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Gross Domestic Product Second quarter 2004

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KEY FINDINGS

Real quarterly GDP at market prices increased by 3,9 percent during the second quarter of 2004, following an increase of 3,6 (revised from 3,1) percent in the first quarter of 2004

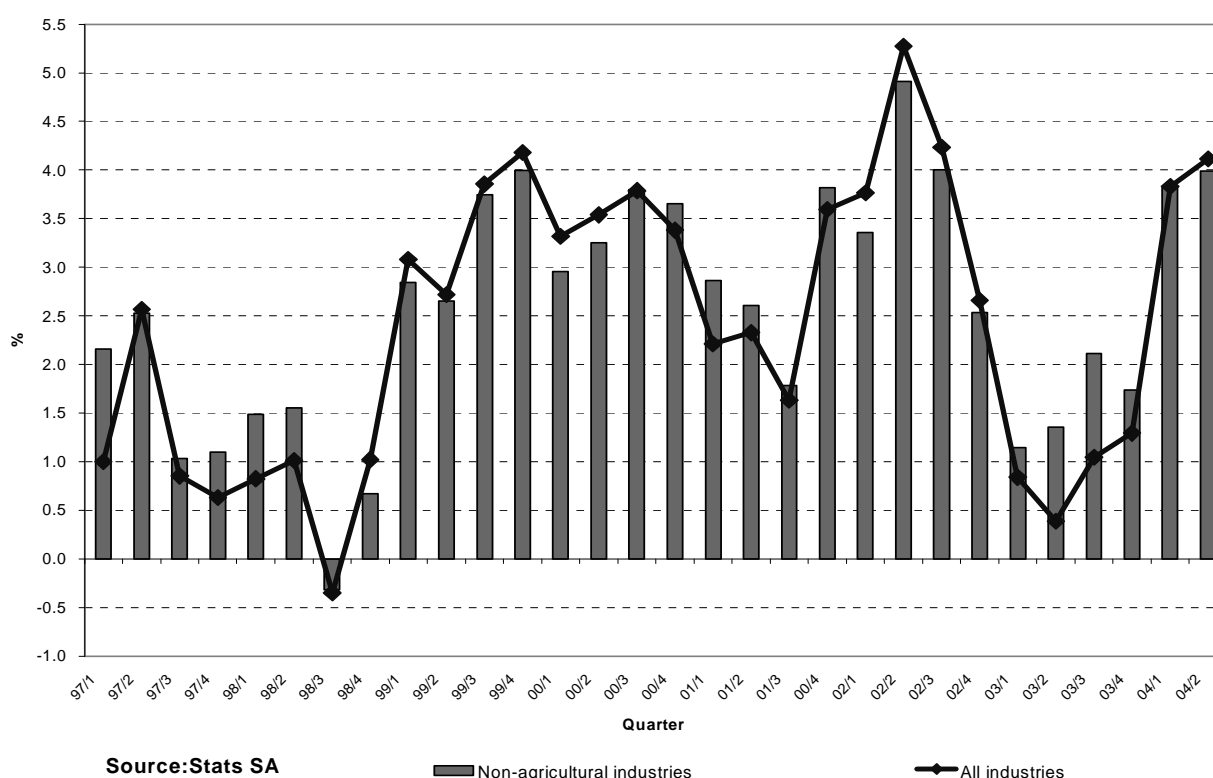
According to the latest preliminary indicators, the seasonally adjusted estimate of real gross domestic product (GDP) at market prices for the second quarter of 2004 increased by an annualised rate of 3,9 percent compared with the first quarter of 2004, following a real annualised economic growth rate of 3,6 (revised from 3,1) percent for the first quarter of 2004 compared with the fourth quarter of 2003. The real annualised economic growth rates for the four quarters of 2003 were 0,9 percent, 0,5 percent, 1,1 percent and 1,3 percent respectively (cf. table 4).

The seasonally adjusted real value added at basic prices for all industries – which is equal to GDP minus taxes on products plus subsidies on products – increased by an annualised rate of 4,1 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 3,8 (revised from 3,3) percent for the first quarter of 2004 compared with the fourth quarter of 2003 (cf. figure 1 and table 4).

The seasonally adjusted real value added by the non-agricultural industries (excluding the impact of the volatile agriculture industry) increased by 3,8 (revised from 3,3) percent and 4,0 percent during the first and second quarters of 2004 compared with the fourth quarter of 2003 and the first quarter of 2004 respectively (cf. figure 1 and table 4).

The unadjusted real GDP at market prices increased by 2,1 (revised from 1,9) percent and 2,5 percent during the first and second quarters of 2004 compared with the first and second quarters of 2003 (cf. table 2). The unadjusted real GDP at market prices for the first six months of 2004 increased by 2,3 percent compared with the first six months of 2003.

Figure 1 - Annualised growth rate in the seasonally adjusted real value added at basic prices



Source: Stats SA
Gross Domestic Product

Non-agricultural industries

All industries

Real value added by industry

Table A shows the contribution of the different industries, and taxes less subsidies on products, to the annualised change in the seasonally adjusted real GDP for ten quarters from the first quarter of 2002 onwards. The impact of an industry on the change in real GDP depends on two factors: the increase or decrease in the real value added of the industry and its relative size measured as its share of GDP in the previous quarter. Therefore, the 3,9 percent annualised increase in the seasonally adjusted real GDP during the second quarter of 2004 was mainly due to increases in the real value added by manufacturing industry (1,0 of a percentage point); transport and communication industry (0,7 of a percentage point); finance, real estate and business services industry (0,7 of a percentage point); wholesale and retail trade, hotels and restaurants industry (0,5 of a percentage point) and agriculture, forestry and fishing industry (0,3 of a percentage point). The contributions to the increase in real GDP by all other industries were lower than the aforementioned e.g. mining and quarrying industry (0,2 of a percentage point); construction (0,2 of a percentage point); general government services (0,1 of a percentage point) and community, social and personal services (0,1 of a percentage point) (cf. table A, last column).

Table A - Contributions of the percentage change in real value added by industries to annualised percentage change in seasonally adjusted real GDP

Industry	Relative size 2004 Q2 ^{1/} (percent)	Seasonally adjusted real annualised change from the previous quarter (percent)										Contributions to the seasonally adjusted annualised changes in real GDP (percentage points) ^{2/}									
		2002				2003				2004		2002				2003				2004	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Agriculture, forestry and fishing	3.4	13.5	13.8	9.5	5.5	-5.6	-19.4	-21.8	-9.5	4.3	7.4	0.5	0.5	0.4	0.2	-0.2	-0.8	-0.8	-0.3	0.1	0.3
Mining and quarrying	5.1	2.0	2.9	2.5	1.4	0.3	5.1	6.2	-0.2	3.5	3.7	0.1	0.1	0.1	0.1	0.0	0.3	0.3	0.0	0.2	0.2
Manufacturing	17.9	4.8	9.9	7.4	-0.1	-4.7	-4.5	-1.7	-3.3	4.6	5.3	0.9	1.8	1.4	0.0	-0.9	-0.8	-0.3	-0.6	0.8	1.0
Electricity and water	3.3	1.7	3.1	0.7	4.1	1.6	1.9	2.4	3.1	2.9	1.5	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Construction	2.9	6.6	5.1	4.5	8.2	4.5	2.6	4.1	6.3	6.6	6.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2
Wholesale and retail trade, hotels and restaurants	12.7	2.6	3.1	2.2	3.5	2.2	2.4	4.3	3.6	4.1	4.2	0.3	0.4	0.3	0.4	0.3	0.3	0.5	0.5	0.5	0.5
Transport and communication	11.5	5.1	5.6	6.0	6.7	6.2	6.1	5.8	5.9	5.6	6.3	0.5	0.6	0.6	0.7	0.7	0.7	0.6	0.7	0.6	0.7
Finance, real estate and business services	18.1	2.8	4.2	3.6	2.5	3.4	2.8	1.6	3.0	3.7	3.9	0.5	0.7	0.6	0.4	0.6	0.5	0.3	0.5	0.7	0.7
Community, social and personal services	2.5	4.2	4.9	4.9	5.2	4.3	4.4	4.2	4.1	3.9	3.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
General government services	12.0	2.0	2.0	1.3	0.5	0.4	0.5	0.6	0.5	0.9	0.8	0.3	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Other producers	2.4	0.3	1.2	1.7	2.2	1.1	1.5	1.9	2.3	2.3	1.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0
<i>Total value added</i>	<i>91.7</i>	<i>3.8</i>	<i>5.3</i>	<i>4.2</i>	<i>2.7</i>	<i>0.8</i>	<i>0.4</i>	<i>1.0</i>	<i>1.3</i>	<i>3.8</i>	<i>4.1</i>	<i>3.5</i>	<i>4.8</i>	<i>3.9</i>	<i>2.4</i>	<i>0.8</i>	<i>0.4</i>	<i>1.0</i>	<i>1.2</i>	<i>3.5</i>	<i>3.8</i>
Taxes less subsidies on products	8.3	3.7	3.5	2.3	2.3	1.6	2.0	1.9	1.8	1.4	2.0	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
GDP at market prices	100.0	3.8	5.1	4.1	2.6	0.9	0.5	1.1	1.3	3.6	3.9	3.8	5.1	4.1	2.6	0.9	0.5	1.1	1.3	3.6	3.9

1/ The relative size of each industry for the second quarter of 2004 is the share of its seasonally adjusted real value added of the seasonally adjusted GDP for the first quarter of 2004. Similarly, the relative size of taxes less subsidies on products is the share of its seasonally adjusted value of the seasonally adjusted GDP for the first quarter of 2004.

2/ The contribution is calculated by multiplying the percentage change of each industry (and taxes less subsidies on products) with its share of GDP in the previous quarter (i.e. its relative size).

The seasonally adjusted real value added by the *agriculture, forestry and fishing* industry increased at an annualised rate of 7,4 percent in the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 4,3 (revised from 2,7) percent during the first quarter of 2004 compared with the fourth quarter of 2003. The seasonally adjusted annualised increase of 7,4 percent by the agriculture, forestry and fishing industry reflected in the second quarter of 2004 was mainly due to an increase in the production of field crops. The unadjusted real value added by the agriculture, forestry and fishing industry decreased by 2,2 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the agriculture, forestry and fishing industry during the first six months of 2004 decreased by 2,6 percent compared with the first six months of 2003.

The seasonally adjusted real value added by the *mining and quarrying* industry increased at an annualised rate of 3,7 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 3,5 percent during the first quarter of 2004 compared with the fourth quarter of 2003. The seasonally adjusted annualised increase of 3,7 percent by the mining and quarrying industry can be mainly be attributed to an increase in the production of non-gold minerals, specifically mining of other metal ores (including platinum). The unadjusted real value added by mining and quarrying industry increased by 3,4 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the mining and quarrying industry during the first six months of 2004 increased by 3,5 percent compared with the first six months of 2003.

The seasonally adjusted real value added by the *manufacturing* industry increased at an annualised rate of 5,3 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 4,6 (revised from 2,7) percent during the first quarter of 2004 compared with the fourth quarter 2003. The seasonally adjusted annualised increase of 5,3 percent by the manufacturing industry reflected during the second quarter of 2004 was mainly due to increase reflected by the food, beverages and tobacco; petroleum, chemical products, rubber and plastic products; basic metals, fabricated metal products, machinery and equipment and transport equipment industries. The unadjusted real value added by the manufacturing industry increased by 1,2 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the manufacturing industry for the first six months of 2004 reflected no growth at 0,0 percent compared with the first six months of 2003.

The seasonally adjusted real value added by the *electricity and water* industry reflected an annualised increase of 1,5 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 2,9 percent during the first quarter of 2004 compared with the fourth quarter of 2003. The seasonally adjusted annualised increase of 1,5 percent by the electricity and water industry during the second quarter of 2004 was due to the increase in the production of electricity. The unadjusted real value added by the electricity and water industry increased by 2,5 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the electricity and water industry for the first six months of 2004 increased by 2,5 percent compared with the first six months of 2003.

The seasonally adjusted real value added by the *construction* industry increased at an annualised growth rate of 6,2 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 6,6 percent during the first quarter of 2004 compared with the fourth quarter of 2003. The unadjusted real value added by the construction industry increased by 5,8 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the construction industry during the first six months of 2004 increased by 5,3 percent compared with the first six months of 2003.

The seasonally adjusted real value added by the *wholesale and retail trade, hotels and restaurants* industry increased at an annualised rate of 4,2 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 4,1(revised from 3,3) percent during the first quarter of 2004 compared with the fourth quarter of 2003. The seasonally adjusted annualised increase of 4,2 percent by the wholesale and retail trade, hotels and restaurants industry was mainly due to increases reflected in the retail trade and the sale, maintenance and repair of motor vehicles industries. The unadjusted real value added by the wholesale and retail trade, hotels and restaurants industry increased by 4,0 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the wholesale and retail trade, hotels and restaurants industry during the first six months of 2004 increased by 3,8 percent compared with the first six months of 2003.

The seasonally adjusted real value added by the *transport and communication* industry increased at an annualised rate of 6,3 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 5,6 percent during the first quarter of 2004 compared with the fourth quarter of 2003. The seasonally adjusted annualised increase of 6,3 percent by the transport and communication industry during the second quarter of 2004 was mainly due to an increase in activities related to land transport as well as communication services. The unadjusted real value added by the transport and communication industry increased by 5,9 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by this industry for the first six months of 2004 increased by 5,8 percent compared with the first six months of 2003.

The seasonally adjusted real value added in the *finance, real estate and business services* industry increased at an annualised rate of 3,9 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 3,7 percent during the first quarter of 2004 compared with the fourth quarter of 2003. The seasonally adjusted annualised increase of 3,9 percent by the finance, real estate and business services industry during the second quarter of 2004 was mainly due to increased activities in the banking and real estate industries. The unadjusted real value added by the finance, real estate and business services industry increased by 3,0 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the finance, real estate and business services industry during the first six months of 2004 increased by 2,9 percent compared with the first six months of 2003.

