CHAPTER 4
SOUTH AFRICAN FISCAL POLICY AND THE BUSINESS CYCLE

4.1 INTRODUCTION

The previous chapter highlighted the many factors that influence the size of automatic fiscal stabilisers. This chapter takes a closer look at some of these factors by analysing the South African business cycle and by documenting the main features of government finances and the fiscal policies pursued in South Africa, as this provides useful information when evaluating the empirical results in the following chapters.

4.2 THE SOUTH AFRICAN BUSINESS CYCLE

The South African Reserve Bank publishes turning-point dates for the South African business cycle. According to the Bank's latest *Quarterly Bulletin*, 6 upswing and downswing phases occurred during the period 1970 to 2000. The course, strength and duration of the South African business cycle since 1970 are depicted in Figure 4.1, while Figure 4.2 portrays the business cycle against economic growth and the output gap.

The output gap was calculated as the percentage deviation of observed real GDP from trend real GDP[1]. In a similar way, the strength and duration of the business cycle are illustrated by means of a trend line and deviations from trend expressed as a percentage. Trend output and the trend in the business cycle was estimated by a Hodrick-Prescott (HP) filter (lambda = 100)[2]. According to Cerra and Saxena (2000:4), trend output (y*) derived using the HP-filter is obtained by minimising a combination of the gap between

[1] The concepts potential output and output gap are widely used in macroeconomics even though their definition and estimation raise a number of theoretical and empirical questions. Potential output is commonly defined as the maximum output an economy can sustain without generating an increase in inflation.

[2] This study does not attempt to evaluate the strengths and weaknesses of different techniques to calculate potential output or to compare results for different sets of potential output and output gap estimates. In order to overcome the drawback of the poor reliability of the end of sample estimates associated with the HP-filter, the GDP series was extended by forecasts based on GDP growth assumptions taken from the National Treasury's *Budget Review 2003*.

actual output (y) and trend output and the rate of change in trend output for the whole sample of observations (T):

$$\text{Min}\sum_{t=0}^{T}\left(y_t - y_t^*\right)^2 + \lambda\sum_{t=2}^{T-1}\left[\left(y_{t+1}^* - y_t^*\right) - \left(y_t^* - y_{t-1}^*\right)\right]^2 \qquad (1)$$

where the detrending parameter λ determines the degree of smoothness of the trend.

According to the October *Monthly Bulletin* of the European Central Bank (2000:38), a variety of methods is available for estimating potential (trend) output and they can be grouped into two broad categories: the "production function" and "statistical" approaches. The former attempts to create an explicit model of the supply-side of the economy using economic theory. The latter attempts to break the real GDP series down directly into a trend and a cyclical component.

Under the production function approach, potential output estimates are based on factor elasticities (labour, capital and technology). This approach is useful for explaining the key economic forces underlying developments in output and growth in the medium term and is widely used by international organisations such as the OECD and the IMF. There are, however, certain disadvantages associated with this approach. It is subject to important data problems and it relies on deriving measures of the trend components of the inputs, which are sometimes very difficult to disentangle. Moreover, the results depend strongly on assumptions with regard to the functional form of the production technology, e.g. returns to scale, the trend growth of technical progress as well as on estimates of the structural unemployment rate. All these assumptions are subject to heated economic debate.

Statistical methods of estimating potential output are based on the idea of extracting the trend from the output series using statistical techniques. This method can be divided into "univariate approaches", which include methods that extract the trend from the information contained in the output series in isolation, without using the information contained in other variables, and methods that attempt to extract the trend using the

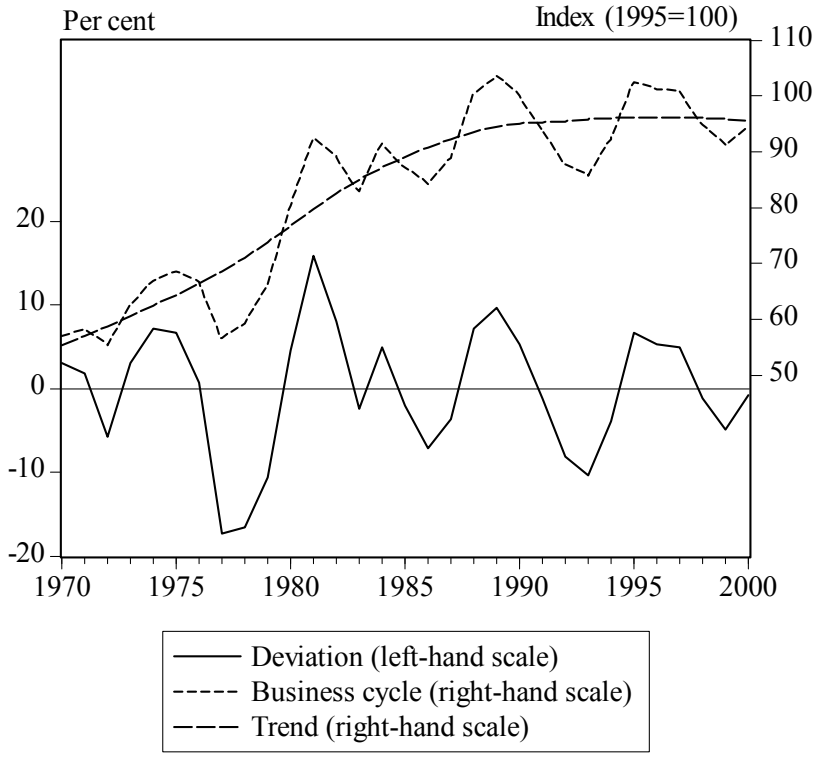
information in the output series in conjunction with information contained in other variables. As mentioned earlier, this study made use of an univariate approach called the Hodrick-Prescott (HP) filter, which derives an estimate of potential output by essentially fitting a trend through the series. The HP-filter extracts a trend component by trying to balance a good fit to the actual series with a certain degree of smoothness. A key parameter of the filter (lambda) determines the respective weight given to each of the two characteristics. If lambda is infinite, then all the weight will be on a high degree of smoothness leading to a linear trend. If lambda is zero, then all the weight will be on goodness of fit to the original series and the estimated trend will always be the same as actual output.

The HP-filter is a pure mechanical smoothing procedure whose statistical foundations are simple and transparent. It does not require any judgemental assumptions or rely on any particular economic theory and estimates from the HP-filter can be easily and quickly replicated. The method is also parsimonious on data requirements. A clear disadvantage of the HP-filter, however, is its lack of economic foundations, which makes its results and underlying assumptions difficult to interpret economically. The HP-filter does not allow for the identification of the respective contributions of the different determinants of potential output growth (capital accumulation, labour supply, technical progress) and it is also unable to track structural changes in the economy on a timely basis. The choice of lambda is arbitrary and the output gap estimates from the HP-filter are affected by end-sample biases, as the estimates of trend output tend to rely excessively on the latest developments in actual output.

In choosing between the various approaches for estimating potential output, there is inevitably a trade-off between the degree of simplicity of the individual approaches and their ability to take into account the insights of economic theory (European Central Bank *Monthly Bulletin* October 2000:47). Different methods usually yield broadly comparable estimates of potential output growth and the change in the output gap, but estimates of the level of the output gap at any particular point in time tend to be surrounded by a greater degree of uncertainty.

