

Quarterly Bulletin

Kwartaalblad



South African Reserve Bank
Suid-Afrikaanse Reserwebank

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

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

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

Quarterly economic review

Introduction

South Africa's prolonged recession of more than four years bottomed out in 1993 and the economy recovered somewhat during the course of the year. This is clearly illustrated by both the composite leading business cycle indicator, which showed a steep upward movement from the beginning of 1993, and the coincident indicator, which rose fairly sharply in the second half of the year. After having declined for three consecutive calendar years, real gross domestic product began to rise in the beginning of 1993 and based on present indications the growth rate could reach some 3 per cent in 1994.

A substantial increase in the volume of merchandise exports and net gold exports made a major contribution to this revival in economic activity. The quantity of goods exported increased by no less than 6 per cent in 1993 – considerably in excess of the growth in world trade. Pronounced increases were recorded in the exports of manufactured goods, indicating that the current level of the exchange rate of the rand enables South African manufacturers to compete successfully in international markets. The good export performance more than

neutralised an increase in merchandise imports related to rising domestic expenditure, and a comfortable surplus was therefore maintained on the current account of the balance of payments throughout 1993.

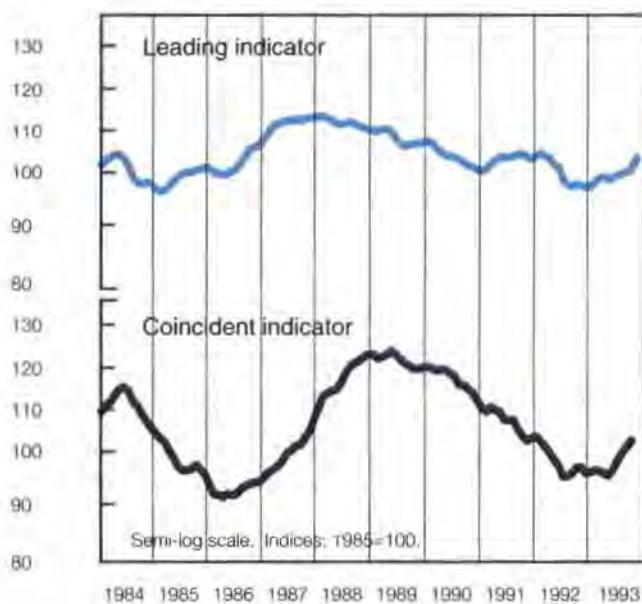
In addition to this remarkable export performance, the mainstay of the economic recovery has been a substantial increase in agricultural production; this followed one of the most severe droughts in South Africa's history. Not only did favourable weather conditions directly cause a higher agricultural output, but through backward and forward linkages the agricultural sector also had a significant indirect effect on domestic production. In the second half of 1993 the increase in economic activity became more widely dispersed and growth was recorded in the real value added by mining, manufacturing, electricity, gas and water, commerce and finance.

An improvement in consumer confidence and a rise in real personal disposable income initially led to a revival in the expenditure on non-durable goods, which rapidly spread to most of the other main categories of consumer goods and services. After having declined for no less than seven consecutive quarters, real private consumption expenditure therefore began to increase from the beginning of 1993. Real capital formation also recovered in the second half of the year, following a period of contraction that had lasted for about 3½ years. The total fixed capital stock of the country nevertheless remained virtually unchanged in 1993, and the capital stock of sectors such as agriculture, mining, electricity, construction and transport actually declined.

The economic recovery was accompanied by a sharp increase in the gross operating surplus amounting to 11½ per cent in 1993. Although this increase was largely related to a rise in the income of farmers, the operating surpluses of most of the other sectors also rose sharply. A sharp increase was particularly evident in the gross operating surpluses of gold mines because of the higher rand price of gold.

Considerable progress was also made during 1993 in realising the objective of financial stability. The rates of increase in both the production and consumer price index declined to levels last attained in the early 1970s. Adherence to a conservative monetary policy, and disintermediation practices, caused the growth in the monetary aggregates to remain subdued during most of 1993. The rates of increase in money supply and bank credit extension generally reached very low levels during the first half of 1993, but then accelerated somewhat towards the end of the year. This brought the growth (measured over twelve months) in the broadly defined money supply (M3) to within the money supply guideline range of 6-9 per cent.

Composite business cycle indicators



Conditions in the money market generally remained tight during 1993, largely because of a substantial decrease in the net foreign assets (including gold) of the Reserve Bank. The Bank prevented conditions from becoming too tight by injecting additional liquidity in the domestic money market. In view of the relatively tight conditions and expected interest rate movements, the decline in money market interest rates, which had already started at the beginning of 1990, continued during 1993 but took place at a much slower pace than in 1992.

Activities on the Johannesburg Stock Exchange, the bond market and the South African Futures Exchange remained buoyant throughout 1993. A decline in the inflation rate, the turn-about in economic activity and a sharp increase in net purchases of securities by non-residents served to fuel a strengthening bull market. Share and stock prices accordingly increased considerably. The market for fixed property also improved significantly in the second half of 1993. The success that was achieved with the reduction of the inflation rate, in conjunction with a decline in overseas interest rates and continued net foreign purchases of domestic loan stock, led to a sharp decrease in long-term interest rates and yields during the course of 1993.

The revival of economic activity and the attainment of greater financial stability in the economy were restricted by a continued large net outflow of capital not related to reserves. Owing largely to political uncertainty, the ongoing internal unrest, pressure on the exchange rate of the rand, a relatively strong US dollar internationally and the relatively high cost of foreign borrowing on international capital markets, a net outflow of capital of no less than R16,3 billion was registered in 1993. Over 90 per cent of this net capital outflow was in the form of short-term capital, i.e. capital with an original maturity of one year or less, and errors and unrecorded transactions.

These large capital outflows caused the net gold and other foreign reserves of the country to decrease by R10,3 billion in 1993. In order to support the level of the foreign reserves and the exchange rate of the rand, the monetary authorities made drawings of R7,1 billion on foreign credit facilities (including an IMF loan) in 1993. As a result of these drawings, the gross gold and other foreign reserves of South Africa declined only marginally. In the first two months of 1994 this position seems to have improved considerably, as reflected in an increase of R1,1 billion in the net foreign reserves of the Reserve Bank, even though a repayment of R1,7 billion was made by South African debtors on foreign debt in terms of the final arrangements with foreign creditor banks.

Despite borrowing by the authorities, the nominal effective exchange rate of the rand declined by 8,7 per cent in 1993, compared with 4,4 per cent in 1992. This sharp drop in the nominal effective exchange rate of the rand exceeded the inflation differential between South Africa and its main trading partners; the real effective exchange rate of the rand therefore also declined by 4,9 per cent in 1993.

The government exercised considerable financial restraint in 1993 and for the second consecutive year real government consumption expenditure increased by less than ½ per cent, compared with an average annual rate of 4 per cent in the 1980s. The Exchequer deficit before borrowing and debt repayment as a ratio of gross domestic product accordingly amounted to 7,3 per cent in the first nine months of fiscal 1993/94, i.e. fairly close to the level of the deficit budgeted for the year as a whole. Although this is a considerable improvement in comparison with the preceding year, the present level of the government deficit is still clearly unsustainable in the long run and, if maintained, will lead to a sharp rise in government debt.

Efforts by the Central Government and parastatal organisations to curtail increases in current expenditure caused the total employment by public authorities to decrease sharply in 1993. Private-sector employment also decreased in the first quarter of 1993, but there are indications that retrenchments may have bottomed out in the second half of 1993. The sharp reductions in employment in the formal sectors of the economy since the second quarter of 1989 have offset increases in employment in the preceding six years. This means that no net additional employment has been provided in the formal non-agricultural sectors of the economy over the past ten years.

Domestic economic developments

Domestic output

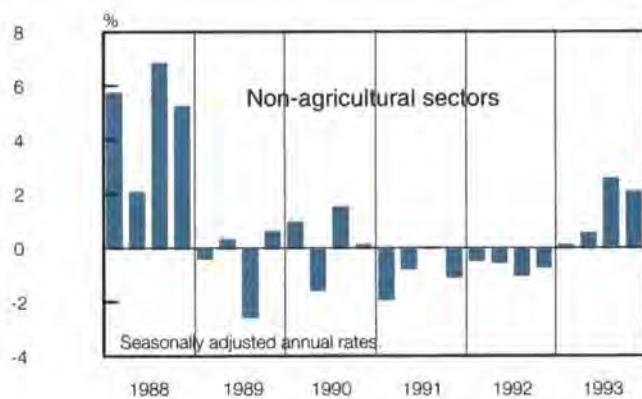
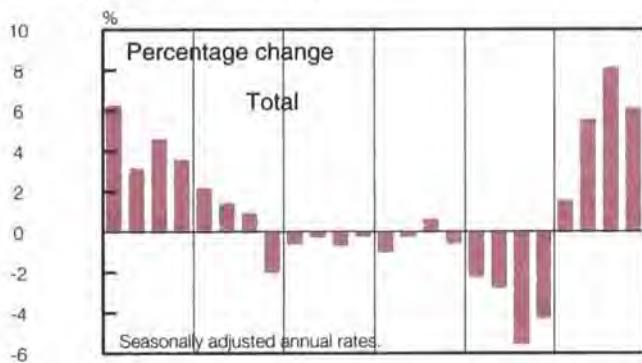
After having declined almost uninterruptedly from the first quarter of 1989 to the fourth quarter of 1992, the level of real economic activity bottomed out and recovered markedly during the course of 1993. The seasonally adjusted and annualised rate of increase in *real gross domestic product* accelerated from 1½ per cent in the first quarter of 1993 to 5½ and 8 per cent in the next two quarters and then amounted to a still high provisional level of 6 per cent in the fourth quarter. In 1993 as a whole the increase in real gross domestic product was approximately 1 per cent; this was the first year of positive growth in the 1990s.

The recovery in domestic output during 1993 was to a large extent the result of favourable weather conditions which led to a rise of 17½ per cent in real *agricultural output*. Maize production in particular trebled from 3 million tons in 1992 to about 9 million tons in 1993. Wheat production also rose substantially over the same period, viz. from 1.3 to 1.9 million tons. Agricultural output did not only make an important direct contribution

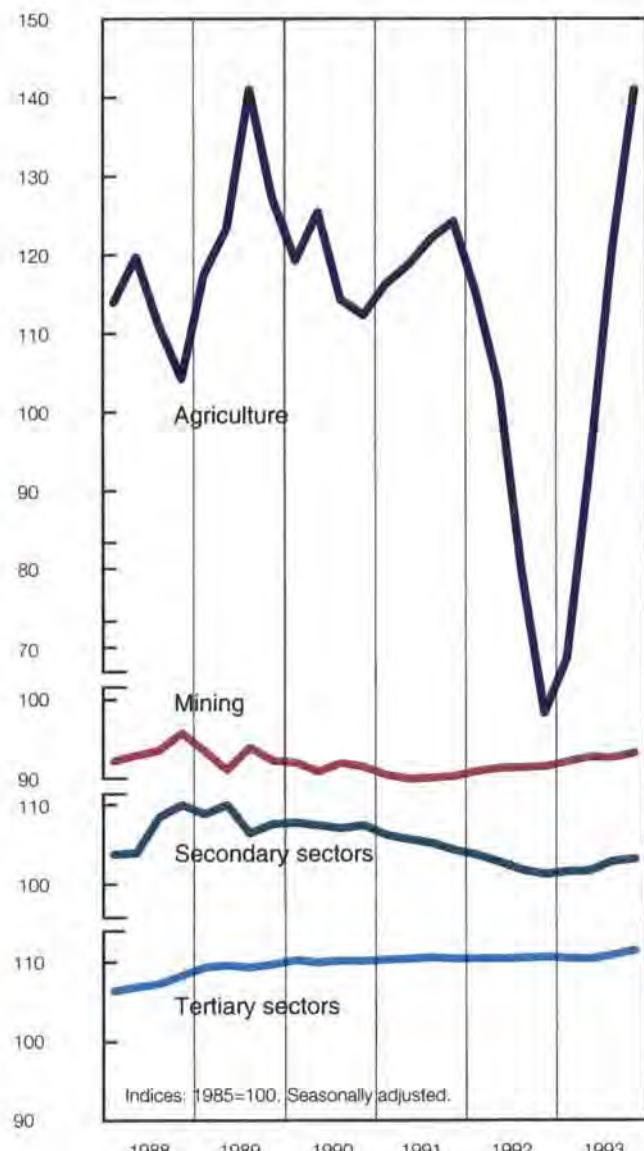
to economic recovery, but through backward and forward linkages also raised domestic production indirectly.

If agricultural production is excluded, the total real output of the *non-agricultural sectors* rose by ½ per cent in 1993; in the preceding year the output of these sectors had contracted by ½ per cent. Moreover, production in the non-agricultural sectors already began to pick up from the beginning of 1993. Fairly marginal annualised rates of increase of ½ per cent in the first two quarters of 1993 were followed by much higher levels of 2½ and 2 per cent in the last two quarters of the year. The economic recovery in the second half of 1993 was

Real gross domestic product



Components of real gross domestic product



also broadly based and embraced a number of economic sectors. In fact, in the fourth quarter of 1993 all the main economic sectors recorded positive growth rates.

Real output by the *mining industry*, which had increased at an average annualised rate of 2½ per cent in the first two quarters of 1993 and had declined by ½ per cent in the third quarter, rose again at an annualised rate of 2½ per cent in the fourth quarter. The real production of the mining industry increased by 1½ per cent in the calendar year 1993, compared with an increase of 1 per cent in 1992. Only the real output of diamond mining contracted in 1993, namely by 5½ per cent; in 1992 diamond production had advanced by no less than 17 per cent. This reversal was mainly due to deliberate cutbacks in production in some of the less cost-effective and older diamond mines in 1993.

Although showing a somewhat erratic pattern, *manufacturing output* also increased in 1993. Real output in the manufacturing sector increased at an annualised rate of 1½ per cent in the first quarter, declined marginally in the second quarter and surged ahead by nearly 5 per cent in the third quarter; in the fourth quarter it edged up by less than ½ per cent. The increase in the average real value added by manufacturing in 1993 as a whole was virtually equal to that of the preceding year. The improvement in the real value added by the manufacturing sector reflected an increase in the output by almost all the sub-sectors and was probably related to the commencement of several major capital projects, the buoyancy in the agricultural sector, an increase in consumer and foreign demand for manufactured goods and the replenishment of inventories.

The quarterly real output of the sector *electricity, gas and water* rose strongly throughout 1993 at annualised rates varying between 5 and 7 per cent. In calendar 1993 a relatively high growth rate of 3½ per cent was recorded in this sector. In contrast to the other secondary sectors, the real value added by the *construction industry* moved up only marginally in the second half of 1993 and the level for the full calendar year was still below that of the preceding year.

The growth in the real value added by the *tertiary sector*, which had generally remained positive throughout the downturn in economic activity, turned negative in the first two quarters of 1993; it then rose sharply at an average rate of 2 per cent in the last two quarters of the year. The net result of these changes was that the real value added by the services sector in 1993 as a whole rose by about ½ per cent.

The strengthening of domestic demand was probably the main factor responsible for the revival of the tertiary sector. An increase in foreign trade and the handling of the sizeable agricultural crop also contributed to the sharp rise in the real value added by the sector providing transport, storage and communication services, while a steady rise in real personal disposable income and the

need to replace motor vehicles were instrumental in bringing about a relatively high growth rate in the commercial sector during the second half of 1993.

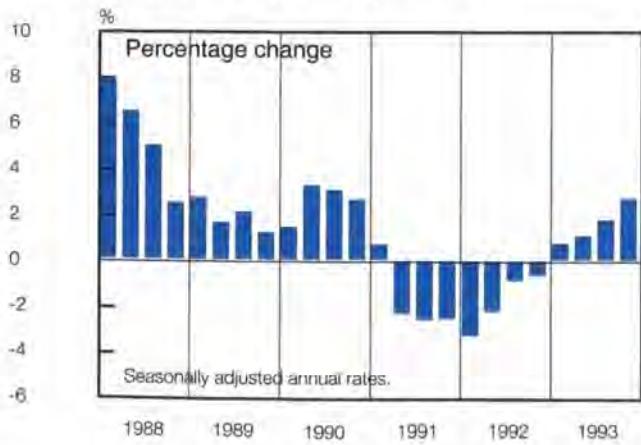
After having receded by more than 2 per cent in 1992, real gross national product rose throughout 1993 and for the year as a whole was 1½ per cent higher than in the preceding year. This increase in the *real gross national product* was caused by higher domestic output levels and a strengthening of South Africa's terms of trade, which more than offset an increase in real net factor payments to non-residents. If population growth is taken into consideration, the real gross national product per capita still declined by almost 1 per cent in 1993. This is also an improvement compared with the rates of decrease of 2 and 4½ per cent recorded in 1991 and 1992.

Domestic expenditure

Aggregate *real gross domestic expenditure*, which had fluctuated considerably in the recession of 1989 to 1993, increased sharply at a revised annualised rate of 12½ per cent in the third quarter of 1993 and a provisionally estimated 11½ per cent in the fourth quarter. For the calendar year 1993 aggregate real gross domestic expenditure rose by ½ per cent; in 1992 it had still declined by about 1 per cent. The moderate increase in domestic expenditure reflected an increase in real consumption expenditure combined with a moderate building-up of inventories, while real gross domestic fixed investment also began to rise in the second half of 1993.

Real private consumption expenditure started to increase in the first quarter of 1993 following decreases in seven consecutive quarters. The annualised rate of increase in real private consumption expenditure rose markedly from 1 per cent in the first quarter of 1993 to more than 2½ per cent in the fourth quarter. As a result

Real private consumption expenditure



of these increases, private consumption in 1993 as a whole rose by approximately $\frac{1}{2}$ per cent. This higher consumption benefited from:

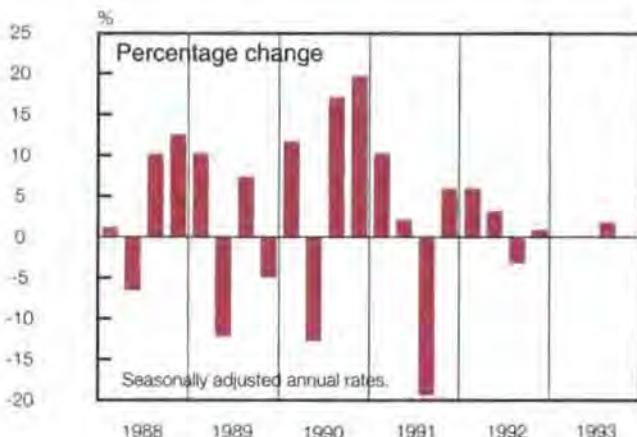
- an increase in real income from the property of households because of improved agricultural conditions;
- a rise in total real personal disposable income, which accelerated from an annualised rate of $1\frac{1}{2}$ per cent in the first two quarters of 1993 to 2 and $2\frac{1}{2}$ per cent in the last two quarters;
- a reduction in the banks' mortgage bond rates, which enhanced the discretionary spending options of households;
- an increase in consumer confidence related to the significant progress made in the negotiations towards a new political dispensation; and
- preliminary indications suggesting that retrenchments may have bottomed out in the second half of 1993.

As shown in the accompanying table, this revival in real private consumption expenditure at first occurred mainly in increased expenditure on non-durable goods. In the second half of 1993, however, it spread quickly to most of the other main categories of consumer goods and services.

For the second consecutive year *real consumption expenditure by general government* rose by less than $\frac{1}{2}$ per cent in 1993. This rate of growth can be compared with $2\frac{1}{2}$ per cent in 1990, 5 per cent in 1991 and an average annual rate of 4 per cent in the 1980s. The fiscal discipline was discernible in both expenditure on intermediate goods and services and in the remuneration of employees.

After having contracted for fourteen consecutive quarters until the second quarter of 1993, *real gross domestic fixed investment* rose at an annualised rate of $1\frac{1}{2}$ per cent in the third quarter and approximately $3\frac{1}{2}$ per cent in the fourth quarter. This acceleration in the growth of fixed investment could be attributed mainly to increases in real capital formation by the private sector and public authorities, which more than offset a moderate decrease in real capital expenditure by public corporations. The rise in capital expenditure by the

Real government consumption expenditure



private sector reflected higher outlays on machinery and equipment financed by way of leasing contracts by financial enterprises, the start of expenditure on major capital projects in the manufacturing sector and a replenishment of capital stock by the agricultural community.

In 1993 as a whole real fixed capital formation still decreased by 4 per cent, following decreases of $8\frac{1}{2}$ and 10 per cent recorded in 1991 and 1992. Although the rate of decline in capital formation slowed down considerably in 1993, the total fixed capital stock showed almost no growth for the first time since the Second World War and the real capital stock of sectors such as agriculture, mining, electricity, gas and water, construction and transport, storage and communication declined.

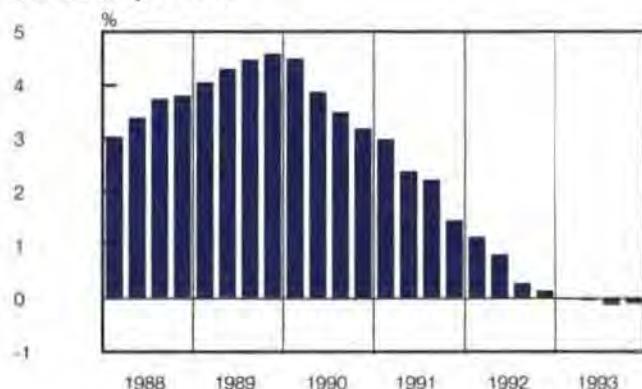
In accordance with the higher domestic demand, an accumulation of inventories was reported in both the third and fourth quarter of 1993. This followed a period of an almost uninterrupted drawing-down of total inventories

Real private consumption expenditure by main category

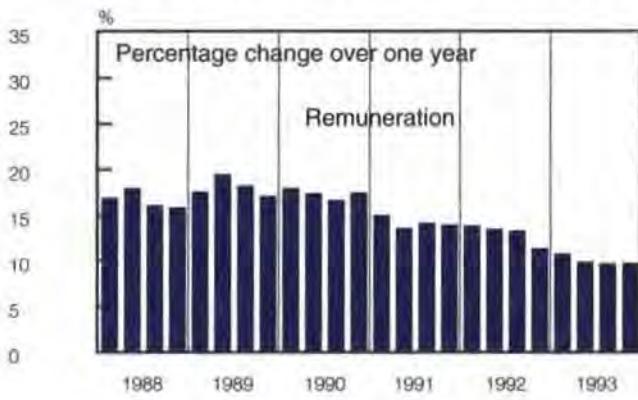
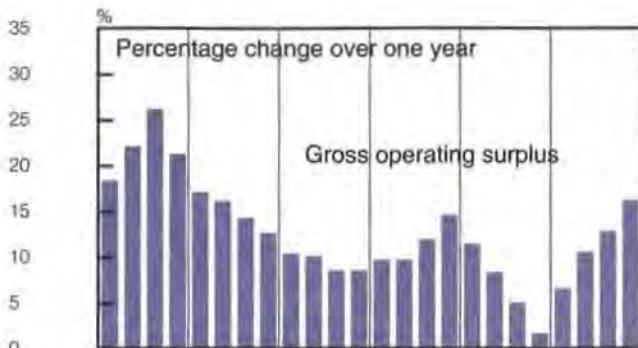
Quarterly percentage change at an annualised rate

	1993			
	1st qr	2nd qr	3rd qr	4th qr
Durable goods	$-\frac{1}{2}$	0	$1\frac{1}{2}$	$3\frac{1}{2}$
Semi-durable goods	$\frac{1}{2}$	1	$1\frac{1}{2}$	3
Non-durable goods	$1\frac{1}{2}$	2	$2\frac{1}{2}$	$2\frac{1}{2}$
Services	0	0	$\frac{1}{2}$	$\frac{1}{2}$
Total.....	1	1	2	$2\frac{1}{2}$
				$\frac{1}{2}$

Net fixed investment as percentage of gross domestic product



Gross operating surplus and labour remuneration



from the second half of 1989. In the calendar year 1993 real investment in inventories rose by R1.2 billion, against substantial decreases in the preceding three years. However, as a ratio of gross domestic product, industrial and commercial inventories continued to move downwards from 17 per cent in the first two quarters of 1993 to about 16½ per cent in the fourth quarter.

Factor income

The growth in *total nominal factor income* at market prices and over a period of twelve months, rose moderately from a low of 8 per cent in the fourth quarter of 1992 to 13½ per cent in the fourth quarter of 1993. The rate of increase in factor income therefore edged up from 10 per cent in 1992 to 11½ per cent in 1993. This moderate increase in factor income was recorded in a period of considerably lower inflation and was the net result of a sharp rise in the rate of increase in the gross operating surplus, which more than neutralised a slowdown in the rate of increase in remuneration of employees.

The percentage change over one year in the gross operating surplus advanced from an average of about 3½ per cent in the last half of 1992 to 14½ per cent in the corresponding period of 1993. For 1993 the gross operating surplus increased by 11½ per cent, which is considerably higher than the increase of 6½ per cent in 1992. This sharp increase was largely related to a sharp increase in the income of farmers. If the agricultural sector is excluded, the gross operating surplus nevertheless rose by 10½ per cent in 1993. Although most of the major sectors contributed to this increase, the gross operating surplus of the gold mines rose particularly sharply with the increase in the rand price of gold.

The rate of increase over four quarters in *nominal remuneration of employees* receded from 11½ per cent in the fourth quarter of 1992 to 9½ per cent in both the third

and fourth quarter of 1993. Over a full calendar year the rate of increase in total salaries and wages decreased from 13 per cent in 1992 to 10 per cent in 1993. This slower growth in the remuneration of employees was evident in all the major sectors of the economy.

Domestic saving

As a result of the sharp increase in domestic expenditure in the last half of 1993, the ratio of gross domestic saving to gross domestic product receded from 17½ per cent in the second quarter of 1993 to 16½ per cent in both the third and fourth quarter. At 16½ per cent for the calendar year 1993, the domestic savings ratio remained more or less at the level of the preceding year.

The lower savings ratio in the second half of 1993 was the result of a still relatively high level of dissaving by general government and a decrease in net saving by the private sector as a percentage of gross domestic product. Although the government remained a net dissaver, the level of government dissaving in the last half of 1993 was 21 per cent lower than in the last half of 1992. The net saving of the private sector also rose strongly over the same period owing to increases in the gross operating surpluses of incorporated business enterprises and a rise in income from property received by households.

Employment

Total employment in the formal *non-agricultural* sectors was severely influenced by the recession of 1989 to 1993, as well as by rationalisation programmes which led to labour shedding. Employment decreased by 5,9 per cent, or by about 350 000 people, from the first quarter of 1989 to the first quarter of 1993 (latest information made available by the Central Statistical Service). The total number of workers employed in the formal non-agricultural sectors of the economy at the end of the first quarter of 1993 was therefore more or less equal to the number employed at the end of the first quarter of 1983. In other words, no additional employment opportunities were provided in the formal non-agricultural sectors of the economy over the past ten years.

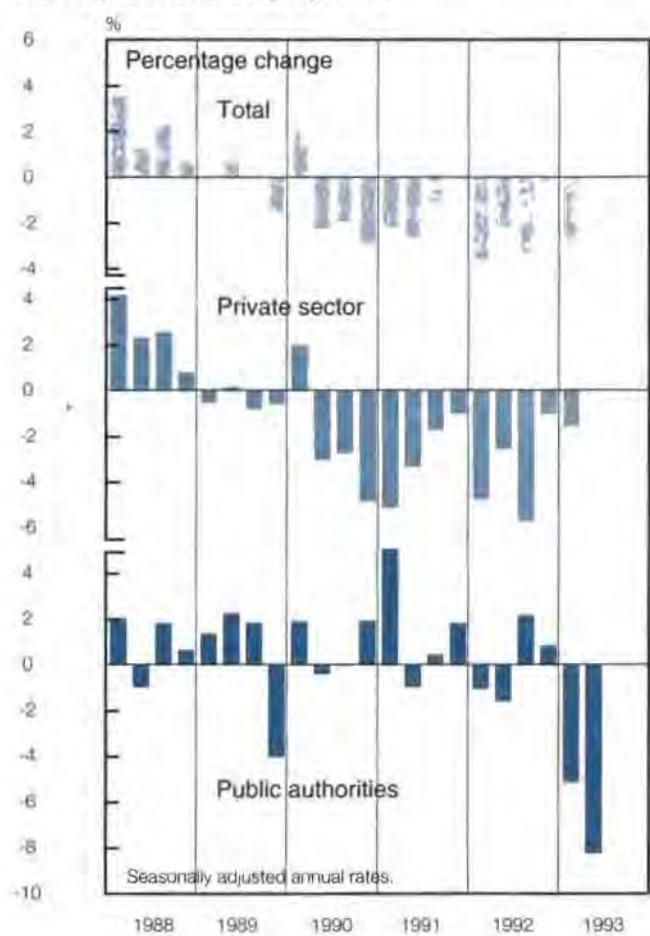
The decline in total employment was attributable to personnel reductions in the *private sector*. Total employment in the private sector started to decline in the third quarter of 1989 and, with the exception of the first quarter of 1990, declined in every subsequent quarter up to the first quarter of 1993. Moreover, the quarter-to-

quarter rate of decline accelerated sharply from a seasonally adjusted and annualised rate of 1,0 per cent in the fourth quarter of 1991 to 5,7 per cent in the third quarter of 1992; only then did it slow down to 1,0 and 1,6 per cent in the next two quarters. Information available for the second quarter of 1993 indicates a continued reduction in the work force of the private sector, despite increases in the employment by the motor trade, banks and the insurance industry.

Employment by *public authorities* rose, on balance, by 2,5 per cent from the first quarter of 1989 to the fourth quarter of 1992. During the first two quarters of 1993, however, efforts by the Central Government and parastatal organisations to curtail increases in current expenditure caused the total employment by public authorities to decline at seasonally adjusted and annualised rates of 5,1 and 8,2 per cent. The level of total employment by public authorities in the second quarter of 1993 was accordingly 0,7 per cent lower than in the first quarter of 1989. Subsequently, the level of employment by public authorities remained unchanged in the third quarter, owing largely to a relatively large increase in the employment of the independent states.

The severe effect of the cyclical downswing on the labour market is also confirmed by a sharp increase in the number of *registered unemployed workers*. During the first ten months of 1993 the average level of registered unemployed persons was 12,5 per cent higher than in the corresponding period of 1992. In October 1993 the seasonally adjusted total number of registered unemployed amounted to 319 000 persons.

Non-agricultural employment



Labour costs and productivity

The rate of increase in the average *nominal remuneration per worker* in the non-agricultural sectors of the economy declined from a peak of 18,3 per cent in 1989 to 15,2 per cent in 1992. The rate of increase over four quarters in average salaries and wages per worker receded even more sharply from 19,4 per cent in the second quarter of 1990 to only 12,2 per cent in the first quarter of 1993. Despite this decline, the rate of increase in nominal labour remuneration per worker was still relatively high, taking inflation rates and the over-supply of workers into consideration. These high rates of increase could mainly be ascribed to the retrenchment of a large number of unskilled workers, causing a decline in the ratio of unskilled to skilled workers in formal-sector employment and thus higher average salaries and wages per worker.

At first the slower growth in total labour remuneration per worker was mainly due to a decrease in the growth of average salaries and wages per worker in the private sector: the growth over four quarters in nominal remuneration per worker in the private sector fell from 18,5 per cent in the first quarter of 1990 to 12,7 per cent in the first quarter of 1993 and, according to available information, probably even further in the second quarter. However, the rate of increase in the nominal remuneration per worker employed by public authorities

also dropped substantially from 22,5 per cent in the first quarter of 1991 to the low levels of 7,0 per cent in the second quarter of 1993 and 7,6 per cent in the third quarter.

The *real remuneration per worker* in the non-agricultural sectors of the economy (as deflated by the price deflator for the non-agricultural gross domestic product) continued to rise throughout the recession until the first quarter of 1993. However, in accordance with the slower growth in nominal remuneration, the growth rate over four quarters in the real remuneration per worker slowed down significantly from 3,5 per cent in the second quarter of 1992 to 1,3 per cent in the first quarter of 1993.

The retrenchment of a sizeable number of workers and a decrease in the number of man-days lost owing to strikes and work stoppages were responsible for an acceleration in the rate of increase in non-agricultural *labour productivity* from 0,5 per cent in 1990 to 1,4 per cent in both 1991 and 1992. The rate of increase over four quarters in the real production per worker in the non-

agricultural sectors also rose from 0,5 per cent in the fourth quarter of 1991 to 1,8 per cent in the fourth quarter of 1992 and 1,7 per cent in the first quarter of 1993.

The lower rates of increase in the nominal remuneration of workers and the rise in labour productivity brought the rate of increase in nominal *unit labour costs* down from 17,2 per cent in 1989 to 13,6 per cent in 1992. The year-on-year rate of increase in nominal unit labour costs declined even more significantly from a peak of 19,8 per cent in the fourth quarter of 1989 to only 10,3 per cent in the first quarter of 1993 – the lowest rate of increase in nominal unit labour costs since 1985. Despite these lower increases in nominal costs, the change in real unit labour costs remained positive until the end of 1992. However, in the first quarter of 1993 real unit labour costs (measured over twelve months) declined by 0,4 per cent.

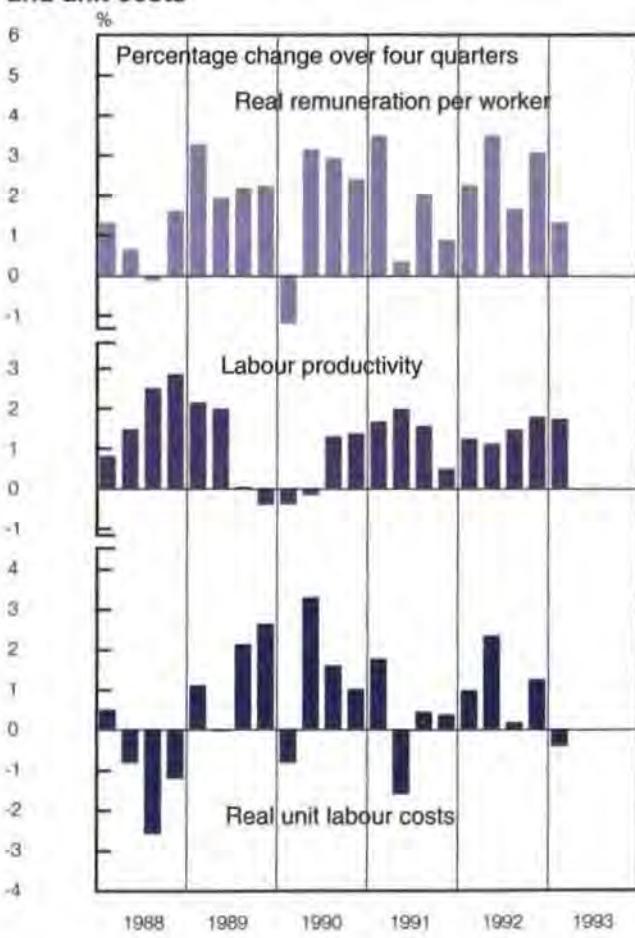
Prices

The lower rates of increase in unit labour costs, the conservative monetary policy pursued by the authorities, the relative stability in the external value of the rand, the lack of demand pressures and improved agricultural conditions combined to bear inflationary pressures down. This caused the rate of increase of the consumer price index to slow down to single-digit levels in 1993, while the rate of increase in the production price index remained relatively low.

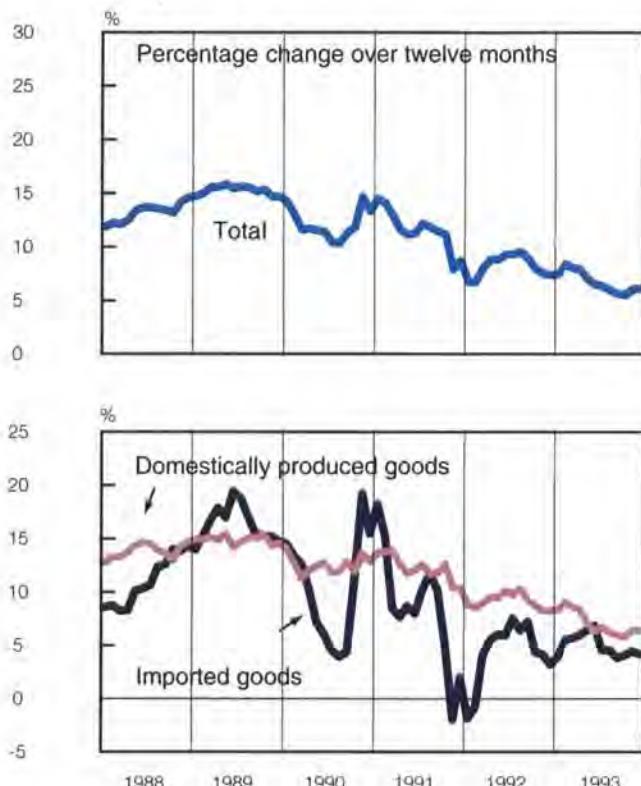
The rate of increase in the all-goods *production price index* declined substantially from its most recent high point of 15,2 per cent in 1989 to only 6,6 per cent in 1993 – its lowest level since 1971. The rate of increase over twelve months in the production price index had already reached a single-digit level of 9,7 per cent in November 1991 and remained under 10 per cent in the ensuing period. In October 1993 this rate of increase reached the low level of 5,4 per cent before rising again somewhat to 6,0 per cent in November and December 1993.

Although the *prices of imported goods* rose at somewhat higher rates in 1993 than in 1992 owing to the sharper depreciation of the rand, these price increases have dampened the inflation in the overall production price index virtually uninterruptedly since the beginning of 1991. The rate of increase over periods of twelve months in the prices of imported goods dropped from 19,1 per cent in November 1990 to negative rates towards the end of 1991 and the beginning of 1992; it then accelerated to 7,5 per cent in July 1992 and fluctuated around this level in the ensuing period. The rate of increase over periods of twelve months in the prices of imported goods receded again recently from 6,8 per cent in June 1993 to 4,1 per cent in December. For the calendar year 1993 the rate of increase in the prices of imported goods amounted to 5,0 per cent, as opposed to 4,2 per cent in 1992 and 16,3 per cent in 1989.

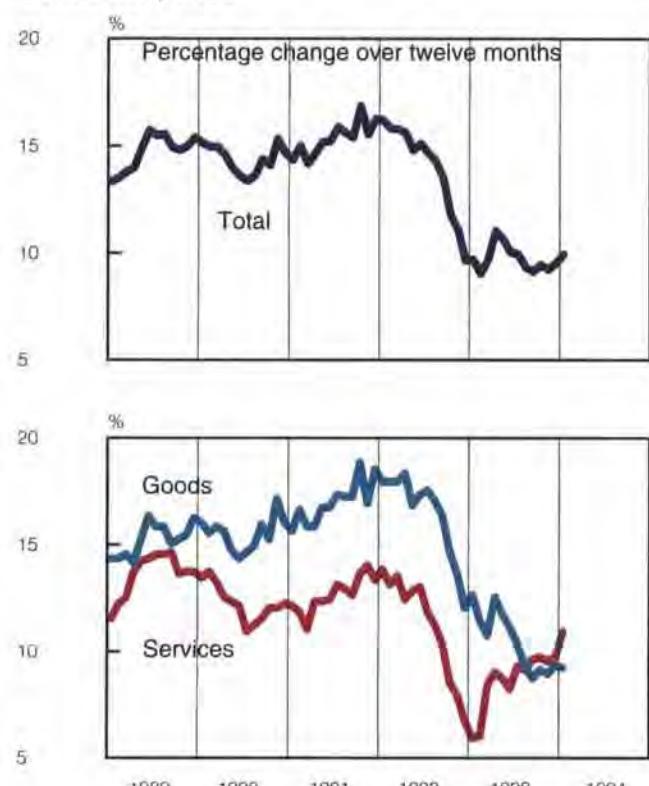
Non-agricultural labour productivity, remuneration and unit costs



Production prices



Consumer prices



After having reached a peak of 13,9 per cent in March 1991, the rate of increase over periods of twelve months in the *prices of domestically produced goods* declined significantly in the subsequent months. During the course of 1993 this rate of increase in the prices of domestically produced goods dropped yet further from 9,0 per cent in February to 5,7 per cent in October, before rising again somewhat to 6,3 per cent in December. The average rate of increase in the prices of domestically produced goods therefore slowed down from 14,9 per cent in 1989 to 7,0 per cent in 1993.

The rate of increase over periods of twelve months in the overall *consumer price index* only reached its most recent high point towards the end of 1991. In contrast with the production price index, this rate of increase in the consumer price index declined only moderately at first from 16,8 per cent in October 1991 to 15,1 per cent in June 1992; only then did it drop rapidly to 9,6 per cent in December 1992 and even further to 9,0 per cent in February 1993. This rate of increase then rose again to 11,0 per cent in April, before fluctuating downwards to 9,1 per cent in September 1993; it then accelerated somewhat to 9,9 per cent in January 1994.

For the first year since 1973, a single-digit rate of inflation in the consumer price index was therefore

recorded in 1993, viz. 9,7 per cent. From April 1993 (the month during which value-added and other indirect taxes were increased) until January 1994 the seasonally adjusted and annualised rate of increase in the consumer price index came to only 7,4 per cent.

Slower increases in the prices of both consumer goods and services contributed to the lower rate of inflation in consumer prices during 1993. However, the rate of increase in the prices of consumer services over a period of twelve months recently showed a distinct upward movement from a low of 5,9 per cent in January 1993 to 10,9 per cent in January 1994. In contrast with this development, the rate of increase over a period of twelve months in the prices of consumer goods decreased on balance from 12,5 per cent in April 1993 to 9,2 per cent in January 1994.

Foreign trade and payments

Current account

Notwithstanding the recovery in economic activity during the course of 1993, the *surplus on the current account* of the balance of payments remained relatively large. Taken at a seasonally adjusted and annualised rate, the current account balance contracted only moderately from an average quarterly level of R6,2 billion in the first half of 1993 to R6,0 billion in the third quarter and R5,3 billion in the fourth quarter. For 1993 as a whole the surplus on the current account amounted to R5,9 billion – significantly more than the surplus of R3,9 billion in 1992. As a percentage of gross domestic product, the surplus on the current account rose from 1,2 per cent in 1992 to 1,6 per cent in 1993.

The only slight downward movement in the surplus on the current account during 1993 took place despite a sharp rise in the value of merchandise imports and in net service and transfer payments to non-residents. This relatively strong current account performance was the combined result of a substantial rise in the value of merchandise exports and net gold exports.

The value of *merchandise exports* (seasonally adjusted and annualised) rose from R48,6 billion in the first quarter of 1993 to no less than R63,6 billion in the fourth quarter. For 1993 as a whole the total value of merchandise exports increased by 14½ per cent, against 9½ per cent in the preceding year. The sharp rise in merchandise exports in 1993 was to a large extent related to higher export prices, which rose by 8 per cent because of the depreciation of the rand. International commodity prices were generally depressed and only started to edge upwards slightly towards the end of the year.

The volume of merchandise exports also performed exceptionally well in 1993 and rose by 6 per cent, thereby exceeding the growth in world trade of 3 per cent by a considerable margin. In particular, the exports of manufactured products rose sharply. As a percentage of

Balance of payments: Trade account



total merchandise exports, manufactured products have now increased their share consistently from 15,7 per cent in 1989 to 23,9 per cent in 1993 – an indication that the level of the exchange rate of the rand still allows South African manufacturers to compete successfully in international markets. The continued strong performance of manufactured exports is probably also a reflection of

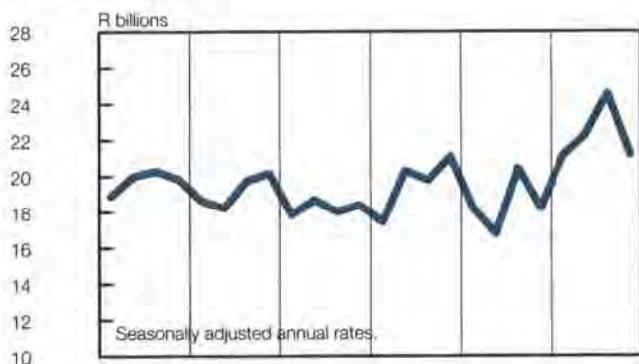
Balance of payments on current account

Seasonally adjusted annual rates

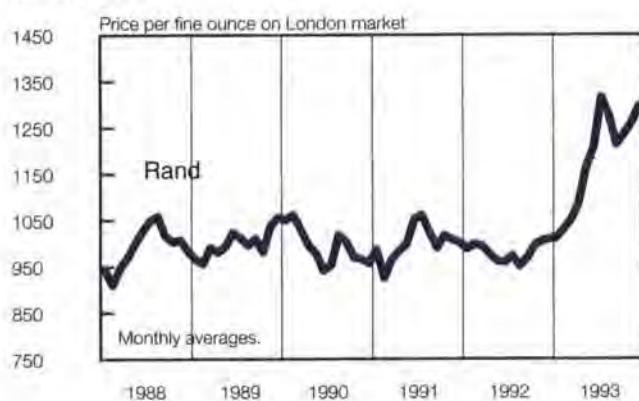
R billions

	1992		1993			
	Year	1st qr	2nd qr	3rd qr	4th qr	Year
Merchandise exports.....	49,0	48,6	56,2	55,8	63,6	56,1
Net gold exports	18,4	21,0	22,2	24,5	21,2	22,2
Merchandise imports.....	-51,9	-56,1	-55,8	-59,3	-64,0	-58,8
Net service and transfer payments	-11,6	-11,7	-12,0	-15,0	-15,5	-13,6
Balance on current account	3,9	1,8	10,6	6,0	5,3	5,9

Net gold exports



Gold price



the low level of domestic demand, which is prompting manufacturers to seek other outlets for their goods.