The seasonally adjusted real value added by the *community, social and personal services* industry increased by an annualised rate of 3,7 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 3,9 percent during the first quarter of 2004 compared with the fourth quarter of 2003. The unadjusted real value added of the community, social and personal services industry increased by 3,3 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the community, social and personal services industry during the first six months of 2003 increased by 3,7 percent compared with the first six months of 2003.

Finally, the seasonally adjusted real value added of the *general government services* sector reflected an annualised increase of 0,8 percent during the second quarter of 2004 compared with the first quarter of 2004, following an annualised increase of 0,9 percent during the first quarter of 2004 compared with the fourth quarter of 2003. The unadjusted real value added of the general government services sector increased by 0,8 percent in the second quarter of 2004 compared with the second quarter of 2003. The unadjusted real value added by the general government services industry during the first six months of 2004 increased by 0,7 percent compared with the first six months of 2003.

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P J Lehohla
Statistician-General: Statistics South Africa

METHODOLOGICAL NOTES

Introduction

This statistical release contains quarterly estimates of the GDP for the years 1994 to 2003, as well as the first and second quarter of 2004, calculated from the production side whereby GDP is derived through the sum of values added of different economic activities or industries. Stats SA is responsible for compiling the production side of the national accounts, while the SARB is responsible for compiling the expenditure side of the national accounts, as well as income and savings and the balance of payments. The SARB will release their estimates on the 22nd September 2004.

Benchmark

There are three ways (production-, income- and expenditure approach) of calculating Gross Domestic Product (GDP) estimates of any country. In South Africa, Statistics South Africa (Stats SA) is responsible for producing the official GDP estimates. Stats SA uses the production- and income approaches. In addition, the South African Reserve Bank (SARB) compiles the GDP using the expenditure approach. The National Department of Agriculture (NDA) plays a pivotal role in the estimation of GDP, as they are responsible for providing the information used for calculating the value added of the agricultural industry, as well as some of the expenditure information on food.

All these methods require periodic rebasing and benchmarking. Rebasing is the process in which the reference year of the constant price estimates is updated, e.g. reference year is changed from 1990=100 to 1995=100. The exercise of benchmarking entails the incorporation of new areas of economic activity that were previously un- or under covered as well as the incorporation of new detailed information. The implementation of the System of National Accounts 1993 (SNA93) occurred in conjunction with the previous revision, benchmarking and rebasing of South Africa's national accounts statistics. It is for this reason that in 1998 the three institutions, Stats SA, SARB and the NDA, joined together and planned for the implementation of the SNA93, the rebasing and the benchmarking of South Africa's national accounts statistics.

In June 1999, the first national accounts results based on the SNA93 were published and they revealed that the level of the revised GDP at current prices was significantly higher (between 11 and 14 per cent) than the previous GDP estimates for the period 1993 to 1998. Approximately R12 billion (2,5% of the previous GDP) was added as the result of changes in definitions in the revised SNA93. The remainder of the increase was due to new activities and new data sources yielding better estimates of existing activities, notably research reports on selected aspects of production by universities and parastatals, the SARB and Stats SA.

International practice requires national accounts estimates to be revised at least every five years. As noted above the last revision was done in 1999 by benchmarking and rebasing to 1995. Stats SA has therefore planned to revise the national accounts estimates from 1998 to 2003 and to change the base year from 1995 = 100 to 2000 = 100. This process started in the third quarter of 2003, with the cooperation of SARB and NDA. The plan is to publish the revised national accounts estimates in November 2004.

The planned revision of national accounts in relation to the new baseline year will not have any major definitional changes, because the SNA93 definitions have not been revised. There are, however, cases where it is now possible to implement aspects of SNA93 that were not previously possible. This process may lead to some changes to the previous GDP estimates. The revisions to GDP estimates will emanate from new data sources such as detailed industry censuses or large sample surveys, the 2001 population census and other relevant studies or research that has become available since 1999.

Furthermore, the compilation will be based on a set of Supply and Use Tables (SUT) as a framework. The SUT incorporates all three approaches of the GDP estimation into one framework, thus making it possible to interrogate the data from all three approaches on a commodity level. The latest SUT was published in June 2003 for the 2000 reference year and this will also be revised as we continually strive for improvement in the quality of information supplied to users.

Reason for deviation from the current revision policy

Stats SA published a new series of monthly manufacturing statistics on Tuesday 18 May 2004, and a new series of monthly retail trade statistics on Thursday 05 August 2004, which reflect higher levels of economic activity. The monthly retail statistics that were published on 05 August 2004 included revisions for the first three months for the year of 2004. Furthermore the National Department of Agriculture, which provides estimates for the agriculture industry have revised the projections for the year 2004. It is Stats SA's policy not to revise quarterly GDP estimates except in the third quarter of each year when the independent annual estimates are compiled. However, given the impact of the revisions to the value added, a decision was taken to divert from the existing revision policy and revise the first quarter estimates by incorporating the revised trends. As previously stated, the re-basing and benchmarking of national accounts statistics, which will be published in November 2004, will provide an opportunity to incorporate the changes in the levels of the recently published economic statistics as well as various other new data sources, e.g. 2001 population census and 2000 income and expenditure survey.

Quarterly GDP tables 1 to 7	The results of the quarterly value added and GDP estimates are presented in tables 1 to 7.
Tables 1 to 2	Table 1 and 2 show values added by industry at constant 1995 basic prices, in Rand million and as percentage changes from the same quarter in the previous year.
Tables 3 to 4	Table 3 and 4 contain seasonally adjusted and annualised values added at constant 1995 basic prices by industry, in Rand million and as annualised percentage changes from the previous quarter. Seasonal adjustment is a method for removing the estimated effects of normal seasonal variation from the quarterly estimates. Although seasonality is an integral part of the quarterly data it may represent an impediment to effective analysis of the business cycle. However, irregular fluctuations because of events such as strikes can still make it difficult to interpret seasonally adjusted data. The annualised values added are equal to the seasonally quarterly data multiplied by four, while the annualised growth rates are derived by raising the change in a given quarter from the previous quarter to the power of four. The intent of annualisation is to indicate what the real growth would be if the present growth rate were to be sustained for a year.
Tables 5 to 7	Tables 5 to 7 present quarterly estimates at current prices of values added by industry and GDP (table 5) and of compensation of employees (table 6) and gross operating surplus and net other taxes on production (table 7) by industry. Seasonally adjusted values added at current prices are available on request.

METHODOLOGY USED TO COMPILE QUARTERLY ESTIMATES FOR THE AGRICULTURE INDUSTRY

Introduction

In the revised national accounts presented in June 1999, the estimates of the value added by the agriculture industry were also affected. The recommendations of the 1993 SNA regarding the methodology to be used to estimate the value added by the agriculture industry were considered but not strictly implemented. Other countries e.g. Australia also deviate to some extent from the recommendations of the 1993 SNA regarding the methodology to be used to estimate the value added by the agriculture industry. The reasons are similar to those presented below for South Africa. In particular it is difficult to implement the 1993 SNA recommendations to estimate the value added by the agriculture industry quarterly, and there is no complete international consensus on the most appropriate methodology to follow. Furthermore, agricultural production fluctuates with occasional sharp increases or decreases due to weather conditions. This makes the seasonally adjusted estimates of the value added by the agriculture industry very sensitive to the choice of methodology.

Due to constraints in June 1999, it was not possible to pay the necessary attention to the quarterly estimates of the value added by the agriculture industry or, in other words, to design the best possible methodology for the quarterly distribution of the annual estimates of this industry. Therefore, Stats SA decided to review the quarterly estimates of the value added by the agriculture industry in order to make them more consistent with the definitions adopted for compiling the annual estimates. Furthermore, it was also important to review the seasonal adjustments methodology. This review has resulted in revised quarterly distributions of the value added of agriculture industry for all years since 1993, while the seasonally adjusted estimates were revised only from 1997 in order to create a seamless link to the latest revised annual estimates of total value added from 1998 onwards.

The following paragraphs discuss the definitions and concepts relevant for estimating the value added by the agriculture industry, the data sources and the methods devised in the review.

Concepts/definitions The contribution of the agriculture industry to the gross domestic product (GDP) is measured by its value added defined and calculated through the production approach as -

Output

Less: Intermediate consumption.

Value added includes -

compensation of employees;

taxes on production *minus*

subsidies; and

operating surplus/mixed income (derived as a balancing item).

Output – in the agriculture industry - is the value of crops, fruits, vegetables and livestock produced for the market or for own final consumption. It also includes construction work carried out by the agricultural establishment itself, e.g. fencing. The output estimates are compiled separately for detailed products classified according to five main headings -

field crops;
 horticulture (fruits and vegetables);
 animal products;
 changes in livestock inventories; and
 own construction.

For many products of agriculture, the process of production extends over a number of quarters or even years for certain products. The growth of crops, fruits, vegetables and livestock, which is managed and controlled, constitutes a process of production. Therefore, the value of the output produced in each period should be measured as work-in-progress (changes in inventories), and the value of the harvested crops, fruits and vegetables, slaughtered animals, etc., should be distributed over the period of production as an increase in work-in-progress. The 1993 SNA prescribes that this should be done by distributing the value of harvested crops, etc., in proportion to the costs (intermediate consumption and labour costs) incurred in each period. For example, the period of production for maize starts with the planting during the fourth quarter and ends the following year with the harvest in the second and third quarter. The harvest of maize in 1999 should be recorded as work-in-progress in the fourth quarter of 1998 and the first, second and third quarters of 1999. Hence, the harvest of maize in 1999 would partly be recorded as output in 1998.

Intermediate consumption consists of the value of goods and services that are used as inputs in the production process of agriculture. It excludes the use of fixed assets. A general criterion is that goods with an economic life span of more than one year should be treated as fixed assets. Intermediate consumption should be recorded in the year and quarter when it is actually used, not when it is purchased.

Compensation of employees is the total remuneration payable by an enterprise to permanent and casual employees for work done by them during the accounting period. It includes wages and salaries in cash, wages and salaries in kind, and employers' social contributions (if any). Remuneration in kind is of particular importance in the agriculture industry of South Africa. In contrast to employees, workers who are the sole or joint owners of the unincorporated enterprise where they work are classified as self-employed. Workers engaged in production for own final consumption and unpaid family workers are also classified in this category. The remuneration for the labour of these categories of workers should be included in mixed income, the balancing item calculated as a residual.

Taxes on production include motor vehicle licenses, assessment rates and the land tax levied in the Western Cape. A similar tax is considered for introduction countrywide.

Subsidies comprise support from government to producers. The agricultural subsidies that existed previously have largely been dismantled and the annual amounts are decreasing.

Practise in SA

Stats SA, in agreement with SARB, did not adopt the recommendations of the 1993 SNA regarding estimating the quarterly output of the agriculture industry. In the annual estimates, output is allocated to the year when the crops are harvested, the animals slaughtered, etc. This method has now also been implemented in the quarterly estimates. It has resulted in time series that are lumpier than the previous estimates. This lumpiness is the valid and necessary result of the output concept adopted in conjunction with the inherent limitations of breaking up an annual process into quarters. Any mathematical smoothing of this lumpiness would be artificial and will remove the estimates from the original data. Smoothing should instead be achieved by appropriate seasonal adjustment techniques.

The reasons for not adopting the recommendations of the 1993 SNA are the following:

- Lack of reliable and comprehensive data on the quarterly distribution of costs for different agricultural products. Although it is possible to estimate quarterly output for the various agricultural products separately, intermediate consumption and compensation of employees are estimated only for the total agriculture industry and not per agriculture product. An alternative – actually applied by other countries – would be to distribute the value of the harvests evenly over the period from planting to harvesting it (the “divide-by-four” method).
- Difficulties related to estimating the harvest in advance. Estimates of work-in-progress would require forecasts of harvests at an early stage. Thus, substantial revisions of preliminary annual estimates would be a likely consequence of the recommendation of the 1993 SNA.
- Unlike other producers, farmers do not usually record their own work-in-progress. This can be explained by uncertainty in what the final output will be; the farmers themselves react to this uncertainty by behaving as the work-in-progress were not output – and thus not generating income. Hence, estimates of work-in-progress may not help in understanding economic developments.

Sources/methods

The estimates of the value added by the agriculture industry are done by Stats SA, based on estimates from the National Department of Agriculture (NDA). (cf. sources and methods, page 36)

Quarterly data collected by the NDA consists mainly of the volume of agricultural products delivered to marketing organisations, payments made by these organisations to producers and prices received by producers. Thus, these quarterly data refer to gross income rather than value of output. However, the NDA estimates the quarterly distributions of the harvest of field crops and fruit. For vegetables and animal products the quarterly gross income data are taken as approximations of output.

The NDA provides separate estimates of annual output. These annual estimates sets a restriction to the quarterly estimates in that the latter must be adjusted to agree with the annual totals.

The NDA compiles quarterly data regarding intermediate consumption and wages and salaries.

Estimates at constant prices of the value added by the agriculture industry are made through double deflation, i.e. output and intermediate consumption are each deflated by separate price indices. This is the case for both the annual and quarterly estimates although less detail are used in the latter.

Seasonal adjustment Seasonal adjustment intends to remove the effects of regular seasonal fluctuations – caused by weather, habits, legislation, etc. – from time series so that changes in trends and business cycles can be more clearly recognised. A seasonally adjusted time series still includes irregular variations. Stats SA applies a method known as X11. However, this method, tested with different options, produces erratic time series for the agriculture industry with occasional huge changes from one quarter to another. It can be argued that the irregular component is frequently too big for a meaningful seasonal adjustment of the value added by the agriculture industry. Furthermore, the production of many agricultural products is an annual process and, as stated above, there are inherent limitations in breaking this up into quarters. Instead of seasonal adjustment of a lumpy quarterly time series, Stats SA has chosen to use a numerical smoothing technique for constructing synthetic quarterly data based on past trends in annual data.