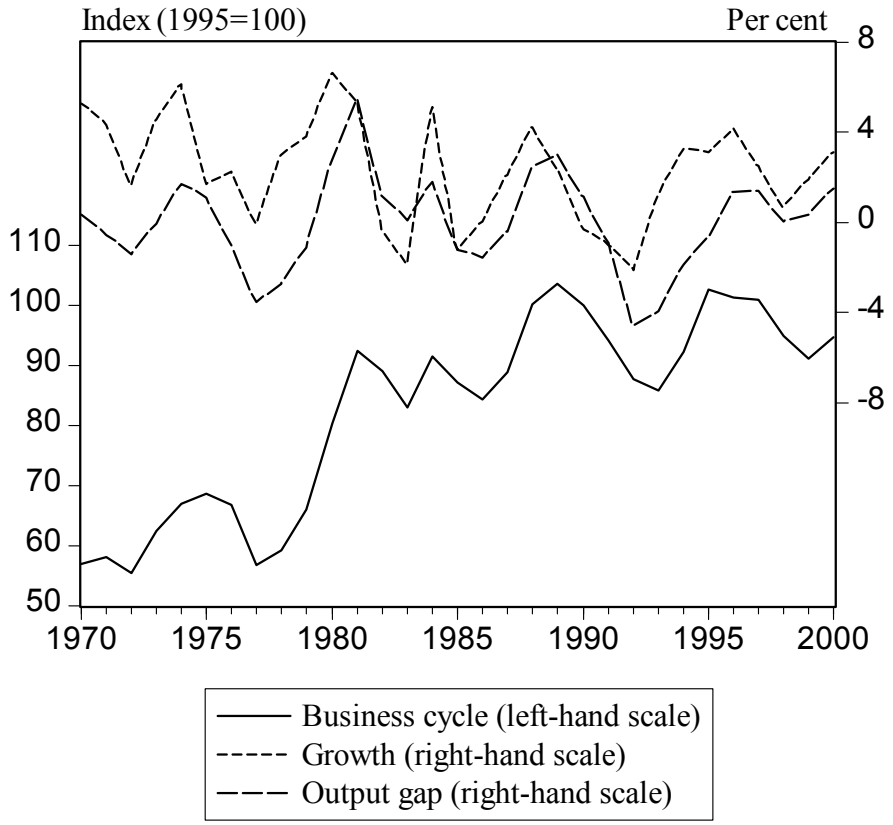
Over the years, economic activity in South Africa was volatile in terms of large and persistent deviations from trend as measured by the output gap. Differences in both the duration and the upswing and downswing momentum of each cycle are evident from Figure 4.1, while Figure 4.2 illustrates similar trends for the business cycle, economic growth and the output gap.

Figure 4.1 The South African business cycle



Source: South African Reserve Bank and own calculations

Figure 4.2 The business cycle in relation to economic growth and the output gap



Source: South African Reserve Bank and own calculations

The output gap and economic growth reached their peaks of 5,5 per cent and 6,6 per cent in 1981 and 1980 respectively, a period that was marked by a surge in the gold price. The lowest values of -4,6 per cent and -2,1 per cent in the output gap and economic growth were reached in 1992, during one of the worst recessions since the Great Depression.

Some analysts described the downward trend in the business cycle during 1989 to 1993 as one of the previous century's worst recessions, while others viewed it as a depression rather than a recession (Van der Walt and Pretorius 1995:73). According to Van der Walt and Pretorius (1995:72), economic developments during this period were the result of

cyclical and structural forces and other exogenous factors such as the domestic political transition, severe droughts and an international economic recession. The downward trend during this period differed from previous downward phases because it occurred during a growth propensity that was much flatter than the growth propensity of prior recessions (*op. cit.*:77).

The upward phase of the South African business cycle from 1993 to 1997 developed against the background of various structural changes that impacted on the economy. According to Pretorius, Venter and Weideman (1999:40), economic growth during this period benefited from the removal of trade and financial sanctions in 1994, improved financial stability as reflected in a slowdown of inflation, the abolition of the financial rand in March 1995 and the gradual relaxation of other exchange control measures. Pretorius, Venter and Weideman (1999:40) maintain that the policy steps taken to correct macroeconomic imbalances in the interest of long-term sustainable economic growth and the phasing-out of export subsidies and accelerated tariff reductions which comprehensively altered the relative price structure of the economy, hampered the economy's growth momentum in the short term, but reinforced the soundness of the economy over the longer term.

The 1993 to 1997 recovery was also assisted by favourable weather conditions which led to a sharp increase in agricultural output from the drought-ridden low levels of 1992, and higher economic growth in some industrial countries with a concomitant increase in export volumes (*op. cit.*: 41). The upturn in economic activity in the first half of 1994 wavered somewhat as output was disrupted by the exceptional circumstances that surrounded the political transition, including widespread labour-market turmoil. Domestic production regained much of its lost momentum in the second half of 1994 as confidence was regained. The tightening of monetary conditions from 1994 to 1996 needed to preserve macroeconomic stability, prudent fiscal policies and international developments contributed towards the slowing and eventual reversal of the upswing in 1997 (*op. cit.*: 42).

The slowdown in economic activity during 1997 to 1999 was characterised more by a deceleration in aggregate domestic demand than in aggregate production (Venter and Pretorius 2001:67). Moreover, the second round of Asian financial market turmoil that had erupted in May 1998 prompted policy-makers to act immediately in order to restore financial market stability by tightening liquidity conditions and increasing interest rates from April to August 1998, thereby delaying the recovery in general economic activity and prolonging the downward phase of the business cycle. According to Pretorius, Venter and Weideman (1999:69), the sharp reduction in interest rates as well as the fast expansion in world economic activity following the Asian crises led to an improvement in the economic growth rate of the South African economy since 1999.

This section illustrated the course, strength and duration of the South African business cycle. The duration and momentum of upswing and downswing phases are evident from fluctuations in real GDP growth and deviations from trend as measured by the output gap. The volatility in economic activity and the various exceptional circumstances and exogenous factors that impacted on the South African economy highlight the need for effective automatic fiscal stabilisers in South Africa.

4.3 FISCAL POLICY OBJECTIVES SINCE THE 1970s

Fiscal policy in South Africa during the 1970s and early 1980s centered around demand management, including frequent variations in the size of the national budget deficit in the interest of macroeconomic stability in the relationship between growth, inflation and the balance of payments (Heyns 1999:69). According to Heyns (1999:70), official stabilisation policy in South Africa during the 1970s was premised on the Keynesian requirement of flexibility and the assumption that government could and should influence the level of economic activity through short-term fiscal adjustments in spending and taxes. Heyns (1999:73) states that the automatic response of tax yields on economic activity was an important ingredient of the national budget's total influence on the national economy. The government used discretionary policies during the 1970s, mainly to smooth out automatic fluctuations in government deficits (Heyns 1999:74). Heyns

(1995:309) argues that since the 1980s, the focus of South African budgetary policy has increasingly shifted from the earlier Keynesian emphasis on short-term stabilisation to the longer-term implications of the budget.

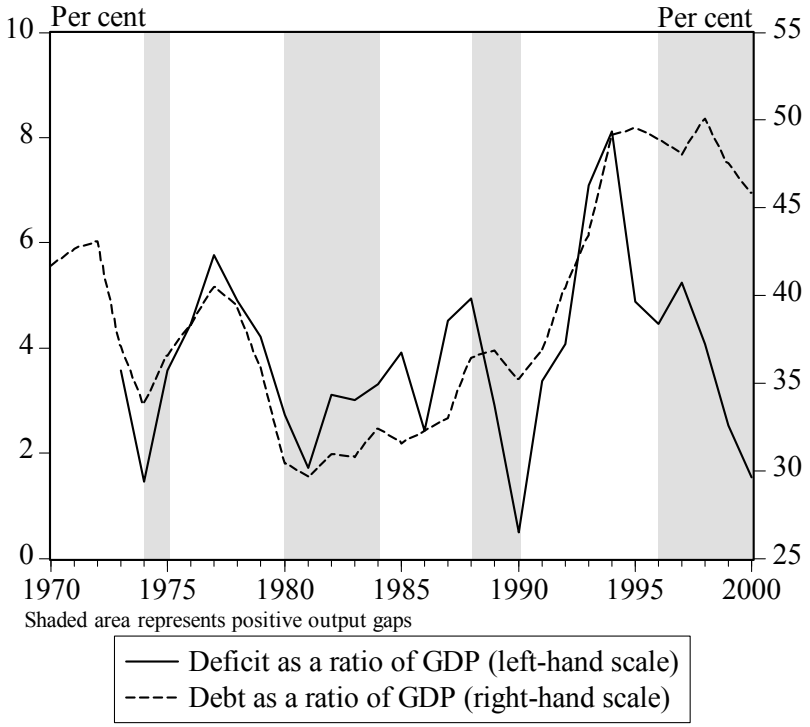
After several years of consolidation, fiscal policy in South Africa is now decidedly growth-orientated. The 2001 Budget paved the way for a growth-orientated fiscal policy stance of improved spending, significant increases in infrastructure allocations and ongoing tax reform, within the sound framework of fiscal management established over the last six years (South African National Treasury *Budget Review* 2001:1). The 2001 Budget had a renewed focus in public policy on microeconomic and structural reforms. The belief was that the series of growth-orientated microeconomic reforms would complement and sharpen the broader structural changes that have taken place in the economy. The 2002 and 2003 Budgets reinforced the growth-orientated stance of the 2001 Budget.

