

Business cycles in South Africa during the period 1981 to 1987

by B.E. van der Walt

Introduction

In previous studies of the business cycle in South Africa, as published in earlier issues of the Reserve Bank's *Quarterly Bulletin*, reference turning-points of the South African business cycle were determined for the period 1946 to 1981.¹ In this article, reference turning-points are determined, and the length of successive upward and downward phases of the business cycle are established for the years 1981 to 1987.

During this seven-year period far-reaching changes were experienced in South Africa in the social, political and economic spheres. Domestic events, and foreign perceptions of these events, during part of this period impinged on South Africa's international financial and trading relationships, affected business and consumer confidence and influenced propensities to spend, save and invest. The intensity of the recession in the industrialised countries during 1981-1982 and shifts and changes in the world economic environment (including the emergence of the international debt crisis in 1982, the restoration of relative price stability in the major industrialised countries mainly during the years from 1981 to 1984, and the rise of protectionism from approximately 1981) powerfully influenced the directions of world trade and the relative strength of demand for various countries' export commodities. In South Africa, output in certain areas and sectors of the economy was also affected at times by recurrent or persistent drought conditions and other natural disasters, and, especially in 1987, also showed the effects of more widespread and aggressive trade union activity.

On balance, these and other developments contributed to a perpetuation during the 1980s to date of the slowing-down of longer-term growth in the South African economy that had already begun to make itself felt from approximately 1975.² These developments also affected the nature and the general appearance – the "smoothness", the lengths and the amplitudes – of successive cycles in aggregate economic activity. References to the timing, nature and importance of these developments therefore form an essential part of the cyclical analysis conducted in this study.

The first section of this article contains an exposition of the methods employed in determining the phases and reference turning-points of the business cycle. The statistical results of these techniques as applied to time series for the period 1978 to 1987 are presented in the second section. A brief review is then given of economic developments during the upward and downward phases of the business cycle, and the final reference turning-points of the business cycle are determined in the third section. Finally, certain outstanding features of the South African business cycle during the period 1981-1987 are highlighted and compared with the business cycle in the major industrialised economies.

Methods used to determine the reference turning-points and to evaluate the phases of the business cycle³

Time is needed for cyclical movements to be spread, or diffused, over a wide range of economic processes. A typical business cycle expansion, for example, usually begins with increases in activity in only a few economic processes. As the expansion gathers momentum, more and more activities will display increases or accelerated increases. However, the number of processes showing rising activity levels usually will taper off many months before the expansion finally comes to an end.

Diffusion indices and composite economic indicators are used to record the changes in different economic activities and are, therefore, summary measures of the movements in the various component series. The reference turning-points of the business cycle are determined by the calculation and analysis of comprehensive historical and current diffusion indices and composite business cycle indicators. The diffusion indices calculated by the South African Reserve Bank are based on 330 seasonally adjusted time series.⁴ The selected

³ The methods employed are described in detail in Van der Walt, B.E.: "Indicators of business cycle changes in South Africa", South African Reserve Bank *Quarterly Bulletin*, March 1983 and Smit, D.J. and B.E. van der Walt, op. cit., 1982.

⁴ A diffusion index may be defined as a measure of dispersion of the increases in a number of time series as at a particular date. In general, two types of diffusion indices are used, namely, the historical and the current. In the case of the historical index, the turning-points of the cyclical component of each series are determined. The value of the index for a particular period is obtained by expressing the number of time series which increase during that period, as a percentage of the total number of time series considered. In addition to the total number of series which increase in a particular period, account is also taken of each series for which the cyclical component remained unchanged during that period.

The current diffusion index is calculated without determining specific turning-points. It is based on the actual change of individual time series from which the trend and seasonal components have been eliminated.

¹ Smit, D.J. and B.E. van der Walt: "Business cycles in South Africa during the post-war period, 1946 to 1968," South African Reserve Bank *Quarterly Bulletin*, September 1970; "Business cycles in South Africa during the period 1968 to 1972," South African Reserve Bank *Quarterly Bulletin*, June 1973; "Growth trends and business cycles in the South African economy, 1972 to 1981," South African Reserve Bank *Quarterly Bulletin*, June 1982.

² The average annual growth rate of real gross domestic product amounted to 4.9 per cent between 1946 and 1974, but slowed down to 1.8 per cent between 1974 and 1987.

series cover final and intermediate economic processes and quantities such as production, demand, income and employment in the different sectors of the economy as defined by the Standard Industrial Classification of All Economic Activities.⁵

As a result of sharp increases in prices – i.e. substantial inflation – during the period under review, the comprehensive aggregates, such as gross domestic product and expenditure, showed sustained positive growth in nominal terms. Although their growth rates naturally varied over time, no *decreases* were recorded in these aggregates during the period concerned. All series relating to production and demand were, therefore, analysed in constant prices or volume terms. However, since financial and price variables have an influence on or are affected by cyclical developments in the economy, they were also included in the diffusion index study.

The comprehensive historical and current diffusion indices were calculated by weighting the sectoral diffusion indices in accordance with the respective contributions of the various sectors to the value added in the generation of the real gross domestic product. In order to allow for shifts in the relative contributions of the various sectors over time, the weight assigned to a particular sector was calculated as the average of the relative contributions of that sector to the total product in the years during the two periods from 1978 to 1982 and from 1983 to 1987.