Notes

Forthcoming issues	Issue	Expected date of publication
Special Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF)	Annual estimates 1993-2003, GDP 1995-2003 and third quarter of 2004 Fourth quarter 2004	30 November 2004 22 February 2005
	<p>South Africa's data dissemination practices are assessed against the IMF's Special Data Dissemination Standard (SDDS). A detailed description of the SDDS can be found on the IMF's Dissemination Standards Bulletin Board on the internet at http://dsbb.imf.org. This is a "best practice" standard. It covers four sectors of the economy i.e. the real, fiscal, financial and external sectors, as well as population and identifies four dimensions i.e. data, access, integrity and quality, of data dissemination. For each of these dimensions, the SDDS prescribes two to four monitorable elements or good practices that can be observed, or monitored, by users of statistics. However, the IMF's monitoring of the SDDS as authorised by the IMF's Board of Executive Directors is limited to the dimensions of data i.e. coverage, periodicity and timeliness, and access i.e. advanced release calendar. It should also be noted that the SDDS is a disclosure standard, i.e. it focuses on encouraging the authorities to provide information to users, including information that will enable users to assess the data.</p> <p>The four institutions responsible for the compilation and dissemination of the SDDS prescribed data categories are National Treasury, the South African Revenue Services (SARS), the South African Reserve Bank (SARB) and Statistics South Africa (Stats SA).</p> <p>National Treasury is responsible for compiling and disseminating data on the national budget (budgetary central government operations). SARS is responsible for compiling and disseminating of data on international merchandise trade.</p> <p>The SARB is responsible for compiling and disseminating data on national accounts, the analytical accounts of the banking sector, the analytical accounts of the central bank, general government operations, consolidated government operations, central government debt, interest rate, exchange rates, share price indices, balance of payments, the international investment position, international reserves and foreign currency liquidity.</p> <p>Stats SA is responsible for compiling and disseminating data on the production index, national accounts, the production price index, consumer price index, labour market and population.</p> <p>South Africa has subscribed to the SDDS since 2 August 1996 and started posting its metadata on 27 September 1996. South Africa met the SDDS specifications for the coverage, periodicity and timeliness of the data, and for the dissemination of advanced release calendars on 18 September 2000. The National Summary Data Page has been hyperlinked since 24 April 1997 and the Data Template on International Reserves and Foreign Currency Liquidity was disseminated on 1 September 2000.</p> <p>South Africa is the only subscriber to the SDDS from the African continent.</p>	

**Reports on
Observance of
Standards and Codes
(ROSC) of the
International
Monetary Fund
(IMF)**

The IMF has been working actively on producing Reports on Observance of Standards and Codes (ROSC) as a step to strengthen the architecture of the international financial system. The objectives of the ROSC include the promotion of increased transparency and encouragement of implementation of internationally accepted standards and codes. One of the ROSC components is the data dissemination module, which falls under the responsibility of the IMF's Statistics Department (STA). In this module, a country is assessed according to the SDDS.

The data dissemination module of the ROSC provides a summary of South Africa's practices on the coverage, periodicity and timeliness of the data categories specified in the IMF's SDDS, and on the practices on the provision of advance release calendars for these categories. It is complemented by an assessment of the quality of national accounts statistics, using the Data Quality Assessment Framework (DQAF) developed by the IMF's Statistics Department.

The DQAF undertakes to assess data quality under the following dimensions -

- prerequisites of quality;
- integrity;
- methodological soundness;
- accuracy and reliability;
- serviceability; and
- accessibility

An IMF delegation visited South Africa from 7 to 18 May 2001 and produced a data ROSC for South Africa. This ROSC indicates to which extent South Africa has observed the IMF's requirements and is available at <http://www.imf.org/external/np/rosc/rosc.asp>.

Table 1 - Quarterly gross domestic product by industry at constant 1995 prices (R million)

Year	Quarter	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity and water	Construction	Wholesale and retail trade; hotels and restaurants	Transport and communication
1994		24 125	35 946	99 706	17 069	15 233	67 780	40 281
1995		19 317	34 830	106 180	17 408	15 774	71 768	44 538
1996		23 949	34 542	107 648	19 287	16 092	74 416	47 271
1997		24 153	35 118	110 562	20 035	16 646	74 749	50 879
1998		22 518	34 840	108 419	20 357	17 083	73 904	54 273
1999		23 659	34 471	108 085	20 728	16 670	74 161	58 141
2000		25 453	33 690	113 596	20 873	17 115	77 492	62 211
2001		24 602	33 240	117 637	21 148	17 673	80 128	66 979
2002		26 212	33 356	123 873	21 526	18 435	82 407	71 472
2003		24 656	34 201	122 579	22 023	19 345	84 784	75 871
1995	1	3 703	8 706	25 348	4 313	3 970	16 394	10 619
	2	5 381	8 646	25 833	4 397	4 024	16 818	10 644
	3	5 771	8 779	27 661	4 469	3 979	17 937	11 518
	4	4 462	8 699	27 338	4 229	3 800	20 619	11 757
1996	1	4 067	8 602	25 917	4 397	4 047	17 330	11 452
	2	9 058	8 543	26 118	4 685	4 095	17 600	11 402
	3	6 487	8 699	27 770	5 071	4 060	18 454	12 173
	4	4 338	8 698	27 843	5 133	3 890	21 031	12 244
1997	1	4 491	8 567	26 391	4 878	4 126	17 704	12 129
	2	8 873	8 736	27 259	5 054	4 151	17 819	12 248
	3	6 433	8 922	28 578	5 118	4 102	18 493	13 090
	4	4 357	8 893	28 334	4 984	4 267	20 732	13 412
1998	1	4 305	8 716	26 549	4 855	4 257	17 581	13 163
	2	8 451	8 702	26 871	5 095	4 256	17 827	13 266
	3	6 101	8 727	27 604	5 223	4 194	18 259	13 800
	4	3 662	8 695	27 394	5 185	4 377	20 238	14 043
1999	1	4 636	8 542	25 775	4 935	4 209	17 291	13 769
	2	9 195	8 594	26 394	5 199	4 164	17 613	14 139
	3	6 456	8 673	27 756	5 328	4 063	18 329	14 973
	4	3 371	8 663	28 159	5 266	4 234	20 928	15 260
2000	1	4 014	8 393	26 884	4 999	4 146	17 877	14 860
	2	8 115	8 463	27 631	5 212	4 208	18 455	15 179
	3	9 086	8 428	29 191	5 398	4 231	19 212	15 939
	4	4 238	8 406	29 889	5 264	4 530	21 948	16 233
2001	1	4 477	8 219	28 268	5 043	4 382	18 627	15 903
	2	9 325	8 383	28 937	5 266	4 405	19 140	16 286
	3	7 210	8 373	29 914	5 488	4 325	19 782	17 178
	4	3 590	8 265	30 519	5 351	4 561	22 579	17 612
2002	1	5 127	8 130	29 108	5 117	4 504	19 126	17 101
	2	10 686	8 342	30 414	5 366	4 556	19 686	17 432
	3	6 626	8 438	32 143	5 565	4 541	20 338	18 248
	4	3 773	8 446	32 208	5 478	4 834	23 257	18 691
2003	1	4 328	8 277	29 936	5 239	4 755	19 646	18 192
	2	10 359	8 536	30 193	5 479	4 783	20 195	18 499
	3	6 522	8 705	31 304	5 703	4 762	20 983	19 286
	4	3 447	8 683	31 146	5 602	5 045	23 961	19 894
2004	1	4 176	8 577	29 538	5 373	4 986	20 363	19 236
	2	10 131	8 826	30 568	5 614	5 061	20 996	19 595

**Table 1 - Quarterly gross domestic product by industry at constant 1995 prices
(R million) (concluded)**

Year	Quarter	Finance, real estate and business services	Community, social and personal services	General government services	Other producers	Total value added at basic prices	Taxes less subsidies on products	GDP at market prices	Total value added at basic prices excluding agriculture
1994		79 378	12 420	80 157	13 687	485 781	45 755	531 537	461 656
1995		82 162	13 690	80 831	13 855	500 352	47 746	548 098	481 035
1996		87 737	14 210	82 393	14 066	521 611	50 094	571 706	497 662
1997		91 866	13 971	83 043	14 298	535 321	51 517	586 838	511 167
1998		96 737	14 108	82 728	14 626	539 595	51 671	591 265	517 076
1999		104 190	14 439	82 161	14 919	551 624	51 666	603 290	527 965
2000		109 220	15 121	81 575	15 205	571 549	52 934	624 483	546 096
2001		113 855	15 702	80 801	15 449	587 215	54 029	641 244	562 613
2002		118 200	16 284	81 194	15 668	608 627	55 448	664 075	582 415
2003		121 642	17 027	81 737	15 926	619 791	56 593	676 384	595 135
1995	1	20 012	3 238	20 146	3 448	119 898	11 780	131 678	116 195
	2	20 208	3 416	20 178	3 458	123 003	11 890	134 893	117 622
	3	20 804	3 526	20 241	3 469	128 153	12 011	140 164	122 382
	4	21 138	3 510	20 267	3 480	129 299	12 066	141 364	124 837
1996	1	20 891	3 575	20 530	3 497	124 305	12 433	136 738	120 238
	2	21 553	3 532	20 555	3 510	130 651	12 457	143 108	121 594
	3	22 337	3 555	20 629	3 523	132 758	12 535	145 293	126 271
	4	22 956	3 549	20 679	3 537	133 897	12 669	146 566	129 559
1997	1	22 626	3 452	20 710	3 553	128 626	12 833	141 459	124 135
	2	22 989	3 516	20 717	3 567	134 930	12 876	147 806	126 057
	3	23 123	3 563	20 793	3 582	135 797	12 900	148 697	129 364
	4	23 128	3 440	20 823	3 596	135 967	12 908	148 875	131 611
1998	1	23 192	3 401	20 728	3 626	130 373	12 906	143 279	126 068
	2	24 074	3 493	20 667	3 648	136 350	12 934	149 284	127 899
	3	24 620	3 624	20 694	3 667	136 514	12 910	149 424	130 413
	4	24 851	3 590	20 639	3 685	136 358	12 921	149 279	132 696
1999	1	25 089	3 531	20 616	3 702	132 095	12 826	144 921	127 459
	2	25 839	3 586	20 561	3 720	139 005	12 864	151 869	129 810
	3	26 443	3 697	20 539	3 739	139 996	12 967	152 963	133 540
	4	26 820	3 625	20 445	3 757	140 528	13 009	153 537	137 157
2000	1	26 710	3 624	20 400	3 774	135 680	13 025	148 705	131 666
	2	27 178	3 712	20 404	3 792	142 349	13 158	155 507	134 234
	3	27 555	3 901	20 406	3 810	147 158	13 320	160 478	138 072
	4	27 777	3 884	20 365	3 829	146 363	13 431	159 794	142 125
2001	1	27 731	3 840	20 295	3 838	140 625	13 388	154 013	136 148
	2	28 314	3 882	20 209	3 852	147 998	13 465	161 463	138 673
	3	28 713	4 023	20 155	3 869	149 028	13 572	162 600	141 818
	4	29 097	3 957	20 142	3 890	149 564	13 604	163 168	145 974
2002	1	28 876	3 939	20 152	3 894	145 074	13 663	158 737	139 947
	2	29 467	4 013	20 215	3 906	154 083	13 821	167 904	143 397
	3	29 815	4 187	20 367	3 923	154 191	13 955	168 146	147 565
	4	30 042	4 145	20 460	3 945	155 279	14 009	169 288	151 506
2003	1	29 847	4 128	20 351	3 956	148 655	13 993	162 648	144 326
	2	30 344	4 201	20 363	3 967	156 918	14 104	171 022	146 560
	3	30 570	4 377	20 474	3 988	156 675	14 220	170 895	150 152
	4	30 881	4 321	20 549	4 015	157 543	14 276	171 819	154 096
2004	1	30 675	4 299	20 484	4 035	151 742	14 242	165 984	147 566
	2	31 267	4 339	20 520	4 040	160 957	14 355	175 312	150 826

Table 2 - Percentage change in the quarterly gross domestic product by industry at constant 1995 prices

