontsparing deur die algemene owerheid en die swak, hoewel steeds positiewe, besparingsgedrag van die private sektor. Hoofsaaklik vanweë die beter invordering van belasting, het die netto ontsparing van die algemene owerheid as persentasie van die bruto binnelandse produk van 4 persent in 1995 tot 3½ persent in die eerste drie kwartale van 1996 verminder. Die ooreenstemmende verhouding vir die private sektor het effens van 7½ persent in 1995 tot 7 persent in die eerste drie kwartale van 1996 gedaal.

Werkverskaffing

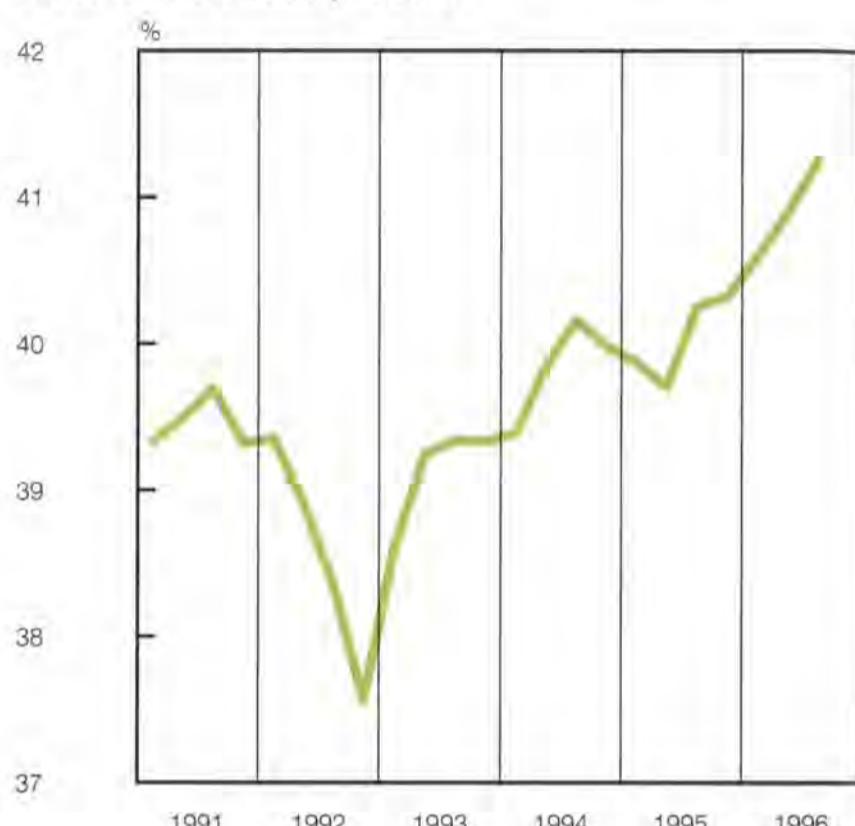
Die herstel in die algehele ekonomiese bedrywigheid sedert die middel van 1993 het nie daarin geslaag om die werkskeppingsvermoë van die Suid-Afrikaanse ekonomie te verbeter nie. Die gemiddelde jaarlike werkverskaffing in die formele sektore van die ekonomie buite die landbou het slegs een keer gedurende die laaste ses jaar toegeneem, toe dit in 1995 teen 'n koers van 0,7 persent van jaar tot jaar gestyg het. Hierdie toename is deur 'n skerp daling teen 'n seisoensaangesuiwerde jaarkoers van 3,6 persent in die eerste kwartaal van 1996 en 'n verdere daling van 2,1 persent in die tweede kwartaal gevvolg. (Die tweede kwartaal van 1996 is die jongste tydperk waarvoor inligting deur die Sentrale Statistiekdiens beskikbaar gestel is.)

Teen die agtergrond van die toenemend meddingende internasionale ekonomiese omgewing, kan werkgewers wat voortdurende sterk aandrang om hoë reële lone in die gesig staar, hul indiensnemingspraktyke in reaksie op hierdie eise op drie verskillende maniere aanpas:

- (i) staan looneiese teen en verminder lone om die winsgewendheid van ondernemings te herstel en sodoende nuwe werkgeleenthede te skep of die bestaandes te behou;
- (ii) verbeter produktiwiteit deur die investering in nuwe toerusting of deur die afdanking van werkers wat groter kapitaalintensiteit en kleiner arbeidsintensiteit in produksiemetodes bewerkstellig; of
- (iii) stel uit en neem geen regstellende stappe om hoë reële lone teen te staan of produktiwiteit te verbeter nie. In hierdie omstandighede ly ondernemings verliese wat hulle later poog om te herwin deur uitsetpryse te verhoog. Uiteindelik boet hulle soveel in op meddingendheid dat hulle ophou om te bestaan.

Die "verbetering in produktiwiteit" is klaarblyklik die benadering wat die meeste besighede in Suid-Afrika sedert die einde van die tagtigerjare gevvolg het. Produsente wat volgehoue eise vir hoë reële lone en salarisne in die gesig moes staar, het reageer deur werkers af te dank en kapitaalintensiever produksie-

Bruto bedryfsurplus as persentasie van bruto binnelandse produk

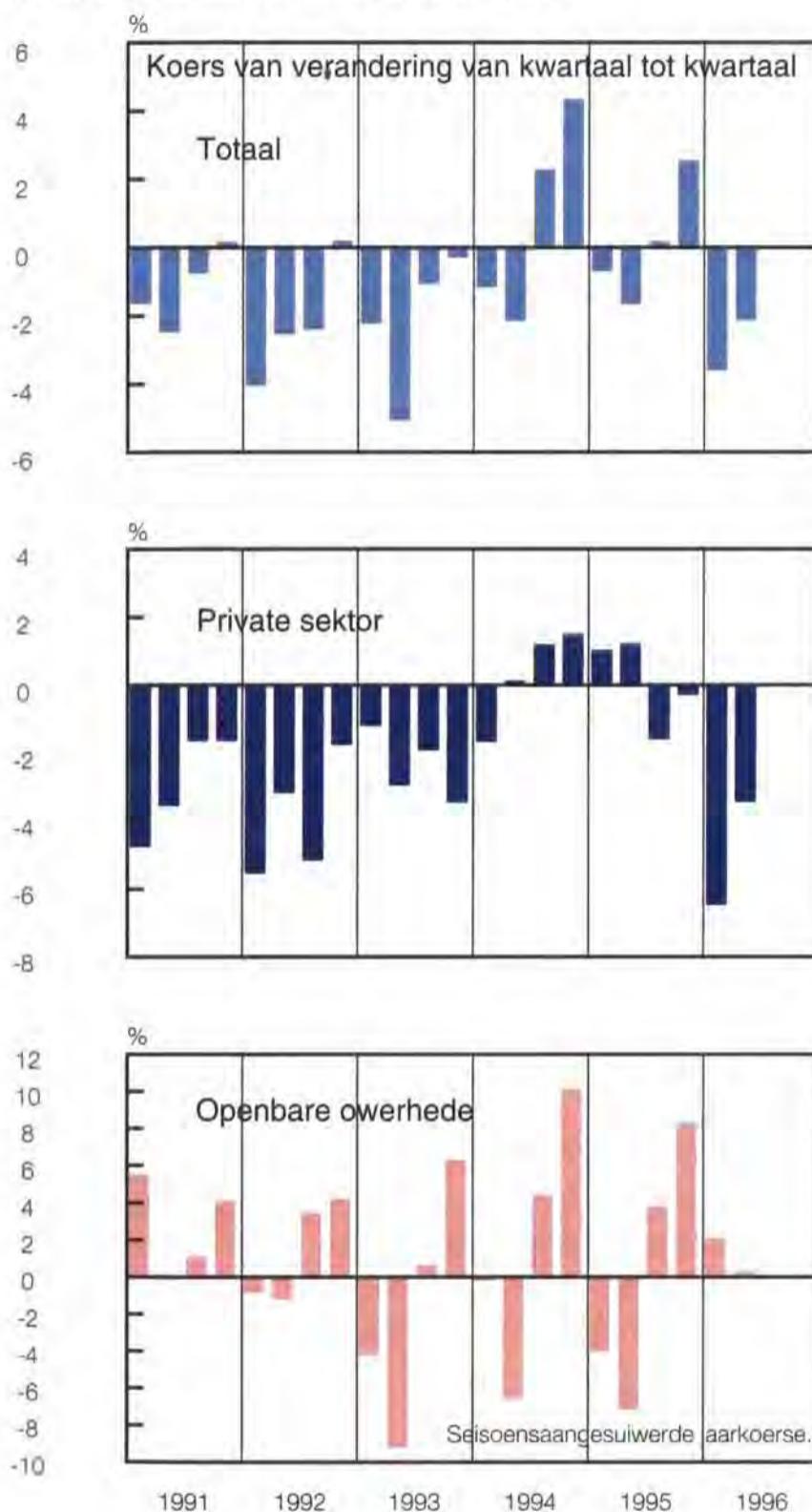


metodes in werking te stel. Die gevolg hiervan was 'n daling in die algehele werkverskaffing in plaas van in die vlak van reële lone. Reële lone het trouens sedert die einde van die tagtigerjare bly toeneem, terwyl totale werkverskaffing afgeneem het. Hierdie vermindering van arbeid het daarin geslaag om bruto bedryfsurplusse te herstel: die aandeel van bedryfsurplusse as 'n persentasie van die totale waarde van produksie het geleidelik van 37,6 persent in die vierde kwartaal van 1992 tot 41,3 persent in die derde kwartaal van 1996 toegeneem.

Die totale *formele werkverskaffing deur ondernemings in die private sektor* van die ekonomie buite die landbou het in die vier kwartale sedert die derde kwartaal van 1995 agtereenvolgens teen seisoensaangesuiwerde jaarkoerse van 1,6 persent, 0,3 persent, 6,4 persent en 3,4 persent gedaal. As gevolg hiervan het ongeveer 104 000 werkgeleenthede in die private sektor tussen die tweede kwartaal van 1995 en die tweede kwartaal van 1996 verlore gegaan. Onvolledige gegewens vir Julie 1996 toon verdere afnames in die werkverskaffing van die fabriekswese, mynbou en steengroewery, konstruksie en elektrisiteitsopwekkingsektore.

Ondanks die terugval in die eerste twee kwartale van 1995 het die *totale werkverskaffing deur die openbare owerhede* met 0,5 persent in 1995 en verder teen seisoensaangesuiwerde jaarkoerse van 2,2 persent in die eerste kwartaal van 1996 en 0,4 persent in die tweede kwartaal toegeneem. Totale werkverskaffing deur die openbare sektor het gevvolglik bykans geen teken getoon van 'n vermindering in die algehele

Werkverskaffing buite die landbou



grootte van die staatsdiens, soos wat in die regering se onlangs aanvaarde makro-ekonomiese strategie in die vooruitsig gestel is nie. In teenstelling hiermee het die verhouding van werkverskaffing deur die openbare owerhede tot totale werkverskaffing in die formele sektore van die ekonomie buite die landbou nou reeds van 30,3 persent in die eerste kwartaal van 1990 tot 34,6 persent in die tweede kwartaal van 1996 toegeneem.

Die onlangse afname in die werkverskaffing in die formele sektore van die ekonomie het tot 'n toename in die aantal geregistreerde werkloses gelei. Die getal werkloses het maandeliks gemiddeld met 7,7 persent van die eerste ses maande van 1995 tot die eerste ses maande van 1996 toegeneem. Dit het die totale getal geregistreerde

werkloses op bykans 320 000 in Junie 1996, teenoor 244 000 in Oktober 1995, te staan laat kom.

Arbeidskoste en produktiwiteit

Die koers van toename van jaar tot jaar in die gemiddelde nominale vergoeding per werker het van 11,9 persent in 1994 tot 9,4 persent in 1995 gedaal. Soos in tabel 3 aangetoon word, is die afwaartse neiging in die nominale vergoeding per werker in die derde kwartaal van 1995 omgekeer. Die hoër groeikoers in salaris en lone per werker sedert die tweede kwartaal van 1995 is in die vergoeding van persone in die private sektor sowel as die openbare owerhede aangeteken. Ondanks hierdie onlangse versnelling in die toenames in die nominale vergoeding per werker, is die groei in die gemiddelde vergoeding per werker in die huidige ekonomiese herstel nog steeds minder as in ander opwaartse fases van die konjunktuurgolf sedert die sewentigerjare.

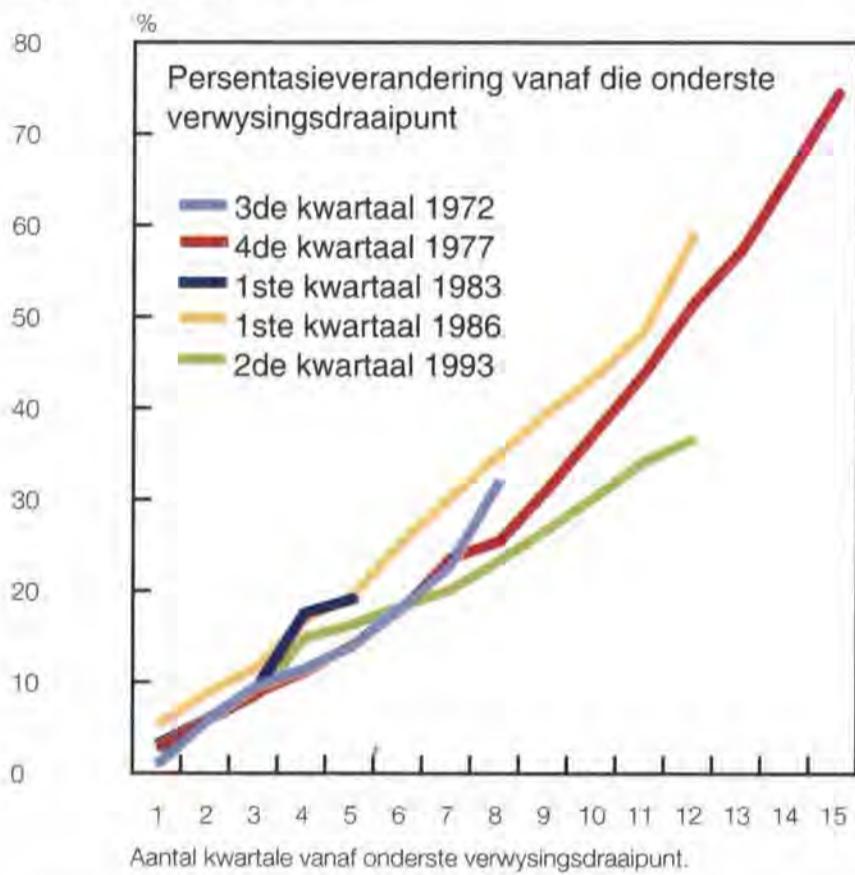
Die koers van toename van jaar tot jaar in die reële vergoeding per werker in die sektore van die ekonomie buite die landbou (gedefinieer as die nominale vergoeding per werker gedeel deur die prysdeflator vir die bruto binnelandse produk buite die landbou) het van 3,2 persent in 1994 tot 0,9 persent in 1995 gedaal. Op 'n soortgelyke wyse as die toename oor vier kwartale in die nominale vergoeding per werker, het die groei oor vier kwartale in die reële vergoeding per werker sedert die derde kwartaal van 1995 versnel. Hoofsaaklik as gevolg van die abnormaal hoë vlakke van vergoeding van werkers ten tye van die algemene verkiesing in die tweede kwartaal van 1994, was die reële vergoeding per werker in die tweede kwartaal van 1995 0,7 persent onder die vlak van 'n jaar tevore. Die reële vergoeding per werker het daarna in die jaar tot die derde kwartaal van 1995 toegeneem en toe in die vierde

Tabel 3. Verandering in arbeidskoste en produktiwiteit

Persentasieverandering oor vier kwartale

Tydperk	Vergoeding per werker				
	Nominaal	Reëel	Arbeids-	Nominale	arbeids-
		produk-	eenheids-	produktiwiteit	koste
1995: 1e kw	10,7	2,3	2,7	7,9	
2e kw	7,3	-0,7	3,3	3,9	
3e kw	8,9	0,6	3,7	5,0	
4e kw	10,1	1,0	3,4	6,5	
1996: 1e kw	11,7	2,4	3,2	8,3	
2e kw	10,9	1,0	2,6	8,1	

Nominale vergoeding per werker buite die landbou



kwartaal en die eerste kwartaal van 1996 verder versnel. Die groei oor vier kwartale in die reële vergoeding per werker het toe in die tweede kwartaal van 1996 ietwat teruggesak.

Die algemene opwaartse neiging in die reële lone het met hoër *arbeidsproduktiwiteit* gepaardgegaan. Die koers van toename van jaar tot jaar in die reële produksie per werker het 3,3 persent in 1995 beloop – dit was die hoogste groei van jaar tot jaar sedert 1978, toe 'n koers van 3,9 persent aangeteken is. Die groei in produktiwiteit het 2,6 persent in die jaar tot die eerste kwartaal van 1996 beloop. Hierdie verbetering in produktiwiteit was deels ten koste van werkverskaffing en was nie ten volle deur 'n toename in werksinspanning verantwoord nie.

Soos met laer toenames in arbeidsvergoeding en stygende produktiwiteit verwag kan word, het die koers van toename in die *nominale arbeidseenheidskoste* in die sektore van die ekonomie buite die landbou van 9,0 persent in 1994 tot 5,9 persent in 1995 gedaal. Hierdie stadiger koers van toename in nominale arbeidseenheidskoste het gedurende 1995 en die vroeë maande van 1996 tot 'n verlangsaming van verbruikersprysinflasie oor twaalf maande bygedra. Die vinniger groei in nominale vergoeding per werker, sonder dat produktiwiteit in dieselfde mate gegroei het, het uitgeloop op 'n versnelling in die koers van toename oor vier kwartale in die nominale arbeidseenheidskoste sedert die derde kwartaal van 1995. Hierdie hoër groeikoers in die gemiddelde arbeidskoste per eenheid produksie het tot versnelde inflasie in sowel die produksie- as verbruikersprysindeks bygedra.

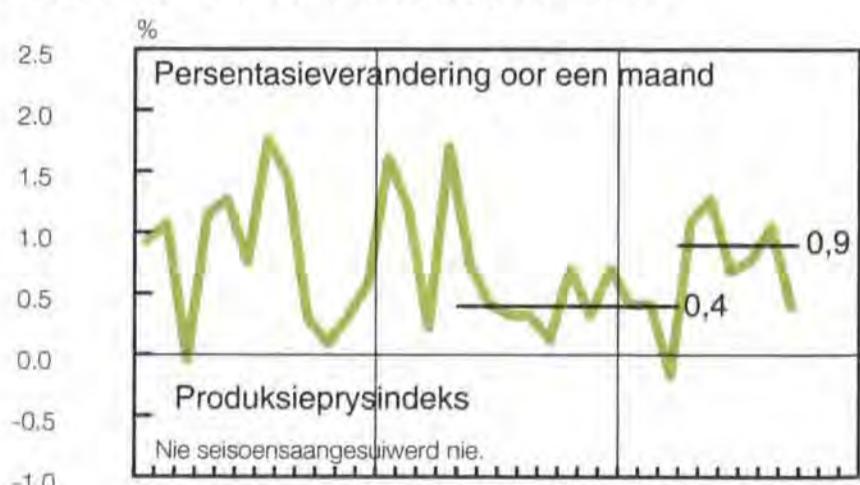
Pryse

Die inflasiekoers, soos gemeet aan die veranderings oor tydperke van twaalf maande in die produksie- en verbruikersprysindeks, het sedert die begin van 1995 afgeneem sodat die gemiddelde inflasiekoers in verbruikerspryse vir die kalenderjaar 1995 op 8,7 persent te staan gekom het – die laagste koers van toename van jaar tot jaar wat sedert 1972 aangeteken is. In die maande sedert Maart 1996 het die veranderings van maand tot maand in die verbruikersprysindeks egter tot 'n hoër gemiddelde vlak beweeg. Eweneens het die veranderings van maand tot maand in die produksieprysindeks sedert April 1996 tot 'n hoër gemiddelde vlak beweeg. Hierdie bewegings kan betekenisvolle dat inflasie van jaar tot jaar besig is om hoër te beweeg vanaf die vlakke wat in die vroeë maande van 1996 gegeld het. Faktore soos die

- depresiasi van die rand sedert die middel van Februarie 1996,
- volgehoue sterk groei in die geldvoorraad en binne-landse kredietverlening,
- vinniger groei in die nominale arbeidseenheidskoste sedert die tweede helfte van 1995 en
- stygende voedselpryse,

dui moontlik op 'n effense terugslag in die vordering wat met die vermindering van inflasie gedurende die negentigerjare gemaak is.

Produksie- en verbruikersprysindekse



Die koers van toename in die produksie- sowel as verbruikersprysindeks, gemeet van kwartaal tot kwartaal en teen 'n jaarkoers, het in die derde kwartaal van 1995 'n onderste draaipunt bereik. Die toename in die *omvattende produksieprysindeks* het van 2,8 persent in die derde kwartaal van 1995 tot 7,9 persent in die vierde kwartaal en agtereenvolgens tot 5,1 persent, 6,3 persent en 9,6 persent in die eerste drie kwartale van 1996 versnel. Hierdie versnelling in die pas van inflasie in produksiepryse is hoofsaaklik aangedryf deur die prys van *binnelands geproduseerde goedere*, wat heelwat vinniger as die prys van ingevoerde goedere gestyg het. Die toename van kwartaal tot kwartaal in die prys van binnelands geproduseerde goedere het van 'n seisoensaangesuiwerde jaarkoers van 3,7 persent in die derde kwartaal van 1995 tot 9,8 persent in die vierde kwartaal, 4,9 persent in die eerste kwartaal van 1996 en 6,2 persent in die tweede kwartaal versnel. Die stiewige groei in die totale binnelandse vraag, wat in 'n betekenisvolle mate deur kredietverlening aan die private sektor gefinansier is, tesame met die hoër groei in die nominale arbeidseenheidskoste sedert die tweede helfte van 1995, was moontlik die hoofredes vir die groter toename in die prys van binnelands geproduseerde goedere. Die prys van binnelands geproduseerde goedere het in die derde kwartaal van 1996 verder met 11,5 persent versnel toe die voedselprys van maand tot maand ook taamlik skerp toegeneem het.

Die seisoensaangesuiwerde indeks van die prys van *ingevoerde goedere* het van die tweede kwartaal van 1995 tot die derde kwartaal teen 'n jaarkoers van 0,5 persent gedaal. Die prys van ingevoerde goedere het daarna teen 'n seisoensaangesuiwerde jaarkoers van 2,8 persent in die vierde kwartaal van 1995 en 6 persent in die eerste kwartaal van 1996 toegeneem. Ondanks die skerp depresiasi van die rand, het die koers van toename van kwartaal tot kwartaal in die prys van ingevoerde goedere in die tweede en derde kwartaal van 1996 redelik gedemp gebly: 'n toename teen 'n jaarkoers van 7,0 persent is in die tweede kwartaal en 2,6 persent in die derde kwartaal aangegeteken, toe daar van Julie tot September bykans geen veranderings van maand tot maand in die prys van ingevoerde goedere was nie. Die klein toenames in die prys van ingevoerde goedere wat kort op die skerp depresiasi van die rand gevolg het, het heel moontlik verband gehou met die verlaging van invoerheffings, mededinging tussen verskaffers van ingevoerde goedere en dalings in die prys van ingevoerde mynbou- en steengroefprodukte.

Net soos die bewegings in die omvattende produksieprysindeks, het die koers van toename van kwartaal tot kwartaal in die *omvattende verbruikersprysindeks* van 'n seisoensaangesuiwerde jaarkoers van 2,2 persent in die derde kwartaal van 1995 tot 9,5 persent in die eerste kwartaal van 1996, 7,0 persent in die tweede kwartaal en 8,9 persent in die derde kwartaal versnel. Die koers van toename in die omvattende verbruikersprysindeks,

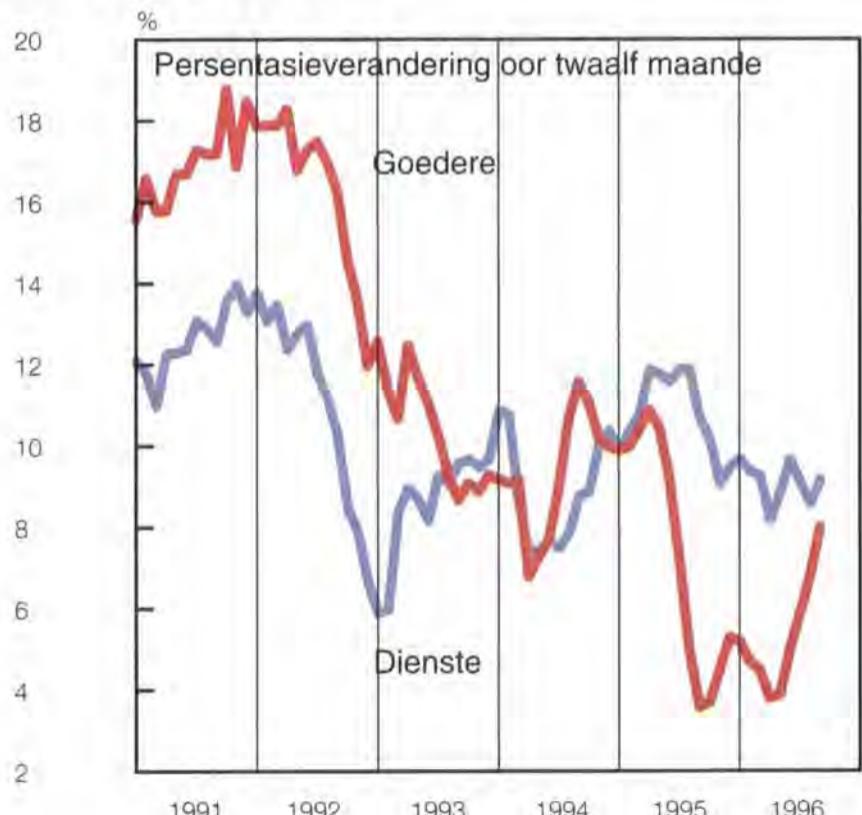
Tabel 4. Inflasie in verbruikerspryse oor twaalf maande

Persent

Tydperk	Omvattende inflasie	Onderliggende inflasie
1996: Jan.....	6,9	7,3
Feb	6,5	7,1
Mrt	6,3	6,8
Apr.....	5,5	6,6
Mei.....	5,9	6,8
Jun.....	6,9	7,3
Jul.....	7,1	7,6
Aug.....	7,5	7,5
Sep.....	8,4	8,0
Okt.....	9,1	8,5

gemeet oor tydperke van twaalf maande, het sedert Julie 1995 onder 10 persent gebly en die laagste vlak sedert Junie 1972 bereik toe dit in April 1996 tot 5,5 persent gedaal het. Dit het vervolgens tot 6,9 persent in Junie 1996, 8,4 persent in September en 9,1 persent in Oktober versnel. Die prys van verbruikersgoedere wat sterk deur toenames in binnelandse produksiekoste beïnvloed word, het meer as die prys van verbruikersdienste tot die onlangse versnelling van die omvattende verbruikersprysinflasie bygedra. Terwyl die prys van

Verbruikersprysindeks



verbruikersgoedere met 4,9 persentasiepunte van 3,8 persent in April 1996 tot 8,7 persent in Oktober versnel het, het die pryse van verbruikersdienste met 1,6 persentasiepunt van 8,2 persent in April 1996 tot 9,8 persent in September versnel.

Onderliggende inflasie (dit wil sê die koers van verandering oor tydperke van twaalf maande in die omvattende verbruikersprysindeks met die uitsondering van die pryse van voedsel en nie-alkoholiese drank, huiseienaarskoste en die belasting op toegevoegde waarde) is al vir 'n ononderbroke tydperk van 31 maande onder 10,0 persent. Dit het nietemin van 6,6 persent in April 1996 – die laagste punt sedert Februarie 1979 – tot 8,0 persent in September en 8,5 persent in Oktober versnel. Hierdie versnelling in die onderliggende inflasie is 'n duidelike teken dat beleidmakers nie hul waaksamheid in die stryd teen inflasie kan verslap nie.