Figure 4.3 provides a graphic representation of the stabilisation efforts of the South African government. Countercyclical fiscal policy requires the government deficit and debt to increase during recessions and to decrease during booms. Figure 4.3 illustrates the various periods in which the government deficit and debt did not move countercyclically in South Africa. The deficit and debt responded more countercyclically during the latter half of the sample period. Moreover, the deficit performed better countercyclically during periods of positive output gaps, while the debt performed better countercyclically during periods of negative output gaps. It therefore appears that the South African government did not have much success in stabilising the South African economy over the years. Furthermore, an analysis of fiscal policy in this country shows little evidence of an explicit role defined for automatic fiscal stabilisers. To date no estimates have been published regarding the impact of automatic stabilisers on the budget and the business cycle in South Africa.

It should be remembered, however, that South Africa is a developing country with huge disparities in income and standards of living in general. Instead of stabilising the

business cycle, expenditure is dedicated towards addressing these social disparities. With regard to income tax (the largest tax component), average and marginal rates are highly progressive and much more room should exist for automatic stabilisation (the following chapters will explore these issues in more detail).

Figure 4.3 Deficit and debt during positive and negative output gaps



Source: South African Reserve Bank and own calculations

4.4 TRENDS IN GENERAL GOVERNMENT FINANCES

This section focuses on the magnitude and composition of government revenue and expenditure. A wide range of fiscal indicators is used to evaluate the overall fiscal situation, since no single indicator captures all the relevant information. Taking into consideration a range of them, helps to counterbalance the shortcomings of each single indicator. Moreover, the fiscal situation is assessed by looking at the evolution of the

indicators over a period of several years, since one year alone could give a distorted picture.

The general government sector in South Africa comprises the consolidated central[3] government, provincial governments and local authorities. Until 1993, the self-governing territories and four independent states (Transkei, Bophuthatswana, Venda and Ciskei) were treated as extra-budgetary accounts of the consolidated central government. These self-governing territories and independent states were phased out in 1994. The number of provinces was increased from four to nine and the operations of the self-governing territories and independent states were either transferred to the new provincial administrations or abolished. The debt of the former independent states was added to that of the consolidated central government based on section 239 of the 1993 constitution.

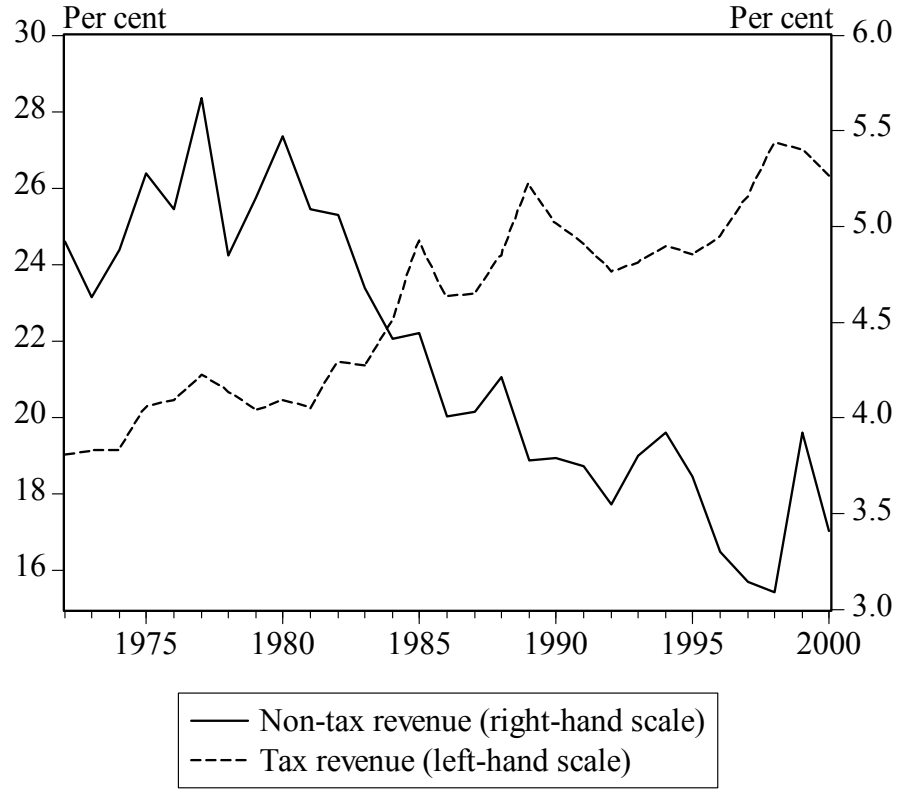
Receipts from own sources constituted a small portion of the revenue of self-governing territories and independent states. However, receipts from these taxes became part of national government revenue in 1995. Consequently, transfers from national government to the provincial administrations were increased correspondingly; to compensate for lost revenue and the devolution of further functions to provinces associated with the implementation of the 1993 constitution. As from 1997 onwards, domestic debt data include part of Namibia's debt, guaranteed by South Africa before Namibia's independence and subsequently incorporated in that of South Africa.

4.4.1 Government revenue

On average, tax revenue accounts for about 83 per cent of total consolidated general government revenue in South Africa during the period fiscal 1972/73 to fiscal 2000/2001. As illustrated in Figure 4.4, tax revenue became increasingly important towards the end of the sample period, while the opposite holds for non-tax revenue.

[3] Comprising the national government, extra-budgetary institutions and social security funds.

Figure 4.4 Consolidated general government tax and non-tax revenue as a ratio of gross domestic product



Source: South African Reserve Bank and own calculations

Taxes on net income and profits and domestic taxes on goods and services are the most important categories of direct and indirect tax revenues respectively. From Table 4.1 it is clear that direct taxes are the main source of South African revenue, averaging 54,4 per cent of total tax revenue over the sample period. Indirect tax as a ratio of total tax revenue reached a maximum of 51,9 per cent in fiscal 1993/94, before declining to 46,8 per cent in fiscal 2000/01. As a ratio of gross domestic product, the highest value of 12,9 per cent was recorded in fiscal 1989/90. This was the result of stronger collections from taxes on goods and services. The improvement in the ratios of direct tax revenue and total tax revenue to gross domestic product during the last three fiscal years can partly be

ascribed to better management and the implementation of more efficient practices and procedures by the South African Revenue Service (South African Reserve Bank *Annual Economic Report* 2000:84).

Table 4.1 Components of consolidated general government tax revenue

Fiscal years	Direct Tax			Indirect tax			Total tax	
	R billions	% Total	% GDP	R billions	% Total	% GDP	R billions	% GDP
1972/73	1.9	59.4	11.4	1.3	40.6	7.6	3.2	19.0
1973/74	2.5	62.5	12.0	1.5	37.5	7.1	4.0	19.1
1974/75	3.1	64.6	12.8	1.6	33.3	6.3	4.8	19.2
1975/76	3.6	63.9	13.0	2.0	36.1	7.3	5.7	20.3
1976/77	4.0	61.9	12.7	2.5	38.1	7.8	6.5	20.5
1977/78	4.4	58.5	12.4	3.0	41.5	8.8	7.4	21.1
1978/79	4.8	55.6	11.5	3.8	44.4	9.2	8.6	20.7
1979/80	5.8	57.1	11.5	4.4	42.9	8.7	10.2	20.2
1980/81	8.1	60.7	12.4	5.2	39.3	8.0	13.4	20.5
1981/82	8.6	57.1	11.6	6.5	42.9	8.7	15.1	20.2
1982/83	10.1	55.3	11.9	8.2	44.7	9.6	18.3	21.5
1983/84	11.7	55.7	11.9	9.3	44.3	9.52	20.9	21.4
1984/85	14.0	54.2	12.2	11.8	45.8	10.3	25.8	22.5
1985/86	18.0	55.5	13.7	14.3	44.2	10.9	32.3	24.6
1986/87	19.8	54.9	12.7	16.7	45.1	10.4	36.1	23.2
1987/88	22.2	52.5	12.2	20.1	47.5	11.0	42.3	23.3
1988/89	26.7	50.3	12.2	26.5	49.8	12.1	53.2	24.2
1989/90	34.3	50.5	13.2	33.7	49.6	12.9	68.0	26.1
1990/91	39.4	52.5	13.2	35.7	47.5	11.9	75.2	25.1
1991/92	44.2	52.4	12.9	40.1	47.6	11.7	84.3	24.5
1992/93	47.7	52.4	12.5	43.4	47.6	11.3	91.1	23.8
1993/94	51.1	48.1	11.6	55.2	51.9	12.5	106.4	24.1
1994/95	61.6	50.6	12.4	60.1	49.4	12.1	121.8	24.5
1995/96	68.6	50.2	12.2	68.2	49.9	12.1	136.8	24.3
1996/97	83.1	52.9	13.1	74.1	47.1	11.7	157.3	24.8
1997/98	95.3	52.9	13.6	85.0	47.1	12.2	180.3	25.8
1998/99	108.6	53.1	14.4	95.9	46.9	12.7	204.5	27.2
1999/00	116.5	52.7	14.2	104.8	47.4	12.8	221.2	27.0
2000/01	127.9	53.2	14.0	112.3	46.8	12.3	240.2	26.3
Source: South African Reserve Bank								