In identifying and evaluating cyclical changes in the economy, there are basically three dimensions of the business cycle that need to be analysed, namely, the diffusion of changes in activity, and the duration and the amplitude of the cycle. The first two elements are measured by the diffusion indices and business cycle indicators, while the intensity or extent of a cyclical movement is approximated by a recession-recovery analysis of national accounts data (comprehensive) and of important individual (cyclically sensitive) time series.⁶ Comparisons of changes in individual indicators are made over periods of recession and expansion of economic activity. The results are usually recorded in tables and shown graphically to facilitate the evaluation of the strength of a particular business cycle expansion (or recession) in terms of the most recent turning-point and relative to the magnitude of the recovery (or decline) over similar intervals from the starting points of preceding business cycle expansions (or recessions). The comparison of the behaviour of

several strategic economic activities in the course of the current and prior expansions (or recessions) makes it possible to evaluate current business cycle conditions, to establish differential characteristics of the current versus earlier cyclical movements, and to provide a guide to the future course of the current cyclical change.

Statistical results

The results of the methods employed show that clear cyclical movements occurred during the period 1978 to 1987 against a modest underlying growth in economic activity. The reference turning-point of the business cycle in 1981 which was determined in a previous study, was confirmed by the current statistical results. The present study will, therefore, focus only on the business cycle in the years from 1981.

The historical diffusion index

The weighted historical diffusion index shows a clear cyclical movement with its peaks and troughs leading the reference turning-points of the business cycle. According to this index a trough occurred in the business cycle in March 1983.⁷ Although a clear expansion of economic activity was recorded from the second quarter of 1983, rates of increase in economic activity towards the end of 1983 exceeded the long-term growth rates in these activities in only 60 per cent of the selected series, compared with a high point of more than 80 per cent in the course of the upward phase in 1978-1981. The main reasons for the relatively low value of the diffusion index were, firstly, that the cyclical expansion of activity in certain sectors was very low or even negative in this period – as in agriculture, construction and electricity generation – and, secondly, that the upward phase was of relatively short duration. The diffusion index remained above the 50 per cent level until mid-1984, indicating an upper turning-point of the business cycle in June 1984. In the following period economic activity declined and during the first half of 1985 the diffusion index reached levels similar to those in previous recessions.

The recovery in the second half of 1985 and the subsequent slow-down of economic activity during the first quarter of 1986 are clearly shown in the accompanying graph. According to the historical diffusion index, a lower turning-point of the business cycle occurred in March 1986; the general spread (or diffusion) of increases in various economic activities then widened again in the subsequent two quarters. Owing to declines in mining activity and a levelling-out of activity in the sectors agriculture, manufacturing,

⁵ With the exception of a few series which had to be replaced on account of changes in definitions or coverage (e.g., the monetary aggregates), the same economic time series were used in this study as in the previous one. The national accounts series included in the present study were revised following a change in the base year for these series from 1980 to 1985.

⁶ This method is described in Moore, G.H.: *Measuring Recessions*, National Bureau of Economic Research, New York, 1958.

⁷ Turning-points of the business cycle are held to have occurred in the month before the historical diffusion index reaches the 50 per cent level.

Graph 1 : Historical diffusion index



electricity generation and transport during the first half of 1987, the level of the diffusion index varied around 55 per cent during that period before resuming an upward movement, which brought it to a level of 64 per cent at the end of 1987.

The current diffusion index

The weighted current diffusion index declined during 1982 and reached a lower turning-point in March 1983. The deviation of the index from its long-term trend shows that economic activity accelerated from 1983 up to a peak in May 1984. In accordance with the short-term tendency in the coincident business cycle indicator and in the historical diffusion index, the cyclical component of the current diffusion index declined sharply from the second half of 1984 and reached a cyclical low in March 1986. The current rate of change in economic activity then rose sharply from the second quarter to the fourth quarter of 1986, but slowed down somewhat during the first three quarters of 1987 before resuming a more decisively upward trend in the fourth quarter.