After having risen persistently from a seasonally adjusted and annualised value of R18.2 billion in the fourth quarter of 1992 to an exceptionally high R24.5 billion in the third quarter of 1993, *net gold exports* declined to a still high level of R21.2 billion in the fourth quarter. The value of net gold exports therefore increased by 21 per cent in 1993; in the four-year period from 1988 to 1992 the value of net gold exports had declined at an average annual rate of approximately 2 per cent. A rise in the rand price of gold was mainly responsible for the increase in 1993, while the average dollar price of gold was, at US\$360 per fine ounce, only slightly higher than in 1992. The volume of net gold exports rose by about 4 per cent in 1993, mainly reflecting an increase in the grade of ore milled.

As could be expected in view of the substantial rise in domestic expenditure in the second half of 1993, the value of *merchandise imports* (seasonally adjusted and annualised) increased from R55.8 billion in the second quarter of 1993 to R59.3 billion in the third quarter and R64.0 billion in the fourth quarter. For the year as a whole

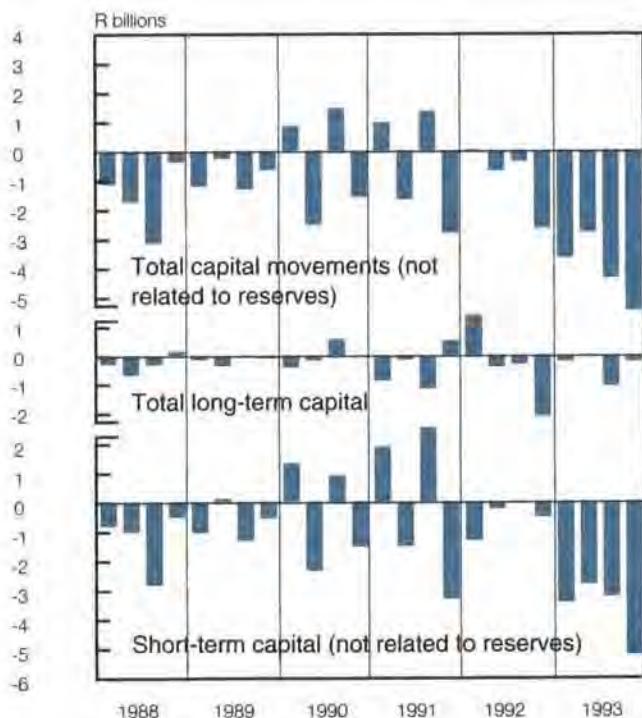
the value of merchandise imports rose by 13½ per cent, consisting of increases of 9 per cent in the prices and 4 per cent in the volume of imported goods. Pronounced increases were registered in the categories machinery and electrical equipment and transport equipment, which offset a sharp decrease in the imports of agricultural products.

Net service and transfer payments to non-residents increased gradually from a seasonally adjusted and annualised value of R11.7 billion in the first quarter of 1993 to R15.0 billion in the third quarter and even further to R15.5 billion in the fourth quarter. The increasingly larger deficit on the services account in 1993 was due to an increase in service payments to non-residents, which exceeded the increase in the value of services rendered to them. The sharp rise in service payments was, in turn, largely the result of higher tourist and travelling expenses by South Africans, higher payments for freight and merchandise insurance and a significant increase in interest payments to non-residents, reflecting large foreign investments through the financial-rand system in South African securities.

Capital movements

The alarmingly large total *net outflow of capital* not related to reserves (as redefined to include the foreign short-term liabilities of the private monetary sector), which had amounted to R10.8 billion in the first nine months of 1993, continued in the fourth quarter. Owing largely to

Net capital movements



Net capital movements (not related to reserves)*

R millions

	1992		1993			Year
	Year	1st qr	2nd qr	3rd qr	4th qr	
Long-term capital						
Public authorities.....	2 092	-119	-597	-738	-619	-2 073
Public corporations.....	1 050	-526	-132	-140	-876	-1 674
Private sector	-4 653	441	750	-224	1 280	2 247
Total long-term capital	-1 511	-204	21	-1 102	-215	-1 500
Short-term capital not related to reserves						
Monetary sector.....	3 306	-1 799	-1 033	652	-629	-2 809
Other, including unrecorded transactions.....	-5 468	-1 652	-1 787	-3 900	-4 625	-11 964
Total capital movements, excluding liabilities related to reserves.....	-3 673	-3 655	-2 799	-4 350	-5 469	-16 273

* Redefined to include the foreign short-term liabilities of the private monetary sector.

political and social uncertainty, the ongoing internal unrest, pressure on the exchange rate of the rand combined with a relatively strong US dollar, and the practice of some foreign banks to reduce their outstanding claims on non-residents at the end of their financial years, a net outflow of capital of no less than R5,5 billion was recorded in the fourth quarter of 1993; this level was somewhat higher than the net outflow of R4,4 billion in the third quarter of 1993.

As in the previous quarters, the continued large net outflow of capital in the fourth quarter of 1993 again occurred mainly in *short-term capital*, including errors and unrecorded transactions. The net outflow of short-term capital not related to reserves increased from R3,2 billion in the third quarter of 1993 to R5,3 billion in the fourth quarter. The net outflow of *long-term capital*, on the other hand, contracted from R1,1 billion to R0,2 billion over the same period.

For the calendar year 1993 as a whole a net outflow of R16,3 billion was registered, which was substantially higher than the net outflow of R3,7 billion in 1992; the cumulative net outflow of capital since 1985 now adds up to R49 billion. Over 90 per cent of the net capital outflow in 1993 was in the form of short-term capital, i.e. capital with an original maturity of one year or less. A large part of this short-term capital outflow was due to a decline in the financial rand balances with banks because of net purchases of securities by non-residents.

The net outflow of long-term capital of R1,5 billion consisted largely of repayments on foreign loans by *public authorities* and *public corporations*. Owing to the relatively high cost of foreign borrowing vis-à-vis domestic borrowing, these institutions were reluctant to

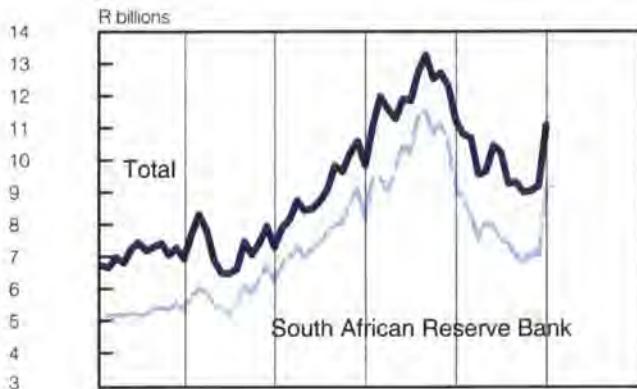
roll over debt falling due to non-residents. No less than R1,6 billion on bearer bonds and notes and R1,8 billion on loans guaranteed by foreign governments were therefore redeemed in 1993. These institutions and the *private sector* also made net repayments of R0,9 billion on debt converted to medium- and long-term loans outside the standstill net, while the final three instalments to foreign creditors in terms of the Third Interim Debt Arrangements came to R2,4 billion in 1993.

Although a net inflow of long-term capital to the private sector of R2,2 billion was recorded in South Africa in 1993, this included net purchases of R4,2 billion by non-residents of securities listed on the Johannesburg Stock Exchange; these purchases do not, of course, represent a net gain of foreign reserves to the country because they were offset by corresponding outflows in other categories of the capital account (for example in the short-term foreign liabilities of monetary institutions), in view of the fact that these transactions had to be concluded through the financial-rand mechanism.

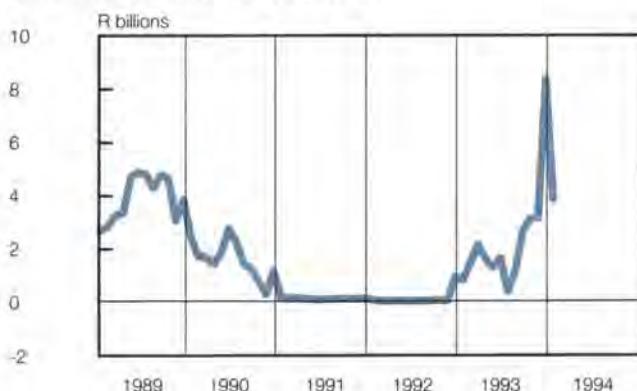
Foreign reserves

The net result of the large outflow of capital not related to reserves and the slightly smaller surplus on the current account of the balance of payments was a decrease of R4,3 billion in South Africa's *net gold and other foreign reserves* in the fourth quarter of 1993. The country's net foreign reserves therefore declined by R10,3 billion in the calendar year 1993; a significant turn-about from the increase of R0,3 billion recorded in 1992. In the first two months of 1994, however, a sharp reversal in this aggregate took place and the net foreign reserves of the Reserve Bank rose by R1,1 billion.

Gross gold and other foreign reserves



Liabilities related to reserves



The relatively low level of the gross foreign reserves caused the authorities to make considerable drawings on their short-term foreign credit facilities. The Reserve Bank's outstanding short-term *foreign liabilities related to reserves* therefore gradually increased from zero in November 1992 to R2,6 billion at the end of September 1993 and to R5,3 billion at the end of December 1993. In the first two months of 1994 these liabilities of the Bank decreased again to R3,9 billion at the end of February. The Central Government also provided additional assistance in maintaining adequate foreign reserve levels by drawing R2,8 billion on the International Monetary Fund in December 1993. This loan is repayable in eight equal quarterly instalments starting in the first quarter of 1997.

As a result of the drawings on these loan facilities, the *gross gold and other foreign reserves* of South Africa declined only marginally from R11,2 billion at the end of 1992 to R11,1 billion at the end of 1993. However, the gold reserves of the country amounted to only 4,8 million fine ounces at the end of December 1993, which was substantially lower than the level of 6,6 million fine ounces

at the end of December 1992; this of course also implies that the foreign exchange holdings of the country increased over this period. In the first two months of 1994 the Reserve Bank's gross gold and other foreign reserves declined marginally by R292 million to R8,8 billion at the end of February 1994.

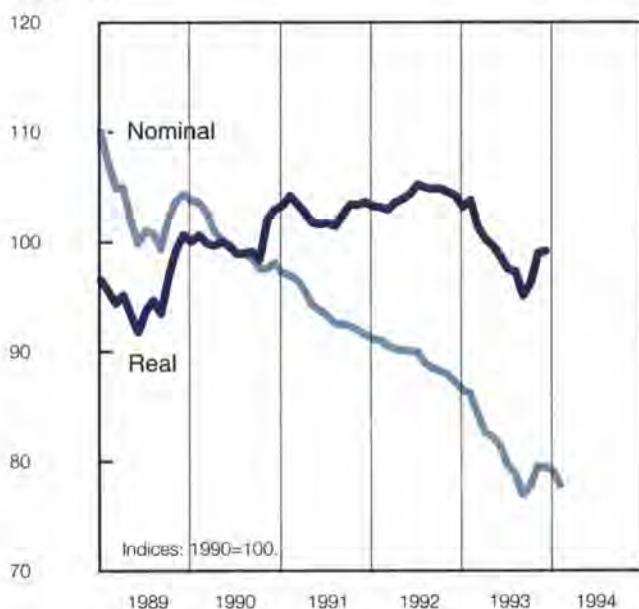
Exchange rates

The *nominal effective exchange rate* of the rand declined by 8,7 per cent in 1993, compared with 4,4 per cent in 1992. The further decrease in the average weighted exchange rate of the rand was the result of a depreciation of the rand against all the main currencies, except the Italian lira. In particular, the rand depreciated substantially against the Japanese yen in 1993 on account of the relative strength of this currency in the international markets. In the first two months of 1994 the rand continued to depreciate against the major currencies, and the nominal effective exchange rate therefore declined further by 3,2 per cent.

The sharp decline in the nominal effective exchange rate of the rand during 1993 exceeded the difference in the inflation rates between South Africa and its main trading partners; the *real effective exchange rate* of the rand therefore declined by 4,9 per cent in 1993.

Despite sharp fluctuations at times in the exchange rate of the *financial rand* in reaction to a variety of political and economic-related incidents in 1993, the exchange rate of the financial rand appreciated, on balance, from R4,860 per dollar at the end of December 1992 to

Nominal and real effective exchange rates of the rand



Changes in exchange rates of the rand

%

	31 Dec '92 to 18 Oct '93	18 Oct '93 to 31 Dec '93	31 Dec '92 to 31 Dec '93	31 Dec '93 to 28 Feb '94
Weighted average	-9,2	0,6	-8,7	-3,2
US dollar	-8,4	-1,9	-10,1	-2,1
British pound	-7,4	-0,3	-7,7	-2,6
German mark ...	-7,8	4,8	-3,4	-3,4
Japanese yen ...	-21,3	2,4	-19,4	-8,5
Netherlands guilder	-7,6	4,2	-3,8	-3,0
Italian lira	-1,4	5,7	4,2	-3,5

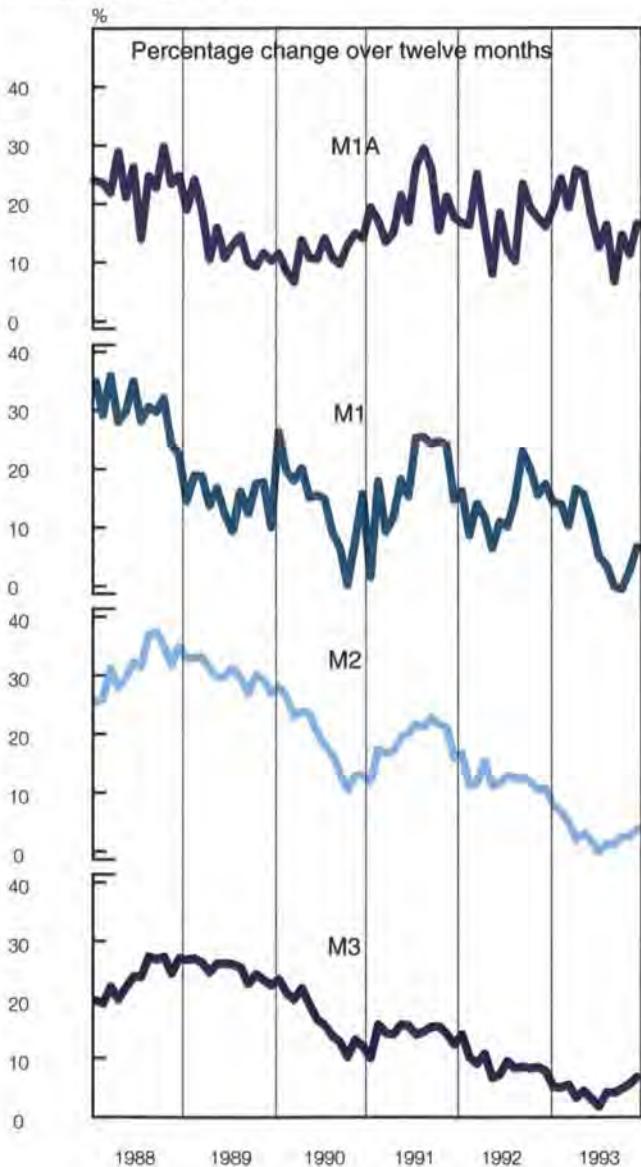
R4,296 per dollar at the end of 1993, or by just more than 13 per cent. The financial rand discount narrowed over this period from 37,2 per cent to 20,9 per cent. Concern regarding problems experienced with the constitutional negotiating process caused the exchange rate of the financial rand to depreciate to R4,726 per dollar on 28 February 1994. The financial-rand discount also widened to 26,5 per cent over this period.

Financial markets

Money supply

Growth in the monetary aggregates remained subdued during the greater part of 1993. The rates of increase in these aggregates generally reached very low levels during the first half of 1993, but then accelerated somewhat towards the end of the year. The twelve-month growth rate in the broadly defined money supply (M3) decreased from an already low 8,0 per cent in December 1992 to only 1,9 per cent in July 1993; in the subsequent six months it rose moderately to 7,0 per cent in December and then further to an estimated 9,6 per cent in January 1994.

Monetary aggregates



Change in monetary aggregates

R millions

	Coin and banknotes in circulation	Cheque and trans- mission deposits	M1A	Other demand deposits	M1	Other short and medium- term deposits	M2	Long- term deposits	M3
December 1992	9 535	30 191	39 726	31 845	71 571	100 642	172 213	25 007	197 220
December 1993	10 482	35 850	46 332	30 066	76 398	102 549	178 947	32 031	210 978
Change	947	5 659	6 606	-1 779	4 827	1 907	6 734	7 024	13 758
Percentage change over 12 months	9,9	18,7	16,6	-5,6	6,7	1,9	3,9	28,1	7,0
Change as percentage of total change in M3	6,9	41,1	-	-12,9	-	13,9	-	51,0	100,0

The relatively slow growth in M3 during a large part of 1993 could mainly be ascribed to the low level of domestic economic activity, a decline in the rate of inflation, the relatively restrictive monetary policy stance and disintermediation practices owing to the large margins between banks' deposit and lending rates. As discussed in some detail in the *Quarterly Bulletin* of December 1993, the growth in the measured money supply was restrained further by some technical matters, such as over-funding of the Exchequer deficit at the beginning of the fiscal year, increased utilisation of flexible mortgage facilities, and regulatory changes to the liquid asset and cash reserve requirements of the banks.

The rates of increase over periods of twelve months in most of the narrower monetary aggregates also declined in the beginning of 1993, but then accelerated somewhat in the second half of the year. The rate of increase in M2 namely receded from 10,8 per cent in December 1992 to 0,1 per cent in July 1993 before rising again to 3,9 per cent in December, while the rate of increase in M1 came down from 17,5 per cent in December 1992 to -0,5 per cent in October 1993 before rising to 6,7 per cent in December. In contrast with these developments, the twelve-month growth rate in M1A initially accelerated from 16,2 per cent in December 1992 to 25,9 per cent in April 1993; it then slowed down to 6,9 per cent in September, but rose again to 16,6 per cent in December.

Shifts between different categories of deposits were mainly responsible for the larger fluctuations in the growth rates of the narrower monetary aggregates than in that of M3 during 1993. As shown in the accompanying table, pronounced shifts occurred from "other demand deposits" to cheque and transmission deposits; this was largely the result of the active marketing of these kinds of deposit and of the transfer of public corporations' call deposits with the Corporation for Public Deposits to cheque and transmission deposits with banks. In addition, a substantial increase was registered in long-term deposits because of "liquidity preference proper" considerations in

anticipation of expected reductions in deposit rates. In fact, the increase in long-term deposits accounted for more than half of the total increase in M3 in 1993.

The 1993 "guideline" year

The average level of the M3 money supply was equal to R207,5 billion in the fourth quarter of 1993; this was 5,6 per cent higher than the average level of M3 in the fourth quarter of 1992. The actual increase in M3, as measured for money supply guideline purposes, was therefore

Guidelines for growth in M3



somewhat below the lower limit of the guideline range of 6·9 per cent for the 1993 guideline year. As already indicated, the growth in M3 was very subdued during the first seven months of 1993 and the seasonally adjusted value of M3 fluctuated around the quarterly average value of M3 for the fourth quarter of 1992 (i.e. the base of the 1993 guideline year). Subsequently, the acceleration in the growth of M3 brought the money supply to within the guideline range from November 1993.

The income velocity of M3 increased from 1·71 in the fourth quarter of 1992 to 1·87 in the third quarter of 1993, or by about 9 per cent, because of the relatively low demand for money and disintermediation practices. The income velocity of M3 then receded somewhat in the fourth quarter in accordance with a marked acceleration of the growth in the demand for money during this quarter.

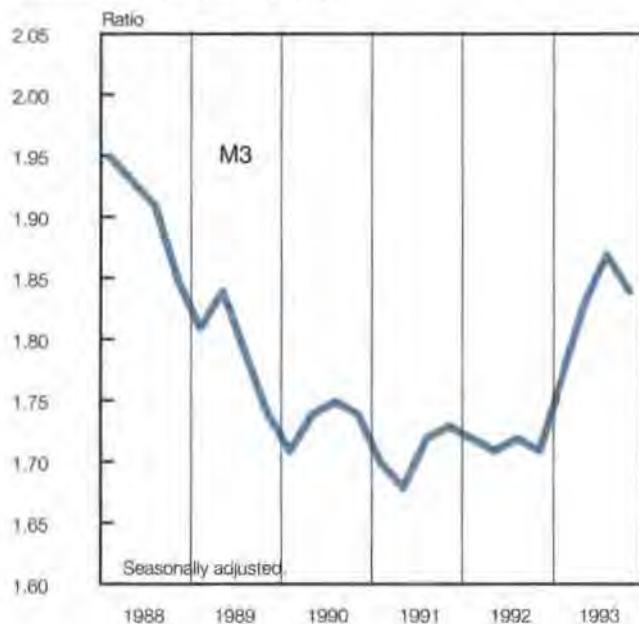
In a statistical or accounting sense the increase in the average quarterly value of R11·0 billion in M3 (seasonally adjusted) from the fourth quarter of 1992 to the fourth quarter of 1993 was more than fully explained by an increase of R19·3 billion in monetary institutions' average claims on the domestic private sector. The monetary sector's quarterly average net claims on the government sector contributed a further R1·5 billion to the increase in money supply. Contrary to these developments, the monetary sector's net foreign assets (including gold) and "net other assets" decreased by R8·4 billion and R1·4 billion, respectively, from the fourth quarter of 1992 to the fourth quarter of 1993.

Credit extension

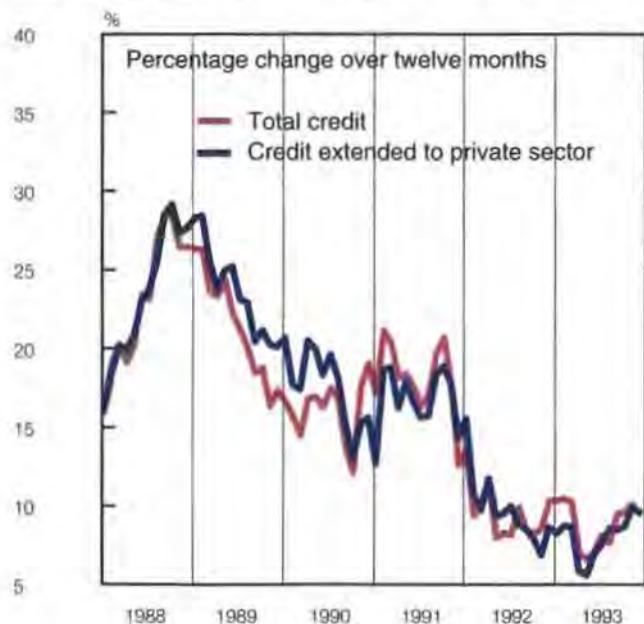
The twelve-month growth rate in *domestic credit extension to the non-bank private sector* by monetary institutions receded from an already low 8·7 per cent in December 1992 to 5·7 per cent in May 1993 before rising to 9·6 per cent in December. These growth rates were below the inflation rate (as measured by changes in the consumer price index) from the end of 1991, and were only positive in real terms in November 1993. The relatively low growth in the banking sector's claims on the private sector was mainly due to the low level of economic activity in South Africa, a weak demand for such credit in conditions of general uncertainty, the relatively high cost of borrowing, disintermediation practices and regulatory changes.

An analysis of the monetary institutions' claims on the domestic private sector by *type of credit* shows that the relatively low growth in credit extension during 1993 was mainly due to relatively low rates of increase in leasing finance and in so-called "other loans and advances". The growth rate over twelve months in *leasing finance* slowed down markedly from 9·6 per cent in December 1992 to only 2·2 per cent in June 1993; it then rose again to 6·8 per cent in December. The corresponding growth rate in "other loans and advances" also decreased further from only 0·9 per cent in December 1992 to negative levels throughout the first six months of 1993, but then increased to 8·1 per cent in December 1993. As shown in the accompanying table, "other loans and advances" nevertheless still accounted for nearly 30 per cent of the

Income velocity of money



Credit extended by monetary institutions



Change in credit extension to the private sector

R millions

	Investments and bills discounted	Instalment sales credit	Leasing finance	Mortgage advances	Other loans and advances	Total
December 1992.....	19 551	19 552	14 500	82 395	73 488	209 487
December 1993.....	14 575	23 062	15 493	97 014	79 452	229 596
Change.....	-4 976	3 510	993	14 618	5 964	20 109
Percentage change over 12 months ...	-25,5	18,0	6,8	17,7	8,1	9,6
Change as percentage of total change in credit extension	-24,7	17,4	4,9	72,7	29,7	100,0

total increase in credit extension to the domestic private sector in 1993. In addition, *investments and bills discounted* by banks actually declined sharply in nominal terms in 1993, making a negative contribution to bank credit extension.

In contrast with these developments, relatively high growth was registered in mortgage finance and instalment sales credit in 1993. Despite the actual decline in the nominal value of transactions in real estate, the demand for *mortgage finance* remained strong because of the advantages of the flexibility of some mortgage schemes and the banks' active promotion of this credit facility on account of the low capital requirements applicable to them. The rate of increase over twelve months in mortgage advances therefore even increased slightly from the high level of 17,3 per cent in December 1992 to 17,7 per cent in December 1993. The pronounced influence of mortgage advances on credit extension is clearly illustrated by the fact that the increase in these facilities accounted for about 73 per cent of the total increase in bank credit to the private sector.

The twelve-month growth rate in *instalment sales credit* accelerated sharply from only 1,5 per cent in December 1992 to 11,4 per cent in June 1993 and to 18,0 per cent in December 1993. This substantial increase in instalment sales credit was driven principally by rising car sales and "special-rate" vehicle finance packages introduced by banks.

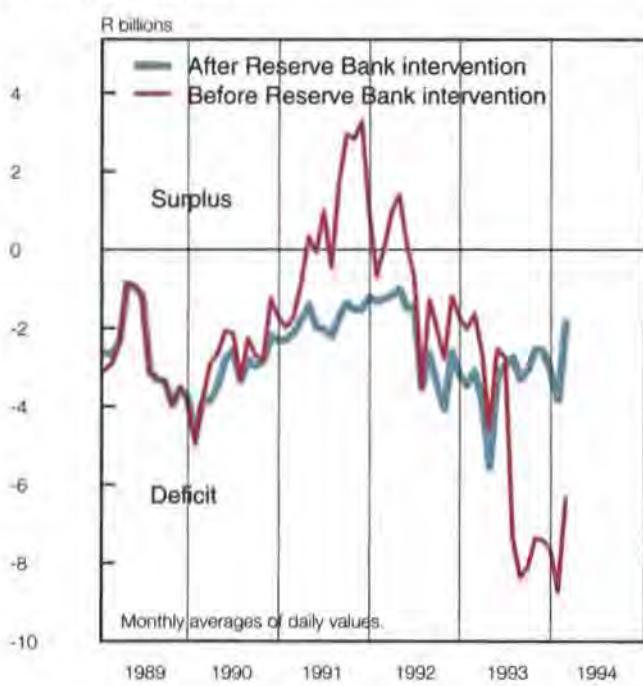
Money market conditions and Reserve Bank operations in the money market

Money market conditions remained relatively tight during the first nine months of 1993, eased somewhat in October and November and tightened again considerably in December 1993. These changes are clearly reflected in the amount of accommodation at the discount window at month-ends, which at first increased from R3,8 billion at the end of December 1992 to R4,8 billion at the end of September 1993; it then contracted again to R3,3 billion at the end of November before rising to R5,6 billion at the end of January 1994 and declining again sharply to R3,9 billion in February.

The relatively tight money market conditions during most of 1993 were mainly due to a decrease in the net foreign assets (including gold) of the Reserve Bank. An increase in notes in circulation and a decrease in the financing of the Land and Agricultural Bank by the monetary authorities, as well as an increase in government deposits with the Reserve Bank in certain months also supported these tighter conditions. In 1993 as a whole, however, government deposits with the Reserve Bank declined by R1,4 billion.

The Reserve Bank prevented money market conditions from becoming too tight by injecting additional liquidity into the domestic money market. The actions of

Money market deficit



the Reserve Bank included a lowering in May 1993 and again in August of the minimum cash reserve requirements that banks had to comply with, buy-back arrangements and the transferring of Treasury cash balances held on deposit with the Reserve Bank to the private banking institutions. This last-mentioned new procedure was introduced in June 1993 in anticipation of a proposed system of Tax and Loan Accounts to be implemented during 1994. At the end of December 1993 the government funds placed with the banks amounted to R5,2 billion; this was reduced to R2,0 billion at the end of February 1994.

In addition, the monetary authorities also neutralised short-term fluctuations in money market liquidity by adjusting the asset portfolio of the Corporation for Public Deposits. From the end of December 1992 to the end of December 1993 these adjustments, on balance, had an easing effect on money market conditions of about R1,6 billion.

Gross sales of government stock by the Reserve Bank came to R178 billion in 1993, compared with R112 billion in 1992. Net sales of these stocks by the Reserve Bank in 1993 amounted to R13,4 billion, which was slightly less than the R14,6 billion in 1992 despite the larger Exchequer deficit in 1993. The Reserve Bank's trading in government stock options increased only marginally from a monthly average of R5,2 billion in 1992 to R5,3 billion in 1993.

Money market interest rates

The general downward movement in money market interest rates, which had already started at the beginning

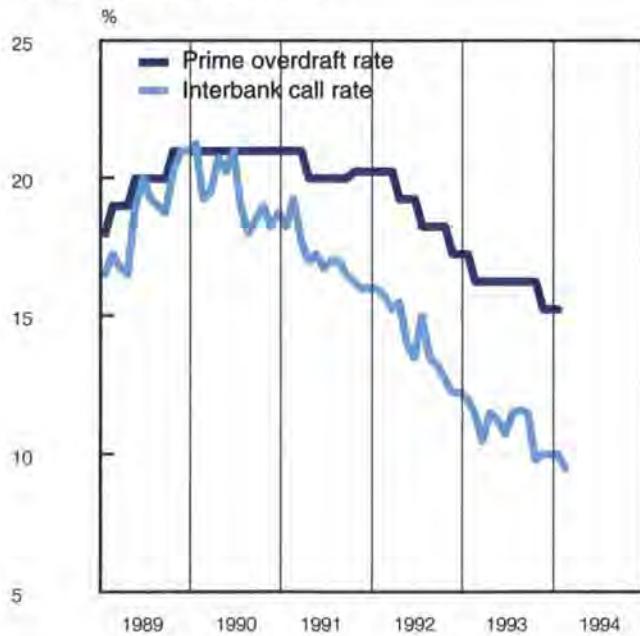
of 1990, continued during 1993 and the first two months of 1994, but at a much slower pace than in 1992. This was clearly reflected in the rate on *inter-bank call money*, which decreased from 16,00 per cent at the end of 1991 to 12,25 per cent at the end of 1992, to 10,00 per cent at the end of December 1993, and to 9,50 per cent at the end of February 1994. Other money market interest rates showed a similar downward trend.

The Reserve Bank lowered Bank rate on two occasions during 1993 by one percentage point to its present level of 12 per cent. The private banks followed suit and reduced their prime lending rates from 17,25 to 16,25 per cent towards the end of February and the beginning of March 1993 and further to 15,25 per cent from 1 November 1993. The inflation-adjusted or real prime lending rate also decreased from 7,0 per cent at the end of 1992 to 5,2 per cent at the end of 1993.

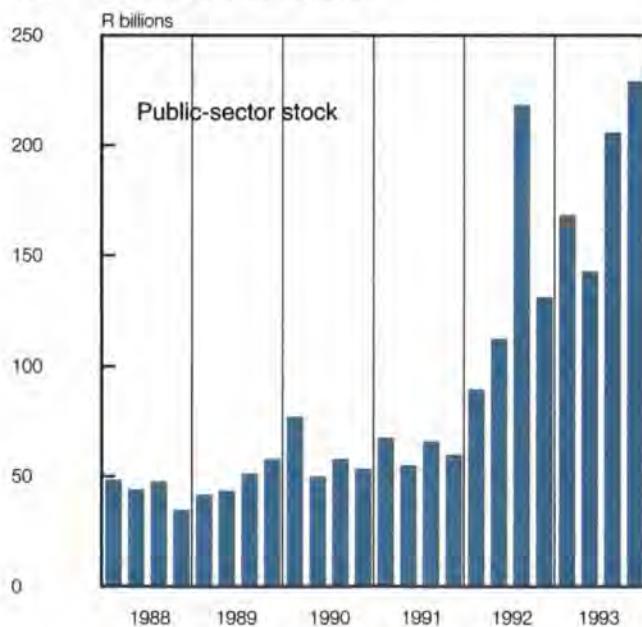
Capital market activity

Activity on the *Johannesburg Stock Exchange* remained buoyant throughout 1993. After having increased sharply from R142,8 billion in the second quarter of 1993 to R206,0 billion in the third quarter, the value of *public-sector stock* traded on the stock exchange increased further to a new record quarterly level of R229,2 billion in the fourth quarter. At R746,4 billion in 1993, the annual turnover of these stocks was 35 per cent higher than in 1992. Trading activity in this market continued at a high level at the outset of 1994, amounting to R82,5 billion in January. A continued decline in the inflation rate, the turn-about in economic activity and a sharp increase in

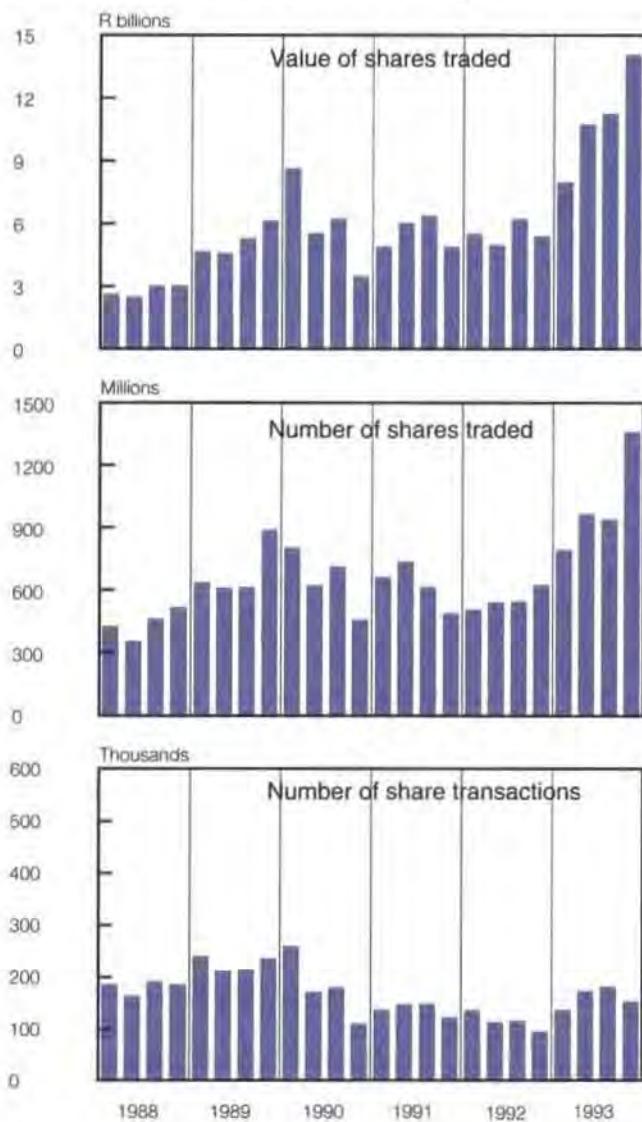
Short-term interest rates



Stock exchange transactions



Shares traded on the stock exchange

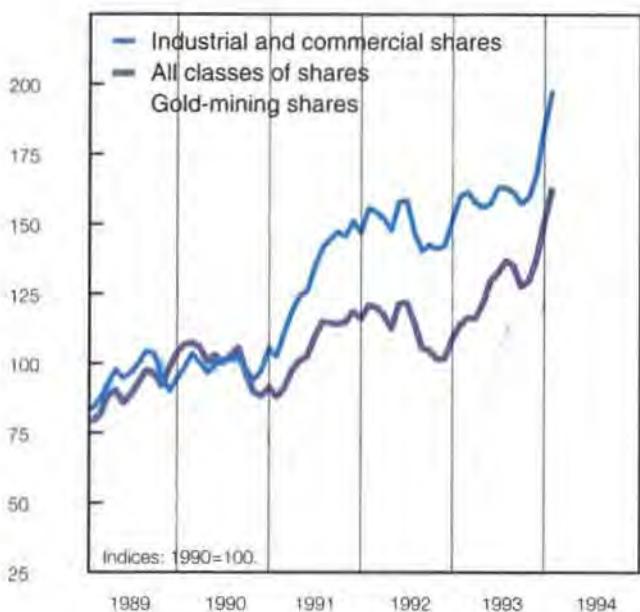


net purchases of securities by non-residents all fuelled a strengthening bull market.

The value of shares traded on the Johannesburg Stock Exchange increased sharply from R8,0 billion in the first quarter of 1993 to R11,3 billion in the third quarter and still further to R14,1 billion in the fourth quarter. The total value of share transactions in 1993 therefore amounted to R44,1 billion – almost double the turnover in 1992. The sharp increase in the value of shares traded resulted in an increase in share turnover velocity (measured as the value of turnover as a percentage of market capitalisation) from a monthly average of 4,3 per cent in 1992 to 7,3 per cent in 1993.

The sharp increase in the value of shares traded in 1993 was the result of significant increases in both the

Share prices



volume and prices of shares traded. The number of shares traded increased by 86 per cent from 2,2 billion in 1992 to 4,1 billion in 1993. Share prices, which had started to recover at the end of 1992 and then faltered slightly in the third quarter, rose substantially in the subsequent four months to January 1994. The average monthly price level of all classes of shares rose by an impressive 27,2 per cent from September 1993 to January 1994. This rise in share prices was brought about by an improvement in the political climate, the lifting of sanctions against South Africa, buoyant trading conditions on some of the world's leading stock exchanges and investors' increased preference for so-called emerging markets.

A slight improvement in the gold price caused the prices of gold shares to recover initially. However, significant increases were also recorded in the prices of all other share categories in 1993. The average price level of all classes of shares was 42,8 per cent higher in January 1994 than in January 1993, while the average price level of gold-mining shares and of industrial and commercial shares was 183,7 per cent and 23,5 per cent higher. In February 1994 share prices softened somewhat after large downward corrections had taken place in some of the world's leading stock exchanges.

Non-residents played an important role in the recovery of share prices during 1993 and were net purchasers of shares to the amount of R2,8 billion. In the fourth quarter of 1993 the net purchases of shares by non-residents came to R0,9 billion. They also continued

to purchase other securities on the Johannesburg Stock Exchange. Non-residents' net purchases of public-sector stock on the stock exchange amounted to R1,5 billion in 1993. This made non-residents net purchasers of securities to an amount of R4,3 billion in 1993; in 1992 their net purchases were only R0,3 billion, while they were net sellers of securities of R3,0 billion and R2,1 billion in 1990 and 1991, respectively.

In the *primary capital market* the largest part of the estimated public-sector borrowing requirement had already been met by the issuing of *public-sector stock* amounting to R16,0 billion in the first half of the fiscal year 1993/94. Consequently, borrowers in the public sector took up only R0,8 billion in the fourth quarter of 1993 by means of new issues of fixed-interest securities.

The value of funds acquired by listed companies through new issues of *fixed-interest securities* (including convertible preference shares and debentures) amounted to R0,1 billion and R0,4 billion in the first two quarters of 1993. No such issues were made in the third quarter, but R0,3 billion was again subscribed for in the fourth quarter.

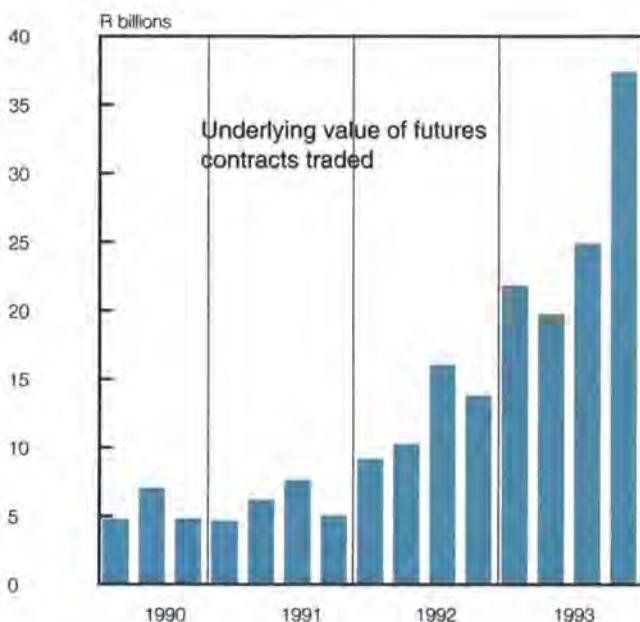
The value of *rights issues of ordinary shares* by companies listed on the Johannesburg Stock Exchange fluctuated considerably in 1993. After having declined from R2,0 billion in the first quarter of 1993 to R0,3 billion in the second quarter, these rights issues rose again to R2,0 billion in the third quarter before declining to R0,9 billion in the fourth quarter. The continued strong demand for quality paper and sharply increasing share prices made issues of share capital attractive to both issuers and investors. A number of companies also announced that they intend acquiring share capital through rights issues in order to facilitate unbundling.

In the *mortgage market* the banks' total holdings of mortgage loans increased steadily from R78,5 billion in December 1992 to R92,9 billion in December 1993. The relatively stagnant housing market in the fourth quarter of 1993 and the decision of certain banks to stop carrying mortgage registration costs and valuation fees caused the average monthly amount of loans paid out by banks to decrease marginally from R3,6 billion in the third quarter to R3,5 billion in the fourth quarter.

The value of *real estate transactions* declined by 3,2 per cent from R24,9 billion in 1992 to R24,1 billion in 1993; the average number of transactions in fixed property contracted by 10,3 per cent, while the average value of property transactions rose by a significant 8,2 per cent. The value of real estate transactions showed a significant turn-around in the second half of 1993 in keeping with the improving economy, the further decline in interest rates and improved affordability. After having declined from R6,1 billion in the first quarter of 1993 to R5,7 billion in the second quarter, the value of real estate transactions increased to R5,9 billion in the third quarter and to R6,4 billion in the fourth quarter.

The *derivative market* was characterised by buoyant activity throughout 1993, but activity increased particularly sharply in the fourth quarter. The underlying

Futures exchange transactions



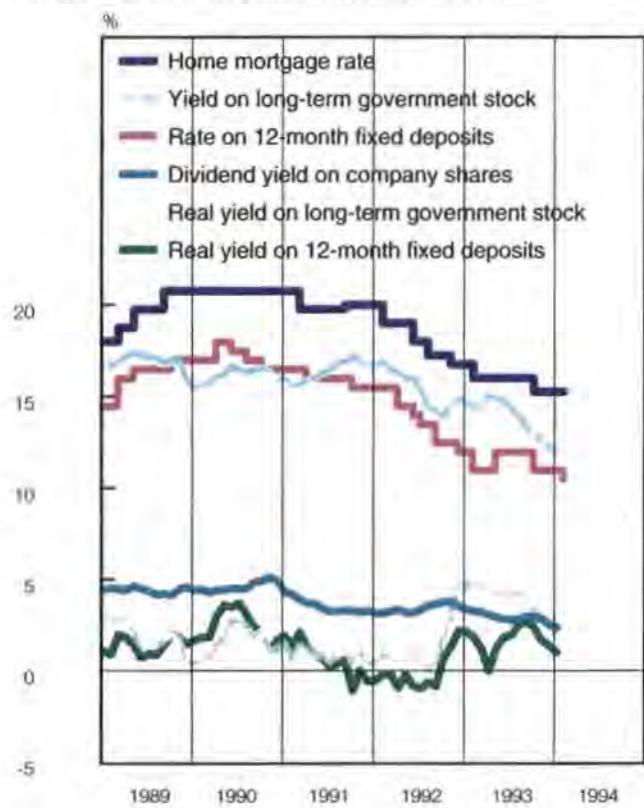
value of transactions in *futures contracts* increased from a quarterly average of R22,1 billion in the first nine months of 1993 to R37,4 billion in the fourth quarter. This level was considerably higher than the quarterly average of R12,3 billion in 1992 and R5,8 billion in 1991. Contracts in share indices represented 97,4 per cent of the total value of futures contracts in 1993. The underlying value of trade in *options* on index futures contracts also increased from a monthly average of R343 million in the third quarter of 1993 to R723 million in the fourth quarter.

Contrary to the extremely high level of activity in futures and options on index futures contracts, activity on the Johannesburg Stock Exchange's *Traded Options Market* had not yet resumed by February 1994, after having fallen away completely in February 1993.