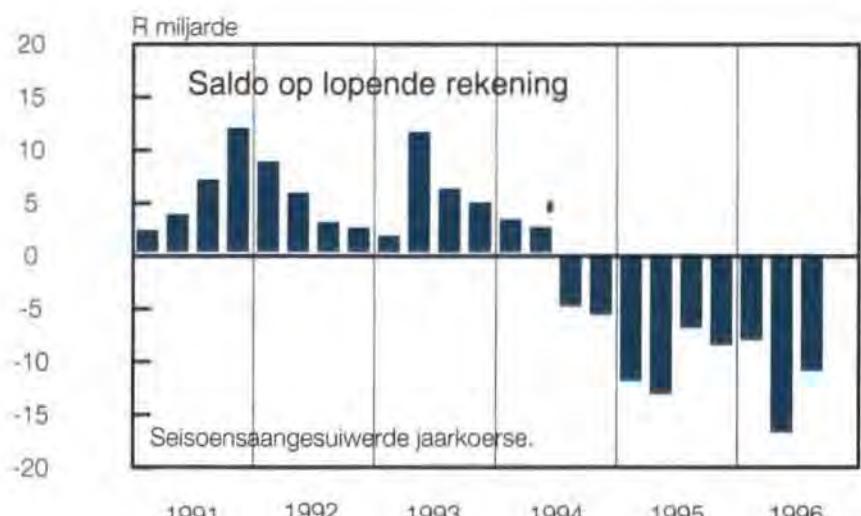
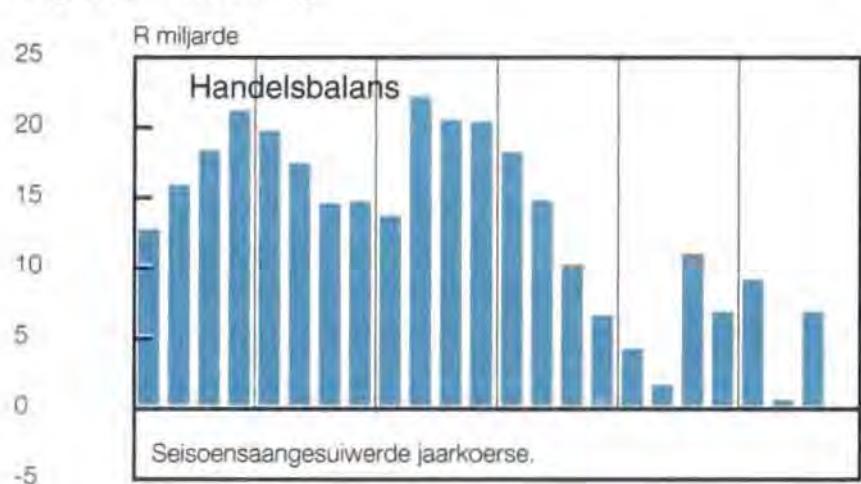
Buitelandse handel en betalings

Lopende rekening

Die tekort op die lopende rekening van die betalingsbalans wat van R2,3 miljard in die eerste kwartaal van 1996 tot R4,7 miljard in die tweede kwartaal toegeneem het, het in die derde kwartaal tot R3,5 miljard gekrimp. In die eerste drie kwartale van 1996 het die kumulatiewe tekort op die lopende rekening gevvolglik R10,5 miljard beloop. Na aanpassing vir seisoenale invloede en teen 'n jaarkoers gereken, het die tekort op die lopende rekening van R16,8 miljard in die tweede kwartaal tot R11,0 miljard in die derde kwartaal vernou. In verhouding tot die bruto binnelandse produk, het die tekort op die lopende rekening van 3,1 persent in die tweede kwartaal tot 2,0 persent in die derde kwartaal gedaal.

Skerp toenames in die waarde van goedere-uitvoer en in netto gouduitvoer was die vernaamste faktore wat vir die verbetering in die saldo op die lopende rekening in die derde kwartaal van 1996 verantwoordelik was. 'n Deel van die toename in die waarde van uitvoer in die derde kwartaal van 1996 was waarskynlik die gevolg van die gedepresioneerde wisselkoers van die rand. Die waarde van invoer het natuurlik ook toegeneem as gevolg van die

Lopende rekening



Tabel 5. Lopende rekening van die betalingsbalans

Seisoensaangesuiwerde jaarkoerse
R miljarde

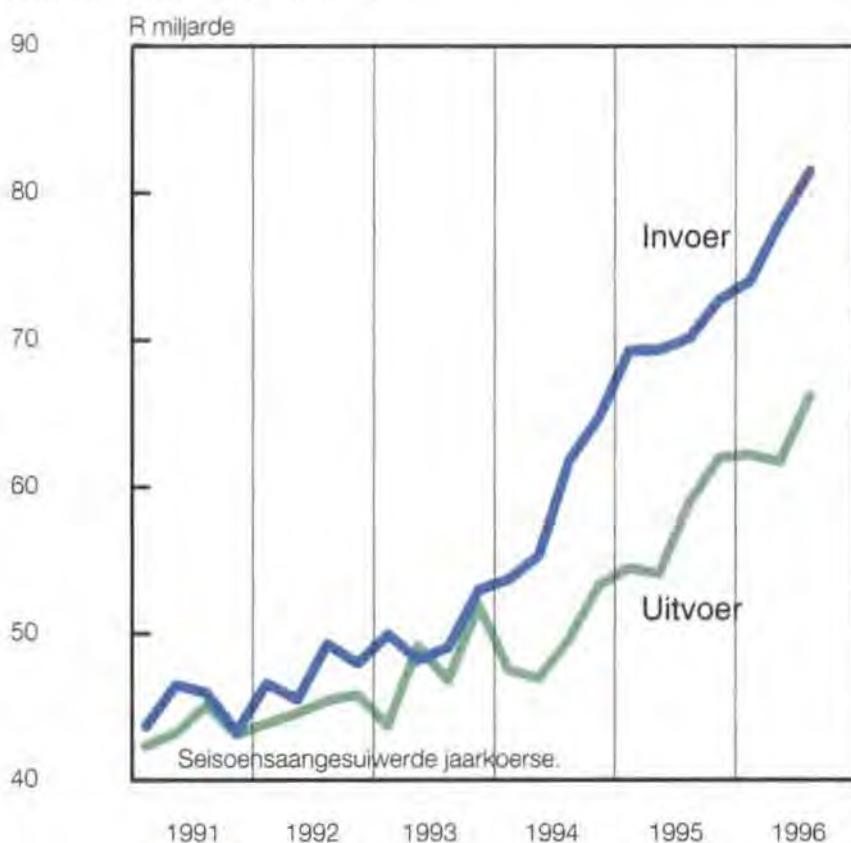
	1995	1996		
	Jaar	1e kw	2e kw	3e kw
Goedere-uitvoer	81,3	90,0	94,3	102,8
Netto gouduitvoer.....	22,5	23,4	20,8	26,5
Goedere-invoer	-98,0	-104,3	-114,5	-122,5
Netto dienste- en oordragbetalings.....	-16,0	-17,2	-17,4	-17,8
Saldo op lopende rekening.....	-10,2	-8,1	-16,8	-11,0

depresiasi van die rand; hierdie styging kon egter nie die toename in uitvoerwaardes ten volle neutraliseer nie.

Die waarde van goedere-uitvoer het van 'n seisoensaangesuiwerde jaarkoers van R94,3 miljard in die tweede kwartaal van 1996 tot R102,8 miljard in die derde kwartaal gestyg. Dit verteenwoordig 'n toename van 9 persent van kwartaal tot kwartaal. Die waarde van die uitvoer van mynbouprodukte en vervaardigde goedere het in die derde kwartaal van 1996 skerp gestyg. Die uitvoerwaardes van mynbouprodukte, waarvan baie in buitelandse geldeenheid vasgestel word, is deur die daling in die wisselkoers van die rand bevoordeel. Die pryselastisiteit van die buitelandse vraag na Suid-Afrikaans vervaardigde goedere behoort na raming ook die waarde van een te oorskry; dit is dus nie heeltemal onverwags om die uitvoerhoeveelhede van vervaardigde goedere positief op die verhoogde mededingendheid van plaaslike produsente te sien reageer nie. Chemiese produkte, masjinerie en elektriese toerusting en vervoertoerusting het in die derde kwartaal 'n sterk toename in uitvoerwaardes getoon. Die uitvoer van landbouprodukte het ook begin styg op grond van die hoër vlak van landbouproduksie wat gevvolg het op die gunstige klimaatstoestande in die eerste helfte van die jaar.

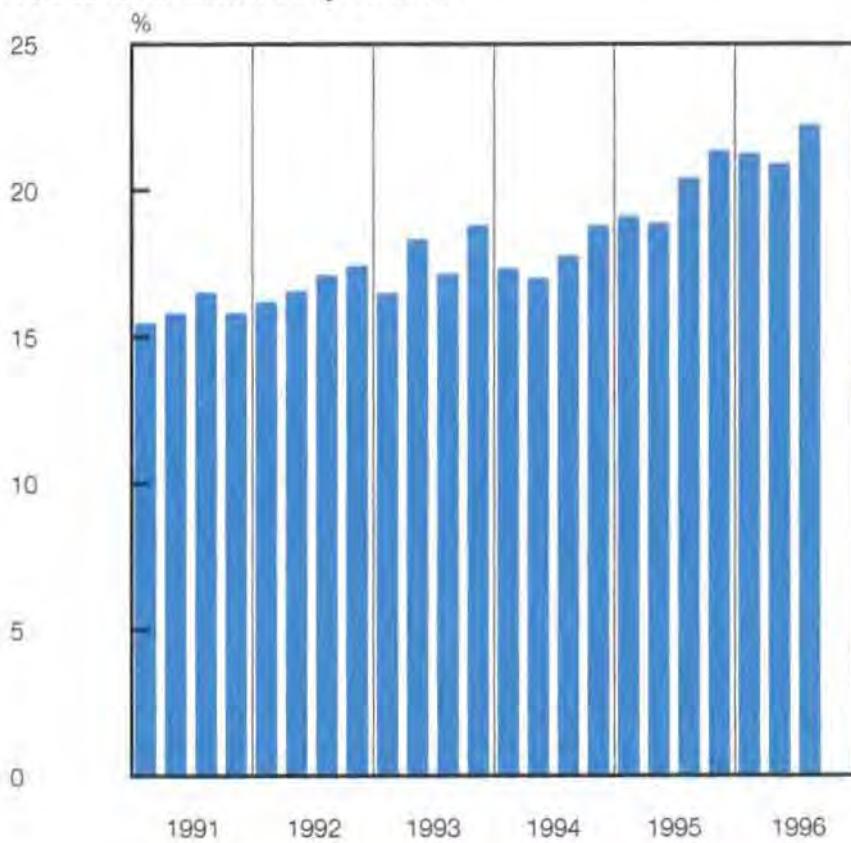
Die hoeveelhede van goedere-uitvoer het in die derde kwartaal van 1996 met net meer as 7 persent gestyg. Die fisiese omvang van die goedere-uitvoer in die eerste nege maande van 1996 was nie minder nie as 13½ persent bo die vlak in die ooreenstemmende tydperk van 1995. Aangesien hierdie toename waarskynlik groter sal wees as die groei in die totale wêreldhandel, is dit moontlik dat Suid-Afrika sy markaandeel in die internasionale handel gedurende die eerste drie kwartale van 1996 vergroot het. In verhouding tot die reële bruto binnelandse produk, het die goedere-uitvoer teen konstante prysie van 20,9 persent in die tweede kwartaal van 1996 tot 22,2 persent in die derde kwartaal gestyg. Hoewel internasionale grondstofpryse nie hoër uitvoerpryse aangehelp het nie, het die

Reële goedere-handel



gemiddelde prysvlak van goedere-uitvoer nogtans van die tweede tot die derde kwartaal van 1996 met 2 persent gestyg vanweë die verdere daling in die nominale wisselkoers van die rand.

Reële goedere-uitvoer as persentasie van reële bruto binnelandse produk



Tabel 6. Goedere-invoer en -uitvoer

Seisoensaangesuiwerde kwartaallikse persentasieverandering

	1996		
	1e kw	2e kw	3e kw
Goedere-invoer			
Waarde	3	10	7
Pryse.....	1	4	3
Hoeveelhede.....	2	6	4
Goedere-uitvoer			
Waarde	2	5	9
Pryse.....	2	6	2
Hoeveelhede.....	-	-1	7

Die waarde van die *netto gouduitvoer* wat teen 'n seisoensaangesuiwerde jaarkoers van R23,4 miljard in die eerste kwartaal van 1996 tot R20,8 miljard in die tweede kwartaal geval het, het in die derde kwartaal sterk herstel tot R26,5 miljard. Die toename in die derde kwartaal van 1996 kan toegeskryf word aan hoër randpryse wat vir gouduitvoer ontvang is en aan 'n toename in die hoeveelheid goud wat uitgevoer is. Hoewel die gemiddelde vasstellingsprys van goud op die Londense mark van VSA\$390 per fyn ons in die tweede kwartaal van 1996 tot VSA\$385 per fyn ons in die derde kwartaal gedaal het, het die rand-ekwivalent van die goudprys oor dieselfde tydperk van R1 683 per fyn ons tot R1 721 per fyn ons verander. In Oktober 1996 het die randprys van goud tot R1 744 per fyn ons toegeneem terwyl die dollarprys verder tot VSA\$381 per fyn ons teruggesak het. Die verkoop van goud uit voorrade wat tydens voorafgaande kwartale opgebou is, het tot gevolg gehad dat die fisiese hoeveelheid van die gouduitvoer van die tweede kwartaal van 1996 tot die derde kwartaal met 10% persent toegeneem het.

Die volgehoud hoë vlak van die totale binnelandse vraag, die depresiasi van die rand, die gevoldlike styging in die prys van ingevoerde goedere en verwagtings van verdere dalings in die wisselkoers van die rand wat die vroeë invoer van intermediêre goedere en kapitaaltoerusting aangewakker het sodat hoër prys later vermy kan word, was primêr vir die styging van 7 persent in die *waarde van die goedere-invoer* van die tweede tot die derde kwartaal van 1996 verantwoordelik. Die depresiasi van die rand, stygende internasionale oliepryse en matige prystoenames in handelsvennootlande het meegebring dat die prys van die goedere-invoer in die derde kwartaal van 1996 met 3 persent gestyg het. Die hoeveelhede van die invoer het van die tweede tot die derde kwartaal van 1996 met 4 persent gestyg, hoofsaaklik vanweë skerp toenames in die invoer van landbouprodukte en vervaardigde goedere.

Netto dienste- en oordragbetalings aan nie-inwoners (seisoensaangesuiwerde en teen 'n jaarkoers gereken) wat in die tweede kwartaal van 1996 tot R17,4 miljard toegeneem het, het in die derde kwartaal van 1996 weer tot R17,8 miljard gestyg. Hierdie toename in die tekort op die diensterekening van die betalingsbalans was die netto gevolg van 'n styging van R1,7 miljard in betalings vir dienste aan buitelanders en 'n styging van R1,3 miljard in die ontvangste vir dienste wat aan nie-inwoners gelewer is. Die hoër betalings vir dienste was veral die gevolg van die hoër vlak van buitelandse handel en die gepaardgaande betalings vir vrag en versekering en hoër rentebetalings vanweë die groter skuldblootstelling van Suid-Afrikaanse organisasies aan nie-inwoners.

Kapitaalrekening

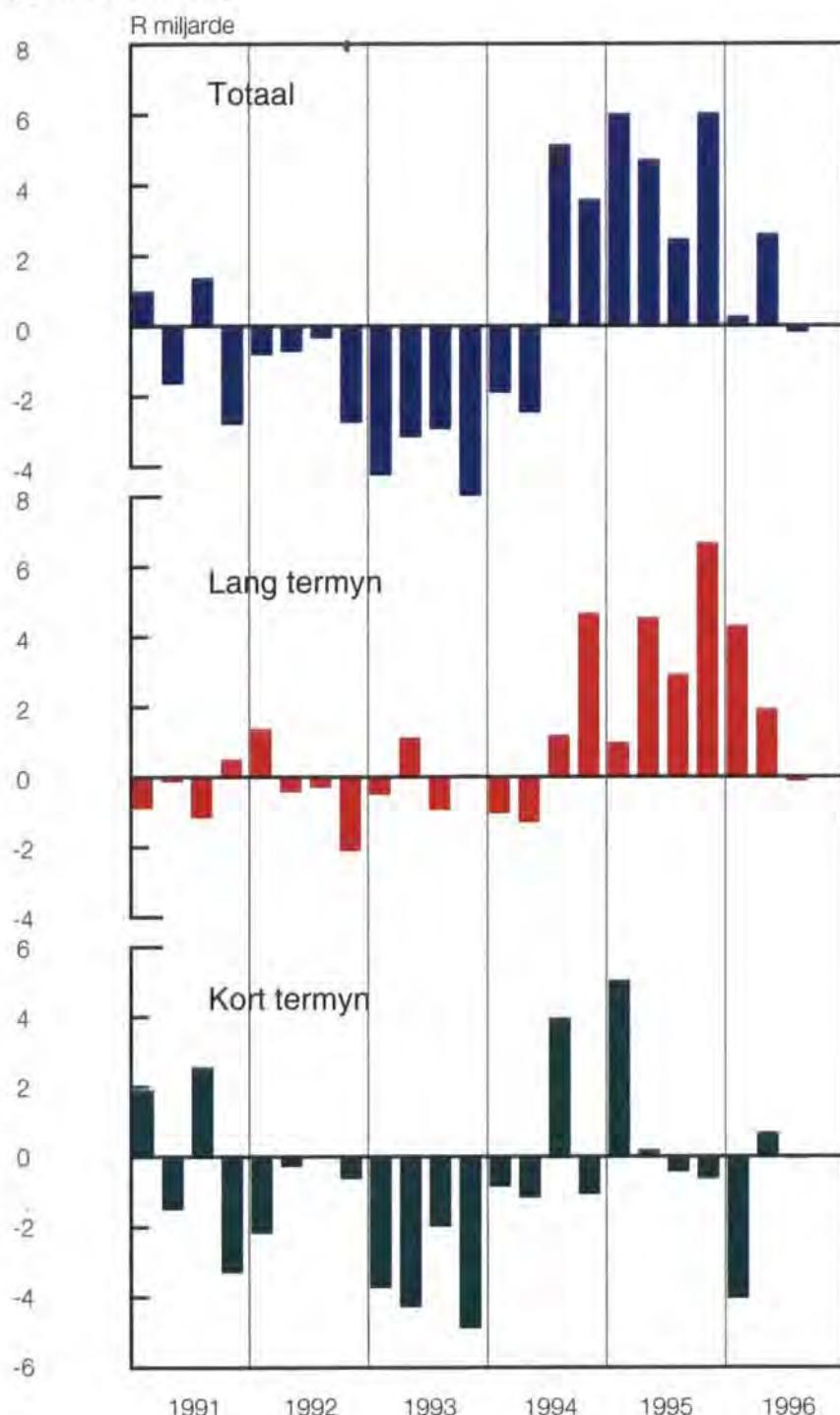
Een van die talle uitvloeisels van die depresiasi van die rand was 'n dramatiese ommekeer in die kapitaalrekening van die betalingsbalans. Namate beleggers se persepsie van Suid-Afrika negatiewer geword het, het die netto inwaartse beweging van kapitaal nie verwant aan reserwes nie aanvanklik gedaal van 'n kwartaallikse syfer van gemiddeld R4,8 miljard in 1995 tot R1,4 miljard in die eerste twee kwartale van 1996 en daarna in die derde kwartaal van 1996 in 'n netto uitvloeiing van R0,2 miljard verander. Ingelsluit by hierdie netto uitvloeiing van kapitaal was verskeie terugbetalingsverpligtinge ingevolge die bestaande amptelike ooreenkomste vir die terugbetaling van buitelandse skuld wat voorheen deur die skuldstilstandeenkomste geraak is, waaronder R575 miljoen wat meestal aan buitelandse krediteurbanke betaal moes word, R685 miljoen aan regerings-gewaarborgde lenings en R760 miljoen aan skuld wat voorheen geraak is wat in langtermynlenings omgeskakel is en in die

Tabel 7. Netto kapitaalbewegings nie verwant aan reserwes nie

R miljarde

	Jaar	1995			1996		
		1e kw	2e kw	3e kw	1e kw	2e kw	3e kw
Langtermynkapitaal							
Openbare owerhede ...		4,6	1,3	0,1	-0,2		
Openbare korporasies.		2,3	0,9	1,0	-0,8		
Monetêre sektor		1,8	-0,2	-0,4	-0,2		
Private sektor		6,4	2,3	1,2	1,1		
Totaal	15,1	4,3	1,9	-0,1			
Korttermynkapitaal		4,1	-4,0	0,7	-0,1		
Totale kapitaal	19,2	0,3	2,6	-0,2			

Netto kapitaalbewegings (nie verwant aan reserwes nie)



derde kwartaal van 1996 betaalbaar geword het.

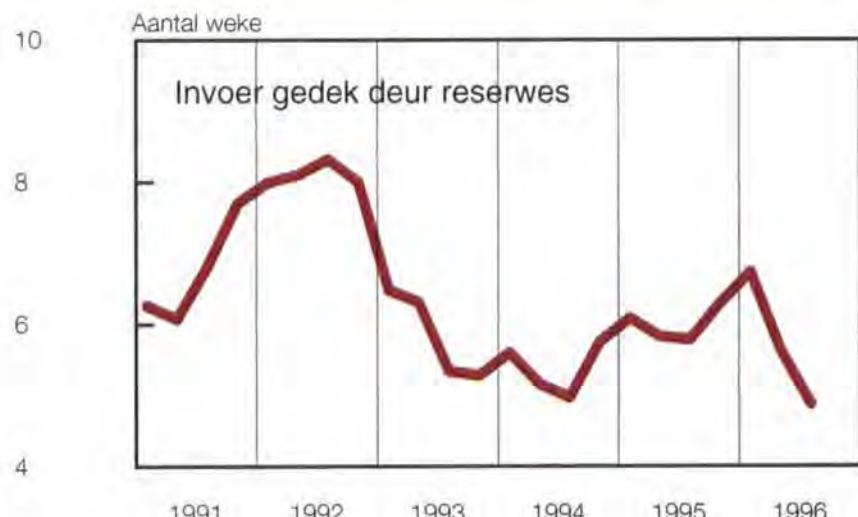
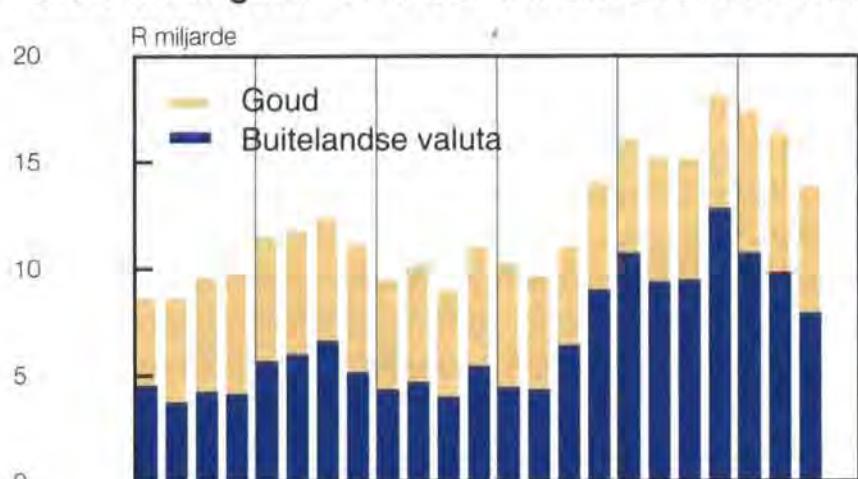
Die netto beweging van *langtermynkapitaal* het onverwags omgeswaai: invloeiinge van langtermynkapitaal van R4,3 miljard in die eerste kwartaal van 1996 en R1,9 miljard in die tweede kwartaal het in die derde kwartaal in 'n netto uitvloeiing van R0,1 miljard verander. Al die institusionele sektore wat in tabel 7 getoon word, met die uitsondering van die private sektor, het netto uitvloeiinge van langtermynkapitaal aangeteken. Die invloeiing van langtermynkapitaal na instansies in die binnelandse private sektor was oorwegend in die vorm van netto aankope deur nie-inwoners van aandele wat op die Johannesburgse Aandelebeurs genoteer is ten bedrae van R1,5 miljard. In Oktober 1996 het nie-inwoners egter netto verkopers van aandele ten bedrae van R1,3 miljard geword.

Soos wat verwag kon word, het netto *korttermynkapitaalbewegings* selfs onbestendiger geword sedert die rand in Februarie 1996 begin depresieer het. 'n Netto uitvloeiing van korttermynkapitaal (met inbegrip van onaangetekende transaksies) van R4,0 miljard in die eerste kwartaal van 1996, het in 'n netto invloeiing van R0,7 miljard in die tweede kwartaal verander wat daarna in die derde kwartaal in 'n netto uitvloeiing van R0,1 miljard omgesit is. Anders as in voorafgaande kwartale toe banke grootliks vir die inwaartse of uitwaartse beweging van korttermynkapitaal na en van die land verantwoordelik was, het banke hul korttermyn buitelandse verpligtinge in die derde kwartaal met 'n betreklik geringe bedrag verminder. Vanweë die skerp invloeiing van korttermynkapitaal na die banksektor in die tweede kwartaal van 1996, het die korttermyn buitelandse verpligtinge van banke gedurende die derde kwartaal op 'n hoëvlak gebly.

Buitelandse reserwes

Die gesamentlike gevolg van tekorte op die lopende rekening en op die kapitaalrekening van die betalingsbalans was 'n daling van R3,7 miljard in die land se *netto goud- en ander buitelandse reserwes* gedurende die derde kwartaal van 1996. Die geakkumuleerde

Totale bruto goud- en ander buitelandse reserwes



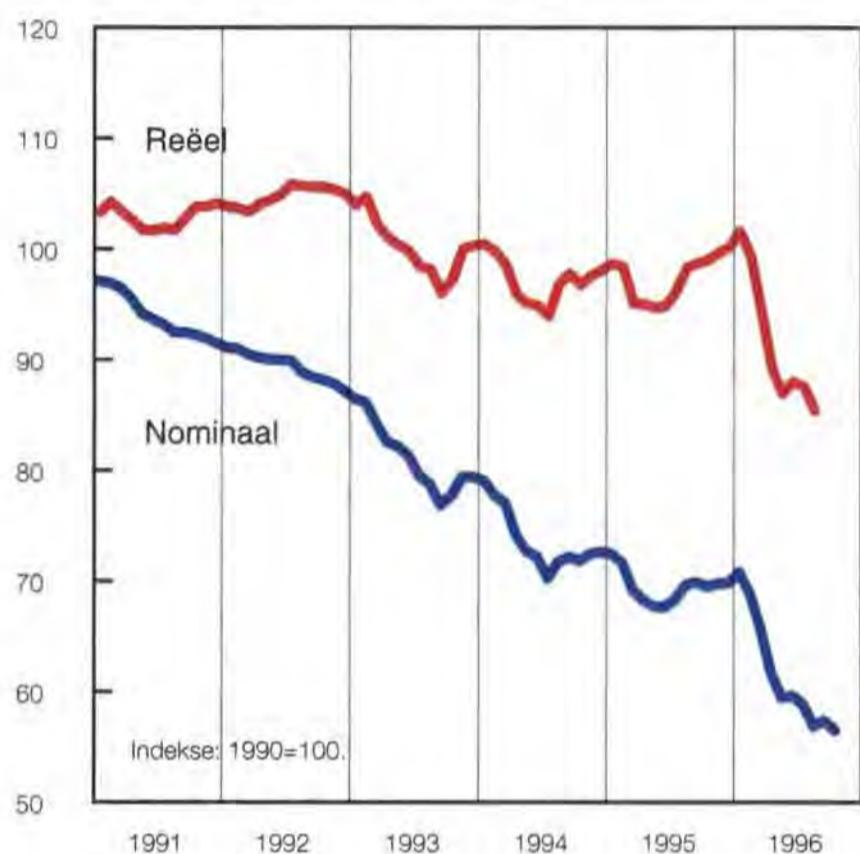
daling in die netto goud- en ander buitelandse reserwes het in die eerste drie kwartale van 1996 op R7,8 miljard te staan gekom. Hierdie daling vergelyk met 'n opbou van die netto goud- en ander buitelandse reserwes ten bedrae van R4,7 miljard in die eerste drie kwartale van 1995. In Oktober 1996 het die netto goud- en ander buitelandse reserwes van die Reserwebank egter weer met R0,4 miljard gestyg.

Die land se *bruto goud- en ander buitelandse reserwes* het in die derde kwartaal van 1996 met R2,6 miljard gedaal, wat die algehelevlak van die bruto buitelandse reserwes aan die einde van daardie kwartaal op R13,9 miljard te staan laat kom het. Hierdie vlak van die bruto buitelandse reserwes het bestaan uit ongeveer 43 persent goudreserwes en 57 persent buitelandse betaalmiddele. Ingelsluit by die besit aan buitelandse betaalmiddele aan die einde van September 1996 was 'n bedrag van R0,6 miljard wat deur 'n korttermynlening verkry is om die vlak van die bruto buitelandse reserwes te ondersteun; hierdie bedrag is in Oktober 1996 ten volle terugbetaal. Die bruto buitelandse reserwes van die land was aan die einde van September gelykstaande aan die waarde van invoer vir 'n tydperk van slegs ongeveer 4½ weke, vergeleke met ongeveer 5½ weke aan die einde van September 1995. Die bruto buitelandse reserwes van die Reserwebank het daarna in Oktober 1996 effens met R0,2 miljard verbeter.

Wisselkoerse van die rand

Die *nominale effektiewe wisselkoers van die rand* wat tussen die einde van 1995 en die einde van Junie 1996 met 14,6 persent gedaal het, het in die driemaandetydperk tot aan die einde van September 1996 verder met 4,3 persent gedaal. Die indekswaarde van die nominale effektiewe wisselkoers het in Julie 1996 skerp gedaal; gedurende die oorblywende maande van die derde kwartaal was die buitelandse valutamark betreklik kalm, en het die rand in werklikheid effens geappresieer. Hierdie kort tydperk van betreklike bestendigheid het in

Effektiewe wisselkoerse van die rand



Oktober 1996 tot 'n einde gekom toe die rand weer die teiken van spekulatiewe aanvalle geword het wat meegebring het dat die nominale geweegde wisselkoers van die rand vanaf die einde van September 1996 tot aan die einde van Oktober met 5,5 persent gedaal het. Hierdie daling het die geakkumuleerde depresiasi van die rand oor die eerste tien maande van 1996 op 22,7 persent te staan gebring.

