The Real Economy

MACROECONOMIC SCENE

2.1 The real GDP growth showed an improvement in 1998-99. During 1997-98 the real GDP growth had declined to 5.0 per cent from the three successive years' growth of over 7.5 per cent achieved during 1994-95 to 1996-97. However, with a significant turnaround in the growth of agriculture and allied activities output from (-)1.0 per cent in 1997-98 to 7.6 per cent in 1998-99, the real GDP growth is estimated to have recovered to 6.0 per cent in 1998-99 (Appendix Table II.1). The GDP estimates are according to the new series of national accounts data released by the Central Statistical Organisation (CSO) (Box II.1). The quarterly estimates of real GDP now made available by the CSO indicated that the recovery occurred in the last two quarters of 1998-99, with the quarterly growth rates rising to 6.5 per cent and 8.4 per cent, respectively, in the third and fourth quarters from 3.9 per . cent and 4.7 per cent, respectively, in the first and second quarters. The improved growth performance during 1998-99 compared to 1997-98 is significant in the light of a general deceleration of the world economy. Notwithstanding this improvement, the presence of many domestic and international uncertainties continued to affect the prospects of faster economic recovery than what was eventually recorded in 1998-99.

Box II.1
New Series of National Accounts Statistics (Base: 1993-94)

One of the desiderata for assessing correctly the responses of the real economic activity to the policy stimuli is the estimational accuracy of national accounting as well as production aggregates of the commodity producing sectors of the economy. The Central Statistical Organisation (CSO) has revised its national accounting statistics in February 1999 by changing the base year from 1980-81 to 1993-94, marking the fourth such shift since publication of national income aggregates for the first time in 1956, using 1948-49 as the base year. The revision was mainly guided by three considerations, *viz.*, i) meaningful analysis of the structural changes in the economy, ii) complete review of the existing data base and methodology, and iii) implementation of the recommendations of the System of National Accounts 1993, United Nations (SNA 1993). The new series is at present available from the year 1993-94 onwards.

In order to capture structural changes of the economy, the new series has sought to improve the coverage of GDP by including several new activities. 'Agriculture and allied activities' now includes floriculture, foreyard/backyard crops and marine fish production under deep-sea fishing. Industry also covers activities incidental to coal production, e.g., washeries. The coverage of the services sector has been enhanced with the inclusion of the services of Employees' Provident Fund Organisation, private communication services, private activities under TV & radio and public services in quasi-government bodies.

The new series embodies a number of conceptual and methodological improvements and uses new and latest data sources. Deviating from the past practice, the income estimation of unregistered manufacturing as well as unorganised services is based on work force estimates revealed by the National Sample Survey Organisation's (NSSO) quinquennial survey of employment and unemployment, instead of decennial population census.

The quick estimates of income from registered manufacturing would be now compiled on the basis of Annual Survey of Industries (ASI) in place of the Index of Industrial Production (IIP). Services sector, apart from the public sector, shows separate estimates for private organised and private unorganised segments. 'Value added' emanating from the Issue Department of the Reserve Bank of India, which was hitherto ignored, has been included in the new GDP series. Savings of quasi-government, quasi-corporate bodies, Pension Fund of Dock Labour Boards and Port Trusts, have been added, respectively, to the public, private corporate and household sectors. The estimates of gross fixed capital formation in the registered manufacturing are being based on 'enterprise approach' in place of ASI results.

Some of the recommendations of SNA 1993 implemented under the new series include treatment of imputed value of own-account labour as mixed income of the self-employed; accounting of mineral exploration expenditure as capital expenditure; allocation of financial intermediation services indirectly measured (FISIM) to the users of these services; valuation of non-market agricultural crops and ownership of dwellings on the basis of prices of similar products made by market producers; estimation of consumption of fixed capital of all fixed assets including government buildings, roads, dams as per the perpetual inventory method (PIM) and estimation of output from life insurance as per SNA 1993.