Table 4.2 Consolidated general government tax revenue, share of total revenue

Per cent

Fiscal years	Taxes on net income and profits	Taxes on property	Taxes on goods and services	Taxes on international trade and transactions	Other taxes	Social security contributions	Taxes on payroll	Total tax revenue
1972/73	45.1	7.2	17.6	3.8	3.6	1.0	0.2	78.4
1973/74	48.1	6.6	15.8	3.9	3.7	1.0	0.2	79.3
1974/75	50.6	5.9	13.5	4.2	3.1	1.1	0.3	78.5
1975/76	49.4	5.5	15.3	4.3	2.7	1.0	0.2	78.5
1976/77	48.2	5.6	17.3	3.9	3.0	1.0	0.2	79.1
1977/78	44.8	5.6	17.1	6.4	2.8	0.9	0.1	77.6
1978/79	43.8	5.3	20.8	5.9	2.8	1.1	0.1	79.8
1979/80	44.3	5.4	21.1	4.1	2.6	1.0	0.1	78.6
1980/81	46.8	4.9	19.9	2.7	2.4	1.0	0.1	77.8
1981/82	44.6	5.1	21.8	3.7	2.6	0.9	0.1	78.8
1982/83	43.6	5.0	23.3	4.2	2.5	1.0	0.1	79.8
1983/84	44.5	5.6	24.1	2.7	2.7	1.0	0.2	80.9
1984/85	43.6	4.9	27.2	2.1	2.5	1.0	0.2	81.4
1985/86	45.9	4.3	27.2	2.5	2.3	1.0	0.2	83.3
1986/87	45.9	4.7	27.0	3.3	2.2	1.3	0.1	84.5
1987/88	44.0	5.4	27.9	3.2	2.2	1.7	0.1	84.5
1988/89	42.2	4.9	28.8	5.1	2.0	1.5	0.0	84.5
1989/90	43.8	4.9	30.2	4.6	2.1	1.5	0.0	87.0
1990/91	45.2	5.0	29.6	3.2	2.1	1.5	0.0	86.5
1991/92	45.2	5.5	28.6	3.6	1.8	1.7	0.0	86.4
1992/93	45.2	6.0	28.1	3.6	1.7	1.8	0.0	86.5
1993/94	41.2	6.2	31.6	3.7	1.6	1.7	0.0	86.0
1994/95	43.3	6.0	30.0	3.4	1.6	1.6	0.0	86.0
1995/96	43.2	6.0	30.9	3.6	1.0	1.8	0.0	86.4
1996/97	46.4	4.7	31.0	3.4	0.7	1.9	0.0	88.1
1997/98	46.9	4.6	31.1	2.3	2.3	1.9	0.0	89.0
1998/99	47.5	5.7	30.3	2.4	2.0	1.8	0.0	89.6
1999/00	45.7	5.7	29.8	2.3	1.9	1.7	0.0	87.1
2000/01	46.5	5.0	30.4	2.7	1.9	1.6	0.5	88.5

Source: South African Reserve Bank

Table 4.2 indicates that taxes on net income and profits are the main source of consolidated general government revenue. During fiscal 1974/75, more than half of total revenue could be ascribed to taxes on net income and profits. This ratio decreased slightly to the lowest value of 41,2 per cent in fiscal 1993/94, before increasing again to 46,5 per cent in fiscal 2000/01. Over time, the tax burden has shifted away from mines and corporations towards individuals. The share of taxes on goods and services increased noticeably from below 20 per cent at the beginning of the sample period to 30,4 per cent

at the end of the sample period. Taxes on international trade and transactions increased in nominal terms after South Africa's reintroduction to international markets. Social security contributions also increased noticeably since the latter half of the sample period.

4.4.2 Government expenditure

From Table 4.3, a number of conclusions may be drawn as to the likely pattern of consolidated general government expenditure over the sample period. Expenditure on goods and services accounts for the largest share of consolidated general government expenditure in South Africa. Over the sample period, an average of 12,0 per cent of total consolidated general government expenditure was spent on servicing state debt cost. Interest payments have increased in relative importance over the years. This is because both interest rates and the size of government debt have grown. Interest payments as a ratio of gross domestic product reached an all-time high level of 6,0 per cent in fiscal 1998/99, representing 19,9 per cent and 18,1 per cent of consolidated general government current and total expenditure, respectively. Since fiscal 1998/99, interest payments of the consolidated general government as a ratio of GDP entered a downward phase, decreasing to 5,7 per cent in fiscal 1999/2000 and further to 5,4 per cent in fiscal 2001/02. The downward trend in interest payments relative to GDP can be ascribed to the steady reduction in the budget deficit since 1992/93, lower interest rates in recent years and an increase in the anticipated proceeds from state asset restructuring.

Current expenditure (83,5 per cent of total expenditure on average) outweighs capital expenditure by far. Since fiscal 1996/97, there has been a continuous decline in general government expenditure as a ratio of gross domestic product. This ratio (which averaged 30,8 per cent over the sample period) declined from 34,0 per cent in fiscal 1996/97, to 31,4 per cent in fiscal 2000/01, after reaching a maximum value of 37,0 per cent in fiscal 1993/94. National government expenditure averaged 45,1 per cent of total general government expenditure over the sample period. The role of the provincial governments, however, became increasingly more important since fiscal 1995/96. As a result, the average contribution of national government (provincial governments) for the last six

years was 40,1 (38,7) per cent. The contributions of extra-budgetary institutions and local authorities are more or less of equal size.

Table 4.3 Consolidated general government expenditure in South Africa, fiscal 1972/73 to 2000/2001

Expenditure components as a ratio of GDP							
	Goods and services	**Interest payments**	**Subsidies and other current transfers**	**Current**	**Current primary**	**Capital**	**Total**
Low	13.3	1.8	2.7	17.9	16.0	2.9	23.9
High	20.7	6.0	6.5	31.8	26.9	8.0	37.0
Average	17.7	3.8	4.4	25.9	22.1	4.9	30.8
Expenditure components as a ratio of total expenditure							
	Goods and services	**Interest payments**	**Subsidies and other current transfers**	**Current**	**Current primary**	**Capital**	
Low	51.4	7.2	11.2	70.0	62.8	8,7	
High	63.1	18.1	16.6	91.3	76.0	30.0	
Average	57.4	12.0	14.1	83.5	71.5	16.5	
Contributions of levels of government							
	National government	**Extra-budgetary institutions**	**Social security funds**	**Provincial governments**	**Local authorities**		
Low	37.7	8.1	0.9	21.4	9.7		
High	55.6	20.6	2.6	40.4	20.6		
Average	45.1	13.9	1.5	27.4	13.8		
Source: South African Reserve Bank and own calculations							

The health of an economy depends not only on how much the government spends, but also on how it spends its resources. A close reflection of the allocation of taxpayers' money is illustrated in Table 4.4. The consolidated general government continued to spend the bulk of its expenditure on education services over the sample period. Other important expenditure functions are interest payments, expenditure on defence services and health expenditure.