Die *reële effektiewe wisselkoers van die rand* het in die eerste helfte van 1996 met 12,1 persent gedaal. 'n Verdere daling van 3 persent in Julie en Augustus 1996

Tabel 8. Veranderings in die wisselkoerse van die rand

Persentasie

	31 Des 1995 tot 31 Mrt 1996	31 Mrt 1996 tot 30 Jun 1996	30 Jun 1996 tot 30 Sep 1996	30 Sep 1996 tot 31 Okt 1996	31 Des 1995 tot 31 Okt 1996
Geweegde gemiddelde.....	-8,0	-7,2	-4,3	-5,5	-22,7
VSA-dollar	-8,9	-7,6	-4,1	-4,6	-23,0
Britse pond.....	-7,5	-8,9	-5,0	-8,5	-26,8
Duitse mark	-6,4	-4,6	-3,8	-5,6	-18,9
Japanse yen	-5,8	-4,5	-2,8	-3,0	-15,2
Nederlandse gulden.....	-6,5	-4,4	-3,8	-5,6	-18,8
Italiaanse lira.....	-9,9	-9,6	-4,6	-5,4	-26,4

het die indeks van die reële effektiewe wisselkoers van die rand daarna laat afneem tot 'nvlak wat 15,9 persent laer was as die onlangse boonste draaipunt in Januarie 1996. Hierdie daling is 'n redelike aanduiding van die omvang waarmee die mededingendheid van Suid-Afrikaanse produsente sedert die begin van 1996 verbeter is.

Die waarde van die *netto daagliks omset in buitelandse valuta* (dit is die bruto aankope en verkope van die vernaamste geldeenhede in die kontant- en termynmarkte, aangepas vir dubbeltelling wat voortspruit uit plaaslike interbanktransaksies) het gedaal van 'n gemiddelde daagliks omset van VSA\$6,7 miljard in die tweede kwartaal van 1996 tot VSA\$4,9 miljard in die derde kwartaal. Hierdie algehele daling het in sowel die kontant- as die termynmark voorgekom. Die waarde van transaksies in die kontantmark waarby buitelandse instellings betrokke is, met inbegrip van buitelandse takke van Suid-Afrikaanse banke, het van 'n gemiddelde van VSA\$1,5 miljard per dag in die tweede kwartaal van 1996 tot VSA\$1,8 miljard per dag in die derde kwartaal toegeneem. Hierdie ontwikkelings het saamgeval met die verlangsaming in die tempo van afname in die wisselkoers van die rand gedurende die derde kwartaal van 1996.

Die swakheid van die rand sedert Februarie 1996 is aangevuur deur volgehoudige gerugte oor toekomstige veranderings in die deviesebeheermaatreëls wat steeds op Suid-Afrikaanse inwoners van toepassing is, die swak algehele betalingsbalansposisie, die lae vlak van buitelandse valutareserwes, stygende inflasie en ietwat eensydige verwagtings oor toekomstige bewegings in die wisselkoers wat geleenthede vir destabiliserende spekulasie geskep het. Soos in tabel 8 getoon word, was die daling in die wisselkoers van die rand besonder sterk teenoor die Britse pond en die Italiaanse lira. Die rand-ekwivalent van die VSA-dollar het van R3,65 aan die einde van Desember 1995 tot R4,74 aan die einde van Oktober 1996 gestyg.

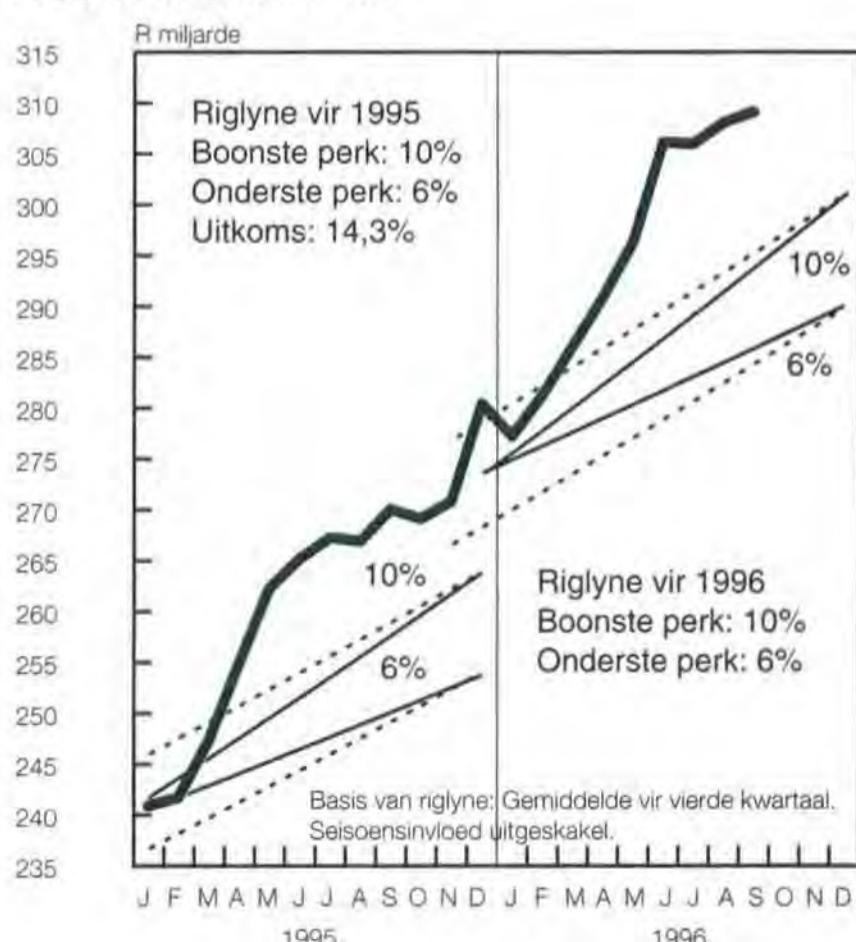
Monetêre ontwikkelings, rentekoerse en finansiële markte

Geldvoorraad

Die *omvattend gedefinieerde geldvoorraad (M3)* het in die eerste nege maande van 1996 vinnig uitgebrei. Die groeikoers oor twaalf maande in M3 het in 'n band tussen 16,1 persent in Februarie 1996 en 13,6 persent in Mei gewissel. In die derde kwartaal van 1996 het dit voorgekom asof die groeikoers oor twaalf maande effens verlangsaam het van 15,7 persent in Junie tot 14,5 persent in September. Die groei van kwartaal tot kwartaal in die kwartaallikse gemiddelde waarde van M3 (seisoensaangesuiwer en teen 'n jaarkoers), wat van 6,9 persent in die vierde kwartaal van 1995 tot 13,7 persent in die eerste kwartaal van 1996 en 21,2 persent in die tweede kwartaal versnel het, het ook effens tot 18,6 persent in die derde kwartaal van 1996 verlangsaam.

As gevolg van die vinnige monetêre uitbreiding in die eerste drie kwartale van 1996, het die seisoensaangesuiwerde maandelikse waardes van M3 die boonste grens van die riglyngebied van 6-10 persent van die huidige riglynjaar aansienlik oorskry. In September 1996 was die seisoensaangesuiwerde waarde van M3 R13,8 miljard, of 4,7 persent hoër as die boonste grens van die riglyn- "kegel". Die groei in die seisoens-

Riglyne vir groei in M3



aangesuiwerde waarde van M3, teen 'n jaarkoers en gemeet vanaf die basis van die riglynjaar, het in September 1996 op 15,9 persent te staan gekom; dit was heelwat hoër as die boonste grens van 10 persent vir die huidige riglyngebied.

Die vinnige groei in die geldvoorraad gedurende 1996 het deels verband gehou met die sterk uitbreiding in verbruiks- en investeringsbesteding, met inbegrip van die opbouing van voorrade. Benewens hierdie transaksiebehoefte aan geld, is die private sektor se likiditeitsvoordeur moontlik ook deur politieke onsekerheid gedurende die tweede kwartaal van 1996 versterk.

Die hoër vraag na geldbesit is ook deur die spekulatiewe behoefte aan geld gemotiveer, wat op verwagtings van groot aanpassings in die effekte- en aandelemarkte gegrond was. Institusionele beleggers, soos langtermynversekeraars en pensioenfondse, het 'n sterk voorkeur getoon om groter-as-normale likiede saldo's by monetêre instellings te hou. Die afname in die waarde van die rand en verwagtings van waarskynlike beleidsoptredes het die private sektor buite die bankwese se likiditeitsvoordeur verder versterk.

Laer inflasie en 'n mate van verhoogde vertroue in geld as 'n waardedraer het ook gedurende 1996 tot die vraag na deposito-tipe beleggings bygedra. Die marges tussen die banke se uitleen- en depositokoerse het in die derde kwartaal van 1996 ietwat vernou. Dit gee normaalweg aanleiding tot 'n toename in banke se betrokkenheid as tussengangers, wat sodoende tot die M3-geldvoorraad bydra.

Bewys van die sterk likiditeitsvoordeur van die private sektor gedurende die eerste drie kwartale van

Tabel 9. Kwartaallikse veranderings in komponente van monetêre totale

R miljard

Monetêre totale	1996		
	1e kw	2e kw	3e kw
Note en munte in omloop	0,3	0,5	-0,3
Tjek- en transmissiedeposito's.....	-2,4	4,5	3,7
M1A.....	-2,1	5,0	3,4
Ander onmiddellik-opeisbare deposito's.....	7,9	2,6	3,3
M1	5,8	7,6	6,7
Ander kort- en middeltermyndeposito's.....	3,5	5,9	-3,6
M2	9,3	13,5	3,1
Langtermyndeposito's.....	-1,3	1,7	1,0
M3	8,0	15,2	4,1

Monetêre totale



1996 word in tabel 9 getoon. Die veranderings in die komponente van M3 dui duidelik op 'n voorkeur vir die besit van kortertermyndeposito's.

Tjek- en transmissiedeposito's was in die tweede en derde kwartale van 1996 baie gewild, terwyl ander onmiddellik-opeisbare deposito's hul gewildheid deur die loop van die eerste drie kwartale van 1996 behou het. Hierdie twee kategorieë van deposito's het saam ongeveer 72 persent tot die groei in M3 gedurende die eerste nege maande van 1996 bygedra. In teenstelling hiermee het langtermyndeposito's betreklike klein toenames ondervind of gedurende elk van die eerste drie kwartale van 1996 afgeneem en slegs sowat 5 persent tot die groei in M3 oor die eerste drie kwartale van 1996 bygedra.

Die groeikoerse oor twaalf maande in die *engere monetêre totale* het ook die voorkeur vir kortertermyndeposito's by monetêre instellings getoon. Die groei oor twaalf maande in M1 het gedurende die eerste nege maande van 1996 deurgaans die groei in M3 oorskry; die groeiverskil ten gunste van M1 was in Augustus en September 1996 meer as 16 persentasiepunte.

Die belangrikste teenhanger (in 'n statistiese of rekeningkundige sin) van die toename van R4,1 miljard in M3 in die derde kwartaal van 1996 was 'n toename in die monetêre instellings se eise teen die private sektor. Dit is in 'n groot mate deur afnames in die monetêre instellings se netto buitelandse bates, hul netto eise teen die regeringsektor en hul netto ander bates teengetrek. Die netto eise van monetêre instellings

Tabel 10. Groeikoerse oor twaalf maande in M1 en M3

Percent

Tydperk		M1	M3
1996: Jan		19,6	14,5
Feb.....		20,5	16,1
Mrt.....		27,0	15,3
Apr		26,9	14,4
Mei		24,1	13,6
Jun		28,7	15,7
Jul.....		28,7	14,7
Aug.....		31,6	15,4
Sep.....		30,7	14,5

teen die regeringsektor het 'n taamlik drastiese ommekeer van 'n toename van R8,9 miljard in die tweede kwartaal van 1996 in 'n afname van R2,1 miljard in die derde kwartaal getoon.

Kredietverlening

Die koers van toename oor twaalf maande in die *totale binnelandse kredietverlening* van die monetêre sektor het van 13,2 persent in Desember 1995 tot 14,2 persent in Maart 1996 en daarna tot 16,4 persent in Junie 1996 toegeneem. Die groei oor twaalf maande in totale binnelandse kredietverlening het later in Julie en

Kredietverlening deur monetêre instellings



Augustus 1996 op naastenby 16 persent gebly, maar in September tot 17,8 persent versnel. Die betreklik hoë koers van kredietverlening in die derde kwartaal van 1996 was hoofsaaklik die gevolg van sterk groei in kredietverlening aan die private sektor buite die bankwese. Soos vroeër gemeld is, het die netto eise van die monetêre instellings teen die regeringsektor in die derde kwartaal van 1996 afgeneem.

Kredietverlening deur die monetêre instellings aan die *private sektor* buite die bankwese het gedurende die eerste nege maande van 1996 volgehou om teen 'n buitengewoon hoë koers te styg. Die groeikoers oor twaalf maande in kredietverlening aan die private sektor het aanvanklik van 17,6 persent in Desember 1995 tot 18,9 persent in Julie 1995 versnel; dit het daarna effens tot 18,1 persent in September 1996 teruggesak. Hierdie maandelikse groeikoerse het die inflasiekoers, soos gemeet deur veranderings in die verbruikersprysindeks, oorskry en die toename in reële kredietverlening oor twaalf maande het van 10,0 persent in Desember 1995 tot 11,6 persent in Maart 1996 versnel. Toe verbruikersprysinflasie in die tweede kwartaal van 1996 begin versnel het, het die styging in reële kredietverlening aan die private sektor tot 11,0 persent in Junie 1996 en tot 8,9 persent in September afgeneem.

'n Ontleding van monetêre instellings se eise teen die private sektor volgens *soort krediet* toon dat groei in kredietverlening aan die private sektor grootliks uit toenames in verbandvoorskotte, afbetelingsverkope, bruikhuurfinansiering, oortrokke rekeninge en "ander lenings en voorskotte" bestaan het. Gesamentlik het die toenames in hierdie soorte kredietverlening die algehele toename in die monetêre sektor se eise teen die private sektor oorskry. Die sterk vraag van privaatsektorinstansies na krediet is deur skerp toenames in lopende besteding deur huishoudings en

Tabel 11. Toenames in kredietverlening aan die private sektor volgens vernaamste soort krediet

Soort krediet	1996		
	1e kw	2e kw	3e kw
Verbandvoorskotte	5,3	5,1	6,5
Afbetalingsverkope	1,6	2,3	1,8
Bruikhuurfinansiering	0,7	0,9	1,7
Beleggings.....	1,0	-1,6	0,6
Wissels verdiskonter	-0,6	0,3	-1,2
Ander lenings en voorskotte	6,2	3,9	5,0
Totaal.....	14,2	10,9	14,4

kapitaalbesteding deur maatskappye aangehelp. Hoe buitelandse handelsvolumes en 'n omskakeling in handelsgebaseerde krediet van buitelandse na binnelandse bronre vanweë die verhoogde onbestendigheid van die wisselkoers en onlangse stygings in termyndekingskoste, het in die derde kwartaal van 1996 verdere stukrag aan groei in krediet aan die private sektor verleen.

Verbandvoorskotte deur die monetêre sektor aan die private sektor buite die bankwese het in die derde kwartaal van 1996 weer eens 'n sterk toename getoon. Indien die verlangsaming van bedrywigheid in die vaste-eiendomsmark sedert Mei 1996 in aanmerking geneem word, lyk dit voor die hand liggend dat 'n aansienlike deel van verbandvoorskotte aan die private sektor vir ander doeleindes as vir die verkryging van vaste eiendom of die konstruksie of verbetering van woongeboue gebruik is.

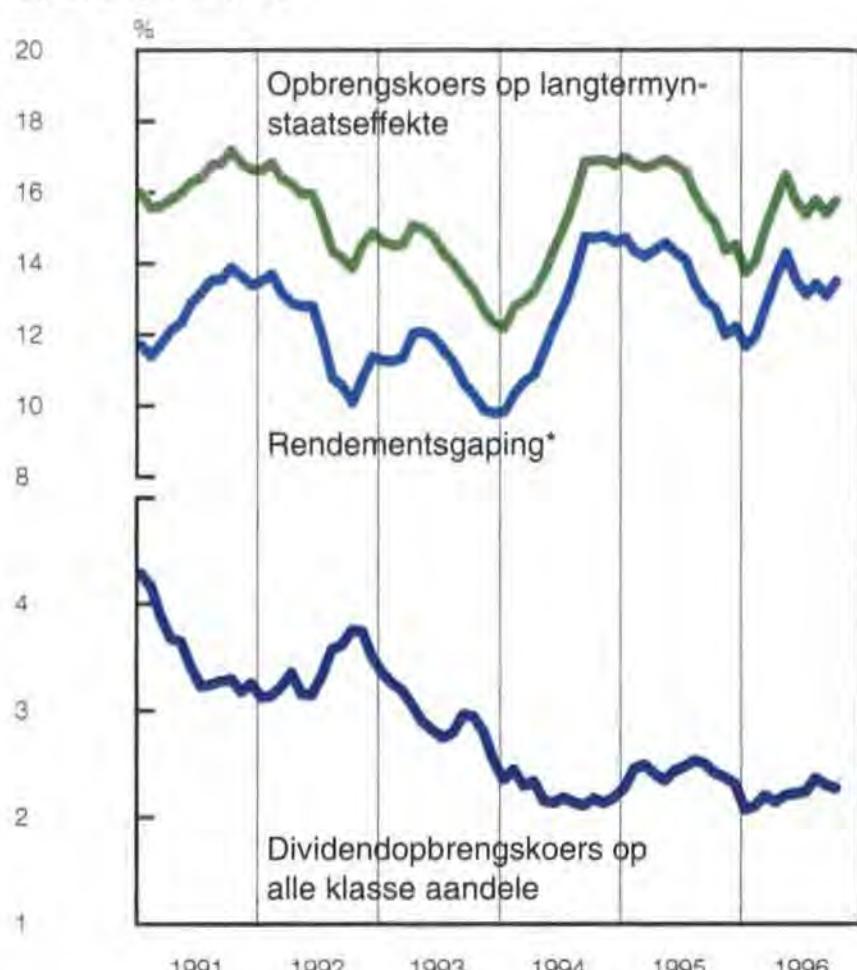
Die klemverskuwing in die relatiewe belangrikheid in kredietverlening van huishoudings na die private maatskappysektor gedurende die tweede kwartaal van 1996 het in die derde kwartaal van 1996 voortgeduur. Hoewel kredietverlening aan private huishoudings van R5,3 miljard in die tweede kwartaal van 1996 tot R6,1 miljard in die derde kwartaal toegeneem het, het kredietverlening aan die maatskappysektor met nog meer verhoog van R4,5 miljard in die tweede kwartaal tot R6,3 miljard in die derde kwartaal. Uitgedruk as persentasieveranderings was die groei oor twaalf maande in kredietverlening aan huishoudings teen 16,0 persent in September 1996 heelwat minder as die groei van 19,4 persent in kredietverlening aan die maatskappysektor oor dieselfde tydperk.

Rente-en opbrengskoerse

Opbrengskoerse op langtermyneffekte, wat vanaf Januarie tot Mei 1996 skerp gestyg het, het in die daaropvolgende maande in 'n relatiewe smal band van ongeveer 15 tot 16 persent gewissel. Die opwaartse beweging in die maandelikse gemiddelde opbrengskoers op langtermynstaatseffekte, vanaf 13,77 persent in Januarie 1996 tot 16,53 persent in Mei, is deur 'n opwaartse regstelling in opbrengskoerse op effekte in die Amerikaanse finansiële markte en die daling in die wisselkoers van die rand sedert middel-Februarie 1996 aan die gang gesit. Die beweging in die opbrengskoers op langtermynstaatseffekte het vanaf Junie 1996 'n gebrek aan 'n duidelik opwaartse of afwaartse neiging getoon. Sowel plaaslike as buitelandse beleggers is klaarblyklik ongemaklik met opbrengskoerse onder die 15 persent-merk terwyl inflasie toeneem en die rand swak bly. Aan die bokant wou dit voorkom asof die betreklike swak vraag na fondse deur instansies in die openbare sektor koerse in die eerste helfte van die fiskale jaar 1996/97 verhinder het om beduidend verby die vlak van 16 persent te styg.

Insgelyks het die koerse in die geldmark in die loop van die eerste vyf maande van 1996 toegeneem. Die

Opbrengskoerse

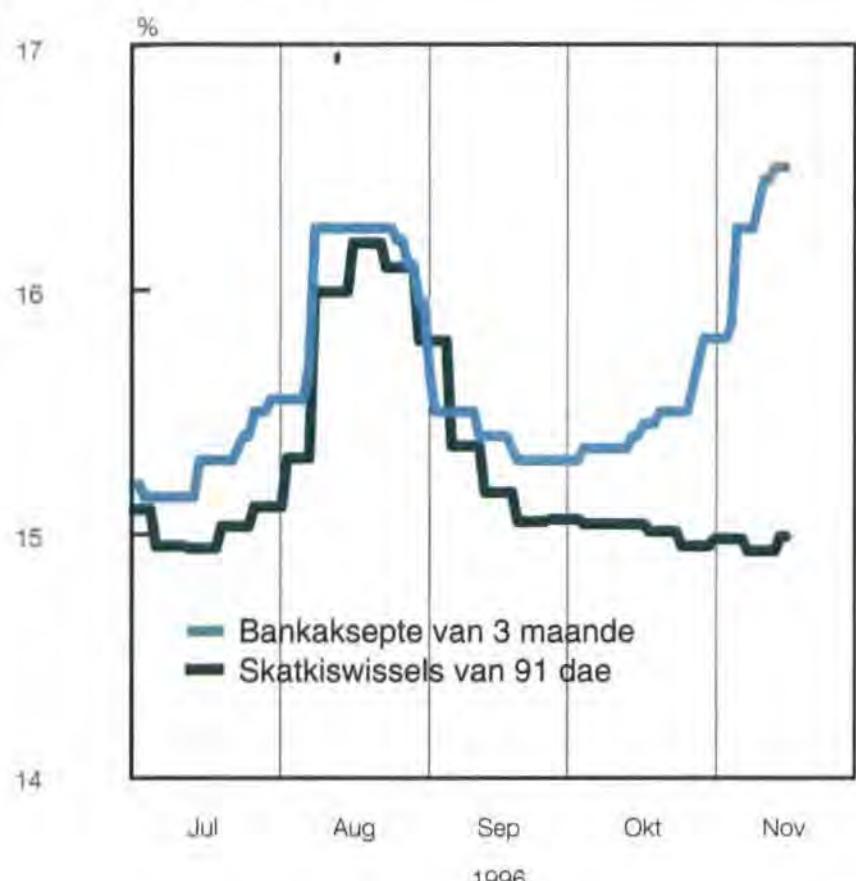


* Die maandelikse gemiddelde opbrengskoers op langtermynstaatseffekte minus die dividendopbrengskoers op alle klasse aandele in persentasiepunte.

koers op bankaksepte van drie maande het byvoorbeeld van 14,10 persent aan die einde van Januarie 1996 en 14,05 persent aan die einde van Februarie tot 16,40 persent aan die einde van Mei 1996 toegeneem. Hierdie koers het daarna aansienlik afgeneem tot 15,20 persent aan die einde van Mei 1996. In die loop van die derde kwartaal het die koers op bankaksepte rondom 'n vlak gewissel wat ietwat hoër as in Junie was, maar aan die einde van Oktober het dit opwaarts beweeg tot 15,80 persent in reaksie op die verswakkings van die rand, hoër inflasieverwagtings en gissings in die mark oor 'n naderende verskerping van monetêre beleid. Die koers op bankaksepte het in November 1996 selfs hoër beweeg en teen 15 November op 16,50 persent te staan gekom.

In teenstelling met die opwaartse beweging in die koers op bankaksepte van drie maande gedurende Oktober en November 1996 het die *tenderkoers op skatkiswissels van drie maande* geleidelik laer beweeg van 15,06 persent aan die einde van September tot 14,99 persent op 15 November. Die spesiale status wat skatkiswissels met 'n kort looptyd geniet, die beperkte beskikbaarheid van likiede bates in die mark en die betreklike sterk vraag na likiede bates deur

Geldmarkrentekoerse



Januarie nie, maar ook effens meer omgekeerd aan die kort kant en steiler aan die lang kant. Namate koerse oor die algemeen oor die hele spektrum van die aflossingstruktuur gedaal het, het die opbrengskromme tot September 1996 afwaarts beweeg. Die opwaartse beweging van koerse in Oktober 1996 het die opbrengskromme laat styg tot 'n vlak effens hoër as dié in Mei, maar met 'n selfs platter helling, wat dui op toenemende onsekerheid oor toekomstige finansiële beleidsrigtings en verwagtings van hoër inflasie.

Teen die agtergrond van baie stram geldmarktoestande is *Bankkoers* op 29 April 1996 van 15 tot 16 persent verhoog in 'n poging om ordelike handelstoestande in die buitelandse valutamark te skep. Die geldmark het oor die algemeen in die tydperk sedert die einde van April stram gebly en die tenderkoers op skatkiswissels van drie maande het sporadies toegenem tot 'n vlak wat hoër as *Bankkoers* was. Ondanks hierdie opwaartse druk op amptelike uitleenkoerse en die verdere verswakking van die rand tussen April en Oktober 1996, het *Bankkoers* tot aan die einde van Oktober onveranderd gebly. Die volgehoue geldmarktekort op 'n baie hoë vlak gedurende November 1996, die verdere styging van koerse in die geldmark, die hoë koers van toename in die geldvoorraad en stygende inflasieverwagtings het daarna veroorsaak dat die Reserwebank *Bankkoers* op 21 November 1996 met een persentasiepunt tot 17 persent verhoog het.

Die prima-oortrekkingskoers van banke is op 29 April 1996 van 18,50 persent tot 19,50 persent verhoog in reaksie op die verhoging in *Bankkoers* op daardie dag. In Mei het die stygende geldmarkkoerse opwaartse druk geplaas op die koste waarteen banke hul uitleenbedrywighede befonds. Om hierdie afwaartse druk op die marge tussen uitleenkoerse en die koste van fondse te

banke was in Oktober en die eerste helfte van November 1996 die vernaamste dryfkragte wat vir die ietwat teenstrydige gedrag van die tenderkoers op skatkiswissels van drie maande verantwoordelik was.

Die vlak en die vorm van die *opbrengskoerskromme* het gedurende die eerste tien maande van 1996 aansienlik gewissel. Tussen Januarie en Mei 1996 het die *opbrengskoerskromme* skerp opwaarts beweeg. In Mei was die *opbrengskoerskromme* nie net hoër as in

Tabel 12. Rente- en opbrengskoerse

Persent soos op maandeinde tensy anders vermeld

Einde van	Maandelikse gemiddelde opbrengskoers op langtermyn-staatseffekte	Bankaksepte van 3 maande	Prima-oortrekkingskoers		Oorheersende koers op verbandlenings	Oorheersende koers op vaste deposito's van 12 maande
			Nominaal	Reëel		
1996: Jan	13,77	14,10	18,50	10,85	18,25	14,00
Apr	15,78	15,20	19,50	13,24	18,25	13,50
Mei	16,53	16,40	20,50	13,83	19,25	14,50
Jun	15,78	15,20	20,50	12,77	20,25	15,00
Jul	15,39	15,55	19,50	11,57	19,25	14,25
Aug.....	15,82	15,95	19,50	11,16	19,25	14,25
Sep.....	15,42	15,30	19,50	10,21	19,25	15,00
Okt	15,80	15,80	19,25	9,31	19,00	15,00

verlig, het banke hul prima-oortrekkingskoerse op 20 Mei 1996 tot 20,50 persent verhoog, ongeag dat Bankkoers toe onveranderd gelaat is. Met die verlaging van geldmarkkoerse in Junie, wat banke se befondingskoste verminder het, en nadat die Reserwebank 'n verlaging van 0,75 persentasiepunte in die koste van akkommodasie teen onderpand van tweedekategorie-bates aangekondig het, het die banke hul prima-oortrekkingskoerse op 1 Julie 1996 tot 19,50 persent verlaag. Na die afskaffing van die heffing op die verskaffing van finansiële dienste het banke hul prima-oortrekkingskoerse op 1 Oktober weer met 0,25 persentasiepunte tot 19,25 persent verlaag. In reaksie op die styging in Bankkoers op 21 November 1996 het die banke hul prima-oortrekkingskoerse op dieselfde dag met een persentasiepunt tot 20,25 persent verhoog.

Die reële of inflasie-aangepaste prima-oortrekkingskoers van banke, dit wil sê die nominale prima-oortrekkingskoers, aangepas vir die verandering in die verbruikersprysindeks oor twaalf maande, het in die eerste nege maande van 1996 betreklik hoog gebly. Hierdie koers het van 10,9 persent aan die einde van Desember 1995 tot 13,8 persent aan die einde van Mei 1996 toegeneem; dit het daarna tot 10,2 persent aan die einde van September teruggesak. Die daling in die reële prima-oortrekkingskoers sedert Mei 1996 was meer 'n weerspieëling van die versnelling in die koers van verbruikersprysinflasie oor twaalf maande as van die afname in die nominale prima-oortrekkingskoers oor hierdie tydperk.