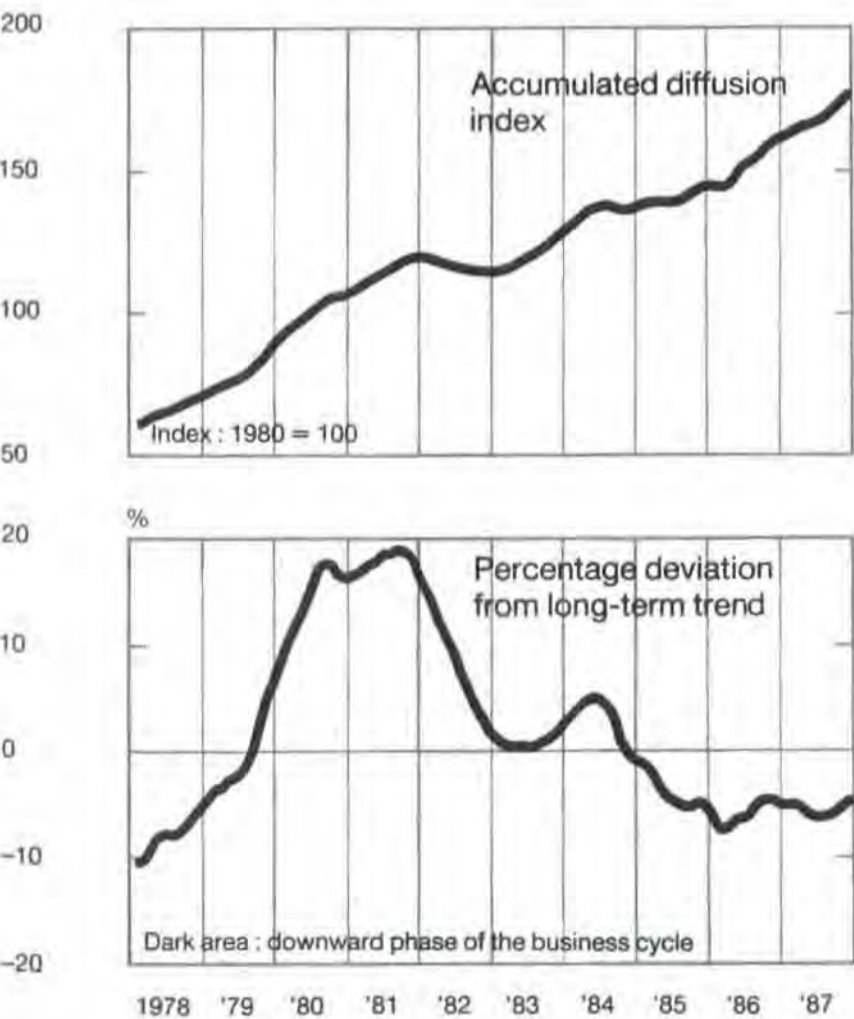
The composite business cycle indicators

The cyclical component of the *coincident* business cycle indicator reached a lower turning-point in March 1983. The upward phase of the cycle, which continued until June 1984, was of relatively short duration, but, measured at an annual rate, the expansion of economic activity during this period was nonetheless as vigorous as during the upward phase of the preceding business cycle from 1978 to 1981. The *leading* business cycle indicator – a composite of selected indicators reflecting activities that normally influence or foreshadow the future course of the economy in general – gave a clear warning of ensuing changes in the cycle in 1983-1984. This indicator reached a cyclical trough in July 1982 and a cyclical peak in June 1983, which preceded the corresponding lower and upper turning-points of the business cycle by 8 and 12 months, respectively.

The composite *coincident* business cycle indicator showed a sharp cyclical decline from the second half of 1984. The decline in this index was arrested temporarily in July 1985. The index then actually rose in the following three months before resuming its decline up to March 1986. Although it was clear that the economy had recovered in 1985, the recovery was not long or strong enough to be classified as a cyclical upward phase in its own right.

After reaching a lower turning-point in March 1985, the *leading* business cycle indicator rose moderately throughout the remainder of 1985. On the basis of its historical timing relationship to the business cycle, this behaviour of the leading indicator pointed to a lower turning-point in the business cycle somewhere in mid-1985, which corresponded to the short but insignificant

Graph 2 : Current diffusion index



recovery shown by the coincident business cycle indicator.

Major shocks were inflicted in 1985 and 1986 by various exogenous influences – notably by the then prevailing socio-political disturbances and by the introduction of the debt standstill and related arrangements – on economic activity in general and on the various components of the composite indicators in particular. As a result of these shocks, the leading index declined between December 1985 and April 1986 before resuming an upward trend during the remainder of 1986.

The cyclical component of the coincident business cycle indicator reached a trough in March 1986. As shown in the accompanying graph, the subsequent rise in the indicator from this lower turning-point suggested a continuation of the upward phase of the business cycle in the second half of 1986, during 1987 and into 1988.