Year ^{1/}	Quarter ^{2/}	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity and water	Construction	Wholesale and retail trade; hotels and restaurants	Transport and communication
1994		7,9	0,5	2,7	5,8	2,9	2,5	4,6
1995		-19,9	-3,1	6,5	2,0	3,6	5,9	10,6
1996		24,0	-0,8	1,4	10,8	2,0	3,7	6,1
1997		0,9	1,7	2,7	3,9	3,4	0,4	7,6
1998		-6,8	-0,8	-1,9	1,6	2,6	-1,1	6,7
1999		5,1	-1,1	-0,3	1,8	-2,4	0,3	7,1
2000		7,6	-2,3	5,1	0,7	2,7	4,5	7,0
2001		-3,3	-1,3	3,6	1,3	3,3	3,4	7,7
2002		6,5	0,3	5,3	1,8	4,3	2,8	6,7
2003		-5,9	2,5	-1,0	2,3	4,9	2,9	6,2
1995	1	-10,0	-1,8	7,6	4,0	4,4	3,8	8,5
	2	-44,9	-3,2	8,6	2,3	3,8	5,6	10,8
	3	-9,4	-3,4	7,4	1,3	4,2	6,8	11,4
	4	15,4	-3,9	2,8	0,4	1,8	7,1	11,4
1996	1	9,8	-1,2	2,2	1,9	1,9	5,7	7,8
	2	68,3	-1,2	1,1	6,5	1,8	4,7	7,1
	3	12,4	-0,9	0,4	13,5	2,0	2,9	5,7
	4	-2,8	0,0	1,8	21,4	2,3	2,0	4,1
1997	1	10,4	-0,4	1,8	10,9	1,9	2,2	5,9
	2	-2,0	2,3	4,4	7,9	1,3	1,2	7,4
	3	-0,8	2,6	2,9	0,9	1,0	0,2	7,5
	4	0,4	2,2	1,8	-2,9	9,7	-1,4	9,5
1998	1	-4,1	1,7	0,6	-0,5	3,2	-0,7	8,5
	2	-4,8	-0,4	-1,4	0,8	2,5	0,0	8,3
	3	-5,2	-2,2	-3,4	2,0	2,2	-1,3	5,4
	4	-15,9	-2,2	-3,3	4,0	2,6	-2,4	4,7
1999	1	7,7	-2,0	-2,9	1,7	-1,1	-1,6	4,6
	2	8,8	-1,2	-1,8	2,0	-2,2	-1,2	6,6
	3	5,8	-0,6	0,6	2,0	-3,1	0,4	8,5
	4	-7,9	-0,4	2,8	1,6	-3,3	3,4	8,7
2000	1	-13,4	-1,7	4,3	1,3	-1,5	3,4	7,9
	2	-11,7	-1,5	4,7	0,2	1,1	4,8	7,4
	3	40,7	-2,8	5,2	1,3	4,1	4,8	6,5
	4	25,7	-3,0	6,1	0,0	7,0	4,9	6,4
2001	1	11,5	-2,1	5,1	0,9	5,7	4,2	7,0
	2	14,9	-0,9	4,7	1,0	4,7	3,7	7,3
	3	-20,7	-0,7	2,5	1,7	2,2	3,0	7,8
	4	-15,3	-1,7	2,1	1,7	0,7	2,9	8,5
2002	1	14,5	-1,1	3,0	1,5	2,8	2,7	7,5
	2	14,6	-0,5	5,1	1,9	3,4	2,9	7,0
	3	-8,1	0,8	7,5	1,4	5,0	2,8	6,2
	4	5,1	2,2	5,5	2,4	6,0	3,0	6,1
2003	1	-15,6	1,8	2,8	2,4	5,6	2,7	6,4
	2	-3,1	2,3	-0,7	2,1	5,0	2,6	6,1
	3	-1,6	3,2	-2,6	2,5	4,9	3,2	5,7
	4	-8,6	2,8	-3,3	2,3	4,4	3,0	6,4
2004	1	-3,5	3,6	-1,3	2,6	4,9	3,7	5,7
	2	-2,2	3,4	1,2	2,5	5,8	4,0	5,9
	1-2 ^{3/}	-2,6	3,5	0,0	2,5	5,3	3,8	5,8

1/ The percentage change is the growth rate from the previous year.

2/ The percentage change is the growth rate for a given quarter compared with the same quarter in the previous year.

3/ The percentage change is the growth rate for the first six months of the year compared with the first six months of the previous year.

Table 2 - Percentage change in the quarterly gross domestic product by industry at constant 1995 prices (concluded)

Year ^{1/}	Quarter ^{2/}	Finance, real estate and business services	Community, social and personal services	General government services	Other producers	Total value added at basic prices	Taxes less subsidies on products	GDP at market prices	Total value added at basic prices excluding agriculture
1994		3,7	9,5	1,0	1,0	3,0	5,9	3,2	2,7
1995		3,5	10,2	0,8	1,2	3,0	4,4	3,1	4,2
1996		6,8	3,8	1,9	1,5	4,2	4,9	4,3	3,5
1997		4,7	-1,7	0,8	1,6	2,6	2,8	2,6	2,7
1998		5,3	1,0	-0,4	2,3	0,8	0,3	0,8	1,2
1999		7,7	2,3	-0,7	2,0	2,2	0,0	2,0	2,1
2000		4,8	4,7	-0,7	1,9	3,6	2,5	3,5	3,4
2001		4,2	3,8	-0,9	1,6	2,7	2,1	2,7	3,0
2002		3,8	3,7	0,5	1,4	3,6	2,6	3,6	3,5
2003		2,9	4,6	0,7	1,6	1,8	2,1	1,9	2,2
1995	1	5,1	13,2	0,8	1,1	3,9	6,4	4,1	4,4
	2	3,7	12,4	0,8	1,2	0,7	4,6	1,0	4,6
	3	3,2	9,8	0,6	1,3	3,8	4,1	3,8	4,5
	4	2,2	6,1	1,1	1,3	3,7	2,5	3,6	3,3
1996	1	4,4	10,4	1,9	1,4	3,7	5,5	3,8	3,5
	2	6,7	3,4	1,9	1,5	6,2	4,8	6,1	3,4
	3	7,4	0,8	1,9	1,6	3,6	4,4	3,7	3,2
	4	8,6	1,1	2,0	1,6	3,6	5,0	3,7	3,8
1997	1	8,3	-3,4	0,9	1,6	3,5	3,2	3,5	3,2
	2	6,7	-0,4	0,8	1,6	3,3	3,4	3,3	3,7
	3	3,5	0,2	0,8	1,7	2,3	2,9	2,3	2,4
	4	0,8	-3,1	0,7	1,7	1,5	1,9	1,6	1,6
1998	1	2,5	-1,5	0,1	2,1	1,4	0,6	1,3	1,6
	2	4,7	-0,7	-0,2	2,3	1,1	0,5	1,0	1,5
	3	6,5	1,7	-0,5	2,4	0,5	0,1	0,5	0,8
	4	7,4	4,4	-0,9	2,5	0,3	0,1	0,3	0,8
1999	1	8,2	3,8	-0,5	2,1	1,3	-0,6	1,1	1,1
	2	7,3	2,7	-0,5	2,0	1,9	-0,5	1,7	1,5
	3	7,4	2,0	-0,7	2,0	2,6	0,4	2,4	2,4
	4	7,9	1,0	-0,9	2,0	3,1	0,7	2,9	3,4
2000	1	6,5	2,6	-1,0	1,9	2,7	1,6	2,6	3,3
	2	5,2	3,5	-0,8	1,9	2,4	2,3	2,4	3,4
	3	4,2	5,5	-0,6	1,9	5,1	2,7	4,9	3,4
	4	3,6	7,2	-0,4	1,9	4,2	3,2	4,1	3,6
2001	1	3,8	6,0	-0,5	1,7	3,6	2,8	3,6	3,4
	2	4,2	4,6	-1,0	1,6	4,0	2,3	3,8	3,3
	3	4,2	3,1	-1,2	1,5	1,3	1,9	1,3	2,7
	4	4,8	1,9	-1,1	1,6	2,2	1,3	2,1	2,7
2002	1	4,1	2,6	-0,7	1,5	3,2	2,1	3,1	2,8
	2	4,1	3,4	0,0	1,4	4,1	2,6	4,0	3,4
	3	3,8	4,1	1,1	1,4	3,5	2,8	3,4	4,1
	4	3,2	4,7	1,6	1,4	3,8	3,0	3,8	3,8
2003	1	3,4	4,8	1,0	1,6	2,5	2,4	2,5	3,1
	2	3,0	4,7	0,7	1,6	1,8	2,0	1,9	2,2
	3	2,5	4,5	0,5	1,7	1,6	1,9	1,6	1,8
	4	2,8	4,2	0,4	1,8	1,5	1,9	1,5	1,7
2004	1	2,8	4,1	0,7	2,0	2,1	1,8	2,1	2,2
	2	3,0	3,3	0,8	1,8	2,6	1,8	2,5	2,9
	1-2 ^{3/}	2,9	3,7	0,7	1,9	2,3	1,8	2,3	2,6

1/ The percentage change is the growth rate from the previous year.

2/ The percentage change is the growth rate for a given quarter compared with the same quarter in the previous year.

3/ The percentage change is the growth rate for the first six months of the year compared with the first six months of the previous year.

Table 3 - Seasonally adjusted and annualised quarterly gross domestic product by industry at constant 1995 prices (R million)

Year	Quarter	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity and water	Construction	Wholesale and retail trade; hotels and restaurants	Transport and communication
1994		24 125	35 946	99 706	17 069	15 233	67 780	40 281
1995		19 317	34 830	106 180	17 408	15 774	71 768	44 538
1996		23 949	34 542	107 648	19 287	16 092	74 416	47 271
1997		24 153	35 118	110 562	20 035	16 646	74 749	50 879
1998		22 518	34 840	108 419	20 357	17 083	73 904	54 273
1999		23 659	34 471	108 085	20 728	16 670	74 161	58 141
2000		25 453	33 690	113 596	20 873	17 115	77 492	62 211
2001		24 602	33 240	117 637	21 148	17 673	80 128	66 979
2002		26 212	33 356	123 873	21 526	18 435	82 407	71 472
2003		24 656	34 201	122 579	22 023	19 345	84 784	75 871
1995	1	22 836	35 184	104 734	17 425	15 689	69 748	42 596
	2	19 324	34 736	106 694	17 569	15 705	71 087	44 244
	3	17 552	34 716	107 114	17 369	15 819	72 334	45 336
	4	17 556	34 684	106 178	17 269	15 883	73 903	45 976
1996	1	20 732	34 673	106 694	18 027	15 910	73 653	46 303
	2	24 048	34 593	107 770	18 730	16 076	74 595	46 772
	3	25 400	34 445	107 914	19 771	16 171	74 552	47 665
	4	25 616	34 461	108 214	20 618	16 211	74 864	48 344
1997	1	24 231	34 543	109 924	20 239	16 394	74 733	49 071
	2	24 433	35 030	110 872	20 094	16 599	74 980	50 187
	3	24 254	35 416	110 757	19 907	16 746	74 743	51 461
	4	23 695	35 482	110 691	19 898	16 845	74 541	52 797
1998	1	22 899	35 249	110 225	20 097	17 003	74 681	53 258
	2	22 262	34 953	109 154	20 328	17 126	74 564	53 958
	3	22 201	34 630	107 366	20 413	17 116	73 709	54 500
	4	22 713	34 528	106 930	20 592	17 091	72 662	55 375
1999	1	23 182	34 520	106 964	20 637	16 908	73 527	56 215
	2	23 418	34 506	107 122	20 687	16 711	73 714	57 613
	3	23 777	34 444	108 322	20 752	16 554	74 357	58 917
	4	24 258	34 418	109 931	20 836	16 508	75 048	59 819
2000	1	24 931	34 060	111 310	20 812	16 645	76 077	60 690
	2	25 526	33 720	112 457	20 858	16 908	77 156	61 746
	3	25 751	33 485	114 293	20 908	17 246	77 982	62 710
	4	25 604	33 495	116 324	20 914	17 661	78 753	63 698
2001	1	24 861	33 403	116 767	21 023	17 587	79 289	64 972
	2	24 621	33 446	117 300	21 095	17 697	79 907	66 262
	3	24 509	33 229	117 280	21 234	17 625	80 295	67 616
	4	24 417	32 882	119 201	21 240	17 783	81 021	69 068
2002	1	25 203	33 043	120 612	21 330	18 071	81 543	69 937
	2	26 029	33 282	123 487	21 494	18 299	82 162	70 897
	3	26 629	33 491	125 714	21 530	18 500	82 605	71 944
	4	26 987	33 608	125 679	21 750	18 870	83 318	73 112
2003	1	26 600	33 631	124 169	21 838	19 080	83 780	74 226
	2	25 202	34 051	122 734	21 941	19 205	84 275	75 339
	3	23 703	34 568	122 218	22 071	19 399	85 160	76 403
	4	23 119	34 554	121 195	22 242	19 696	85 922	77 514
2004	1	23 361	34 849	122 556	22 402	20 015	86 789	78 569
	2	23 781	35 169	124 148	22 486	20 320	87 678	79 771

Table 3 - Seasonally adjusted and annualised quarterly gross domestic product by industry at constant 1995 prices (R million) (concluded)

Year	Quarter	Finance, real estate and business services	Community, social and personal services	General government services	Other producers	Total value added at basic prices	Taxes less subsidies on products	GDP at market prices	Total value added at basic prices excluding agriculture
1994		79 378	12 420	80 157	13 687	485 781	45 755	531 537	461 656
1995		82 162	13 690	80 831	13 855	500 352	47 746	548 098	481 035
1996		87 737	14 210	82 393	14 066	521 611	50 094	571 706	497 662
1997		91 866	13 971	83 043	14 298	535 321	51 517	586 838	511 167
1998		96 737	14 108	82 728	14 626	539 595	51 671	591 265	517 076
1999		104 190	14 439	82 161	14 919	551 624	51 666	603 290	527 965
2000		109 220	15 121	81 575	15 205	571 549	52 934	624 483	546 096
2001		113 855	15 702	80 801	15 449	587 215	54 029	641 244	562 613
2002		118 200	16 284	81 194	15 668	608 627	55 448	664 075	582 415
2003		121 642	17 027	81 737	15 926	619 791	56 593	676 384	595 135
1995	1	81 337	13 356	80 734	13 804	497 443	47 121	544 564	474 607
	2	81 837	13 585	80 807	13 840	499 428	47 554	546 982	480 104
	3	82 509	13 809	80 865	13 876	501 299	48 044	549 343	483 747
	4	82 965	14 010	80 922	13 900	503 246	48 265	551 511	485 690
1996	1	84 687	14 117	81 563	13 960	510 319	48 931	559 250	489 587
	2	86 692	14 177	82 206	14 036	519 696	50 030	569 726	495 648
	3	88 761	14 245	82 718	14 108	525 749	50 440	576 189	500 349
	4	90 808	14 301	83 085	14 160	530 682	50 976	581 658	505 066
1997	1	91 261	14 173	83 232	14 201	532 003	51 324	583 327	507 772
	2	91 754	14 057	83 113	14 267	535 385	51 508	586 892	510 952
	3	92 038	13 909	82 958	14 332	536 522	51 599	588 120	512 268
	4	92 410	13 745	82 869	14 390	537 364	51 637	589 001	513 669
1998	1	93 757	13 893	82 901	14 506	538 469	51 775	590 244	515 570
	2	96 001	14 053	82 836	14 591	539 826	51 748	591 574	517 564
	3	97 921	14 192	82 638	14 669	539 356	51 538	590 894	517 155
	4	99 269	14 294	82 537	14 739	540 729	51 623	592 352	518 016
1999	1	101 257	14 366	82 463	14 808	544 846	51 534	596 380	521 664
	2	103 068	14 427	82 365	14 881	548 510	51 485	599 995	525 092
	3	105 071	14 475	82 098	14 955	553 721	51 719	605 440	529 944
	4	107 367	14 488	81 718	15 030	559 420	51 926	611 346	535 162
2000	1	107 858	14 714	81 808	15 097	564 001	52 323	616 323	539 070
	2	108 647	14 975	81 740	15 196	568 927	52 674	621 601	543 402
	3	109 828	15 264	81 533	15 240	574 238	53 124	627 362	548 488
	4	110 547	15 531	81 219	15 287	579 030	53 615	632 645	553 427
2001	1	111 982	15 590	81 398	15 337	582 208	53 743	635 951	557 347
	2	113 190	15 656	80 986	15 407	585 565	53 918	639 483	560 944
	3	114 443	15 733	80 487	15 486	587 937	54 090	642 027	563 428
	4	115 805	15 829	80 333	15 566	593 148	54 365	647 513	568 731
2002	1	116 604	15 992	80 741	15 578	598 653	54 855	653 508	573 450
	2	117 800	16 183	81 138	15 625	606 395	55 326	661 721	580 366
	3	118 834	16 376	81 399	15 692	612 714	55 646	668 360	586 085
	4	119 562	16 585	81 498	15 777	616 746	55 965	672 711	589 759
2003	1	120 553	16 760	81 578	15 821	618 037	56 189	674 226	591 437
	2	121 387	16 942	81 678	15 881	618 635	56 461	675 096	593 433
	3	121 863	17 117	81 791	15 955	620 248	56 731	676 979	596 545
	4	122 765	17 289	81 901	16 047	622 244	56 991	679 235	599 125
2004	1	123 895	17 455	82 087	16 141	628 119	57 188	685 307	604 758
	2	125 080	17 613	82 248	16 193	634 486	57 467	691 953	610 705