Table 4.4 Functional classification of consolidated general government expenditure, fiscal 1982/83 to fiscal 2000/2001

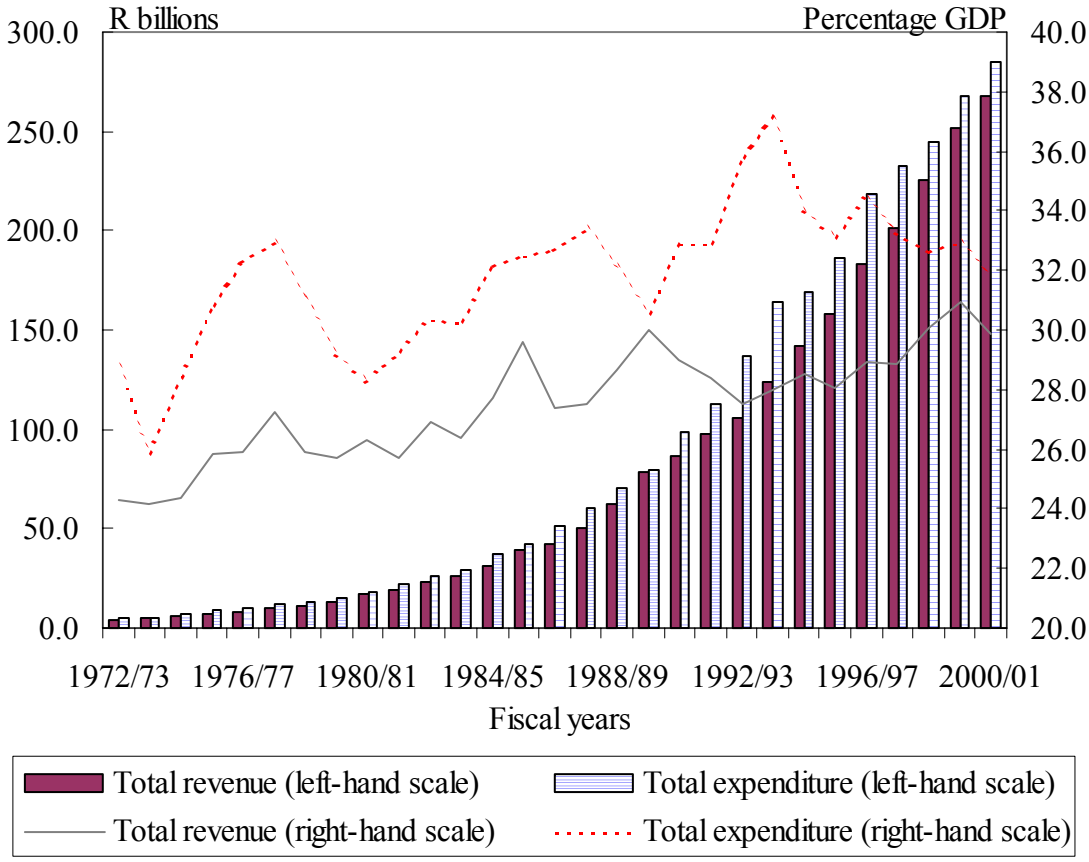
	Minimum	Maximum	Average
General public services	8.1	12.7	9.4
Defence	4.5	14.2	9.6
Public order and safety	5.5	10.0	7.7
Education	17.1	22.0	19.3
Health	8.9	10.3	9.6
Social security and welfare	5.9	13.0	8.2
Housing and community services	2.8	5.6	4.0
Recreation and culture	1.2	1.7	1.5
Environmental protection	1.9	2.2	2.1
Fuel and energy	0.2	4.5	0.7
Agriculture, forestry and fishing	1.4	4.4	2.8
Mining, manufacturing and construction	0.6	3.7	2.1
Transportation and communication	4.6	10.1	6.2
Other economic services	1.5	3.5	2.4
Interest	12.4	17.3	14.2
Other	0.9	6.2	2.1
Source: South African Reserve Bank			

Social security and welfare provision, on average, absorbs about 8,2 per cent of consolidated general government expenditure. According to Katz (1994:130), social grants account for about a fifth of the reported disposable incomes of the poorest 40 per cent of South African households. The largest and most important item in this category is the old-age pension payable, based on means test, to women and men who have reached the ages of 60 and 65, respectively. Social security funds, of which the Unemployment Insurance Fund (UIF) is the most important, only comprise a small portion of the income and expenditure flows of the consolidated general government. On average, UI benefits represent only 0,2 per cent of gross domestic product and 0,7 per cent of total consolidated general government expenditure. For the last ten years, however, the average ratio of UI benefits to gross domestic product (total expenditure) was 0,4 (1,1) per cent. UI contributions as a ratio of gross domestic product (general government revenue) averaged 0,2 (0,8) per cent. The corresponding ratios for the last ten years were 0,3 (1,2) per cent.

4.4.3 Government balances

Figure 4.5 portrays the trends in general government revenue, expenditure and the deficit over the sample period. Total revenue increased at an average year-on-year growth rate of 16,4 per cent over the sample period. The corresponding rate in total expenditure is 16,2 per cent. The largest deficit was recorded in fiscal 1993/94 due to strong growth in expenditure. Since then, the general government seems to have brought their expenditure under control, leading the deficit towards a downward trend towards the end of fiscal 2000/01.

Figure 4.5 Total consolidated general government revenue and expenditure

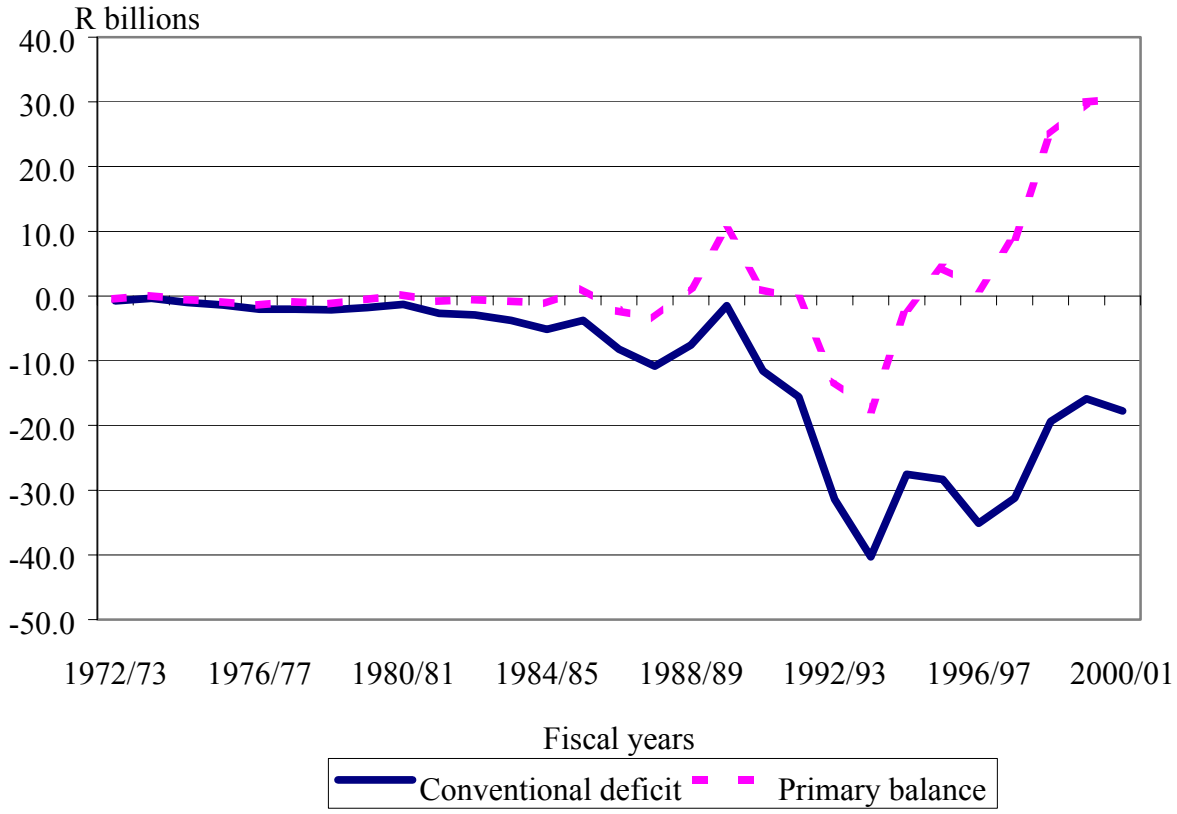


Source: South African Reserve Bank and own calculations

A graphic representation of the consolidated general government balances (Figure 4.6) shows that the conventional consolidated general government deficit deteriorated to R40,3 billion or 9,1 per cent of gross domestic product in fiscal 1993/94, before the financial position improved to a deficit of R14,1 billion or 1,6 per cent of gross domestic product in fiscal 2000/01. Over the same period, the primary balance (revenue less non-interest expenditure) followed the same trend by improving from a deficit of R17,5 billion or 4,0 per cent of gross domestic product to a surplus of R35,0 billion or 3,8 per cent. The widening gap between the conventional deficit and the primary deficit towards the end of the sample period reflects increasing interest payments on the government's accumulated debt. The steady decline in the general government borrowing requirement

as a ratio of GDP since the all-time high of 9,1 per cent in fiscal 1993/94 is consistent with government's stated objective of decreasing its direct involvement in the economy.