Economic developments⁸ and final reference turning-points of the business cycle

Downward phase : September 1981 to March 1983

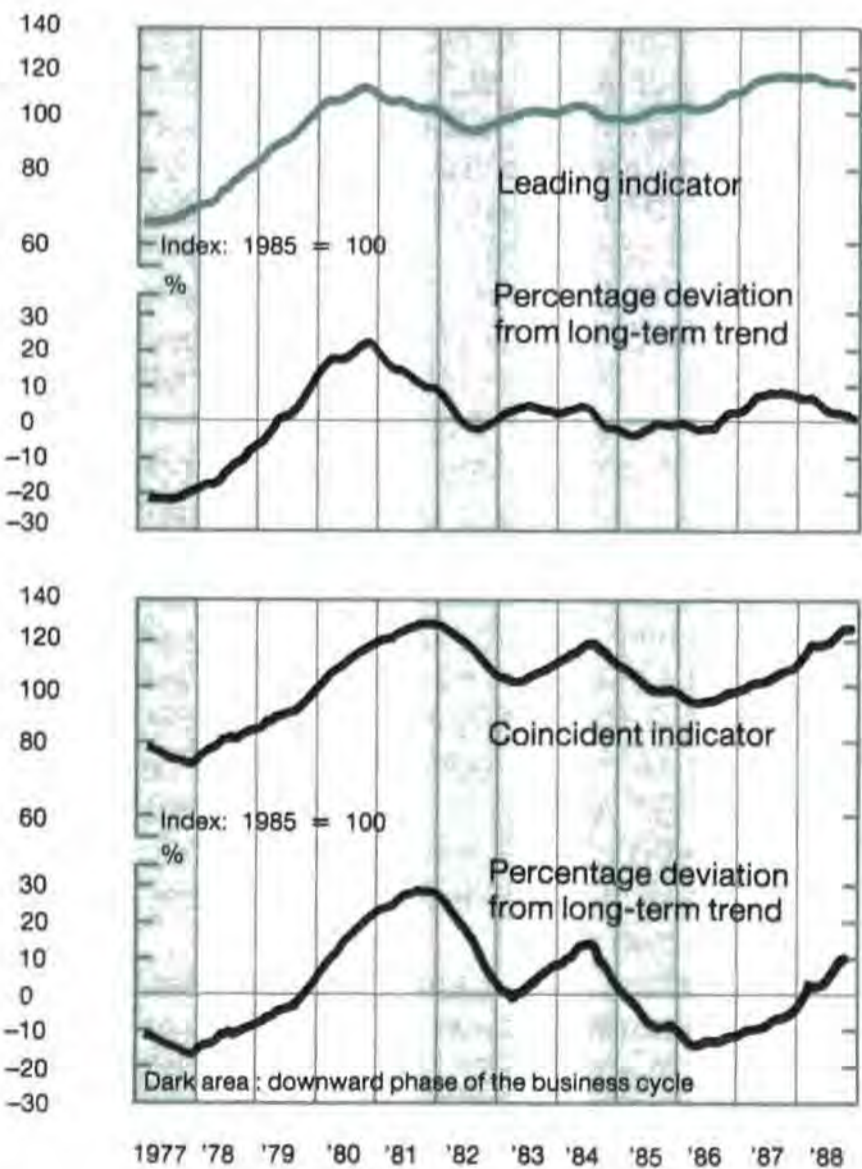
During the advanced stages of the upward phase of the business cycle that preceded this contraction (notably in 1980 and 1981), aggregate demand increased to such an extent that it exceeded the economy's production capabilities. This excessive monetary demand resulted in upward pressure on prices and costs and contributed to the increased deficit on the balance of payments current account. In addition, the South African economy in 1980 and 1981 was affected adversely by external forces, which included the prolonged recession in the industrialised countries from 1980 to 1982. The decline in demand in these countries was responsible for a sharp decrease in the volume of South African merchandise exports.

The effect of lower export volumes on the balance of payments was aggravated by sharp declines in the prices of gold and other export commodities. At a seasonally adjusted annual rate, the current account deficit increased sharply to R7,4 billion (10 per cent of gross domestic product) in the first quarter of 1982, before declining to R5,3 billion (7 per cent of gross domestic product) in the second quarter.

In order to contain the excess demand and its resultant inflationary pressures, and also to bring about the necessary balance of payments adjustment, the authorities pursued a fiscal and monetary policy of consolidation and adjustment in 1981 and 1982. In monetary policy the emphasis was on allowing a sharp rise to take place in interest rates in accordance with market forces. At the same time, the value of the rand was allowed to depreciate. Emphasis in fiscal policy was on restraining the growth in government expenditure.

The downward adjustment in the economy was intensified by the worst drought in many years. Real gross domestic product declined by 5,8 per cent from its peak in 1981 to the first quarter of 1983, the sharpest drop in any downswing period in the post-war period. This decrease in real output could be observed in virtually all the sectors of the economy, indicating widely dispersed recessionary conditions. In addition to a continued decline in the real demand for South African exports, real domestic spending decreased on account of a sharp decline in domestic

Graph 3 : Business cycle indicators



⁸ In this short review of economic developments reference will be made only to major developments, because extensive reviews of short-term economic developments and details of policy measures during the period under discussion have already been provided in the *Annual Economic Reports* and *Quarterly Bulletins* of the South African Reserve Bank, as well as in addresses by the Governor of the Reserve Bank at the Bank's annual general meetings of stockholders and at conferences during the years from 1981 to 1988.

fixed investment and inventories. The rate of growth in private consumption expenditure also slowed down in this phase.

The three statistical methods used in this study to determine the reference turning-points of the business cycle clearly show the downward phase of the economy from the fourth quarter of 1981. The cyclical components of the composite coincident business cycle indicator and of the current diffusion index reached lower turning-points in March 1983; this date was confirmed by the historical diffusion index. The specific turning-points of important individual output and demand indicators, such as real gross domestic product, the volume of manufacturing and non-gold mining output, the volume of wholesale, retail and new motor vehicle sales and the volume of imports, were clustered around the first quarter of 1983. These results suggest that the recession came to an end in the first quarter. March 1983 was accordingly selected as the final reference date of the cyclical trough.

Upward phase : April 1983 to June 1984

This upward phase of the business cycle – frequently referred to as the 1983-1984 mini-boom – originated from economic developments during the second half of 1982 and the first few months of 1983. These developments eventually created a set of circumstances normally associated with a recovery originating from external (international) demand. As a result of the international debt crisis, the gold price rose sharply during the second half of 1982 and the balance on the current account of the balance of payments was transformed into a surplus from the fourth quarter of 1982. The resulting increase in the net gold and other foreign reserves and a higher domestic savings ratio were important elements in bringing about a more favourable financial environment. Easier financial conditions, in turn, were conducive to a strengthening of consumer confidence and to a more optimistic business mood, which provided the initiating spark for a consumption-induced upswing in economic activity.