Table 4 - Annualised percentage change in the seasonally adjusted quarterly gross domestic product by industry at constant 1995 prices

Year ^{1/}	Quarter ^{2/}	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity and water	Construction	Wholesale and retail trade; hotels and restaurants	Transport and communication
1994		7,9	0,5	2,7	5,8	2,9	2,5	4,6
1995		-19,9	-3,1	6,5	2,0	3,6	5,9	10,6
1996		24,0	-0,8	1,4	10,8	2,0	3,7	6,1
1997		0,9	1,7	2,7	3,9	3,4	0,4	7,6
1998		-6,8	-0,8	-1,9	1,6	2,6	-1,1	6,7
1999		5,1	-1,1	-0,3	1,8	-2,4	0,3	7,1
2000		7,6	-2,3	5,1	0,7	2,7	4,5	7,0
2001		-3,3	-1,3	3,6	1,3	3,3	3,4	7,7
2002		6,5	0,3	5,3	1,8	4,3	2,8	6,7
2003		-5,9	2,5	-1,0	2,3	4,9	2,9	6,2
1995	1	-36,2	-9,5	8,0	3,8	4,5	6,3	15,1
	2	-48,7	-5,0	7,7	3,3	0,4	7,9	16,4
	3	-31,9	-0,2	1,6	-4,5	2,9	7,2	10,2
	4	0,1	-0,4	-3,4	-2,3	1,6	9,0	5,8
1996	1	94,5	-0,1	2,0	18,7	0,7	-1,3	2,9
	2	81,0	-0,9	4,1	16,5	4,2	5,2	4,1
	3	24,5	-1,7	0,5	24,1	2,4	-0,2	7,9
	4	3,4	0,2	1,1	18,3	1,0	1,7	5,8
1997	1	-19,9	1,0	6,5	-7,2	4,6	-0,7	6,2
	2	3,4	5,8	3,5	-2,8	5,1	1,3	9,4
	3	-2,9	4,5	-0,4	-3,7	3,6	-1,3	10,5
	4	-8,9	0,7	-0,2	-0,2	2,4	-1,1	10,8
1998	1	-12,8	-2,6	-1,7	4,1	3,8	0,8	3,5
	2	-10,7	-3,3	-3,8	4,7	2,9	-0,6	5,4
	3	-1,1	-3,6	-6,4	1,7	-0,2	-4,5	4,1
	4	9,5	-1,2	-1,6	3,5	-0,6	-5,6	6,6
1999	1	8,5	-0,1	0,1	0,9	-4,2	4,8	6,2
	2	4,1	-0,2	0,6	1,0	-4,6	1,0	10,3
	3	6,3	-0,7	4,6	1,3	-3,7	3,5	9,4
	4	8,3	-0,3	6,1	1,6	-1,1	3,8	6,3
2000	1	12	-4	5	0	3	6	6
	2	9,9	-3,9	4,2	0,9	6,5	5,8	7,1
	3	3,6	-2,8	6,7	1,0	8,2	4,4	6,4
	4	-2,3	0,1	7,3	0,1	10,0	4,0	6,5
2001	1	-11,1	-1,1	1,5	2,1	-1,7	2,8	8,2
	2	-3,8	0,5	1,8	1,4	2,5	3,2	8,2
	3	-1,8	-2,6	-0,1	2,7	-1,6	2,0	8,4
	4	-1,5	-4,1	6,7	0,1	3,6	3,7	8,9
2002	1	13,5	2,0	4,8	1,7	6,6	2,6	5,1
	2	13,8	2,9	9,9	3,1	5,1	3,1	5,6
	3	9,5	2,5	7,4	0,7	4,5	2,2	6,0
	4	5,5	1,4	-0,1	4,1	8,2	3,5	6,7
2003	1	-5,6	0,3	-4,7	1,6	4,5	2,2	6,2
	2	-19,4	5,1	-4,5	1,9	2,6	2,4	6,1
	3	-21,8	6,2	-1,7	2,4	4,1	4,3	5,8
	4	-9,5	-0,2	-3,3	3,1	6,3	3,6	5,9
2004	1	4,3	3,5	4,6	2,9	6,6	4,1	5,6
	2	7,4	3,7	5,3	1,5	6,2	4,2	6,3

1/ The percentage change is the growth rate from the previous year.

2/ The annualised percentage change is the growth rate for a given quarter from the previous quarter and compounded to an annual rate.

Table 4 - Annualised percentage change in the seasonally adjusted quarterly gross domestic product by industry at constant 1995 prices (concluded)

Year ^{1/}	Quarter ^{2/}	Finance, real estate and business services	Community, social and personal services	General government services	Other producers	Total value added at basic prices	Taxes less subsidies on products	GDP at market prices	Total value added at basic prices excluding agriculture
1994		3,7	9,5	1,0	1,0	3,0	5,9	3,2	2,7
1995		3,5	10,2	0,8	1,2	3,0	4,4	3,1	4,2
1996		6,8	3,8	1,9	1,5	4,2	4,9	4,3	3,5
1997		4,7	-1,7	0,8	1,6	2,6	2,8	2,6	2,7
1998		5,3	1,0	-0,4	2,3	0,8	0,3	0,8	1,2
1999		7,7	2,3	-0,7	2,0	2,2	0,0	2,0	2,1
2000		4,8	4,7	-0,7	1,9	3,6	2,5	3,5	3,4
2001		4,2	3,8	-0,9	1,6	2,7	2,1	2,7	3,0
2002		3,8	3,7	0,5	1,4	3,6	2,6	3,6	3,5
2003		2,9	4,6	0,7	1,6	1,8	2,1	1,9	2,2
1995	1	2,3	7,7	-0,3	1,1	1,6	0,2	1,5	4,0
	2	2,5	7,0	0,4	1,0	1,6	3,7	1,8	4,7
	3	3,3	6,8	0,3	1,0	1,5	4,2	1,7	3,1
	4	2,2	6,0	0,3	0,7	1,6	1,9	1,6	1,6
1996	1	8,6	3,1	3,2	1,7	5,7	5,6	5,7	3,2
	2	9,8	1,7	3,2	2,2	7,6	9,3	7,7	5,0
	3	9,9	1,9	2,5	2,1	4,7	3,3	4,6	3,8
	4	9,5	1,6	1,8	1,5	3,8	4,3	3,9	3,8
1997	1	2,0	-3,5	0,7	1,2	1,0	2,8	1,2	2,2
	2	2,2	-3,2	-0,6	1,9	2,6	1,4	2,5	2,5
	3	1,2	-4,1	-0,7	1,8	0,9	0,7	0,8	1,0
	4	1,6	-4,6	-0,4	1,6	0,6	0,3	0,6	1,1
1998	1	6,0	4,4	0,2	3,3	0,8	1,1	0,8	1,5
	2	9,9	4,7	-0,3	2,4	1,0	-0,2	0,9	1,6
	3	8,2	4,0	-1,0	2,1	-0,3	-1,6	-0,5	-0,3
	4	5,6	2,9	-0,5	1,9	1,0	0,7	1,0	0,7
1999	1	8,3	2,0	-0,4	1,9	3,1	-0,7	2,7	2,8
	2	7,3	1,7	-0,5	2,0	2,7	-0,4	2,4	2,7
	3	8,0	1,3	-1,3	2,0	3,9	1,8	3,7	3,7
	4	9,0	0,4	-1,8	2,0	4,2	1,6	4,0	4,0
2000	1	2	6	0	2	3	3	3	3
	2	3,0	7,3	-0,3	2,6	3,5	2,7	3,5	3,3
	3	4,4	7,9	-1,0	1,2	3,8	3,5	3,8	3,8
	4	2,6	7,2	-1,5	1,2	3,4	3,7	3,4	3,7
2001	1	5,3	1,5	0,9	1,3	2,2	1,0	2,1	2,9
	2	4,4	1,7	-2,0	1,8	2,3	1,3	2,2	2,6
	3	4,5	2,0	-2,4	2,1	1,6	1,3	1,6	1,8
	4	4,8	2,5	-0,8	2,1	3,6	2,0	3,5	3,8
2002	1	2,8	4,2	2,0	0,3	3,8	3,7	3,8	3,4
	2	4,2	4,9	2,0	1,2	5,3	3,5	5,1	4,9
	3	3,6	4,9	1,3	1,7	4,2	2,3	4,1	4,0
	4	2,5	5,2	0,5	2,2	2,7	2,3	2,6	2,5
2003	1	3,4	4,3	0,4	1,1	0,8	1,6	0,9	1,1
	2	2,8	4,4	0,5	1,5	0,4	2,0	0,5	1,4
	3	1,6	4,2	0,6	1,9	1,0	1,9	1,1	2,1
	4	3,0	4,1	0,5	2,3	1,3	1,8	1,3	1,7
2004	1	3,7	3,9	0,9	2,3	3,8	1,4	3,6	3,8
	2	3,9	3,7	0,8	1,3	4,1	2,0	3,9	4,0

1/ The percentage change is the growth rate from the previous year.

2/ The annualised percentage change is the growth rate for a given quarter from the previous quarter and compounded to an annual rate.

Table 5 - Quarterly gross domestic product by industry at current prices (R million)

Year	Quarter	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity and water	Construction	Wholesale and retail trade; hotels and restaurants	Transport and communication
1994		20 252	32 111	92 068	15 975	13 797	62 474	38 296
1995		19 317	34 830	106 180	17 408	15 774	71 768	44 538
1996		23 721	38 768	114 125	18 602	17 631	79 463	51 787
1997		25 140	40 524	124 604	19 929	19 829	85 858	57 874
1998		24 287	43 439	129 017	22 534	21 687	89 814	63 278
1999		24 996	46 174	136 016	21 741	22 325	95 595	70 868
2000		26 060	54 951	150 198	22 657	23 843	107 299	80 799
2001		31 132	67 301	166 331	23 197	25 279	118 977	89 374
2002		42 098	79 030	198 094	24 325	27 071	134 300	100 377
2003		41 935	78 502	208 267	25 501	28 951	146 689	110 720
1995	1	3 842	7 929	24 312	4 177	3 929	16 512	9 987
	2	5 526	8 888	25 513	4 345	4 046	16 711	10 672
	3	5 569	9 385	27 939	4 619	3 867	17 804	11 624
	4	4 380	8 628	28 415	4 268	3 931	20 741	12 256
1996	1	4 070	8 868	26 830	4 426	4 497	18 662	12 210
	2	8 701	10 061	27 627	4 646	4 546	18 507	12 404
	3	6 256	10 339	29 557	4 978	4 255	19 514	13 304
	4	4 693	9 500	30 111	4 551	4 333	22 780	13 869
1997	1	4 906	9 517	29 218	4 608	4 931	20 014	13 531
	2	9 332	10 358	30 703	5 097	5 013	20 414	14 031
	3	6 393	10 726	32 240	5 274	4 918	21 277	15 041
	4	4 509	9 923	32 443	4 950	4 967	24 154	15 271
1998	1	5 276	9 486	30 927	5 315	5 453	21 004	14 460
	2	8 891	11 141	31 562	5 855	5 518	21 725	15 478
	3	6 382	11 828	33 206	5 865	5 390	22 215	16 274
	4	3 737	10 984	33 321	5 500	5 327	24 869	17 066
1999	1	4 963	10 653	31 834	4 971	5 715	21 883	16 132
	2	9 646	11 704	32 676	5 475	5 656	22 550	17 244
	3	6 771	12 001	35 332	6 016	5 491	23 683	18 324
	4	3 615	11 817	36 172	5 278	5 463	27 479	19 167
2000	1	4 813	12 547	34 950	5 196	6 030	24 347	18 323
	2	8 591	14 344	35 930	5 737	5 996	25 185	19 638
	3	8 389	13 911	39 225	6 154	5 929	26 807	20 891
	4	4 267	14 149	40 093	5 570	5 888	30 960	21 947
2001	1	5 558	15 762	39 305	5 374	6 402	27 373	20 740
	2	11 400	17 728	40 063	5 860	6 402	28 021	21 808
	3	8 641	17 346	42 449	6 253	6 257	29 337	22 466
	4	5 533	16 465	44 514	5 711	6 218	34 246	24 360
2002	1	6 946	17 749	45 005	5 491	6 873	30 572	23 310
	2	15 972	20 471	48 058	6 137	6 806	31 593	24 281
	3	12 128	21 423	51 647	6 577	6 704	33 175	25 228
	4	7 053	19 387	53 384	6 120	6 688	38 960	27 558
2003	1	7 164	18 439	50 374	5 836	7 395	34 307	26 115
	2	16 463	19 672	50 504	6 478	7 305	34 531	26 838
	3	12 280	21 376	53 012	6 838	7 201	36 239	27 705
	4	6 028	19 015	54 377	6 349	7 050	41 612	30 061
2004	1	7 191	18 895	53 070	6 011	7 801	36 717	28 270
	2	15 810	20 710	54 460	6 713	7 715	37 038	29 103