Figure 4.6 Consolidated general government balances

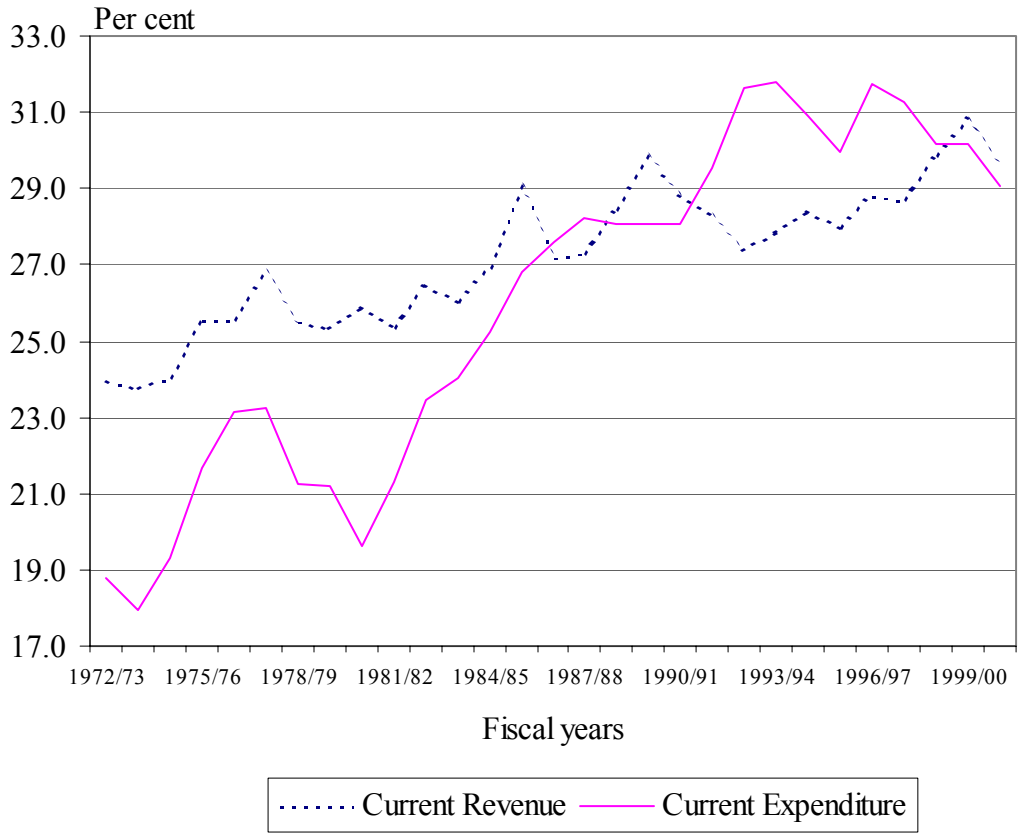


Source: South African Reserve Bank and own calculations

By looking at Figure 4.7, five phases can be identified. The periods 1972/73 to 1985/86, 1988/89 to 1990/91 and 1999/00 to 2000/01 (where current revenue exceeded current expenditure) represent periods of general government saving, while the periods 1986/87 to 1987/88 and 1991/92 to 1998/99 (where current expenditure exceeded current revenue) represent periods of dissaving. The figure also clearly illustrates the stronger growth in current expenditure as a ratio of gross domestic product compared to the same ratio in current revenue. However, it seems that the general government has brought its current expenditure under control since fiscal 1997/98, as is reflected in its ratio to gross

domestic product. Spending containment and solid growth in current revenue were the main factors responsible for the decline in the dissaving ratio of general government (South African Reserve Bank *Annual Economic Report* 1999:44).

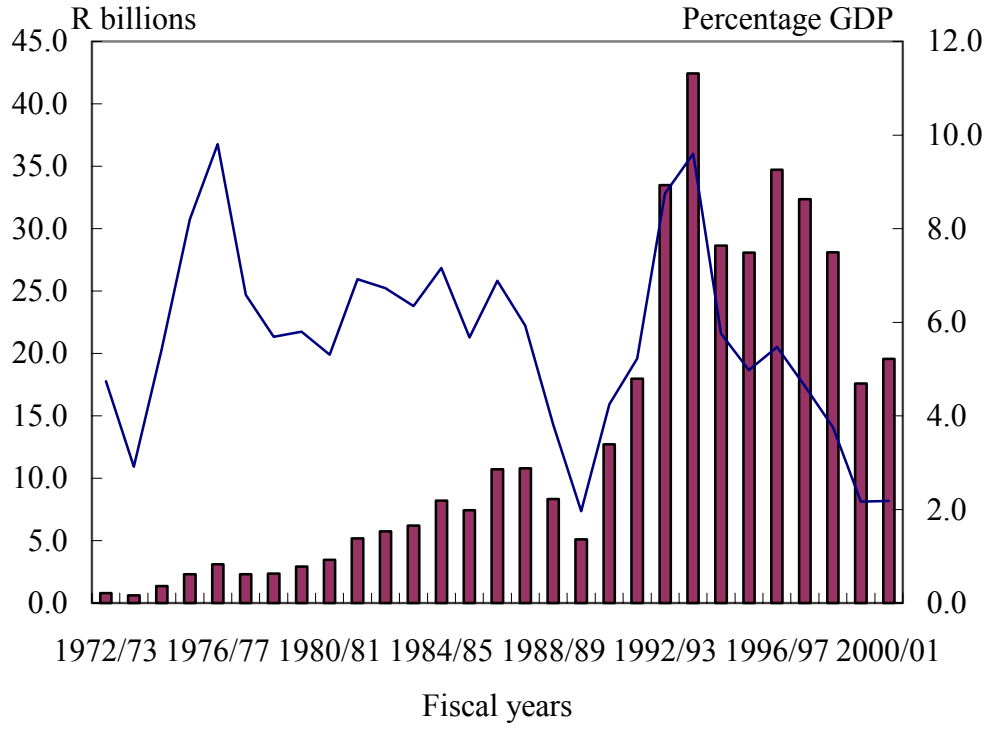
Figure 4.7 Consolidated general government current revenue and expenditure as a ratio of GDP



Source: South African Reserve Bank and own calculations

Figure 4.8 indicates that the trend in the non-financial public sector borrowing requirement followed more or less the same pattern as the borrowing requirement of general government, amounting to record levels in fiscal 1993/94, before declining to much lower levels in fiscal 2000/01.

Figure 4.8 Non-financial public sector borrowing requirement



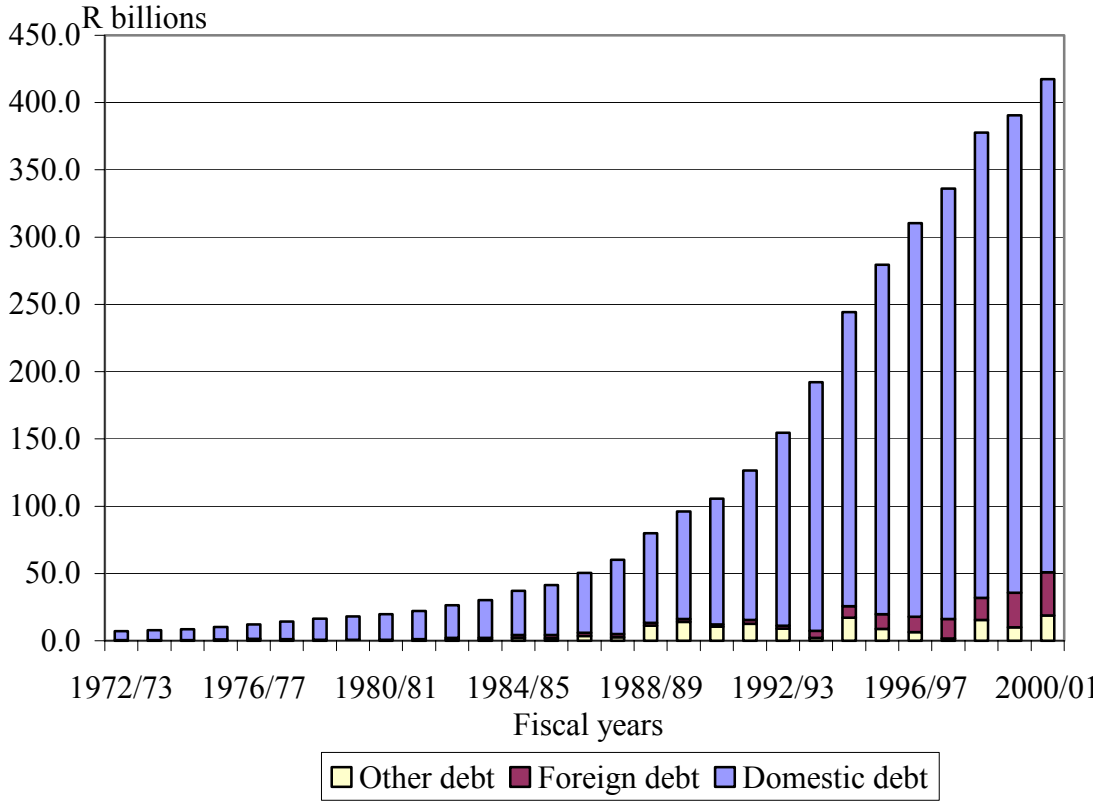
Source: South African Reserve Bank and own calculations