Capital market yields and interest rates

The monthly average *yield on long-term government stock*, which had moved upwards from 13,9 per cent in October 1992 to 15,0 per cent in April 1993, declined quite sharply in the subsequent months to 12,1 per cent in January 1994. This downward movement was mainly a reflection of the continued success achieved in reducing inflation, a decline in overseas interest rates and net foreign purchases of domestic loan stock. The decline in the long-term yield on government stock was appreciably sharper than the decline in the inflation rate; the *real yield* on government stock therefore decreased from 3,6 per cent in April to 2,5 per cent in December.

Capital market interest rates and yields



1993. In February 1994 the nominal long-term yield on government stock firmed significantly to a monthly average of 12,6 per cent because of the foreign selling of stock, profit-taking, reduced expectations of a cut in Bank rate and nervousness about political developments.

The banks' predominant mortgage bond rate was reduced by 0,75 percentage points to 16,0 per cent from 1 March 1993 and by a further 0,75 percentage points to 15,25 per cent in November 1993. The mortgage bond rate has therefore now been lowered by 5,5 percentage points from its peak of 20,75 per cent in February 1991.

The twelve-month deposit rate of banks was lowered from 15,5 per cent at the beginning of 1992 to 12,0 per cent in December and further to 11,0 per cent in February 1993. Without an accompanying increase in the mortgage rate, some banks increased their twelve-month deposit rate again to 12,0 per cent in April, while others followed suit towards the middle of May. In November 1993 this rate was lowered to 11 per cent and again to 10,5 per cent in January 1994. In view of the fact that the prime overdraft rate of clearing banks declined to the same extent in November, the margin between the twelve-month deposit rate and the predominant prime overdraft rate of banks remained at 4,25 percentage points before increasing to 4,75

percentage points in January 1994. The rate on deposits of twelve months provided a positive *real* yield before tax of 1,4 per cent to depositors in December 1993.

The sharp increase in share prices resulted in a reduction of the average *dividend yield* from 3,51 per cent in December 1992 to 2,97 per cent in September 1993 and then sharply further to 2,36 per cent in January 1994. The average *earnings yield* on all classes of shares (excluding gold-mining shares) decreased even more significantly from 7,74 per cent to 6,91 per cent and 5,50 per cent over the same periods. The *price-earnings ratio* of 18,2 in January 1994 thereby approached its all-time high of 18,6 achieved in September 1987. However, if the discount on the financial rand is taken into consideration, the price-earnings ratio for non-residents amounted to only 13,8 in January 1994.

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

Other longer-term rates were also lowered during the five-month period until February 1994. The standard interest rate applicable to loans granted by the government out of the State Revenue Fund was lowered from 14,75 per cent to 13,5 per cent on 1 November 1993, and in three further steps to 12,5 per cent on 1 February 1994. The standard interest rate was increased to 13,25 per cent with effect from 1 March 1994. After having remained unchanged since 1 July 1989, the prescribed interest rate on certain judgement debts was reduced by 3 percentage points to 15,5 per cent with effect from 1 October 1993. The official rate of interest, as defined by the Income Tax Act, was reduced by 1 percentage point to 14 per cent with effect from 1 February 1994.

Public finance

Public-sector borrowing requirement

The *public-sector borrowing requirement* (the deficit before borrowing and debt repayment of the consolidated Central Government, provincial administrations, local authorities and the non-financial public enterprises) amounted to R17,5 billion in the first nine months of fiscal 1993/94. This was R2,7 billion below the level in the corresponding period of the preceding year. As a ratio of gross domestic product, the public-sector borrowing requirement decreased from 8,1 per cent in the first nine months of fiscal 1992/93 to 6,2 per cent in the first nine months of fiscal 1993/94.

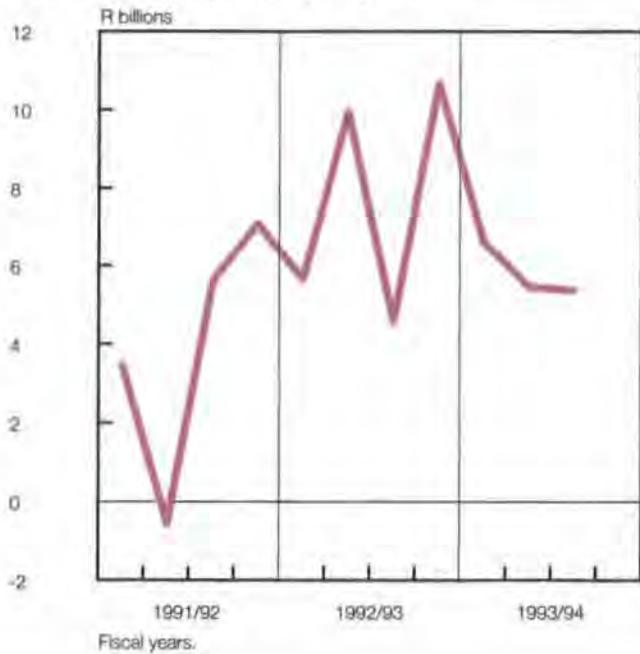
The decline in the public-sector borrowing requirement could partly be attributed to the fact that the total income and grants received by non-financial public enterprises exceeded their current and capital expenditure and the net loans extended by them. More importantly, the lower public-sector borrowing requirement was the result of a contraction in the *borrowing requirement of general government* from R21,4 billion in the first nine months of fiscal 1992/93 to R18,9 billion in the first nine months of fiscal 1993/94, or of R2,5 billion. This improvement in the deficit before borrowing of general government was achieved because of a slower increase in expenditure than in revenue. Expenditure by general government recorded a year-on-year rate of increase of 9,4 per cent in the first nine

months of fiscal 1993/94, while the year-on-year rate of increase in revenue amounted to 15,5 per cent. However, expenditure of general government in the second quarter of fiscal 1992/93 included extraordinary transfers to the amount of R5,8 billion. If these transfers are excluded from the figures for the first nine months of fiscal 1992/93, general government expenditure in the first nine months of fiscal 1993/94 would be 16,4 per cent higher and the borrowing requirement R3,3 billion higher than the adjusted figure for the first nine months of the preceding year.

All the various levels of general government, with the notable exception of extra-budgetary institutions, recorded an improvement in their balances on income-and-expenditure accounts in the first nine months of fiscal 1993/94. In view of a sharp increase in the deficit before borrowing and debt repayment of the TBVC countries and the self-governing states, the borrowing requirement of extra-budgetary institutions totalled R0,3 billion in the first nine months of fiscal 1993/94; in the first nine months of fiscal 1992/93 these institutions' income still exceeded their expenditure.

In contrast to these developments, the borrowing requirement of local authorities remained virtually unchanged and the surplus on the income-and-expenditure accounts of provincial administrations increased from R1,2 billion in the first nine months of fiscal 1992/93 to R1,6 billion in the first nine months of fiscal 1993/94. Owing to the fact that the extraordinary transfers to the Gold and Foreign Exchange Contingency Reserve Account and the civil service pension funds in the first nine months of fiscal 1992/93 were made from the Main Budget, the deficit before borrowing and debt repayment on this account decreased by R2,9 billion in the first nine months of fiscal 1993/94.

Public-sector borrowing requirement

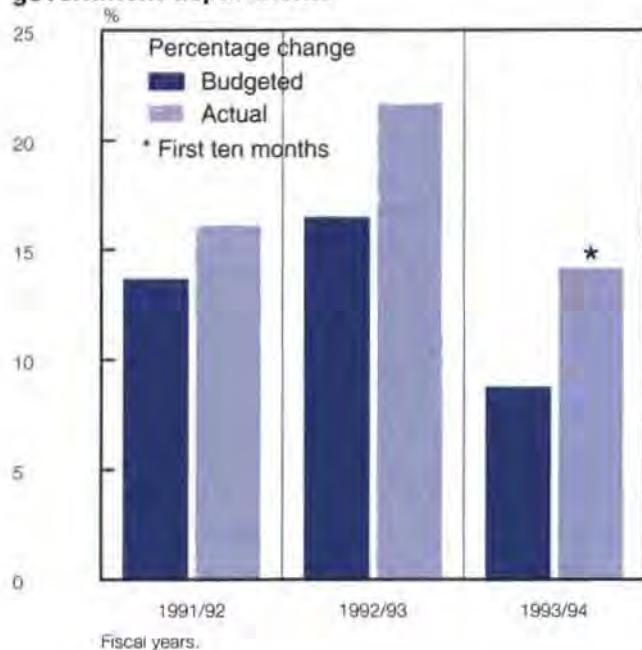


Exchequer account

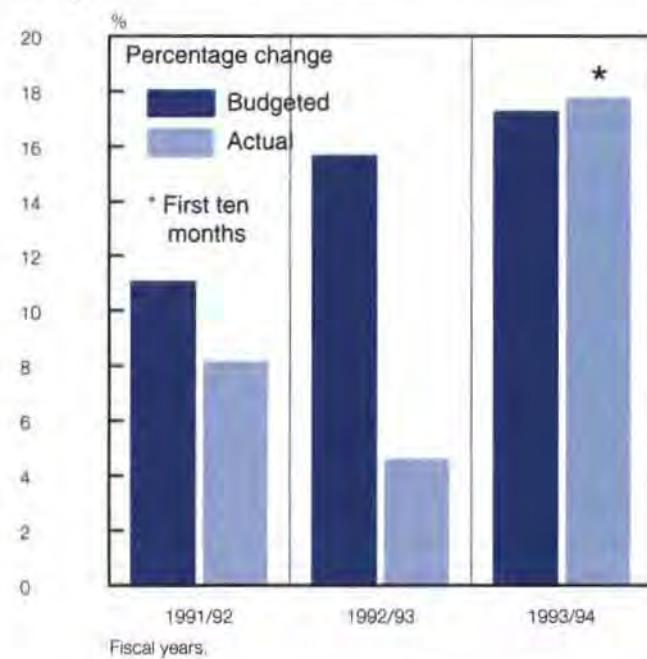
After having accelerated from 12,7 per cent in the first quarter of fiscal 1993/94 to 17,1 per cent in the second quarter, the year-on-year rate of increase in *Exchequer issues* (adjusted for cash flows, including changes in the balance on the Paymaster-General Account) amounted to 16,2 per cent in the third quarter of fiscal 1993/94. This brought the level of Exchequer issues in the first nine months of fiscal 1993/94 to 15,4 per cent above the level reached in the corresponding period of the preceding fiscal year; in the Budget for the fiscal year 1993/94 as a whole an increase of 8,8 per cent in expenditure had been envisaged. Exchequer issues as a ratio of gross domestic product, equalled 30,7 per cent in the first nine months of fiscal 1993/94, which is substantially higher than the average level of 27,5 per cent in the corresponding period of the preceding five fiscal years.

In January 1994 Exchequer issues increased by only 1,0 per cent compared with January 1993, which brought the year-on-year rate of increase in these issues to 14,2 per cent in the first ten months of fiscal 1993/94. Exchequer issues for the first ten months of fiscal

Budgeted and actual Exchequer issues to government departments



Budgeted and actual revenue



1993/94 therefore equalled 81,3 per cent of the total expenditure of R114,2 billion budgeted for the year as a whole; this percentage was higher than the 77,8 per cent in the corresponding period of the preceding fiscal year and also higher than the average ratio of 79,2 per cent for the first ten months of the preceding five fiscal years.

The year-on-year rate of increase in *Exchequer receipts* (excluding the proceeds from privatisation) accelerated from 13,0 per cent in the first quarter of fiscal 1993/94 to 17,1 and 18,4 per cent in the next two quarters. For the first nine months of fiscal 1993/94 Exchequer receipts therefore increased by 16,4 per cent against the corresponding period in the preceding year; this rate of increase was considerably higher than the year-on-year rate of increase of 4,5 per cent in the first nine months of fiscal 1992/93. As a ratio of gross domestic product, Exchequer receipts also rose from 22,7 per cent in the first nine months of fiscal 1992/93 to 23,4 per cent in the first nine months of fiscal 1993/94.

In January 1994 the revenue collected by the government advanced sharply, mainly because of an overflow of revenue which had been due in the preceding month. The year-on-year rate of increase in Exchequer receipts accordingly reached a level of 17,8 per cent in the first ten months of fiscal 1993/94, or slightly above the increase of 17,3 per cent budgeted for the fiscal year as a whole.

As shown in the accompanying table, this relatively good performance of government revenue collected was the combined result of slightly higher-than-expected

income from value-added tax and from customs and excise duties, while income-tax receipts performed below expectations. Income-tax proceeds from companies declined in the first nine months of fiscal 1993/94 compared with the corresponding period of the preceding year, probably relating to the low level of economic activity, the lag in the collection of the newly introduced tax on distributed profits and the overflow of provisional tax receipts due in December into January, which was much larger than in the preceding year. The

Exchequer receipts

Percentage change

	Budgeted for fiscal 1993/94	Actual for first nine months of fiscal 1993/94
Value-added tax	43,1	44,4
Income tax	11,6	6,9
Companies	1,0	-5,1
Individuals	15,5	11,4
Customs and excise duties	10,0	12,4
Customs duty (including the surcharge)	5,9	13,9
Fuel levy	12,1	10,3
Excise duty	11,1	9,0

receipts from individuals' income tax in the first nine months of fiscal 1993/94 were also considerably lower than the amount budgeted because of lower-than-expected salary and wage increases. Customs receipts, however, exceeded expectations owing to a substantial rise in the value of imports.

The deficit on the Exchequer Account before borrowing and debt repayment amounted to R5,4 billion in the December quarter of 1993. The deficit in the first nine months of fiscal 1993/94 therefore totalled R20,4 billion, or 7,3 per cent of gross domestic product; the budgeted deficit for the fiscal year as a whole was R25,9 billion or 7,0 per cent of gross domestic product.

In the first nine months of fiscal 1993/94 the Exchequer deficit, including the discount on new government stock, was financed mainly from funds obtained from the Public Investment Commissioners and from the non-monetary private sector. Nearly R2,0 billion of the deficit was financed from funds obtained from monetary institutions as part of the deliberate policy of the authorities to increase the amount of Treasury bills outstanding in order to improve the efficacy of monetary policy.

As a result of the sharp increase in receipts and the somewhat lower issues in January 1994, the Exchequer deficit before borrowing and debt repayment in the first

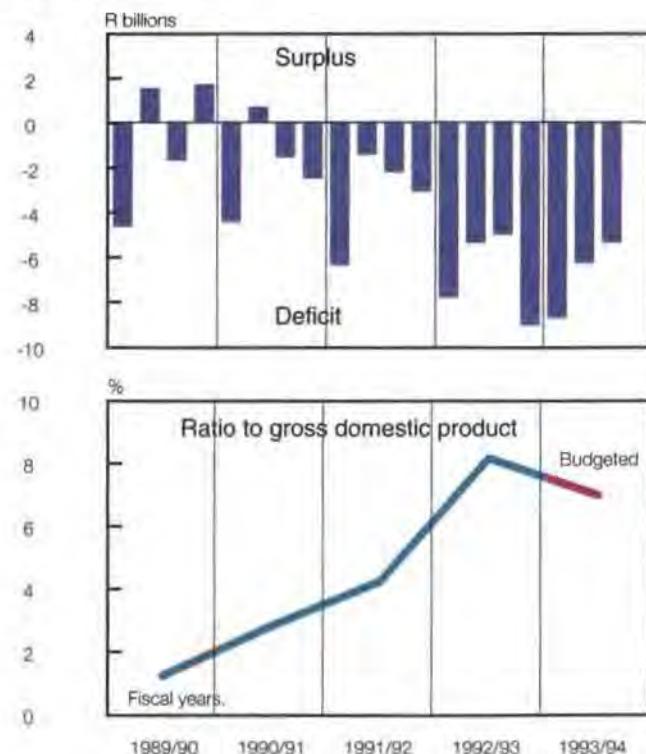
Financing of the Exchequer deficit in the first nine months of fiscal 1993/94 by type of lender

Sector	R millions
Public Investment Commissioners.....	7 145
Non-monetary private sector.....	14 111
Monetary institutions	1 964
Corporation for Public Deposits.....	873
Other monetary institutions.....	1 091
Foreign sector	-275
Total gross financing	22 945
Less: Discount on new government stock	2 527
Total net financing	20 418

ten months of fiscal 1993/94 declined to R18,7 billion. The borrowing instruments utilised to finance this deficit, including the discount on new government stock, were as follows:

	R millions
Government stock (including discount).....	27 273
Treasury bills	1 657
Foreign loans	-129
Non-marketable securities	-147
Change in available cash balances (increase -, decrease +).....	-7 369
Total gross financing	21 285
Less: Discount on new government stock ..	2 601
Total net financing	18 684

Exchequer deficit



Adjustment Budget

In his presentation of the *Adjustment Budget* for fiscal 1993/94 to Parliament in December 1993, the Minister of State Expenditure indicated that an additional amount of R4 113 million would have to be appropriated for the current fiscal year. The revised expenditure for fiscal 1993/94 is therefore R115,2 billion, i.e., after adjustments have been made for expected surrenders to the amount of R1,5 billion, savings of R0,5 billion and additional expenditure of R1,1 billion, which had already been included in the budgeted amount of R114,2 billion.

A macro-economic examination of the price-formation process in the South African economy

by C.J. Pretorius and M.M. Smal

1. Introduction

South Africa has been troubled by relatively high inflation since the beginning of the 1970s. Over this period inflation expectations became firmly entrenched and until fairly recently people have generally assumed that inflation will continue at a rate in the region of 15 per cent per year.

In 1989 the Reserve Bank announced its intention to deal effectively with the problem of inflation. The Bank then adopted as its mission the protection of the internal and external value of the rand. The Bank proclaimed in no uncertain terms that its future actions would concentrate on the need to obtain financial stability in order to reduce the rate of inflation.

For a while it appeared as if the Bank's efforts met with little success. Inflation remained high and at times moved even higher under the impact of some price-raising exogenous shocks. Only after a protracted period of persistently restrictive monetary policy did price increases begin to subside.

In some circles the long delay in the response of prices to the tightening of policies was interpreted as an indication of the impotence of monetary policy. However, such a delay is perfectly reconcilable with a theoretical model of the price-formation process that was developed by the Economics Department of the Reserve Bank during the first half of the 1980s.

The purpose of this paper is to describe the price-determination process as contained in the econometric model of the Bank. The development of this theoretical model is depicted in Section 2 of the paper. The most important variables of the model, which is based predominantly on the expectations-augmented version of the Phillips curve, are then discussed briefly in Section 3. The quantification of the price-forming process is portrayed by means of economic equations in Section 4 and the price-determination process is summarised in a flow chart in Section 5. Some pertinent remarks with regard to the curbing of inflation, as they are suggested by the study, are made in Section 6.

2. A theoretical model of price-determination

The point of departure for the description of the price-formation process is that output prices are essentially determined as a fixed mark-up over costs. When output prices are defined as value-added deflators and output itself is defined as the value-added concept of the national income and product accounts, labour

costs become the most important single cost element. In accordance with this simplification, output prices are derived as a fixed mark-up over labour costs.

Labour's share in the aggregate value of output has traditionally been expressed in mathematical terms as:

$$\alpha = \frac{WN}{Py} \quad (1)$$

where W = nominal labour costs (wage) per unit of labour input,

N = number of units of labour input,

P = final product price per unit of output, and

y = the physical volume of output.

By rearranging Equation (1), output prices can be expressed as the product of a constant mark-up factor and the costs of labour per unit of output:

$$P = \frac{1}{\alpha} \times \frac{WN}{y}$$
$$= mu \times ULC \quad (2)$$

where $mu = \frac{1}{\alpha}$ = mark-up factor, and

$ULC = \frac{WN}{y}$ = the cost of labour per unit of output.

A simple algebraic manipulation of the expression for unit labour costs reveals that unit labour costs can be written as the quotient of the nominal wage and the average productivity of labour¹:

$$ULC = \frac{W}{y/N}$$
$$= \frac{W}{A} \quad (3)$$

where $A = y/N$ = average output per unit of labour input, i.e. average labour productivity.

Incorporating Equation (3) into Equation (2) and

¹ From this formulation follows that the ratio which is usually labelled as "real unit labour costs" ($\frac{WN}{yN}$) is equal to labour's share in the aggregate nominal value of output ($\frac{WN}{Py}$).

rewriting the resultant expression in terms of percentage changes gives the following expression for output price changes:

$$\dot{P} = \dot{W} - \dot{A} \quad (4)$$

where a dot over a variable indicates percentage change.

Equation (4) indicates that changes in final output prices are the net result of changes in wage rates less changes in the average productivity of labour. If nominal wage growth exceeds productivity growth, output prices rise. Conversely, if nominal wage growth falls short of productivity growth, output prices will fall according to Equation (4). Only when wage growth matches productivity growth will price stability prevail.

It can reasonably be assumed that price-setters respond to changes in nominal wage rates in a manner that differs from their response to changes in average labour productivity. In the short term, movements in prices are more likely to be dominated by changes in wage rates rather than by changes in productivity levels.

Although measured labour productivity may exhibit fairly dramatic changes in the short term, such changes are usually short-lived and are soon reversed. In contrast, fundamental changes in labour productivity are likely to occur gradually as the existing labour force acquires new skills, production techniques become more advanced and skilful management succeeds in improving the cost-efficiency of the production process.

Nominal wage increases (just as productivity changes) are highly volatile over the course of the business cycle, but rising wages (unlike short term productivity increases) are rarely reversed by later declines in nominal wages. Wage increases in the short term therefore tend to swamp the impact of productivity improvements on prices. Thus, attempts to explain short term price-setting behaviour have to focus much more closely on wage changes than on productivity changes.

A popular approach for explaining changes in nominal wages finds its origin in Phillips' statistical analysis of the relationship between wage rate changes and unemployment rates in the United Kingdom.² Phillips' statistical analysis pointed to a direct negative relationship between the rate of increase of nominal wages and the unemployment rate. This relationship can be formulated as follows:

$$\dot{W} = f(u), f' < 0 \quad (5)$$

where u indicates the unemployment rate and f' the first derivative of the functional relationship.

The original relationship between nominal wage changes and the unemployment rate, or the so-called Phillips curve, was widely interpreted as offering a menu of policies which allowed policy-makers to choose between various combinations of rates of wage increases and unemployment rates. Less unemployment was attainable according to the Phillips curve, but at the cost of faster wage inflation. Economies with a preference for lower inflation could, on the other hand, indulge this preference, but would then have to accept a higher unemployment rate.

The possibility of obtaining a stable trade-off between wage rises and unemployment was not confirmed by developments in many industrialised countries during the 1970s. Most of these countries experienced a more or less unchanged unemployment situation coupled with a variable inflation rate. This contradicted the original view of the Phillips relationship that nominal wage growth and unemployment were uniquely related.

The developments of the 1970s called for a revision of the Phillips relationship between wages and unemployment. To allow the same unemployment rate to co-exist with multiple inflation rates, it was suggested that inflation expectations should be added as an explanatory variable in the wage-determination model.³ This expectations-augmented version of the model postulates that a nominal wage increase, which may be acceptable to workers for a given unemployment rate and inflation rate, is unlikely to be acceptable when unemployment remains unchanged, but inflation is expected to be much higher than before.

A further theoretical insight which was added to the wage-determination model in order to eliminate some of its perceived deficiencies, is that so-called "full employment" of labour is consistent with some unutilised labour resources. Such unemployment is fully compatible with equilibrium in the goods and labour markets and results from unavoidable frictions in the functioning of these markets. Expressed as a percentage of the total labour force, such unemployment is referred to as "natural" and its accompanying unemployment rate as the "natural rate of unemployment". It differs from country to country and is mainly determined by factors such as the degree of unionisation of labour supply, labour mobility, cost of information and search confronting job seekers, the availability of unemployment benefits and other factors that may inhibit the productive utilisation of all labour resources. The natural rate is not affected by short-term stabilisation policies, but it can be influenced by government policies regarding the structure and functioning of the labour market, such as education programmes, minimum-wage

² Phillips, A.W.: "The relationship between unemployment and the rate of change in money wage rates in the U.K., 1861-1957", *Economica*, November 1958, pp. 283-299.

³ See Friedman, M.: "The role of monetary policy", *American Economic Review*, March 1968, pp.1-17.

legislation, unemployment compensation, social security programmes, re-training of unemployed workers and the availability of labour-market information. Sustained inflation, through its debilitating effect on the efficient functioning of a market economy, is also likely to raise the natural rate of unemployment to a higher level.

A wage-determination model based on the view that workers are remunerated according to productivity improvements and incorporating the original ideas of Phillips, inflation expectations and the natural rate hypothesis, can be presented algebraically as follows:

$$\dot{W} = a_1(u - u^*) + a_2 \dot{A} + a_3 \dot{P}^e, \quad a_1 < 0; \quad a_2, a_3 > 0 \quad (6)$$

where u^* = natural rate of unemployment, and

\dot{P}^e = expected future inflation rate.

All the other symbols have the same meaning as before.

Equation (6) states that wage changes are inversely related to the unemployment rate (u). For low levels of unemployment, or when the actual unemployment rate is below the natural rate ($u - u^* < 0$), nominal wage increases will be higher. When unemployment increases during times of economic slack to levels exceeding the natural rate ($u - u^* > 0$), downward pressure is likely to be exerted on changes in nominal wages. Equilibrium in the labour market will be attained when the actual unemployment rate matches the natural rate. In such an event, wage rises may still occur because of increases in labour productivity and the persistence of inflation expectations.

Equation (6) served as the basis for the estimation of an empirical function explaining nominal wage change in South Africa. The inadequacy of information on unemployment, however, necessitated a slight modification of the unemployment variable. Following Okun⁴ it is assumed that a direct relationship exists between the unemployment rate and the difference or gap between potential aggregate production and actual aggregate production. This implies the existence of a certain output level where the gap between potential production and actual production is consistent with equilibrium in the labour and goods markets – a so-called "natural output gap". The output gap and the natural output gap were consequently substituted for the unemployment rate and the natural unemployment rate in Equation (6).

Some interesting conclusions can be made from this wage-determination model. If it is assumed that labour is fully rewarded for productivity improvements

and fully compensated for expected inflation, both a_2 and a_3 in Equation (6) equal unity. By incorporating Equation (6) (with $a_2 = a_3 = 1$) into Equation (4), the following relationship is obtained:

$$\dot{P} = a_1(G - G^*) + \dot{P}^e, \quad a_1 < 0, \quad (7)$$

where G and G^* indicate the actual and the "natural" output gaps, respectively. Equation (7) can be adjusted slightly as follows:

$$\dot{P} - \dot{P}^e = a_1(G - G^*), \quad a_1 < 0. \quad (8)$$

From Equation (8) it can be deduced that attempts to permanently reduce the actual output gap below its natural level⁵ requires actual inflation to be consistently higher than expected inflation. If it is assumed that inflation expectations will eventually adjust to actual inflation, a continuously accelerating inflation rate is necessary to ensure that the actual output gap is permanently lower than its natural level. Thus, according to the postulated wage-determination model it is possible to encourage higher output and employment levels by allowing inflation to accelerate. However, if the expectations-formation process is such that inflation expectations ultimately adjust to actual inflation, the output gap will widen once again and return to its natural level, leaving the economy with a higher rate of inflation and without any durable improvement in the level of output and income.

3. The variables of the model

The variables of the specified model are described briefly in this section. A distinction is drawn between endogenous variables (whose values are determined within the framework of the model) and exogenous variables (whose values are not determined within the model, but which play a prominent role in the determination of the values of the endogenous variables).

Endogenous variables

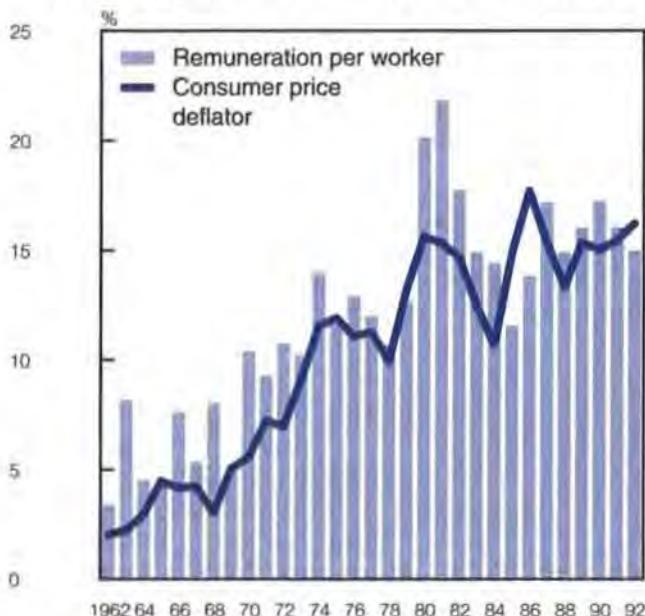
Wage per worker

The dependent variable in the wage equation is calculated as the percentage change over four quarters in the average remuneration per worker in the non-agricultural sectors, excluding the gold-mining sector and the general government. Aggregate labour

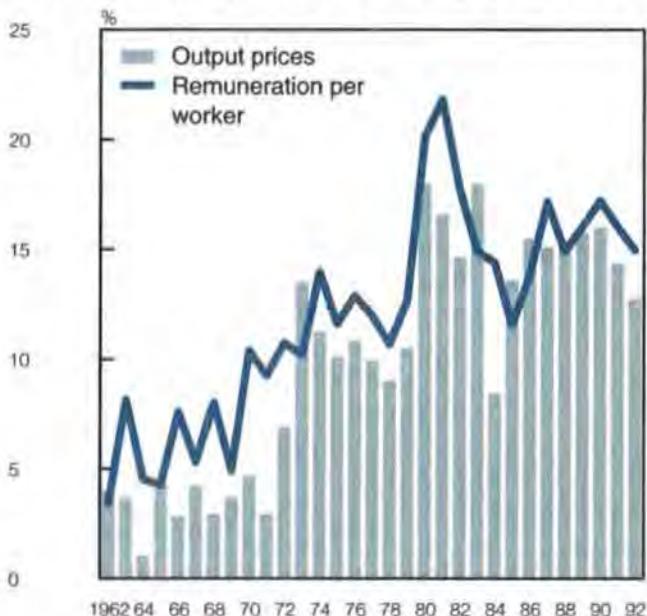
⁴ Okun, A.: *Potential GNP: Its measurement and significance*, Proceedings of the Business and Economic Statistics Section of the American Statistical Association, 1962.

⁵ This is equivalent to reducing the unemployment rate below its natural level or raising actual output beyond the level consistent with the full employment of labour resources.

Graph 1: Wage per worker and the inflation rate



Graph 2: Output prices and the wage per worker



remuneration was obtained from national accounts statistics, whereas employment data were compiled from information released by the Central Statistical Service. The average wage per worker was derived by dividing aggregate labour remuneration by the estimated number of employees.

Changes during calendar years in nominal labour remuneration per worker and consumer price inflation are indicated in Graph 1. Of great significance is that the increase in the average remuneration per worker in the private sector exceeded inflation in almost every year since the early sixties.

Output prices

The deflator for the gross value added in the non-agricultural sectors, excluding the general government and the gold-mining sector, is used as a best approximation for output prices. Estimates of the value-added deflator were derived from the national accounts statistics as the ratio of value added at current factor cost to value added at 1985 factor cost.

As indicated earlier, output prices in the model are determined as a mark-up over cost. For purposes of the wage-price model it was assumed that labour costs dominate the overall cost-structure of South Africa's productive business sector. This assumption is confirmed by Graph 2 which indicates a relatively close relationship between changes in unit labour costs and output prices.

Consumer prices

The derived deflator for private consumption expenditure is an alternative indicator for the general level of consumer prices. The derived deflator differs from the consumer price index in that it covers the entire economy and not just the urban areas, and that it is a current-weighted index with weights continuously adjusting to changes in spending patterns, instead of the fixed-weight structure of the consumer price index. Changes in this derived deflator over four quarters are equated with inflation. The deflator was obtained by dividing private consumption expenditure as estimated in the national accounts at current prices by private consumption expenditure valued at 1985 prices.

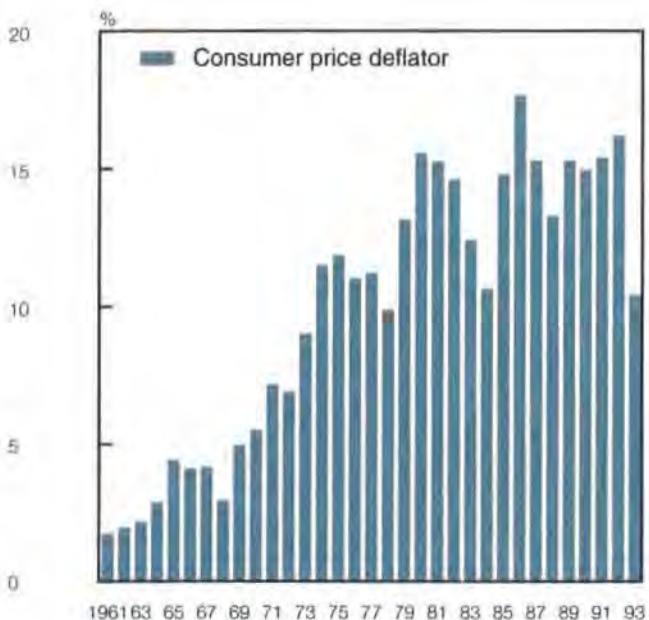
As indicated in Graph 3, the South African economy experienced a comparatively high degree of price stability in the 1960s with single-digit inflation prevailing until 1973. Inflation reached double-digit proportions in 1974 and has remained at a comparatively high level since then.

Exogenous variables

Labour productivity

The percentage change over four quarters in the output per worker in the non-agricultural sectors, excluding the general government and the gold-mining sector, is used as an indicator for labour productivity growth. The real gross domestic product at factor cost is used as an indicator for output, whereas the

Graph 3: The inflation rate



Graph 4: Change in labour productivity



employment data in the non-agricultural sectors have been compiled from information published by the Central Statistical Service.

The average productivity of labour, i.e. the level of output per unit of labour, varies procyclically. Graph 4 indicates that the output per worker tends to fall at least during the early stages of a period of economic contraction and increases in the advanced stages of prolonged contractions and once the recovery gets under way. This could be attributed to the fact that firms are reluctant to lay off workers when output declines, as such declines in output may well be only temporary. This was particularly the case when rigidities in the labour market severely curbed the mobility of labour in the country.

Economic theory postulates a large degree of interdependence between wages and productivity. Wage growth reflects productivity growth, whilst productivity itself can also be influenced by the wage level. The law of diminishing marginal productivity whereby successive units of labour hired yield successively diminishing returns, serves as a guideline to employers who want to maximise their profits. At a given level of wages, additional labour will be hired until the marginal productivity of the last unit employed equals the wage paid.

Output gap

The gap between the potential gross domestic product and the actual gross domestic product⁶ is used as an indicator of the under-utilisation of productive

resources. The average output gap over the sample period provides an indication of the natural unemployment rate. The difference between the actual output gap and its natural level is used as an explanatory variable in the wage equation.

When the output gap falls below its natural level, it indicates that upward pressure is being exerted on wages, whereas an output gap above the natural level indicates the existence of excess capacity and the absence of upward pressure on wages.

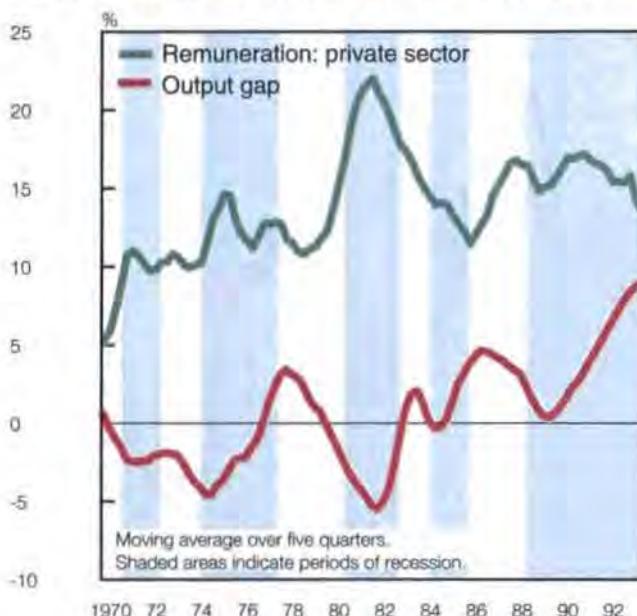
The inverse relationship between the wage per worker in the private sector and the difference between the output gap and its natural level is illustrated in Graph 5. Accelerating wage growth broadly corresponds with higher capacity utilisation, and slower wage growth with rising under-utilisation of production potential.

Inflation expectations

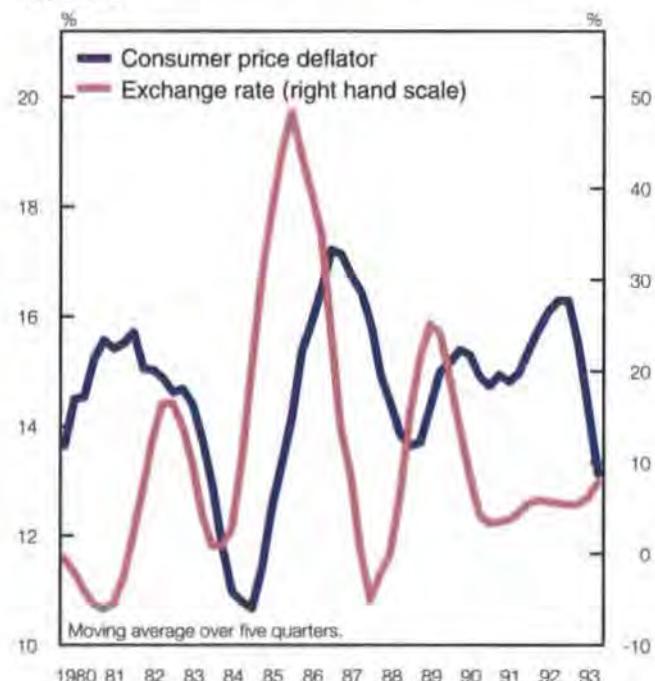
Inflation expectations in any particular period can be estimated in many ways. One method is to use actual inflation of the past as an indication of the future inflation rate. Alternatively, a weighted average of actual inflation rates in a number of periods can be regarded as an approximation of what future inflation

⁶ For a description of the calculation of the potential gross domestic product see De Jager, B.L. and Smal, M.M.: "The potential gross domestic product of South Africa," *Quarterly Bulletin* of the South African Reserve Bank, December 1984.

Graph 5: Wage per worker and the output gap



Graph 6: The inflation rate and changes in the nominal effective exchange rate of the rand



can reasonably be expected to be. The rational-expectations model suggests that the expected inflation rate in any period is based on all information available to decision-makers at that moment. This information may include the past performance of the economy and expectations of future policies likely to be implemented by the authorities. This approach assumes that policy-makers act according to clearly defined policy rules which are fully understood by decision-makers in the private sector. Changes in selected key variables, such as the money supply, interest rates, the exchange rate and the budget deficit, may thus be regarded as indicators of policies which influence inflation expectations. In this analysis a quantity theory approach is adopted and inflation expectations are explained by the growth in M3 money supply and changes in output volumes. Allowance is also made for the effect that changes in import prices are likely to have on future inflation and the carry-over effect of historical inflation to expected inflation.

Import prices

The deflator for imports of goods and non-factor services is used as an indicator of import prices. Changes in the exchange rate of the rand against other currencies play a prominent role in the explanation of domestic price changes, primarily through the influence on the prices of imported goods.

Graph 6 shows the relationship between the consumer price inflation rate and the changes in the

nominal effective exchange rate of the rand. Cross-correlation tests indicate that domestic price changes follow changes in the exchange rate by 3 to 4 months. For most of the 1980s the delayed response of consumer price inflation to exchange rate changes is clearly reflected in this graph. This relationship became blurred from about 1989 when the exchange rate movements began to exhibit considerably less volatility and domestic prices were affected particularly by other factors.

Administered prices

Graph 7 compares increases in administered prices with general consumer-price inflation. On average, administered prices tended to rise somewhat more slowly than the prices of all consumer goods and services.

The move during the 1980s towards an increased reliance on market forces in official economic decision-making saw the importance of administered prices in the overall consumer price index declining from 24,6 per cent in 1981 to 10,8 per cent in 1992. Over time the significance of officially determined price changes has thus been reduced. Accordingly price changes are being influenced much more strongly than before by market forces and it seems reasonable to expect that prices are likely to show an increased responsiveness to policy measures aimed at restoring financial stability.

Graph 7: The inflation rate and changes in administered prices



sector is compared with the inflation rate for three sub-periods in Table 1. The data reveal that since 1970 the increase in the remuneration of employees in the government sector has on average been higher than both the inflation rate and the increase in the average salaries and wages of employees in the private sector. Yearly changes in the remuneration of employees in the government sector show larger fluctuations than changes in the remuneration of the private sector. Salary adjustments in the government sector are below inflation in some years, but are often followed in ensuing years by adjustments well in excess of the inflation rate.

Net indirect taxes

Net indirect taxes are introduced into the model for technical reasons. Final output prices in the model are derived from national accounts aggregates valued at factor costs, i.e. excluding net indirect taxes. Consumer prices, in contrast, are end-user prices and therefore incorporate all indirect taxes added to production costs. When end-user prices are assumed to be determined by production costs, the impact of net indirect taxes on consumer prices has to be explicitly allowed for in the price formula.

Graph 8 suggests that net indirect taxes, i.e. indirect taxes less subsidies per unit of physical output, increased at a much faster rate than inflation during the period from 1970 to 1989. Since 1990 this tendency has been reversed and increases in net indirect taxes

Remuneration of government employees

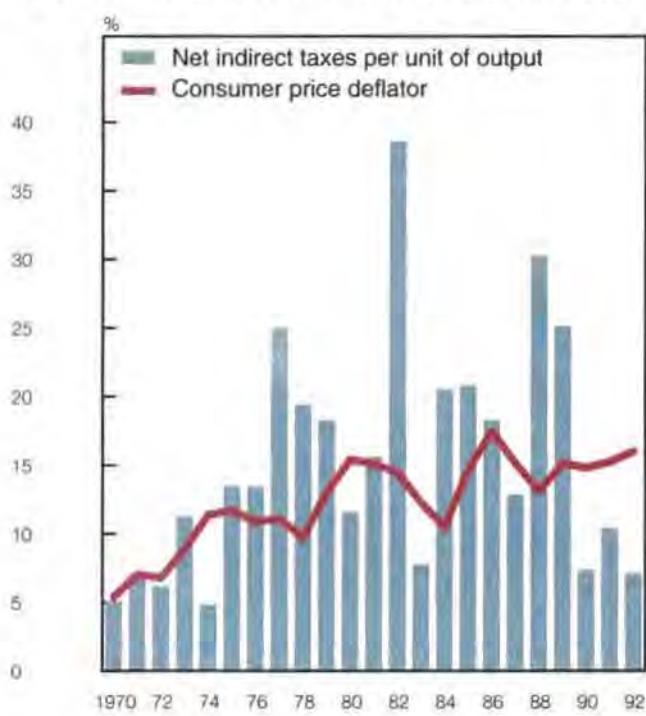
The wage-determination process is influenced by the formal and informal comparison by workers of their own wages and the wages of workers in other sectors of the economy. The salary increases of civil servants are often used as a formal guideline for determining salary increases of individuals in the private sector performing similar duties. The remuneration of employees in the private sector is, on the other hand, often used to determine wages and salaries in the government sector. Comparisons are also made on an informal basis by both employers and employees to establish a suitable frame of reference for deciding wage levels.

National accounts statistics served as a basis for the calculation of the average remuneration of employees of the government and the private sector. The average increase in the remuneration of employees in the general-government sector and the private

Table 1
Remuneration of employees and the inflation rate

	70-90 %	80-90 %	85-92 %
Increase in remuneration of employees:			
General government	14,3	17,4	16,9
Private sector.....	14,1	16,2	15,2
Inflation rate	12,4	14,6	15,3

Graph 8: Net indirect taxes and the inflation rate



were well below the inflation rate. The relatively large increases that occurred during 1982, 1984 and 1989 can be partly attributed to increases in the general sales tax rate during those years, whilst the increase in 1988 can be ascribed to the introduction of the fuel levy.

4. Statistical estimation of wage and price equations

In this section the results of the statistical estimation of the theoretical model are discussed. Ordinary least squares estimation techniques were applied and the t-values of the estimated coefficients and the following summary statistics are tabulated:

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

D-W = Durbin-Watson d-statistic;

RHO = Autocorrelation coefficient.

Quarterly data were used and the period of estimation is also indicated.

Wages in the private sector

The dependent variable in the wage equation is the percentage change over four quarters in the average nominal remuneration per worker in the non-agricultural sectors, excluding the gold-mining sector and the general government, and is denoted by W_p . The following explanatory variables are included in the equation:

- the difference between the output gap, expressed as a percentage of potential output, and the average percentage output gap over the sample period ($u=G-G^*$);
- the percentage change over four quarters in the real output per worker in the non-agricultural sector, excluding the general government and the gold-mining sector (A);
- inflation expectations, based on changes in the derived deflator for private consumption expenditure (p^e); and
- a dummy variable (fv), used to indicate the entry to and presence of labour unions in the labour market since 1980, with $1980.I \text{ to } 1992.IV = 1.0$, and 0 otherwise⁷.