**Table 5 - Quarterly gross domestic product by industry at current prices (R million)
(concluded)**

Year	Quarter	Finance, real estate and business services	Community, social and personal services	General government services	Other producers	Total value added at basic prices	Taxes less subsidies on products	GDP at market prices
1994		70 491	11 349	71 278	12 054	440 144	41 974	482 119
1995		82 162	13 690	80 831	13 855	500 352	47 746	548 099
1996		94 122	15 368	96 214	15 671	565 472	52 485	617 957
1997		110 488	17 374	107 744	17 803	627 167	58 562	685 729
1998		123 778	19 390	116 484	20 154	673 860	65 068	738 927
1999		143 545	21 521	123 477	22 527	728 784	71 987	800 770
2000		160 936	24 049	132 739	24 930	808 460	79 994	888 454
2001		176 242	27 552	142 648	27 502	895 533	87 915	983 448
2002		201 721	31 037	154 181	29 450	1 021 685	99 211	1 120 896
2003		227 699	34 341	166 399	31 925	1 100 929	108 570	1 209 499
1995	1	19 826	3 220	19 772	3 299	116 805	12 013	128 818
	2	20 264	3 371	20 105	3 409	122 850	11 229	134 078
	3	20 957	3 564	20 340	3 532	129 199	12 211	141 410
	4	21 115	3 536	20 614	3 615	131 500	12 294	143 793
1996	1	22 507	3 607	22 427	3 721	131 826	13 053	144 879
	2	23 336	3 800	24 200	3 854	141 682	12 278	153 960
	3	24 072	3 994	24 578	3 996	144 845	13 805	158 650
	4	24 207	3 967	25 009	4 100	147 120	13 349	160 468
1997	1	26 076	4 091	26 183	4 263	147 338	14 772	162 111
	2	27 444	4 296	26 526	4 388	157 602	13 081	170 683
	3	28 319	4 512	27 301	4 522	160 523	15 010	175 532
	4	28 649	4 474	27 734	4 630	161 704	15 701	177 405
1998	1	30 004	4 704	28 535	4 775	159 939	16 076	176 014
	2	31 129	4 793	29 015	4 911	170 018	15 209	185 227
	3	31 072	5 014	29 283	5 146	171 676	16 360	188 035
	4	31 572	4 879	29 651	5 322	172 228	17 423	189 650
1999	1	34 324	5 193	30 547	5 452	171 670	18 069	189 739
	2	34 761	5 297	30 686	5 559	181 254	15 007	196 260
	3	36 789	5 656	30 960	5 685	186 709	19 476	206 185
	4	37 671	5 374	31 284	5 831	189 152	19 435	208 587
2000	1	38 041	5 744	32 530	6 013	188 534	19 854	208 388
	2	39 154	5 913	32 881	6 215	199 584	17 920	217 504
	3	41 673	6 224	33 467	6 307	208 977	20 784	229 761
	4	42 068	6 168	33 861	6 395	211 366	21 436	232 802
2001	1	42 586	6 720	35 295	6 859	211 974	22 593	234 567
	2	43 213	6 794	35 412	6 959	223 660	19 635	243 295
	3	44 775	7 021	35 707	6 899	227 149	22 283	249 432
	4	45 668	7 017	36 234	6 785	232 750	23 404	256 154
2002	1	47 801	7 581	37 901	7 312	236 541	25 497	262 038
	2	48 810	7 697	38 159	7 450	255 434	23 299	278 733
	3	50 709	7 880	38 641	7 367	261 479	24 911	286 390
	4	54 401	7 878	39 480	7 321	268 231	25 504	293 735
2003	1	56 368	8 461	41 090	7 851	263 400	27 633	291 033
	2	57 243	8 573	41 171	8 014	276 793	25 159	301 952
	3	57 750	8 728	41 677	7 931	280 737	25 557	306 294
	4	56 337	8 579	42 461	8 129	280 000	30 221	310 221
2004	1	60 562	9 215	44 274	8 581	280 587	33 432	314 019
	2	61 980	9 310	44 452	8 705	295 996	31 174	327 170

Table 6 - Quarterly compensation of employees (R million)

Year	Quarter	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity and water	Construction	Wholesale and retail trade; hotels and restaurants	Transport and communication
1994		5 680	16 516	50 761	4 317	9 954	31 373	19 364
1995		6 406	18 452	56 484	4 943	10 909	35 343	22 275
1996		6 908	19 969	59 965	6 098	11 414	38 417	25 295
1997		7 398	22 061	63 532	6 663	12 285	42 132	27 536
1998		7 911	22 622	70 678	7 228	13 460	45 069	30 728
1999		8 380	23 612	74 554	7 922	13 770	48 877	31 815
2000		8 904	25 707	78 439	7 761	14 091	51 478	34 104
2001		9 519	28 487	83 762	7 661	14 715	54 511	37 694
2002		10 247	30 309	91 401	9 316	15 304	60 626	40 897
2003		11 052	33 204	100 156	10 350	16 156	67 534	44 691
1995	1	1 550	4 314	13 123	1 086	2 600	7 998	5 046
	2	1 667	4 392	13 157	1 222	2 675	8 433	5 525
	3	1 660	4 712	14 055	1 285	2 680	8 756	5 678
	4	1 528	5 034	16 148	1 350	2 954	10 155	6 026
1996	1	1 672	4 880	14 274	1 344	2 727	9 157	5 870
	2	1 798	4 780	14 142	1 499	2 769	9 137	6 276
	3	1 790	5 002	15 031	1 581	2 830	9 415	6 388
	4	1 648	5 307	16 518	1 675	3 088	10 708	6 761
1997	1	1 790	5 364	14 916	1 477	2 869	9 771	6 600
	2	1 926	5 254	15 179	1 651	2 997	10 000	6 756
	3	1 918	5 554	15 851	1 720	3 055	10 400	6 899
	4	1 764	5 889	17 586	1 816	3 364	11 962	7 282
1998	1	1 914	5 654	16 468	1 594	3 142	10 410	7 233
	2	2 060	5 475	16 873	1 780	3 290	10 389	7 671
	3	2 051	5 583	17 477	1 862	3 355	11 122	7 718
	4	1 887	5 909	19 860	1 992	3 672	13 148	8 106
1999	1	2 081	5 679	17 618	1 855	3 330	11 198	7 520
	2	2 218	5 755	18 003	1 893	3 354	11 935	7 894
	3	2 137	6 027	18 367	1 917	3 374	12 106	8 025
	4	1 945	6 151	20 566	2 257	3 713	13 638	8 376
2000	1	2 166	6 197	18 503	1 810	3 363	11 726	8 005
	2	2 348	6 214	18 945	1 860	3 372	12 465	8 458
	3	2 293	6 473	19 362	1 944	3 496	12 678	8 597
	4	2 097	6 833	21 629	2 147	3 860	14 609	9 045
2001	1	2 348	6 866	19 711	1 785	3 494	12 478	8 849
	2	2 521	6 868	20 205	1 835	3 520	13 089	9 317
	3	2 433	7 180	20 670	1 916	3 657	13 490	9 447
	4	2 217	7 573	23 176	2 125	4 044	15 454	10 081
2002	1	2 487	7 298	21 270	2 082	3 597	13 814	9 485
	2	2 694	7 225	22 069	2 280	3 660	14 502	10 117
	3	2 650	7 701	22 647	2 312	3 816	15 002	10 237
	4	2 416	8 085	25 415	2 642	4 231	17 308	11 058
2003	1	2 691	8 012	23 324	2 359	3 794	15 404	10 417
	2	2 900	7 920	24 219	2 534	3 858	16 147	11 059
	3	2 845	8 420	24 775	2 544	4 034	16 685	11 137
	4	2 616	8 852	27 839	2 913	4 470	19 298	12 077
2004	1	2 893	8 747	25 430	2 589	3 944	17 076	11 375
	2	3 124	8 570	26 372	2 775	3 989	17 781	12 070

Table 6 - Quarterly compensation of employees (R million) (concluded)

Year	Quarter	Finance, real estate and business services	Community, social and personal services	General government services	Other producers	Total compensation of employees
1994		23 931	5 001	63 435	11 833	242 166
1995		28 136	6 100	72 021	13 607	274 676
1996		31 676	6 691	86 292	15 395	308 120
1997		36 689	7 863	96 416	17 496	340 071
1998		41 915	8 682	103 526	19 819	371 638
1999		47 550	9 662	108 754	22 168	397 064
2000		53 230	10 834	116 131	24 550	425 229
2001		58 689	12 443	124 411	27 080	458 972
2002		66 154	14 391	133 809	28 969	501 422
2003		73 621	16 415	144 171	31 392	548 741
1995	1	6 430	1 435	17 657	3 240	64 480
	2	6 953	1 502	17 928	3 348	66 803
	3	7 160	1 588	18 107	3 469	69 149
	4	7 587	1 576	18 329	3 550	74 238
1996	1	7 207	1 570	20 073	3 655	72 429
	2	7 843	1 654	21 748	3 786	75 432
	3	8 075	1 739	22 038	3 926	77 815
	4	8 551	1 727	22 433	4 028	82 444
1997	1	8 418	1 852	23 530	4 190	80 775
	2	9 160	1 944	23 752	4 312	82 932
	3	9 246	2 042	24 339	4 444	85 468
	4	9 864	2 025	24 795	4 551	90 896
1998	1	9 813	2 106	25 552	4 696	88 582
	2	10 445	2 146	25 813	4 829	90 772
	3	10 729	2 245	25 936	5 061	93 139
	4	10 928	2 185	26 225	5 234	99 145
1999	1	11 324	2 332	27 051	5 365	95 353
	2	11 829	2 378	27 082	5 471	97 812
	3	12 062	2 539	27 170	5 594	99 318
	4	12 335	2 413	27 451	5 738	104 582
2000	1	12 628	2 596	28 611	5 921	101 526
	2	13 223	2 672	28 820	6 121	104 498
	3	13 533	2 795	29 174	6 210	106 555
	4	13 847	2 771	29 526	6 298	112 662
2001	1	13 736	2 995	30 786	6 756	109 804
	2	14 310	3 060	30 929	6 856	112 510
	3	15 172	3 199	31 121	6 793	115 078
	4	15 471	3 189	31 575	6 675	121 580
2002	1	15 435	3 518	33 006	7 197	119 189
	2	16 335	3 559	33 173	7 330	122 944
	3	17 164	3 660	33 486	7 247	125 922
	4	17 220	3 654	34 144	7 195	133 368
2003	1	17 253	4 039	35 640	7 720	130 653
	2	17 950	4 088	35 660	7 881	134 217
	3	19 110	4 188	36 019	7 800	137 557
	4	19 308	4 100	36 852	7 991	146 315
2004	1	18 997	4 525	38 559	8 438	142 573
	2	19 698	4 568	38 579	8 561	146 087

Table 7 - Quarterly gross operating surplus and net other taxes on production^{1/} (R million)

Year	Quarter	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity and water	Construction	Wholesale and retail trade; hotels and restaurants	Transport and communication
1994		14 572	15 594	41 307	11 658	3 842	31 101	18 932
1995		12 911	16 378	49 695	12 465	4 865	36 425	22 263
1996		16 813	18 799	54 160	12 503	6 217	41 046	26 492
1997		17 742	18 463	61 072	13 266	7 544	43 726	30 338
1998		16 375	20 817	58 339	15 306	8 227	44 744	32 550
1999		16 616	22 563	61 462	13 819	8 555	46 718	39 053
2000		17 156	29 234	71 759	14 896	9 753	55 821	46 695
2001		21 613	38 813	82 569	15 536	10 563	64 466	51 679
2002		31 852	48 721	106 692	15 009	11 767	73 675	59 480
2003		30 883	45 298	108 111	15 151	12 795	79 156	64 365
1995	1	2 292	3 615	11 189	3 091	1 329	8 514	4 941
	2	3 859	4 496	12 356	3 122	1 371	8 278	5 147
	3	3 908	4 673	13 884	3 334	1 188	9 048	5 946
	4	2 852	3 594	12 267	2 918	977	10 586	6 229
1996	1	2 398	3 988	12 556	3 082	1 771	9 506	6 340
	2	6 903	5 280	13 485	3 148	1 777	9 370	6 129
	3	4 467	5 337	14 526	3 397	1 425	10 099	6 917
	4	3 045	4 193	13 593	2 877	1 245	12 071	7 108
1997	1	3 117	4 154	14 302	3 131	2 062	10 243	6 931
	2	7 406	5 104	15 523	3 446	2 016	10 414	7 275
	3	4 475	5 172	16 388	3 555	1 863	10 877	8 142
	4	2 744	4 034	14 858	3 134	1 602	12 193	7 990
1998	1	3 362	3 832	14 459	3 721	2 311	10 595	7 227
	2	6 831	5 665	14 690	4 075	2 227	11 336	7 807
	3	4 331	6 244	15 730	4 002	2 035	11 093	8 557
	4	1 851	5 075	13 461	3 508	1 655	11 720	8 960
1999	1	2 883	4 974	14 216	3 117	2 385	10 685	8 612
	2	7 428	5 949	14 674	3 582	2 303	10 614	9 350
	3	4 634	5 974	16 965	4 099	2 117	11 578	10 299
	4	1 671	5 666	15 606	3 021	1 750	13 841	10 791
2000	1	2 647	6 349	16 447	3 386	2 667	12 622	10 318
	2	6 243	8 131	16 985	3 877	2 624	12 719	11 181
	3	6 096	7 437	19 863	4 210	2 433	14 129	12 294
	4	2 170	7 316	18 464	3 423	2 028	16 351	12 903
2001	1	3 210	8 895	19 594	3 589	2 907	14 895	11 891
	2	8 880	10 860	19 859	4 025	2 882	14 932	12 491
	3	6 208	10 167	21 778	4 337	2 600	15 847	13 018
	4	3 316	8 892	21 338	3 585	2 174	18 792	14 279
2002	1	4 459	10 451	23 735	3 409	3 276	16 759	13 826
	2	13 278	13 246	25 989	3 857	3 146	17 090	14 164
	3	9 478	13 722	29 000	4 265	2 888	18 173	14 991
	4	4 637	11 302	27 968	3 478	2 457	21 653	16 500
2003	1	4 473	10 427	27 050	3 477	3 601	18 903	15 698
	2	13 563	11 752	26 285	3 944	3 447	18 384	14 115
	3	9 435	12 956	28 237	4 295	3 167	19 554	16 568
	4	3 413	10 163	26 538	3 435	2 581	22 315	17 984
2004	1	4 298	10 148	27 640	3 422	3 857	19 641	16 895
	2	12 687	12 140	28 088	3 938	3 726	19 257	17 033

^{1/} Net other taxes on production equals other taxes on production minus other subsidies on production.