4.4.4 Government debt

Figure 4.9 illustrates the total debt of national government. National government debt increased significantly from R7,2 billion or 43,1 per cent of gross domestic product in fiscal 1972/73 to R377,7 billion or 50,2 per cent of gross domestic product in fiscal 1998/99, before declining to 45,7 per cent of gross domestic product in fiscal 2000/01. Although foreign debt constitutes only a small portion of total debt, it became increasingly important since fiscal 1994/95, after South Africa's reintroduction to the global economy. The irregular contribution of other debt to total debt can be ascribed to losses made on the gold and foreign exchange contingency reserve account. The ratio of national government debt to GDP increased only slightly from the end of fiscal 1994/95, and the increase was almost entirely due to losses incurred through the provision of cover

against exchange-rate risk by the South African Reserve Bank (South African Reserve Bank *Annual Economic Report* 1999:3).

Figure 4.9 Total debt of national government



Source: South African Reserve Bank and own calculations

4.5 INTERNATIONAL COMPARISONS

Table 4.5 compares South Africa's central government finances with six other developing countries, namely Chile, India, Indonesia, Mauritius, Mexico and Romania. The comparison with international practice allows the judgement of how far South Africa may be below (or above) the "international norm". These countries were chosen on the basis of available government finance and output data that are essential for the empirical analysis that will follow in the next chapters. It must be pointed out, however, that

although the sample of developing countries chosen for this study represents at least one country from Asia, Europe and the Western Hemisphere, it might not be an accurate representation of all developing countries.

Excluding Romania, South Africa has the highest average revenue and expenditure to GDP ratios. South Africa's average revenue to GDP ratio (24,3 per cent) and expenditure to GDP ratio (28,8 per cent) are also well above the six-country averages of 21,5 per cent and 23,9 per cent, respectively. India has the lowest average balance to GDP ratio (-5,9 per cent), followed by South Africa (-4,5 per cent) and Mauritius (-4,4 per cent). South Africa's deficit to GDP ratio is nearly twice the size of the six-country average of –2,4 per cent. Chile and Romania, on average, recorded surpluses over the sample period. India has the lowest average revenue to GDP ratio, while Mexico has the lowest average expenditure to GDP ratio. Romania has the maximum average revenue, expenditure and balance to GDP ratios. South Africa's revenue, expenditure and balance to GDP ratios are on average very close to those of Mauritius.

Table 4.5 An international comparison of consolidated central government aggregates, 1972 to 2000

Country	Revenue to GDP ratio			Expenditure to GDP ratio			Balance to GDP ratio		
	Av.	Min.	Max.	Av.	Min.	Max.	Av.	Min.	Max.
South Africa	24.3	19.1	29.2	28.8	22.8	34.1	-4.5	-9.1	-0.2
Chile	23.0	13.2	30.0	22.8	17.8	28.9	0.2	-5.6	4.8
India	12.7	9.4	14.5	18.7	12.3	23.0	-5.9	-9.0	-2.9
Indonesia	17.6	12.4	22.5	18.8	14.7	24.4	-1.3	-3.8	2.2
Mauritius	22.7	16.8	25.2	27.1	19.5	36.1	-4.4	-13.9	0.9
Mexico	14.0	8.9	16.7	17.9	11.6	30.6	-3.9	-14.3	4.2
Romania	39.0	27.0	53.6	38.2	27.3	53.4	0.8	-4.7	8.2
Source: IMF, GFS CD-ROM (November 2002) and WEO Database (April 2003); and own calculations									

A comparison of South Africa's tax to GDP ratio with the six other developing countries is documented in Table 4.6. The results show that, on average, South Africa's tax to GDP ratio is much higher compared with the average for the other countries. With regard to the tax components, the average ratio of South Africa's taxes on net income and profits to GDP is much higher compared with the average for the other developing countries, while the ratio of taxes on international trade and transactions and the ratio of social security contributions to GDP are much lower than the six-country averages. Taxes on net income and profits are the most important tax revenue component in South Africa and Indonesia, while tax revenue in Chile, Mexico and India is mainly dependent on domestic taxes on goods and services. Social security taxes account for the bulk of Romania's tax revenue, while Mauritius relies mainly on taxes on international trade and transactions. In summary, the results show that South Africa's tax to GDP ratio is much higher compared to the other developing countries referred to, and that large discrepancies occur between the different countries with respect to the main source of tax revenue.

Table 4.7 compares the consolidated central government expenditure of South Africa in more detail with that of the six other developing countries. South Africa's expenditure on goods and services and total current expenditure as a ratio of GDP is much higher than the average for the six other selected developing countries, while South Africa's capital expenditure to GDP ratio is much lower. The most striking difference between South Africa and the six other developing countries is the fact that social security and welfare provision in the other developing countries (except for Indonesia) by far exceed that in South Africa. The average share of unemployment-related expenditure in total current primary expenditure in South Africa is 1,0 per cent, which is significantly below the average of 6,5 per cent for OECD countries as estimated by Van den Noord (2000:25). Capital expenditure is the most important expenditure category in Indonesia, while expenditure on goods and services accounts for the bulk of expenditure in South Africa, Mexico and Mauritius. Subsidies and other current transfers are the most important expenditure categories in Chile, India and Romania.

Table 4.6 A comparison of consolidated central government tax revenue, 1972 to 2000

		Taxes on net income and profits	Taxes on property	Taxes on goods and services	Taxes on inter-national trade and tran-sactions	Other taxes	Social security contri-butions	Taxes on payroll and work-force	Total
Tax revenue components as a ratio of GDP									
South Africa	**Low**	10.4	0.3	3.5	0.0	0.2	0.2	0.0	16.5
	High	14.7	0.6	9.2	2.5	0.4	0.5	0.1	26.6
	Average	12.8	0.4	7.1	0.5	0.3	0.4	0.0	22.0
Chile	**Low**	1.9	0.0	3.8	0.0	0.0	1.2	0.0	11.3
	High	5.0	1.4	11.2	2.0	2.0	4.9	0.0	22.5
	Average	3.5	0.2	9.1	0.8	1.1	2.2	0.0	17.9
Indonesia	**Low**	5.6	0.1	1.7	0.1	0.0	0.0	0.0	10.9
	High	16.3	0.5	6.1	1.6	0.2	0.5	0.0	19.4
	Average	10.6	0.2	3.4	0.7	0.1	0.1	0.0	15.6
India	**Low**	1.9	0.0	3.4	0.4	0.0	0.0	0.0	8.0
	High	3.6	0.1	5.0	4.1	0.7	0.0	0.0	11.0
	Average	2.4	0.1	4.5	2.1	0.0	0.0	0.0	9.8
Romania	**Low**	0.0	0.0	0.0	0.0	0.0	2.8	0.0	5.1
	High	12.8	0.0	11.2	1.7	1.1	11.0	5.1	33.0
	Average	3.5	0.0	3.1	0.5	0.2	6.6	2.1	15.1
Mexico	**Low**	3.0	0.0	3.0	0.5	0.1	1.5	0.0	8.1
	High	5.5	0.0	12.2	1.3	0.3	2.4	0.2	15.4
	Average	4.5	0.0	7.6	0.9	0.2	1.9	0.1	12.7
Mauritius	**Low**	2.0	0.7	3.0	1.0	0.0	0.0	0.0	16.0
	High	8.9	1.2	8.5	11.3	0.3	1.3	0.1	22.7
	Average	3.6	1.0	4.9	6.8	0.1	0.7	0.1	19.9
Tax revenue components as a ratio of total tax revenue									
South Africa	**Low**	50.6	1.4	18.6	1.8	0.7	2.3	0.0	
	High	67.6	3.6	39.6	9.5	2.3	1.3	0.6	
	Average	58.5	2.0	31.9	4.6	1.2	1.7	0.1	
Chile	**Low**	13.1	0.0	33.3	4.6	0.0	7.2	0.0	
	High	25.8	7.1	57.3	16.7	9.8	33.3	0.0	
	Average	19.3	1.3	50.9	10.6	5.9	12.3	0.0	
Indonesia	**Low**	50.9	0.3	9.1	2.7	0.0	0.0	0.0	
	High	84.1	3.2	37.5	21.7	1.2	6.6	0.0	
	Average	67.0	1.5	22.2	7.9	0.5	0.7	0.0	
India	**Low**	17.6	0.1	36.4	19.4	0.0	0.0	0.0	
	High	37.3	0.8	52.1	36.4	7.1	0.0	0.0	
	Average	24.5	0.6	45.6	29.0	0.3	0.0	0.0	
Romania	**Low**	0.0	0.0	0.0	0.0	0.0	25.5	0.0	
	High	44.4	0.0	37.7	7.0	4.4	59.1	44.0	
	Average	18.2	0.0	11.3	1.9	0.8	48.1	19.6	
Mexico	**Low**	25.3	0.0	35.2	3.6	0.3	10.5	0.0	
	High	43.5	0.4	79.4	15.0	2.5	21.0	1.9	
	Average	36.2	0.0	58.2	7.6	1.4	15.2	0.8	
Mauritius	**Low**	9.6	3.2	43.6	30.7	0.1	0.0	0.0	
	High	41.1	7.1	14.0	59.5	2.0	7.2	0.7	
	Average	18.3	5.1	24.9	47.6	0.4	3.6	0.2	