The estimated wage equation is as follows:

$$W_p = 0.89 \cdot p^e - 0.55 \cdot (0.25 \sum_{i=0}^3 u_i - 9.3) + 0.60 \cdot A + 2.87 \cdot fv$$

(17.43) (5.26) (6.06) (3.22)

$$\bar{R}^2 = 0.45$$

$$D-W = 1.70$$

$$RHO = 0.48$$

Estimation period: 1970.I to 1992.IV

The relatively low \bar{R}^2 -value can be attributed to the fact that the dependent variable is the percentage change in wages over four quarters, which is subject to large fluctuations.

Because all the variables, apart from the dummy variable, are expressed as percentage changes, the estimated coefficients can be interpreted as elasticities. The coefficients accordingly indicate the percentage change in the nominal wage that can be expected from a change of one per cent in the relevant explanatory variable. The size of the coefficient of the dummy variable indicates that labour unions were very successful in accelerating the rate of wage increases. On average, the rate of nominal wage increase rose by about 2% percentage points per year when labour unions for black workers were legalised at the beginning of the 1980s.

Productivity growth has been properly accounted for in nominal wage growth during the estimation period. Over the period since 1970 labour has been rewarded for productivity increases broadly in proportion to its share of the value of output – about 60 per cent of the rise in productivity was allocated to nominal wage growth. This implies constancy of the distribution of income between labour and capital in the long run.

According to the estimated equation, upward wage pressure is likely to arise when idle productive capacity is reduced to a level below 9.3 per cent of total productive capacity. When unutilised productive capacity equals 9.3 per cent of potential output, wage changes will no longer be influenced by excess demand pressures. Under such circumstances nominal wage growth will be determined by other forces, such as inflation expectations, productivity growth and the bargaining power of trade unions. At this rate of idle capacity, wage inflation will not be accelerating nor decelerating because of excess or insufficient demand. The estimated equation therefore agrees with the theory of a non-accelerating inflation rate of unemployment (NAIRU), with the implication that there is a trade-off between higher wage inflation and lower unutilised capacity in the short term, but that inflation will be the only lasting outcome of such a demand-management policy in the long run.

The estimated wage equation also resembles a very flat trade-off between idle productive capacity and wage

⁷ The stability of the estimated equation over the entire period was the prime consideration for the inclusion of the dummy variable. See the section under the heading "Tests for structural change" below.

inflation in the short term. According to these results unutilised productive capacity will have to rise to about 18.4 per cent of potential capacity in order to reduce nominal wage growth by 5 percentage points. This means that in the absence of other forces favouring lower wage growth, a very deep recession is required to slow the rate of increase in nominal wages significantly.

The estimated equation also confirms that inflation expectations play an important role in the wage formation process. All other things equal, expected inflation of 10 per cent per year is likely to increase nominal wages by almost 9 per cent per year. This high sensitivity of changes in nominal wages to inflation expectations, combined with the relative inflexibility of wages to respond to slack demand and a rising output gap, indicates that attempts to curb inflation by means of orthodox demand-restraining policies could turn out to be costly in terms of output and employment losses, especially if not applied consistently. If policy measures are not perceived to be credible, inflation expectations are unlikely to adjust to the desired degree and economic activity will have to decline substantially to bring about the desired results. A consistent conservative monetary policy is therefore required to restore policy credibility and price stability at the lowest cost to the country in terms of lost employment opportunities and lower production.

The price functions

The model distinguishes between a production price function and a consumer price function.

The production price function

The equation for production prices is a linear approximation of the mark-up relationship between production costs and output prices. Labour costs and the costs of imported goods are singled out as the most important cost elements influencing output prices. Net indirect tax payments by producers are, however, not taken into consideration at this level of the price-formation process because the value-added deflators are derived from national-accounts aggregates at factor costs. The costs of goods and services rendered by public-sector bodies and parastatal corporations are captured by the inclusion of the average wage costs of workers in the general government sector.

The deflator for the gross value added in the non-agricultural sectors, excluding the general government and the gold-mining sector, is used as the dependent variable and as proxy for output prices (p_p). The explanatory variables are:

- the deflator for consumption expenditure by the general government (remuneration of employees), used as a proxy for the cost of general government services (w_g);

- the average wage per worker in the non-agricultural sector, excluding the general government and gold-mining sector, used as a proxy for unit labour costs in the private sector (w_p); and

- the prices of imported goods and services (p_i).

The estimated function is as follows:

$$p_p = 0,05 + 0,84 \cdot (0,8 \cdot w_p + 0,2 \cdot w_g) + 0,14 \cdot p_i \\ (7,95) \quad (44,53) \quad (5,23)$$

$$\bar{R}^2 = 0,99$$

$$D-W = 1,94$$

$$RHO = 0,65$$

Estimation period: 1970.I to 1992.IV

The consumer price function

The equation describing the relationship between consumer prices and production prices allows explicitly for the direct effects of the prices of imported goods and administered prices on end-user prices. The dependent variable in the consumer price function is the derived deflator for private consumption expenditure (p_v). The variables used to explain consumer prices are:

- administered prices (p_a), weighted with the share of administered prices in the consumer price index (wp_a);
- production prices (p_p); and
- the prices of imported goods and services (p_i), weighted with the share of imported prices in the consumer price index (wp_i).

The estimated function is as follows:

$$p_v = wp_a \cdot p_a + wp_i \cdot p_i - 0,08 + 0,83 \cdot p_p \\ (3,08) \quad (51,96)$$

$$\bar{R}^2 = 0,97$$

$$D-W = 1,78$$

$$RHO = 0,90$$

Estimation period: 1975.I to 1992.IV

Equation for inflation expectations

The inflation expectations variable is based on the percentage change over four quarters in the derived deflator for private consumption expenditure (p_v). The explanatory variables which play a role are:

- the growth rate over four quarters in the M3 money supply per unit of production (My);

- the percentage change over four quarters in the price of imported goods (\dot{p}_I); and
- the inflation rate in the preceding period (\dot{p}).

The estimated function is as follows:

$$\dot{p}^e = 0,04 \cdot M_{Y_2} + 0,04 \cdot \dot{p}_I + 0,93 \cdot \dot{p}_t$$

$$(1,86) \quad (3,01) \quad (39,60)$$

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

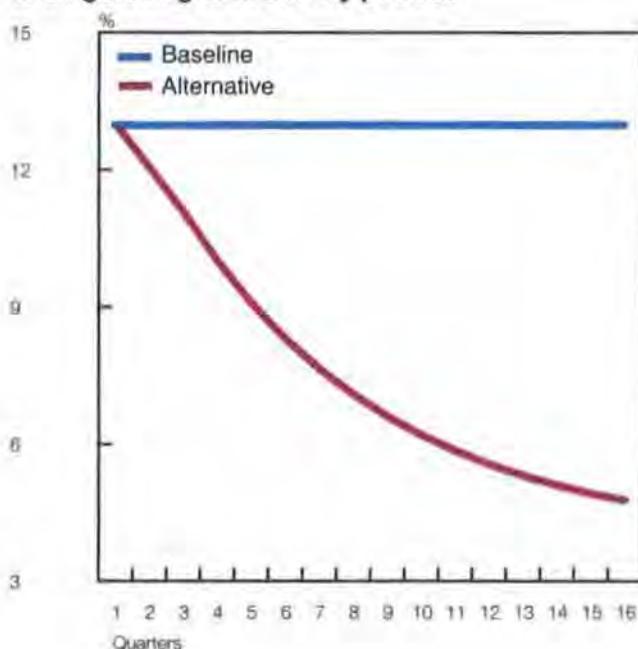
$$D-W = 2,38$$

Estimation period: 1961.IV to 1992.IV

According to this hypothesis the expectations-formation process is dominated by past inflation. The estimated equation states that expectations are unlikely to adjust speedily to a reduction in monetary growth. By slowing monetary growth from 15 per cent per year to 5 per cent per year, the expected inflation rate will probably be reduced in the short term by only 0,4 percentage points. The further lowering of expectations will take place gradually and the feed-through effect to lower nominal wage settlements is similarly likely to be a drawn-out process. However, once a credible policy has been established and evidence of a significant lowering of inflation becomes visible, inflation expectations may subside considerably faster. In order to have a lasting effect on firmly entrenched inflation expectations, tight monetary policies will have to be pursued for a rather prolonged period of time. A quick response of inflation expectations to a tightening of monetary policies will probably require some unorthodox measures to encourage decision-makers in the private sector, particularly those in the labour market, to change the way in which they formulate expectations of future price increases.

Graph 9 presents a single-equation simulation of the response of inflation expectations to a tightening of monetary policies. In the baseline simulation, monetary

Graph 9: Response of inflation expectations to a tightening of monetary policies



growth was assumed to persist at 15 per cent per year, ensuring that inflation can be expected to be sustained at about 13 per cent per year. In the alternative simulation it was assumed that money growth is reduced permanently to 5 per cent, implying a long-run inflation rate of about 3 per cent. The alternative simulation indicates that only after the elapse of four years (sixteen quarters) did inflation expectations subside from 13 per cent to about 5 per cent.

Tests for structural changes

In order to test the stability of the estimated equations, regressions were performed over different estimation

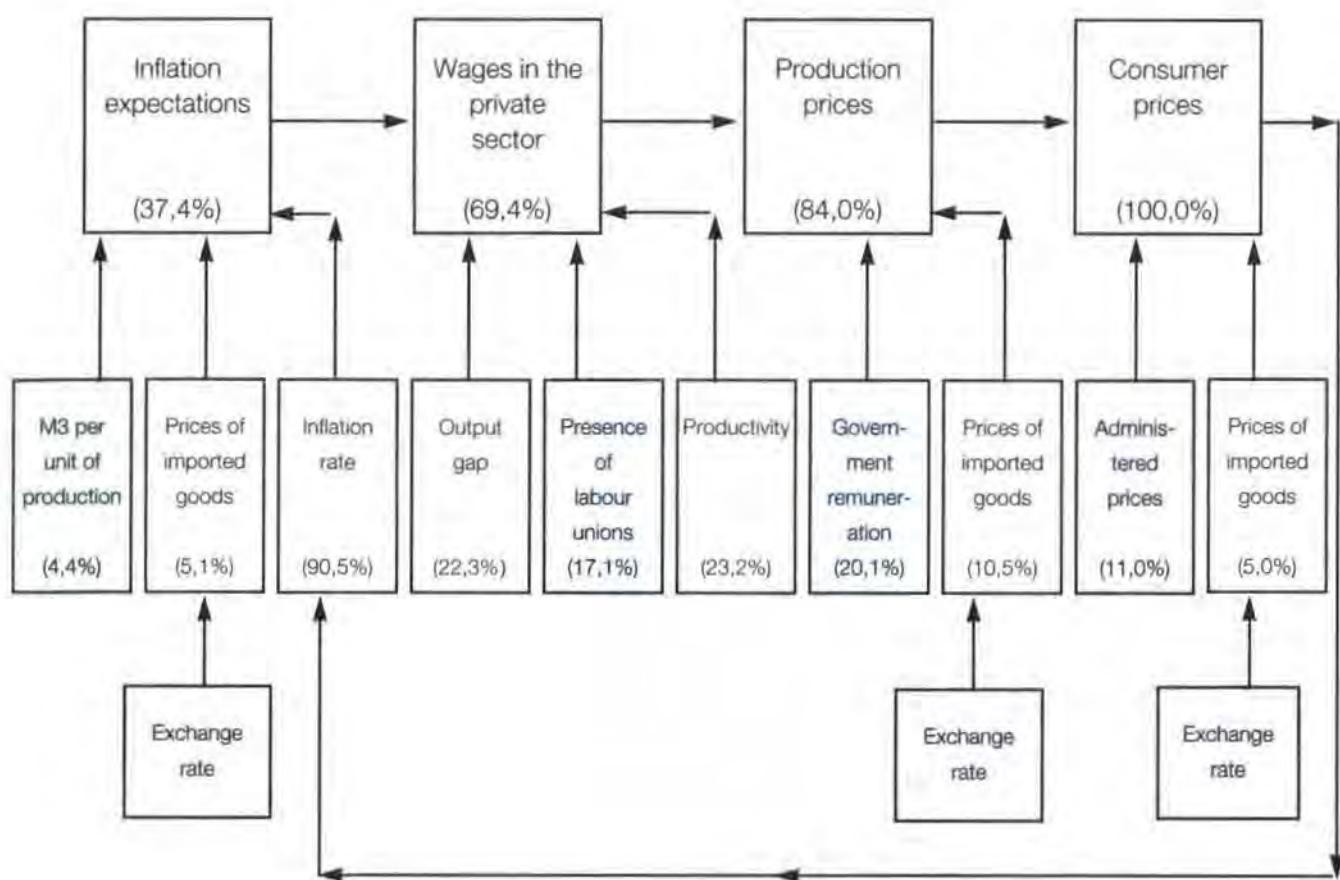
Table 2
Goodness of fit (determination coefficients) of the functions

Function	Estimation period						
	1970 - 1980	1970 - 1982	1970 - 1984	1970 - 1986	1970 - 1988	1970 - 1990	1970 - 1992
Remuneration in the private sector	0,454	0,577	0,520	0,413	0,387	0,361	0,357
Production prices	0,993	0,991	0,987	0,992	0,995	0,997	0,997
Consumer prices*	0,983	0,991	0,979	0,986	0,984	0,989	0,986
Inflation expectations.....	0,779	0,828	0,818	0,844	0,846	0,847	0,857

* The estimation period starts from 1975.

Diagram

Flow chart of the price-formation process



The percentage change in brackets is the beta-coefficient and indicates the change in the dependent variable for a unit change in each explanatory variable.

periods. Only the estimated function for remuneration in the private sector showed a notable weakening in the coefficient of determination (see Table 2)*.

Quandt and Chow tests⁹ were performed on all the functions to test for structural changes. A structural change was detected only in the wage function in 1980. Since 1980 the average rate of wage change was considerably higher than before. A possible reason for this is that labour unions have played a profound role in wage negotiations since that year. The Wiehahn Report¹⁰, which recommended that participation of black unions in the bargaining process be legalised,

was released in 1979 and these recommendations were accepted and implemented by the government in 1980. A dummy variable was therefore introduced in the wage function (as noted above in the description of the wage equation) and the function's coefficient of determination improved to 0,45.

5. Flow chart of the price-formation process in the South African Reserve Bank model

A flow chart of the price-formation model is presented in the Diagram. The shaded areas indicate variables which can be influenced significantly by the authorities. The figures in brackets are the beta-coefficients¹¹ obtained from the regression analysis. These coefficients indicate the change in the dependent

* This is the wage equation without the dummy variable to capture the effect of the entry of organised black unions into the labour market.

⁹ Intriligator M.D.: *Econometric Models, Techniques and Applications*, Prentice Hall, 1978.

¹⁰ The Wiehahn Commission: "Report of the Commission of Investigation on Labour Regulation", RP27/1981.

¹¹ Maddala G.S.: *Econometrics*, McGraw-Hill, Inc., 1977.

variable for a unit change in each explanatory variable, keeping other variables unchanged.

The Diagram indicates that inflation expectations are based predominantly on the most recent inflation rate (90,5 per cent of previous inflation feeds through to current expected inflation) and these inflation expectations, in turn, constitute the main explanatory variable in the wage-determination process in the private sector (37,4 per cent of the variation in nominal wages is explained by the price-expectations variable). Wages in the private sector are seen as the most important component (69,4 per cent) in the determination of the production prices. Changes in production prices, in turn, contribute largely to changes in consumer prices (84,0 per cent).

Certain variables in the price-formation process, as described above, can be influenced directly or indirectly by the authorities in order to constrain inflation. The growth in the money supply can be influenced by, among other things, adjustments in the instruments of monetary policy such as the discount rate of the Reserve Bank. A policy-induced depreciation of the rand against a basket of other currencies will lead to an increase in the cost of imported goods and consequently to an increase in the domestic price level. Should the monetary authorities succeed in maintaining a stable exchange rate, the influence of the prices of imported goods on the domestic price level will only be limited to the extent of inflation in South Africa's trading partner countries. The authorities can also attempt to keep increases in administered prices moderate and to restrict increases in the salaries of civil servants below the current inflation rate. Such a policy is not always commendable because it can produce undesired results arising from unintended distortions of relative prices.

The beta-coefficients indicate that inflation expectations and increases in the remuneration of employees are the most important explanatory variables in the price-formation process. According to these coefficients, wage settlements are based largely on inflation expectations and, to a lesser extent, on demand and supply in the labour market. Expected price increases are taken into account during the wage-formation process and inflation is therefore in reality propagated mainly by expectations that it will continue.

6. Constraining inflation

The spiral of inflation expectations and the inflation rate poses a serious problem for policy-makers and also places a responsibility on them to influence the way in which participants in the economic process form these expectations. Policy must be aimed at persuading economic participants to use the *future expected*

inflation rate in the decision-making processes and not the most recent historical inflation rate. This future expected inflation rate ought to be based also on the policy actions pursued by the authorities to influence the inflation rate. If the authorities are able to convince other participants that they are capable of lowering inflation, expectations are likely to be adjusted accordingly. Just as inflation is generated by participants' expectations of price increases, so price stability can be obtained if participants can be let to expect that prices will remain relatively stable in future.

The consistent adherence to a conservative monetary policy and the maintenance of fiscal discipline is the usual way to restore the credibility of the authorities when they embark on an anti-inflation campaign. During such attempts to restore policy credibility, inflation expectations are likely to adjust slowly until the economic participants are convinced that the authorities will persist with their policies. This also explains why real production and job opportunities are affected adversely during the early stages of an active policy programme to reduce inflation from relatively high levels. Once more stable financial conditions have been created, the negative effects of financial discipline will most likely be reduced considerably.

7. Summary

This study has analysed the price-formation process in South Africa by means of a theoretical model. The main conclusions are that changes in labour costs are at the core of the inflation process and that wage-changes are largely driven by inflation expectations. These expectations react slowly to conventional monetary policies directed at reducing the growth in the money supply, until people are convinced that the authorities will persist with a restrictive policy to achieve their stated objectives. In order to influence expectations decisively, a conservative monetary policy will therefore have to be pursued for an extended period. The consistent application of an anti-inflation policy is seen as an absolutely essential part of any programme aimed at stabilising the overall price level at the lowest cost to the country. Attempts to speed up the move towards greater price stability will require unorthodox and perhaps in the end unhealthy methods to reduce inflationary expectations more speedily. Once financial stability has been achieved, the costs of maintaining these conditions will decrease considerably.

Notes to tables

Balance of payments – tables S-70, S-71 and S-85

In this issue of the *Quarterly Bulletin* the item "changes in liabilities related to reserves" has been redefined to include only changes in the short-term liabilities of the Reserve Bank, and in foreign loans of the Central Government (such as loans from the International Monetary Fund) that have been entered into for the specific purpose of supporting the level of the gross foreign exchange holdings of the country. The other short-term foreign liabilities of the rest of the monetary sector are therefore now excluded from reserve-related liabilities and are shown against a separate item under "short-term capital movements not related to reserves". In the table on the "gold and other foreign reserves" (Table S-85) the item "liabilities related to reserves" has been changed accordingly.

This revision should improve the analytical presentation of South Africa's balance of payments. It also brings the compilation of South Africa's balance of payments more in line with the guidelines of the International Monetary Fund in their recently released Fifth Edition of the *Balance of Payments Manual*. In this Manual the classification of a liability under "liabilities related to reserves" depends on whether the liability is:

- repayable on demand or in the short term;
- repayable in an asset that the debtor would regard as a reserve asset; and/or
- owed to a central bank or central government.

Monetary analysis – table S-24

In the monetary analysis the item "net gold and other foreign reserves" has been renamed "net foreign assets" so as to show that this item differs conceptually from the definition of the net gold and other foreign reserves as reported in the balance of payments of the country.

Kwartaallikse ekonomiese oorsig

Inleiding

Die langdurige resessie van meer as vier jaar in Suid-Afrika het in 1993 'n laagtepunt bereik en die ekonomie het in die loop van die jaar effens herstel. Dit blyk duidelik uit sowel die saamgestelde leidende konjunktuuraanwyser, wat sedert die begin van 1993 skerp opwaarts beweeg het, en die samevallende aanwyser, wat in die tweede helfte van die jaar betreklik skerp gestyg het. Nadat die reële bruto binnelandse produk vir drie agtereenvolgende jare gedaal het, het dit aan die begin van 1993 begin toeneem en op grond van huidige aanduidings kan die groeikoers in 1994 sowat 3 persent beloop.

'n Aansienlike toename in die fisiese omvang van die uitvoer van goedere en die netto uitvoer van goud het 'n belangrike bydrae tot hierdie oplewing in die ekonomiese bedrywigheid gemaak. Die hoeveelheid van goedere wat uitgevoer is, het in 1993 met nie minder nie as 6 persent toegeneem – heelwat meer as die groei in die wêrelphandel. Sterk toenames in die uitvoer van vervaardigde goedere is aangeteken, wat daarop duif dat die huidigevlak van die wisselkoers van die rand Suid-Afrikaanse vervaardigers nog steeds in staat stel om suksesvol in die internasionale markte mee te ding. Die goele vertoning

van die uitvoer het die toename in die invoer wat met die stygende binnelandse besteding verband hou, meer as net uitgekanselleer en 'n bevredigende oorskot is gevolglik in die loop van 1993 op die lopende rekening van die betalingsbalans gehandhaaf.

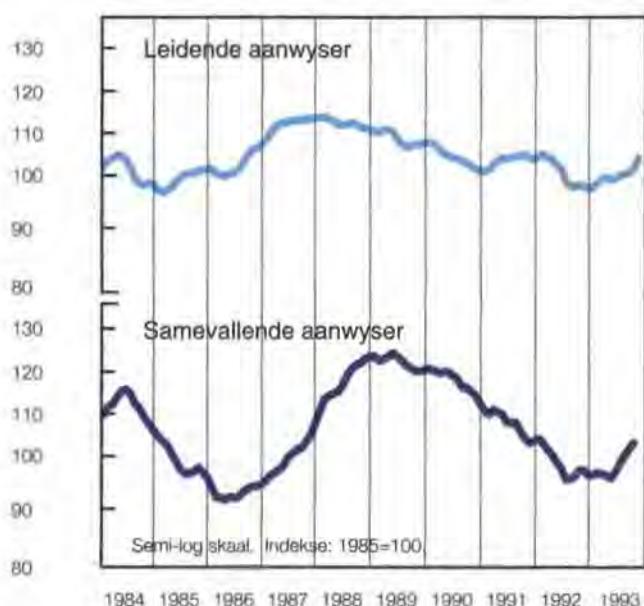
Benewens hierdie merkwaardige vertoning van die uitvoer, was 'n aansienlike toename in die landbouproduksie die steunpilaar van die ekonomiese herstel; dit het gevolg op een van die ernstigste droogtes in Suid-Afrika se geskiedenis. Gunstige weerstoestande het nie net regstreeks hoër landbouproduksie teweeggebring nie, maar die landbousektor het ook die binnelandse produksie onregstreeks deur voorwaartse en rugwaartse skakelings betekenisvol beïnvloed. In die tweede helfte van 1993 het die toename in die ekonomiese bedrywigheid wyer uitgekrag en is groei aangeteken in die reële toegevoegde waarde van die mynbou, fabrieksweise, elektrisiteit, gas en water, handel en finanslewese.

'n Verbetering in die verbruikersvertroue en 'n styging in die reële persoonlike beskikbare inkomne het aanvanklik aanleiding gegee tot 'n oplewing in die besteding aan nie-duursame goedere wat vinnig na die meeste ander hoofgroepes van verbruikersgoedere en -dienste versprei het. Nadat die private verbruiksbesteding vir nie minder nie as sewe opeenvolgende kwartale gedaal het, het dit aan die begin van 1993 begin toeneem. Die reële kapitaalvorming het ook in die tweede helfte van die jaar herstel nadat dit vir 'n tydperk van sowat 3½ jaar gedaal het. Die totale vaste kapitaalvoorraad van die land het nogtans in 1993 bykans onveranderd gebly en die kapitaalvoorraad van sektore soos die landbou, mynbou, elektrisiteit, konstruksie en vervoer het boonop afgeneem.

Die ekonomiese herstel in 1993 het gepaardgegaan met 'n skerp toename in die bruto bedryfsurplus van 11½ persent. Ofskoon hierdie toename grootliks met die styging in die inkomne van boere verband gehou het, het die bedryfsurplusse van die meeste ander sektore ook skerp gestyg. 'n Skerp toename was veral in die bruto bedryfsurplusse van die goudmyne waarneembaar as gevolg van die hoër randprys van goud.

Aansienlike verdere vordering is ook in 1993 gemaak met die verwesenliking van die doelwit van finansiële bestendigheid. Die koers van toename van die produksie- en die verbruikersprysindeks het teruggesak tot vlakke wat laas in die vroeë sewentigerjare bereik is. Die navolging van 'n konserwatiewe monetêre beleid en disintermediasieprakteke het veroorsaak dat die groei in die monetêre totale gedurende die grootste deel van 1993 traag gebly het. Die koers van toename in die geldvoorraad en bankkredietverlening het in die eerste helfte van 1993 oor die algemeen lae vlakke bereik, maar

Saamgestelde konjunktuuraanwysers



daarná het dit tot aan die einde van die jaar effens versnel. Dit het die groei (gemeet oor twaalf maande) in die omvattend gedefinieerde geldvoorraad (M3) tot binne die geldvoorraadriglyngrens van 6-9 persent gebring.

Geldmarktoestande het gedurende 1993 oor die algemeen stram gebly, hoofsaaklik as gevolg van die aansienlike daling in die netto buitelandse bates (ingesluit goud) van die Reserwebank. Die Bank het verhoed dat toestande te stram word deur bykomende likwiditeit in die binnelandse geldmark terug te plaas. Gegewe hierdie betreklike stram toestande en verwagtings oor rentekoersbewegings, het die daling in geldmarkrentekoerse wat aan die begin van 1990 reeds 'n aanvang geneem het, in 1993 voortgeduur maar teen 'n heelwat stadiger tempo as in 1992.

Bedrywighede op die Johannesburgse Effektebeurs, die effektemark en die Suid-Afrikaanse Termynmark het dwarsdeur 1993 lewendig gebly. 'n Daling in die inflasiekoers, die ommekeer in ekonomiese bedrywighheid en die skerp toename in die netto aankope van sekuriteite deur nie-inwoners het tot 'n sterkerwordende stygmark bygedra. Aandele- en effektepryse het dienooreenkomsdig aansienlik gestyg. Die vaste-eiendomsmark het ook in die tweede helfte van 1993 opmerklik verbeter. Die sukses wat met die verlaging in die inflasiekoers behaal is, in samehang met die daling in die buitelandse rentekoerse en die voortgesette netto aankope van binnelandse leningseffekte deur nie-inwoners, het in die loop van 1993 tot 'n skerp daling in langtermynrente-koerse en opbrengskoerse geleei.

Die oplewing in die ekonomiese bedrywighheid en die bereiking van groter finansiële bestendigheid in die ekonomie is aan bande gelê deur die voortdurende groot netto uitvloeiing van kapitaal nie verwant aan reserwes nie. Hoofsaaklik vanweë politieke onsekerheid, die voortslepende binnelandse onrus, druk op die wisselkoers van die rand, 'n betreklike sterk VSA-dollar internasionaal en die betreklik hoë koste van buitelandse lenings op internationale kapitaalmarkte, is 'n netto uitvloeiing van kapitaal van nie minder nie as R16,3 miljard in 1993 aangeteken. Meer as 90 persent van hierdie netto kapitaaluitvloeiing was in die vorm van korttermynkapitaal, dit wil sê kapitaal met 'n aanvanklike looptyd van een jaar of minder, en foute en onaange-tekende transaksies.

Hierdie groot kapitaaluitvloeiinge het veroorsaak dat die netto goud- en ander buitelandse reserwes van die land in 1993 met R10,3 miljard gedaal het. Ten einde die vlak van die buitelandse reserwes en die wisselkoers van die rand te ondersteun, het die monetêre owerhede in 1993 trekkings van R7,1 miljard op buitelandse kredietfasiliteite gemaak (met inbegrip van 'n lening van die IMF). As gevolg van hierdie trekkings, het die bruto goud- en ander buitelandse reserwes van Suid-Afrika net effens gedaal. In die eerste twee maande van 1993 het hierdie posisie skynbaar aansienlik verbeter soos in 'n toename van R1,1 miljard in die netto buitelandse reserwes van die Reserwebank weerspieël word, selfs nadat 'n terug-

betaling van R1,7 miljard deur Suid-Afrikaanse debiteure op buitelandse skuld ingevolge die finale reëlings met die buitelandse krediteurbanke gemaak is.

Ondanks hierdie lenings deur die owerhede, het die effektiewe wisselkoers van die rand in 1993 met 8,7 persent gedaal, vergeleke met 4,4 persent in 1992. Dié skerp daling in die nominale effektiewe wisselkoers van die rand was groter as die verskil tussen die inflasiekoers van Suid-Afrika en dié van sy belangrikste handelsvennote; die reële effektiewe wisselkoers van die rand het gevoldiglik ook in 1993 met 4,9 persent gedaal.

Die regering het in 1993 aansienlike finansiële beheersing uitgeoefen en die reële owerhedsverbruiksbesteding het vir die tweede agtereenvolgende jaar met minder as $\frac{1}{2}$ persent gestyg, vergeleke met 'n jaarlikse gemiddelde van 4 persent in die tagtigerjare. Die skatkistekort voor lenings en skuldaflossings in verhouding tot die bruto binnelandse produk het in die eerste nege maande van die fiskale jaar 1993/94 dienooreenkomsdig 7,3 persent beloop, dit wil sê betreklik na aan die vlak van die tekort wat vir die jaar in die geheel begroot is. Hoewel dit 'n aansienlike verbetering is vergeleke met die voorafgaande jaar, is die huidige vlak van die regeringstekort, indien daarvan volgehou word, duidelik steeds nie oor die lang termyn handhaafbaar nie en sal dit tot 'n skerp toename in die staatskuld aanleiding gee.

Pogings van die Sentrale Regering en die openbare instellings om die toenames in hul lopende besteding binne perke te hou, het tot gevolg gehad dat die totale werkverskaffing deur die openbare owerhede in 1993 skerp afgeneem het. Die werkverskaffing in die private sektor het ook in die eerste kwartaal van 1993 verminder, maar daar is aanduidings dat afdankings in die tweede helfte van 1993 'n keerpunt kon bereik het. Die skerp verminderings in die werkverskaffing in die formele sektore van die ekonomie sedert die tweede kwartaal van 1989, het toenames in die werkverskaffing in die voorafgaande ses jaar geneutraliseer. Dit beteken dat geen netto bykomstige werkgeleenthede oor die afgelope tien jaar in die formele sektore van die ekonomie buite die landbou geskep is nie.

Binnelandse ekonomiese ontwikkelings

Binnelandse produksie

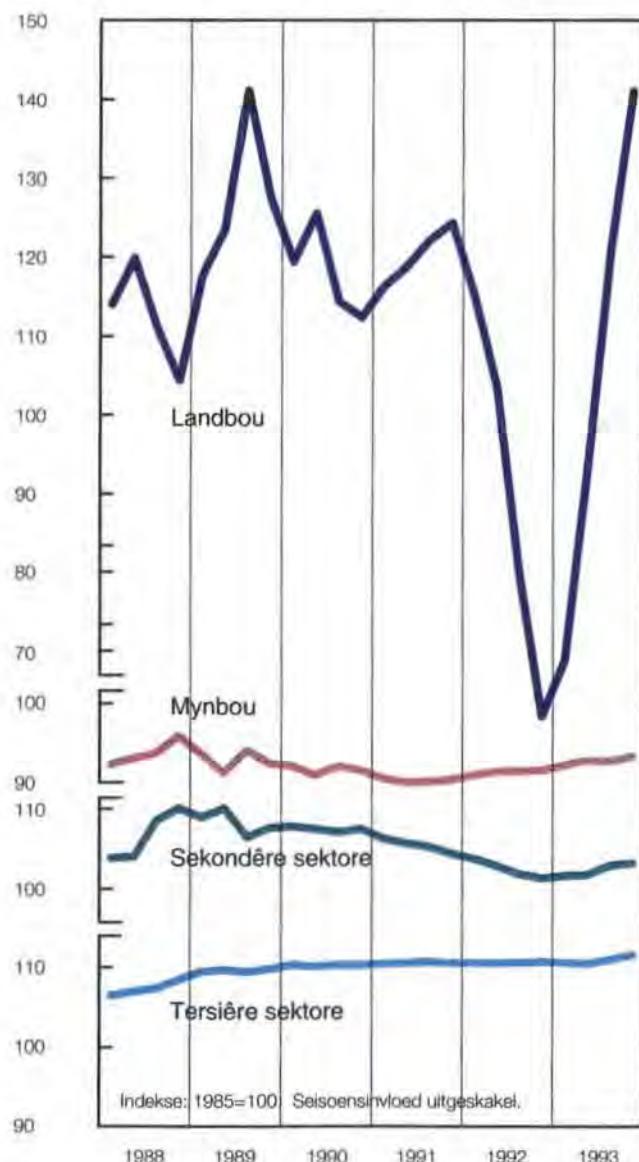
Nadat die vlak van die reële ekonomiese bedrywigheid vanaf die eerste kwartaal van 1989 tot die vierde kwartaal van 1992 bykans onafgebroke gedaal het, het dit 'n laagtepunt bereik en in die loop van 1993 aansienlik herstel. Die toename teen 'n seisoensaangesuiwerde jaarkoers in die *reële bruto binnelandse produk* het van $1\frac{1}{2}$ persent in die eerste kwartaal van 1993 tot $5\frac{1}{2}$ en 8 persent in die volgende twee kwartale versnel en in die vierde kwartaal 'n hoë vlak teen 'n voorlopig geraamde 6 persent bereik. In 1993 in die geheel was die toename in die *reële bruto binnelandse produk* ongeveer 1 persent; dit was die eerste jaar van positiewe groei in die negentigerjare.

Die herstel in die binnelandse produksie gedurende 1993 was in 'n groot mate die gevolg van gunstige weerstoestande wat tot 'n styging van $17\frac{1}{2}$ persent in die *reële landbouproduksie* geleid het. Die mielieproduksie, in die besonder, het verdriedubbel van 3 miljoen ton in 1992 tot ongeveer 9 miljoen ton in 1993. Die koringoes het ook oor dieselfde tydperk aansienlik gestyg, naamlik van 1,3 tot 1,9 miljoen ton. Landbouproduksie het nie

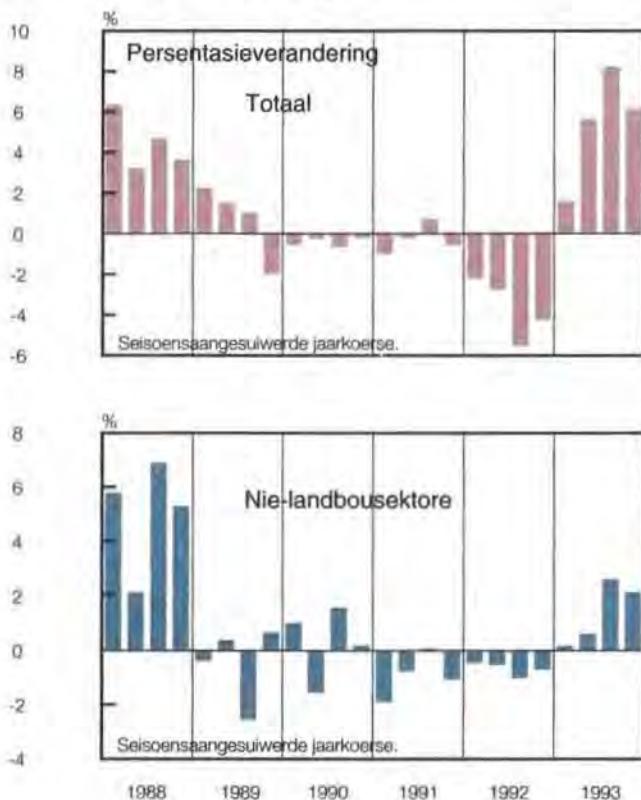
net 'n belangrike regstreekse bydrae tot die ekonomiese herstel gemaak nie, maar ook die binnelandse produksie op 'n onregstreekse manier deur terugwaartse en voorwaartse skakelings laat toeneem.

Indien die landbouproduksie buite rekening gelaat word, het die totale reële produksie van die sektore *buite die landbou* in 1993 met $\frac{1}{2}$ persent toegeneem; in die voorafgaande jaar het die produksie van hierdie sektore met $\frac{1}{2}$ persent afgeneem. Boonop het die produksie in die sektore buite die landbou reeds aan die begin van 1993 begin herstel. Betreklik geringe toenames teen jaarkoerse van $\frac{1}{2}$ persent in die eerste twee kwartale van 1993, is in die laaste twee kwartale van die jaar gevvolg deur heelwat hoër vlakke van $2\frac{1}{2}$ en 2 persent. Die

Komponente van reële bruto binnelandse produk



Reële bruto binnelandse produk



ekonomiese herstel in die tweede helfte van 1993 het bowendien 'n breë grondslag gehad en het in 'n aantal ekonomiese sektore voorgekom. Positiewe groeikoerse is trouens in al die vernaamste ekonomiese sektore in die vierde kwartaal van 1993 aangeteken.

Die reële produksie deur die mynboubedryf, wat in die eerste twee kwartale van 1993 teen 'n gemiddelde jaarkoers van 2% persent toegeneem en in die derde kwartaal met $\frac{1}{2}$ persent gedaal het, het in die vierde kwartaal weer teen 'n jaarkoers van 2% persent gestyg. Die reële produksie van die mynboubedryf het in die kalenderjaar 1993 met 1½ persent toegeneem, vergeleke met 'n toename van 1 persent in 1992. Slegs die reële produksie van die diamantmynbou het in 1993 afgeneem, te wete met 5½ persent; in 1992 het die diamantproduksie nie minder nie as 17 persent vermeerder. Die oommekeer in 1993 was hoofsaaklik te wyte aan 'n doelbewuste vermindering in produksie deur sommige van die minder kostedoeltreffende en ouer diamantmyne.

Hoewel fabrieksproduksie 'n ietwat wisselvallige patroon gevvolg het, het dit ook in 1993 toegeneem. Die reële produksie van die fabriekswese het in die eerste kwartaal teen 'n jaarkoers van 1½ persent toegeneem, in die tweede kwartaal het dit effens afgeneem en in die derde kwartaal weer met bykans 5 persent uitgebrei; in die vierde kwartaal het dit met minder as $\frac{1}{2}$ persent gestyg. Die toename in die gemiddelde reële toegevoegde waarde van die fabriekswese was in 1993 in die geheel op ongeveer dieselfdevlak as in die voorafgaande jaar. Die verbetering in die reële toegevoegde waarde van die fabriekswese het 'n toename in die produksie van bykans alle subsektore weerspieël en kan waarskynlik toegeskryf word aan die begin wat met verskeie groot kapitaalprojekte gemaak is, die oplewing van die landbousektor, 'n toename in die verbruikers- en buitelandse vraag na vervaardigde goedere en die opbou van voorrade.

Die kwartaallikse reële produksie van die sektor elektrisiteit, gas en water het deur die loop van 1993 skerp gestyg teen jaarkoerse van tussen 5 en 7 persent. In die kalenderjaar 1993 is 'n betreklik hoë groeikoers van 3½ persent in hierdie sektor aangeteken. In teenstelling met die ander sekondêre sektore, het die reële toegevoegde waarde van die konstruksiebedryf in die tweede helfte van 1993 net effens opwaarts beweeg en was dit vir die volle kalenderjaar steeds onder die vlak van die vorige jaar.

Die groei in die reële toegevoegde waarde van die tersiêre sektor, wat tydens die afwaartse beweging van die ekonomiese bedrywigheid meesal positief gebly het, het in die eerste twee kwartale van 1993 negatief geword; dit het daarmá in die laaste twee kwartale van die jaar skerp gestyg teen 'n gemiddelde koers van 2 persent. Die netto gevvolg van hierdie veranderings was dat die reële toegevoegde waarde van die dienstesektor in 1993 in die geheel met ongeveer $\frac{1}{2}$ persent gestyg het.

Die verstewiging in die binnelandse vraag was waarskynlik hoofsaaklik vir die herstel van die tersiêre sektor verantwoordelik. 'n Toename in die buitelandse handel

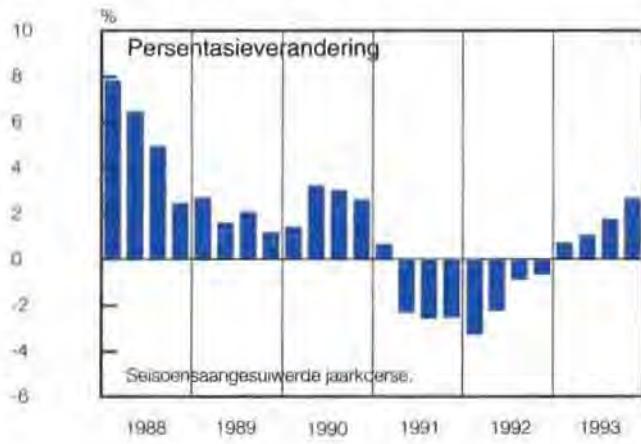
en die hantering van die aansienlike landbou-oes het ook bygedra tot die skerp stijging in die toegevoegde waarde van die sektor wat vervoer-, opberg- en kommunikasielidensvoorsien, terwyl 'n bestendige toename in die reële persoonlike beskikbare inkome en die behoeftes om motorvoertuie te vervang ook bevorderlik was vir die betreklik hoë groeikoers in die handelsektor gedurende die tweede helfte van 1993.

Nadat die reële bruto nasionale produk in 1992 met meer as 2 persent afgeneem het, het dit in die loop van 1993 gestyg en vir die jaar in die geheel was dit 1½ persent hoér as in die voorafgaande jaar. Hierdie toename in die reële bruto nasionale produk is deur hoér binnelandse produksievlekke en 'n verbetering van Suid-Afrika se ruilvoet teweeggebring, wat 'n toename in die reële netto faktorbetalings aan nie-inwoners meer as geneutraliseer het. Wanneer die bevolkingsgroei in berekening gebring word, het die reële bruto nasionale produk per capita in 1993 steeds met bykans 1 persent gedaal. Dit is ook 'n verbetering wanneer dit vergelyk word met die dalende groeikoerse van 2 en 4½ persent wat in 1991 en 1992 aangeteken is.

Binnelandse besteding

Die totale reële bruto binnelandse besteding, wat gedurende die resessie van 1989 tot 1993 merkbaar gewissel het, het in die derde kwartaal van 1993 skerp toegeneem teen 'n hersiene jaarkoers van 12½ persent en teen 'n voorlopige geraamde 11½ persent in die vierde kwartaal. Vir die kalenderjaar 1993 het die totale reële bruto binnelandse besteding met $\frac{1}{2}$ persent gestyg; in 1992 het dit nog met ongeveer 1 persent gedaal. Die matige toename in die binnelandse besteding het die toename in die reële verbruiksbesteding tesame met 'n matige opbou van voorrade weerspieël, terwyl die reële bruto binnelandse vaste investering ook in die tweede helfte van 1993 begin styg het.

Reële private verbruiksbesteding



Die reële private verbruiksbesteding het in die eerste kwartaal van 1993 begin toeneem na afnames in sewe agtereenvolgende kwartale. Die toename teen 'n jaarkoers in die reële private verbruiksbesteding het merkbaar gestyg van 1 persent in die eerste kwartaal van 1993 tot meer as $2\frac{1}{2}$ persent in die vierde kwartaal. As gevolg van hierdie toenames, het die private verbruiksbesteding in 1993 in die geheel met ongeveer $\frac{1}{2}$ persent toegeneem. Hierdie hoër verbruik is aangehelp deur:

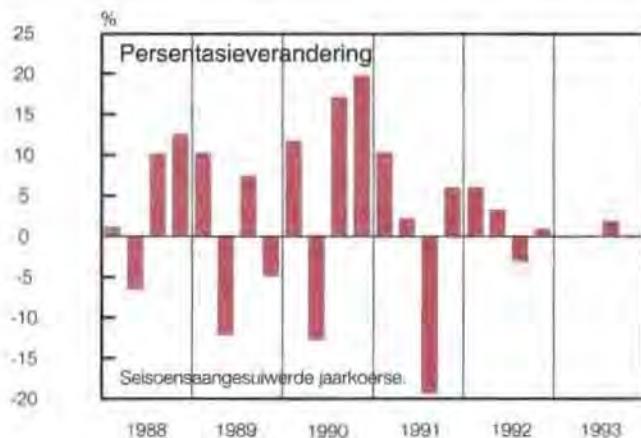
- 'n toename in die reële inkomte uit die eiendom van huishoudings as gevolg van beter landbutoestande;
- 'n styging in die totale reële persoonlike beskikbare inkomte, wat van 'n jaarkoers van $1\frac{1}{2}$ persent in die eerste twee kwartale van 1993 tot 2 en $2\frac{1}{2}$ persent in die laaste twee kwartale versnel het;
- 'n verlaging in die banke se verbandleningskoers, wat die diskresionêre bestedingskeuses van huishoudings verhoog het;
- 'n toename in verbruikersvertroue wat verband hou met die aansienlike vordering wat in die onderhandelinge vir 'n nuwe politieke bedeling waargeneem kon word; en
- voorlopige aanwysers wat daarop dui dat afdankings in die tweede helfte van 1993 moontlik uitgevlak het.