Private and government consumption expenditure rose sharply during this phase. As the economic recovery in the industrialised countries gained further momentum during 1983, exports also began to rise sharply and contributed to the buoyancy of the economy. Total real domestic output began to rise in the second quarter of 1983. By the second quarter of 1984 it had risen to a level that was 7,8 per cent higher than in the first quarter of the preceding year.⁹

⁹ Although this upward phase is now generally known as the mini-boom because of its short duration, the extent of the rise in output in this period was clearly not in a "mini" category. In fact, the rate of increase in real gross domestic product from the first quarter of 1983 to the second quarter of 1984 exceeded the rate of growth experienced over similar periods in all previous upward phases of the business cycle since 1960.

Towards the end of 1983 and early in 1984 it became clear that the rapid rise in domestic expenditure could not be sustained. The fairly strong upward thrust in the dollar price of gold came to an abrupt end in February 1983. During the ensuing period up to the beginning of 1985 the gold market remained weak and the average daily fixing price drifted downwards. The surplus on the current account of the balance of payments was transformed into a deficit from the fourth quarter of 1983; this, in turn, was reflected in a renewed decline in the effective exchange rate of the rand from October 1983 and in an acceleration of the rate of inflation. In addition to the external disequilibrium, the volume of agricultural output declined sharply in 1983-1984 as a result of extended drought conditions, mainly in the summer rainfall areas.

In his Budget Speech in March 1984 the Minister of Finance stressed the need for a temporary pause in the process of economic expansion in order to strengthen the balance of payments and to prevent a further acceleration of the inflation rate. Various policy measures were taken, firstly, to correct short-term imbalances, and secondly, to effect structural changes aimed at promoting sustainable growth over the longer term.

Monetary policy was tightened from mid-1983 and interest rates moved upward in response to the adverse extraneous developments and increased domestic demand for credit. The prime overdraft rate of the clearing banks, for example, rose from 15 per cent in June 1983 to 21 per cent in March 1984.

Mainly on account of a further sharp rise in government expenditure in the second quarter of 1984 – in direct contrast to the intentions of the Budget – it was announced in May that the general sales tax rate would be increased with effect from 1 July. This announcement, however, prompted consumers to increase their expenditure on consumer goods ahead of this date. As a result, a sharp increase in real outlays on durable consumer goods was recorded in the second quarter.

Stubbornly high domestic spending levels during the second quarter of 1984 caused the authorities to tighten their monetary policy stance further. The Reserve Bank's rediscount rate for Treasury bills of discount houses was raised to 18,75 per cent in July 1984 and to a record 21,75 per cent in August. In response to these actions, the clearing banks raised their prime overdraft rates to 25 per cent from the first week in August 1984.

The economy responded to these policy measures and real domestic demand and domestic output declined from the third quarter of 1984. The fairly general slow-down of activities in different economic processes was clearly reflected in the historical diffusion index, which reached levels equal to those in previous recessions. This index showed that the peak of the business cycle occurred in June 1984. The cyclical component of the coincident business cycle indicator

also reached a peak in June and the current diffusion index in May. Based on these observations, June 1984 was selected as the final reference date of the peak in the business cycle.

Downward phase : July 1984 to March 1986

During this period economic stability was adversely affected by international events and domestic socio-political developments. An analysis of real and financial economic variables shows that the 1984-1986 downswing can be divided in three sub-phases:

- (a) Following a relatively short but vigorous upswing in economic activity in the period 1983-1984, the *first phase* of the subsequent downswing from July 1984 to mid-1985 was an adjustment period in which the economic system reacted to the remedial policy measures that had been implemented to correct the short-term imbalances which had developed in the preceding cyclical upswing. Also on the basis of the economy's lagged response to corrective actions (such as increases in the level of interest rates) that had already been applied from as early as the second quarter of 1983, a major adjustment in the economy commenced almost instantaneously. This was reflected in a sharp decline in real domestic expenditure, and more particularly in real private consumption expenditure, in the third quarter of 1984. Real gross domestic expenditure continued to contract during the ensuing three quarters and by the second quarter of 1985 was 9,9 per cent lower than a year earlier. This decline in expenditure, which was the sharpest to be recorded in any comparable recession period since 1960 (see Table 2), also exerted a contractionary effect on real output and employment.

In terms of short-term objectives the adjustment in the economy during this phase succeeded in bringing about an improved balance of payments position.

- (b) The *second phase* was a low growth phase during the second half of 1985. Economic activity strengthened somewhat during this phase, and relatively greater economic stability was achieved. Real gross domestic product increased at annual rates of 0,3 per cent and 2,2 per cent in the third and the fourth quarter of 1985, respectively.

Substantially improved international competitiveness resulting from the depreciation of the rand, sustained economic expansion in major trading partner countries, and the ready availability of production resources contributed to a sustained growth of exports. The volume of agricultural and mining production, other than gold production,

also increased during this period. In addition, the dollar price of gold had been rising since February 1985. In view of the general absence of excess monetary demand, the underutilisation of production resources in the economy and the improved balance of payments position, monetary and fiscal policies during this sub-period were directed at increased growth of output and employment. Interest rates, for example, were allowed to decline from the second quarter of 1985 onward; the clearing banks' prime overdraft rate had been brought down to 16,5 per cent by the end of the year.