Source: IMF, GFS CD-ROM (November 2002) and WEO Database (April 2003); and own calculations

Table 4.7 A comparison of consolidated central government expenditure, 1972 to 2000

		Goods and services	Interest payments	Subsidies and other current transfers	Current	Current primary	Capital	Social[4] security and welfare	Total
Expenditure components as a ratio of GDP									
South Africa	**Low**	7.3	1.3	6.8	16.3	15.0	1.2	0.6	19.4
	High	16.5	5.8	16.9	30.6	25.5	4.2	1.2	32.6
	Average	11.5	3.5	9.6	24.6	21.2	2.7	1.0	27.3
Chile	**Low**	5.1	0.0	7.0	15.0	14.6	1.9	3.5	18.0
	High	12.3	2.6	18.1	28.0	27.6	8.0	12.6	30.0
	Average	7.6	1.1	11.0	19.8	18.6	3.2	7.6	22.9
Indonesia	**Low**	3.5	0.3	2.0	8.0	6.3	4.8	0.0	14.6
	High	7.2	3.9	7.9	15.4	11.5	12.0	1.1	23.3
	Average	4.8	1.6	3.8	10.2	8.6	8.0	0.2	18.2
India	**Low**	3.3	1.0	3.6	8.1	7.1	1.3		9.5
	High	4.8	4.8	7.4	15.6	11.9	2.4		17.4
	Average	3.9	2.9	6.2	13.0	10.1	1.7		14.7
Romania	**Low**	4.8	8.4	4.9	15.9	15.3	2.8	4.9	27.3
	High	15.4	24.9	10.6	36.5	36.3	17.9	10.6	53.4
	Average	10.2	14.9	7.6	26.3	25.1	9.1	7.6	38.2
Mexico	**Low**	3.5	0.8	2.2	7.6	6.8	1.6	2.0	10.7
	High	7.0	18.6	11.4	24.8	12.2	4.9	3.6	30.5
	Average	5.0	4.8	4.9	14.7	9.9	3.0	2.9	17.6
Mauritius	**Low**	9.4	2.7	3.4	14.6	12.8	2.6	2.7	18.1
	High	12.1	6.4	9.0	26.6	23.0	6.8	7.9	31.7
	Average	11.2	4.6	6.9	21.3	18.1	4.3	4.6	25.6
Expenditure components as a ratio of total expenditure									
South Africa	**Low**	24.3	6.0	23.2	83.9	74.3	4.0	1.8	
	High	55.2	19.2	53.6	96.0	79.9	16.1	4.2	
	Average	42.3	12.1	35.2	89.6	77.5	10.4	0.6	
Chile	**Low**	27.7	1.4	30.6	77.5	70.0	6.6	17.5	
	High	43.7	10.3	60.2	93.4	91.9	30.9	42.7	
	Average	32.8	5.0	48.2	85.9	81.0	14.1	33.0	
Indonesia	**Low**	17.7	1.5	12.5	46.9	35.1	23.6	0.0	
	High	40.4	19.2	39.5	76.4	67.2	51.7	7.2	
	Average	27.0	8.5	20.8	56.2	47.7	43.6	1.3	
India	**Low**	22.8	10.2	37.8	85.2	61.4	9.1		
	High	37.0	28.8	44.9	92.1	76.3	14.8		
	Average	27.0	19.2	41.9	88.1	68.9	12.0		
Romania	**Low**	11.3	0.0	20.3	55.1	53.9	8.0	10.4	
	High	37.8	13.5	58.9	92.0	91.0	44.4	31.5	
	Average	28.8	4.7	42.6	74.9	71.4	25.1	21.0	
Mexico	**Low**	16.5	7.5	14.7	69.3	28.1	9.1	7.0	
	High	43.3	60.8	52.2	91.3	76.3	32.0	27.4	
	Average	30.2	23.4	29.1	82.7	59.3	18.2	17.9	
Mauritius	**Low**	39.6	4.0	18.7	77.1	62.9	9.4	14.9	
	High	51.8	21.1	34.1	90.6	78.9	22.8	29.9	
	Average	44.2	12.5	26.6	83.3	70.8	16.7	18.0	

Source: IMF, GFS CD-ROM (November 2002) and WEO Database (April 2003); and own calculations

[4] Refers to the functional classification of government expenditure.

4.6 SYNOPSIS

This chapter highlights the main aspects regarding the South African business cycle, the trends in government finances and the fiscal policies pursued by the South African government, since these aspects impact directly on the size of automatic fiscal stabilisers.

Fiscal policy in South Africa during the 1970s and early 1980s centered around demand management, including frequent variations in the size of the national budget deficit in the interest of macroeconomic stability in the relationship between growth, inflation and the balance of payments. Since the mid 1980s the focus of South African budgetary policy has increasingly shifted from the earlier Keynesian emphasis on short-term stabilisation to the longer-term implications of the budget. After several years of consolidation, fiscal policy in South Africa is now decidedly growth-oriented. The 2000/2001 Budget entailed a growth-oriented fiscal policy stance of improved spending, significant increases in infrastructure allocations and ongoing tax reform, within the sound framework of fiscal management established over the last five years. The 2000/2001 Budget had a renewed focus on microeconomic and structural reforms.

A graphic representation of the government deficit and debt over the sample period shows that the South African government did not have much success in stabilising the South African economy. Furthermore, an analysis of fiscal policy in this country shows little evidence of an explicit role defined for automatic fiscal stabilisers. To date no estimates have been published by organisations or other authors regarding its impact on the budget and the economy at large.

This chapter also illustrates the course, strength and duration of the South African business cycle, with some explanation of the economic performance of the country during the period 1970 to 2000. The duration and momentum of some upswing and downswing phases are evident from fluctuations in real GDP growth and deviations from trend as measured by the output gap. The main macroeconomic events and developments that impacted on the South African business cycle include, amongst others, structural

economic reforms, the domestic political transition, weather conditions, international economic developments and labour market turmoil. The volatility in economic activity and the fact that some changes in the business cycle resulted from exogenous factors and exceptional circumstances, leave ample room for automatic fiscal stabilisers to smooth the cycle. In terms of government size and the revenue and expenditure structure, this chapter illustrates that the size of the South African government (in terms of revenue and expenditure to GDP ratios) exceeds that of some other developing countries, while tax revenue (and more specifically taxes on net income and profits) is the main source of revenue. However, social security and welfare provision in South Africa is much smaller compared to other developing countries. It can therefore be expected that automatic fiscal stabilisers in South Africa will be much stronger on the revenue side of the budget.

Although the South African government was successful in its objective of decreasing its direct involvement in the economy, as reflected in the downward trend in the budget deficit since fiscal 1993/94, these efforts could have had a destabilising impact on the economy as the consolidation efforts coincided with a period marked by negative and small positive output gaps.