Soos in die bygaande tabel aangetoon word, het hierdie herstel in die reële private verbruiksbesteding aanvanklik meesal in 'n toename in die besteding aan nie-duursame goedere voorgekom. In die tweede helfte van 1993 het dit egter vinnig na die meeste ander hoofgroepen van verbruikersgoedere en -dienste versprei.

Die reële verbruiksbesteding deur die algemene owerheid het in 1993 vir die tweede opeenvolgende jaar met minder as $\frac{1}{2}$ persent toegeneem. Hierdie groeikoers kan met groelkoerse van $2\frac{1}{2}$ persent in 1990, 5 persent in 1991 en 'n gemiddelde jaarkoers van 4 persent in die tagtigerjare vergelyk word. Die fiskale dissipline kon in die besteding aan intermediêre goedere en dienste sowel as in die arbeidsvergoeding van werknemers waargeneem word.

Nadat die reële bruto binnelandse vaste investering vir veertien opeenvolgende kwartale tot in die tweede kwartaal van 1993 gedaal het, het dit in die derde

Reële overheidsverbruiksbesteding



kwartaal teen 'n jaarkoers van $1\frac{1}{2}$ persent en in die vierde kwartaal met ongeveer $3\frac{1}{2}$ persent gestyg. Hierdie versnelling in die groei van vaste investering kon hoofsaaklik aan toenames in die reële kapitaalvorming van die private sektor en die openbare owerhede toege-skryf word, wat 'n geringe afname in kapitaalbesteding deur die openbare korporasies meer as geneutraliseer het. Die styging in die reële kapitaalbesteding deur die private sektor word weerspieël deur hoër uitgawes op masjinerie en toerusting wat met verhuringskontrakte deur finansiële instellings gefinansier is, die aanvang van besteding aan groot kapitaalprojekte in die fabriekswese en 'n aanvulling van die kapitaalvoorraad deur die landbougemeenskap.

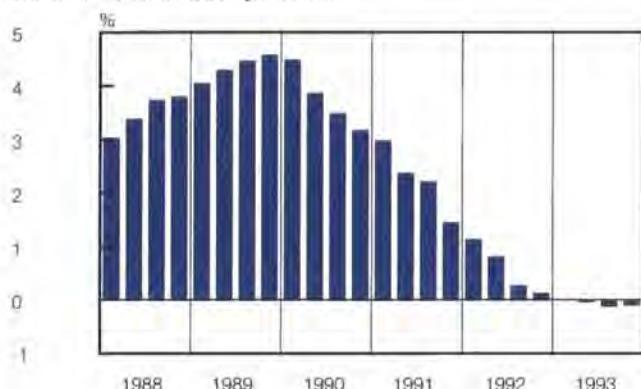
In 1993 in die geheel het die reële vaste kapitaalvorming steeds met 4 persent afgeneem; dit volg op afnames van $8\frac{1}{2}$ en 10 persent wat in 1991 en 1992 aangeteken is. Hoewel die koers van afname in kapitaalvorming in 1993 aansienlik verlangsaam het, het die totale vaste kapitaalvoorraad vir die eerste keer sedert die Tweede Wêreldoorlog byna geen groei getoon nie en het

Reële private verbruiksbesteding volgens hoofgroep

Kwartaallike persentasieverandering teen 'n jaarkoers

	1993				
	1e kw	2e kw	3e kw	4e kw	Jaar
Duursame goedere	-%	0	$1\frac{1}{2}$	$3\frac{1}{2}$	$-1\frac{1}{2}$
Semi-duursame goedere.....	$\frac{1}{2}$	1	$1\frac{1}{2}$	3	$1\frac{1}{2}$
Nie-duursame goedere	$1\frac{1}{2}$	2	$2\frac{1}{2}$	$2\frac{1}{2}$	0
Dienste	0	0	%	%	1
Totaal.....	1	1	2	$2\frac{1}{2}$	%

Netto vaste investering as persentasie van bruto binnelandse produk



die reële kapitaalvoorraad van sektore soos die landbou, mynbou, elektrisiteit, gas en water, konstruksie en vervoer, opberging en kommunikasie afgeneem.

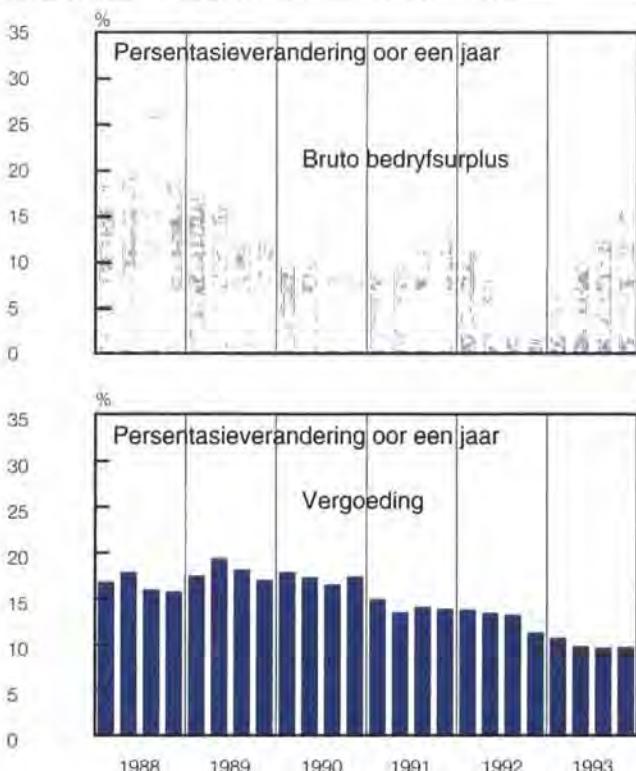
In ooreenstemming met die hoér binnelandse vraag, is 'n opbou van voorrade in die derde sowel as die vierde kwartaal van 1993 aangeteken. Dit het gevolg op 'n tydperk van 'n bykans ononderbroke afname van totale voorrade sedert die tweede helfte van 1989. Reële investering in voorrade het in die kalenderjaar 1993 met R1,2 miljard gestyg, teenoor aansienlike afnames in die voorafgaande drie jaar. In verhouding tot die bruto binnelandse produk, het die nywerheids- en handelsvoorraade egter steeds afwaarts beweeg van 17 persent in die eerste twee kwartale van 1993 tot ongeveer 16% persent in die vierde kwartaal.

Faktorinkome

Die groei in die *totale nominale faktorinkome* teen markpryse het oor 'n tydperk van twaalf maande effens toegeneem van 'n laagtepunt van 8 persent in die vierde kwartaal van 1992 tot 13% persent in die vierde kwartaal van 1993. Die koers van toename in die faktorinkome het dus van 10 persent in 1992 tot 11% persent in 1993 toegeneem. Hierdie matige toename in faktorinkome is in 'n tydperk van aansienlik laer inflasie aangeteken en was die netto gevolg van 'n skerp stygging in die koers van toename in die bruto bedryfsurplus, wat die daling in die koers van toename in die vergoeding van werknemers meer as geneutraliseer het.

Die persentasieverandering van die *bruto bedryfsurplus* oor een jaar het van 'n gemiddelde van ongeveer 3% persent in die laaste helfte van 1992 tot 14% persent in die ooreenstemmende tydperk van 1993 gestyg. In 1993 het die bruto bedryfsurplus met 11% persent toege neem, wat aansienlik hoér is as die toename van 6% persent in 1992. Hierdie skerp toename het hoofsaaklik verband gehou met 'n stewige uitbreiding in die inkomme van die boere. Indien die landbousektor buite rekening

Bruto bedryfsurplus en arbeidsvergoeding



gelaat word, het die bruto bedryfsurplus in 1993 steeds met 10% persent gestyg. Hoewel die meeste van die hoofsektore tot hierdie toename bygedra het, het veral die bruto bedryfsurplus van die goudmyne as gevolg van die stygging in die randwaarde van goud skerp toegeneem.

Die koers van toename oor vier kwartale in die *nominale vergoeding* van werkers het van 11½ persent in die vierde kwartaal van 1992 tot 9½ persent in die derde sowel as die vierde kwartaal van 1993 afgeneem. Oor 'n volle kalenderjaar het die koers van toename in die totale salaris en lone van 13 persent in 1992 tot 10 persent in 1993 gedaal. Hierdie stadiger groei in die vergoeding van werknemers was in al die hoofsektore van die ekonomie waarneembaar.

Binnelandse besparing

As gevolg van die skerp toename in die binnelandse besteding in die eerste helfte van 1993, het die verhouding van die bruto binnelandse besparing tot die bruto binnelandse produk van 17½ persent in die tweede kwartaal van 1993 tot 16½ persent in die derde sowel as in die vierde kwartaal afgeneem. Teen 16½ persent in die kalenderjaar 1993, het die binnelandse besparingsverhouding min of meer op dieselfdevlak as in die vorige jaar gebly.

Die laer besparingsverhouding in die tweede helfte

van 1993 was die gevolg van die steeds betreklik hoë vlak van ontsparing deur die algemene owerheid en 'n daling in die netto besparing deur die private sektor as 'n persentasie van die bruto binnelandse produk. Ofskoon die owerheid 'n netto ontspaarder gebly het, was die vlak van die owerheid se ontsparing in die laaste helfte van 1993 21 persent minder as in die laaste helfte van 1992. Die netto besparing van die private sektor het oor dieselfde tydperk ook stewig vertoon as gevolg van toenames in die bruto bedryfsurplus van geïnkorporeerde sakeondernemings en 'n styging in die inkomme uit eiendom wat deur huishoudings ontvang is.

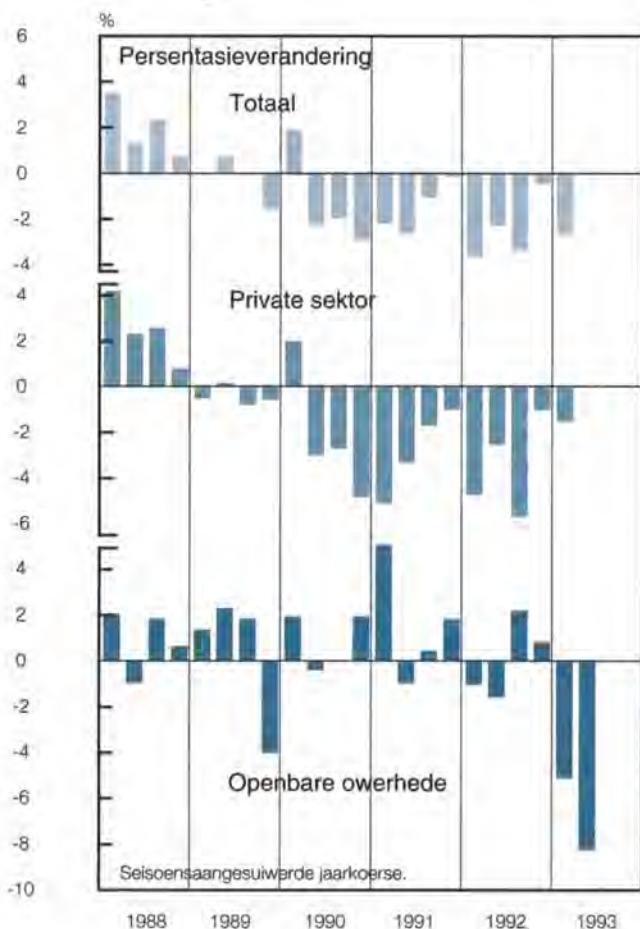
Werkverskaffing

Die totale werkverskaffing in die formele sektore buite die landbou is ernstig geraak deur die resessie van 1989 tot 1993, sowel as deur besuinigingsprogramme wat tot arbeidsvermindering aanleiding gegee het. Die werkverskaffing het van die eerste kwartaal van 1989 tot die eerste kwartaal van 1993 (die jongste inligting wat deur die Sentrale Statistiekdiens beskikbaar gestel is) met 5,9 persent, of met ongeveer 350 000 persone, afgeneem. Die totale aantal werkers wat aan die einde van die eerste kwartaal van 1993 in die formele sektore van die ekonomie buite die landbou in diens was, was gevoglik naastenby dieselfde as die aantal wat aan die einde van die eerste kwartaal van 1983 in diens was. Met ander woorde, geen netto bykomstige werkgeleenthede is gedurende die afgelope tien jaar in die formele sektore van die ekonomie buite die landbou geskep nie.

Die afname in die totale werkverskaffing kan toegeskryf word aan personeelvermindering in die *private sektor*. Die totale werkverskaffing in die private sektor het in die derde kwartaal van 1989 begin daal en, met die uitsondering van die eerste kwartaal van 1990, in elke daaropvolgende kwartaal tot en met die eerste kwartaal van 1993 afgeneem. Boonop het die koers van afname van kwartaal tot kwartaal skerp versnel van 'n seisoensaangesuiwerde jaarkoers van 1,0 persent in die vierde kwartaal van 1991 tot 5,7 persent in die derde kwartaal van 1992; toe eers het dit verlangsaam tot 1,0 en 1,6 persent in die daaropvolgende twee kwartale. Beskikbare gegewens vir die tweede kwartaal van 1993 dui op 'n voortgesette afname in die arbeidsmag van die private sektor ondanks die toenames in die werkverskaffing deur die motorhandel, banke en die versekeringsbedryf.

Die werkverskaffing deur die *openbare owerhede* het per saldo van die eerste kwartaal van 1989 tot die vierde kwartaal van 1992 met 2,5 persent toegeneem. Gedurende die eerste twee kwartale van 1993 het die pogings van die sentrale regering en die openbare ondernemings om toenames in die lopende besteding te besnoei egter veroorsaak dat die totale werkverskaffing deur die openbare owerhede teen seisoensaangesuiwerde jaarkoerse van 5,1 en 8,2 persent gedaal het. Die vlak van die totale werkverskaffing deur die openbare owerhede in die tweede kwartaal van 1993 was gevoglik 0,7 persent laer as in die eerste kwartaal van 1989.

Werkverskaffing in nie-landbousektore



Vervolgens het die vlak van die werkverskaffing deur die openbare owerhede in die derde kwartaal onveranderd gebly grotendeels as gevolg van 'n betreklike groot toename in die werkverskaffing deur die onafhanklike state.

Die ernstige uitwerking van die konjunkturele afwaartse beweging op die arbeidsmark is ook gestaaf deur 'n skerp toename in die aantal *geregistreerde werklose persone*. Gedurende die eerste tien maande van 1993 was die gemiddelde vlak van die geregistreerde werklose persone 12,5 persent hoër as gedurende die ooreenstemmende tydperk van 1992. In Oktober 1993 het die seisoensaangesuiwerde totale getal geregistreerde werkloses 319 000 beloop.

Arbeidskoste en produktiwiteit

Die koers van toename in die gemiddelde *nominale vergoeding per werker* in die sektore van die ekonomie buite die landbou het afgeneem van 'n hoogtepunt van 18,3 persent in 1989 tot 15,2 persent in 1992. Die koers van toename oor vier kwartale in die gemiddelde salaris en lone per werker het selfs skerper gedaal van 19,4

persent in die tweede kwartaal van 1990 tot slegs 12,2 persent in die eerste kwartaal van 1993. Ondanks hierdie afname, was die koers van toename in die nominale arbeidsvergoeding per werker steeds betreklik hoog as die inflasiekoerse en die ooraanbod van werkers in afgeneem word. Hierdie hoë koerse van toename kon hoofsaaklik toegeskryf word aan die afdanking van 'n groot aantal ongeskoolde werkers wat tot 'n daling in die verhouding van ongeskoolde tot geskoolde werkers in die werkverskaffing van die formele sektor en gevvolglik tot hoër gemiddelde salaris en lone per werker aanleiding gegee het.

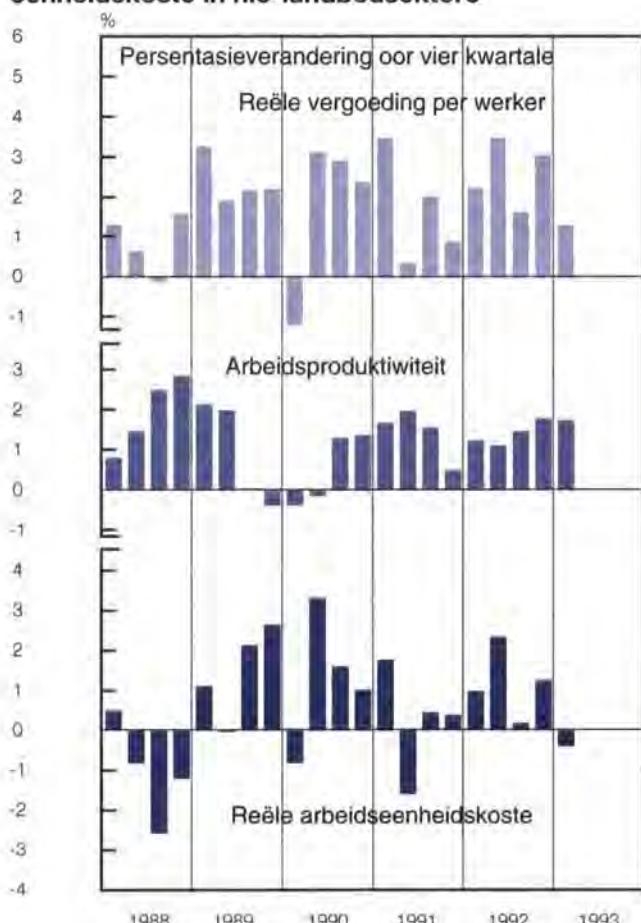
Die stadiger groei in die totale arbeidsvergoeding per werker kon aanvanklik hoofsaaklik toegeskryf word aan 'n afname in die groei van die gemiddelde salaris en lone per werker in die private sektor: die groei oor vier kwartale in die nominale vergoeding per werker in die private sektor het afgeneem van 18,5 persent in die eerste kwartaal van 1990 tot 12,7 persent in die eerste kwartaal van 1993 en, volgens beskikbare gegewens, moontlik selfs verder in die tweede kwartaal. Die koers van toename in die nominale vergoeding per werker in diens van die openbare owerhede het egter ook aansienlik gedaal van 22,5 persent in die eerste kwartaal van 1991 tot die lae vlakte van 7,0 persent in die tweede kwartaal van 1993 en 7,6 persent in die derde kwartaal.

Die reële vergoeding per werker in die sektore van die ekonomie buite die landbou (soos gedefleer met die prysdeflator vir die bruto binnelandse produk buite die landbou) het dwarsdeur die resessie tot die eerste kwartaal van 1993 voortgegaan om toe te neem. In ooreenstemming met die stadiger groei in die nominale vergoeding het die groei oor vier kwartale in die reële vergoeding per werker egter aansienlik afgeneem van 3,5 persent in die tweede kwartaal van 1992 tot 1,3 persent in die eerste kwartaal van 1993.

Die afdanking van 'n groot aantal werkers en 'n afname in die getal mandaat wat vanweë stakings en werkstopsettings verloor is, was verantwoordelik vir 'n versnelling in die koers van toename in die arbeidsproduktiwiteit buite die landbou van 0,5 persent in 1990 tot 1,4 persent in sowel 1991 as 1992. Die koers van toename oor vier kwartale in die reële produksie per werker in die sektore uitgesonderd landbou het ook van 0,5 persent in die vierde kwartaal van 1991 tot 1,8 persent in die vierde kwartaal van 1992 en 1,7 persent in die eerste kwartaal van 1993 versnel.

Die laer koerse van toename in die nominale vergoeding van werkers en die styging in die arbeidsproduktiwiteit het die koers van toename in die nominale arbeidseenheidskoste van 17,2 persent in 1989 tot 13,6 persent in 1992 verminder. Die koers van toename oor vier kwartale in die nominale arbeidseenheidskoste het selfs meer betekenisvol afgeneem van 'n hoogtepunt van 19,8 persent in die vierde kwartaal van 1989 tot slegs 10,3 persent in die eerste kwartaal van 1993 – die laagste koers van toename in die nominale arbeidseenheidskoste sedert 1985. Ondanks hierdie lae toenames in nominale

Arbeidsproduktiwiteit, vergoeding en eenheidskoste in nie-landbousektore



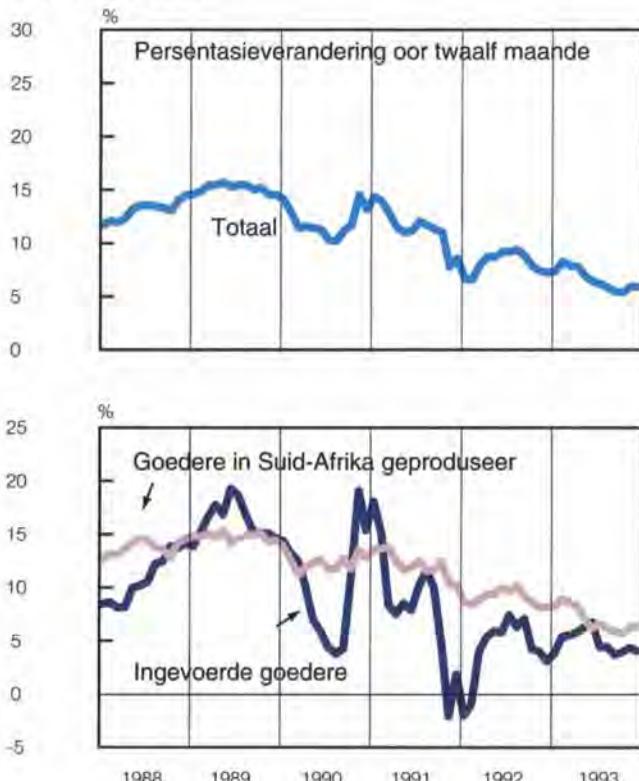
koste, het die verandering in die arbeidseenheidskoste tot aan die einde van 1992 positief gebly. In die eerste kwartaal van 1993 het die reële arbeidseenheidskoste (gemeet oor vier kwartale) egter met 0,4 persent gedaal.

Prys

Die laer koerse van toename in die arbeidseenheidskoste, die konserwatiewe monetêre beleid wat deur die owerhede nagevolg is, die betreklike bestendigheid van die eksterne waarde van die rand, die gebrek aan vraagdruk en die verbeterde landbouthouerstande het meegewerk om inflasiedruk te verminder. Dit het veroorsaak dat die koers van toename in die verbruikersprysindeks in 1993 tot enkelsyfervlakte afgeneem het, terwyl die koers van toename in die produksieprysindeks betreklik laag gebly het.

Die koers van toename in die omvattende produksieprysindeks het aansienlik afgeneem van sy jongste hoogtepunt van 15,2 persent in 1989 tot slegs 6,6 persent in 1993 – die laagste vlak sedert 1971. Die koers van toename oor tydperke van twaalf maande in die produksieprysindeks het reeds in November 1991 'n

Produksiepryse



enkelsyfvlak van 9,7 persent bereik en in die daaropvolgende tydperk onder 10 persent gebly. In Oktober 1993 het hierdie koers van toename die lae vlak van 5,4 persent bereik voordat dit weer ietwat toegeneem het tot 6,0 persent in November en Desember 1993.

Hoewel die pryse van *ingevoerde goedere* gedurende 1993 teen ietwat hoér koerse as in 1992 gestyg het as gevolg van die skerp depresiasie van die rand, het die stygging in hierdie pryse sedert 1991 feitlik deurgaans 'n demper op inflasie in die omvattende produksieprysindeks geplaas. Die koers van toename oor tydperke van twaalf maande in die pryse van *ingevoerde goedere* het gedaal van 19,1 persent in November 1990 tot negatiewe koerse aan die einde van 1991 en die begin van 1992; daarna het dit versnel tot 7,5 persent in Julie 1992 en in die daaropvolgende tydperk rondom hierdie vlak gewissel. Die koers van toename oor tydperke van twaalf maande in die pryse van *ingevoerde goedere* het onlangs weer teruggesak van 6,8 persent in Junie 1993 tot 4,1 persent in Desember. In die kalenderjaar 1993 het die koers van toename in die pryse van *ingevoerde goedere* 5,0 persent beloop, teenoor 4,2 persent in 1992 en 16,3 persent in 1989.

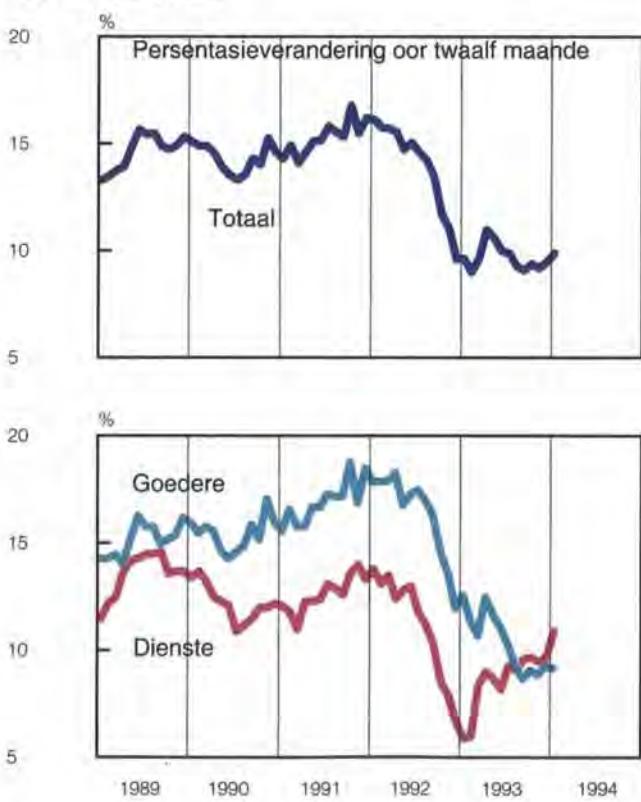
Nadat die koers van toename oor tydperke van twaalf maande in die pryse van *binnelands geproduseerde goedere* in Maart 1991 'n hoogtepunt van 13,9 persent

bereik het, het dit in die daaropvolgende maande aansienlik afgeneem. Gedurende 1993 het hierdie koers van toename in die pryse van binnelands geproduseerde goedere verder gedaal van 9,0 persent in Februarie tot 5,7 persent in Oktober, voordat dit weer ietwat toegeneem het tot 6,3 persent in Desember. Die gemiddelde koers van toename in die pryse van binnelands geproduseerde goedere het derhalwe afgeneem van 14,9 persent in 1989 tot 7,0 persent in 1993.

Die koers van toename oor tydperke van twaalf maande in die omvattende *verbruikersprysindeks* het sy jongste hoogtepunt eers teen die einde van 1991 bereik. In teenstelling met die produksieprysindeks, het hierdie koers van toename in die verbruikersprysindeks aanvanklik slegs matig afgeneem van 16,8 persent in Oktober 1991 tot 15,1 persent in Junie 1992; eers daarna het dit vinnig gedaal tot 9,6 persent in Desember 1992 en selfs verder tot 9,0 persent in Februarie 1993. Hierdie koers van toename het daarna weer toegeneem tot 11,0 persent in April voordat dit afwaarts gewissel het tot 9,1 persent in September 1993; dit het daarna weer ietwat tot 9,9 persent in Januarie 1994 versnel.

Vir die eerste jaar sedert 1973 is 'n enkelsyferinflasiekoers in die verbruikersprysindeks dus in 1993 aangeteken, te wete 9,7 persent. Vanaf April 1993 (die maand waarin die toegevoegde waarde en ander

Verbruikerspryse



indirekte belastings verhoog is) tot Januarie 1994 het die seisoensaangesuiwerde jaarkoers van toename in die verbruikersprysindeks slegs 7,4 persent beloop.

'n Stadiger toename in die prysse van verbruikersgoedere en -dienste het tot die laer inflasiekoers in verbruikerspryse gedurende 1993 bygedra. Die koers van toename in die prysse van verbruikersdienste oor 'n tydperk van twaalf maande het egter onlangs 'n duidelik opwaartse beweging getoon van 'n laagtepunt van 5,9 persent in Januarie 1993 tot 10,9 persent in Januarie 1994. In teenstelling met hierdie ontwikkeling, het die koers van toename oor tydperke van twaalf maande in die prysse van verbruikersgoedere per saldo van 12,5 persent in April 1993 tot 9,2 persent in Januarie 1994 afgeneem.

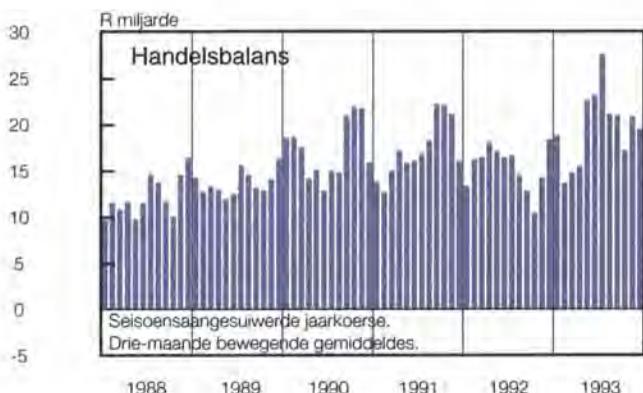
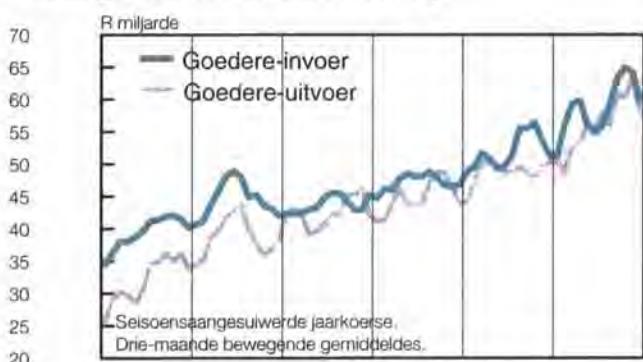
Buitelandse handel en betalings

Lopende rekening

Ondanks die herstel in die ekonomiese bedrywigheid gedurende die loop van 1993, het die *oorskot op die lopende rekening* van die betalingsbalans betreklik groot gebly. Gereken teen 'n seisoensaangesuiwerde jaarkoers, het die saldo op die lopende rekening slegs matig gekrimp van 'n gemiddelde kwartaallikse vlak van R6,2 miljard in die eerste helfte van 1993 tot R6,0 miljard in die derde kwartaal en R5,3 miljard in die vierde kwartaal. Vir 1993 in die geheel het die oorskot op die lopende rekening R5,9 miljard beloop – aansienlik meer as die oorskot van R3,9 miljard in 1992. In verhouding tot die bruto binnelandse produk, het die oorskot op die lopende rekening van 1,2 persent in 1992 tot 1,6 persent in 1993 toegeneem.

Die slegs effense afwaartse beweging in die oorskot op die lopende rekening gedurende 1993 het plaasgevind ondanks 'n skerp stygging in die waarde van die goedere-invoer en in netto betalings vir dienste en oordragte aan nie-inwoners. Hierdie betreklike sterk vertoning van die lopende rekening was die gesamentlike resultaat van 'n aansienlike stygging in die waarde van die

Betalingsbalans: Handelsrekening



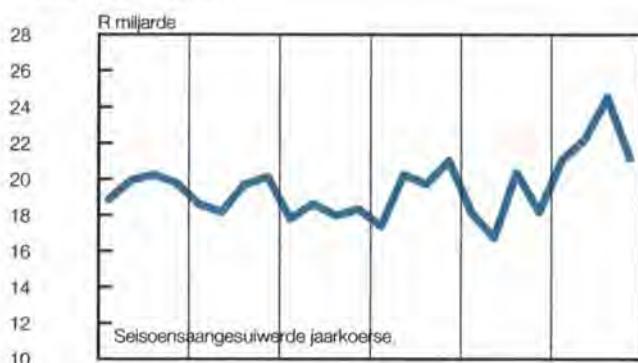
goedere-uitvoer en die netto gouduitvoer.

Die waarde van die goedere-uitvoer (seisoensaangesuiwerd en tot 'n jaarkoers verhef) het van R48,6 miljard in die eerste kwartaal van 1993 tot nie minder nie as R63,6 miljard in die vierde kwartaal gestyg. Vir 1993 in die geheel het die totale waarde van die goedere-uitvoer met 14% persent toegeneem, teenoor 9½% persent in die voorafgaande jaar. Die skerp styging in die goedere-uitvoer in 1993 het in 'n groot mate verband gehou met hoér uitvoerpryse wat vanweë die depresiasie van die rand met 8 persent gestyg het. Internasionale grondstofpryse was oor die algemeen onder druk en het eers teen die einde van die jaar effens opwaarts begin beweeg.

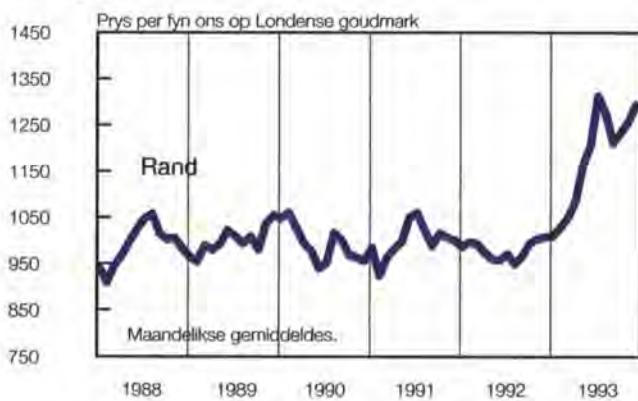
Die hoeveelheid van die goedere-uitvoer het in 1993 buitengewoon goed presteer en met 6 persent gestyg; daarmee het dit die groei van 3 persent in die wêreldhandel met 'n aansienlike marge oorskry. In die besonder het die uitvoer van vervaardigde produkte skerp gestyg. In verhouding tot totale goedere-uitvoer, het die aandeel van vervaardigde produkte nou voortdurend van 15,7 persent in 1989 tot 23,9 persent in 1993 gestyg – 'n aanduiding dat die vlak van die wisselkoers van die rand Suid-Afrikaanse vervaardigers steeds in staat stel om suksesvol op internasionale markte mee te ding. Die voortgesette sterk prestasie van die uitvoer van vervaardigde produkte is waarskynlik ook 'n weerspieëeling van die lae vlak van die binnelandse vraag, wat vervaardigers noop om ander afsette vir hulle produkte te vind.

Nadat die *netto gouduitvoer* bestendig van 'n seisoensaangesuiwerde jaarkoers van R18,2 miljard in die vierde kwartaal van 1992 tot 'n buitengewoon hoë R24,5 miljard in die derde kwartaal van 1993 gestyg het, het dit in die vierde kwartaal tot die steeds hoë vlak van R21,2 miljard gedaal. Die waarde van die netto gouduitvoer het gevvolglik in 1993 met 21 persent toegeneem; in die vierjaar-tydperk van 1988 tot 1992 het die waarde van die netto gouduitvoer teen 'n gemiddelde jaarlikse koers van ongeveer 2 persent gedaal. 'n Styging in die randprys van goud was hoofsaaklik vir dié

Netto gouduitvoer



Goudprys



toename in 1993 verantwoordelik, terwyl die gemiddelde prys van goud uitgedruk in VSA-dollar teen \$360 per fyn ons slegs effens hoër as in 1992 was. Die hoeveelheid van die netto gouduitvoer het in 1993 met ongeveer 4 persent gestyg, wat hoofsaaklik 'n weerspieëling is van 'n

Lopende rekening van die betalingsbalans

Seisoensaangesuiwerde jaarkoerse

R miljarde

	1992				1993	
	Jaar	1e kw	2e kw	3e kw	4e kw	Jaar
Goedere-uitvoer	49,0	48,6	56,2	55,8	63,6	56,1
Netto gouduitvoer	18,4	21,0	22,2	24,5	21,2	22,2
Goedere-invoer	-51,9	-56,1	-55,8	-59,3	-64,0	-58,8
Netto dienste- en oordragbetalings	-11,6	-11,7	-12,0	-15,0	-15,5	-13,6
Saldo op lopende rekening	3,9	1,8	10,6	6,0	5,3	5,9

toename in die gehalte van die erts wat verwerk is.

Die aansienlike styging in die binnelandse besteding in die tweede helfte van 1993 het soos verwag kon word 'n toename in die waarde van die goedere-invoer (seisoensaangesuiwerd en tot 'n jaarkoers verhef) van R55,8 miljard in die tweede kwartaal van 1993 tot R59,3 miljard in die derde kwartaal en R64,0 miljard in die vierde kwartaal tot gevolg gehad. Vir die jaar in die geheel het die waarde van die goedere-invoer met 13½ persent gestyg, wat uit toenames van 9 persent in die pryse en 4 persent in die hoeveelhede van ingevoerde goedere bestaan het. Sterk toenames is aangeteken in die kategorieë masjinerie en elektriese toerusting en vervoertoerusting, wat 'n skerp afname in die invoer van landbouprodukte teëgewerk het.

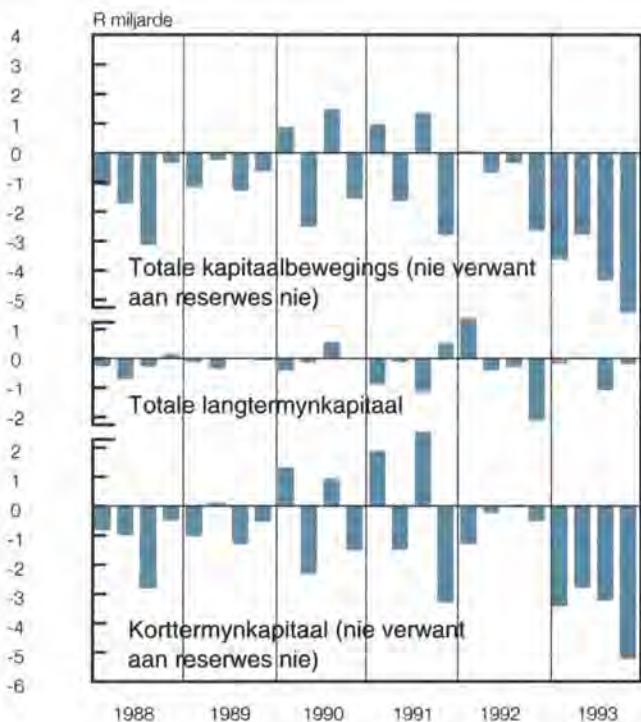
Netto betalings vir dienste en oordragte aan nie-inwoners het geleidelik toegeneem van 'n selsoensaangesuiwerde jaarkoers van R11,7 miljard in die eerste kwartaal van 1993 tot R15,0 miljard in die derde kwartaal en selfs verder tot R15,5 miljard in die vierde kwartaal. Hierdie toenemende groter tekort op die dienstebetallings aan nie-inwoners wat die toename in ontvangste vir dienste aan hulle gelewer, oorskry het. Die skerp styging in dienstebetallings was op sy beurt grootliks die gevolg van hoér besteding aan toerisme en reiskoste deur Suid-Afrikaners, hoér betalings vir vrag en versekering sowel as 'n betekenisvolle toename in rentebetallings aan nie-inwoners, wat 'n weerspieëling is van groot buitelandse beleggings deur die stelsel van finansiële rand in Suid-Afrikaanse effekte.

Kapitaalbewegings

Die kommerwekkende groot totale netto uitvloeiing van kapitaal nie verwant aan reserwes nie (soos heromskry om die buitelandse korttermynlaste van die private monetêre sektor in te sluit) van R10,8 miljard in die eerste nege maande van 1993, het in die vierde kwartaal voortgeduur. Hoofsaaklik vanweë politieke en sosiale onsekerhede, die voortslepende binnelandse onrus, druk op die wisselkoers van die rand tesame met die betreklike sterk VSA-dollar en die praktyk wat deur sommige buitelandse banke gevvolg word om hul uitstaande eise op nie-inwoners aan die einde van hul finansiële jaar te verminder, is 'n netto kapitaaluitvloeiing van nie minder nie as R5,5 miljard in die vierde kwartaal van 1993 aangeteken; hierdie vlak was letwat hoër as die netto uitvloeiing van R4,4 miljard in die derde kwartaal van 1993.

Soos in vorige kwartale, het 'n voortgesette groot netto uitvloeiing van kapitaal in die vierde kwartaal van 1993 hoofsaaklik weer in *korttermynkapitaal*, insluitende foute en onaangewekende transaksies, voorgekom. Die netto uitvloeiing van korttermynkapitaal nie verwant aan reserwes nie het van R3,2 miljard in die derde kwartaal van 1993 tot R5,3 miljard in die vierde kwartaal toegeneem. Die netto uitvloeiing van *langtermynkapitaal* het daarenteen oor dieselfde tydperk van R1,1 miljard tot

Netto kapitaalbewegings



R0,2 miljard verminder.

Vir die kalenderjaar 1993 in die geheel is 'n netto uitvloeiing van R16,3 miljard aangeteken, wat aansienlik hoër was as die netto uitvloeiing van R3,7 miljard in 1992; die kumulatiewe netto uitvloeiing van kapitaal sedert 1985 beloop nou R49 miljard. Meer as 90 persent van die netto kapitaaluitvloeiing in 1993 was in die vorm van korttermynkapitaal, dit wil sê kapitaal met 'n oorspronklike looptyd van een jaar of minder. 'n Groot deel van hierdie uitvloeiing van korttermynkapitaal was te wyte aan 'n afname in finansielerand-saldo's by banke vanweë netto aankope van sekuriteite deur buitelanders.

Die netto uitvloeiing van langtermynkapitaal van R1,5 miljard het hoofsaaklik bestaan uit terugbetalings op buitelandse lenings deur die *openbare owerhede* en *openbare korporasies*. Vanweë die betreklik hoë koste van buitelandse lenings teenoor binnelandse lenings, was hierdie instellings nie geneë om uitstaande verpligtinge teenoor nie-inwoners op vervaldatums om te rol nie. Nie minder nie as R1,6 miljard op toondereffekte en skuldbrieue en R1,8 miljard op lenings gewaarborg deur buitelandse regerings is gevvolglik in 1993 afgelos. Hierdie instellings en die *private sektor* het ook netto terugbetalings van R0,9 miljard gemaak op skuld wat na medium- en langtermynlenings buite die net omgeskakel is, terwyl die finale drie paaiememente aan buitelandse krediteure ingevolge die Derde Tussentydse Skuldooreenkoms in 1993 R2,4 miljard beloop het.

Netto kapitaalbewegings (nie verwant aan reserwes nie)*

R miljoene

	1992		1993			Jaar
	Jaar	1e kw	2e kw	3e kw	4e kw	
Langtermynkapitaal						
Openbare owerhede	2 092	-119	-597	-738	-619	-2 073
Openbare korporasies.....	1 050	-526	-132	-140	-876	-1 674
Private sektor	-4 653	441	750	-224	1 280	2 247
Totale langtermynkapitaal.....	-1 511	-204	21	-1 102	-215	-1 500
Korttermynkapitaal nie verwant aan reserwes nie						
Monetêre sektor	3 306	-1 799	-1 033	652	-629	-2 809
Ander, insluitende onaangetekende transaksies	-5 468	-1 652	-1 787	-3 900	-4 625	-11 964
Totale kapitaalbewegings, uitsluitende laaste verwant aan reserwes.....	-3 673	-3 655	-2 799	-4 350	-5 469	-16 273

* Heromskryf om die buitelandse korttermynlaaste van die private monetêre sektor in te sluit.

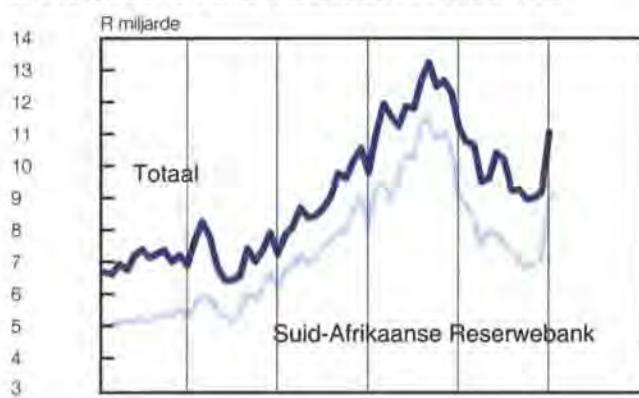
Hoewel 'n netto invloeiing van langtermynkapitaal van R2,2 miljard na die private sektor in 1993 aangeteken is, het dit netto aankope ingesluit van R4,2 miljard deur nie-inwoners van aandele en effekte wat op die Johannesburgse Effektebeurs genoteer is; hierdie aankope verteenwoordig natuurlik nie 'n netto toename van buitelandse reserwes na die land nie omdat dit deur ooreenstemmende uitvloeiings in ander poste van die kapitaalrekening geneutraliseer behoort te word (byvoorbeeld in die buitelandse korttermynlaaste van monetêre instellings), vanweë die feit dat hierdie transaksies deur die finansiélerandmeganisme moes plaasgevind het.