Non-economic factors, however, severely constrained this policy stance and put a damper on the underlying expansionary forces in the economy. Most important among these factors were the prevailing conditions of socio-political unrest, the consequent proclamation of a state of emergency in a number of magisterial districts in July 1985, and a pervasive sense of uncertainty and lack of confidence. These developments contributed to a marked deterioration of foreign perceptions of South Africa's socio-political stability and economic prospects. Foreign loans were withdrawn and credit facilities were terminated. Subsequently, economic sanctions and an intensified disinvestment campaign were launched against South Africa. The general feeling of uncertainty, a reluctance to take longer-term views, the marked cooling-down of the economy that had already taken place, and households' concern about prospects for employment and real earnings, strongly inhibited consumer expenditure and inducement to invest during this period.

- (c) The moderate recovery during the second half of 1985 did not build up sufficient self-sustaining momentum to neutralise the exogenous influences on the economy. As a result, real output, private consumption expenditure and investment in fixed assets and inventories contracted once again in the *third phase* of the 1984-1986 downswing, which covers the first few months of 1986. The volume of activity, in fact, decreased sharply, during this period as was reflected clearly in various economic indicators such as those for manufacturing output and for the volumes of manufacturing, wholesale, retail and motor trade and of merchandise imports. Real domestic product in the non-agricultural sectors declined by 1,1 per cent between the fourth quarter of 1985 and its lower turning-point in the first quarter of 1986.

According to both the historical and the current diffusion index and the composite coincident business cycle indicator a lower turning-point in the business cycle was reached in March 1986. Various business

cycle indicators recorded lower turning-points in either the first or the second quarter of 1986. On the basis of the available information, March 1986 was, therefore, selected as the reference date of the cyclical trough.

A profile of the South African business cycle during the period 1981 to 1987

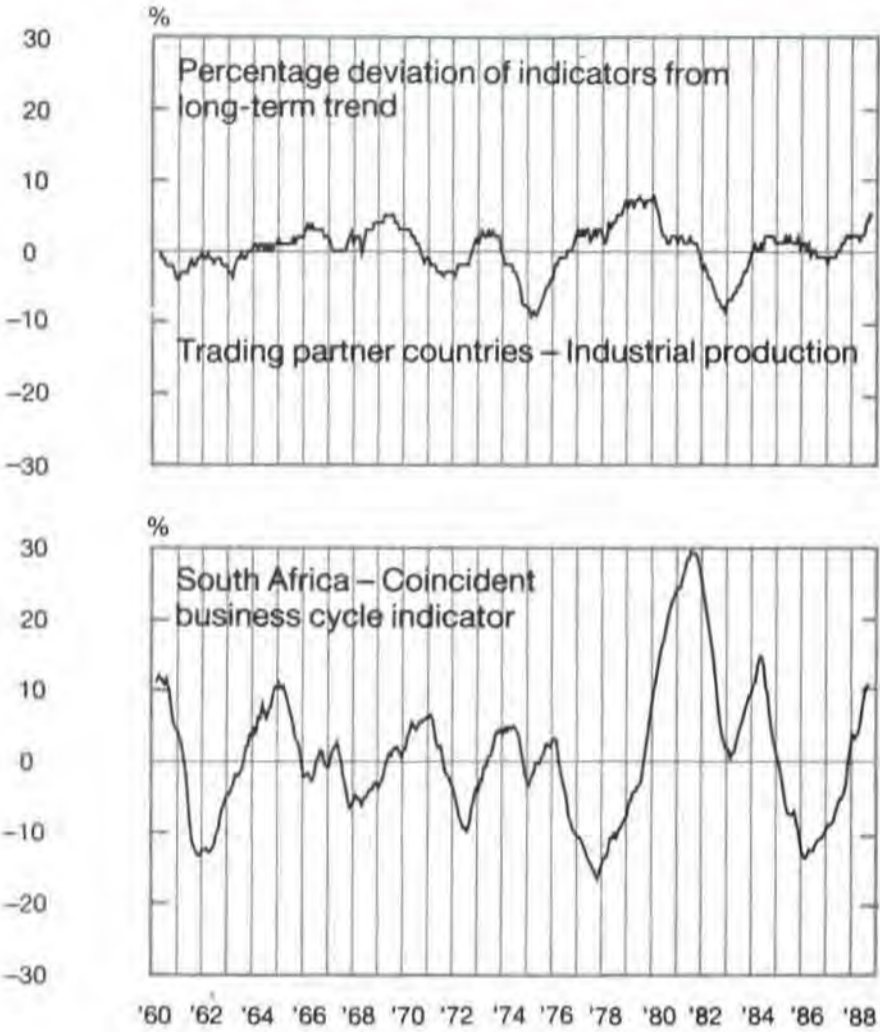
The dynamic unfolding of the South African economy during the period under review did not proceed smoothly, but was characterised by alternate periods of prosperity and recession. These developments, however, were not unique to South Africa, but were also a major feature of the economies of most industrialised countries. Owing to the relative "openness" of the South African economy, it could not isolate itself from cyclical developments in trading partner countries. In addition to the effect of domestic factors, the instability of international economic developments consequently also had an impact on the course of the business cycle in South Africa. With the exception of the sharp cyclical downturn of 1984-1986, most cyclical changes in South Africa followed the business cycle of the industrialised countries with some time-lag.

During the period 1981 to 1987 the South African economy experienced two downward phases and two upward phases: a downward phase from September 1981 to March 1983, an upward phase from April 1983 to June 1984, a downward phase from July 1984 to March 1986, and an upswing in economic activity in the subsequent period.