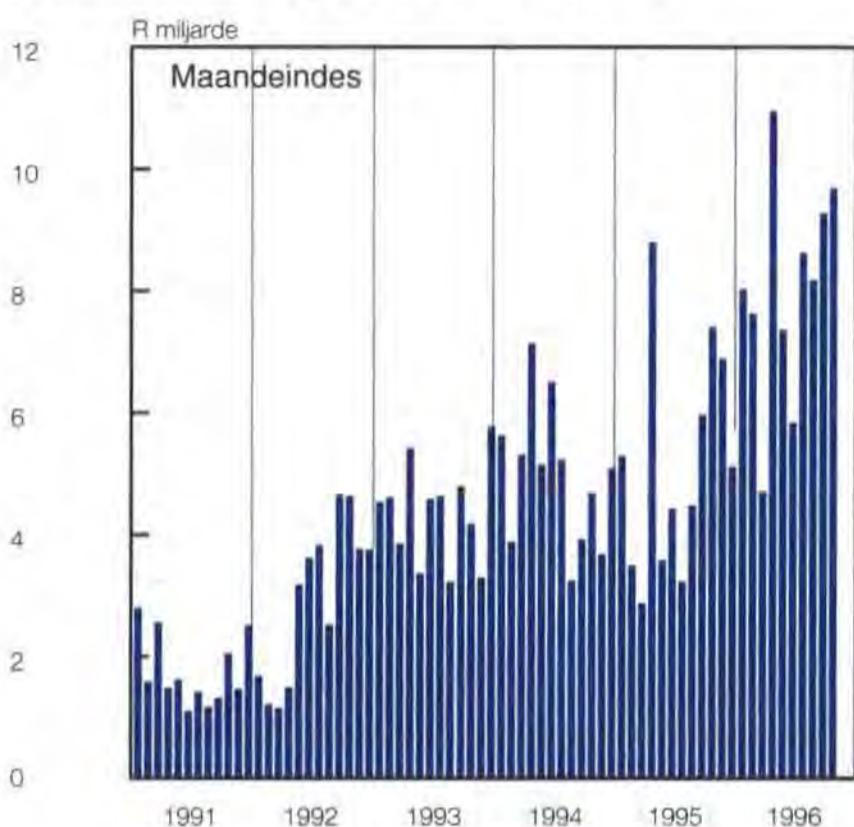
Die oorheersende koers op verbandlenings van banke het die veranderings in die prima-oortrekkingskoers van banke gevvolg. Verbandkoerse is met een persentasiepunt tot 19,25 persent vanaf Mei 1996 en verder tot 20,25 persent vanaf Junie verhoog, maar daarna tot 19,25 persent vanaf Julie en 19,00 persent vanaf Oktober 1996 verlaag.

Die oorheersende kleinhandelskoers op vaste deposito's van twaalf maande is vanaf Mei 1996 met een persentasiepunt tot 14,50 persent en weer vanaf Junie tot 15,00 persent verhoog, maar is vanaf Julie tot 14,25 persent verlaag. Die koers op vaste deposito's van twaalf maande is vanaf September, toe geldmarktoestande weer eens baie stram geword het, tot 15 persent verhoog.

Geldmarktoestande

Geldmarktoestande het in die eerste tien maande van 1996 heelwat gewissel, maar sedert April oor die algemeen stram gebly. Die bedrag wat die Reserwebank teen maandeindes aan banke moes voorsien het binne 'n band van R4,7 miljard aan die einde van Maart 1996 en R11,0 miljard aan die einde van April gewissel. Hierdie "geldmarktekort" het in die derde kwartaal van 1996 van R5,8 miljard aan die einde van Junie tot R9,3 miljard aan die einde van September toegeneem. Die bedrag aan Reserwebankakkommodesie het in Oktober weer eens tot R9,7 miljard aan die einde van die maand toegeneem.

Akkommodasie by die diskontovenster



Die vernouing van geldmarktoestande gedurende die derde kwartaal van 1996 was hoofsaaklik die gevolg van 'n afname van R1,4 miljard in die netto buitelandse bates van die Reserwebank, 'n toename van R0,8 miljard in die note en munte in omloop buite die Reserwebank en 'n toename, ook van R0,8 miljard in regeringsdeposito's by die Reserwebank.

Die optrede van die Reserwebank in die geldmark gedurende die derde kwartaal van 1996 was daarop gerig om die geldmarktekort toe te laat om die onderliggende wanbalans tussen vraag en aanbod te weerspieël en om tydelike bystand ten tye van uiterste stramheid te verleen. Om dit te doen, het die Bank toepaslike aanpassings in die portefeuille van die Korporasie vir Openbare Deposito's aangebring en ook ruiloooreenkoms met private banke aangegaan om sodoende die baie stram geldmarktoestande te verlig. Sommige banke het gedurende Oktober en November tweedekategorie-bates as onderpand gebruik teen 'n deel van die akkommodasie wat van die Reserwebank verkry is.

Effektemark

Netto nuwe lenings deur die *openbare sektor* in die *binnelandse primêre effektemark* het vinnig van R1,9 miljard in die tweede kwartaal van 1996 tot R9,8 miljard in die derde kwartaal toegeneem. Die totale bedrag aan fondse wat deur instansies in die openbare sektor verkry is, het gevoldlik in die eerste helfte van die huidige fiskale jaar R11,7 miljard bedra, vergeleke met

'n baie groter bedrag van R19,6 miljard in die eerste helfte van die fiskale jaar 1995/96.

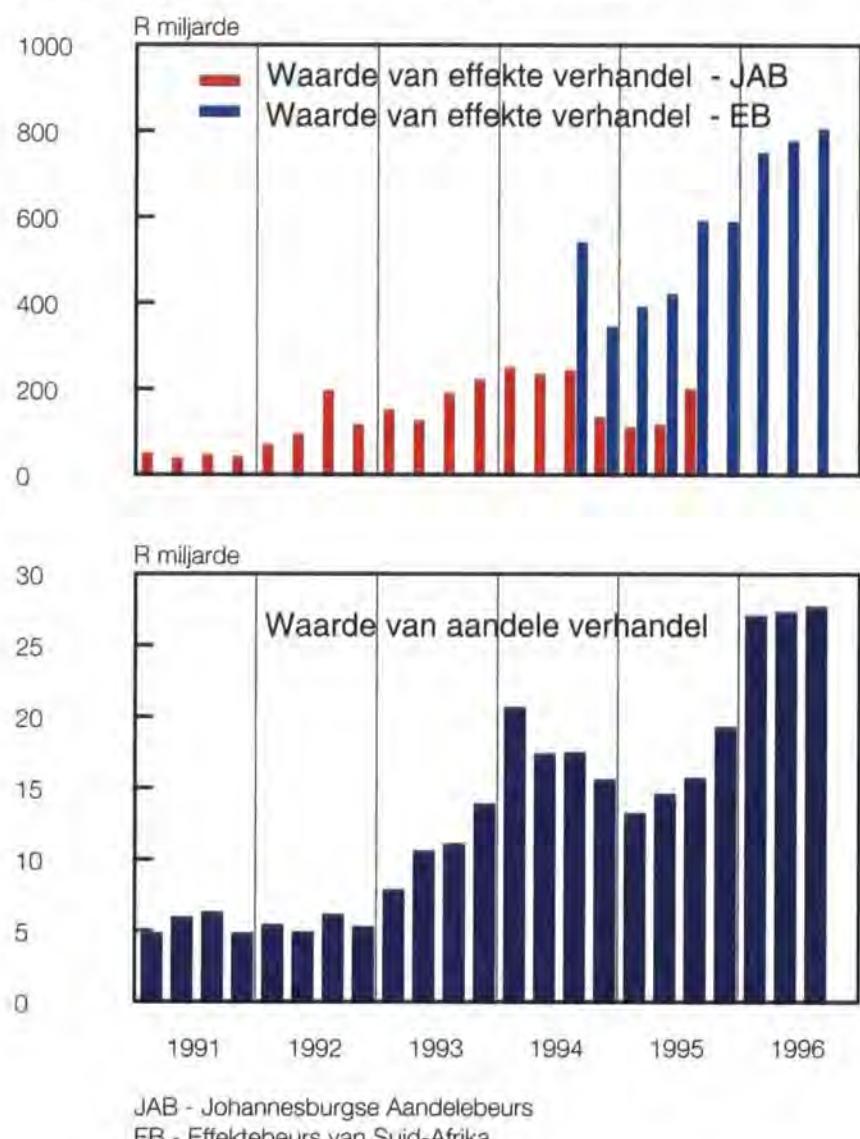
Genoteerde maatskappye in die private sektor het in die derde kwartaal van 1996 fondse ten bedrae van R2,1 miljard deur regtē-uitgiftes van vaste-rentedraende sekuriteite (met inbegrip van omskepbare voorkeur-aandele en skuldbriewe) verkry. Hierdie uitgiftes was die eerste van hul soort sedert Julie 1995 en het die betrokke maatskappye die geleentheid gebied om hul finansieringsbehoeftes te bevredig teen 'n laer koste as die heersende hoë rentekoerse op ander soorte waardepapier, terwyl beleggers aangetrek is deur die moontlikheid om skuldinstrumente op 'n toekomstige datum in aandele te omskep.

Die regering het fondse in die *internasionale primère effektemark* verkry deur uitgiftes in die Euro-effektemark ten bedrae van DM500 miljoen (R1,5 miljard) en \$300 miljoen (R1,4 miljard) in die Verenigde State-mark in Oktober. Die Euro-effekte-uitgifte se prys is vasgestel teen 140 basispunte bo die vergelykbare Bund van die Duitse regering wat in 2003 verval en die dollar-uitgifte teen 190 basispunte bo die heersende koers op regeringseffekte in die VSA met 'n looptyd gelykstaande aan dié van die Suid-Afrikaanse uitgifte. Hierdie uitgiftes het nie net die beleggersbasis verbreed nie, maar ook die aflossingstruktuur van Suid-Afrikaanse staatskuld verleng. Ondernemings in die nie-finansiële openbare sektor en maatskappye in die private sektor het gedurende die derde kwartaal van 1996 geen nuwe fondse op die internasionale effektemarkte verkry nie. Maatskappye in die private sektor het trouens sedert die vierde kwartaal van 1995 nog nie weer tot die internationale effektemark teruggekeer nie.

Die bedrywigheid in die *sekondêre effektemark* was gedurende die eerste drie kwartale van 1996 baie lewendig. Die waarde van effekte wat op die Effektebeurs verhandel is, het van 'n kwartaallikse gemiddelde van R593 miljard in die tweede helfte van 1995 tot R753 miljard in die eerste kwartaal van 1996 en R781 miljard in die tweede kwartaal toegeneem. Daarna het die bedrywigheid selfs verder toegeneem toe die omset in die derde kwartaal R809 miljard bereik het. In Oktober 1996 het die omset effens afgeneem tot R268 miljard vanaf 'n maandelikse gemiddelde van R270 miljard in die derde kwartaal. Die lewendigheid van die sekondêre effektemark is aangewakker deur die betreklik hoë vlak van inflasie-aangepaste opbrengskoerse gedurende 1996, wat tesame met 'n taamlike verandering in die opbrengskoers, geleenthede vir beleggers sowel as spekulante geskep het.

Nie-inwoners was in die eerste tien maande van 1996 netto aankopers van effekte ten bedrae van R2,0 miljard. Hulle het hul deelname in die mark boonop vergroot deur hul aankope as 'n persentasie van totale omset van 3,6 persent in Januarie 1996 tot 7,6 persent in Oktober te verhoog. Verkope van effekte deur nie-inwoners het ook van 3,0 persent van die totale omset in Januarie 1996 tot 7,6 persent in Oktober 1996

Omset op die sekondêre kapitaalmark



JAB - Johannesburgse Aandelebeurs
EB - Effektebeurs van Suid-Afrika.

toegeneem. Al is nie-inwoners se deelname in sekondêre effekteverhandeling steeds ietwat beskeie, het hul handelsbedrywigheid 'n betekenisvolle uitwerking op korttermynprysbewegings in die mark gehad. Terwyl nie-inwoners vanaf Mei tot Julie 1996 netto kopers van effekte was, was hulle in Augustus en Oktober netto verkopers.

Aandelemark

Die vraag na fondse in die *primère aandelemark* deur genoteerde maatskappye op die Johannesburgse Aandelebeurs, het in 1996 matig toegeneem. Die waarde van nuwe kapitaal wat verkry is, het in die eerste nege maande van 1996 tot R16,4 miljard of met 7 persent vergeleke met die eerste nege maande van 1995 toegeneem, hoofsaaklik vanweë die betreklik hoë vlak van aandelepryse en die hoë koste van lenings.

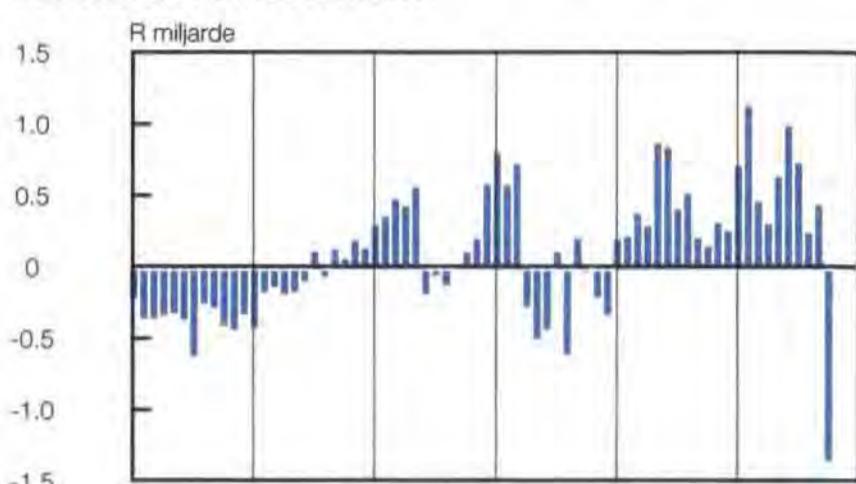
Die waarde van aandele wat op die *sekondêre aandelemark* verhandel is, het in die derde kwartaal van 1996 'n rekordhoogtepunt van R27,8 miljard bereik. Die maandelikse gemiddelde waarde van aandele wat verhandel is, het toe selfs hoër beweg van gemiddeld R9,3 miljard in die derde kwartaal van 1996 tot R12,6 miljard in Oktober. Vir die eerste tien maande van 1996

in die geheel, het die totale waarde van aandele wat op die Johannesburgse Aandelebeurs verhandel is, met 90 persent toegeneem. Omdat aandelepryse in 1996 betreklik gelyk verloop het, is die groter omset toe te skryf aan 'n toename in die aantal aandele wat verhandel is. Afgesien van laer belasting op bemarkbare sekuriteite, is die omset ook aangehelp deur die instelling van rekenaar gebaseerde verhandeling en tweeledige verhandelingskapasiteit, die toetreding tot die mark deur finansiële instellings en buitelandse firmas wat in sekuriteite handel dryf en verskerpte mededinging binne die geledere van die makelaars.

Nie-inwoners het as kopers en verkopers aktiewe deelnemers in die sekondêre aandelemark gebly. In die eerste tien maande van 1996 het aankope van genoteerde aandele deur nie-inwoners R33,7 miljard of 70 persent meer as in die ooreenstemmende tydperk van 1995 bedra. Verkope van genoteerde aandele deur nie-inwoners het in die eerste tien maande van 1996 op R29,3 miljard te staan gekom, wat die Johannesburgse Aandelebeurs met 'n netto inwaartse beweging van nie-inwonerfondse van R4,4 miljard gelaat het. Hierdie netto aankope het egter 'n duidelik afwaartse beweging van R2,4 miljard in die eerste kwartaal van 1996 tot R2,0 miljard in die tweede kwartaal en R1,4 miljard in die derde kwartaal getoon: dit is deur netto verkope van aandele ten bedrae van R1,3 miljard in Oktober gevvolg – die eerste keer sedert Desember 1994 dat nie-inwoners netto verkopers van aandele was.

Die maandelikse gemiddelde prysvlak van alle klasse aandele het vanaf Januarie tot Julie 1996 binne in 'n betreklike smal band gewissel. Die Johannesburgse Aandelebeurs het op die afname in aandelepryse op Wallstraat in middel-Juli gereageer en die maandelikse gemiddelde prysvlak van alle klasse aandele het in Augustus teruggesak tot 'n vlak wat ongeveer 4 persent laer as die hoogtepunt in Februarie 1996 was. Aandelepryse het in September weer herstel en die maandelikse gemiddelde prysvlak van alle klasse

Netto aankope deur nie-inwoners op die sekondêre aandelemark



Aandeleprysindeks van alle klasse aandele



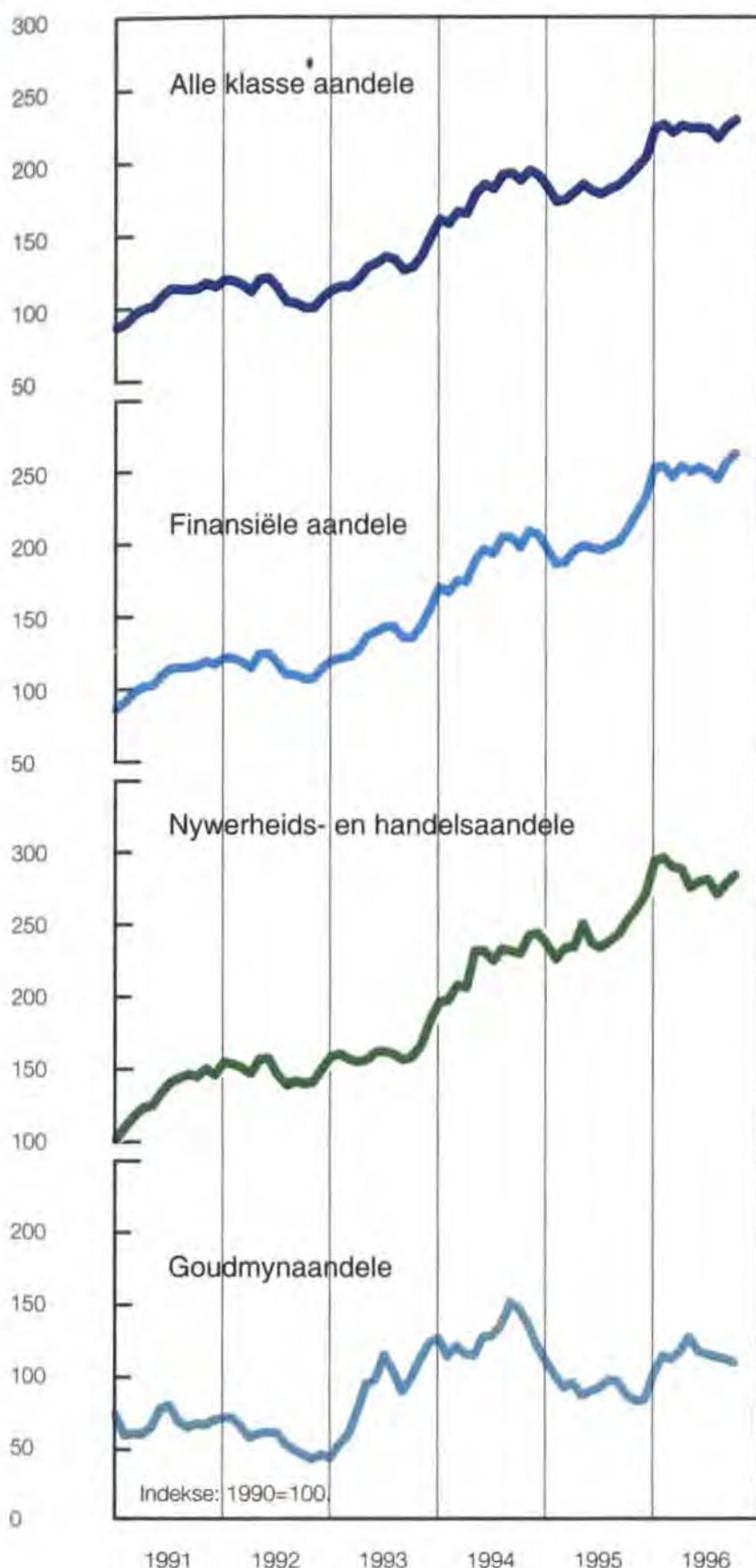
aandele het met 3,6 persent toegeneem en in Oktober 1996 weer met 2,0 persent. Die verstewiging in aandelepryse van Augustus tot Oktober was die netto gevolg van 'n stellige toename in die prys van finansiële aandele, 'n effens kleiner toename in die prys van nie-goudmynaandele en nywerheids- en handels-aandele, en 'n afname in die prys van goudmynaandele. Omgereken tot 'n dollar-indeks, het die maandelikse gemiddelde prysvlak van alle klasse aandele vanaf Januarie tot Oktober 1996 met 18,3 persent afgeneem. Hierdie afname kan deels as verklaring dien vir die verswakkings in die netto aankope van aandele deur nie-inwoners oor die eerste tien maande van 1996.

Die maandelikse gemiddelde dividend- en verdienste-opbrengskoers op alle klasse aandele (die verdienste-opbrengskoers sluit goudmynaandele uit) het van Augustus tot Oktober 1996 effens afgeneem namate aandelepryse oor die algemeen verstewig het. Die prysverdiensteverhouding van alle klasse aandele, behalwe die aandele van goudmynaatskappye, het effens van 15,2 in Augustus 1996 tot 15,8 in Oktober

Tabel 13. Transaksies op die aandelemark

Kwartaal	Aantal aandele verhandel (miljoene)	Waarde van aandele verhandel (R miljarde)	Netto aankope deur nie-inwoners (R miljarde)
1995: 1e kw.....	1 119	13,3	0,8
2e kw.....	1 158	14,7	2,0
3e kw.....	1 348	15,8	1,2
4e kw.....	1 523	19,4	0,8
1996: 1e kw.....	1 990	27,2	2,4
2e kw.....	1 912	27,4	2,0
3e kw.....	2 370	27,8	1,4

Aandelepryse



Tabel 14. Dividendopbrengskoers, verdiensteopbrengskoers, prysverhouding en rendementsgaping op alle klasse aandele

Tydperk	Dividendopbrengskoers Percent	Verdiensteopbrengskoers Percent	Prysverhouding*	Rendementsgaping Persentasiepunte
1995: Jan.....	2,08	5,50	18,17	11,69
Mei.....	2,21	6,05	16,54	14,32
Aug.....	2,37	6,57	15,22	13,45
Sep.....	2,31	6,40	15,64	13,11
Okt.....	2,28	6,31	15,84	13,52

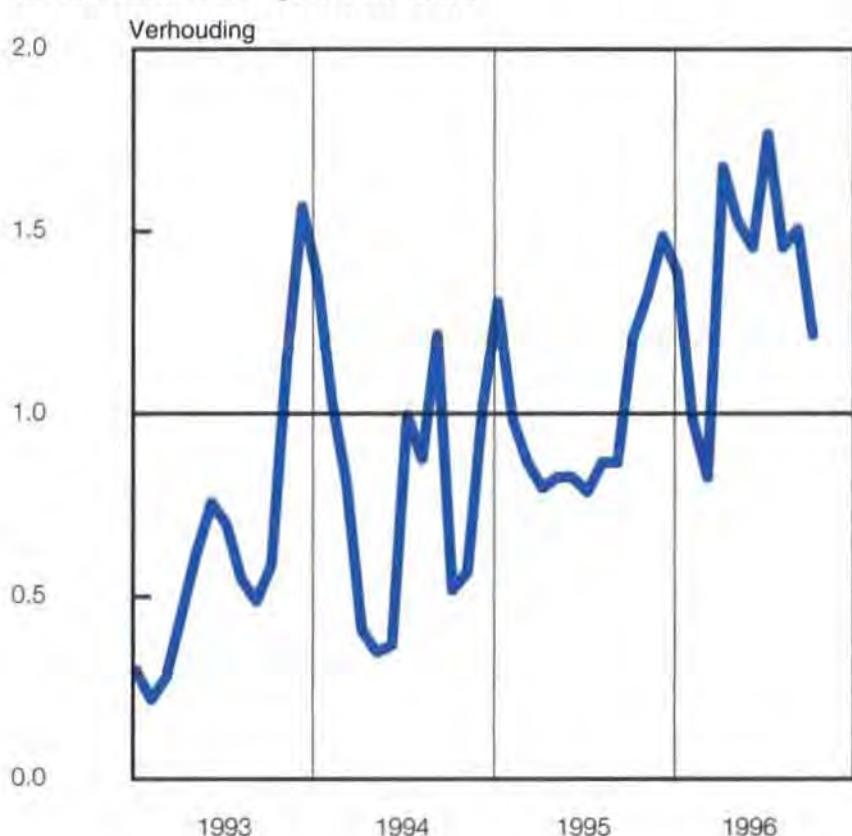
* Uitgesonderd goudmynaandele

koers op alle klasse aandele) van 14,3 persentasiepunte in Mei tot 13,5 persentasiepunte in Oktober verklein.

Ander finansiële markte

Onsekerheid en die gebrek aan 'n duidelike neiging in die finansiële markte, asook die aanhoudende verswakking van die rand sedert Februarie 1996 het na die *formele mark vir afgeleide instrumente* deurgewerk. Die aantal aandele-opsiekontrakte wat verhandel is, het dienooreenkomsdig in die eerste tien maande van 1996

Die verhouding van aantal aandele-opsiekontrakte tot aandeletermynkontrakte



toegeneem, namate aandelepryse gestyg en verdienste effens gedaal het. Hierdie opwaartse beweging is egter voorafgegaan deur 'n afname in die prysverhouding van 18,2 in Januarie 1996 tot 16,5 in Mei en verder tot 15,2 in Augustus. Met die opbrengskoers op langtermynstaatseffekte wat sedert Mei 1996 effens afwaarts geneig het, het die *rendementsgaping* (dit is die maandelikse gemiddelde opbrengskoers op langtermynstaatseffekte minus die dividendopbrengs-

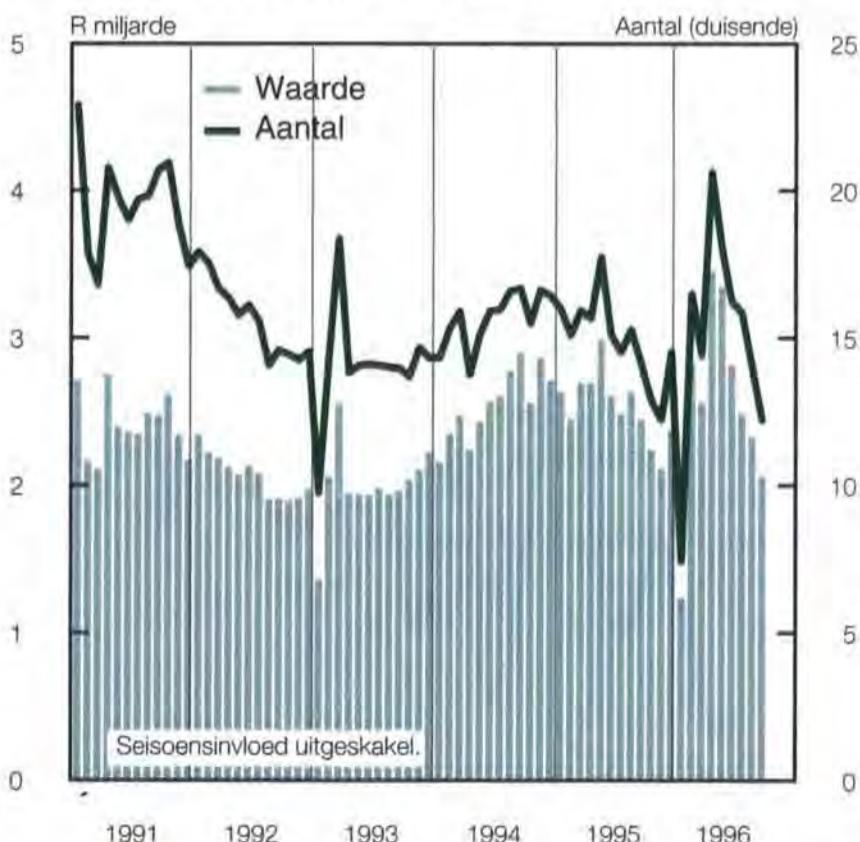
met soveel as 51 persent toegeneem, vergeleke met die ooreenstemmende tydperk van die vorige jaar. Hier teenoor, het die aantal *aandeleteermynkontrakte* wat verhandel is met slegs 7,6 persent in die eerste tien maande van 1996 toegeneem, teenoor die ooreenstemmende tydperk van 1995. Die vinniger toename in die aantal aandele-opsiekontrakte wat verhandel is, het tot gevolg gehad dat die verhandeling in hierdie soort kontrakte sedert April 1996 deurlopend die verhandeling in aandeletermynkontrakte oorskry het. Die toename in die gewildheid van opsiekontrakte in verhouding tot termynkontrakte kan toegeskryf word aan die onbestendigheid en onsekerheid in die aandelemark gedurende 1996.

Die waarde van transaksies in die *mark vir vaste eiendom* wat van R8,3 miljard in die tweede kwartaal van 1995 tot R6,7 miljard in die eerste kwartaal van 1996 afgeneem het, het in die tweede kwartaal tot R9,6 miljard toegeneem. Toenames in die oorheersende koers op verbandlenings in Mei en Junie 1996, tesame met ongekende skerp toenames in die tariewe en belastings van plaaslike regerings, het die mark vir vaste eiendom teen die middel van 1996 nadelig beïnvloed, en die maandelikse waarde van transaksies in vaste eiendom het gevolelik van 'n rekordhoogtepunt van R3,5 miljard in April 1996 tot R2,1 miljard in September gedaal. Gemeet oor 'n tydperk van een jaar, het die gemiddelde nominale waarde per transaksie in vaste eiendom in die derde kwartaal van 1996 met 0,9 persent afgeneem. Dit was die eerste afname sedert die vierde kwartaal van 1986, en het op 'n skerp

afname in die inflasie-aangepaste prys van vaste eiendom gedui.