Buitelandse reserwes

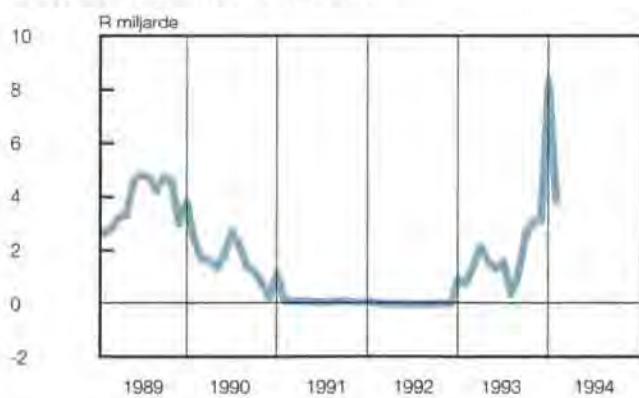
Die netto resultaat van die groot uitvloeiing van kapitaal nie verwant aan reserwes nie en die effens kleiner oorskot op die lopende rekening van die betalingsbalans was 'n afname van R4,3 miljard in Suid-Afrika se netto goud- en ander buitelandse reserwes in die vierde kwartaal van 1993. Die land se netto buitelandse reserwes het gevvolglik in die kalenderjaar 1993 met R10,3 miljard gedaal; 'n aansienlike verandering van die toename van R0,3 miljard wat in 1992 aangeteken is. In die eerste twee maande van 1994 het 'n sterk oommekeer egter in hierdie grootheid voorgekom en het die netto buitelandse reserwes van die Reserwebank met R1,1 miljard gestyg.

Die betreklik lae vlak van die bruto buitelandse reserwes het die owerhede genoodsaak om aansienlike trekkings op hul buitelandse korttermynkredietfasilitate te maak. Die uitstaande buitelandse korttermynlaaste verwant aan reserwes van die Reserwebank het gevvolglik geleidelik toegeneem van nul in November 1992 tot R2,6 miljard aan die einde van September 1993 en tot R5,3

Bruto goud- en ander buitelandse reserwes



Laaste verwant aan reserwes



miljard aan die einde van Desember 1993. In die eerste twee maande van 1994 het hierdie laste van die Bank weer tot R3,9 miljard aan die einde van Februarie gedaal. Die Sentrale Regering het ook addisionele bystand verleen met die handhawing van die vlakke van die buitelandse reserwes deur die trekking in Desember 1993 van R2,8 miljard by die Internasionale Monetêre Fonds. Hierdie lening is terugbetaalbaar in agt gelyke kwartaallikse paaieremente wat in die eerste kwartaal van 1997 'n aanvang neem.

As gevolg van die trekkings op hierdie leningsfasiliteite, het die *bruto goud- en ander buitelandse reserwes* van Suid-Afrika slegs marginaal van R11,2 miljard aan die einde van 1992 tot R11,1 miljard aan die einde van 1993 gedaal. Die goudreserwes van die land het egter aan die einde van Desember 1993 slegs 4,8 miljoen fyn onse beloop, wat aansienlik laer was as die vlak van 6,6 miljoen fyn onse aan die einde van Desember 1992; dit beteken natuurlik ook dat die besit aan buitelandse valuta van die land oor dieselfde tydperk toegeneem het. In die eerste twee maande van 1994 het die Reserwebank se bruto goud- en ander buitelandse reserwes marginaal met R292 miljoen tot R8,8 miljard aan die einde van Februarie 1994 gedaal.

Wisselkoerse

Die *nominale effektiewe wisselkoers* van die rand het in 1993 met 8,7 persent gedaal, vergeleke met 4,4 persent in 1992. Die verdere afname in die gemiddelde geweegde wisselkoers van die rand was die gevolg van 'n depresiasi van die rand teenoor al die belangrikste

Veranderings in die wisselkoerse van die rand

%

	31 Des '92 tot 18 Okt '93	18 Okt '93 tot 31 Des '93	31 Des '92 tot 31 Des '93	31 Des '93 tot 28 Feb '94
Geweegde				
gemiddelde ...	-9,2	0,6	-8,7	-3,2
VSA-dollar	-8,4	-1,9	-10,1	-2,1
Britse pond.....	-7,4	-0,3	-7,7	-2,6
Duitse mark.....	-7,8	4,8	-3,4	-3,4
Japanse yen.....	-21,3	2,4	-19,4	-8,5
Nederlandse				
gulden	-7,6	4,2	-3,8	-3,0
Italiaanse lira....	-1,4	5,7	4,2	-3,5

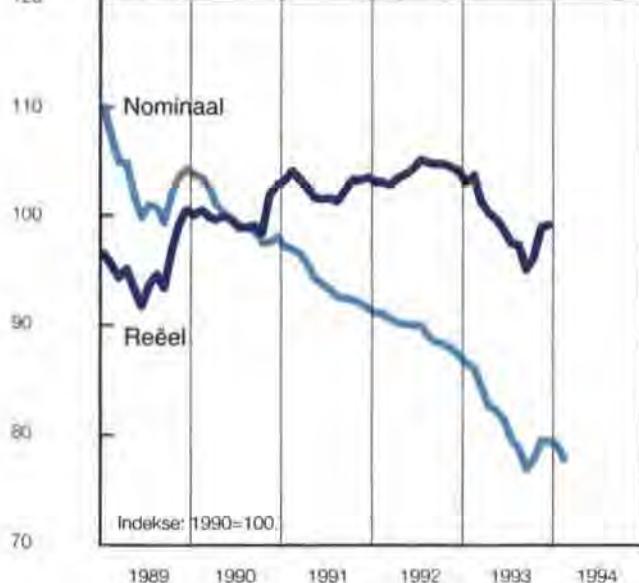
geldeenhede uitgesonderd die Italiaanse lira. In die besonder, het die rand aansienlik teenoor die Japanse yen gedepresieer as gevolg van die geldeenheid se betreklike sterk vertoning in internasionale markte. Die rand het in die eerste twee maande van 1994 voortgegaan om teenoor die belangrikste geldeenhede te depresieer, met die gevolg dat die nominale effektiewe wisselkoers van die rand met 'n verdere 3,2 persent gedaal het.

Die skerp daling in die nominale effektiewe wisselkoers van die rand gedurende 1993 het die verskil in die inflasiekoerse tussen Suid-Afrika en sy vernaamste handelsvennootlande oorskry; die *reële effektiewe wisselkoers* van die rand het gevólglik gedurende 1993 met 4,9 persent verminder.

Ondanks die skerp fluktuasies in die wisselkoers van die *finansiële rand* wat gedurende 1993 in reaksie op verskeie politieke en ekonomiese verwante voorvalle van tyd tot tyd voorgekom het, het die wisselkoers van die finansiële rand per saldo van R4,860 per dollar aan die einde van Desember 1992 tot R4,296 per dollar aan die einde van 1993 geappresieer, 'n styging van meer as 13 persent. Die diskonto op die finansiële rand het gedurende die tydperk van 37,2 persent tot 20,9 persent vermou. Kommer oor probleme rakende die konstitusionele onderhandelingsproses het geleid tot 'n depresiasi van die wisselkoers van die finansiële rand tot R4,726 op 28 Februarie 1994. Die diskonto op die finansiële rand het oor hierdie tydperk ook tot 26,5 persent verbreed.

Nominale en reële effektiewe wisselkoerse van die rand

120



Finansiële markte

Geldvoorraad

Die groei in die monetêre groothede het gedurende die grootste deel van 1993 traag gebly. Die koers van toename in hierdie groothede het oor die algemeen gedurende die eerste helfte van 1993 baie lae vlakke bereik, maar dit het daarna teen die einde van die jaar ietwat versnel. Die koers van toename oor twaalf maande in die *omvattend gedefinieerde geldvoorraad* (M3) het van 'n reeds lae 8,0 persent in Desember 1992 tot slegs 1,9 persent in Julie 1993 gedaal; in die daaropvolgende ses maande het dit matig tot 7,0 persent in

Desember 1993 en verder tot 'n geraamde 9,6 persent in Januarie 1994 gestyg.

Die betreklik lae groeikoerse in M3 gedurende 'n groot deel van 1993 kon hoofsaaklik aan die lae vlak van die binnelandse ekonomiese bedrywigheid, 'n afname in die inflasiekoers, die betreklik beperkende monetêre beleidsingesteldheid en disintermediasierprakteke vanweë die betreklike groot gapings tussen banke se deposito- en uitleenkoerse, toegeskryf word. Soos reeds breedvoerig in die *Kwartaalblad* van Desember 1993 uiteengesit is, is die groei in die geldvoorraad verder deur sekere tegniese aspekte beperk, soos die oorbefondsing van die skatkistekort aan die begin van die fiskale jaar, groter benutting van buigsame verbandfasiliteite en regulatoriese veranderings aan die likwiedebate- en kontantreserwevereistes van die banke.

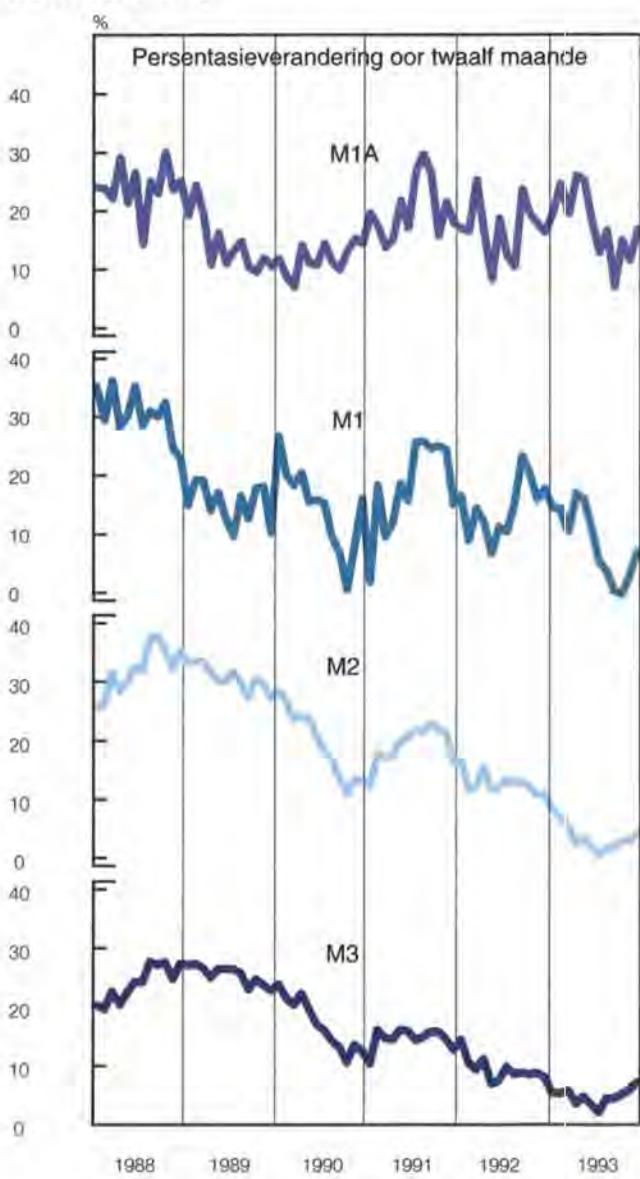
Die koers van toename oor tydperke van twaalf maande in die meeste van die *enger monetêre totale* het ook aan die begin van 1993 gedaal, maar daarna het dit in die tweede helfte van die jaar ietwat versnel. Die koers van toename in M2 oor tydperke van twaalf maande het naamlik van 10,8 persent in Desember 1992 tot 0,1 persent in Julie 1993 gedaal voordat dit in Desember weer tot 3,9 persent gestyg het, terwyl die koers van toename in M1 van 17,5 persent in Desember 1992 tot -0,5 persent in Oktober 1993 gedaal het voordat dit in Desember tot 6,7 persent gestyg het. In teenstelling met hierdie ontwikkelings het die groeikoers oor twaalf maande in M1A aanvanklik van 16,2 persent in Desember 1992 tot 25,9 persent in April 1993 gestyg; dit het daarna in September tot 6,9 persent gedaal, maar in Desember weer tot 16,6 persent gestyg.

Verskuiwings tussen die verskillende kategorieë deposito's was hoofsaaklik verantwoordelik vir die groter wisselings in die koers van toename in die *enger monetêre totale* as in dié van M3 gedurende 1993. Soos uit die bygaande tabel blyk, het duidelike verskuiwings van "ander onmiddellik opeisbare deposito's" na tjeke- en transmissiedepositos plaasgevind; dit was hoofsaaklik die gevolg van die aktiewe bemarking van hierdie tipies deposito en die oordrag van openbare korporasies se daggeledddeposito's by die Korporasie vir Openbare Depositos na tjeke- en transmissiedepositos by banke. Daarbenewens is 'n merkbare toename in langtermyndeposito's aangeteken as gevolg van "egte likwiditeitsvoorseurooorwegings" in afwagting van verwagte verlagings in depositokoerse. Die toename in langtermyndeposito's was trouens in 1993 vir meer as die helfte van die totale toename in M3 verantwoordelik.

Die 1993-“riglynjaar”

Die gemiddelde vlak van die M3-geldvoorraad het in die vierde kwartaal van 1993 R207,5 miljoen beloop; dit was 5,6 persent hoër as die gemiddelde vlak van M3 in die vierde kwartaal van 1992. Die werklike toename in M3, soos gemaat vir geldvoorraadriglyndoelendes, was dus ietwat laer as die onderste perk van die mikpuntriglyne van 6–9 persent vir die 1993-“riglynjaar”. Soos reeds

Monetêre totale



Verandering in monetêre totale

R miljoene

	Munte en note in omloop	Tjek- en trans- missie deposito's	M1A	Ander onmiddellik opeisbare deposito's	M1	Ander kort- en middel- termyn deposito's	M2	Lang- termy deposito's	M3
Desember 1992.....	9 535	30 191	39 726	31 845	71 571	100 642	172 213	25 007	197 220
Desember 1993.....	10 482	35 850	46 332	30 066	76 398	102 549	178 947	32 031	210 978
Verandering	947	5 659	6 606	-1 779	4 827	1 907	6 734	7 024	13 758
Persentasieverandering oor 12 maande.....	9,9	18,7	16,6	-5,6	6,7	1,9	3,9	28,1	7,0
Verandering as persentasie van totale verandering in M3.....	6,9	41,1	-	-12,9	-	13,9	-	51,0	100,0

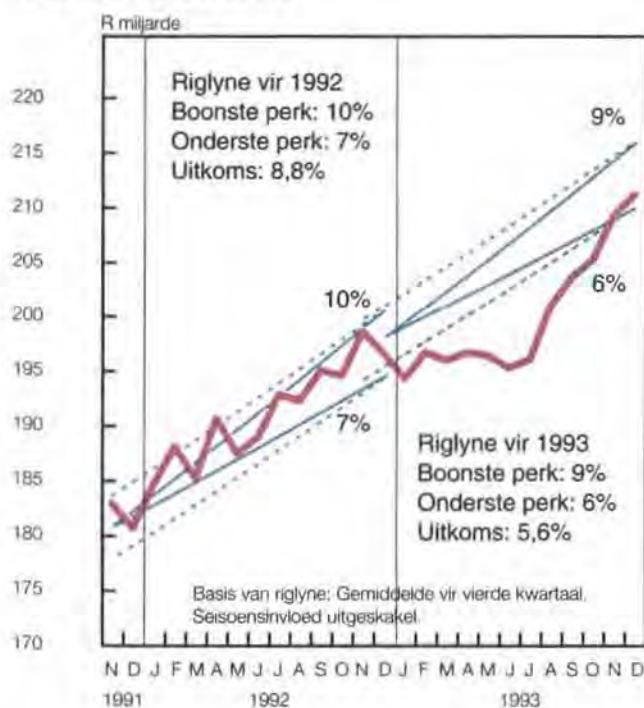
vermeld, was die groei in M3 gedurende die eerste sewe maande van 1993 besonder traag en die seisoensaangesuiwerde waarde van M3 het om die kwartaallikse gemiddelde waarde van die vierde kwartaal van 1992 (wat as basis vir die 1993-riglynjaar dien) gewissel. Die daaropvolgende versnelling in die groei van M3 het die geldvoorraad vanaf November 1993 tot binne die riglyngrens gebring.

Die *inkome-omloopsnelheid* van M3 het as gevolg van die betreklik lae vraag na geld en disintermediasie-

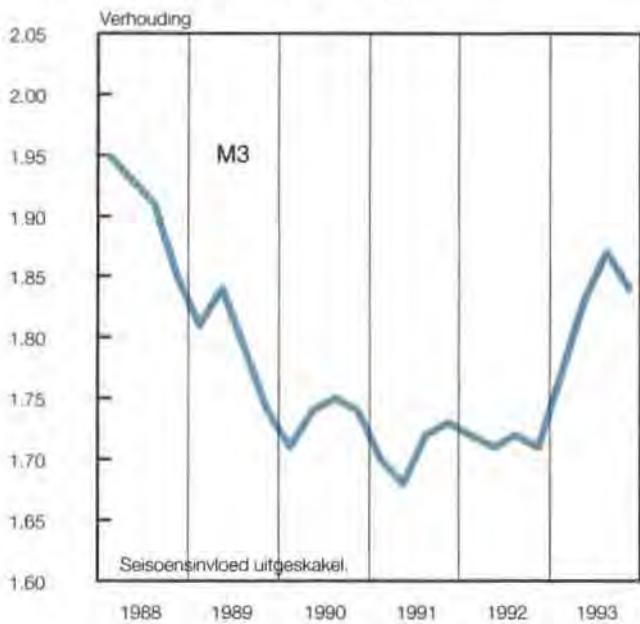
praktyke van 1,71 in die vierde kwartaal van 1992 tot 1,87 in die derde kwartaal van 1993 gestyg, of met ongeveer 9 persent. Die inkome-omloopsnelheid van M3 het daarna in die vierde kwartaal teruggesak in ooreenstemming met 'n merkbare versnelling in die groei van die vraag na geld gedurende hierdie kwartaal.

In 'n statistiese of rekenkundige sin was die toename in die gemiddelde kwartaallikse waarde van M3 van R11,0 miljard (seisoensaangesuiwer) van die vierde kwartaal van 1992 tot die vierde kwartaal van 1993 meer as volledig verklaar deur die toename van R19,3 miljard in die monetêre sektor se kwartaallikse gemiddelde eise

Riglyne vir groei in M3



Inkome-omloopsnelheid van geld



teen die binnelandse private sektor. Die monetêre sektor se kwartaallikse gemiddelde netto eise teen die regeringsektor het 'n verdere R1,5 miljard tot die toename in die geldvoorraad bygedra. In teenstelling hiermee het die monetêre instellings se kwartaallikse gemiddelde besit aan netto buitelandse bates (ingesluit goud) en "netto ander bates" van die vierde kwartaal van 1992 tot die vierde kwartaal van 1993 met onderskeidelik R8,4 miljard en R1,4 miljard gedaal.

Kredietverlening

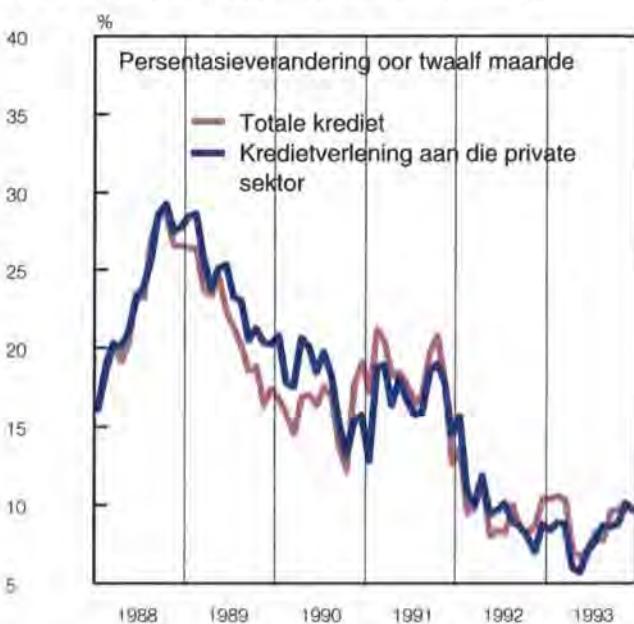
Die groeikoers oor twaalf maande in *binnelandse kredietverlening aan die nie-bank private sektor* deur monetêre instellings het van 'n reeds lae 8,7 persent in Desember 1992 tot 5,7 persent in Mei 1993 afgeneem voordat dit in

Desember tot 9,6 persent gestyg het. Hierdie groeikoers was van die einde van 1991 af laer as die inflasiekoers (soos gemeet deur veranderings in die verbruikersprysindeks), en was slegs in November 1993 in reële terme positief. Die betreklik lae groei in die banksektor se eise op die private sektor was hoofsaaklik veroorsaak deur die lae vlak van ekonomiese bedrywigheid in Suid-Afrika, 'n swak vraag na sulke krediet te midde van algemene onsekerheid, die betreklik hoë koste van leenbedrywigheide, disintermediasieprakteke en regulatoriese veranderings.

'n Ontleding van die monetêre instellings se eise teen die binnelandse private sektor volgens soort krediet toon dat die betreklik lae groei in kredietverlening gedurende 1993 hoofsaaklik die gevolg was van relatief lae koers van toename in bruukhuurfinansiering en in sogenaamde "ander lenings en voorskotte". Die groeikoers oor twaalf maande in *bruukhuurfinansiering* het merkbaar verlangsaaam van 9,6 persent in Desember 1992 tot slegs 2,2 persent in Junie 1993; dit het daarná gestyg tot 6,8 persent in Desember. Die ooreenstemmende groeikoers in "ander lenings en voorskotte" het ook verder gedaal van slegs 0,9 persent in Desember 1992 tot negatiewe vlakke gedurende die eerste ses maande van 1993; maar in Desember 1993 het dit tot 8,1 persent toegeneem. Soos in die bygaande tabel aangetoon word, was "ander lenings en voorskotte" nietemin vir bykans 30 persent van die totale toename in kredietverlening aan die binnelandse private sektor in 1993 verantwoordelik. Daarbenewens het *beleggings en wissels wat by banke verdiskonter* is in 1993 in nominale terme in werklikheid skerp afgeneem en 'n negatiewe bydrae tot kredietverlening deur banke gemaak.

In teenstelling met hierdie ontwikkelings is 'n betreklik hoë groei in verbandfinansiering en afbetalingsverkoop-krediet in 1993 aangeteken. Ondanks die werklike afname in die nominale waarde van transaksies in vaste eiendom, het die vraag na *verbandfinansiering* sterk gebly vanweë die voordele van die buigsaamheid van sommige verbandskemas en die banke se aktiewe bevordering van hierdie kredietfasilitet as gevolg van die laer kapitaalvereistes wat daarop van toepassing is. Die koers van

Kredietverlening deur monetêre instellings



Verandering in kredietverlening aan die private sektor

R miljoene

	Beleggings en wissels verdiskonter	Afbetalings- verkoop- krediet	Bruukhuur finan- siering	Verband- voor- skotte	Ander lenings en voor- skotte	Totaal
Desember 1992	19 551	19 552	14 500	82 395	73 488	209 487
Desember 1993	14 575	23 062	15 493	97 014	79 452	229 596
Verandering.....	-4 976	3 510	993	14 618	5 964	20 109
Persentasieverandering oor 12 maande	-25,5	18,0	6,8	17,7	8,1	9,6
Verandering as persentasie van totale verandering in kredietverlening	-24,7	17,4	4,9	72,7	29,7	100,0

toename oor twaalf maande in verbandvoorskotte het derhalwe effens gestyg van 'n hoëvlak van 17,3 persent in Desember 1992 tot 17,7 persent in Desember 1993. Die klaarblyklike invloed van verbandfinansiering op kredietverlening word duidelik geïllustreer deur die feit dat die toename in hierdie geriewe vir nagenoeg 73 persent van die totale toename in bankkrediet aan die private sektor verantwoordelik was.

Die groeikoers oor twaalf maande in *afbetalingsverkoopkrediet* het skerp versnel van slegs 1,5 persent in Desember 1992 tot 11,4 persent in Junie 1993 en tot 18,0 persent in Desember 1993. Hierdie aansienlike toename in afbetalingsverkoopkrediet is hoofsaaklik veroorsaak deur stygende motorverkope en voertuigfinansieringspakkette wat teen 'n "spesiale koers" deur banke in werking gestel is.

Geldmarktoestande en Reserwebankoptrede in die geldmark

Geldmarktoestande het gedurende die eerste nege maande van 1993 betreklik stram gebly, in Oktober en November ietwat verruim maar in Desember 1993 weer aansienlik strammer geword. Hierdie veranderings word duidelik weerspieël deur die bedrag aan akkommodasie by die diskontovenster soos op maandeindes, wat eers van R3,8 miljard aan die einde van Desember 1992 tot R4,8 miljard aan die einde van September 1993 toegeneem het; dit het daarna weer tot R3,3 miljard aan die einde van November gekrimp voordat dit aan die einde van Januarie 1994 tot R5,6 miljard gestyg het en

weer in Februarie skerp afgeneem het tot R3,9 miljard.

Hierdie betreklike stram geldmarktoestande gedurende die grootste deel van 1993 kon hoofsaaklik aan 'n afname in die netto buitelandse bates (ingesluit goud) van die Reserwebank toegeskryf word. 'n Toename in note in omloop en 'n afname in die finansiering van die Landen Landboubank deur die monetêre owerhede, sowel as 'n toename in regeringsdeposito's by die Reserwebank gedurende sekere maande, het ook hierdie strammer toestande ondersteun. Gedurende 1993 in die geheel het regeringsdeposito's by die Reserwebank egter met R1,4 miljard afgeneem.

Die Reserwebank het verhoed dat geldmarktoestande te stram word deur bykomstige likwiditeit in die binnelandse geldmark te plaas. Die optredes van die Reserwebank het bestaan uit 'n vermindering van die minimum kontantreserwevereistes waaraan banke moes voldoen in Mei 1993 en weer in Augustus, terugkoopoorseenkomste en die oordrag van Tesouriekontantbalanse wat as deposito's by die Reserwebank gehou is na die private banke. Hierdie laasgenoemde nuwe prosedure is in Junie 1993 in werking gestel in afwagting van die voorgestelde stelsel van Belasting- en Leningsrekenings wat gedurende 1994 geïmplimenteer sal word. Aan die einde van Desember 1993 het die regeringsfondse wat by banke geplaas is R5,2 miljard beloop; dit is verminder na R2,0 miljard aan die einde van Februarie 1994.

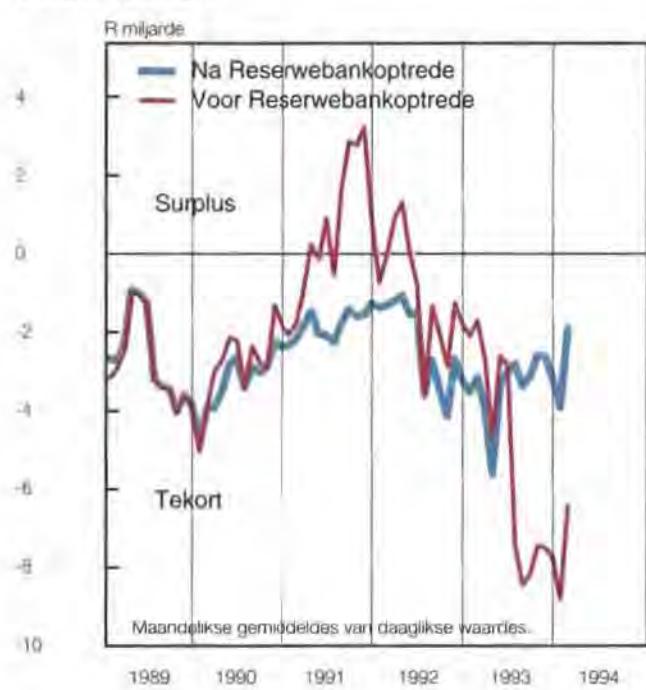
Hierbenewens het die monetêre owerhede gedurende 1993 ook korttermynfluktuaties in geldmarklikwiditeit uitgeskakel deur die bateportefeuille van die Korporasie vir Openbare Deposito's aan te pas. Hierdie aanpassings het per saldo van die einde van Desember 1992 tot aan die einde van Desember 1993 'n verruimende invloed van ongeveer R1,6 miljard op die geldmarktoestande uitgeoefen.

Bruto verkope van staatseffekte deur die Reserwebank het in 1993 R178 miljard bedra, vergeleke met R112 miljard in 1992. Netto verkope van hierdie effekte deur die Reserwebank het in 1993 R13,4 miljard beloop, wat ondanks die groter Skatkistekort in 1993 ietwat minder was as die R14,6 miljard in 1992. Die Reserwebank se handel in opsies op staatseffekte het slegs effens toegeneem van 'n maandelikse gemiddelde van R5,2 miljard in 1992 tot R5,3 miljard in 1993.

Geldmarkrentekoerse

Die algemeen afwaartse neiging in geldmarkrentekoerse, wat reeds aan die begin van 1990 'n aanvang geneem het, het gedurende 1993 en die eerste twee maande van 1994 voortgeduur, maar teen 'n aansienlik stadiger tempo as in 1992. Dit is duidelik deur die koers op *interbankdaggaalde* weerspieël wat van 16,00 persent aan die einde van 1991 tot 12,25 persent aan die einde van 1992 en tot 10,00 persent aan die einde van Desember 1993 en 9,50 persent aan die einde van Februarie 1994 afgeneem het. Ander geldmarkrentekoerse het 'n soortgelyke afwaartse neiging getoon. Die Reserwebank het die Bankkoers by twee geleenthede gedurende 1993

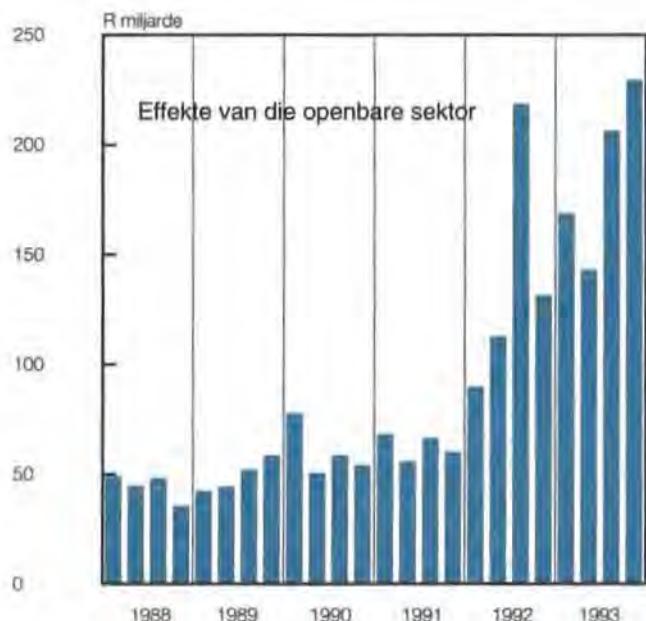
Geldmarktekort



Korttermynrentekoerse



Effektebeurstransaksies



met een persentasiepunt tot sy huidige vlak van 12,00 persent verlaag. Die private banke het die verlaging in die Bankkoers gevvolg en hul primakoers op oortrekkings teen die einde van Februarie en die begin van Maart 1993 van 17,25 tot 16,25 persent en vanaf 1 November 1993 verder tot 15,25 persent verlaag. Die inflasie-aangepaste of reële primakoers het ook van 7,0 persent aan die einde van 1992 tot 5,2 persent aan die einde van 1993 afgeneem.

Kapitaalmarkbedrywigheid

Bedrywigheid op die Johannesburgse Effektebeurs het in die loop van 1993 lewendig gebly. Nadat die waarde van effekte van die openbare sektor wat op die Johannesburgse Effektebeurs verhandel is, skerp gestyg het van R142,8 miljard in die tweede kwartaal van 1993 tot R206,0 miljard in die derde kwartaal, het dit in die vierde kwartaal verder toegeneem tot 'n nuwe kwartaallikse rekordvlak van R229,2 miljard. Die jaarlikse omset van hierdie effekte ten bedrae van R746,4 miljard in 1993 was 35 persent hoër as in 1992. Handelsbedrywigheid in hierdie mark het aan die begin van 1994 op 'n hoog vlak gebly en in Januarie R82,5 miljard beloop. 'n Voortgesette afname in die Inflasiekoers, die ommekeer in ekonomiese bedrywigheid en 'n skerp toename in die netto aankope van sekuriteite deur nie-inwoners het bygedra om 'n stygmark te ondersteun.

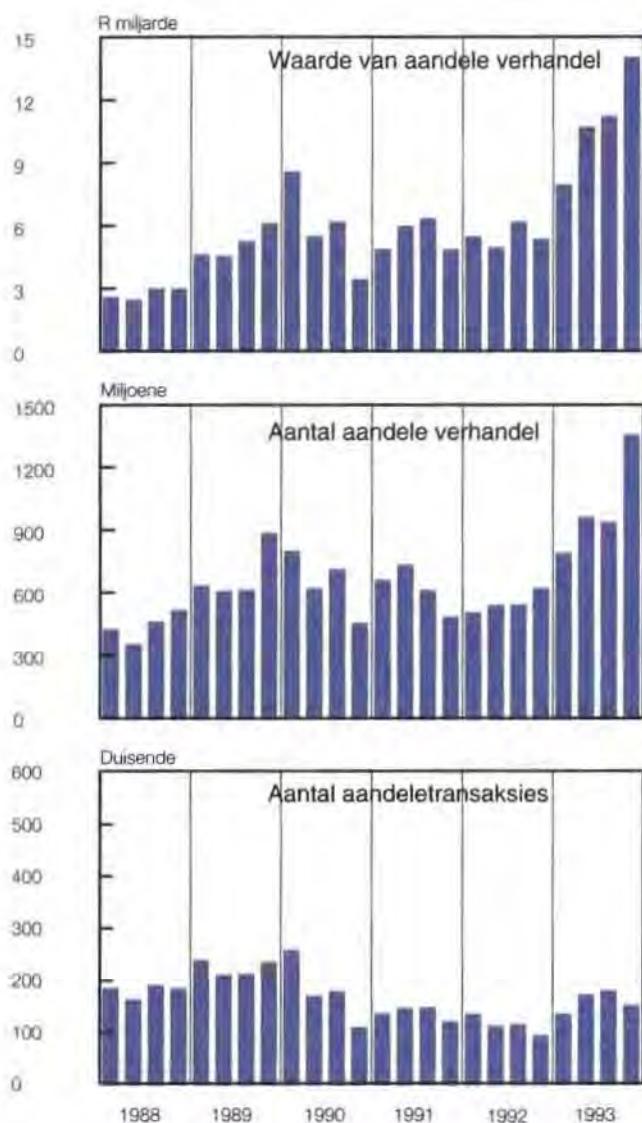
Die waarde van aandele wat op die Johannesburgse Effektebeurs verhandel is, het skerp toegeneem van R8,0 miljard in die eerste kwartaal van 1993 tot R11,3 miljard in die derde kwartaal en nog verder tot R14,1 miljard in

die vierde kwartaal. Die totale waarde van aandeletransaksies in 1993 het dus R44,1 miljard beloop – ongeveer dubbel die omset van 1992. Die skerp toename in die waarde van aandele verhandel het 'n toename in die omsetsnelheid van aandele (gemeet as die waarde van omset as 'n persentasie van markkapitalisasie) van 'n maandelikse gemiddelde van 4,3 persent in 1992 tot 7,3 persent in 1993 tot gevolg gehad.

Die skerp toename in die waarde van aandele wat in 1993 verhandel is, was die gevolg van betekenisvolle toenames in sowel die hoeveelheid as pryse van aandele wat verhandel is. Die aantal aandele verhandel het met 86 persent toegeneem van 2,2 miljard in 1992 tot 4,1 miljard in 1993. Aandelepryse, wat aan die einde van 1992 begin het om te herstel en in die derde kwartaal effens geweifel het, het in die daaropvolgende vier maande tot Januarie 1994 aansienlik toegeneem. Die maandelikse gemiddelde prysvlak van alle klasse aandele het met 'n indrukwekkende 27,2 persent van September 1993 tot Januarie 1994 toegeneem. Hierdie stygging in aandelepryse is meegebring deur 'n verbetering in die politieke klimaat, die opheffing van sanksies teen Suid-Afrika, lewendige handelstoestande op sommige van die wêreld se toonaangewende effektebeurse en beleggers se voorkeur vir sogenaamde opkomende markte.

Die effense verbetering in die goudprys het veroorsaak dat die prys van goudaandele aanvanklik herstel het. Beteckenisvolle toenames is egter ook in die prys van al die ander kategorieë van aandele in 1993 gemeet. In Januarie 1994 was die gemiddelde prysvlak van al die klasse van aandele 42,8 persent hoër as in Januarie

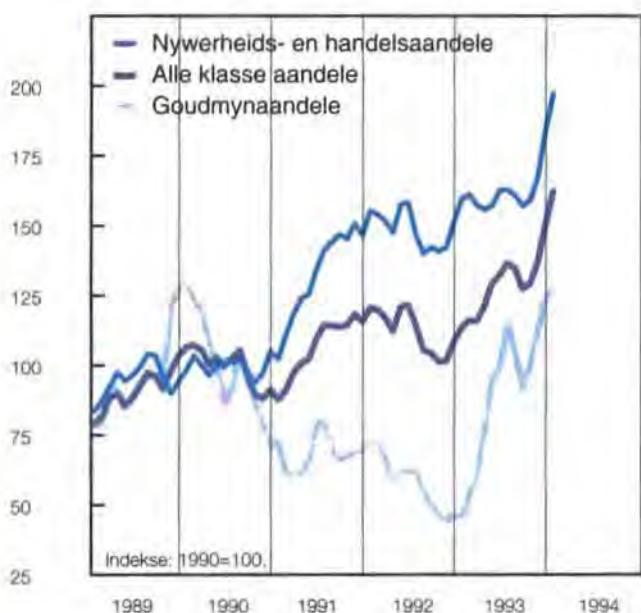
Aandele op die effektebeurs verhandel



1993, terwyl die gemiddelde prysvlak van goudmynaandele en van nywerheids- en handelsaandele onderskeidelik 183,7 persent en 23,5 persent hoer was. In Februarie 1994 het aandelepryse ietwat gedaal nadat groot afwaartse aanpassings op sommige van die wêreld se toonaangewende effektebeurse voorgekom het.

Nie-inwoners het 'n belangrike rol gespeel in die herstel van aandelepryse gedurende 1993 en hulle was netto aankopers van aandele ten bedrae van R2,8 miljard. In die vierde kwartaal van 1993 het die netto aankope van aandele deur nie-inwoners R0,9 miljard bedra. Hulle het ook voortgegaan om ander sekuriteite op die Johannesburgse Effektebeurs aan te koop. Nie-inwoners se netto aankope van effekte van die openbare sektor op die effektebeurs het in 1993 R1,5 miljard beloop. Dit het nie-inwoners netto aankopers van

Aandelepryse



sekuriteite ten bedrae van R4,3 miljard gemaak; in 1992 was hulle netto aankope slegs R0,3 miljard gewees, terwyl hulle in 1990 en 1991 netto verkopers van sekuriteite van R3,0 miljard en R2,1 miljard was.

In die *primère kapitaalmark* is daar reeds aan die grootste deel van die geskatte leningsbehoefte van die openbare sektor voldoen met die uitreiking van effekte van die openbare sektor ten bedrae van R16,0 miljard in die eerste helfte van die fiskale jaar 1993/94. Gevolglik het leners in die openbare sektor in die vierde kwartaal van 1993 slegs R0,8 miljard deur middel van nuwe uitgifte van vaste-rentedraende sekuriteite opgeneem.

Die waarde van fondse wat deur genoteerde maatskappye deur nuwe uitgifte van vaste-rentedraende sekuriteite (met inbegrip van omskepbare voorkeuraandele en skuldbriefe) bekom is, het in die eerste twee kwartale van 1993 R0,1 miljard en R0,4 miljard bedra. Geen sodanige uitgifte is in die derde kwartaal gemaak nie, maar R0,3 miljard is weer in die vierde kwartaal opgeneem.

Die waarde van *regte-uitgifte van gewone aandele* deur maatskappye wat op die Johannesburgse Effektebeurs genoteer is, het in 1993 aansienlik gewissel. Nadat dit van R2,0 miljard in die eerste kwartaal van 1993 tot R0,3 miljard in die tweede kwartaal afgeneem het, het hierdie regte-uitgifte weer in die derde kwartaal tot R2,0 miljard toegeneem alvorens dit in die vierde kwartaal tot R0,9 miljard afgeneem het. Die voortgesette sterk vraag na goeie gehalte papier en skerp stygende aandelepryse het uitgifte van aandelekapitaal vir sowel uitreikers as beleggers aantreklik gemaak. 'n Aantal

maatskappye het ook aangekondig dat hulle beplan om aandelekapitaal deur middel van regte-uitgifte te bekomen ten einde ontbondeling te vergemaklik.

In die verbandmark het die banke se totale besit aan verbandlenings geleidelik toegeneem van R78,5 miljard in Desember 1992 tot R92,9 miljard in Desember 1993. Die betreklik stagnante behuisingsmark gedurende die vierde kwartaal van 1993, en die besluit van sekere banke om nie langer verbandregistrasiekoste en waardasiefooie te dra nie, het onlangs tot gevolg gehad dat die gemiddelde maandelikse bedrag aan lenings wat deur banke uitbetaal is effens afgeneem het van R3,6 miljard in die derde kwartaal tot R3,5 miljard in die vierde kwartaal van 1993.

Die waarde van *transaksies in vaste eiendom* het met 3,2 persent afgeneem van R24,9 miljard in 1992 tot R24,1 miljard in 1993; die gemiddelde aantal transaksies in vaste eiendom het met 10,3 persent gedaal, terwyl die gemiddelde waarde van eiendomstransaksies met 'n beduidende 8,2 persent gestyg het. Die waarde van transaksies in vaste eiendom het in die tweede helfte van 1993 'n betekenisvolle ommekaer getoon, in ooreenstemming met 'n verbeterende ekonomiese, die verdere afname in rentekoerse en 'n verbeterde bekostigbaarheid. Nadat die waarde van transaksies in vaste eiendom van R6,1 miljard in die eerste kwartaal van 1993 tot R5,7 miljard in die tweede kwartaal afgeneem het, het dit in die derde kwartaal tot R5,9 miljard en in die vierde kwartaal tot R6,4 miljard toegeneem.

Die *aangeleide markte* is gekenmerk deur lewendige bedrywigheid gedurende 1993, maar bedrywigheid het

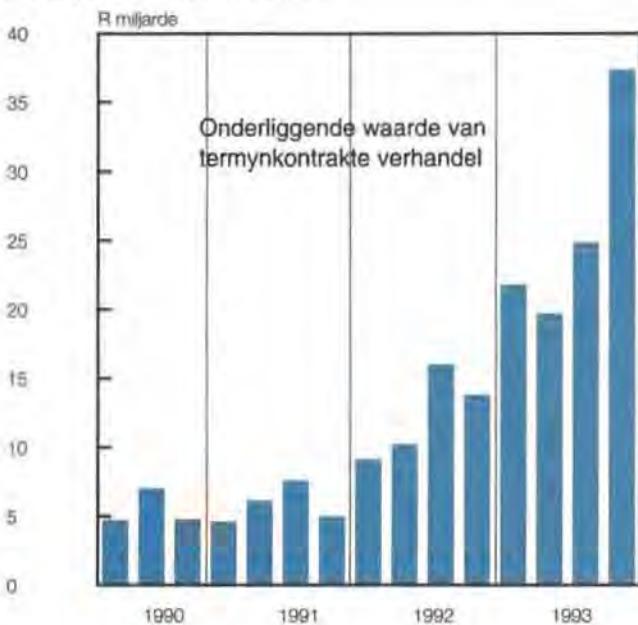
veral in die vierde kwartaal skerp toegeneem. Die onderliggende waarde van transaksies in *termynkontrakte* het van 'n kwartaallike gemiddelde van R22,1 miljard in die eerste nege maande van 1993 tot R37,4 miljard in die vierde kwartaal toegeneem. Hierdie vlak was aansienlik hoër as die kwartaallike gemiddelde van R12,3 miljard in 1992 en R5,8 miljard in 1991. Kontrakte in aandeleindekse het in 1993 97,4 persent van die totale waarde van termynkontrakte verteenwoordig. Die onderliggende waarde van handel in *opsies* op indekstermynkontrakte het ook van 'n maandelikse gemiddelde van R345 miljoen in die derde kwartaal van 1993 tot R723 miljoen in die vierde kwartaal toegeneem.

In teenstelling met die uitsonderlik hoë vlak van bedrywigheid in termynkontrakte en opsies op indekstermynkontrakte, is die bedrywigheid op die Johannesburgse Effektebeurs se *Verhandelbare Opsiemark* teen Februarie 1994 nog nie weer hervat nie, nadat dit sedert Februarie 1993 heeltemal weggeval het.