The average durations or lengths of the upward and downward phases of the business cycle in South Africa during the period from 1960 up to the lower turning-point of March 1986 were 30 months and 19 months, respectively. As a matter of fact, the average duration of the phases of the business cycle in South Africa's principal trading partner countries was about the same over this period. The average durations of the upward and downward phases in these countries were 31 months and 20 months, respectively. The duration of the upward phase in the South African economy of 1983-1984 was 15 months, which was only half as long as the average length of all earlier upward phases since 1960. The duration of the downward phase in 1981-1983 was 19 months and that of the downward phase in 1984-1986, 21 months, which was slightly longer than the average length of downswings during the years from 1960 to 1986. It is also clear from Table 3 that the duration of most recession phases in South Africa as well as in trading partner countries has lengthened since the 1970s.

The increased amplitude of cyclical movements during the past decade, as shown in Graph 4, similarly was not unique to South Africa, but was, in fact, an international phenomenon. The recession in the industrial world of 1980-1982 was one of the most severe to

Graph 4 : Business cycle indicators



be recorded in this century, both as regards its duration and the extent of change. This economic instability was transmitted to South Africa and other countries of the world. The relatively short duration of the subsequent recovery and the slow-down of growth in economic activity in the industrialised countries which was recorded thereafter, were also reflected in the more modest rates of growth in total real output in these countries during the period under review. In order to evaluate the relative intensity of economic change during the various phases of the cycle in the period 1981-1987, the changes in real demand and

Table 1 Average annual percentage change in real GNP/GDP¹ in South Africa and trading partner countries²

	1960-1987	1960-1970	1971-1980
Trading partner countries	3,6	4,8	3,2
South Africa	3,7	5,8	3,4

¹ Trading partner countries: product valued at 1980 prices and 1982 exchange rates. South Africa: product valued at 1985 prices.
² USA, UK, West Germany, France, Italy, Canada and Japan.

Table 2 **Business cycle phase comparisons**

The status of the recession or recovery in economic activity between two and eight quarters from the reference turning points during 1960 – 1987

Expenditure on gross domestic product at constant 1985 prices	Date of peak	Percentage change from reference peak to period end ¹				Date of trough	Percentage change from reference trough to period end ¹			
		2 quarters	4 quarters	6 quarters	8 quarters		2 quarters	4 quarters	6 quarters	8 quarters
1. Private consumption expenditure	Average '60 – 72	2,1	4,5	6,9		Average '60 – 74	2,0	6,1	7,4	12,3
	3qr 1974	-0,8	4,8	5,3	-4,0	4qr 1977	3,0	0,7	3,4	6,0
	3qr 1981	0,9	0,7	1,6		1qr 1983	3,1	6,2		
	2qr 1984	-5,9	-8,2	-7,0	-7,1	1qr 1986	1,9	3,4	5,7	8,2
2. Consumption expenditure by general government	Average '60 – 72	1,7	6,1	6,9		Average '60 – 74	3,8	5,9	10,6	14,5
	3qr 1974	2,5	12,7	16,7	17,8	4qr 1977	-5,1	1,0	1,0	8,2
	3qr 1981	9,3	2,9	3,1		1qr 1983	5,0	5,4		
	2qr 1984	-0,8	-1,0	0,8	8,8	1qr 1986	-1,4	5,3	0,3	10,3
3. Gross domestic fixed investment	Average '60 – 72	5,3	5,6	6,0		Average '60 – 74	-3,3	0,5	7,3	10,8
	3qr 1974	0,4	10,8	8,1	3,1	4qr 1977	2,0	5,0	-0,3	5,4
	3qr 1981	0,0	-4,9	-9,7		1qr 1983	-3,1	-0,8		
	2qr 1984	-2,0	-5,9	-11,6	-24,2	1qr 1986	0,3	-2,2	-5,5	-0,2
4. Change in Inventories ²	Average '60 – 72	-2 061	-5 659	-5 837		Average '60 – 74	-1 101	1 191	3 580	3 935
	3qr 1974	-2 065	-5 694	-10 596	-11 507	4qr 1977	-2 226	1 506	6 804	10 167
	3qr 1981	-2 745	-10 602	-7 276		1qr 1983	-2 064	-1 869		
	2qr 1984	-3 519	-5 818	-8 149	-4 919	1qr 1986	-2 084	-1 404	1 738	1 508
5. Gross domestic expenditure	Average '60 – 72	0,1	-0,1	1,1		Average '60 – 74	2,3	7,2	14,6	19,7
	3qr 1974	-2,3	-0,9	-2,6	-4,5	4qr 1977	5,3	3,7	8,0	8,2
	3qr 1981	-1,5	-9,7	-14,0		1qr 1983	2,7	10,8		
	2qr 1984	-3,1	-9,9	-10,1	-10,2	1qr 1986	3,2	0,5	4,3	11,0
6. Exports of goods and non-factor services	Average '60 – 72	3,8	6,7	11,0		Average '60 – 74	2,8	1,2	0,1	6,9
	3qr 1974	-4,3	-0,6	2,6	5,5	4qr 1977	-1,0	2,1	-6,1	3,2
	3qr 1981	-2,8	2,1	-4,3		1qr 1983	-4,1	6,2		
	2qr 1984	7,8	15,2	14,5	13,9	1qr 1986	13,1	10,7	1,6	5,7
7. Imports of goods and non-factor services	Average '60 – 72	-10,5	-11,9	-9,0		Average '60 – 74	4,2	15,8	26,9	33,6
	3qr 1974	-7,7	-11,5	-14,1	-25,7	4qr 1977	5,6	6,9	-1,3	4,9
	3qr 1981	-4,8	-24,6	-33,8		1qr 1983	0,9	25,8		
	2qr 1984	2,6	-12,0	-16,8	-17,2	1qr 1986	27,7	7,7	6,7	31,4
8. Gross domestic product	Average '60 – 72	2,4	4,1	6,3		Average '60 – 74	2,5	5,0	8,3	12,5
	3qr 1974	-1,1	1,8	3,0	3,7	4qr 1977	4,1	3,6	6,0	8,5
	3qr 1981	-0,9	-1,4	-5,1		1qr 1983	1,2	6,0		
	2qr 1984	-1,5	-2,3	-1,6	-1,7	1qr 1986	0,9	2,0	3,0	5,0