Hoewel finansiering in die *verbandmark* lewendig gebly het, het 'n aplatting in die groeikoers in die eerste nege maande van 1996 duidelik geword. Die koers van toename in verbandvoorskotte oor 'n tydperk van twaalf maande het in September 1996 tot 17,1 persent teruggesak, vergeleke met 18,9 persent in September 1995. Monetêre instellings se totale uitstaande verbandvoorskotte het nietemin van R134,6 miljard in Desember 1995 tot R151,6 miljard in September 1996 toegeneem. Die toename in verbandvoorskotte was hoofsaaklik te sien in konvensionele verbandlenings eerder as buigsame onmiddellik-toeganklike verbandlenings.

Transaksies in vaste eiendom



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, die nie-finansiële openbare sakeondernemings en openbare korporasies) het met R2,3 miljard van R16,4 miljard in die eerste helfte van die fiskale jaar 1995/96 tot R18,7 miljard in die eerste helfte van die fiskale jaar 1996/97 toegeneem. Dit het die totale leningsbehoefte van die openbare sektor in die eerste helfte van die fiskale jaar 1996/97 op 6,9 persent van die bruto binnelandse produk te staan gebring, wat effens swakker is as die 6,8 persent wat in die eerste helfte van die vorige fiskale jaar aangeteken is.

Die effense verswakking in die leningsbehoefte van die openbare sektor in die eerste helfte van die fiskale jaar 1996/97 kan aan die ommekeer in die finansies van die provinsiale regerings van 'n oorskot van R1,6 miljard in die eerste helfte van die fiskale jaar 1995/96 in 'n tekort van R0,5 miljard in die eerste helfte van die fiskale jaar 1996/97 toegeskryf word. Die finansiële tekort van die provinsiale regerings getuig van die verbetering in die vermoë om maatskaplike dienste op provinsiale regeringsvlak te lewer. Die finansies van die plaaslike owerhede en die buitebegrotingsinstellings het ook van die eerste helfte van die fiskale jaar 1995/96 tot

die eerste helfte van die fiskale jaar 1996/97 versleg, maar dit is deels teengewerk deur 'n vermindering in die leningsbehoefte van die nie-finansiële openbare ondernemings, die Hoofbegroting en die bestaansbeveiligingsfondse.

Op die vlak van die algemene owerheid (dit wil sê die totale openbare sektor met die uitsondering van nie-finansiële openbare ondernemings) is die verswakking in die leningsbehoefte onder andere deur 'n skerp versnelling in die besteding aan goedere en dienste en rentebetalings veroorsaak. Die toename van jaar tot jaar in die besteding aan goedere en dienste deur die algemene owerheid het van 9,2 persent in die eerste helfte van die fiskale jaar 1995/96 tot 17,9 persent in die eerste helfte van die fiskale jaar 1996/97 versnel. Rentebetalings deur die algemene owerheid wat in die eerste helfte van die fiskale jaar 1995/96 met 22,5 persent in vergelyking met die ooreenstemmende tydperk van die voorafgaande jaar toegeneem het, het in die eerste helfte van die fiskale jaar 1996/97 met 23,6 persent teenoor die eerste helfte van die fiskale jaar 1995/96 toegeneem.

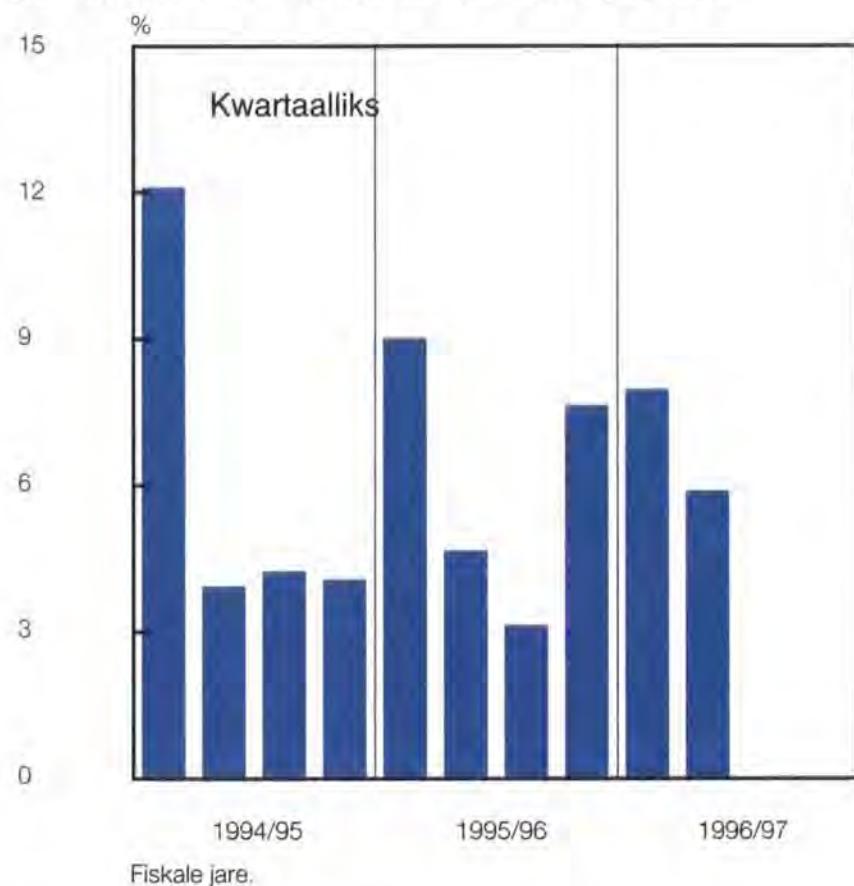
Skatkisrekening

Die fiskale rekenings vir die eerste helfte van die fiskale jaar 1996/97 dui daarop dat die regering in staat sal wees om sy doelwit te bereik om die tekort voor lenings en skuldaflossing in verhouding tot die bruto binnelandse produk te verminder, soos dit in die Begroting van Maart 1996 voorsien is. Die skatkisuitreikings sowel as skatkisontvangste het egter ietwat meer toegeneem as wat in die Begroting in die vooruitsig gestel is.

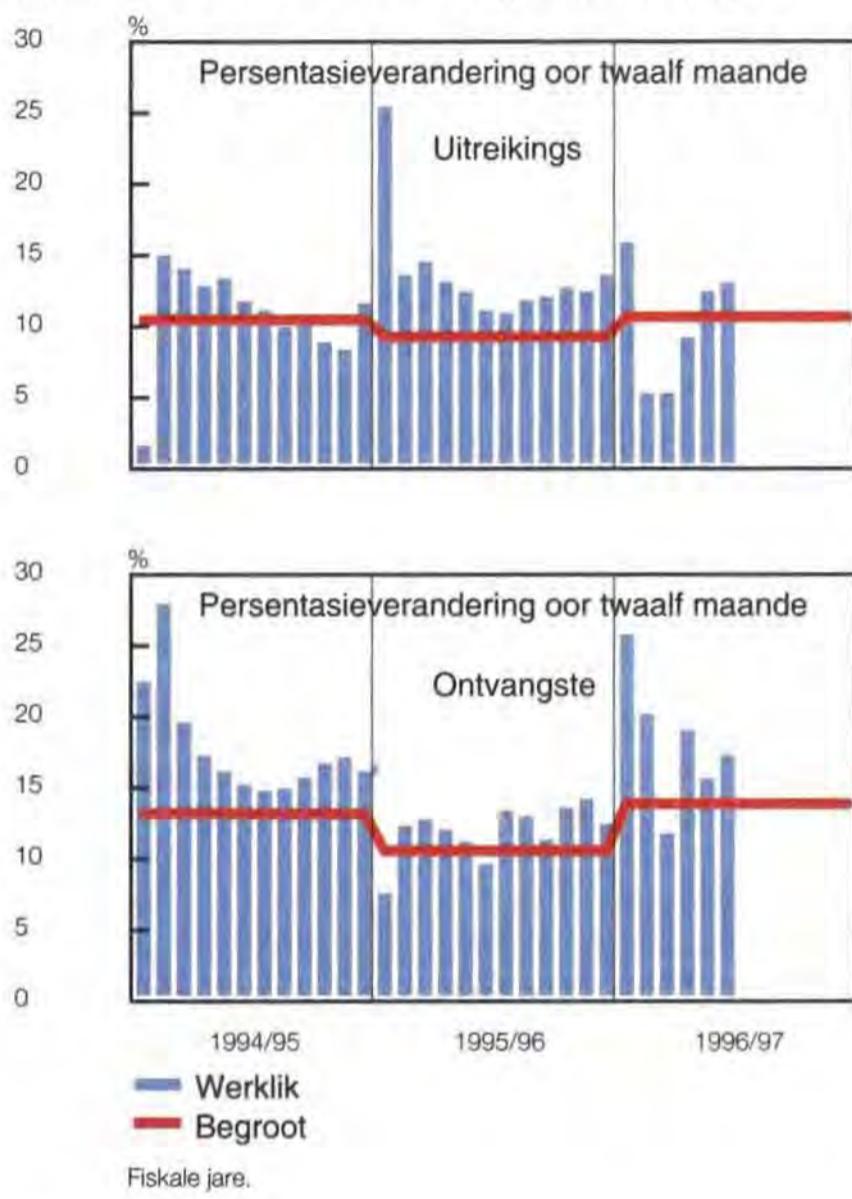
In die eerste helfte van die fiskale jaar 1996/97 het die koers van toename van jaar tot jaar in *skatkisuitreikings* aan staatsdepartemente (aangepas om kontantvloeiinge te weerspieël) 11,3 persent bedra, wat minder as 1 persentasiepunt hoër is as die 10,4 persent wat in die Begroting vir die fiskale jaar in die geheel voorsien is. As 'n duidelike bewys van die owerheid se verbintenis tot fiskale omsigtigheid, was die koers van toename in die skatkisuitreikings in die huidige fiskale jaar heelwat laer as die gemiddelde koers van toename van jaar tot jaar van 14,9 persent in die eerste ses maande van die voorafgaande vyf fiskale jare. In verhouding tot die bruto binnelandse produk, het die skatkisuitreikings aan staatsdepartemente van 32,7 persent in die eerste helfte van die fiskale jaar 1995/96 tot 32,5 persent in die eerste helfte van die huidige fiskale jaar afgeneem.

Skatkisuitreikings in Oktober 1996 het die koers van toename van jaar tot jaar in dié uitreikings in die eerste sewe maande van die fiskale jaar 1996/97 op 14,2 persent te staan gebring. Skatkisuitreikings vir die eerste sewe maande van die fiskale jaar 1996/97 het 59,5 persent uitgemaak van die totale besteding van R173,7 miljard wat deur die Minister van Finansies vir die fiskale jaar 1996/97 in die geheel in die vooruitsig gestel is.

Leningsbehoefte van die openbare sektor as persentasie van bruto binnelandse produk



Kumulatiewe skatkisuitreikings en -ontvangste



In die eerste ses maande van die fiskale jaar 1996/97 was *Skatkisontvangste* (met die uitsondering van buitengewone of nie-herhalende ontvangste) 14,7 persent meer as in die eerste helfte van die fiskale jaar 1995/96. Dit beteken dat die groeikoers van jaar tot jaar in skatkisontvangste 1,1 persentasiepunt hoër was in die eerste helfte van die fiskale jaar 1996/97 as die verwagte groeikoers van 13,6 persent vir die volle fiskale jaar; die gemiddelde koers van toename van jaar tot jaar in skatkisontvangste in die eerste helfte van die voorafgaande vyf fiskale jare was 11,1 persent. In verhouding tot die bruto binnelandse produk het skatkisontvangste van 24,9 persent in die eerste helfte van die fiskale jaar 1995/96 tot 25,5 persent in die eerste helfte van die huidige fiskale jaar toegeneem.

Die hoér-as-begrote koers van toename in staatsinkomste kan toegeskryf word aan die ontvangste van binnelandse inkomste wat beter as die begrotatingsramings presteer het. As gevolg van 'n skerper toename in inkomstebelastinginvorderings as wat begroot is, het ontvangste van binnelandse inkomste vinniger toegeneem as wat in die Begroting voorsien is.

Tabel 15. Toename in staatsinkomste

Percentasieverandering oor dieselfde tydperk van die voorafgaande jaar

Bron van inkomste	Begrote toename: fiskale jaar 1996/97	Werklike toename: eerste ses maande van die fiskale jaar 1996/97
Doeane en aksynsregte.....	9,7	11,1
Binnelandse inkomste	14,2	18,1
Inkomstebelasting.....	17,5	21,2
Belasting op toegevoegde waarde.....	13,3	10,9
Totale skatkisontvangste	13,6	14,7

In teenstelling hiermee het die toename in ontvangste uit belasting op toegevoegde waarde nie die begrotatingsramings gehaal nie. Die volgehoue hoë vlak van totale binnelandse vraag en die gepaardgaande hoë vlak van goedere-invoer het daar toe bygedra dat die ontvangste uit doeane-en-aksynsregte in die eerste helfte van die fiskale jaar 1996/97 met 11,1 persent gestyg het, in vergelyking met 'n begrote toename van 9,7 persent vir die fiskale jaar in die geheel.

Die inkomste wat in Oktober 1996 deur die staat ingevorder is, is verhoog deur inkomste wat in September ingevorder is, maar eers aan die begin van Oktober in die Skatkisrekening te boek gestel is. In die eerste sewe maande van die fiskale jaar 1996/97 het die koers van toename van jaar tot jaar in skatkisontvangste dus 17,1 persent beloop. In verhouding tot die beraamde inkomste-invorderings vir die huidige fiskale jaar in die geheel, het die inkomste in die eerste sewe maande 60,1 persent bedra.

Die netto gevolg van die hoér-as-begrote inkomste en uitgawes in die eerste helfte van die fiskale jaar 1996/97 was 'n tekort van R18,8 miljard op die Skatkisrekening voor lenings en skuldaflossing. In verhouding tot die bruto binnelandse produk word die tekort in die eerste helfte van die fiskale jaar 1996/97 op 6,9 persent bereken; vir die volle fiskale jaar is 'n verhouding van 5,5 persent voorsien en in die eerste helfte van die voorafgaande fiskale jaar is 'n tekort van 7,8 persent aangeteken. Die tekort in die eerste helfte van die fiskale jaar 1996/97 het 61,4 persent van die begrote tekort vir die jaar in die geheel beloop, wat laer was as die koers van 63,4 persent vir die ooreenstemmende tydperk van die voorafgaande fiskale jaar.

Soos in tabel 16 aangetoon word, is die tekort in die eerste helfte van die fiskale jaar 1996/97 hoofsaaklik deur die uitreiking van langtermynstaatseffekte gefi-

Tabel 16. Finansiering van die skatkistekort in die eerste helfte van die fiskale jaar 1996/97

	R miljoene
Staatseffekte (diskonto ingesluit)	17 415
Min: Diskonto op nuwe staatseffekte	3 974
Netto ontvangste uit staatseffekte	13 441
Skatkiswissels	3 618
Buitelandse lenings	-6
Nie-bemarkbare sekuriteite	-138
Geldmarkinstrumente	-2 981
Buitengewone ontvangste	1 878
Afname in beskikbare kontantsaldo's	3 033
 Totale netto finansiering	18 845

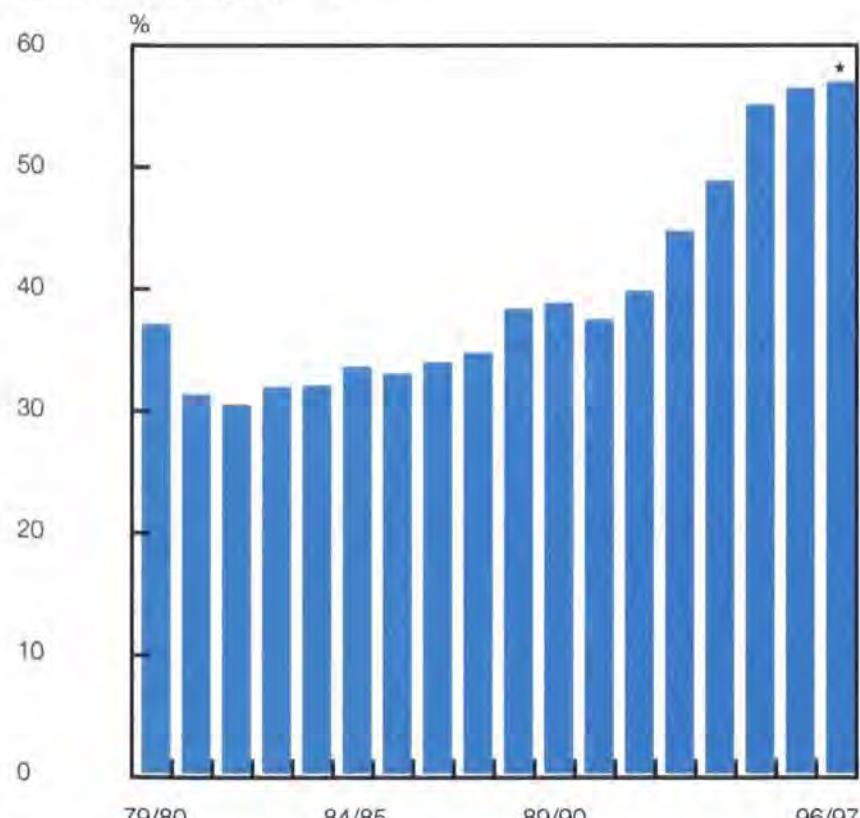
nansier. Die tekort wat gefinansier moes word, tesame met die diskonto op die uitreiking van nuwe staats-effekte, het geleid tot 'n toename in die *staatskuld* van R279,8 miljard aan die einde van Maart 1996 tot R299,0 miljard aan die einde van September. In verhouding tot die bruto binnelandse produk, het die staatskuld van 56,2 persent aan die einde van Maart 1996 tot 56,7 persent aan die einde van September toegeneem.

As 'n stap ter implementering van die regering se makro-ekonomiese strategie vir groei, werkverskaffing en

herverdeling, is 'n aantal veranderings in die belasting-struktuur gedurende die derde kwartaal van 1996 aangekondig. In ooreenstemming met die strategie is die nuwe versnelde waardeverminderingtoegewings, wat deel vorm van die regering se maatreëls om nywerhede te ondersteun, sedert 1 Julie 1996 beskikbaar. Hierdie toegewings laat die afskrywing vir die waardevermindering van uitbreidings van bestaande vervaardigingsaanlegte en -toerusting oor 'n tydperk van 3 jaar toe in plaas van die vyf jaar wat voorheen voorgeskryf is. 'n Belastingvakansieskema het op 1 Oktober 1996 in werking getree vir alle nuwe vervaardigingsprojekte wat voldoen aan sekere vereistes met betrekking tot die intensiteit van werkverskaffing, vestiging in bepaalde gebiede en die soort nywerheid.

Ten einde die doeltreffendheid van die invordering van belastings in die land te verbeter, het die regering op 22 Oktober 1996 nog 'n belastingamnestie aangekondig. Die nuwe amnestie wat bestem is om van 1 November 1996 tot 28 Februarie 1997 te duur, sal van toepassing wees op 'n wye reeks belastingpligtiges met agterstallige betalings as wat met vorige amnesties die geval was.

Totale staatskuld as persentasie van bruto binnelandse produk



Fiskale jare.

*Soos op 30 September 1996.

Verklaring oor die Bankkoers

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

20 November 1996

Die wisselkoers van die rand het sedert Februarie 1996 nou reeds met meer as 20 persent gedepresieer. Die gemiddelde geweegde waarde van die rand, gemeet aan 'n mandjie van die geldeenheid van Suid-Afrika se vernaamste handelsvennote, het sedert 31 Desember 1995 tot einde Junie met 14,6 persent, tot einde Julie met 18,1 persent en tot 20 November 1996 met 22,2 persent gedaal.

Alhoewel die aanvanklike depresiasié in Februarie 1996 verklaar kon word aan die hand van onderliggende ekonomiese ontwikkelings wat in 1995 en die eerste weke van 1996 plaasgevind het, het die daaropvolgende aanpassings, en veral die verdere depresiasié van nagenoeg 5 persentasiepunte in Oktober 1996, nie meer grondiggende ekonomiese ontwikkelings, soos koopkragpariteit, die internasionale mededingendheid van die Suid-Afrikaanse ekonomie of selfs sikkies ongunstige neigings in die lopende rekening van die betalingsbalans, weerspieël nie. Die kumulatiewe en buitensporige depresiasié van die rand het 'n stadium bereik waar dit nou 'n ernstige bedreiging van 'n eskalasie in inflasie volgende jaar inhoud en dit het die noodsaak van 'n versigtiger monetêre beleid om die binnelandse waarde van die rand te beskerm, meegebring.

Betreffende die binnelandse ekonomie het betekenisvolle aanpassings in die derde kwartaal van 1996 plaasgevind toe 'n verdere verlangsaming in die koers van toename in algehele binnelandse besteding die druk op die algehele betalingsbalans verminder het. Nasionalerekeningestatistiek vir die derde kwartaal is nog nie beskikbaar nie, maar voorlopige ramings dui daarop dat die tekort op die lopende rekening, teen 'n seisoensaangesuiwerde jaarkoers, met sowat R6 miljard tot ongeveer R10 miljard gedaal het vergeleke met die hersiene tekort van nagenoeg R16 miljard in die tweede kwartaal van 1996.

Hierdie ontwikkelings in die reële ekonomiese bedrywigheid word nog nie in die finansiële toestand weerspieël nie en beide bankkredietverlening en geldvoorraad hou aan om teen onaanvaarbare hoë koerse te styg. Die tekort op die lopende rekening van die betalingsbalans was weer eens nie gedek deur die netto kapitaalinvloei nie en die netto buitelandse reserves van die Reserwebank het van die einde van Junie tot aan die einde van Oktober 1996 met R1,8 miljard gedaal.

Die voortdurende tekort op die betalingsbalans in geheel het likiditeit uit die bankstelsel onttrek en die geldmarktekort het van R5,8 miljard aan die einde van Junie tot R9,3 miljard aan die einde van September en R9,7 miljard aan die einde van Oktober 1996 gestyg. Tydens die eerste twintig dae van November was die

gemiddelde daaglikse bedrag van die geldmarktekort meer as R9 miljard.

Die tekort aan likiditeit het feitlik alle geldmarkrentekoerse na hoër vlakke opgedruk. Vanaf die einde van September tot in die derde week van November 1996 het korttermynrentekoerse oor die algemeen met nagenoeg $1\frac{1}{2}$ persentasiepunte gestyg. Die interbankkoers het byvoorbeeld van 15,50 persent op 30 September tot 17,00 persent op 20 November gestyg en die koers op korttermyn verhandelbare depositosertifikate van 15,80 persent tot 17,15 persent. Die opbrengskoers op langtermynstaatseffekte het ook met 1 persentasiepunt tot 16,12 persent op 14 November gestyg, voordat dit weer effens tot 15,92 persent op 20 November gedaal het.

Die voortdurende hoë vlak van die geldmarktekort het ook 'n tekort meegebring aan likide bates wat aanvaarbaar is as onderpand vir lenings by die diskontovenster van die Reserwebank. Dit het die vraag na Skatkiswissels by die weeklikse tender verhoog en die tenderkoers op Skatkiswissels met 'n looptyd van 91 dae kunsmatig laag gehou. Die vlak van die Bankkoers van 16 persent het nou uit pas met ander markrente-koerse geraak, en die banke maak toenemend staat op hierdie bron van betreklik goedkoop fondse om hulle kontantvereistes te balanseer.

Die Reserwebank het twee keuses in hierdie omstandighede, naamlik om of likiditeit te verhoog deur meer geld tot die stelsel toe te voeg of die Bankkoers te verhoog. Eersgenoemde benadering sal vanselfsprekend die reeds hoë koers van toename in die geldvoorraad verhoog en verdere aanmoediging vir die reeds stygende inflasiedruk verleen. Die koers van toename in die gemiddelde verbruikerspryse, vergeleke met dieselfde maand van die vorige jaar, het van 5,5 persent in April 1996 tot 9,1 persent in Oktober 1996 gestyg. Met inagneming van die verwagte verdere druk wat uit die depresiasié van die rand voortspruit, sal dit 'n selfvernietigende benadering vir die Reserwebank wees om in hierdie omstandighede selfs nog meer sentralebankgeld te skep.

Die wisselvallige toestande in die mark vir buitelandse valuta, onlangse ontwikkelings in die binnelandse finansiële markte en die toenemende druk op inflasie noodsaak 'n verskerping in monetêre beleid op hierdie tydstip. Derhalwe het die Reserwebank besluit om die onlangse neigings in die finansiële markte te volg en die Bankkoers, dit is die koers waarteen die Bank bereid is om lenings op 'n oornagbasis aan bankinstellings te maak, van 16 tot 17 persent te verhoog. Die verhoging tree more, 21 November 1996, in werking. Ander verwante rentekoerse van die Reserwebank sal ook met 1 persent van hulle huidige vlakke af, verhoog word.

Onlangse ontwikkelings in reële ekonomiese bedrywigheid dui daarop dat die Suid-Afrikaanse ekonomie, ná meer as drie jaar van toenemende groeikoerse, nou in 'n konsolidasiefase in beweeg. Tydens hierdie konsolidasietydperk sal groeikoerse in sekere van die belangriker makro-ekonomiese groothede soos bruto binnelandse besteding, na laer, maar meer handhaafbare vlakke daal. Die konsolidasietydperk verskaf ook 'n geleentheid vir die herstel van ewewig in die betalingsbalans in geheel wat 'n meer stabiele wisselkoers van die rand behoort te ondersteun. Daar is tegelykertyd nou 'n geleentheid om die nodige verlangsaming in die koers van toename in finansiële groothede soos bankkredietverlening en geldvoorraad te bewerkstellig. Tensy hierdie geleentheid benut word, sal Suid-Afrika te kampe kry met die probleem van laer ekonomiese groei met hoër inflasie, 'n toestand wat die suksesvolle inwerkingstelling van die Regering se Makro-ekonomiese Strategie vir Groei, Werkverskaffing en Herverdeling onmoontlik sal maak.

Ten einde die onvermydelike inflasione druk wat uit die oormatige depresiasié van die rand die afgelope jaar spruit, in toom te hou, is daadwerklike stappe nou nodig om beide eksterne en interne finansiële stabiliteit te herstel. Die verdere depresiasié van die rand in Oktober verteenwoordig 'n stap in die verkeerde rigting wat nou optrede verg. Die toenemende stramheid in geldmarktoestande en die stygende rentekoerse verteenwoordig noodsaaklike elemente van die aanpassingsproses tydens die konsolidasiefase. Deur die dissiplines van hierdie markkragte te aanvaar, sal die weg gebaan word vir 'n vroeë aanvang van die volgende uitbreidingsfase, wat hopelik die ekonomiese groeipotensiaal van die land na 'n hoërvlak sal opstoot.

Ontwikkelings in vaste kapitaalvoorraad: 1960-1995

deur J.W. Prinsloo en H. Smith

1. Inleiding

'n Belangrike struktuurverandering in die Suid-Afrikaanse ekonomie sedert die middel-tigtigerjare is die skerp afname in die aandeel van bruto binnelandse vaste investering in die bruto binnelandse produk. Hierdie verhouding het van 'n gemiddelde van 24 persent in die tydperk van 1960 tot 1985 tot 18½ persent in die tydperk van 1986 tot 1995 gedaal. As gevolg van hierdie daling het die koers van toename in die reële vaste kapitaalvoorraad afgeneem van 'n gemiddelde toename van 5½ persent per jaar tussen 1960 en 1985 tot ongeveer 1 persent in die afgelope tien jaar.

Volgens algemeen aanvaarde groeiteorie het die vlak van vaste investering, en derhalwe die groeikoers van die kapitaalvoorraad, 'n belangrike invloed op 'n ekonomie se arbeidsproduktiwiteit, die mededingendheid van sakeondernemings en uiteindelik ook op die koers van toename in die lewensgehalte. Ramings van kapitaalvorming en die voorraad van fisiese kapitaalgoedere is daarom belangrike aanwysers vir die beoordeling van makro-ekonomiese prestasie.

Die doel met hierdie artikel is om die ontwikkelings in Suid-Afrika se vaste kapitaalvoorraad sedert 1960 te beskryf. As 'n algemene agtergrond vir die bespreking word die eerste afdeling gewy aan 'n oorsig van die metodologie wat gebruik word vir die meting van die kapitaalvoorraad vir doeleindes van die nasionale rekeninge. Daarna volg 'n kort bespreking van die invloed van privatisering op die institusionele indeling van die kapitaalvoorraad. In die volgende drie afdelings word die groei in die vaste kapitaalvoorraad, die veranderings in die samestelling van die kapitaalvoorraad en die kapitaalopbrengsverhoudings behandel. Die laaste afdeling bevat 'n opsomming en enkele slotopmerkings.