Incorporating all the above changes, the new GDP series shows higher level of output than that according to the old series. For instance, GDP (at factor cost) for the base year 1993-94 has been revised upward to Rs.7,99,077 crore (*i.e.*, by 9.03 per cent) from Rs.7,32,874 crore under the old series. Most of the increase in GDP due to the revision is accounted for by private final consumption expenditure, whose coverage has been enhanced. However, there have been only marginal changes in real GDP and sectoral growth rates. While real GDP growth for 1994-95 remains unchanged at 7.8 per cent, those pertaining to 1995-96 and 1996-97 have undergone marginal improvement. The growth rate in 1997-98 is slightly lower under the new series than under the old series. In so far as the impact on sectoral composition of real GDP is concerned, the shares of 'services' and 'agriculture and allied activities' have gone up, with a *per contra* decrease in that of 'industry'. As the quantum of nominal GDP is higher in the new series, the saving and investment rates are correspondingly lower under the new series than under the old series.

2.2 The real GDP growth originating in the industrial sector declined to 4.6 per cent in 1998-99 from 6.3 per cent in 1997-98, with 'manufacturing', `mining and quarrying' and 'electricity, gas and water supply' showing significant decline in growth rates to 5.2 per cent, (-)2.0 per cent and 6.3 per cent, respectively, in 1998-99 from 6.8 per cent, 2.7 per cent and 6.6 per cent in 1997-98. Growth in the services sector (including construction) declined to 5.8 per cent in 1998-99 from 7.8 per cent in 1997-98.

Saving and Capital Formation

2.3 According to the CSO's Quick Estimates, the rate of Gross Domestic Saving (GDS), after having peaked at 24.4 per cent of GDP in 1996-97, declined to 23.1 per cent in 1997-98 (Appendix Table II.2). The decline in the saving rate by 1.3 percentage points coincided with the decline in the overall investment rate (24.8 per cent in 1997-98 compared with 25.7 per cent in

1996-97). Rates of both private corporate sector saving and public sector saving declined from the recent peaks of 4.8 per cent and 1.9 per cent, respectively, in 1995-96 to 3.8 per cent and 1.0 per cent in 1997-98. While low profitability conditions in 1997-98 could be the reason for the decline in the private corporate sector saving, the increased dissaving by government administration stemming from a fiscal slippage in 1997-98 contributed to the decline in the public sector saving.

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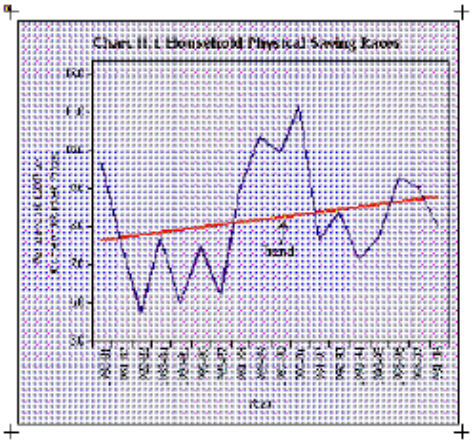
2.4 The saving rate of the household sector has also moved downward from 18.8 per cent in 1996-97 to 18.3 per cent in 1997-98, driven entirely by a decline in the physical saving rate from 9.0 per cent in 1996-97 to 8.0 per cent in 1997-98. Deceleration in the sector's investments in physical assets reflected, *inter alia,* the relatively low attractiveness of the returns on such assets. With household physical saving estimates exhibiting volatility since the late 'eighties, caution has to be exercised in the interpretation of its behaviour, especially in the light of residual nature of its estimation and the increase in errors and omissions in the recent years. Nevertheless, the trend behaviour of the household physical saving rate with respect to GDP shows some plateauing, with year-to-year volatility close to the trend line (Chart II.1). On the other hand, financial saving of the household sector improved from 9.8 per cent of GDP in 1996-97 to 10.3 per cent in 1997-98 (Appendix Table II.2), which was made possible by increased holdings of bank deposits and claims on government. Besides higher rates of return on household financial saving as against physical saving, the growing financial intermediation and preference of households for less risky bank deposits, contractual saving and small saving instruments have shifted the composition of household saving in favour of financial assets. In so far as the investment trend is concerned, the Gross Domestic Capital Formation (GDCF) declined from 25.7 per cent of GDP in 1996-97 to 24.8 per cent in 1997-98, notwithstanding the increase of net inflow of resources from abroad from 1.2 per cent of GDP to 1.7 per cent of GDP during this period.