Table 7 - Quarterly gross operating surplus and net other taxes on production^{1/} (R million)

Year	Quarter	Finance, real estate and business services	Community, social and personal services	General government services	Other producers	Total gross operating surplus
1994		46 559	6 348	7 843	221	197 979
1995		54 032	7 590	8 810	248	225 682
1996		62 446	8 678	9 922	276	257 352
1997		73 799	9 511	11 328	307	287 096
1998		81 863	10 708	12 958	335	302 222
1999		95 995	11 859	14 722	359	331 720
2000		107 705	13 214	16 608	380	383 221
2001		117 553	15 109	18 238	422	436 561
2002		135 567	16 646	20 373	481	520 263
2003		154 078	17 926	22 229	533	550 524
1995	1	13 396	1 785	2 115	59	52 324
	2	13 311	1 869	2 177	61	56 046
	3	13 797	1 976	2 233	63	60 049
	4	13 528	1 960	2 285	65	57 262
1996	1	15 300	2 037	2 354	66	59 397
	2	15 493	2 146	2 452	68	66 249
	3	15 997	2 255	2 540	70	67 030
	4	15 656	2 240	2 576	72	64 675
1997	1	17 658	2 240	2 653	74	66 563
	2	18 283	2 352	2 774	76	74 670
	3	19 073	2 470	2 962	78	75 055
	4	18 785	2 449	2 939	80	70 808
1998	1	20 191	2 598	2 983	79	71 356
	2	20 684	2 647	3 202	82	79 246
	3	20 343	2 769	3 347	86	78 537
	4	20 644	2 694	3 426	88	73 083
1999	1	23 000	2 862	3 496	87	76 317
	2	22 932	2 919	3 604	89	83 442
	3	24 727	3 117	3 790	91	87 391
	4	25 336	2 962	3 833	93	84 570
2000	1	25 413	3 148	3 919	92	87 009
	2	25 931	3 241	4 061	94	95 086
	3	28 141	3 428	4 293	97	102 422
	4	28 220	3 397	4 335	97	98 704
2001	1	28 851	3 725	4 509	103	102 170
	2	28 903	3 734	4 483	103	111 150
	3	29 603	3 822	4 586	106	112 071
	4	30 197	3 828	4 659	109	111 170
2002	1	32 366	4 063	4 895	114	117 352
	2	32 475	4 139	4 986	120	132 491
	3	33 545	4 220	5 155	120	135 557
	4	37 181	4 224	5 336	126	134 863
2003	1	39 116	4 422	5 450	131	132 747
	2	39 293	4 485	5 512	132	140 912
	3	38 640	4 540	5 658	132	143 180
	4	37 029	4 479	5 609	138	133 685
2004	1	41 565	4 690	5 715	143	138 015
	2	39 293	4 742	5 873	143	146 920

^{1/} Net other taxes on production equals other taxes on production minus other subsidies on production.

ADDITIONAL INFORMATION

Explanatory Notes

Introduction

- 1 This Statistical Release contains quarterly estimates of the Gross Domestic Product (GDP) for the period 1993 to the second quarter of 2001. The estimates are based on the 1993 System of National Accounts (SNA93) published by the United Nations in co-operation with other international organisations. The methodology, concepts and classifications on which the estimates are based, are in accordance with the latest guidelines of an internationally agreed system of national accounts.
- 2 Revised estimates of GDP for the years 1993 to 1998 in accordance with the new SNA were published for the first time in the June 1999 issue of Statistical Release P0441. The revisions also included an update of the base year from 1990 to 1995 for the estimates at constant prices. Thus, the estimates of real GDP are made at 1995 constant prices in this publication.

Methodology

- 3 Annual GDP estimates are now calculated independently from the quarterly estimates. Previously, annual GDP estimates were derived as the sum of the GDP for the four quarters of the relevant year.
- 4 Short-term indicators are used to estimate the quarterly GDP (cf. Statistical sources and methods, p36). However, they are by their nature incomplete in terms of coverage and annual changes of output measured through them are generally not as reliable as in instances where the results of annual surveys are used. Therefore, the quarterly estimates must be adapted to the independent annual estimates when such estimates become available.

Classifications

- 5 The estimates of value added by industry are classified according to the standard Industrial Classification of all Economic Activities (SIC), fifth edition. SIC is based on the third revision of the International Standard Industrial Classification of all Economic Activities (ISIC), with suitable adaptations for South African conditions.

Seasonal adjustment

- 6 The quarterly value added and GDP estimates have been seasonally adjusted. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove irregular or non-seasonal influences which may be present in any particular quarter. Influences that are volatile or unsystematic can still make it difficult to interpret.

- Reliability of estimates** **7** Revisions of the estimates for all components of the national accounts are usually done every five years in conjunction with the rebasing of the estimates at constant prices. At such a time the results of censuses that have become available in the meantime and any other additional information sources are incorporated in the estimates. Due to the availability of more comprehensive data, revisions are also made of estimates for the latest quarters and, once a year, for the two latest years.
- Related publications** **8** Users may also wish to refer to the following publications from Stats SA -
- Bulletin of Statistics; and
 - SA Statistics
- Unpublished Statistics** **9** In some cases Stats SA can also make available information which is not published. This information can be made available through a computer printout or diskette. Generally a charge is made for providing unpublished information.
- Pre-release policy** **10** New estimates of economic indicators are kept strictly confidential by Stats SA prior to the date and time of release. To enable selected government departments to prepare their public responses, the following pre-release procedure is applied. It accords with practice in leading statistical agencies.
- 11** An official representative from the Office of the President, the Department of Finance and the SARB receive a copy of the release on a strictly confidential basis one hour in advance of the public issue.
- Symbols and abbreviations** **12** SARB South African Reserve Bank
SIC Standard Industrial Classification
SNA System of National Accounts
Stats SA Statistics South Africa
- not applicable

Classification of Industries

The industries used in estimating the value added was classified according to the Standard Industrial Classification of all Economic Activities (SIC), fifth edition. It is based on the third revision of the International Standard Industrial Classification of all Economic Activities (ISIC), with suitable adaptations for local conditions.

For the convenience of users, the SIC is duplicated in this statistical release for easy reference. Two versions of SIC are presented, namely table B reflecting only those categories of the SIC which have actually been used in the national accounts tables in this statistical release and table C which is the full version of SIC (5th edition). Furthermore, table B also furnishes the abbreviated titles as used in the national accounts tables.

Table B - Categories used in the national accounts tables

Title in the national accounts tables	Major division of SIC	Division of SIC
Agriculture, forestry and fishing	1	
Agriculture		11
Forestry		12
Fishing		13
Mining and quarrying	2	
Coal mining		21
Gold mining		23
Mining of other metal ores		24
Other mining and quarrying		25, 29
Manufacturing	3	
Food, beverages and tobacco products		30
Textiles, clothing and leather goods		31
Wood and paper; publishing and printing		32
Petroleum products, chemicals, rubber and plastic		33
Other non-metallic mineral products		34
Metals, metal products, machinery and equipment		35
Electrical machinery and apparatus		36
Radio, TV, instruments, watches and clocks		37
Transport equipment		38
Furniture; other manufacturing		39
Electricity and water	4	
Electricity		41
Water		42
Construction	5	
Wholesale, retail, and motor trade; catering and accommodation	6	
Wholesale trade		61
Retail trade; repair of household goods		62
Motor trade; repair of motor vehicles		63
Catering and accommodation		64

Table B - Categories used in the national accounts tables (concluded)

Title in the national accounts tables	Major division of SIC	Division of SIC
Transport and communication	7	
Transport		71-74
Communication		75
Finance, real estate and business services	8	
Finance and insurance		81-83
Real estate		84
Business services		85-88
Other private services	9 <u>1/</u>	
General government services	9 <u>1/</u>	
Other producers	9 <u>1/</u>	01 <u>1/</u>

1/ Major division 9 of SIC - Community, social and personal services - has been disaggregated into three categories in the national accounts tables. These categories follow other criteria than SIC and cannot be defined in terms of the divisions and groups of SIC 9. The first category - Community, social and personal services - includes private enterprises. They are market producers. The second category - general government services - comprises the activities of general government in producing non-market community and social services, e.g. public administration, defence, health and education. The third category - Other producers - consist of non-profit institutions serving households (NPISH) and domestic workers. These are also non-market producers.

Table C - Standard Industrial Classification of All Economic Activities (SIC)
(5th edition)

Title of category	Major division	Division
Agriculture, hunting, forestry and fishing Agriculture, hunting and related services Forestry, logging and related services Fishing, operation of fish hatcheries and fish farms	1	11 12 13
Mining and quarrying Mining of coal and lignite Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying Mining of gold and uranium ore Mining of metal ores, except gold and uranium Other mining and quarrying Services activities incidental to mining of minerals	2	21 22 23 24 25 29
Manufacturing Manufacture of food products, beverages and tobacco products Manufacture of textiles, clothing and leather goods Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; manufacture of paper and paper products; publishing, printing and reproduction of recorded media Manufacture of coke, refined petroleum products and nuclear fuel; manufacture of chemicals and chemical products; manufacture of rubber and plastic products Manufacture of other non-metallic mineral products Manufacture of basic metals, fabricated metal products, machinery and equipment and of office, accounting and computing machinery Manufacture of electrical machinery and apparatus n.e.c. Manufacture of radio, television and communication equipment and apparatus and of medical, precision and optical instruments, watches and clocks Manufacture of transport equipment Manufacture of furniture; manufacturing n.e.c.; recycling	3	30 31 32 33 34 35 36 37 38 39
Electricity, gas and water supply Electricity, gas, steam and hot water supply Collection, purification and distribution of water	4	41 42
Construction	5	
Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; catering and accommodation Wholesale and commission trade, except of motor vehicles and motor cycles Retail trade, except of motor vehicles and motor cycles; repair of personal household goods Sale, maintenance and repair of motor vehicles and motor cycles; retail trade in automotive fuel Catering and accommodation	6	61 62 63 64

Table C - Standard Industrial Classification of All Economic Activities (SIC)
(5th edition) (concluded)

Title of category	Major division	Division
Transport, storage and communication	7	
Land transport; transport via pipelines		71
Water transport		72
Air transport		73
Supporting and auxiliary transport activities; activities of travel agencies		74
Post and telecommunications		75
Financial intermediation, insurance, real estate and business services	8	
Financial intermediation, except insurance and pension funding		81
Insurance and pension funding, except compulsory social security		82
Activities auxiliary to financial intermediation		83
Real estate activities		84
Renting of machinery and equipment, without operator, and of personal and household goods		85
Computer and related activities		86
Research and development		87
Other business activities		88
Community, social and personal services	9	
Public administration and defence activities		91
Education		92
Health and social work		93
Other community, social and personal service activities		94
Activities of membership organisations n.e.c.		95
Recreational, cultural and sporting activities		96
Other service activities		99
Private households, extraterritorial organisations, representatives of foreign governments and other activities not adequately defined	0	
Private households with employed persons		01
Extraterritorial organisations		02
Representatives of foreign governments		03
Other activities not adequately defined		04

Statistical sources and methods

Table D summarises the most important statistical sources from which the annual and quarterly value added and GDP estimates are derived and the method used to compile the figures, discussing both the estimates at current and at constant prices. The term “benchmark years” refers to those years in respect of which authoritative and detailed information is available.