2. Meting en metodologie

In 'n ontleding van produksie is die invloed van kapitaalvorming op produksie en produktiwiteit nie slegs afhanklik van die groei in die kapitaalvoorraad nie, maar eerder van die veranderings in die stroom van dienste wat deur hierdie voorraad gelewer word. Ongelukkig is die stroom van dienste van kapitaal in die algemeen moeilik om te bepaal. By gebrek aan die regstreekse meting van kapitaaldienste word in die ontleding van produksie gewoonlik aanvaar dat hierdie stroom in verhouding is met veranderings in die kapitaalvoorraad. In werklikheid hoef dit nie so te wees nie. Wanneer 'n ekonomie ná 'n resessie herstel, word bestaande mas-

jinerie en toerusting byvoorbeeld meer intensief gebruik en styg die stroom van kapitaaldienste vinniger as die toename in die kapitaalvoorraad. 'n Een-tot-een verhouding bestaan nie. Die verandering in die kapitaalvoorraad is bloot 'n benaderde aanwyser van die werklike stroom van kapitaalinsette.

'n Raming van die kapitaalvoorraad verwys na die waarde van die totale fisiese kapitaal wat op 'n bepaalde tydstip in die ekonomie beskikbaar is. In teenstelling hiermee is die waarde van kapitaalinsette 'n vloeiveranderlike met 'n bepaalde tydsomvang aangesien dit 'n weerspieëling is van die verandering in kapitaaltoevoegings binne 'n bepaalde tydperk. Ongeag of die klem op die kapitaalvoorraad of op die stroom van kapitaalinsette geplaas word, hou die ramings in beginsel verband met 'n volumemaatstaf: ramings van die waarde van kapitaalvoorraad is 'n weerspieëling van die fisiese produksievermoë wat vir herhaalde gebruik in die produksie van ander goedere en dienste beskikbaar is. In die praktyk word dit gewoonlik as bruto of netto kapitaalvoorraad op 'n reële grondslag bereken en word die "voortdurende voorraadmetode" gebruik vir die ramings van die voorraad van tasbare reproducerebare bates.

Om die reële waarde van die vaste kapitaalvoorraad te bereken, word die bruto binnelandse vaste investering teen heersende pryse deur toepaslike prysindekse gedeel. Ramings vir die bruto binnelandse vaste investering word vir vyf soorte bates gedaan, naamlik woongeboue, nie-woongeboue, konstruksiewerke, vervoertoerusting en masjinerie en ander toerusting. Die bruto vaste investering in geboue en konstruksiewerke word deur prysindekse gedeel wat die oprigtingskoste van hierdie bates weerspieël. Investering in vervoertoerusting en masjinerie en ander toerusting word deur toepaslike produksieprysindekse gedeel. Dieselfde prysindekse word vir die bates van byna al die verskillende ekonomiese sektore en instellings gebruik. Die enigste uitsondering is die landbousektor, waar masjinerie en vervoertoerusting gedeel word deur toepaslike indekse wat vir boerderybenodigdhede saamgestel is.

2.1 Die definisie van vaste kapitaalvoorraad

Volgens die riglyne van die Verenigde Nasies se 1993 *Stelsel van Nasionale Rekeninge* word die waardes van nie-finansiële bates in die kapitaalrekening aangeteken en word tussen die volgende vyf indelings onderskei:

- bruto vaste kapitaalvorming;
- verbruik van vaste kapitaal;
- verandering in voorrade;
- aankope min verkope van kosbaarhede; en
- aankope min verkope van nie-vervaardigde, nie-finansiële bates (byvoorbeeld mineraalneerslae).

Bruto vaste kapitaalvorming, wat belangrik is vir die berekening van die vaste kapitaalvoorraad, bestaan uit die waarde van aankope verminder met die verkope van nuwe of bestaande vaste bates. Vaste bates bestaan uit tasbare en ontasbare bates wat die resultaat is van produksieprosesse en herhaaldelik of deurlopend oor 'n tydperk van meer as een jaar in ander produksieprosesse gebruik word. In die berekening van die vaste kapitaalvoorraad vir die Suid-Afrikaanse ekonomie word 'n eng definisie van vaste bates egter gebruik: daarvolgens bestaan kapitaalvoorraad uit duursame en reproducerebare tasbare bates. Dit sluit tasbare bates soos grond en ondergrondse mineraalneerslae uit, aangesien hierdie soort bates nie vervaardig kan word nie. Ander soorte "vaste bates", soos sagteware vir rekenaars, word ook uitgesluit omdat dit ontasbaar is. Verder word die verhandeling van bestaande bates tussen sektore nie in die huidige ramings van die nasionale rekeninge vir bruto kapitaalvorming en die berekening van die vaste kapitaalvoorraad in aanmerking geneem nie. Die omvang van die handel in bestaande bates is betreklik klein in verhouding tot die totale bruto binnelandse vaste investering en behoort daarom nie die betroubaarheid en nut van die sektorale ramings van kapitaalvoorraad oormatig te beïnvloed nie.

2.2 Die voortdurende voorraadmetode

Soos reeds aangetoon is, word die voortdurende voorraadmetode gewoonlik gebruik om die vaste kapitaalvoorraad te bereken. Die voortdurende voorraadmetode wat vir die raming van die bruto kapitaalvoorraad gebruik word, bestaan uit die opbou van 'n historiese stroom van bruto vaste kapitaaluitgawes, ná aftrekking van die beraamde waarde van uitgediende voorraad, maar voordat enige voorsiening vir die verbruik van vaste kapitaal in berekening gebring word. Ramings van die netto kapitaalvoorraad (soos dit in die *Kwartaalblad* van die Suid-Afrikaanse Reserwebank vrygestel word) word verkry deur die toepassing van 'n kapitaalverbruiksfunksie wat op die verwagte ekonomiese lewensduur van die onderskeie bates gegrond is. Verbruik van vaste kapitaal kan omskryf word as daardie deel van die bruto binnelandse produk wat nodig is om die vaste kapitaal wat gedurende 'n tydperk in die produksieproses verbruik word, te vervang. Dit berus op die beginsel van die verwagte ekonomiese leeftyd van 'n bate en is bestem om die verlies in waarde as gevolg van normale slytasie, verwagte veroudering en die normale koste van onherstelbare toevallige skade, te dek. Onvoorsiene veroudering word as 'n kapitaalverlies, eerder as die verbruik van vaste kapitaal hanteer.

Ramings van die netto kapitaalvoorraad in Suid-Afrika vind volgens die reguitlyn-afskrywingsmetode plaas. Hoewel daar verskillende oorlewings- en afskrywingsfunksies bestaan, het al hierdie metodes sekere tekortkominge. Hierdie tekortkominge spruit hoofsaaklik uit verskille in die mate waarin bates in

ekonomiese resessies of opwaartse konjunktuurfases behou of afgeskryf word. Hierdie aangeleentheid word verder bemoeilik deur veranderinge in die ekonomiese bruikbare lewe van bates as gevolg van monetêre en fiskale beleid, soos beleggingsaansporingsmaatreëls en die afskaffing van kapitaalsubsidies en toelaes.

Die verskil tussen die bruto en netto berekening van vaste kapitaalvoorraad en die berekening van die gemiddelde ouderdom van kapitaalvoorraad volgens soort bate sal kortliks in die volgende afdeling bespreek word.

2.3 Die leeftyd en ouderdom van kapitaalvoorraad

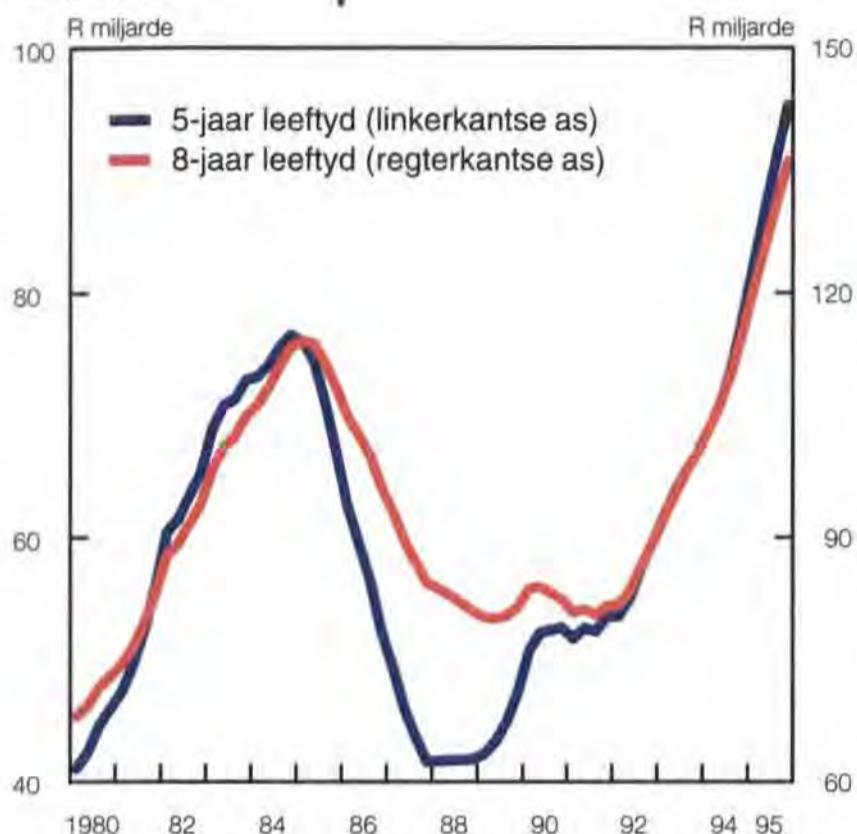
Om die waarde van die netto kapitaalvoorraad volgens die voortdurende voorraadmetode te bereken, is 'n raming van die ekonomiese leeftyd van bates noodsaaklik. Die Reserwebank se ramings van die ekonomiese leeftyd van verskillende soort bates wissel van 'n onbepaalde tydperk vir die konstruksiewerke van die owerheid en 'n maksimum van 80 jaar vir konstruksiewerke in die landbousektor, tot 'n minimum van 8 jaar vir vervoertoerusting (kyk tabel 1). 'n Internasionale vergelyking van die ekonomiese leeftyd van bates toon dat die Bank se ramings oor die algemeen ooreenstem met dié wat in nywerheidslande soos die Verenigde State van Amerika, Verenigde Koninkryk, Duitsland, Italië en België gebruik word. Hoewel die vlak van die kapitaalvoorraad op 'n bepaalde tydstip sal verskil na gelang van die ekonomiese leeftyd wat in die berekening van vaste kapitaalvoorraad vir 'n besondere soort bate gebruik word, toon 'n ontleding van die neigings in grafiek 1 dat die verskil tussen ramings van kapitaalvoorraad volgens verskillende leeftye oor die lang termyn betreklik klein is.

Die berekening van die netto kapitaalvoorraad is wesenlik 'n geweegde gemiddelde van die historiese reële investeringsuitgawes. Die gewigte wat in die

Tabel 1. Die ekonomiese leeftyd volgens soort bate

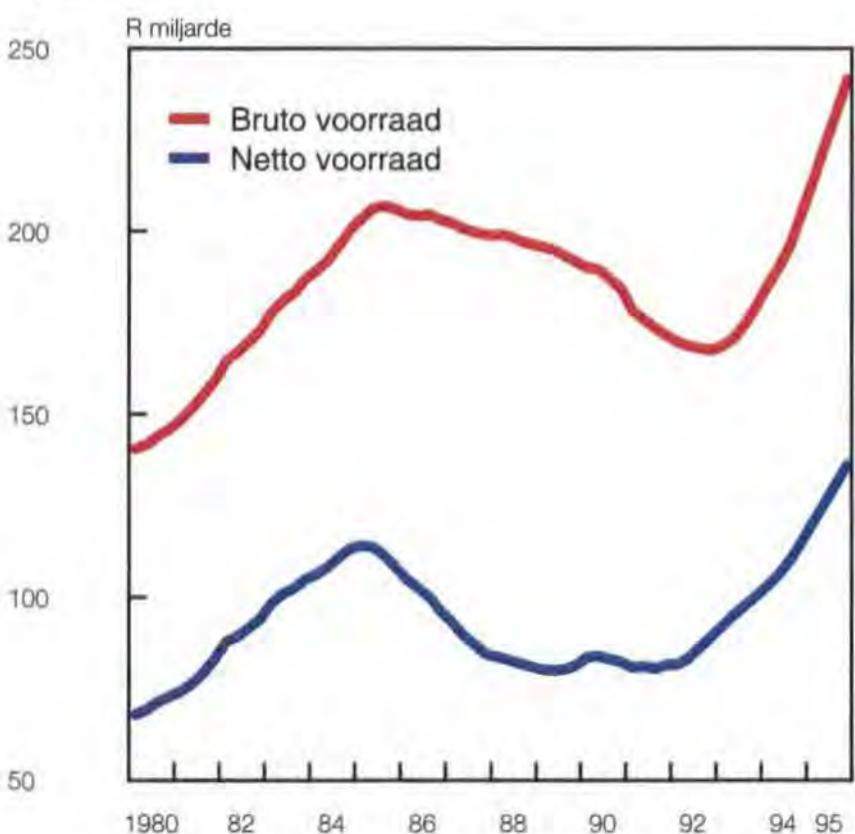
Soort bate	Sektor	Leeftyd
Woongeboue		50 jaar
Nie-woongeboue		50 jaar
Konstruksiewerke	Landbou	80 jaar
	Mynbou	30 jaar
	Ander	50 jaar
Vervoertoerusting	Algemene owerheid	Onbepaald
Masjinerie en ander toerusting	Fabriekswese	8 jaar
	Mynbou en elektrisiteit, gas en water	16 jaar
	Ander	10 jaar

Grafiek 1. Vaste kapitaalvoorraad van masjinerie en toerusting met ekonomiese leeftye van 5 en 8 jaar



voorafgaande tydperk aan reële investeringsuitgawes toegeken word, neem af namate die bates verouder. In teenstelling hiermee, word die "bruto" kapitaalvoorraad bereken deur gebruik te maak van gewigte waarvan die

Grafiek 2. Bruto en netto vaste kapitaalvoorraad van masjinerie en toerusting met 'n leeftyd van 8 jaar



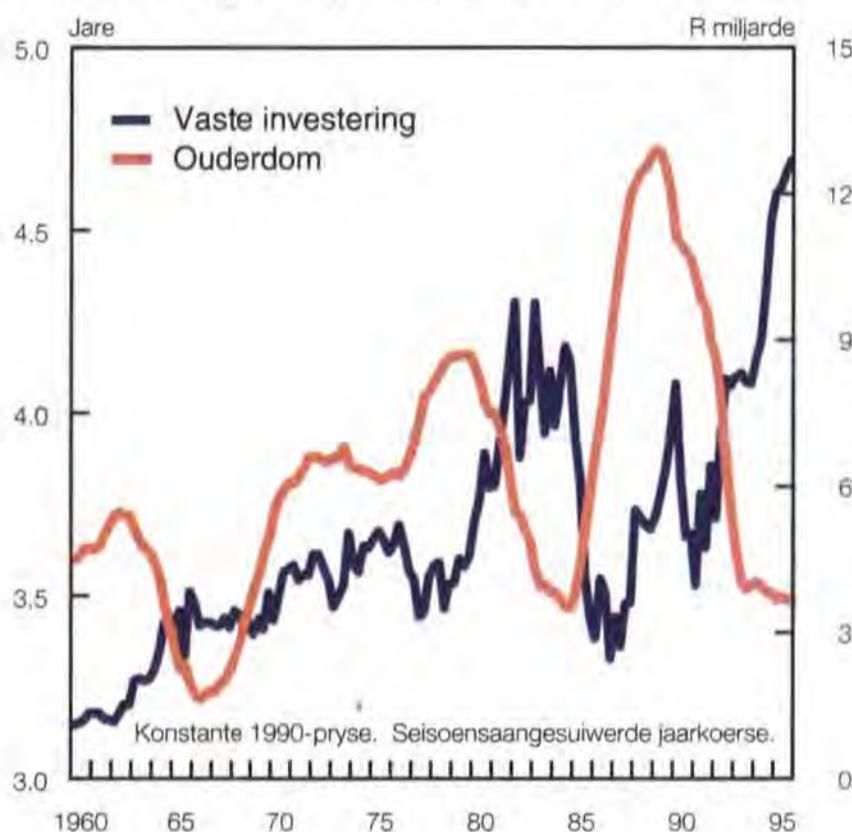
waarde konstant op die waarde gehou word totdat die kapitaalgoedere volledig afgeskryf is. Die bruto voorraad verteenwoordig dus die koste van totale investering in 'n spesifieke bate wat nog in die produksieproses gebruik word.

Grafiek 2 toon die beraamde waardes van die bruto en netto kapitaalvoorraad van masjinerie en toerusting. Uit die grafiek is dit duidelik dat die konjunktuurbeweging in die twee reekse bykans dieselfde is. In die voorbeeld is daar egter 'n sloering van twee kwartale in die bruto kapitaalvoorraad na die hoogtepunt van die golf en een van vyf kwartale by die onderste draaipunt van die golf. Sekere navorsers meen dat dit belangrik is om die bruto benadering te gebruik om die verwantskap tussen vaste kapitaalvoorraad en die huidige produksie te bepaal. Oor 'n betreklike kort tydperk is dit sinvol om heersende produksie- met kapitaalinsette te vergelyk, waar kapitaalinsette gemeet word as 'n funksie van alle bates wat nog in gebruik is. Oor 'n langer tydperk is die vermoë van die voorraad wat volgens die onverstreke leeftyd gemeet word egter meer gepas omdat die gelykmatige afskrywing van die kapitaalvoorraad in ooreenstemming is met die afnemende produksievermoë van bates namate dit verouder.

Die voortdurende voorraadmetode maak dit ook moontlik om die *gemiddelde ouerdom van die kapitaalvoorraad* van bates met dieselfde leeftyd te bereken. 'n Ontleding van die gemiddelde ouerdom van die kapitaalvoorraad bepaal ook die nodigheid vir die vervanging van bates. Vir die volle leeftyd van 'n bate word die kapitaaluitgawes wat in elke tydperk plaasvind vermenigvuldig met 'n waarde vir die tydperk waarin investering plaasvind en word die som van die geweegde investering deur die waarde van die kapitaalvoorraad gedeel om die gemiddelde ouerdom van die kapitaalvoorraad te bepaal.

Grafiek 3 toon die verhouding tussen die ouerdom in jare van die reële bruto vaste kapitaalvoorraad en die reële vaste investering in masjinerie en toerusting in die private fabriekswese. Die gemiddelde ouerdom van bates toon 'n omgekeerde verwantskap met die konjunktuurverloop van vaste investering. Die algemene veroudering van kapitaaltoerusting bevat 'n duidelike risiko van tegnologiese veroudering en agteruitgang en die moontlikheid van die agteruitgang in die mededingingskrag van 'n land se produkte op die internationale markte. Die hoogste ouerdom van masjinerie en toerusting in Suid-Afrika is in die eerste kwartaal van 1989 behaal en was toe 'n weerspieëling van die noodsaaklikheid vir die vervanging van verouderde bates. Die algemene opwaartse neiging in die reële besteding aan masjinerie en toerusting wat in die eerste kwartaal van 1986 begin het, het die gemiddelde ouerdom van masjinerie en toerusting van 4,72 jaar in die eerste kwartaal van 1989 tot 3,49

Grafiek 3. Ouderdom van reële vaste kapitaalvoorraad en bruto vaste investering in masjinerie en toerusting deur private fabriekswese



jaar in die vierde kwartaal van 1995 verlaag; dit is laer as die langtermyngemiddelde van 4 jaar.

3. Privatisering en die institusionele verdeling van kapitaalvoorraad

As gevolg van die privatisering van sekere openbare korporasies en die kommersialisering van sekere sakeondernemings van die algemene owerheid moes aanpassings aan die institusionele indeling van die kapitaalvoorraad gemaak word. Sasol en sy filiale, met die uitsondering van Sasol III, se indeling is van die eerste kwartaal van 1987 van openbare korporasies na private sakeondernemings verander. Alusaf, Gaskor en Yskor en Yskor se filiale is van die eerste kwartaal van 1990 op dieselfde wyse heringedeel, terwyl Sasol III in die eerste kwartaal van 1991 as 'n privaatsektoronderneming geklassifiseer is. Transnet se herindeling as 'n openbare korporasie pleks van 'n sakeonderneming van die algemene owerheid is in die eerste kwartaal van 1990 gedoen en die SA Poskantoor en Telkom is in die eerste kwartaal van 1992 op soortgelyke wyse heringedeel.

Hierdie indelings is gedoen aan die begin van die kwartaal wat die naaste was aan die werklike datum van die privatisering of kommersialisering. Die kapitaalvoorraad vir elk van die ondernemings is bereken soos op 31 Desember van die jaar voor die nuwe indeling gemaak is. Hierdie kapitaalvoorraad is toe van die een

institusionele totaal afgetrek en by die ander een gevoeg. Dit beteken dat die waarde van die kapitaalvoorraad van die institusionele sektore nie oor tyd vergelykbaar is nie. Die waarde van die kapitaalvoorraad volgens ekonomiese sektore is egter steeds vergelykbaar.

4. Groei in die reële vaste kapitaalvoorraad

Die totale reële vaste kapitaalvoorraad in Suid-Afrika het in die tydperk onmiddellik na die oorlog aansienlik toegeneem. Die reële vaste kapitaalvoorraad het gedurende die tydperk 1946 tot 1954 gemiddeld met bykans 7 persent per jaar toegeneem. Dit kon hoofsaaklik aan die behoefté aan uitbreiding van die produksievermoë deur die private fabriekswese as gevolg van die hoë na-oorlogse verbruiks- en investeringsvraag toegeskryf word. Reële vaste investering het ook gestyg as gevolg van die ontwikkeling van die destydse nuutontdekte goudvelde in die Vrystaat en Wes-Transvaal. Openbare korporasies het ook aansienlik bygedra tot die groei in die vaste kapitaalvoorraad as gevolg van die oprigting van Sasol I en Yskor se Vanderbijlparkwerke.

In die jare hierna tot en met 1963, het die toename in die reële vaste kapitaalvoorraad tot 'n gemiddelde jaarlikse groeikoers van $4\frac{1}{2}$ persent verlangsaam. Hierdie stadiger koers van toename kon deels toegeskryf word aan ekonomiese faktore soos 'n volgehoue aanwesigheid van 'n oormaat produksievermoë in sekere onderafdelings van die fabriekswese, meddinging uit die buiteland en die algemene verlangsaming in ekonomiese bedrywigheid. Die onsekerheid en 'n afname in vertroue weens politieke ontwikkelings aan die begin van die sestigerjare het ook tot die verlangsaming bygedra. Vir die oorblywende deel van die sestigerjare het die groei in die reële vaste kapitaalvoorraad egter teen 'n gemiddelde koers van 6 persent per jaar gegroeい. Namate vertroue herstel is en die oormaat produksievermoë afgeneem het, het die vaste kapitaaluitgawes in sowel die private as die openbare sektore in die tweede helfte van die sestigerjare aansienlik toegeneem. Die reële vaste kapitaalvoorraad van die openbare korporasies het in die tydperk 1965 tot 1969 teen 'n gemiddelde koers van $11\frac{1}{2}$ persent per jaar toegeneem, vergeleke met 'n gemiddelde groeikoers van 5 persent in die voorafgaande vyf jaar. Die belangrikste bydraes tot hierdie vinniger groei is deur Eskom en Yskor gemaak. Aan die ander kant is die styging in die vaste kapitaalvoorraad van die openbare owerhede versterk deur toenames in die vaste kapitaalbesteding deur die algemene departemente van die sentrale regering, hoofsaaklik aan watervoorsieningswerke, behuising en die ontwikkeling van die spoorweg en hawenetwerke.

Hoewel die private vaste kapitaalvoorraad, wat die belangrikste onderdeel van totale vaste kapitaalvoorraad

Tabel 2. Die groei in die totale reële vaste kapitaalvoorraad volgens soort ekonomiese bedrywigheid
Persentasieverandering

Tydperk	Landbou, bosbou en vissery	Mynbou en steen- groewery	Fabrieks- wese	Elektrisiteit, gas en water	Kon- struksie	Groot- en kleinhandel, verversings en akkommodasie	Vervoer, opberging en kommu- nikasie	Finansies, versekering, vaste eiendom en sake- dienste	Gemeen- skaps-, maatskap- like en persoonlike dienste	Totaal
1960	1,5	3,9	3,0	4,1	2,4	4,5	4,6	3,7	10,2	4,9
1961	1,7	4,9	3,2	3,7	2,7	4,2	3,6	2,5	6,7	3,9
1962	1,6	1,9	3,7	3,6	4,2	3,6	3,1	2,0	6,5	3,4
1963	2,0	1,0	10,3	3,8	27,7	4,1	4,5	3,2	6,3	4,5
1964	2,5	2,4	16,3	2,6	23,4	5,2	4,9	5,0	6,7	5,7
1965	2,0	2,8	15,3	4,8	19,8	6,5	6,7	6,0	8,1	6,8
1966	1,6	-0,1	11,2	7,4	14,5	5,4	5,7	5,4	7,7	5,9
1967	2,1	0,1	6,6	7,6	5,8	5,7	5,9	6,1	6,9	5,6
1968	3,5	0,6	4,2	9,6	3,4	4,2	5,1	5,8	7,1	5,4
1969	3,8	1,4	4,5	8,1	11,6	6,4	4,1	7,2	8,3	6,0
1970	3,5	2,6	8,2	7,2	11,0	9,3	4,2	8,1	8,3	6,8
1971	3,9	2,1	7,9	7,2	6,5	9,0	6,1	7,6	9,0	7,1
1972	2,9	1,5	8,1	5,7	20,8	7,9	8,4	6,1	9,0	7,0
1973	2,4	3,2	10,3	5,0	24,9	7,5	7,1	6,9	7,2	6,8
1974	2,9	5,9	9,3	4,6	18,3	6,8	7,5	6,2	7,4	6,8
1975	5,0	11,4	7,8	7,2	13,4	5,3	9,1	5,0	7,2	7,1
1976	2,4	10,8	4,9	9,1	7,1	4,8	9,2	4,0	6,1	6,2
1977	1,9	6,5	5,3	11,7	4,2	3,8	5,6	2,5	5,1	4,9
1978	1,0	5,4	6,8	11,1	2,7	1,1	2,9	2,5	4,1	4,1
1979	0,7	8,0	8,3	9,7	1,9	0,5	2,2	2,0	4,0	4,1
1980	2,9	10,6	13,3	8,4	3,7	0,7	2,2	3,5	3,7	5,1
1981	4,9	10,0	10,3	7,7	3,8	2,8	3,3	4,6	3,7	5,4
1982	0,8	7,6	6,8	8,5	1,8	4,0	4,3	3,9	3,1	4,6
1983	-0,9	5,3	5,3	8,3	1,5	2,8	2,5	4,1	2,9	3,8
1984	-2,2	5,1	2,6	8,7	1,6	3,6	1,2	4,4	2,8	3,3
1985	-2,8	5,4	-1,1	6,6	-0,6	4,5	1,7	3,2	2,7	2,5
1986	-3,6	4,8	-3,2	1,5	-4,1	0,2	0,6	1,8	2,6	1,0
1987	-3,7	4,8	-3,1	0,2	-4,9	-0,3	0,0	2,0	2,4	0,8
1988	-2,8	5,3	-1,5	-1,3	-3,6	1,7	-0,3	3,1	2,4	1,2
1989	-1,5	4,3	2,4	-0,9	-3,1	0,1	-0,4	2,7	2,6	1,6
1990	-1,8	3,1	4,4	-1,4	-1,4	0,4	-0,6	1,5	2,4	1,4
1991	-2,2	2,1	3,0	-2,9	-0,5	0,7	0,1	1,0	1,9	0,9
1992	-2,4	0,1	2,5	-3,0	-2,1	1,0	-0,3	0,8	2,1	0,6
1993	-2,2	-2,0	2,8	-3,5	-3,2	1,0	-0,2	0,7	2,0	0,5
1994	-1,0	-1,0	3,2	-2,8	-1,8	1,7	-0,4	1,3	1,9	0,9
1995	-0,6	-0,5	4,6	-1,7	-0,3	2,4	0,0	1,7	1,7	1,3

Gemiddelde vir die tydperk

1960-1969	2,2	1,9	7,7	5,5	11,2	5,0	4,8	4,7	7,4	5,2
1970-1979	2,6	5,7	7,7	7,8	10,8	5,6	6,2	5,1	6,7	6,1
1980-1989	-0,9	6,3	3,0	4,7	-0,4	2,0	1,5	3,3	2,9	2,9
1990-1995	-1,7	0,3	3,4	-2,6	-1,5	1,2	-0,2	1,1	2,0	0,9

verteenvoerdig, gedurende die sestigerjare teen 'n laer koers as die kapitaalvoorraad van die openbare sektor toegeneem het, het die groeikoers van 1963 tot aan die begin van die sewentigerjare versnel. Hierdie beter prestasie van die private vaste kapitaalvoorraad was die netto gevolg van 'n sterk opwaartse beweging in die kapitaalvoorraad van die fabriekswese, konstruksiebedryf, handel en finansies, teenoor laer groei in die kapitaalvoorraad van die landbou en mynbou.

Vir die tydperk 1970 tot 1979 het die groei in die totale reële vaste kapitaalvoorraad 'n gemiddelde koers van 6 persent per jaar gehandhaaf. Dit kan hoofsaaklik aan 'n gemiddelde groeikoers van 13½ persent per jaar in die reële vaste kapitaalvoorraad van die openbare korporasies toegeskryf word, terwyl die gemiddelde jaarlikse groei in die vaste kapitaalvoorraad van die openbare owerhede en private sakeondernemings onderskeidelik 6 persent en 4½ persent bedra het.