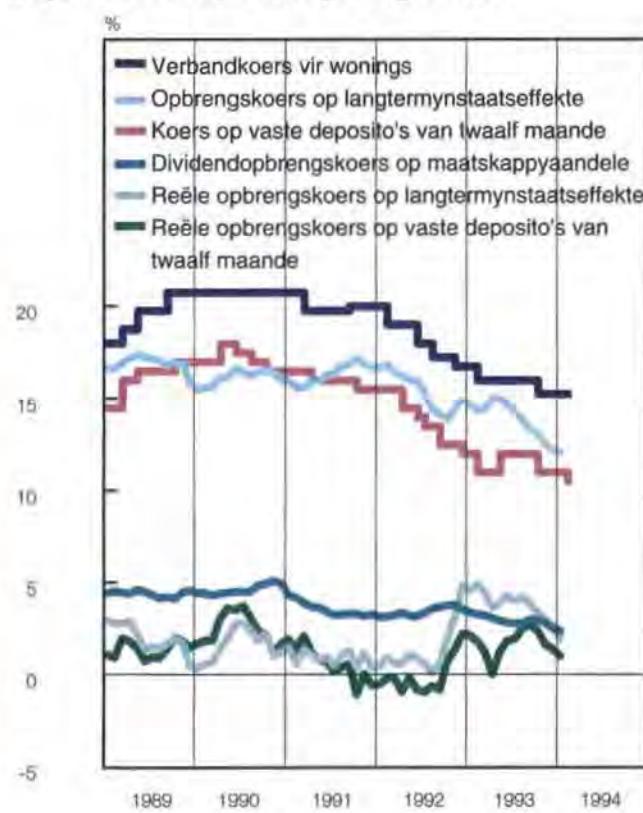
Opbrengs- en rentekoerse op die kapitaalmark

Die gemiddelde maandelikse *opbrengskoers op langtermynstaatseffekte* wat opwaarts beweeg het van 13,9 persent in Oktober 1992 tot 15,0 persent in April 1993, het in die daaropvolgende maande weer redelik skerp gedaal tot 12,1 persent in Januarie 1994. Hierdie

Termynbeurstransaksies



Kapitaalmarkrente- en opbrengskoerse



aawaartse beweging was hoofsaaklik 'n weerspieëling van die voortgesette sukses wat behaal is met die vermindering van inflasie, 'n daling in buitelandse rentekoerse en netto buitelandse aankope van binnelandse leningseffekte. Die daling in die opbrengskoers van langtermynstaatseffekte was aansienlik skerper as die daling in die inflasiekoeur; die *reële* opbrengskoers op staatseffekte het gevvolglik van 3,6 persent in April 1993 tot 2,5 persent in Desember 1993 afgeneem. In Februarie 1994 het die nominale opbrengskoers op langtermynstaatseffekte aansienlik verstewig tot 'n maandelikse gemiddelde van 12,6 persent as gevolg van buitelandse verkope van effekte, winsneming, 'n afname in die verwagtinge oor 'n verlaging in Bankkoers en onsekerheid rakende politieke ontwikkelings.

Die banke se *oorheersende koers op huisverbandlenings* is van 1 Maart 1993 met 0,75 persentasiepunte tot 16,0 persent en in November 1993 met 'n verdere 0,75 persentasiepunte tot 15,25 persent verlaag. Die koers op huisverbandlenings is derhalwe nou reeds met 5,5 persentasiepunte sedert die hoogtepunt van 20,75 persent in Februarie 1991 verlaag.

Die koers op *deposito's van twaalf maande* is van 15,5 persent aan die begin van 1992 tot 12,0 persent in Desember en verder tot 11,0 persent in Februarie 1993 verlaag. Sonder 'n gepaardgaande verhoging in die koers op huisverbandlenings, het sommige banke die koers op deposito's van twaalf maande in April weer tot 12,0 persent verhoog, terwyl ander hulle teen die middel van Mei gevolg het. In November 1993 is hierdie koers tot 11,0 persent en in Januarie 1994 weer tot 10,5 persent verlaag. Aangesien die verrekeningsbanke se oorheersende primakoers op oortrokke rekeninge gedurende November in dieselfde mate gedaal het, het die marge tussen die koers op deposito's van twaalf maande en die banke se oorheersende primakoers op 4,25 persentasiepunte gebly voordat dit in Januarie 1994 tot 4,75 persentasiepunte toegeneem het. Die koers op deposito's van twaalf maande het in Desember 1993 'n positiewe *reële* opbrengs voor belasting van 1,4 persent aan deposante gelewer.

Die skerp toename in aandelepryse het 'n afname in die gemiddelde *dividendopbrengskoers* van 3,51 persent in Desember 1992 tot 2,97 persent in September 1993 en daarna nog verder tot 2,36 persent in Januarie 1994 tot gevolg gehad. Die gemiddelde *verdienste-opbrengskoers* op alle klasse van aandele (uitgesondert goudmynaandele) het selfs meer beduidend afgeneem van 7,74 persent tot 6,91 persent en 5,50 persent oor dieselfde tydperke. Sodoende het die prys-verdienste-verhouding van 18,2 in Januarie 1994 weer nader aan die rekord hoogtepunt van 18,6 in September 1987 beweeg. Indien die diskonto op finansiële rand egter in berekening gebring word, het die prys-verdienste-verhouding vir nie-inwoners in Januarie 1994 slegs 13,8 bedra.

Die maksimum toelaatbare koers op *finansieringskoste* soos dit deur die Woekerwet vasgestel word, is met ingang van 24 Desember 1993 van 25 tot 23

persent verlaag in die geval van geldlenings, krediet- en bruukhuurtransaksies vir bedrae van meer as R6 000 (maar nie meer as R500 000), en van 28 tot 26 persent in die geval van bedrae tot en met R6 000. Dit het die totale verlaging in hierdie koers gedurende 1993 op 3,0 persentasiepunte te staan gebring.

Ander *langtermynrentekoerse* is ook gedurende die vyfmaande-tydperk tot Februarie 1994 verlaag. Die standaardrentekoers van toepassing op lenings deur die staat uit die Staatsinkomstefonds is op 1 November 1993 van 14,75 persent tot 13,5 persent, en in drie verdere stappe tot 12,5 persent op 1 Februarie 1994 verlaag. Die standaardrentekoers is met ingang van 1 Maart 1994 tot 13,25 persent verhoog. Nadat dit sedert 1 Julie 1989 onveranderd gebly het, is die voorgeskrewe rentekoers op sekere vonnisskulde met ingang van 1 Oktober 1993 met 3 persentasiepunte tot 15,5 persent verlaag. Die amptelike rentekoers, soos omskryf in die *Inkomstebelastingwet*, is met ingang van 1 Februarie 1994 met 1 persentasiepunt tot 14 persent verlaag.

Openbare finansies

Leningsbehoefte van die openbare sektor

Die *leningsbehoefte van die openbare sektor* (die tekort voor lenings en skuldaflossing van die gekonsolideerde Sentrale Regering, provinsiale administrasies, plaaslike owerhede en nie-finansiële owerheidsondernemings) het in die eerste nege maande van die fiskale jaar 1993/94 R17,5 miljard bedra. Dit was R2,7 miljard laer as die vlak in die ooreenstemmende tydperk van die voorafgaande jaar. In verhouding tot die bruto binnelandse produk, het die leningsbehoefte van die openbare sektor van 8,1 persent in die eerste nege maande van die fiskale jaar 1992/93 tot 6,2 persent in die eerste nege maande van die fiskale jaar 1993/94 gedaal.

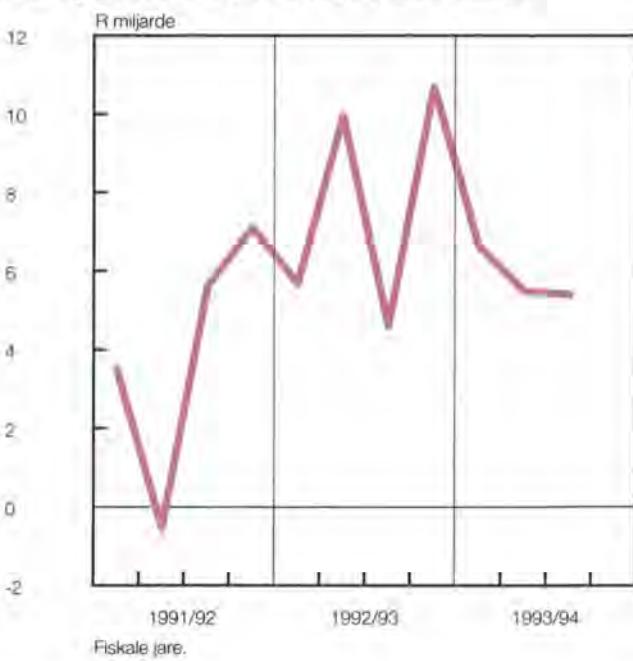
Die afname in die leningsbehoefte van die openbare sektor was deels te danke aan die feit dat die totale inkomste en oordragte wat deur die nie-finansiële owerheidsondernemings ontvang is hulle lopende en kapitale uitgawes en die netto toegestaande lenings oorskry het. Nog belangriker is dat die laer leningsbehoefte van die openbare sektor die gevolg was van 'n inkrimping in die *leningsbehoefte van die algemene owerheid* van R21,4 miljard in die eerste nege maande van die fiskale jaar 1992/93 tot R18,9 miljard in die eerste nege maande van die fiskale jaar 1993/94, of met R2,5 miljard. Hierdie verbetering in die tekort voor lenings van die algemene owerheid is bereik as gevolg van 'n stadiger toename in die besteding as in die inkomste. Die besteding van die algemene owerheid het in die

eerste nege maande van die fiskale jaar 1993/94 'n koers van toename van jaar tot jaar van 9,4 persent aangeteken, terwyl die koers van toename van jaar tot jaar in die inkomste 15,5 persent bedra het. Die besteding van die algemene owerheid in die tweede kwartaal van die fiskale jaar 1992/93 sluit egter buitengewone oordragte ten bedrae van R5,8 miljard in. Indien hierdie oordragte van die syfers vir die eerste nege maande van die fiskale jaar 1992/93 uitgesluit word, sal algemene owerheidsbesteding in die eerste nege maande van die fiskale jaar 1993/94 16,4 persent en die leningsbehoefte R3,3 miljard hoër wees as die aangepaste syfer vir die eerste nege maande van die voorafgaande jaar.

Al die verskillende vlakke van die algemene owerheid, met die opmerklike uitsondering van die buitebegrotingsinstellings, het in die eerste nege maande van die fiskale jaar 1993/94 'n verbetering in die saldo's op hul inkomste- en bestedingsrekeninge aangeteken. As gevolg van 'n skerp toename in die tekort voor lenings en skuldaflossing van die TBVC-lande en die selfregerende state, het die leningsbehoefte van die buitebegrotingsinstellings in die eerste nege maande van die fiskale jaar 1993/94 in totaal R0,3 miljard beloop; in die eerste nege maande van die fiskale jaar 1992/93 het hierdie instellings se inkomste nog hulle besteding oorskry.

In teenstelling met hierdie ontwikkelinge, het die leningsbehoefte van plaaslike owerhede feitlik onveranderd gebly en het die surplus op die inkomste- en bestedingsrekeninge van provinsiale administrasies van R1,2 miljard in die eerste nege maande van die fiskale jaar 1992/93 tot R1,6 miljard in die eerste nege maande van die fiskale jaar 1993/94 toegeneem. Vanweë die feit dat die buitengewone oordragte na die Goud-en-buitelandsevaluta-gebeurlikheidsreservewerekening en die staatsdienspensioenfondse in die eerste nege maande van die fiskale jaar 1992/93 uit die Hoofbegroting gemaak is, het die tekort voor lenings en skuldaflossing op hierdie rekening in die eerste nege maande van die fiskale jaar 1993/94 met R2,9 miljard afgeneem.

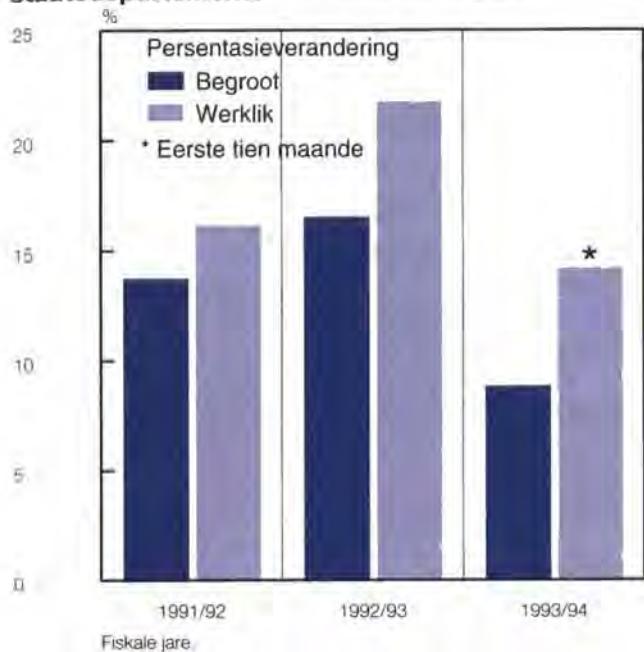
Leningsbehoefte van die openbare sektor



Skatkisrekening

Nadat die koers van toename van jaar tot jaar in *skatkisuitrekings* (na aansuiwing vir kontantvloeie, insluitende veranderings in die saldo op die Betaalmeester-generaalrekening) van 12,7 persent in die eerste kwartaal van die fiskale jaar 1993/94 tot 17,1 persent in die tweede kwartaal versnel het, het dit in die derde kwartaal van die fiskale jaar 1993/94 16,2 persent beloop. Dit het die vlak van die skatkisuitrekings in die eerste nege maande van die fiskale jaar 1993/94 te staan gebring op 15,4 persent bo die vlak wat in die ooreenstemmende tydperk van die voorafgaande fiskale jaar bereik is; in die Begroting vir die fiskale jaar 1993/94 in die geheel is 'n toename van 8,8 persent in die vooruitsig gestel. In verhouding tot die bruto binnelandse produk het skatkisuitrekings in die eerste nege maande van die fiskale jaar 1993/94 30,7 persent beloop, wat aansienlik

Begrote en werklike skatkisuitreikings aan staatsdepartemente



hoer is as die gemiddelde vlak van 27,5 persent in die ooreenstemmende tydperk van die voorafgaande vyf fiskale jare.

In Januarie 1994 het skatkisuitreikings in vergelyking met Januarie 1993, met slegs 1,0 persent toegeneem, wat die koers van toename van jaar tot jaar in hierdie uitreikings in die eerste tien maande van die fiskale jaar 1993/94 op 14,2 persent te staan gebring het. Skatkisuitreikings was dus vir die eerste tien maande van die fiskale jaar 1993/94 gelyk aan 81,3 persent van die totale begrote besteding van R114,2 miljard vir die jaar in die geheel; hierdie verhouding is hoer as die 77,8 persent in die ooreenstemmende tydperk van die voorafgaande fiskale jaar en ook hoer as die gemiddelde verhouding van 79,2 persent vir die eerste tien maande van die voorafgaande vyf fiskale jare.

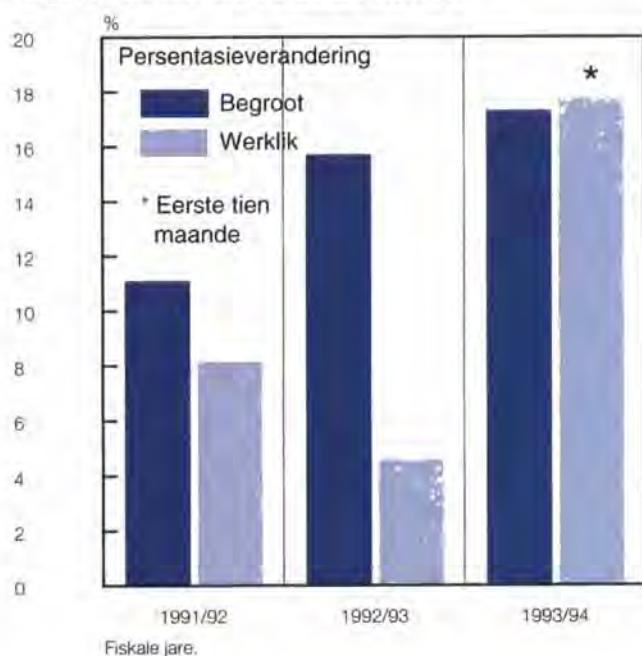
Die koers van toename van jaar tot jaar in die skatkisontvangste (uitgesonderd die opbrengs uit privatisering) het van 13,0 persent in die eerste kwartaal van die fiskale jaar 1993/94 tot 17,1 persent en 18,4 persent in die daaropvolgende twee kwartale toegeneem. Vir die eerste nege maande van die fiskale jaar 1993/94 het skatkisontvangste dus met 16,4 persent teenoor die ooreenstemmende tydperk in die voorafgaande jaar toegeneem; hierdie koers van toename was aansienlik hoer as die koers van toename van jaar tot jaar van 4,5 persent in die eerste nege maande van die fiskale jaar 1992/93. In verhouding tot die bruto binnelandse produk het skatkisontvangste van 22,7 persent in die eerste nege maande van die fiskale jaar 1992/93 tot 23,4 persent in die eerste nege maande van die fiskale jaar

1993/94 toegeneem.

In Januarie 1994 het die ontvangste wat deur die owerheid ingevorder is, hoofsaaklik as gevolg van 'n oorvloei van ontvangste wat reeds in die voorafgaande maand betaalbaar was, skerp toegeneem. Die koers van toename van jaar tot jaar in die skatkisontvangste het dienooreenkomsdig in die eerste tien maande van die fiskale jaar 1993/94 'n vlak van 17,8 persent bereik, of effens bo die begrote toename van 17,3 persent vir die fiskale jaar in die geheel.

Soos in die bygaande tabel aangetoon word, was die betreklik goeie vertoning van die owerheidsinkomste die gesamentlike gevolg van die effens hoer-as-verwagte inkomste uit belasting op toegevoegde waarde en uit doeane- en aksynsregte, terwyl die ontvangste uit inkomstebelasting laer-as-verwag presteer het. Die opbrengs uit inkomstebelasting op maatskappye het in die eerste nege maande van die fiskale jaar 1993/94 vergeleke met die ooreenstemmende tydperk in die voorafgaande jaar gedaal, wat waarskynlik verband hou met die lae vlak van ekonomiese bedrywigheid, die sloering in die invordering van die nuut-ingestelde belasting op uitgekeerde winste en die oorvloei van voorlopige belastingontvangste van Desember na Januarie wat heelwat groter was as in die voorafgaande jaar. Die ontvangste uit inkomstebelasting op individue was in die eerste nege maande van die fiskale jaar 1993/94 ook aansienlik laer as die bedrag waarvoor begroot is, waarskynlik as gevolg van die laer-as-verwagte salaris- en loonverhogings. Inkomste uit doeaneegrete het egter die verwagtinge oortref as gevolg

Begrote en werklike staatsinkomste



Skatkisontvangste

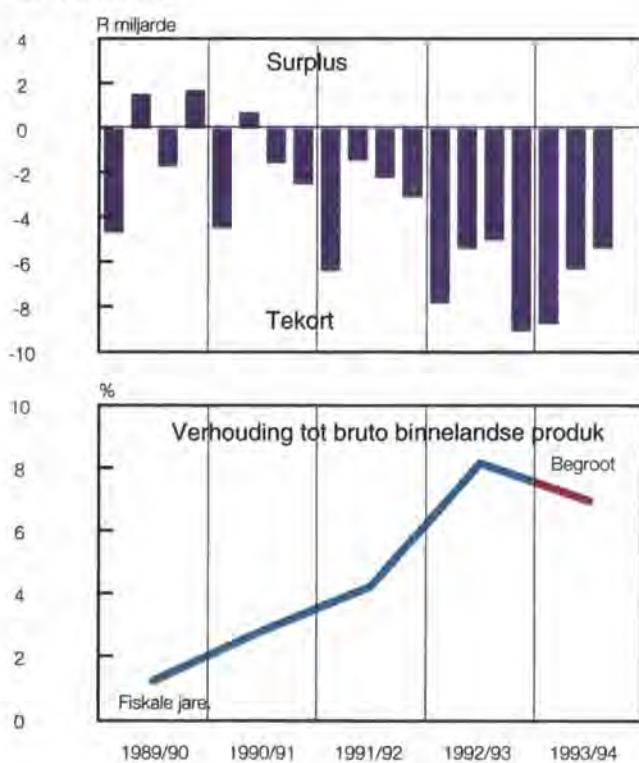
Persentasieverandering

	Begroot vir die fiskale jaar 1993/94	Werklik vir die eerste nege maande van die fiskale jaar 1993/94
Belasting op toegevoegde waarde	43,1	44,4
Inkomstebelasting	11,6	6,9
Maatskappye	1,0	-5,1
Individue	15,5	11,4
Doeane en aksynsregte	10,0	12,4
Doeaneheffing (ingesluit bobelasting)	5,9	13,9
Brandstofheffing	12,1	10,3
Aksynsbelasting	11,1	9,0

van die aansienlike verhoging in die waarde van die goedere-invoer.

Die tekort op die Skatkisrekening voor lenings en skuldaflossing het in die Desember-kwartaal van 1993 R5,4 miljard bedra. Die tekort in die eerste nege maande

Skatkistekort



Finansiering van die skatkistekort vir die eerste nege maande van die fiskale jaar 1993/94 volgens tipe lener

Sektor	R miljoene
Openbare Beleggingskommissarisse	7 145
Nie-monetäre private sektor	14 111
Monetäre instellings	1 964
Korporasie vir Openbare Deposito's	873
Ander monetäre instellings	1 091
Buitelandse sektor	-275
Totale bruto finansiering	22 945
Min: Diskonto op nuwe uitgigte van staatseffekte	2 527
Totale netto finansiering	20 418

van die fiskale jaar 1993/94 het derhalwe R20,4 miljard of 7,3 persent van die bruto binnelandse produk beloop; die begrote tekort vir die fiskale jaar in die geheel was R25,9 miljard, of R7,0 persent van die bruto binnelandse produk.

Die skatkistekort, insluitende die diskonto op nuwe staatseffekte, is in die eerste nege maande van die fiskale jaar 1993/94 hoofsaaklik gefinansier deur fondse wat vanaf die Openbare Beleggingskommissarisse en vanaf die nie-monetäre private sektor bekom is. Ongeveer R2,0 miljard van die tekort is gefinansier uit fondse wat verkry is vanaf monetäre instellings as deel van die doelbewuste beleid van die owerhede om die uitgereikte bedrag van Skatkiswissels te verhoog ten einde die funksionering van monetäre beleid te verbeter.

As gevolg van 'n skerp toename in inkomste en die letwat laer uitbrekings in Januarie 1994, het die skatkistekort voor lenings en skuldaflossing in die eerste tien maande van die fiskale jaar 1993/94 tot R18,7 miljard afgeneem. Die leningsinstrumente wat aangewend is om hierdie tekort te finansier, insluitende die diskonto op nuwe staatseffekte, was soos volg:

	R miljoene
Staatseffekte (diskonto ingesluit)	27 273
Skatkiswissels	1 657
Buitelandse lenings	-129
Nie-bemarkbare sekuriteite	-147
Toename in beskikbare kontantsaldo's (toename-, afname +)	-7 369
Totale bruto finansiering	21 285
Min: Diskonto op nuwe staatseffekte	2 601
Totale netto finansiering	18 684

Aansuiweringsbegroting

In sy aanbieding van die Aansuiweringsbegroting vir die fiskale jaar 1993/94 aan die Parlement in Desember 1993, het die Minister van Staatsbesteding aangedui dat

'n addisionele bedrag van R4 113 miljoen vir die huidige fiskale jaar beskikbaar gestel sal moet word. Die hersiene besteding vir die fiskale jaar 1993/94 is derhalwe R115,2 miljard; dit is nadat aansuiwerings gemaak is vir die verwagte terugstortings ten bedrae van R1,5 miljard, besparings van R0,5 miljard en addisionele besteding van R1,1 miljard, wat alreeds in die begrote bedrag van R114,2 miljard ingesluit is.

'n Makro-ekonomiese beskouing van die prysvormingsproses in die Suid-Afrikaanse ekonomie

deur C.J. Pretorius en M.M. Smal

1. Inleiding

Suid-Afrika gaan sedert die begin van die sewentigerjare gebuk onder betreklik hoë inflasie. In hierdie tydperk het inflasieverwagtings gevestig geraak en tot betreklik onlangs is algemeen aanvaar dat inflasie teen 'n koers van ongeveer 15 persent per jaar sal bly voortduur.

In 1989 het die Reserwebank sy voorname bekend gemaak om die inflasieprobleem daadwerklik te bekamp. Die Bank het toe die beskerming van die interne en die eksterne waarde van die rand as sy missie aanvaar. Die Bank het dit baie duidelik gestel dat sy toekomstige optrede gerig sal bly op die behoefte om finansiële stabilitet te verkry ten einde die inflasiekoers te verminder.

Aanvanklik het dit voorgekom asof die Bank se pogings weinig sukses opgelewer het. Inflasie het hoog gebly en by tye selfs hoër beweeg onder die aanslag van sekere prysverhogende eksogene skokke. Eers na 'n langdurige tydperk van volgehoue beperkende monetêre beleid het prysstygings begin afneem.

In sommige kringe is die lang tydsverloop in die reaksie van prysse op die beperkende beleid vertolk as 'n aanduiding van die ontoereikendheid van monetêre beleid. Só 'n sloering is egter heeltemal versoenbaar met 'n teoretiese model van die prysvormingsproses wat gedurende die eerste helfte van die tagtigerjare deur die Departement Ekonomie van die Reserwebank ontwikkel is.

Die oogmerk met hierdie artikel is om die prysvasstellingsproses te beskryf, soos dit in die ekonomiese model van die Bank vervat is. Die ontwikkeling van hierdie teoretiese model word in afdeling 2 van die artikel weergegee. Die belangrikste veranderlikes van die model, wat oorwegend gegrond is op die verwagtings-aangepaste weergawe van die Phillipskromme, word kortliks in afdeling 3 bespreek. Die kwantifisering van die prysvormingsproses word deur middel van ekonomiese vergelykings in afdeling 4 uitgebeeld en in afdeling 5 word die prysvormingsproses met behulp van 'n vloeidiagram opgesom. Enkele ter sake dienende opmerkings oor die bekamping van inflasie, soos in die studie aan die hand gedoen word, word in afdeling 6 gemaak.

2. 'n Teoretiese model vir prysvasstelling

As uitgangspunt vir die beskrywing van die prysvormingsproses word aanvaar dat produksiepryse hoofsaaklik bepaal word as 'n vaste toeslag bo koste. Indien produksiepryse gedefinieer word as toegevoegde-waarde deflators en produksie self gedefinieer word

volgens die toegevoegde-waarde begrip van die nasionale inkome- en produkrekeninge, word arbeidskoste die belangrikste enkele koste-element. In ooreenstemming met hierdie vereenvoudiging word produksiepryse afgelei as 'n vaste toeslag bo arbeidskoste.

Die aandeel van arbeid in die totale waarde van produksie word gewoonlik deur die volgende wiskundige vergelyking voorgestel:

$$\alpha = \frac{WN}{Py} \quad (1)$$

waar W = nominale arbeidskoste (loon) per eenheid van arbeidsinset,
 N = aantal eenhede van arbeidsinsette,
 P = finale produkprys per eenheid van produksie, en
 y = die fisiese hoeveelheid van produksie.

Deur vergelyking (1) te hervangskik, kan produksiepryse geskryf word as die produk van 'n konstante toeslagfaktor en die koste van arbeid per eenheid van produksie:

$$P = \frac{1}{\alpha} \times \frac{WN}{y}$$
$$= mu \times ULC \quad (2)$$

waar $mu = \frac{1}{\alpha}$ = toeslagfaktor, en

$$ULC = \frac{WN}{y} = \text{die arbeidskoste per eenheid van produksie.}$$

'n Eenvoudige algebraïese hervangskikking van die vergelyking vir die arbeidseenheidskoste toon dat dit geskryf kan word as die kwosiënt van die geldloon en die gemiddelde arbeidsproduktiwiteit:

$$ULC = \frac{W}{y/N}$$
$$= \frac{W}{A} \quad (3)$$

Uit hierdie formulering volg dit dat die verhouding wat gewoonlik "reële arbeidseenheidskoste" ($\frac{WN}{y}$) genoem word, dieselfde is as die aandeel van arbeid in die totale nominale waarde van produksie ($\frac{W}{Py}$).

waar $A = y/N$ = gemiddelde produksie per eenheid van arbeidsinset, dit wil sê die gemiddelde arbeidsproduktiwiteit.

Deur vergelyking (3) in vergelyking (2) te vervang en die vergelyking te herskryf in terme van persentasieveranderings, word die volgende vergelyking vir produksieprysveranderings verkry:

$$\dot{P} = \dot{W} - A' \quad (4)$$

waar 'n kolletjie bo 'n veranderlike 'n persentasieverandering aandui.

Vergelyking (4) toon dat veranderings in finale produkpryse die netto resultaat is van veranderings in die loonkoerse verminder met veranderings in die gemiddelde arbeidsproduktiwiteit. Indien die groei in die geldlone die groei in die produktiwiteit oorskry, neem die produksiepryse toe. Omgekeerd sal die produksiepryse volgens vergelyking (4) daal indien die groei in die geldlone kleiner is as die produktiwiteitsgroe. Prysstabiliteit sal slegs gehandhaaf word as die groei in lone ooreenstem met die groei in produktiwiteit.

Die kan geredelik aanvaar word dat die reaksie van prysbepalers op veranderings in die geldloonkoerse sal verskil van hul reaksie op veranderings in die gemiddelde arbeidsproduktiwiteit. Op kort termyn is prysbewegings meer geneig om deur veranderings in die loonkoerse as deur veranderings in die produktiwiteitsvlakke oorheers te word.

Hoewel die waargenome arbeidsproduktiwiteit op kort termyn redelik drasties kan verander, is sulke veranderings gewoonlik van korte duur en word dit spoedig omgekeer. In teenstelling hiermee is die grondliggende veranderings in die arbeidsproduktiwiteit geneig om geleidelik plaas te vind namate die bestaande arbeidsmag nuwe vaardighede verwerf, produksieteknologie ontwikkel en bekwarne bestuur daarin slaag om die kostedoeltreffendheid van die produksieproses te verhoog.

Geldloonverhogings (net soos produktiwiteitsveranderings) is baie veranderlik gedurende die konjunktuursiklus, maar stygings in lone (in teenstelling met produktiwiteitsverhogings op kort termyn) word selde ongedaan gemaak deur latere afnames in geldlone. Loonverhogings neig dus om die uitwerking van produktiwiteitsverbeterings op prys op kort termyn te verswieg. Pogings om die gedrag van prysvasstellings op kort termyn te verklaar moet gevolglik baie meer op loonveranderings as op produktiwiteitsveranderings let.

'n Gewilde benadering om die veranderings in geldlone te verklaar vind sy oorsprong in Phillips se statistiese ontleding van die verwantskap tussen die veranderings in loonkoerse en werkloosheidskoerse in die Verenigde Koninkryk.² Die statistiese verwerkings van Phillips het op 'n regstreekse negatiewe verwantskap

tussen die koers van toename in geldlone en die werkloosheidskoers gedui. Hierdie verwantskap kan soos volg geformuleer word:

$$\dot{W} = f(u), f' < 0 \quad (5)$$

waar u die werkloosheidskoers en f' die eerste afgeleide van die funksionele verwantskap aandui.

Die oorspronklike verwantskap tussen die geldloonveranderings en die werkloosheidskoers, of die sogenaamde Phillipskromme, is allerweé vertolk as 'n spyskaart van beleidsopsies, wat beleidmakers toegelaat het om tussen verskillende kombinasies van koerse van loonverhogings en werkloosheidskoerse te kies. Volgens die Phillipskromme was minder werkloosheid moontlik, maar ten koste van vinniger looninflasie. In teenstelling hiermee kan ekonomiese met 'n voorkeur vir laer inflasie só 'n keuse uitoefen, maar dan moes 'n hoër werkloosheidskoers aanvaar word.

Die moontlikheid van 'n bestendige verruiling van loonverhogings vir werkloosheid, is nie deur ontwikkelings in die meeste nywerheidslande gedurende die sewentigerjare gestaaf nie. Die meeste van hierdie lande het 'n min of meer onveranderde werkloosheidsituasie gepaard met 'n wisselende inflasiekoers ondervind. Dit het die oorspronklike beskouing van die Phillips-verwantskap weerspreek dat die groei in die geldloon en werkloosheid op 'n eenduidige wyse met mekaar verband hou.

Ontwikkelings gedurende die sewentigerjare het 'n hersiening van die Phillipsverwantskap tussen lone en werkloosheid genoodsaak. Om toe te laat dat dieselfde werkloosheidskoers saam met verskillende inflasiekoerse kan voorkom, is aan die hand gedoen dat inflasieverwagtings as 'n verklarende veranderlike in die loonvasstellingsmodel bygevoeg word.³ Hierdie verwagtingsaangepaste weergawe van die model aanvaar dat 'n geldloonverhoging, wat vir werkers teen 'n gegewe werkloosheidskoers en inflasiekoers aanvaarbaar mag wees, heel waarskynlik onaanvaarbaar sal wees indien werkloosheid onveranderd bly, maar dit verwag word dat inflasie baie hoër as voorheen sal wees.

In Verdere teoretiese insig wat by die prysvasstellingsmodel gevoeg is om enkele tekortkominge uit te skakel, is dat die sogenaamde "volle indiensneming" van arbeid versoen kan word met 'n mate van onbenutte arbeidsbronre. Sulke werkloosheid is ten volle versoenbaar met ewewig in die goedere- en arbeidsmarkte en spruit voort uit onvermydelike wrywings in die werking van hierdie markte. Bereken as 'n persentasie van die totale arbeidsmag, word na hierdie werkloosheid as "natuurlik" verwys en na die gepaardgaande werkloosheidskoers as die "natuurlike werkloosheidskoers". Dit verskil van land tot land en word hoofsaaklik bepaal deur faktore soos die omvang van vakbondvorming in die geledere van die arbeidsmag, arbeidsmobiliteit, die koste

² Phillips, A.W.: "The relationship between unemployment and the rate of change in money wage rates in the U.K. 1861-1957", *Economica*, November 1958, pp. 283-299.

³ Sien Friedman, M.: "The role of monetary policy", *American Economic Review*, Maart 1968, pp. 1-17.

wat werksoekers moet aangaan vir die verkryging van inligting en die soektog na werkgeleenthede, die beskikbaarheid van werkloosheidsvoordele en ander faktore wat die produktiewe aanwending van alle arbeidsbronne aan bande kan lê. Die natuurlike koers word nie deur 'n korttermynstabiliseringssbeleid beïnvloed nie, maar kan wel beïnvloed word deur owerheidsbeleid wat op die strukture en die werking van die arbeidsmark gerig is, soos opvoedkundige programme, minimumloonwetgewing, werkloosheidsvergoeding, bestaansbeveiligingsprogramme, heropleiding van werklose persone en die beskikbaarstelling van arbeidsmarkinligting. Voortdurende inflasie sal moontlik ook die natuurlike koers van werkloosheid op 'n hoër vlak te staan laat kom, deur middel van die aftakelende uitwerking wat dit op die doeltreffende werkverrigting van 'n markekonomie het.

'n Loonvasstellingsmodel wat gegrond word op die standpunt dat werkers in ooreenstemming met produktiwiteitsverbeteringe vergoed word en met inagneming van die oorspronklike idees van Phillips, inflasieverwagtings en die hipotese van die natuurlike koers, kan algebraïes soos volg geskryf word:

$$W = a_1(u - u^*) + a_2A + a_3p^*, \quad a_1 < 0; \quad a_2, a_3 > 0 \quad (6)$$

waar u^* = natuurlike werkloosheidskoers, en

p^* = verwagte toekomstige inflasiekoers.

Al die ander simbole het dieselfde betekenis as voorheen.

Vergelyking (6) toon dat loonveranderings omgekeerd gekorreleerd is met die werkloosheidskoers (u). In die geval van lae vlakte van werkloosheid, of wanneer die werklike werkloosheidskoers laer is as die natuurlike koers ($u - u^* < 0$), sal toenames in geldlone hoër wees. Wanneer werkloosheid in tye van ekonomiese traagheid tot vlakte bo die natuurlike koers styg ($u - u^* > 0$), sal afwaartse druk waarskynlik op veranderings in geldlone uitgeoefen word. Ewewig in die arbeidsmark sal bereik word wanneer die werklike werkloosheidskoers gelyk is aan die natuurlike koers. In so 'n geval kan loonstygings steeds plaasvind as gevolg van toenames in arbeidsproduktiwiteit en voortgesette inflasieverwagtings.

Vergelyking (6) het as grondslag gedien vir die skatting van 'n empiriese funksie wat geldloonveranderings in Suid-Afrika verklaar. Ontoereikende gegewens met betrekking tot werkloosheid noodsak egter 'n geringe wysiging aan die werkloosheidsveranderlike. In navolging van Okun⁴ word aanvaar dat 'n regstreekse verwantskap bestaan tussen die werkloosheidskoers en die verskil of gaping tussen die potensiële totale produksie en die werklike totale produksie. Dit veronderstel dat 'n sekere produksievlek bestaan waar die gaping tussen die potensiële en die werklike produksie in ooreenstemming is met ewewig in die arbeids- en goederemarkte – 'n

sogenaamde "natuurlike produksiegaping". Die produksiegaping en die natuurlike produksiegaping vervang derhalwe die werkloosheidskoers en die natuurlike werkloosheidskoers in vergelyking (6).

Enkele interessante gevolgtrekkings kan op grond van hierdie loonvasstellingsmodel gemaak word. Indien aanvaar word dat arbeid ten volle beloon word vir produktiwiteitsverbeterings en ook ten volle vir verwagte inflasie vergoed word, is sowel a_2 as a_3 in vergelyking (6) gelyk aan een. Deur vergelyking (6) (met $a_2 = a_3 = 1$) in vergelyking (4) in te stel, word die volgende verwantskap verkry:

$$\dot{p} = a_1(G - G^*) + \dot{p}^*, \quad a_1 < 0, \quad (7)$$

waar G en G^* onderskeidelik die werklike en die "natuurlike" produksiegapings voorstel. Vergelyking (7) kan soos volg gewysig word:

$$\dot{p} - \dot{p}^* = a_1(G - G^*), \quad a_1 < 0. \quad (8)$$

Uit vergelyking (8) kan afgelei word dat pogings om die werklike produksiegaping standhoudend tot onder die natuurlike vlak⁵ te verlaag, sal vereis dat die werklike inflasie deurlopend hoër as die verwagte inflasie moet wees. Indien aanvaar word dat inflasieverwagtings uiteindelik gelyk aan die werklike inflasie sal wees, is 'n voortdurende versneling in die inflasiekoers nodig om te verseker dat die werklike produksiegaping standhoudend laer sal wees as die natuurlike vlak. Volgens die hipotetiese loonvasstellingsmodel is dit dus moontlik om hoër produksie- en indiensnemingsvlakte aan te moedig deur toe te laat dat inflasie versnel. Indien die verwagtingsvormingsproses egter sodanig is dat inflasieverwagtings uiteindelik dieselfde as die werklike inflasie sal wees, sal die produksiegaping weer eens vergroot en tot sy natuurlike vlak terugkeer, wat die ekonomie met 'n hoër inflasiekoers sal laat sonder om enige langdurige verbetering in die vlak van produksie en inkomte te bewerkstellig.

3. Die veranderlikes van die model

Die veranderlikes van die model word kortliks in hierdie afdeling beskryf. 'n Onderskeid word getref tussen die endogene veranderlikes (waarvan die waardes binne die raamwerk van die model bepaal word) en die eksogene veranderlikes (waarvan die waardes nie binne die raamwerk van die model bepaal word nie, maar wat 'n vername rol speel in die bepaling van die waardes van die endogene veranderlikes).

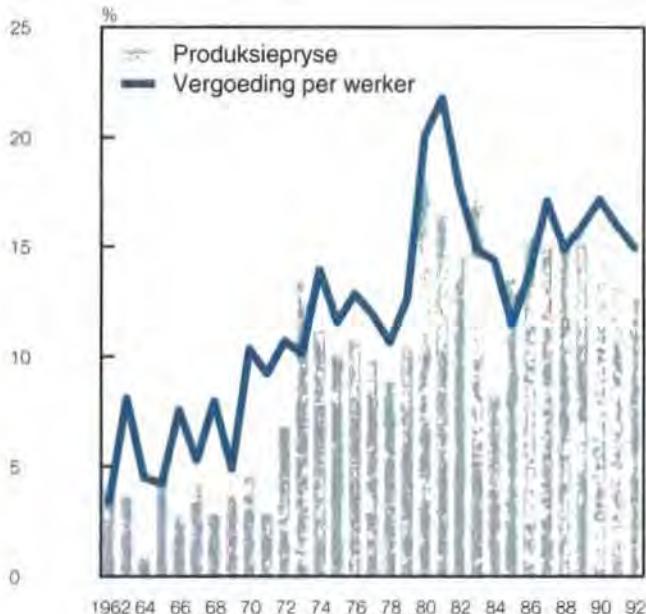
⁴ Okun, A.: *Potential GNP: Its measurement and significance*, Proceedings of the Business and Economic Statistics Section of the American Statistical Association, 1962.

⁵ Dit is gelykstaande aan die verlaging van die werkloosheidskoers tot onder sy natuurlike vlak, of die verhoging van die werklike produksie tot bo die vlak wat in ooreenstemming is met die volle indiensneming van arbeidshulpbronne.

Grafiek 1: Loon per werker en die inflasiekoers



Grafiek 2: Produksiepryse en die loon per werker



Endogene veranderlikes

Loon per werker

Die afhanglike veranderlike in die loonvergelyking is bereken as die persentasieverandering oor vier kwartale in die gemiddelde vergoeding per werker in die sektore buite die landbou, met uitsondering van die goudmynbousektor en die algemene owerheid. Totale arbeidsvergoeding is verkry uit gegewens oor die nasionale rekening, terwyl gegewens met betrekking tot indiensneming saamgestel is uit data wat deur die Sentrale Statistiekdiens vrygestel word. Die gemiddelde loon per werker is bereken deur die totale arbeidsvergoeding met die geskakte aantal werknelmers te deel.

Veranderings gedurende kalenderjare in die nominale arbeidsvergoeding per werker en die verbruikersprys-inflasie word in grafiek 1 getoon. Dit is veral betekenisvol dat die toename in die gemiddelde vergoeding per werker in die private sektor in bykans elke jaar sedert die vroeë sestigerjare hoër as inflasie was.

Produksiepryse

Die deflator vir die bruto toegevoegde waarde in die sektore buite die landbou, met die uitsondering van die algemene owerheid en die goudmynbousektor, is gebruik as die beste aanwyser vir produksiepryse. Skattings van die toegevoegde-waarde deflator is bereken uit gegewens oor die nasionale rekening en word uitgedruk as die verhouding van die toegevoegde waarde teen heersende faktorkoste tot die toegevoegde waarde teen 1985-faktorkoste.

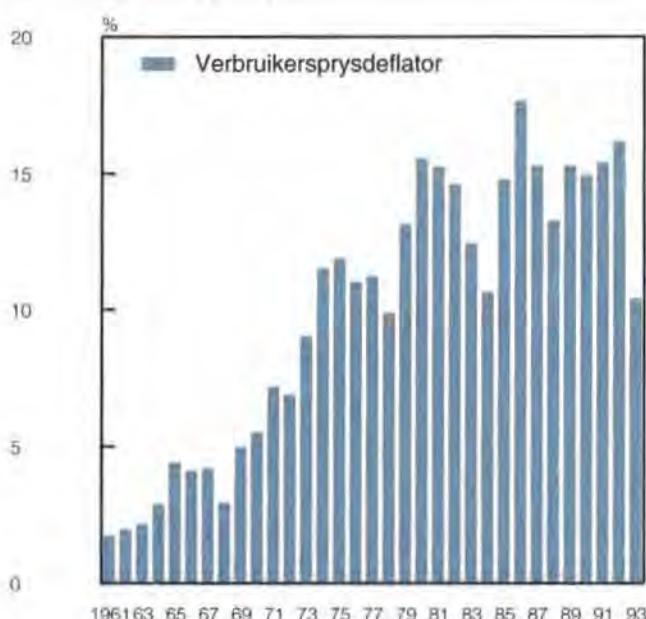
Soos vroeër genoem, word produksiepryse in die model bepaal as 'n toeslag bo koste. Vir die doeleindes van die loon-prysmodel is aanvaar dat arbeidskoste in die algehele kostestruktuur van Suid-Afrika se produktiewe sakesektor oorheersend is. Hierdie aanname word bevestig deur grafiek 2 wat die betreklik noue verwantskap tussen veranderings in arbeidseenheidskoste en produksiepryse toon.

Verbruikerspryse

Die afgeleide deflator vir private verbruiksbesteding is 'n alternatiewe aanwyser vir die algemene vlak van verbruikerspryse. Die afgeleide deflator verskil van die verbruikersprysindeks in die opsig dat dit op die hele ekonomie en nie net die stedelike gebiede betrekking het nie, en dat dit 'n geweegde indeks is met gewigte wat voortdurend aanpas namate bestedingspatrone verander in plaas van die vastegewigstruktuur van die verbruikersprysindeks. Die verandering oor vier kwartale in hierdie afgeleide deflator word gelyk gestel aan inflasie. Die deflator is bereken deur die private verbruiksbesteding, soos dit in die nasionale rekening teen heersende prys geraam word, te deel met die private verbruiksbesteding teen 1985-pryse geraam.