Table D - Statistical sources and methods used in estimating annual and quarterly value added and GDP at current and at constant prices

Industry	Annual estimates at current prices	Quarterly estimates at current prices	Estimates at constant prices
Agriculture	<p>Benchmark years: Periodic Censuses of Agriculture conducted by Stats SA. GDP estimates compiled by the National Department of Agriculture in co-operation with Stats SA.</p> <p>Other years: Annual surveys of agriculture conducted by Stats SA. GDP estimates are compiled by the Department of Agriculture in collaboration with Stats SA. Estimates from censuses and surveys are verified against quarterly source data collected by the National Department of Agriculture. Estimates include the value of farm produce consumed by farmers for own account.</p>	<p>Information obtained from various marketing agents and other agricultural related organisations in respect of the value of production of field crops, horticulture and livestock. Expenditure on intermediate goods is collected by the National Department of Agriculture from a number of manufacturers and associations regarding, inter alia, fertilisers, farm feed, dips and sprays, and fuel.</p>	<p>Nominal values (current prices) of production and intermediate inputs are deflated by appropriate price indices compiled by the National Department of Agriculture.</p>
Forestry	<p>Benchmark and other years: Annual information obtained from the Department of Water Affairs and Forestry. Estimates of growing forests and own-account production are based on a research project conducted by UP</p>	<p>Judgemental trend.</p>	<p>Base year estimates are extrapolated using volumes of harvested timber and changes in standing timber inventories.</p>
Fishing	<p>Benchmark and other years: Information provided by the Marine Development Branch of the Department of Environmental Affairs and technical periodicals.</p>	<p>Information provided by the Marine Development Branch of the Department of Environmental Affairs and technical periodicals.</p>	<p>Base year estimates are extrapolated using appropriate indices of the quantity (volume) of fish caught.</p>

Table D - Statistical sources and methods used in estimating annual and quarterly value added and GDP at current and at constant prices (continued)

Industry	Annual estimates at current prices	Quarterly estimates at current prices	Estimates at constant prices
Mining and quarrying	<p>Benchmark years: Periodic Censuses of Mining conducted by Stats SA. Results from the 1993 and 1996 mining censuses are included.</p> <p>Other years: Monthly data on production and sales for the various sectors of the mining industry and the quarterly surveys of financial and labour statistics conducted by Stats SA. Supplemented by information from the Chamber of Mines regarding the gold-mining industry and sample surveys conducted by the SARB.</p>	<p>Monthly data on production and sales for the various sectors of the mining industry and the quarterly surveys of financial and labour statistics conducted by Stats SA. Supplemented by information from the Chamber of Mines regarding the gold-mining industry and sample surveys conducted by the SARB.</p>	<p>Base year estimates are extrapolated using appropriate indices of output quantities of various sectors of mining. Information obtained from the Chamber of Mines, the Minerals Bureau, the Department of Minerals and Energy and Stats SA.</p>
Manufacturing	<p>Benchmark years: Periodic Censuses of Manufacturing conducted by Stats SA. Results from the 1993 and 1996 manufacturing censuses are included.</p> <p>Other years: Monthly data on production and sales of the manufacturing industry, quarterly surveys of financial and labour statistics conducted by Stats SA, supplemented by sample surveys conducted by the SARB.</p>	<p>Monthly data on production and sales of the manufacturing industry, quarterly surveys of financial and labour statistics conducted by Stats SA, supplemented by sample surveys conducted by the SARB.</p>	<p>Base year estimates are extrapolated using appropriate indices of output quantities (volume) based on manufacturing sales at constant prices for the various divisions of manufacturing.</p>
Electricity and water	<p>Benchmark and other years: Annual statistics and financial statements obtained from ESKOM, the water boards and local authorities.</p>	<p>Monthly survey regarding generation and consumption of electricity conducted by Stats SA as well as monthly surveys conducted by the SARB.</p>	<p>Base year estimates are extrapolated using appropriate indices of output quantities (units of electricity generated and kilo litre water).</p>

Table D - Statistical sources and methods used in estimating annual and quarterly value added and GDP at current and at constant prices (continued)

Industry	Annual estimates at current prices	Quarterly estimates at current prices	Estimates at constant prices
Construction	<p>Benchmark years: Periodic Censuses of Construction conducted by Stats SA. Results from the 1994 construction census are included.</p> <p>Other years: Extrapolation of the benchmark year estimates according to the trend in gross domestic fixed investment of residential and non-residential buildings and construction works as compiled by the SARB. Verified with the monthly survey of building statistics conducted by Stats SA. Labour remuneration is extrapolated according to the quarterly survey of total employment and earnings conducted by Stats SA.</p>	<p>Extrapolation of the benchmark year estimates according to the trend in gross domestic fixed investment of residential and non-residential buildings and construction works as compiled by the SARB. Verified with the monthly survey of building statistics conducted by Stats SA. Labour remuneration is extrapolated according to the quarterly survey of total employment and earnings conducted by Stats SA.</p>	<p>Base year estimates are extrapolated using the trend in real gross domestic fixed investment of residential and non-residential buildings and construction works as well as the monthly survey of building statistics conducted by Stats SA. Verified by cement sales.</p>
Wholesale, retail and motor trade	<p>Benchmark years: Periodic Censuses of Wholesale Trade, Commercial Agents and Allied Services; Retail Trade; and Motor Trade and Repair Services, conducted by Stats SA. Annual and quarterly surveys of local authorities conducted by Stats SA. The results of the above-mentioned censuses for 1993 are included.</p> <p>Other years: Monthly surveys of financial (turnover) statistics of wholesale, retail and motor trade and the quarterly survey of total employment and earnings conducted by Stats, supplemented by sample surveys conducted by the SARB.</p>	<p>Monthly surveys of financial (turnover) statistics of wholesale, retail and motor trade and the quarterly survey of total employment and earnings conducted by Stats, supplemented by sample surveys conducted by the SARB.</p>	<p>Base year estimates are extrapolated using indices for the volume of wholesale, retail and motor trade sales.</p>

Table D - Statistical sources and methods used in estimating annual and quarterly value added and GDP at current and at constant prices (continued)

Industry	Annual estimates at current prices	Quarterly estimates at current prices	Estimates at constant prices
Catering and accommodation	<p>Benchmark years: Periodic Censuses of Catering and Accommodation Services and Licensed Restaurants, conducted by Stats SA. The results of the 1995 census of accommodation services and the 1992 census of restaurants are included.</p> <p>Other years: Extrapolation according to the trend of retail trade sales and trading statistics for hotels published by Stats SA.</p>	<p>Extrapolation according to the trend of retail trade sales and trading statistics for hotels published by Stats SA.</p>	<p>Base year estimates are extrapolated using changes in indices for room and bed nights sales.</p>
Transport and communication	<p>Benchmark and other years: Financial reports of Transnet, Telkom, SA Post Office; annual and quarterly surveys of local authorities conducted by Stats SA. Private transport benchmark estimates are obtained from Censuses of Transport and Allied Services conducted by Stats SA. Estimates for in-between years of private transport are extrapolated according to the monthly survey of transport of goods and passengers by road and rail conducted by Stats SA.</p> <p>Supplemented by individual studies such as for the taxi industry, the cellular networks and the internet service providers.</p>	<p>Financial information from Transnet, Telkom, SA Post Office; annual and quarterly surveys of local authorities conducted by Stats SA.</p> <p>The monthly survey of transport of goods and passengers by road and rail conducted by Stats SA. Supplemented by individual studies such as for the taxi industry, the cellular networks and the internet service providers.</p> <p>Supplemented by surveys conducted by the SARB.</p>	<p>Base year estimates are extrapolated using appropriate indices of the volume of services rendered by the various institutions.</p>

Table D - Statistical sources and methods used in estimating annual and quarterly value added and GDP at current and at constant prices (concluded)

Industry	Annual estimates at current prices	Quarterly estimates at current prices	Estimates at constant prices
Financial intermediation and insurance	Benchmark and other years: Annual and quarterly surveys conducted by the SARB among the various institutions in the private sector and information reported by public authorities and public corporations.	Annual and quarterly surveys conducted by the SARB among the various institutions in the private sector and information reported by public authorities and public corporations.	Base year estimates are extrapolated using appropriate indices, verified by nominal transactions deflated by appropriate price indices.
Real estate (including imputed rent on residential buildings) and business services	Benchmark and other years: Censuses of Business Services and the 1996 Population Census. Supplemented by individual studies such as for car rentals and the security industry.	The monthly survey of building statistics conducted by Stats SA and monthly price indices of rent. Judgemental estimates for business services.	Base year estimates are extrapolated using an index of the estimated number of houses. For business services various volume indicators as well as price indices are used supplemented by judgemental estimates.
Other private services	Benchmark years: Censuses of Social Services. Results from the 1994 Censuses of Health are included. Other years: Extrapolated by relevant items of private consumption expenditure estimated by the SARB.	Extrapolated by relevant items of private consumption expenditure estimated by the SARB.	Nominal values (current prices) deflated by relevant components of the Consumer Price Index (CPI).
General government services	Benchmark years: Government Financial Statistics (GFS) analysis. Other years: Annual Main Budget of South Africa as published in the Budget Review and annual statistics on the provincial governments and local authorities and extra-budgetary accounts.	Quarterly survey of total employment and earnings of the public sector conducted by Stats SA.	Base year estimates are extrapolated using an index of employment by general government.
Other producers	Benchmark and other years: Censuses of relevant social services, such as welfare organisations, supplemented by the 1996 Population Census and annual reports of relevant non-profit institutions.	Judgmental.	Nominal values (current prices) deflated by relevant components of the CPI and verified by the GDP deflator.

Glossary

Annualised percentage change	The annualised percentage change is the growth rate of a given quarter compared with the previous quarter, compounded to an annual rate.
Balancing items	A balancing item is an accounting construct obtained by subtracting the total value of the entries on one side of an account from the total value of the entries on the other side. Balancing items are not simply devices introduced to ensure that accounts balance. They encapsulate a great deal of information and include some of the most important entries in the accounts, for example value added and operating surplus.
Basic prices	The basic price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output <i>minus</i> any tax payable <i>plus</i> any subsidy receivable on that unit as a consequence of its production or sale. Basic prices exclude any transport charges invoiced separately by the producer. Basic prices is the preferred method of valuing output.
Compensation of employees	Compensation of employees is defined as the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during the accounting period. It is recorded on a gross basis, before any deduction for income taxes. It also includes employers' social contributions to pensions, unemployment insurance and other social insurance schemes.
Constant prices	Constant prices is a valuation concept expressed at the prices prevailing during a fixed reference period or base period. Currently, the base period for national accounts estimates at constant prices is 1995, which means that they have been restated at 1995 prices.
Current prices	A valuation at current prices is expressed at the prices prevailing during the period being referred to.
Enterprise	An enterprise may be a corporation (a quasi-corporate enterprise is treated as if it is a corporation in the SNA), a non-profit institution or an unincorporated enterprise. Corporate enterprises and non-profit institutions are complete institutional units. An unincorporated enterprise, however, refers to an institutional unit - a household or government unit - only in its capacity as a producer of goods and services. It covers only those activities of the unit which are directed towards the production of goods and services.
Establishment	An establishment is defined as an enterprise, or part of an enterprise, that is situated at a single location and in which only a single (non-ancillary) productive activity is carried out or in which the principal productive activity accounts for most of the value added.
Factor cost	Factor cost is a valuation reflecting the cost of the factors of production – labour and capital – recorded as compensation of employees and operating surplus/mixed income respectively. Values added and GDP at factor cost are no longer compiled in South Africa's national accounts.

GDP at market prices	GDP at market prices equals the sum of gross value added by all industries at basic prices <i>plus</i> taxes on products <i>minus</i> subsidies on products.
Industries	Industries are defined in the SNA in the same way as in the Standard Industrial Classification (SIC). An industry consists of a group of establishments engaged in the same or similar kinds of activity.
Intermediate consumption	Intermediate consumption consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets. Consumption of fixed assets is recorded as consumption of fixed capital.
Net other taxes on production	Other taxes on production <i>minus</i> other subsidies on production.
Operating surplus / mixed income	Operating surplus or mixed income is the balancing item in the generation of income account, i.e. value added <i>minus</i> compensation of employees payable <i>minus</i> taxes on production payable <i>plus</i> subsidies receivable. The term mixed income refers to unincorporated enterprises where part of the surplus accrues to working owners as remuneration for his/her input of labour.
Other subsidies on production	Subsidies are transfers from the government to the business sector toward current cost of production. These transfers represent additions to the income of producers from current production.
Other taxes on production	Other taxes on production consist of taxes on the ownership of land, buildings or other assets used in production or on labour employed, etc. Important South African examples are assessment rates, the service and establishment levies paid to district councils, motor vehicle licenses, and business or professional licenses.
Output	Output consists of those goods or services that are produced within an establishment that become available for use outside that establishment.
Percentage change	When using annual data, the percentage change is the growth rate from one year to the next year. For quarterly data, the percentage change is the growth rate of a given quarter compared with the same quarter in the previous year. However, for seasonally adjusted quarterly data the percentage change is the growth rate of a given quarter compared with the previous quarter. In this publication, these rates are annualised.
Purchaser's price	The purchaser's price is the amount paid by the purchaser, excluding any deductible value added tax (VAT) or similar deductible tax, in order to take delivery of a unit of a good or service at the time and place required by the purchaser. The purchaser's price of a good includes any transport charges paid separately by the purchaser to take delivery at the required time and place.
Revision of estimates	Revision of the estimates for all components of the national accounts are usually done every five years in conjunction with the rebasing of the estimates at constant prices. At such a time the results of censuses that have become available in the meantime and any other additional information sources are incorporated in the estimates. Due to the availability of definite basic data, revisions are also made of estimates for the latest quarters and, once a year, for the two latest years.

Seasonal adjustment	Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove irregular or non-seasonal influences, which may be present in any particular quarter. Influences that are volatile or unsystematic can still make it difficult to interpret.
Subsidies	Subsidies are transfers from the government to the business sector toward current cost of production. These transfers represent additions to the income of producers from current production. There are two categories, subsidies on products and other subsidies on production. These categories are defined in a similar way as taxes on products and other taxes on production.
System of National Accounts	System of National Accounts (SNA), refers to an internationally-agreed standard system for macro-economic accounts. The latest version is described in the System of National Accounts 1993, which was implemented in South Africa in June 1999.
Taxes on production and imports	Taxes on production and imports are taxes that enterprises incur by engaging in production. They are recorded as being payable out of the value added of producers or, if not being attributed to a specific producer, as payable on the level of the total economy. There are two categories, taxes on products and other taxes on production.
Taxes on products	Taxes on products consist of taxes payable on goods and services when they are produced, delivered, sold or otherwise disposed of by their producers. Furthermore, they are payable per unit of a good or service produced. Important examples of taxes on products are excise and import duties and value added tax (VAT).
Value added	Value added measures the value created by production and may be calculated either before or after deducting the consumption of fixed capital on the fixed assets used. Gross value added is defined as the value of output less the value of intermediate consumption. Value added is the balancing item in the production account for an institutional unit or sector, or establishment or industry.

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 (012) 310 8161 (publishing)

Fax number: (012) 310 8304

E-mail address: gdp@statssa.gov.za

Postal address: Private bag X44, Pretoria, 0001

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