'n Sektorale ontleding toon dat die hoër groei in die vaste kapitaalvoorraad gedurende die sewentigerjare toegeskryf kan word aan buitengewoon groot gemiddelde jaarlikse groeikoerse in 'n aantal sektore, waaronder fabriekswese, elektrisiteit, gas en water, konstruksie, vervoer, opbergung en kommunikasie en gemeenskaps-, maatskaplike en persoonlike dienste. Die volgehoue sterk toename in die reële vaste kapitaalvoorraad van die fabriekswese gedurende die grootste deel van die sewentigerjare is hoofsaaklik deur projekte soos Alusaf, Natref, Yskor se werke by Newcastle, die Sasol II-aanleg en uitbreidingsprogramme by Yskor se Pretoria- en Vanderbijlpark-werke teweeggebring. Terwyl hierdie ontwikkelings die uitbreiding van die reële vaste kapitaalvoorraad van fabriekswese se ondernemings as openbare korporasies aangehelp het, het die gemiddelde koers van toename van jaar tot jaar in die reële vaste kapitaalvoorraad van die private fabriekswese van ongeveer 8 persent gedurende die sestigerjare tot slegs 4 persent in die sewentigerjare verlangsaam. Hierdie verlangsaming kan deels aan die lae vlak van die binnelandse vraag gedurende die afwaartse fase van die ekonomie van 1974-77 en die gevoldlike oormaat produksievermoë toegeskryf word.

In die sektor wat elektrisiteit, gas en water voorsien het die reële vaste kapitaalvoorraad gedurende die sewentigerjare teen 'n gemiddelde koers van byna 8 persent per jaar toegeneem vergeleke met 'n koers van 5½ persent in die voorafgaande dekade. Hierdie versnelling in die groeikoers van die vaste kapitaalvoorraad het die toename in kapitaalbesteding deur Eskom aan sy kern- en ander kragsentrales weerspieël.

Die sektor vervoer, opbergung en kommunikasie het gedurende die sewentigerjare 'n effens hoër persentasie toename in reële vaste kapitaalvoorraad as die ekonomie in die geheel getoon. Hierdie ontwikkeling het gespruit uit die kapitaalbesteding van die voormalige Suid-Afrikaanse Spoorweë en Hawens Administrasie en die Departement Pos en Telekommunikasie om voldoende infrastruktur

vir vervoer en kommunikasie te voorsien. Hierdie besteding het ook die aankoop van nuwe vliegtuie vir die Suid-Afrikaanse Lugdiens en die oprigting van die Richardsbaaise spoorlyn en hawe ingesluit. Die uitbreiding van die vaste kapitaalvoorraad deur die private vervoersektor gedurende die middel-sewentigerjare kon geheel en al toegeskryf word aan die verkryging van skepe en houers vir die behoueringsprogram en die uitvoer van ystererts nadat die Sishen-Saldanha-spoorlyn voltooi is.

Die volgehoue hoë koers van toename in die reële vaste kapitaalvoorraad van die sektor gemeenskaps-, maatskaplike en persoonlike dienste gedurende die tydperk 1970 tot 1979, wat 'n gemiddelde jaarlikse koers van meer as 6½ persent beloop het, is hoofsaaklik deur die betreklik hoë vlak van kapitaalvorming deur die openbare sektor in ekonomiese en maatskaplike infrastrukturele ontwikkeling soos paaie, brûe, waterstelsels, skole, hospitale en die daarstelling van 'n televisiediens teweeggebring.

Gedurende die sewentigerjare het die gemiddelde jaarlikse groei in die reële vaste kapitaalvoorraad van die mynbou, handel en finansiëledienstesektore tussen 5 en 5½ persent gewissel. Hoewel dit minder as die gemiddelde jaarlikse groeikoers in die vaste kapitaalvoorraad van die ekonomie in die geheel was, het dit die gemiddelde groeikoers in die kapitaalvoorraad vir hierdie sektore in die voorafgaande dekade oortref. In die mynbousektor het die groeikoers van gemiddeld 2 persent per jaar gedurende die sestigerjare tot 5½ persent in die sewentigerjare versnel. Dit kon aan die betreklik hoë vlak van investering deur verskeie goudmyne, uraananaanlegte en platinummyne gedurende die tydperk toegeskryf word. Die effens hoë koers van toename in die reële vaste kapitaalvoorraad van finansies, versekering, vaste eiendom en besigheidsdienste gedurende die sewentigerjare was hoofsaaklik die gevolg van die hoë vlak van kapitaalbesteding deur verhulingsondernemings en die sterk groei in die reële investering in private woongeboue.

In die tagtigerjare het die groei in die reële vaste kapitaalvoorraad aansienlik verlangsaam. 'n Sektorale ontleding toon dat hierdie verlangsaming in al die hoofsektore van die ekonomie met die uitsondering van mynbou waargeneem kon word. In die geval van die sektore landbou en konstruksie het die vlak van die reële kapitaalvoorraad trouens teen gemiddelde koerse van onderskeidelik 1 persent en ½ persent per jaar afgeneem, terwyl die groei in die reële vaste kapitaalvoorraad vir die ekonomie in die geheel tot 'n gemiddelde koers van 3 persent per jaar ingesink het. Die daling in die kapitaalvoorraad van die landbousektor was 'n weerspieëling van herhaalde droogtetoestande wat vanselfsprekend 'n negatiewe uitwerking op investering gehad het, terwyl die toename in die koste van landboufinansiering tot meer markgerigte vlakke ook tot die laer koers van kapitaalvorming in die landbou bygedra het.

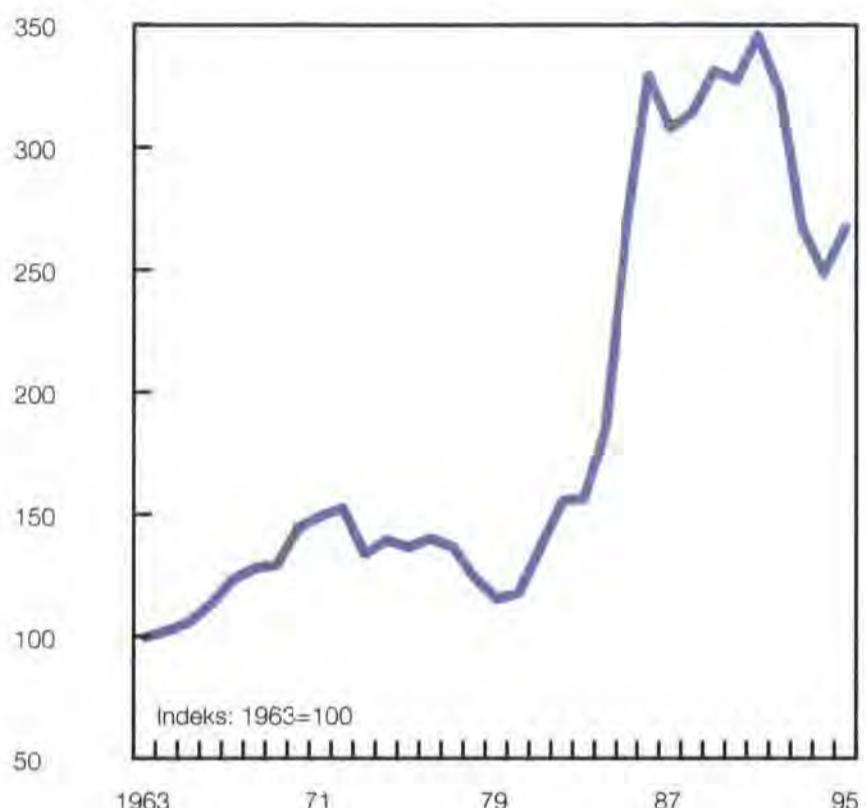
In die mynbousektor het die reële vaste kapitaal-

voorraad gedurende die tagtigerjare teen 'n gemiddelde koers van 6½ persent per jaar gestyg. Dit was deels die gevolg van nuwe ontwikkelings en die uitbreiding van die produksievermoë van die goud- sowel as die nie-goudmynboubedrywe aan die begin van die tagtigerjare. Vaste investeringsbedrywighede in die mynbousektor het gedurende die middel van die tagtigerjare toegeneem as gevolg van 'n hoér vraag na die uitvoer van metale en minerale, asook die positiewe uitwerking van die depresiasie van die rand op die winsgewendheid van die mynbou.

Die meeste van die sub-sektore in die sekondêre en tersiêre sektore van die ekonomie het gedurende die tweede helfte van die tagtigerjare lae of selfs negatiewe groei in hul reële vaste kapitaalvoorraad ondervind. Hierdie ontwikkelings was hoofsaaklik die gevolg van verskeie eksterne faktore en ontwikkelings wat die algehele ekonomiese prestasie ongeveer gelyktydig begin beïnvloed het. Dit het faktore ingesluit soos die negatiewe gevolg van opeenvolgende jare van droogte en die voorwaartse en rugwaartse skakelings van die laer landbouproduksie op die res van die ekonomie, die voltooiing van groot uitbreidingsprogramme deur Sasol en die besluit deur sekere openbare korporasies en sakeondernemings van die algemene owerheid om die kostedoeltreffendheid van hul bedrywighede te verbeter en meer op markkragte te reageer. Laasgenoemde het programme van beplande vermindering in vaste kapitaalbesteding deur instellings soos Eskom, Transnet, Telkom en die Suid-Afrikaanse Poskantoor ingesluit. Die doel met hierdie programme was om ten volle voordeel te trek uit die oormaatvermoë wat gedurende die laat sewentigerjare en die begin van die tagtigerjare deur grootskaalse investeringsprogramme bewerkstellig is. 'n Toename in burgerlike onrus, groeiende negatiewe buitelandse persepsies van die Suid-Afrikaanse sosio-ekonomiese en politieke omstandighede, handelsanksies en boikotte, disinvestering deur buitelandse ondernemings en Suid-Afrika se uitsluiting van die internasionale kapitaalmarkte, asook 'n gebrek aan vertroue en 'n algemene gevoel van onsekerheid ten opsigte van die toekoms, het die vaste kapitaalvorming gedurende daardie jare ongunstig beïnvloed.

Die reële vaste kapitaalvoorraad in die fabriekswesesektor het in die tweede helfte van die tagtigerjare aansienlike dalings aangeteken en tussen 1985 en 1989 teen 'n gemiddelde jaarlikse koers van 1½ persent afgeneem. Groot dalings in die bruto vaste kapitaalvorming in die fabriekswese gedurende hierdie tydperk kan onder andere aan 'n toename in die vlak van die relatieve gebruikskoste van kapitaalgoedere toegeskryf word.¹¹ Nadat die relatieve gebruikskoste van kapitaal in 1979 'n onderste draipunt bereik het (kyk grafiek 4), het dit in die eerste vier jaar van die tagtigerjare effens gestyg. Van 1983 tot 1986 het dit egter sterk gestyg tot 'n vlak wat ongeveer 185 persent hoér as in 1979 was. Dit het die uitwerking van kostestyging vanweé

Grafiek 4. Die relatiewe gebruikskoste van kapitaal in die fabriekswese



opeenvolgende dalings in die effektiewe wisselkoers van die rand op die binnelandse pryse van kapitaalgoedere gedurende hierdie tydperk weerspieël. Die relatiewe gebruikskoste van kapitaal het boonop in 1984 en 1985 toegeneem as gevolg van die hoér vlak van binnelandse rentekoerse wat deur die verswakkende betalingsbalans in daardie jare en die owerhede se streng monetêre teenmaatreëls veroorsaak is.

Vanaf 1987 tot 1991 het die relatiewe gebruikskoste van kapitaal langs 'n opwaartse neiging gewissel en in 1991 'n historiese hoogtepunt bereik. Die groei in die reële vaste kapitaalvoorraad in die fabriekswese was gedurende hierdie tydperk gevvolglik broos en het eers in 1989 positief geword, hoofsaaklik as gevolg van verhoogde investering in projekte soos Mossgas en Mossref. Namate die relatiewe gebruikskoste van kapitaal van 1992 tot 1995 afgeneem het, het die groei in die reële vaste kapitaalvoorraad in die fabriekswese van 2½ persent in 1992 tot 4½ persent in 1995 versnel.

In die tydperk 1990 tot 1995 het die uitbreiding in die reële vaste kapitaalvoorraad van die ekonomie in die geheel aansienlik afgeneem tot 'n gemiddelde van 1 persent per jaar teenoor die langtermyngemiddelde van

¹¹ Die gebruikskoste van kapitaal bestaan uit elemente van koste (of voordele) soos die prys van nuwe kapitaalgoedere, voorsiening vir waardevermindering, langtermyn-rentekoerse en verskillende belastings (of belastingtoegewings) wat deel van die aankoop, bruikuur of die gebruik van die betrokke kapitaalgoedere is. Die relatiewe gebruikskoste van kapitaal is die verhouding van die gebruikskoste van kapitaal tot die algemene vlak van produksiepryse in die fabriekswese.

4 persent. Die netto gevolg van die dalings in die vlak van die reële vaste kapitaalvoorraad in die sektore landbou, konstruksie, vervoer, opberging en kommunikasie en die sektor wat elektrisiteit, gas en water voorsien, het die toenames in die reële vaste kapitaalvoorraad van die ander sektore van die ekonomie byna geneutraliseer.

'n Faktor wat bygedra het tot die daling in die groei in die reële vaste kapitaalvoorraad gedurende die negentigerjare is die toename in die bruto vaste investering van 1989 tot 1993 wat minder as die groei in die voorsiening vir waardevermindering was. Die verhouding van netto vaste investering en waardevermindering tot bruto binnelandse vaste investering het gedurende die tydperk 1960 tot 1983 deurgaans betreklik bestendig gebly en die gaping tussen netto vaste investering en waardevermindering in verhouding tot bruto binnelandse vaste investering het nooit die koers van 20 persent oorskry nie. Vanaf 1984 het die gaping tussen die twee verhoudings egter groter geword en in 1987 'n hoogtepunt van ongeveer 80 persent bereik, voordat dit in 1989 tot minder as 60 persent afgeneem het. Gedurende die afwaartse fase in die ekonomie van 1989-1993 het hierdie gaping in 1993 weer tot 80 persent gegroeи en toe weer tot 60 persent in 1995 verbeter.

Die gaping tussen die verhoudings en die gevoglike swak groei in die reële vaste kapitaalvoorraad kan gesien word as deel van die langtermyndaling in kapitaalvorming wat uit die vroeë tagtigerjare dateer. Baie van die algemene faktore wat die verlangsaming in die groei van vaste kapitaalvoorraad veroorsaak het, het sedert 1993 omgekeer en bygedra tot groter investering. Hierdie faktore het die volgende ingesluit:

- Finansiële sinksies het vanaf 1985 'n bindende betalingsbalansbeperking tot gevolg gehad. 'n Gebrek aan toegang tot die internasionale kapitaalmarkte het Suid-Afrika genoop om oorskotte op die lopende rekening te handhaaf om ooreengekome skuldterugbetalings te kan doen. Dit is bewerkstellig deur die toepassing van 'n meer beperkende binnelandse finansiële beleid as wat in ander omstandighede nodig sou wees en het investering tot die beskikbare hoeveelheid binnelandse besparing beperk. Intussen het 'n uitbreiding in die owerheid se besteding aan sosiale dienste tot die vermindering van openbare besparing geleid.
- Onsekerheid oor Suid-Afrika se politieke toekoms was wydverspreid. Op grond van hierdie onsekerheid het beleggers klaarblyklik 'n wag-en-sien-houding ingeneem.
- Faktorprysontwikkelings gedurende die afgelope dekade was nadelig vir groei en werkskepping. Die Suid-Afrikaanse arbeidsmark is oorheers deur sterk en militante vakbonde wat suksesvol was met die bedwinging van hoë reële lone wat nie met die groei in produktiwiteit gepaardgegaan het nie. Die gevoglike verwringing van

relatiewe faktorpryse het die ekonomie se groeivermoë op die lang termyn ondermy en die dryfveer om te investeer verswak.

- Die gebruikskoste van kapitaal het tussen 1983 en 1991 skerp gestyg; dit was 'n weerspieëling van hoë reële (en verwagte reële) uitleenkoerse, hoë maatskappybelasting en minder belastingkortings namate investeringstoegewings uitgefaseer en aanvangstoelaes verminder is.
- Die feit dat die winsgewendheid van die maatskappysektor afwaarts geneig het, veral in die laat tagtigerjare en aan die begin van die negentigerjare, het bygedra tot die onwilligheid om investering in die private sektor uit te brei.
- Gedurende die resessie van 1989-1993 het die persentasiebenutting van produksievermoë in die fabriekswesesektor van ongeveer 85 persent in die tweede kwartaal van 1989 tot 'n historiese laagtepunt van 77 persent in die derde kwartaal van 1992 gedaal. 'n Oormaat produksievermoë is natuurlik nie bevorderlik vir die skep van bykomende vermoë nie.

Die ommekeer van baie van hierdie faktore ná 1993 was hoofsaaklik verantwoordelik vir die sterker groei in die vaste investering wat toe begin het. Hierdie beter prestasie van investering was veral die gevolg van:

- die opheffing van handelsanksies, die vermindering van politieke onsekerheid en die daling in die totale vlak van politiek-geïnspireerde geweld in die land, wat investering deur binnelandse en buitelandse beleggers aangemoedig het;
- die onopgeloste probleme in die arbeidsmark en die hoë vlak van reële arbeideenheidskoste wat steeds die produksiefaktor kapitaal in verhouding tot arbeid bevoordeel het;
- die daling in die gebruikskoste van kapitaal in 1993 en 1994;
- die skerp styging in die persentasiebenutting van produksievermoë in die fabriekswese gedurende die huidige herstelfase van die ekonomie;
- die opmerklike styging in die winsgewendheid van die maatskappysektor sedert die begin van 1992;
- die onlangse verskuiwing in die samestelling van die kapitaalvoorraad vanaf vaste strukture wat betreklik stadig in waarde verminder na masjinerie en toerusting wat betreklik vinnig in waarde verminder, het investering om bates te vervang laat toeneem; en
- die tydelike belastingaansporingstelsel ingevolge artikel 37E van die Inkomstebelastingwet, wat vir aansienlike waardeverminderingstoegewings voorsiening maak om vaste investering in die metaal- en mineraalveredelingsprojekte aan te moedig.

Hierdie ontwikkelings het hoofsaaklik die fabriekswese beïnvloed, met die gevolg dat die groei in die reële vaste kapitaalvoorraad van hierdie sektor van 'n gemiddelde koers van ongeveer 1 persent tussen 1982 en 1989 tot 3½ persent in die eerste helfte van die negentigerjare toegeneem het. Die volgehoute stadige

groei van die vaste kapitaalvoorraad in die res van die ekonomie kan onder ander daarvan toegeskryf word dat bovenoemde positiewe faktore nog nie ten volle na hierdie sektore deurgewerk het nie. Hierbenewens het die betreklike kragteloosheid van reële vaste kapitaalvorming deur die openbare owerhede vanweë die langtermyn afwaartse neiging in investering deur die algemene owerheid ook tot die verlangsaaming in die groei van die totale reële kapitaalvoorraad bygedra. Die gemiddelde jaarlikse groeikoers in die reële vaste kapitaalvoorraad van die algemene owerheid het van 7 persent in die sestigerjare tot slegs 2 persent in die negentigerjare verlangsaam. Hierdie daling is hoofsaaklik veroorsaak deur doelbewuste pogings om openbare besteding van tyd tot tyd te beperk, wat sonder uitsondering 'n groot uitwerking op kapitaalpleks van lopende besteding gehad het.

5. Die samestelling van vaste kapitaalvoorraad

Soos reeds aangedui is, het die privatisering en die kommersialisering van 'n aantal openbare korporasies en sakeondernemings van die algemene owerheid tussen 1987 en 1992 die vergelykbaarheid oor tyd van die waarde van vaste kapitaalvoorraad volgens instelling en funksie beïnvloed. In die tydperk voor die privatisering van openbare korporasies was daar 'n versteuring in die verdeling van die totale vaste kapitaalvoorraad aangesien investering toenemend na openbarektorbedrywighede met 'n baie laer regstreekse produktiwiteit as die private sektor verskuif het. Die aandeel van die private sektor in die totale vaste kapitaalvoorraad het van 'n gemiddelde van meer as 51 persent in die sestigerjare tot 43½ persent in die eerste helfte van die tagtigerjare afgeneem. As gevolg van die aansienlike daling in die vaste investering deur die openbare korporasies sedert 1984, het die private sektor se aandeel van die land se kapitaalvoorraad vergroot, maar hierdie verhouding is ook deur privatisering beïnvloed. Op grond van hierdie ontwikkelings word die veranderings in die samestelling van die kapitaalvoorraad in die Suid-Afrikaanse ekonomie in die volgende afdeling slegs volgens soort ekonomiese bedrywigheid en soort bate beskryf.

5.1 Vaste kapitaalvoorraad volgens soort ekonomiese bedrywigheid

'n Sektorale ontleding van die verdeling van die vaste kapitaalvoorraad volgens soort ekonomiese bedrywigheid toon dat die proporsionele aandeel van die sektore wat vir konstruksiewerke, handel en finansiële en verwante dienste verantwoordelik is, tussen die sestigerjare en die eerste helfte van die negentigerjare baie min verander het. Die betreklike bestendigheid in die bydrae van hierdie sektore tot die vlak van die totale

vaste kapitaalvoorraad kan hoofsaaklik toegeskryf word aan die onderskikte rol wat die dienstesekture oor die algemeen in die proses van ekonomiese ontwikkeling gespeel het.

Die mynbousektor se aandeel in totale vaste kapitaalvoorraad het van 7½ persent in die sestigerjare tot 6 persent gedurende die sewentigerjare gedaal, maar weer tot 8½ persent aan die begin van die negentigerjare gestyg. Die onlangse herstel in die mynbousektor se aandeel in die totale vaste kapitaalvoorraad was hoofsaaklik 'n weerspieëling van die investering in nuwe diamant-, steenkool- en "ander" mynbouontwikkelings in die laat tagtiger- en vroeë negentigerjare.

Die proporsionele aandeel van die landbou en die sektor vervoer, opberging en kommunikasie in die vaste kapitaalvoorraad het sedert die sestigerjare byna ononderbroke gedaal. Die vaste kapitaalvoorraad in die landbousektor as 'n persentasie van die totale vaste kapitaalvoorraad het van 'n gemiddelde van 10½ persent in die sestigerjare tot 4 persent in die tydperk 1990 tot 1995 afgeneem. Eweneens het die sektor vervoer, opberging en kommunikasie se aandeel in die vaste kapitaalvoorraad van 17 persent in die sestigerjare tot 14 persent in die eerste helfte van die negentigerjare

Tabel 3. Die samestelling van totale vaste kapitaalvoorraad volgens soort ekonomiese bedrywigheid

Sekture	Gemiddelde vir die tydperk			
	1960 tot 1969	1970 tot 1979	1980 tot 1989	1990 tot 1995
Landbou, bosbou en vissery.....	10,3	7,5	5,5	4,2
Mynbou en steen- groewery	7,7	5,8	7,4	8,4
Fabriekswese	9,1	10,7	12,5	12,5
Elektrisiteit, gas en water	6,5	7,0	9,4	8,5
Konstruksie	0,5	0,8	0,7	0,5
Groot- en kleinhandel, verversings en akkommodasie.....	5,4	5,4	4,7	4,6
Vervoer, opberging en kommunikasie	17,2	17,0	15,7	14,2
Finansies, versekerings, vaste eiendom en besigheidsdienste.....	20,8	20,4	19,3	20,3
Gemeenskaps-, maat- skaplike en persoon- like dienste.....	22,5	25,4	24,8	26,8
Totaal.....	100,0	100,0	100,0	100,0

gedaal. Die daling in die relatiewe aandeel van die landbousektor in die totale vaste kapitaalvoorraad is naastenby in ooreenstemming met die proses van ekonomiese ontwikkeling, naamlik in die eerste plek 'n vermindering in die aandeel van landbou in die totale produksie en in die tweede plek deur die samevoeging van boerdery-eenhede en die gevvolglike vermindering van fisiese infrastrukturele ontwikkelings en investering per boerderyeenheid. Boonop is die daling in die proporsionele aandeel van die sektor vervoer, opberging en kommunikasie ook nie onverwags nie. Aanvanklik is groot bedrae in spoorweg- en padvervoerstelsels belê ten einde 'n effektiewe vervoernetwerk te vestig. Gedurende die tagtigerjare het die deregulering van vervoer en die gevvolglike afskaling van nie-winsgewende vervoerstelsels deur Transnet ook tot die kleiner aandeel van die vervoerdienste in die totale vaste kapitaalvoorraad bygedra.

Die aandeel van die fabriekswese en die sektore wat elektrisiteit, gas en water en gemeenskaps-, maatskaplike en persoonlike dienste voorsien, in die totale vaste kapitaalvoorraad het tussen die sestigerjare en die eerste helfte van die negentigerjare merkbaar gestyg. Die aandeel van fabriekswese het van 'n gemiddelde van 9 persent in die tydperk 1960 tot 1969 tot 12½ persent in die jare 1990 tot 1995 toegeneem. Hierdie toename was die netto gevolg van 'n matige groei in die aandeel van die vaste kapitaalvoorraad van die private fabriekswese, wat in die eerste helfte van die negentigerjare aangehelp is deur investering in groot kapitaalprojekte soos die Columbus-vlekvryestaalaanleg en die Alusaf-aluminiumsmeltery en investering deur die openbare korporasies in strategies belangrike bedrywe.

Die aandeel van die vaste kapitaalvoorraad in die sektor elektrisiteit, gas en water, het van gemiddeld 6½ persent in die sestigerjare tot 'n hoogtepunt van 9½ persent gedurende die tagtigerjare gestyg, voordat dit tot gemiddeld 8½ persent tussen 1990 en 1995 teruggeval het. Hierdie toename kan hoofsaaklik toegeskryf word aan 'n intensieve kapitaaluitbreidingsprogram deur Eskom tussen 1974 en 1984, wat op 'n ooroptimistiese waardering van Suid-Afrika se toekomstige groeivooruitsigte gegrond was, en meer onlangs ook aan die uitbreiding van die elektrisiteitsverspreidingsnetwerk na minder ontwikkelde gebiede van die land.

5.2 Vaste kapitaalvoorraad volgens soort bate

Die batesamestelling van die reële vaste kapitaalvoorraad tussen 1960 en 1995 word in tabel 4 getoon. Die proporsionele aandeel van geboue en konstruksiewerke in die totale kapitaalvoorraad van ongeveer 80 persent en dié van masjinerie en toerusting van ongeveer 20 persent het sedert die sestigerjare min verandering getoon. In die sewentiger- en tagtigerjare het die aandeel van geboue en konstruksiewerke vir die twee tydperke onderskeidelik tot 77½ en 76 persent teruggesak, terwyl die aandeel van masjinerie en

Tabel 4. Die samestelling van totale vaste kapitaalvoorraad volgens soort bate

Soort bate	Gemiddelde vir die tydperk				
	1960 tot 1969	1970 tot 1979	1980 tot 1989	1990 tot 1995	
Woongeboue.....	20,3	18,4	17,0	17,1	
Nie-woongeboue.....	18,7	19,2	19,1	21,9	
Konstruksiewerke.....	37,3	36,7	37,0	36,6	
Oordragkoste	3,9	3,4	3,0	3,4	
Totaal: Geboue en konstruksiewerke...	80,2	77,7	76,1	79,0	
Vervoertoerusting	8,0	8,5	7,9	6,5	
Masjinerie en ander toerusting	11,8	13,8	16,0	14,5	
Totaal: Toerusting	19,8	22,3	23,9	21,0	
Totaal	100,0	100,0	100,0	100,0	

vervoertoerusting tot 22½ en 24 persent gestyg het. Hierdie toenames in die relatiewe aandeel van die opgehoopde investering in masjinerie en toerusting was hoofsaaklik die gevolg van 'n toename in die kapitaal-intensiteit van die produksieprosesse van die openbare korporasies.

'n Ontleding volgens soort bate toon dat die aandeel van woongeboue in die totale vaste kapitaalvoorraad van gemiddeld 20½ persent in die sestigerjare tot 17 persent in die tydperk tussen 1990 en 1995 gedaal het, terwyl die ooreenstemmende verhouding vir nie-woongeboue gedurende dieselfde tydperke van 18½ persent tot 22 persent gestyg het. Die toename in die relatiewe belangrikheid van investering in nie-woongeboue hou verband met volgehoudne toenames in die reële vaste kapitaalvoorraad van die sektore handel, finansies en gemeenskaps-, maatskaplike en persoonlike dienste. Soortgelyke neigings is in die verdeling van die vaste kapitaalvoorraad tussen masjinerie en toerusting en vervoertoerusting waargeneem. In die geval van vervoertoerusting het die verhouding van gemiddeld 8 persent in die sestigerjare tot 6½ persent in die eerste helfte van die negentigerjare teruggesak, terwyl die verhouding vir masjinerie en toerusting in die ooreenstemmende tydperke van 12 persent tot 14½ persent toegeneem het.

Die daling in die aandeel van die vaste kapitaalvoorraad van vervoertoerusting was veral sedert 1985 merkbaar. Hierdie daling kan toegeskryf word aan die volgehoudne hoër vlak van reële rentekoerse sedert 1985, die skerp styging in die relatiewe pryse van vervoertoerusting sedert die middel-tagtigerjare, die baie lang resessietydperk wat die Suid-Afrikaanse ekonomie tussen 1989 en 1993 ondervind het en die laer investering in vervoertoerusting deur Transnet as deel

van hul rasionaliseringssprogramme gedurende die tweede helfte van die tagtigerjare. In teenstelling hiermee het die toename in die aandeel van die vaste kapitaalvoorraad van masjinerie en toerusting gekom van die groei in die reële vaste investering in hierdie soort bates sedert die laat tagtigerjare wat die groei in al die ander belangrike soorte bates oortref het. Hierbenewens weerspieël die toename ook 'n verskuiwing in die samestelling van die vaste kapitaalvoorraad van strukture na toerusting. Hierdie verskuiwing is heel waarskynlik deur die vinniger groei in die doeltreffendheid van toerusting in verhouding tot dié van strukture meegebring. Veral die revolusionêre ontwikkeling in rekenaar- en kommunikasietegnologie het die prysprestasieverhouding van toerusting meer verbeter as die onlangse verbetering in hierdie verhouding vir strukture.