Soos in grafiek 3 aangedui word, het die Suid-Afrikaanse ekonomie gedurende die sestigerjare 'n betreklike groot mate van prysbestendigheid ervaar met enkelsyferinflasie wat tot in 1973 aan die orde van die dag was. Inflasie het in 1974 dubbelsyferafmetings begin aanneem en het sedertdien op 'n betreklik hoë vlak gebly.

Grafiek 3: Die inflasiekoers



Grafiek 4: Verandering in arbeidsproduktiwiteit



Eksogene veranderlikes

Arbeidsproduktiwiteit

Die persentasieverandering oor vier kwartale in die produksie per werker in die sektore buite die landbou, met die uitsondering van die algemene owerheid en die goudmynhousektor, is gebruik as 'n aanwyser vir die groei in arbeidsproduktiwiteit. Die reële bruto binnelandse produk teen faktorkoste is gebruik as 'n aanwyser vir produksie, terwyl indiensnemingstatistiek in die sektore buite die landbou saamgestel is uit gevawens wat deur die Sentrale Statistiekdiens vrygestel word.

Die gemiddelde arbeidsproduktiwiteit, dit wil sê die vlak van produksie per eenheid van arbeid, verander saam met die konjunktuur. Grafiek 4 toon dat die produksie per werker geneig is om ten minste gedurende die vroeë stadiums van tydperke van ekonomiese inkrimping te dal en dat dit toeneem gedurende die gevorderde stadiums van 'n langdurige inkrimping en sodra 'n oplewing begin. Dit kan toegeeskryf word aan die feit dat sakeondernemings huiwerig is om werkers af te dank wanneer produksie daal, aangesien die daling in die produksie net tydelik mag wees. Dit was veral die geval toe stramhede in die arbeidsmark die beweeglikheid van arbeid in die land ernstig gekortwiek het.

Ekonomiese teorie veronderstel 'n hoë mate van interafhanklikheid tussen lone en produktiwiteit. Loongroei weerspieël produktiwiteitsgroei, terwyl produktiwiteit self ook deur die loonvlak beïnvloed kan word. Die wet van dalende grensopbrengs, ingevolge waarvan opeenvolgende eenhede van indiensgeneemde

arbeid tot opeenvolgende dalende opbrengste aanleiding gee, dien as 'n riglyn vir werkgewers wat hul winste wil maksimaliseer. Teen 'n gegewe loonvlak sal addisionele arbeidseenhede in diens geneem word totdat die grensproduktiwiteit van die laaste indiensgeneemde eenheid gelyk is aan dieloon wat betaal word.

Produksiegaping

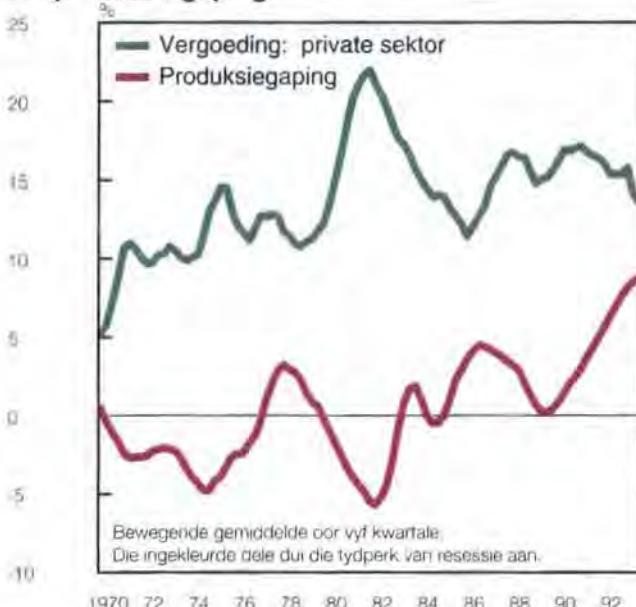
Die gaping tussen die potensiële bruto binnelandse produk en die werklike bruto binnelandse produk⁶ word as 'n aanduiding van die onderbenutting van produktiewe hulpbronne gebruik. Die gemiddelde produksiegaping oor die steekproeftydperk gee 'n aanduiding van die natuurlike werkloosheidskoers. Die verskil tussen die werklike produksiegaping en die natuurlike vlak word as 'n verklarende veranderlike in die loonvergelyking gebruik.

Wanneer die produksiegaping onder die natuurlike vlak daal, dui dit op opwaartse druk op lone, terwyl 'n produksiegaping bo die natuurlike vlak die bestaan van oorskotkapasiteit en die afwesigheid van opwaartse druk op lone aandui.

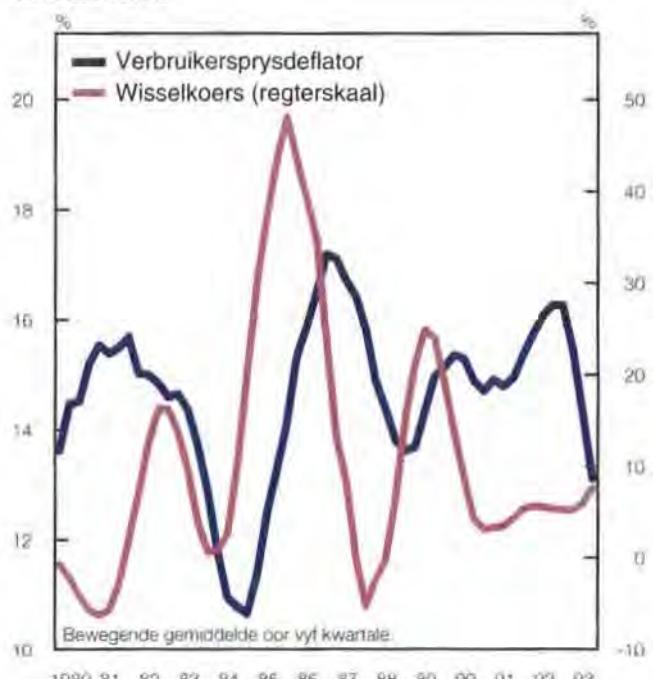
Die omgekeerde verwantskap tussen dieloon per werker in die private sektor en die verskil tussen die produksiegaping en sy natuurlike vlak word in grafiek 5

⁶ Vir 'n beskrywing van die berekening van die potensiële bruto binnelandse produk, sien De Jager, B.L. en Smal, M.M.: "Die potensiële bruto binnelandse produk van Suid-Afrika", *Kwartaalblad van die Suid-Afrikaanse Reserwebank*, Desember 1984.

Grafiek 5: Loon per werker en die produksiegaping



Grafiek 6: Die inflasiekoers en veranderings in die nominale effektiewe wisselkoers van die rand



voorgestel. Toenemende groei in die loon stem grootliks ooreen met die hoër kapasiteitsbenutting en 'n stadiger groei in die loon gaan met toenemende onderbenutting van die produksiepotensiaal gepaard.

Inflasieverwagtings

Inflasieverwagtings in enige bepaalde tydperk kan op verskeie metodes geraam word. Een metode is om werklike inflasie in die verlede as 'n aanwyser vir die toekomstige inflasiekoers te gebruik. Andersins kan 'n geweegde gemiddelde van die werklike inflasiekoerse in 'n aantal tydperke beskou word as 'n raming van wat redelikerwys van inflasie in die toekoms verwag kan word. Die rationele verwagtingsmodel veronderstel dat die verwagte inflasiekoers in enige tydperk gegrond is op alle inligting wat op daardie tydstip vir besluitneming beskikbaar is. Hierdie inligting kan die prestasies van die ekonomiese in die verlede en die verwagtings aangaande toekomstige beleid wat moontlik deur die owerhede in werking gestel kan word, insluit. Hierdie benadering veronderstel dat beleidmakers ooreenkomsdig duidelik omskreve beleidsreëls optree wat ten volle deur besluitnemers in die private sektor verstaan word. Veranderings in uitgesoekte sleutelveranderlikes, soos die geldvoorraad, rentekoerse, wisselkoerse en die begrotingstekort, kan beskou word as beleidsaanwysers wat inflasieverwagtings beïnvloed. 'n Kwantiteitsteoriebenadering word in hierdie ontleding aanvaar en inflasieverwagtings word deur die groei in die M3-geldvoorraad en veranderings in die omvang van produksie verklaar. Voorsiening word ook gemaak vir die moontlike uitwerking van veranderings in

invoerpryse op toekomstige inflasie en die invloed van historiese inflasie op verwagte inflasie.

Invoerpryse

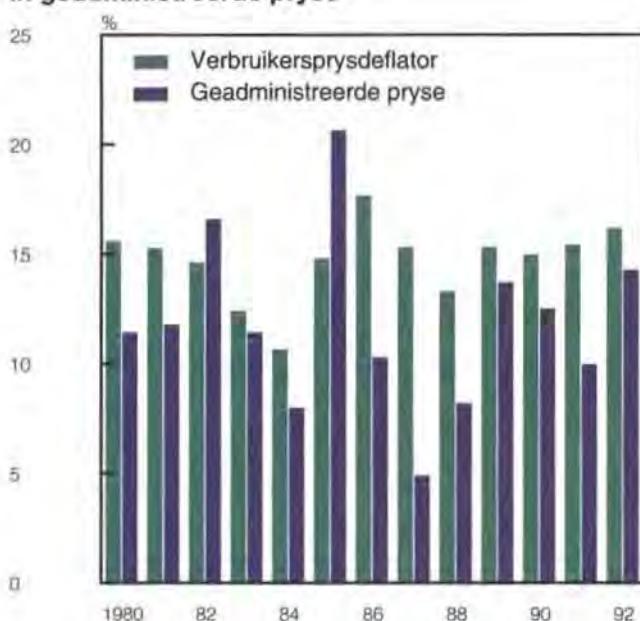
Die deflator vir die invoer van goedere en nie-faktordienste word as aanwyser van die prys van ingevoerde produkte gebruik. Veranderings in die wisselkoers van die rand teenoor ander geldeenhede speel 'n belangrike rol in die verklaring van binnelandse prysveranderings, hoofsaaklik vanweé die beïnvloeding van die prys van ingevoerde goedere.

Grafiek 6 toon die verwantskap tussen die verbruikersprys-inflasiekoers en die veranderings in die nominale effektiewe wisselkoers van die rand. Kruiskorrelasietoetse dui daarop dat binnelandse prysveranderings die veranderings in die wisselkoers met 'n tydsloering van 3 tot 4 maande volg. Die gesloerde reaksie van verbruikersprysinflasie op veranderings in die wisselkoers word vir die grootste deel van die tagtigerjare duidelik in hierdie grafiek weerspieël. Hierdie verwantskap het sedert ongeveer 1989 vervaag toe wisselkoersbewegings beduidend minder onbestendig geword het en binnelandse prys meesal deur ander faktore beïnvloed is.

Geadministreerde pryse

In grafiek 7 word toenames in geadministreerde pryse met algemene verbruikersprysinflasie vergelyk. Oor die algemeen het geadministreerde pryse geneig om ietwat

Grafiek 7: Die inflasiekoers en veranderings in gadministreerde pryse



stadiger as die prys van totale verbruikersgoedere en -dienste te styg.

Die groter vertroue op markkragte in amptelike ekonomiese besluitneming wat tydens die tagtigerjare posgevat het, het aanleiding gegee tot 'n afname in die belangrikheid van gadministreerde prys in die totale verbruikersprysindeks van 24,6 persent in 1981 tot 10,8 persent in 1992. Die belangrikheid van amptelik vasgestelde prysveranderings het dus met verloop van tyd verminder. Prysveranderings word gevvolglik tans meer deur markkragte beïnvloed as voorheen en daar kan geredelik verwag word dat prys 'n groter reaksie op beleidsmaatreëls, wat op die herstel van finansiële bestendigheid gerig word, sal toon.

Vergoeding van owerheidswerknemers

Die loonvasstellingsproses word beïnvloed deur die formele en informele vergelyking deur werkers van hul eie lone met die lone van werkers in ander sektore van die ekonomie. Die salarisverhogings van staatsdiens-amptenare word dikwels as 'n formele riglyn gebruik in die bepaling van salarisverhogings van individue wat soortgelyke take in die private sektor verrig. Daarenteen word die vergoeding van werknemers in die private sektor dikwels in die loon- en salarisvasstelling van die owerheidsektor gebruik. Vergelykings word ook op 'n informele grondslag deur sowel werkgewers as werknemers gedoen om 'n gesikte verwysingsraamwerk vir die vasstelling van loonvlakte daar te stel.

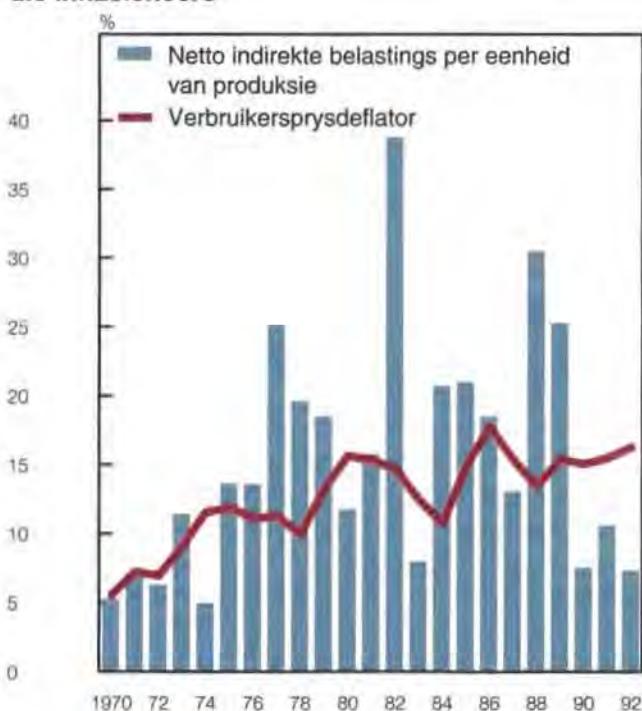
Gegewens uit die nasionale rekeninge is gebruik as 'n grondslag vir die berekening van die gemiddelde vergoeding van owerheidswerknemers en van werk-

Tabel 1
Vergoeding van werknemers en die inflasiekoers

	70-90 %	80-90 %	85-92 %
Toename in vergoeding van werknemers:			
Algemene owerheid	14,3	17,4	16,9
Private sektor.....	14,1	16,2	15,2
Inflasiekoers	12,4	14,6	15,3

nemers in die private sektor. Die gemiddelde toename in die vergoeding van werknemers in die algemene owerheidsektor en in die private sektor word in tabel 1 met die inflasiekoers vir drie tydperke vergelyk. Die gegewens toon dat toenames in die vergoeding van werknemers in die owerheidsektor sedert 1970 hoër was as die inflasiekoers en die stygings in die gemiddelde salaris en lone van werknemers in die private sektor. Die jaarlikse veranderings in die vergoeding van werknemers in die owerheidsektor toon groter fluktuasies as die veranderings in die vergoeding in die private sektor. Salarisaanpassings in die owerheidsektor is in sommige jare laer as die inflasiekoers, maar dit word dikwels in die daaropvolgende jare gevvolg deur aanpassings wat heelwat hoër as die inflasiekoers is.

Grafiek 8: Netto indirekte belastings en die inflasiekoers



Netto indirekte belastings

Netto indirekte belastings word om tegniese redes in die model ingesluit. Die pryse van eindprodukte word in die model afgelei van totale wat in die nasionale rekening voorkom en wat teen faktorkoste bereken is, dit wil sê wat netto indirekte belastings uitsluit. Hier teenoor sluit verbruikerspryse alle indirekte belastings in wat by produksiekoste getel word. Indien aanvaar word dat eindgebruikerspryse deur produksiekoste bepaal word, behoort daar in die prysvergelyking uitdruklik voorsiening gemaak te word vir die uitwerking van netto indirekte belasting op verbruikerspryse.

Grafiek 8 toon dat die netto indirekte belastings, dit wil sê die indirekte belastings verminder met die subsidies per eenheid van fisiese produksie gedurende die tydperk van 1970 tot 1989, teen 'n heelwat vinniger koers as die inflasiekoers toegeneem het. Sedert 1990 het 'n ommeker in hierdie neiging plaasgevind en was toenames in die netto indirekte belastings heelwat laer as die inflasiekoers. Die betreklik groot stygings wat gedurende 1982, 1984 en 1989 voorgekom het, kan deels aan toenames in die algemene verkoopbelastingkoers gedurende daardie jare toegeskryf word, terwyl die stygging in 1988 aan die instelling van die brandstofheffing toegeskryf kan word.

4. Statistiese skatting van loon- en prysvergelykings

In hierdie afdeling word die resultate van die statistiese skatting van die teoretiese model bespreek. Gewone kleinste kwadrate skattungstegnieke is toegepas en die t-waardes van die geskakte koëffisiënte, asook die volgende opsommende statistieke, word getabelleer:

\bar{R}^2 = Aangepaste bepaaldheidskoëffisiënt;

D-W = Durbin-Watson d-statistiek;

RHO = Outokorrelasiekoëffisiënt.

Kwartaallikse gegewens is gebruik en die skattings-tydperk word ook aangedui.

Lone in die private sektor

Die afhanklike veranderlike in die loonvergelyking is die persentasieverandering oor vier kwartale in die gemiddelde nominale vergoeding per werker in die sektore buite die landbou, uitgesonderd die goudmynbousektor en die algemene owerheid, en word deur W_p aangedui. Die volgende verklarende veranderlikes is in die vergelyking ingesluit:

- die verskil tussen die produksiegaping (gemeet as 'n persentasie van die produksievermoë) en die gemiddelde

produksiegaping oor die steekproeftydperk (gemeet as 'n persentasie van die produksievermoë) ($u=G-G^*$);

- die persentasieverandering oor vier kwartale in die reële produksie per werker in die sektore buite die landbou, uitgesonderd die algemene owerheid en die goudmynbousektor (\dot{A});
- inflasieverwagtings, gegrond op veranderings in die afgeleide deflator vir private verbruiksbesteding (p^e); en
- 'n fopveranderlike (fv) wat gebruik word om die instelling en die bestaan van vakbonde in die arbeidsmark sedert 1980 te toon, met 1980.I tot 1992.IV = 1,0 en 0 andersins.⁷

Die geskakte loonvergelyking is soos volg:

$$\hat{W}_p = 0,89 \cdot p^e - 0,55 \cdot (0,25 \sum_{i=0}^3 u_i - 9,3) + 0,60 \cdot \dot{A} + 2,87 \cdot fv$$

(17,43)	(5,26)	(6,06)	(3,22)
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$$\bar{R}^2 = 0,45$$

$$D-W = 1,70$$

$$RHO = 0,48$$

Skattings-tydperk: 1970.I tot 1992.IV

Die betreklik lae \bar{R}^2 -waarde kan toegeskryf word aan die feit dat die afhanklike veranderlike, dit wil sê die persentasieverandering in lone oor vier kwartale, aan groot wisseling onderhewig is.

Aangesien al die veranderlikes, behalwe die fopveranderlike, as persentasieveranderings uitgedruk word, kan die geskakte koëffisiënte as elastisiteite vertolk word. Die koëffisiënte toon derhalwe die persentasieverandering in die nominale loon wat verwag kan word as gevolg van 'n verandering van een persent in die betrokke verklarende veranderlike. Die grootte van die koëffisiënt van die fopveranderlike dui daarop dat vakbonde baie suksesvol was om die koers van loontoenames te laat versnel. Sedert die bestaan van vakbonde vir swart werkers aan die begin van die tagtigerjare deur wetgewing gemagtig is, het die gemiddelde koers van toename in die geldloon met ongeveer 2% persentasiepunte per jaar gestyg.

Produktiwiteitsgroei is na behore in berekening gebring by die geldloongroei gedurende die skattings-tydperk. Gedurende die tydperk sedert 1970 is arbeid vir produktiwiteitstoenames naastenby in verhouding tot die aandeel daarvan in die waarde van produksie vergoed – ongeveer 60 persent van die toename in produktiwiteit is toegewys aan die groei in die geldloon. Dit dui op 'n konstante verdeling van inkome tussen arbeid en kapitaal oor die lang termyn.

⁷ Die stabilitet van die geskakte vergelyking gedurende die hele tydperk was die belangrikste rede vir die insluiting van die fopveranderlike. Kyk na die afdeling onder die opskrif "Toetsse vir struktuurveranderings" wat volg.

Volgens die geskatte vergelyking behoort opwaartse loondruk na vore te kom as onbenutte produktiewe kapasiteit afneem tot 'n vlak laer as 9,3 persent van die totale produksievermoë. Wanneer onbenutte produksievermoë gelyk is aan 9,3 persent van totale produksievermoë, sal loonveranderings nie meer deur oormatige vraagdruk beïnvloed word nie. In sulke omstandighede sal die geldloongroei bepaal word deur ander faktore, soos inflasieverwagtings, produktiwiteitsgroei en die bedingsmag van vakbone. Teen hierdie koers van onbenutte produksievermoë, sal looninflasie nie toeneem as gevolg van oormatige vraag nie en sal dit ook nie afneem as gevolg van ontoereikende vraag nie. Die geskatte vergelyking stem dus ooreen met die teorie van 'n nie-versnellende inflasiekoers van werkloosheid (NAIRU), met die implikasie dat daar op kort termyn 'n veruiling is tussen hoër looninflasie en laer onbenutte produksievermoë, maar dat inflasie oor die lang termyn die enigste blywende gevolg van so 'n beleid van vraagbestuur is.

Die geskatte loonvergelyking verteenwoordig ook 'n baie ongunstige veruiling tussen onbenutte produksievermoë en looninflasie op kort termyn. Volgens hierdie resultate sal onbenutte produksievermoë tot ongeveer 18,4 persent van die totale produksievermoë moet toeneem ten einde geldloongroei met 5 persentasiepunte te verminder. Dit beteken dat 'n baie ernstige resessie nodig is om die koers van toename in die geldloon beduidend te verminder as ander kragte wat laer loongroei bevorder nie aanwesig is nie.

Die geskatte vergelyking bevestig ook dat inflasieverwagtings 'n belangrike rol in die loonvasstellingsproses speel. Met alle ander faktore onveranderd, sal verwagte inflasie van 10 persent per jaar waarskynlik lei tot 'n toename in die geldloon van ongeveer 9 persent per jaar. Hierdie gevoeligheid van die veranderings in die geldloon op inflasieverwagtings, tesame met die betreklike stramheid van lone om op traie vraagtoestande en 'n stygende produksiegaping te reageer, toon dat pogings om inflasie deur middel van ortodokse vraagbeperkende beleid te bekamp baie duur mag wees as dit aan produksie- en indiensnemingsverliese gemeet word, veral as die beleid nie konsekwent toegepas word nie. Indien beleidsmaatreëls nie as geloofwaardig beskou word nie, sal inflasieverwagtings waarskynlik nie na wense aanpas nie en sal ekonomiese bedrywigheid beduidend moet afneem ten einde die nodige resultate te verkry. 'n Konsekwente konserwatiewe monetêre beleid is gevoldig nodig om beleidsgeloofwaardigheid en om prysbestendigheid teen die laagste koste vir die land te herstel, soos gemeet aan verlore werkgeleenthede en laer produksie.

Die prysfunksies

Die model onderskei tussen 'n produksieprysfunksie en 'n verbruikersprysfunksie.

Die produksieprysfunksie

Die vergelyking vir produksiepryse is 'n lineêre benadering van die toeslagverwantskap tussen produksiekoste en

produksiepryse. Arbeidskoste en die koste van ingevoerde goedere word uitgesonder as die belangrikste koste-elemente wat produksiepryse beïnvloed. Die netto indirekte belastingbetalings deur produsente is egter nie op hierdie stadium van die prysvormingsproses in aanmerking geneem nie, omdat die deflators vir toegevoegde waarde van die totale teen faktorkoste uit die nasionale rekeninge afgelei word. Die koste van goedere en dienste wat deur die instellings in die openbare sektor en die openbare korporasies gelewer word, word saamgevat deur die insluiting van die gemiddelde loonkoste van werkemers van die algemene owerheid.

Die deflator vir die bruto toegevoegde waarde in die sektore buite die landbou, met die uitsondering van die algemene owerheid en die goudmynbousektor, word gebruik as die afhanklike veranderlike en as 'n benaderde waarde vir produksiepryse (p_p). Die verklarende veranderlikes is:

- die deflator vir verbruiksbesteding deur die algemene owerheid (vergoeding van werkemers), wat gebruik word as 'n benaderde waarde vir die koste van algemene owerheidsdienste (w_o);
- die gemiddelde loon per werker in die sektore buite die landbou, uitgesonderd die algemene owerheid en die goudmynbousektor, wat as 'n benaderde waarde vir arbeidseenheidskoste in die private sektor (w_p) gebruik word; en
- die prys van ingevoerde goedere en dienste (p_i).

Die geskatte funksie is soos volg:

$$p_p = 0,05 + 0,84 \cdot (0,8 \cdot w_o + 0,2 \cdot w_p) + 0,14 \cdot p_i$$

(7,95) (44,53) (5,23)

$$\bar{R}^2 = 0,99$$

$$D-W = 1,94$$

$$RHO = 0,65$$

Skattingsydperk: 1970.I tot 1992.IV

Die verbruikersprysfunksie

Die vergelyking wat die verwantskap tussen verbruikerspryse en produksiepryse beskryf, maak uitdruklik voorstelling vir die regstreekse uitwerking van die prys van ingevoerde goedere en geadministreerde prys op verbruikerspryse vir eindprodukte. Die afhanklike veranderlike in die verbruikersprysfunksie is die afgeleide deflator vir private verbruiksbesteding (p_p). Die veranderlikes wat gebruik word om verbruikerspryse te verklaar, is:

- geadministreerde prys (p_a), vermenigvuldig met die aandeel van die geadministreerde prys in die verbruikersprysindeks (wp_a);
- produksiepryse (p_p); en

- die pryse van ingevoerde goedere en dienste (p_i), vermenigvuldig met die aandeel van ingevoerde pryse in die verbruikersprysindeks (wp_i).

Die geskatte funksie is soos volg:

$$p_v = wp_a \cdot p_a + wp_i \cdot p_i - 0,08 + 0,83 \cdot p_o$$

$$(3,08) \quad (51,96)$$

$$\bar{R}^2 = 0,97$$

$$D-W = 1,78$$

$$RHO = 0,90$$

Skattingstydperk: 1975.I tot 1992.IV

Vergelyking vir inflasieverwagtings

Die inflasieverwagtingsveranderlike is gegrond op die persentasieverandering oor vier kwartale in die afgeleide deflator vir private verbruiksbesteding (\dot{p}^i). Die verklarende veranderlikes wat 'n rol speel, is:

- die groeikoers oor vier kwartale in die M3-geldvoorraad per eenheid van produksie (My),
- die persentasieverandering oor vier kwartale in die prys van ingevoerde goedere (\dot{p}_i); en
- die inflasiekous in die voorafgaande tydperk (\dot{p}).

Die geskatte funksie is soos volg:

$$\dot{p}^i = 0,04 \cdot My_2 + 0,04 \cdot \dot{p}_i + 0,93 \cdot \dot{p}_1$$

$$(1,86) \quad (3,01) \quad (39,60)$$

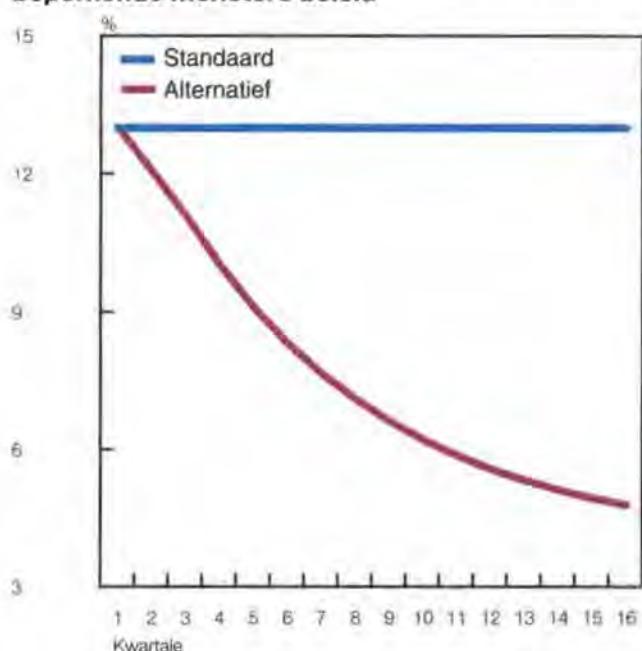
$$\bar{R}^2 = 0,95$$

$$D-W = 2,38$$

Skattingstydperk: 1961.IV tot 1992.IV

Volgens hierdie hipotese word die verwagtingsvormingsproses deur die voorafgaande inflasie oorheers. Die geskatte vergelyking bevestig dat dit onwaarskynlik is dat

Grafiek 9: Reaksie van inflasieverwagtings op beperkende monetêre beleid



verwagtings vinnig sal reageer op 'n afname in monetêre groei. Indien monetêre groei van 15 persent per jaar tot 5 persent per jaar afneem, sal die verwagte inflasiekous op kort termyn na verwagting met slegs 0,4 persentasiepunte verminder. Die verdere verlaging van verwagtings sal geleidelik plaasvind en die deurvoer-effek wat tot laer geldloonskikkings lei, sal waarskynlik ook 'n lang uitgestrekte proses wees. Sodra 'n geloofwaardige beleid egter ingeburger is en bewyse van 'n beduidende verlaging in inflasie sigbaar word, kan inflasieverwagtings aansienlik vinniger afneem. 'n Streng monetêre beleid moet vir 'n redelike lang tydperk nagevolg word ten einde 'n blywendie uitwerking op diep gewortelde inflasieverwagtings te hê. 'n Vinnige reaksie van inflasieverwagtings op 'n beperkende monetêre beleid sal waarskynlik die gebruik

Tabel 2
Pasgehalte (bepaaldheidskoëfisiënt) van die funksies

Funksie	Skattingstydperk						
	1970 - 1980	1970 - 1982	1970 - 1984	1970 - 1986	1970 - 1988	1970 - 1990	1970 - 1992
Vergoeding in die private sektor..	0,454	0,577	0,520	0,413	0,387	0,361	0,357
Produksiepryse	0,993	0,991	0,987	0,992	0,995	0,997	0,997
Verbruikerspryse*	0,983	0,991	0,979	0,986	0,984	0,989	0,986
Inflasieverwagtings	0,779	0,828	0,818	0,844	0,846	0,847	0,857

* Die skattingstydperk begin by 1975.

van onortodoxe metodes vereis om besluitnemers in die private sektor, veral diegene betrokke by die arbeidsmark, aan te moedig om die wyse te verander waarop hulle verwagtings van toekomstige prystoenames formuleer.

Grafiek 9 stel 'n enkelvergelyking-simulasie van die reaksie van inflasieverwagtings op beperkende monetêre beleid voor. In die standaardsimulasie word aanvaar dat die monetêre groei teen 15 persent per jaar sal voortduur. Dit verseker dat die verwagte inflasie ongeveer 13 persent per jaar sal beloop. In die alternatiewe simulasie is aangeneem dat die groei in die geldvoorraad standhouend tot 5 persent verminder word, wat 'n inflasiekoers van ongeveer 3 persent oor die lang termyn impliseer. Die alternatiewe simulasie dui daarop dat inflasieverwagtings eers na verloop van vier jaar (sestien kwartale) van 13 persent tot ongeveer 5 persent sal afneem.

Toetse vir struktuurveranderings

Ten einde die stabiliteit van die geskatte vergelykings te toets, is regressies oor verskillende skattingsydperspekte uitgevoer. Die enigste funksie wat 'n merkbare verswakkings in die bepaaldheidskoëfisiënt getoon het, was die funksie vir vergoeding in die private sektor (sien tabel 2).⁸

Quandt- en Chow-toetse⁹ is op al die funksies uitgevoer om vir struktuurveranderings te toets. Hiervolgens is vasgestel dat daar slegs gedurende 1980 'n struktuurverandering in die loonfunksie voorgekom het. Sedert 1980 was die gemiddelde koers van loonveranderings beduidend hoër as voorheen. 'n Moontlike rede hieroor is dat die vakbonde sedert 1980 'n belangrike rol in loononderhandelings gespeel het. Die Wiehahn-verslag¹⁰ wat voorgestel het dat die deelname van swart vakbonde aan die onderhandelingsproses gewettig moet word, is in 1979 vrygestel en hierdie voorstelle is in 1980 deur die regering aanvaar en geïmplementeer. 'n Fopveranderlike is derhalwe in die loonfunksie ingesluit (soos in die voorafgaande beskrywing van die loonvergelyking genoem is) en die funksie se bepaaldheidskoëfisiënt het tot 0,45 verbeter.

5. Vloeidiagram van die prysvormingsproses in die model van die Suid-Afrikaanse Reserwebank

'n Vloeidiagram van die prysvormingsmodel verskyn in die diagram. Die ingekleurde dele dui op veranderlikes wat in 'n groot mate deur die owerhede beïnvloed kan word.

Die syfers tussen hakies is die beta-koëfisiënte¹¹ wat uit die regressie-ontleding verkry is. Hierdie koëfisiënte dui op die verandering in die afhanglike veranderlike in reaksie op 'n eenheidsverandering in elke verklarende veranderlike, wanneer alle ander veranderlikes onveranderd bly.

Die diagram toon dat inflasieverwagtings hoofsaaklik gegronde word op die jongste inflasiekoers (90,5 persent van die vorige inflasie word deurgevoer na die huidige verwagte inflasiekoers) en hierdie inflasieverwagtings word op hul beurt as die belangrikste verklarende veranderlike in die loononderhandelingsproses in die private sektor beskou (37,4 persent van die variasie in nominale lone word deur die prysverwagtingsveranderlike verklaar). Lone in die private sektor word as die belangrikste komponent (69,4 persent) in die vasstelling van produksiepryse beskou. Veranderings in produksiepryse dra op hul beurt grootliks by tot veranderings in verbruikerspryse (84,0 persent).

Soos hierbo beskryf kan sekere veranderlikes in die prysvormingsproses regstreeks of onregstreeks deur die owerhede beïnvloed word om inflasie te bekamp. Onder andere kan die groei in die geldvoorraad beïnvloed word deur aanpassings in die monetêre beleidsinstrumente, soos byvoorbeeld die Reserwebank se diskontokoers. 'n Depresiasijsie van die rand teen 'n mandjie van ander geldeenheide as gevolg van beleidsoptrede sal lei tot 'n toename in die koste van ingevoerde goedere en gevoldlik tot 'n toename in die binnelandse prysvlak. Indien die monetêre owerhede daarin sou slaag om 'n bestendige wisselkoers te handhaaf, sal die invloed van die prys van ingevoerde goedere op die binnelandse prysvlak beperk word tot slegs die omvang van inflasie in Suid-Afrika se handelsvennootlande. Die owerhede kan ook poog om die toenames in geadministreerde pryse te beveel en om stygings in die salaris van staatsamptenare tot onder die huidige inflasiekoers te beperk. Só 'n beleid kan egter nie altyd aanbeveel word nie, aangesien dit ongewenste resultate kan oplewer, wat uit die onbedoelde verwringing van relatiewe pryse voortspruit.

Die beta-koëfisiënte dui daarop dat inflasieverwagtings en toenames in die vergoeding van werknemers die belangrikste verklarende veranderlikes in die prysvasstellingsproses is. Volgens hierdie koëfisiënte word loonskikkings hoofsaaklik gegronde op inflasieverwagtings en in 'n mindere mate op die vraag en aanbod in die arbeidsmark. Verwagte prystoenames word gedurende die loonvasstellingsproses in aanmerking geneem en inflasie word dus in werklikheid voortgeplant hoofsaaklik vanweë die verwagting dat dit sal voortduur.

6. Bekamping van inflasie

Die spiraal van inflasieverwagtings en die inflasiekoers stel beleidmakers voor 'n ernstige probleem en plaas ook die

⁸ Hierdie loonvergelyking sluit nie die fopveranderlike, wat die effek van die toetreding van georganiseerde swart vakbonde tot die arbeidsmark weergee, in nie.

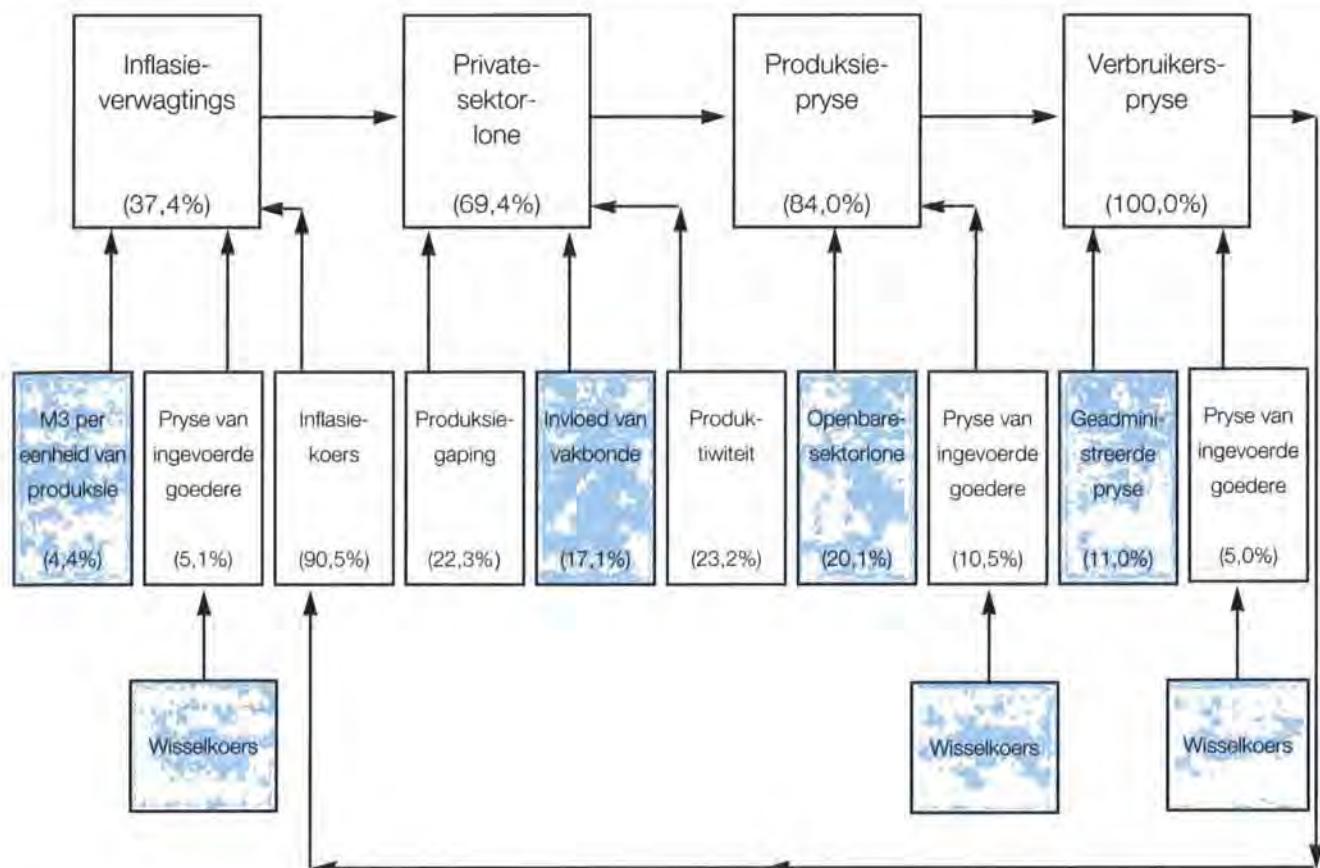
⁹ Intriligator M.D.: *Econometric Models, Techniques and Applications*, Prentice Hall, 1978.

¹⁰ Die Wiehahn Kommissie: "Report of the Commission of Investigation on Labour Regulation", RP27/1981.

¹¹ Maddala G.S.: *Econometrics*, McGraw-Hill, Inc., 1977.

Diagram

Vloeidiagram van die prysvormingsproses



Die persentasieverandering tussen hakies dui die beta-koeffisiënte, dit is die verandering in die afhanglike veranderlike vir 'n eenheidsverandering in elke verklarende veranderlike, aan.

verantwoordelikheid op hulle om die wyse waarop deelnemers aan die ekonomiese proses hierdie verwagtings vorm, te beïnvloed. Beleid moet daarop gemik wees om ekonomiese deelnemers daarvan te oortuig dat die *toekomstige verwagte inflasiekous* in besluitnemingsprosesse gebruik word en nie die jongste waargenome inflasiekous nie. Hierdie toekomstige verwagte inflasiekous behoort ook gegrond te wees op die beleidsoptrede van die owerhede om die inflasiekous te beïnvloed. Indien die owerhede ander deelnemers kan oorred dat hulle in staat is om inflasie te verlaag, sal verwagtings waarskynlik dienooreenkomsdig aangepas word. Net soos inflasie ontstaan omdat deelnemers verwag dat pryse gaan toeneem, kan prysbestendigheid verkry word indien deelnemers verwag dat pryse in die toekoms betreklik bestendig sal bly.

Die konsekwente toepassing van 'n konserwatiewe monetêre beleid en die handhawing van fiskale discipline is die gebruiklike manier om die geloofwaardigheid van die owerhede te herstel wanneer hulle 'n anti-inflasieveldtog van stapel stuur. Gedurende sulke pogings om

beleidsgeloofwaardigheid te herstel is dit moontlik dat inflasieverwagtings stadig sal aanpas totdat ekonomiese deelnemers daarvan oortuig is dat die owerhede met hul beleid sal volhard. Dit verklaar waarom reële produksie en werkgeleenthede nadelig getref word gedurende die vroeë fasies van 'n daadwerklike beleidsprogram om inflasie vanaf betreklik hoë vlakke te verminder. Sodra meer ewewigte finansiële toestande geskep is, sal die nadelige uitwerking van finansiële discipline waarskynlik aansienlik verminder.

7. Opsomming

In hierdie studie is die prysvormingsproses in Suid-Afrika deur middel van 'n teoretiese model ontleed. Die belangrikste gevolgtrekkings is dat veranderings in arbeidskoste die kern van die inflasieproses vorm en dat loonveranderings hoofsaaklik deur inflasieverwagtings aangedryf word. Hierdie verwagtings reageer stadig op

konvensionele monetêre beleid wat gerig is op die vermindering van die groei in die geldvoorraad totdat die publiek daarvan oortuig is dat die owerhede met 'n beperkende beleid sal volhard om hul vooropgestelde doelstellings te bereik. Ten einde verwagtings deurslaggewend te beïnvloed moet 'n konserwatiewe monetêre beleid dus vir 'n lang tydperk gehandhaaf word. Die konsekwente toepassing van 'n anti-inflasionistiese beleid word beskou as 'n onontbeerlike deel van enige program wat gernik is op die stabilisering van die algemene prysvlak, teen die laagste koste vir die land. Pogings om die beweging na groter prysbestendigheid te bespoedig, sal onortodokse en desnoods ongesonde metodes vereis om inflasieverwagtings vinniger te verminder. Sodra finansiële stabiliteit verkry is, sal die koste verbonden aan die handhawing van so 'n toestand merkbaar afneem.

Notas tot tabelle

Betalingsbalans – tabelle S-70, S-71 en S-85

In hierdie uitgawe van die *Kwartaalblad* is die pos "veranderings in laste verwant aan reserwes" heromskryf om slegs die veranderings in die korttermynlaste van die Reserwebank, en in buitelandse lenings van die Sentrale Regering (soos lenings van die Internasionale Monetêre Fonds) wat aangegaan is met die uitsluitlike doel om die vlak van die bruto buitelandse valutabesit van die land te ondersteun, in te sluit. Die ander buitelandse korttermynlaste van die res van die monetêre sektor word gevvolglik nou nie by die laste verwant aan reserwes ingesluit nie en teen 'n afsonderlike pos onder "korttermynkapitaalbewegings nie verwant aan reserwes nie" getoon. In die tabel oor die "goud- en ander buitelandse reserwes" (tabel S-85) is die pos "laste verwant aan reserwes" dienooreenkomsdig aangepas.

Hierdie hersiening behoort die analitiese voorstelling van Suid-Afrika se betalingsbalans te verbeter. Dit bring ook die samestelling van Suid-Afrika se betalingsbalans meer in ooreenstemming met die riglyne van die Internasionale Monetêre Fonds in hul Vyfde Uitgawe van die *Betalingsbalanshandleiding* wat onlangs vrygestel is. In hierdie handleiding is die klassifikasie van 'n las onder "laste verwant aan reserwes" afhanklik daarvan of die las:

- op aanvraag of op kort termyn betaalbaar is;
- terugbetaalbaar is in 'n bate wat die debiteur as 'n reserwebate sou beskou; en/of
- verskuldig is aan 'n sentrale bank of sentrale regering.

Monetêre ontleding – tabel S-24

In die monetêre ontleding word die pos "netto goud- en ander buitelandse reserwes" herbenoem as "netto buitelandse bates" ten einde aan te dui dat hierdie pos konsepsioneel verskil van die definisie van die netto goud- en ander buitelandse reserwes soos wat dit in die betalingsbalans van die land aangeteken word.