¹ The percentage change from the reference peak (trough) is determined up to and including the following cyclical trough (peak) within a period of eight quarters² Cumulative change in R millions.

Table 3 Business cycle phase analysis for South Africa and its trading partner countries¹

Reference turning-point dates ²				Length of phase (months)				Percentage change in the volume of production between turning-points ³	
G-7 countries ¹		South Africa		G-7 countries		South Africa		G-7 countries	South Africa
Peak	Trough	Peak	Trough	Upward phase	Downward phase	Upward phase	Downward phase		
2/60		4/60							
	2/61		8/61		12		16	1,7	6,2
2/62				12				8,4	
	2/63				12			3,0	
		4/65				44			29,6
			12/65				8		3,3
3/66		5/67		37		17		26,6	6,6
	10/67		12/67		19		7	6,0	3,1
10/69				24				15,1	
		12/70				36			19,8
	8/71				22			2,2	
			8/72				20		4,0
11/73				27				19,5	
		8/74				24			12,0
	5/75				18			-13,1	
			12/77				40		3,4
2/80		8/81		57		44		31,4	18,4
	12/82		3/83		34		19	-8,5	-3,7
7/85 ⁴		6/84		31		15		18,7	7,8
			3/86				21		-3,7
Average length				31	20	30	19		

¹ USA, UK, West Germany, France, Italy, Canada and Japan.

² Source: Center for International Business Cycle Research, USA, and SA Reserve Bank.

³ G-7 countries: Composite index of the volume of industrial production.

South Africa: Gross domestic product excluding agriculture at constant 1985 factor cost.

⁴ Preliminary.

production during these phases were compared with earlier business cycle phases during the period from 1960 to 1987. From the accompanying Table 2 it is clear that the declines in real output and expenditure during the two recession phases in 1981-1983 and 1984-1986 were more severe than in the comparable stages of the downward phases of earlier business cycles. For example, six quarters after the cyclical peaks in 1981 and 1984 the level of real gross domestic product had declined by 5,1 per cent and 1,6 per cent, respectively; this may be compared with positive growth of 3 and 4 per cent during the corresponding six quarters in the 1974-1977 and 1971-1972 recession periods, respectively. A similar impression of the relative intensity of the more recent recessions may be gained from the relatively sharp decline in real domestic expenditure in the downward phases of the business cycle in 1981-1983 and 1984-1986.

Although the strengthening of economic activity during the upward phase of 1983-1984 was not evenly distributed among all sectors of the economy, the extent of this change compared favourably with the buoyancy displayed by upward phases of the business cycle in earlier years. At the peak of the business cycle in the second quarter of 1984, real gross domestic product was 7,8 per cent above its level at the trough in the first quarter of 1983. At comparable stages of the cyclical upward phases during the high-growth period from 1960 to 1974, the increase in real output amounted, on average, to 7 per cent.

Both the duration of business cycle phases and the amplitude of cyclical changes during the 1980s to date, to a large extent reflected the influence of extraneous developments on the South African economy. In addition to the effects of international economic instability, socio-political developments and the effects of adverse weather conditions on agricul-

ture contributed to lower economic growth and to increased variations in economic activity in general. The actual course of the business cycle in South Africa during the period 1981 to 1986 was, however, a function of endogenous economic developments to a lesser extent than in earlier years.

Final reference turning-point dates of the business cycle

The turning-point dates of the business cycle during the post-war period are given in the accompanying table.

Upward phase	Downward phase
Post -war – Jul. 1946	Aug. 1946 – Apr. 1947
May 1947 – Nov. 1948	Dec. 1948 – Feb. 1950
Mar. 1950 – Dec. 1951	Jan. 1952 – Mar. 1953
Apr. 1953 – Apr. 1955	May 1955 – Sept. 1956
Oct. 1956 – Jan. 1958	Feb. 1958 – Mar. 1959
Apr. 1959 – Apr. 1960	May 1960 – Aug. 1961
Sept. 1961 – Apr. 1965	May 1965 – Dec. 1965
Jan. 1966 – May 1967	Jun. 1967 – Dec. 1967
Jan. 1968 – Dec. 1970	Jan. 1971* – Aug. 1972
Sept. 1972 – Aug. 1974	Sept. 1974 – Dec. 1977
Jan. 1978 – Aug 1981	Sept. 1981 – Mar. 1983
Apr. 1983 – Jun. 1984	Jul. 1984 – Mar. 1986