6. Die doeltreffendheid van vaste investering

Die doeltreffendheid van investering word normaalweg aan die hand van die grootte en verandering in die kapitaalopbrengsverhouding beoordeel, dit wil sê die verhouding van die reële bruto binnelandse produk tot die reële vaste kapitaalvoorraad. Hierdie verhouding gee 'n aanduiding van die hoeveelheid kapitaal wat gebruik word om een eenheid produksie te lewer.

'n Internasionale vergelyking van die inkrementele kapitaalopbrengsverhouding²⁾ (IKOV) vir Suid-Afrika en enkele Oos-Asiatiese lande (kyk tabel 5) toon duidelik die daling in die doeltreffendheid van investering in Suid-Afrika teenoor dié van die Oos-Asiatiese lande. Aan die begin van die sewentigerjare het die inkrementele kapitaalopbrengsverhoudings vir die uitgesoekte lande tussen 1,54 en 2,51 gewissel, terwyl die verhouding vir Suid-Afrika teen 3,13 ietwat hoër was. Hoewel die verhouding daarna in die tweede helfte van die tagtigerjare in al die lande toegeneem het, het dit aansienlik meer in Suid-Afrika as in die Oos-Asiatiese ekomieë gestyg.

In tabel 6 word die gemiddelde kapitaalopbrengsverhoudings vir uitgesoekte sektore en vir die ekonomie in die geheel getoon. Die gemiddelde kapitaalopbrengsverhouding het in die algemeen tussen 1960 en 1995 in al die hoofsektore, behalwe die landbou, toegeneem. Die koers van toename in die totale kapitaalopbrengsverhouding het nietemin in die negentigerjare verlangsaaam en toe effens teruggesak toe enkele sektore dalings in hul kapitaalopbrengsverhoudings aangeteken het.

Soos in grafiek 5 getoon word, het die groeikoerse

Tabel 5. Die inkrementele kapitaalopbrengsverhouding vir Suid-Afrika en sommige Oos-Asiatiese lande.

Typerk	Korea	Singapoer	Thailand	Maleisië	Suid-Afrika
1971-74	1,54	2,51	2,12	1,62	3,13 ¹⁾
1975-79	1,98	2,81	1,86	1,99	5,34
1980-84	3,22	3,26	2,09	2,63	4,42
1985-88	1,96	4,30	1,88	2,99	6,56 ²⁾
1990-95					5,24

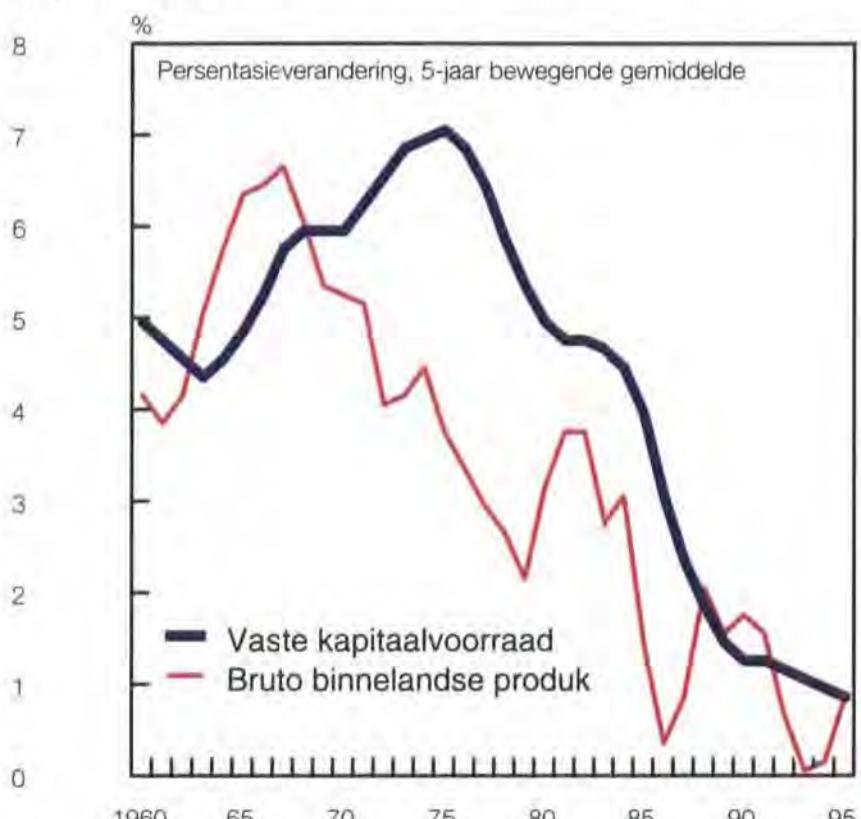
1) 1970-74

2) 1985-89

Bron: Larrain & Vergara (1993: 263)

van die totale reële bruto binnelandse produk en die totale reële vaste kapitaalvoorraad aan die begin van die sestigerjare naastenby ooreengestem. Die totale kapitaalopbrengsverhouding het gevvolglik betreklik konstant gebly. Ná 1967 het hierdie toedrag van sake aansienlik verander en het die twee groeikoerse merkbaar van mekaar begin verskil. Die kapitaalopbrengsverhouding van die ekonomie in die geheel het van die middel van die sestigerjare tot 1995 teen gemiddeld 1½ persent per jaar toegeneem. Die konjunkturele herstel in die ekonomie na die goudprysoplewing van 1979-80, die ekonomiese opwaartse

Grafiek 5. Groei in die totale reële bruto binnelandse produk en totale reële vaste kapitaalvoorraad



²⁾ Die gemiddelde verandering in die reële vaste kapitaalvoorraad in verhouding tot die toename in die reële bruto binnelandse produk.

Tabel 6. Die kapitaalopbrengsverhouding volgens soort ekonomiese bedrywigheid

Tydperk	Landbou, bosbou en vissery	Mynbou en steen- groewery	Fabriks- wese	Elektrisiteit, gas en water	Kon- struksie	Groot- en kleinhandel, verversings, en akkom- modasie	Vervoer, opberging en kom- munikasie	Finansies, versekering, vaste eiendom en sake- dienste	Gemeen- skaps-, maatskap- like en persoonlike dienste	Totaal
1960	4,10	0,92	0,98	7,52	0,21	1,06	7,05	4,21	29,01	2,41
1961	4,02	0,91	0,97	7,42	0,22	1,09	7,24	4,20	30,02	2,41
1962	3,87	0,88	0,94	7,29	0,22	1,06	7,07	4,10	30,63	2,36
1963	3,81	0,84	0,88	7,10	0,23	0,99	6,88	3,98	31,75	2,29
1964	4,40	0,80	0,86	6,80	0,23	0,95	6,66	3,87	32,03	2,23
1965	4,46	0,79	0,93	6,57	0,23	0,93	6,58	3,89	33,88	2,23
1966	4,20	0,78	0,98	6,68	0,28	0,96	6,75	3,97	35,17	2,27
1967	3,42	0,78	0,98	6,72	0,28	0,93	6,86	3,96	35,52	2,26
1968	3,99	0,76	0,99	6,80	0,27	0,88	6,81	3,85	35,85	2,27
1969	3,95	0,76	0,93	6,99	0,26	0,88	6,63	3,73	38,63	2,26
1970	4,39	0,74	0,93	6,81	0,25	0,87	6,23	3,84	40,25	2,28
1971	3,83	0,80	0,95	6,83	0,24	0,89	6,17	4,03	41,34	2,33
1972	3,99	0,85	0,98	6,67	0,25	0,94	6,39	4,14	44,52	2,44
1973	4,69	0,87	0,98	6,44	0,31	0,92	6,40	4,13	47,11	2,49
1974	3,69	0,99	1,02	6,22	0,33	0,91	6,11	4,23	47,81	2,52
1975	4,20	1,13	1,06	6,21	0,38	0,89	6,43	4,36	49,77	2,62
1976	4,46	1,18	1,10	6,48	0,43	0,93	6,86	4,45	51,18	2,73
1977	4,09	1,25	1,19	6,75	0,48	1,04	7,23	4,58	52,17	2,89
1978	3,99	1,32	1,18	7,04	0,55	1,07	7,22	4,58	52,59	2,93
1979	4,10	1,36	1,17	7,29	0,55	1,12	6,82	4,46	52,29	2,94
1980	3,79	1,52	1,18	7,42	0,52	1,01	6,47	4,31	52,43	2,88
1981	3,74	1,69	1,24	7,19	0,51	0,94	6,25	4,28	50,50	2,88
1982	4,21	1,85	1,39	7,33	0,55	0,97	6,73	4,35	49,22	3,05
1983	5,42	1,95	1,59	7,95	0,59	0,97	7,42	4,36	47,36	3,24
1984	4,80	1,97	1,57	8,14	0,58	0,92	6,97	4,40	45,61	3,19
1985	3,89	2,08	1,70	8,20	0,62	0,99	7,00	4,48	46,04	3,31
1986	3,53	2,25	1,65	8,31	0,66	1,06	7,19	4,49	46,37	3,37
1987	3,32	2,62	1,55	8,09	0,67	1,03	7,17	4,41	46,14	3,35
1988	3,11	2,58	1,43	7,63	0,63	1,00	6,83	4,42	45,94	3,24
1989	2,67	2,73	1,41	7,29	0,56	1,00	6,51	4,48	46,22	3,21
1990	2,83	2,84	1,52	7,09	0,54	0,99	6,48	4,57	46,72	3,29
1991	2,65	2,99	1,64	6,80	0,56	1,02	6,63	4,56	47,06	3,36
1992	3,56	2,98	1,74	6,56	0,59	1,05	6,48	4,58	47,31	3,47
1993	2,80	2,87	1,79	6,11	0,61	1,05	6,30	4,59	47,66	3,43
1994	2,46	2,91	1,78	5,71	0,59	1,03	6,07	4,50	48,00	3,37
1995	2,87	3,00	1,72	5,41	0,58	0,99	5,78	4,40	47,90	3,31

Gemiddelde vir die tydperk

1960-1969	4,02	0,82	0,94	6,99	0,24	0,97	6,85	3,98	33,25	2,30
1970-1979	4,14	1,05	1,06	6,68	0,38	0,96	6,59	4,28	47,90	2,62
1980-1989	3,85	2,12	1,47	7,76	0,59	0,99	6,85	4,40	47,58	3,17
1990-1995	2,86	2,93	1,70	6,28	0,58	1,02	6,29	4,53	47,44	3,37

beweging van 1987-88 en die herstel sedert die middel van 1993, het die groeikoers van die bruto binnelandse produk meer in ooreenstemming met dié van die kapitaalvoorraad gebring.

Gedurende die negentigerjare het die groei in die reële bruto binnelandse vaste kapitaalvoorraad van Suid-Afrika tot 'n gemiddelde jaarkoers van minder as 1 persent gedaal, vergeleke met die gemiddelde jaarlikse groei van 5 persent in die sestigerjare, 6 persent in die sewentigerjare en 3 persent in die tagtigerjare. Die koers van toename in die reële bruto binnelandse produk het die koers van toename in die totale reële vaste kapitaalvoorraad gedurende die ekonomiese herstel sedert die middel van 1993 oortref. Gevolglik het die omvattende kapitaalopbrengsverhouding tussen 1992 en 1995 met $4\frac{1}{2}$ persent gedaal, ná 'n toename van 8 persent in die tydperk 1989 tot 1992.

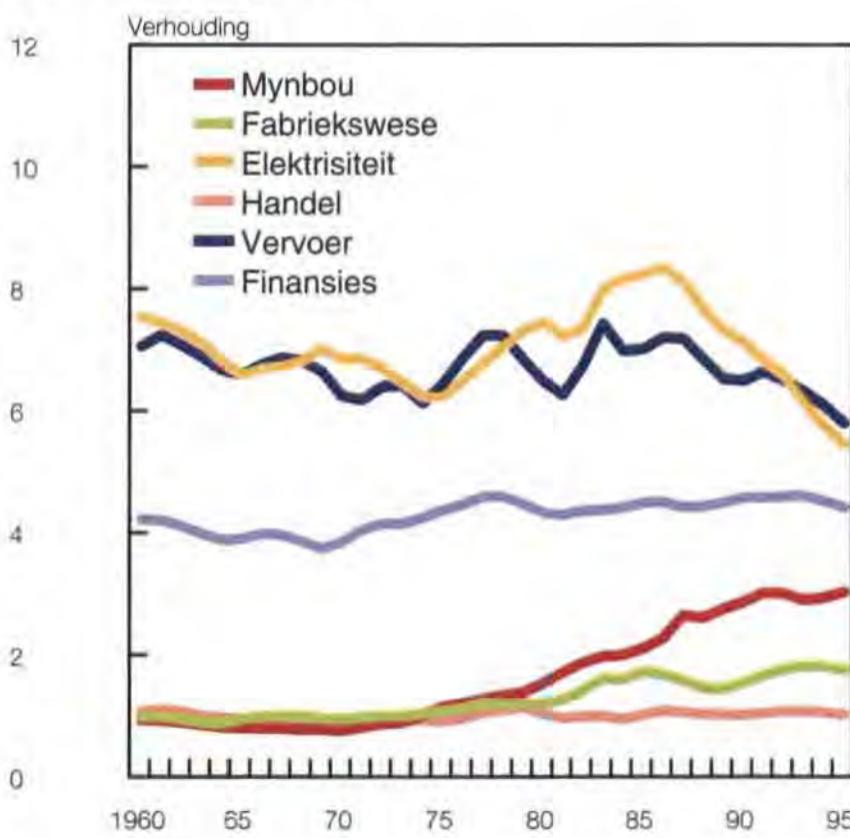
Die onlangse verbetering in die produktiwiteit van kapitaal was in al die hoofsektore van die ekonomie waarneembaar, met die merkbare uitsondering van die mynboubedryf. Soos grafiek 6 toon, het die kapitaalopbrengsverhoudings van die elektrisiteit- en vervoersektor reeds sedert die laat tagtigerjare verbeter, wat die beter benutting van produksievermoë weerspieël wat in die vroeë tagtigerjare in hierdie sektore geskep is. Die onlangse afplatting in die daling van die kapitaalopbrengsverhouding in die fabriekswese is teweeggebring deur 'n sterker groei in produksie as gevolg van die lewendige uitvoervraag na vervaardigde goedere en die ingebruikneming van die Columbus-vlekvryestaal- en Alusaf-aluminiumaanleg. Die afname in die kapitaal-

produktiwiteit van die mynbousektor was die gesamentlike gevolg van 'n toename in die kapitaalintensiteit en die daling in die gehalte van gouddraende erts wat gemaal is. Die verbetering in die kapitaalopbrengsverhouding van die landbousektor was naastenby in ooreenstemming met die groter druk van mededinging wat deur die sektor ondervind is, asook die rationalisering van boerdery-eenhede.

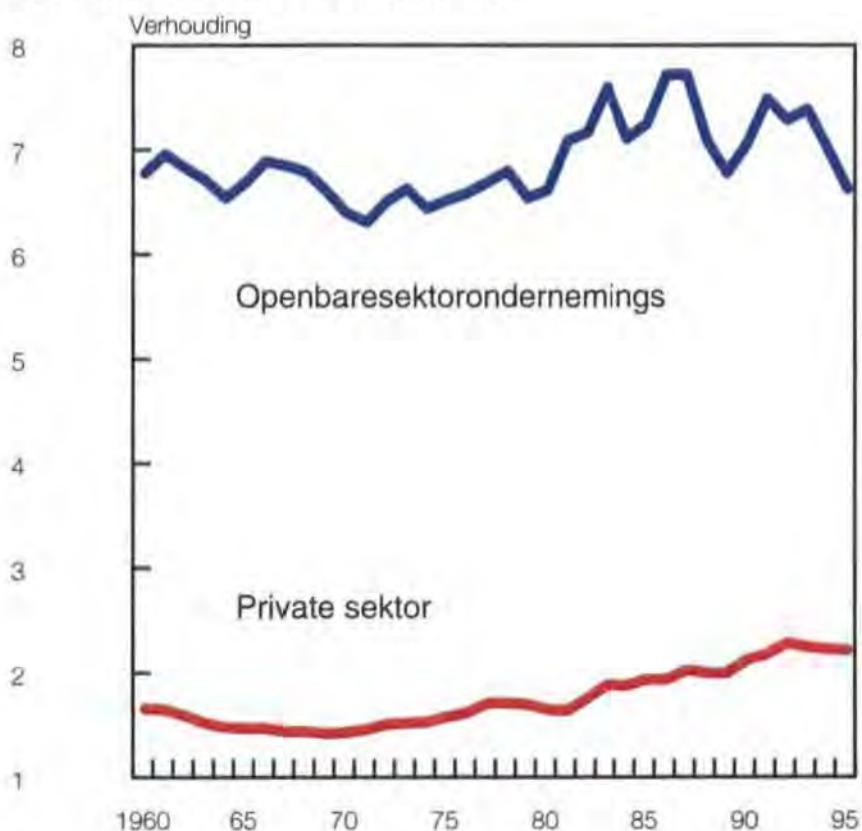
Uit grafiek 6 is dit ook duidelik dat die kapitaalproduktiwiteit van die verskillende produksiesektore merkbaar verskil: die gemiddelde hoeveelheid kapitaal wat bestee is om een eenheid te produseer is tussen drie en sewe keer hoër in sektore soos elektrisiteit, gas en water, vervoer, opbergung en kommunikasie en finansiële dienste as in die mynbou-, fabriekswese- en handelsektor. Grafiek 7 toon die verskil tussen die kapitaalopbrengsverhoudings van openbaresektorondernemings (dit wil sê sakeondernemings van die algemene owerheid en die openbare korporasies) en die private sektor. Hoewel die uitbreiding van die infrastrukturele investering 'n stimulerende uitwerking op die bedrywighede van die private sektor gehad het, het dit ook daartoe gelei dat sektore waarvan die bates 'n lae opbrengs het, 'n groter aandeel in die kapitaalvoorraad verkry het en dat die groei en werkskeppingspotensiaal van die ekonomie dus verlaag is.

Gedurende die tydperk voor 1987, toe die privatisering van openbare korporasies begin het, het die aandeel van die private sektor in die totale kapitaalvoorraad geleidelik verminder. In die tydperk 1960 - 1969 was die private sektor vir ongeveer 51 persent van

Grafiek 6. Gemiddelde kapitaalopbrengsverhouding per sektor



Grafiek 7. Die kapitaalopbrengsverhoudings vir die private sektor en openbaresektorondernemings



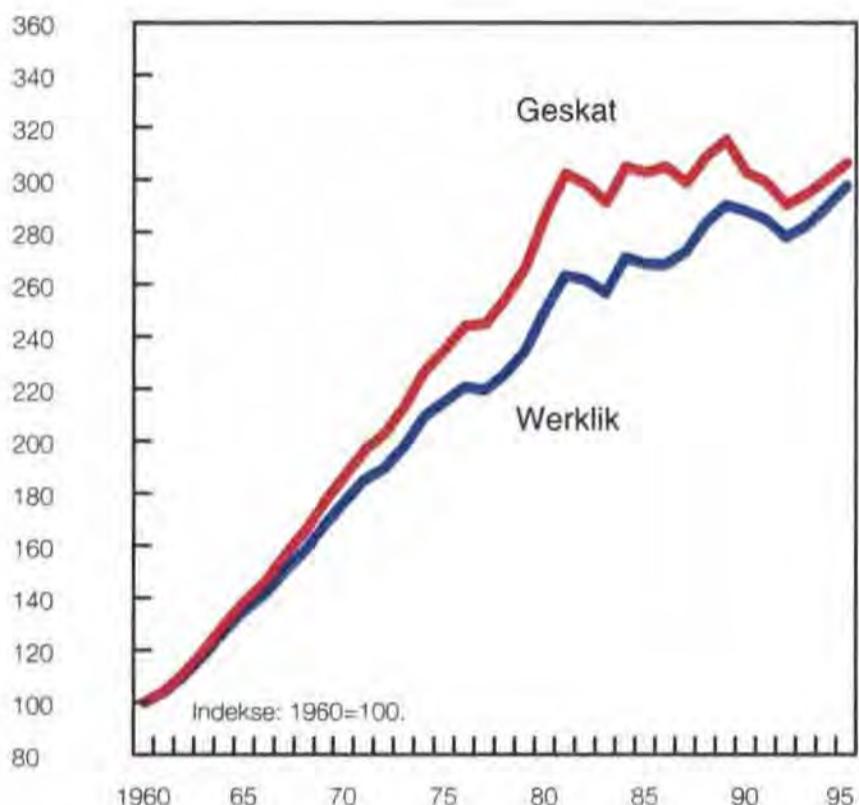
die totale reële kapitaalvoorraad verantwoordelik, terwyl openbaresektorondernemings vir 28 persent verantwoordelik was. Hierdie verhoudings het in die eerste helfte van die tagtigerjare na 43 persent vir die private sektor en 34 persent vir die openbaresektorondernemings verander. Daarna het die aandeel van die private sektor in die kapitaalvoorraad tot gemiddeld 48 persent aan die begin van die negentigerjare gestyg; privatisering het na raming ongeveer 4 persentasiepunte tot hierdie toename bygedra.

Grafiek 7 toon dat die produktiwiteit van kapitaal, gemeet volgens die kapitaalopbrengsverhouding, heelwat hoër in die private sektor as in openbaresektorondernemings is. Die gemiddelde kapitaalopbrengsverhouding van openbaresektorondernemings het tussen 1960 en 1995 ongeveer 6,9 beloop, wat ongeveer vier keer groter was as die gemiddelde kapitaalopbrengsverhouding van die private sektor van 1,7. Die verskuiwing van die kapitaalvoorraad van die private sektor na die openbaresektorondernemings het 'n merkbare uitwerking gehad op die groei van die reële bruto binnelandse produk. Om hierdie gevolgtrekking te staaf, is die vlak van die reële bruto binnelandse produk vir elke jaar sedert 1960 geraam op die veronderstelling dat die relatiewe verhouding van die totale kapitaalvoorraad in die private sektor en openbaresektorondernemings onveranderd op 1960-vlakke gebly het maar dat die kapitaalopbrengsverhoudings van die onderskeie sektore was soos wat dit vir elke jaar bereken is. Hoewel die uitwerking van die hersamestelling van die kapitaalvoorraad gedurende die sestigerjare matig was, het dit gedurende die tweede helfte van die sewentiger- en die vroeë tagtigerjare aansienlik toegeneem. Die uitwerking van die hertoedeling het in 1981 'n hoogtepunt bereik toe dit vir 'n verskil van ongeveer 15 persent tussen die werklike en geskatte vlak van produksie verantwoordelik was. Dit beteken dat 15 persent van die land se potensiële produksie op grond van die verskuiwing van hulpbronne ten gunste van openbaresektorondernemings verbeur is. Die negatiewe uitwerking van die herverdeling van vaste investering het ná die middel van die tagtigerjare gedaal, maar dit kan ten minste deels toegeskryf word aan die privatisering waarna vroeër verwys is.

7. Samevatting en gevolgtrekkings

Hierdie artikel bied 'n kort oorsig van die meting en metodologie wat in Suid-Afrika gebruik word vir die berekening van die binnelandse vaste kapitaalvoorraad en ten einde die groei en veranderings in die samestelling van die voorraad van tasbare bates te ontleed. Die ramings toon dat die groei in die totale reële vaste kapitaalvoorraad gedurende die sestiger- en sewentigerjare sterk gestyg het, maar daarna in die tagtiger- en negentigerjare verlangsaam het.

Grafiek 8. Potensiële reële bruto binnelandse produk



In die tydperk voor die privatisering van openbare korporasies was daar 'n verskuiwing in die toedeling van die totale vaste kapitaalvoorraad aangesien investering toenemend na openbaresektorbedrywigheide gekanaliseer is en die aandeel van die private sektor in die totale vaste kapitaalvoorraad tussen 1960 en die begin van die tagtigerjare aansienlik gedaal het. Sedert die tweede helfte van die tagtigerjare het die private sektor egter sy aandeel in die totale kapitaalvoorraad uitgebrei. Die ramings van die gemiddelde ouderdom van masjinerie en toerusting toon dat die ouderdom van hierdie soort bates teen die einde van die tagtigerjare 'n hoogtepunt bereik het, voordat dit tot die onlangse laagtepunt gedurende 1996 gedaal het. Dit het die gemiddelde ouderdom van die voorraad masjinerie en toerusting te staan gebring op 'nvlak wat merkbaar laer as die langtermyn gemiddelde is.

Ondanks die laer groei in die totale reële kapitaalvoorraad, het die koers van toename in die totale reële vaste kapitaalvoorraad die langtermyn groei in die reële bruto binnelandse produk bly oortref. Gevolglik het die totale kapitaalopbrengsverhouding¹ van die sestiger- tot die negentigerjare gestyg, wat beteken dat die effektiewe benutting van kapitaal verswak het. 'n Belangrike rede vir hierdie verwikkeling is die verskuiwing in die samestelling van die vaste kapitaalvoorraad vanaf die private sektor, met 'n betreklik lae kapitaalopbrengsverhouding, na openbaresektorondernemings met 'n betreklik hoë kapitaalopbrengsverhouding. Dit het die uitwerking gehad dat sowel die vlak as die groei van die totale reële bruto binnelandse produksie verlaag is.

Vergeleke met ander lande, veral sekere Oos-Asiatiese ekonomiese, het die Suid-Afrikaanse ekonomie oor die afgelope 15 jaar 'n wesenlike daling in vaste investeringskoerse en 'n gelyktydige verlangsaming in die groei van die bruto binnelandse produk ondervind. Die doeltreffende gebruik van skaars investeringsbronne om die benutting van die bestaande kapitaalvoorraad en toekomstige toevoegings tot hierdie voorraad te verbeter sal van groot belang wees om 'n hoë koers van ekonomiese groei en 'n verbetering in die lewensgehalte van alle Suid-Afrikaners teweeg te bring.

8. Bronnels

België. 1980. Statistieken ten dienste van de bedrijven, hun beschrijving en methodologie. *Statistische studiën nummer 58*, Nationaal instituut voor de Statistiek.

Blades, D. 1983. Service lives of fixed assets. *OECD Working paper*, No. 4.

De Cindio, G. 1993. *Average service life of fixed capital in Italy: Results of an ISCO special survey*. 21st CIRET conference.

De Jager, B.L. 1973. Die vaste kapitaalvoorraad en kapitaalopbrengsverhouding van Suid-Afrika vanaf 1946 tot 1972. *Suid-Afrikaanse Reserwebank Kwartaalblad*, Junie.

Du Piesanie, C.J. 1968. *Die bepaling en die gebruik van kapitaalopbrengsverhoudings*. Ongepubliseerde M.A. Ekon verhandeling, Pretoria: Universiteit van Pretoria.

Fallon, P. & Pereira de Silva, L.A. 1994. South Africa: Economic performance and policies. *Informal discussion papers on aspects of the economy of South Africa*, The World Bank Southern Africa Department, Discussion paper 7.

Hibbert, J., Griffen, T.J. & Walker, R.L. 1977. Development of estimates of the stock of fixed capital in the United Kingdom. *Review of Income and Wealth*, Vol. 23, p. 117-137.

Inter-Secretariat Working Group on National Accounts. 1993. *System of National Accounts*. Brussels: Eurostat, New York: UN, Paris: OECD, Washington D.C: IMF.

Larrain, F. & Vergara, R. 1993. Investment and macroeconomic adjustment: The case of East Asia, in Serven, L. & Solimano, A. (Eds) 1993. *Striving for growth after adjustment: The role of capital formation*. Washington D.C: World Bank.

Oliner, S.D. 1989. The formation of private business capital: Trends, recent developments, and measurement issues. *Federal Reserve Bulletin*, December.

Prais, S.J. 1986. Some international comparisons of the age of the machine stock. *Journal of Industrial Economics*, Vol. 34, No. 3.

Serven, L. & Solimano, A. 1993. Private investment and macroeconomic adjustment: A survey, in Serven, L. &

Solimano, A. (Eds). 1993. *Striving for growth after adjustment: The role of capital formation*. Washington D.C: World Bank.

Serven, L. & Solimano, A. 1993. Economic adjustment and investment performance in developing countries: The experience of the 1980s, in Serven, L. & Solimano, A. (Eds). 1993. *Striving for growth after adjustment: The role of capital formation*. Washington D.C: World Bank.

Suid-Afrikaanse Reserwebank. 1991. Suid-Afrika se nasionale rekeninge, 1946 tot 1990. *Geleentheidspublikasie*, no 5, September.

Swanepoel, C.J. & Van Dyk, J. 1978. Die vaste kapitaalvoorraad en sektorale kapitaalopbrengsverhoudings van Suid-Afrika, 1947 tot 1977. *Suid-Afrikaanse Reserwebank Kwartaalblad*, September.

Ward, M. 1976. *The measurement of capital: The methodology of capital stock estimates in OECD countries*. Paris: OECD.