2.5 Firm estimates of saving are not available for the year 1998-99. Owing to improvement in currency holdings, non-banking deposits, provident and pension funds, relief bond holdings and small savings, the rate of financial saving of the household sector is likely to move upward in 1998-99. However, with the increase in public sector dissaving and the generally limited improvement in corporate results, the overall domestic saving rate in 1998-99 may not be encouraging.

2.6 One of the important features of the Indian economy since 1992 has been the uptrend in the real GDP growth during the post-reform period (1992-93 to 1997-98). Interestingly enough, during four out of the six years of the post-reform period, the real investment rate (*i.e.*, real gross capital formation as a percentage of real GDP at market prices) has moved in an opposite direction to that of the movement in real GDP growth. Also in recent years there has been evidence of greater cyclical variability in real GDP growth and such cycles seem to be less correlated with cyclical changes in saving and investment rates. Both these trends suggest that productivity changes are playing an important role in the growth process of the Indian economy in the post-reform period, even though there are not many definite studies for the post-reform period to prove that total factor productivity has been the prime mover of the uptrend in real growth rates (Box II.2).

Box II.2
Dimensions of Growth - Productivity and Cyclicity

A view on total factor productivity needs to be taken in the light of the declining investment trends and the cyclicity in real GDP growth. In this context, it is important to recognise that Solow's idea of quantifying the contributions to growth (like from labour, capital and technology) has been used by many economists for estimating cyclical properties as a potential source of the impulse (Kydland, 1995). Cycles can be set in motion by real shocks such as technology shocks, public finance shocks by way of changes in government purchases, tax rates, *etc*. The intertemporal propagation of these cycles through consumption, investment, labour and also through other economic decisions, generate cycles in aggregate economic activity (Kydland and Prescott, 1982). While data limitations preclude the conduct of this type of investigation for the Indian economy, one may study the cyclicity of the overall growth using the concept of co-movements of the deviations from trend in available related aggregate time series (Lucas, 1977).

One may, therefore, study the co-movements of real GDP growth with the rates of saving and investment through time series analysis by decomposing the actual values into trend components and cyclical components representing the deviation of the actual values from the trend values (residuals). The Hodrick-Prescot filter provides a useful filtering process to study the dynamics of a data series into its trend and cyclical components. Such an analysis carried out on overall GDP growth and saving and investment rates in the Indian economy for the pre- and post-reform periods brings out the following two stylised facts.

- The correlation coefficients between real GDP growth on the one hand, and rates of investment and saving, on the other, turn out to be positive and higher for the filtered (trend) series than for the actual series during the period, 1980-81 through 1997-98. This suggests that the trend growth is largely explained by the trend rates of saving and investment.

- If the degree of cyclicity of the growth rate of the economy is proxied by the deviation of the actual growth rate of real GDP from its filtered values, then the growth rate of real GDP experienced strong cyclical upswings during the period 1992-93 to 1996-97 as against cyclical downswings in the most part of the pre-reform period (1980-81 to 1991-92). In 1997-98 the negative cyclical factor was prominent, which depressed the growth rate to a substantial extent.

During 1992-93 to 1997-98 the average growth of 6.6 per cent in overall GDP was explained by average trend growth rate of 6.3 percentage points and the rest 0.3 percentage point by the cyclical factors. During this period, cyclical components of the saving and real investment rates on an average were both negative at (-)0.2 percentage point, suggesting that the cycles in growth and investment and saving rates moved in opposite directions. This could mean that shocks to the growth stemmed from factors other than investment, where productivity factors may be playing an important role.

A recent study under preparation with the Development Research Group in the Reserve Bank of India on total factor productivity growth in the manufacturing sector in the Indian economy throws some early useful evidence on this aspect (Trivedi, *et. al* (1999)). The study estimated productivity growth of the manufacturing sector (organised factory sector) and some select industries over the time-span 1973-74 to 1994-95 in terms of alternate measures, *viz.*, total factor productivity [both using single deflation (TFPs) and double deflation (TFPd) methods] and total productivity (TP).

The TFP is defined as the ratio of real value added to weighted sum of all the inputs used in the production process. This is deemed to be the broadest measure of productivity and efficiency in resource use. It measures the effect of residual factors, such as, changes in technology, better utilisation of capacities, learning by doing, improved quality of factors of production *etc.*, after removing the effect of changes in input quantities on output (Ahluwalia, 1991). The TP indices were found lower than TFPs consistently for all industries, especially since 1980-81 (Chart II.2). The rate of growth of productivity, as measured both by TFPs and by TFPd turned out to be higher at 2.7 per cent and 4.5 per cent, respectively, than the rate of growth of 1.0 per cent for TP, during the period 1973-74 to 1994-95. Some of the industries which contributed to this trend were textiles and textile products, machinery and transport equipments, chemical and chemical

products and leather. A rising trend was noted both in TFPs and TFPd in the 1990s, thereby providing evidence on the productivity impact of residual factors like technology, better capacity utilisation, learning by doing, *etc.*, on the manufacturing sector's growth.

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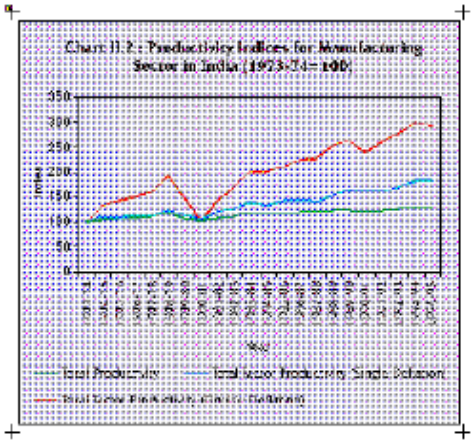


AGRICULTURE

2.7 Agricultural production revealed a turnaround during 1998-99 with the crop production index estimated to record a growth rate of 7.6 per cent in contrast to a decline of 5.6 per cent during the previous year (Appendix Table II.3). This was significantly higher than average growth rate of 2.0 per cent during 1990-91 through 1997-98. Notwithstanding a series of weather-related aberrations, the total foodgrains production (quantum) is estimated to have increased to 202.5 million tonnes in 1998-99, crossing the 200 million tonnes mark for the first time, thereby surpassing the previous peak of 199.4 million tonnes attained in 1996-97. Among the non-foodgrains segment, major crops such as oilseeds, sugarcane, cotton as well as beverages, particularly tea, registered impressive growth in output compared with their

respective levels in the previous year. Though the monsoon in 1998 was normal for the eleventh successive year, imbalance in weather in several parts of the country had adversely affected production of certain non-foodgrain crops. The excess heat conditions in the northern India during May-June 1998, floods in certain parts of eastern India during the monsoon season and heavy rainfall in late October 1998 affected *kharif* crops, cotton and fruits and certain vegetables such as potato and onion, whose supply shortage was acute during 1998-99.

2.8 Season-wise, the *rabi* foodgrains output peaked at 99.9 million tonnes during 1998-99 reflecting a sharp rise of 9.4 per cent over that in the previous year. The *kharif* foodgrains production, on the other hand, showed a modest rise of 1.5 per cent to 102.7 million tonnes in 1998-99. Rice, wheat and pulses output registered peak levels in 1998-99. The production of rice is estimated to have risen by 3.0 per cent to 84.7 million tonnes from 82.3 million tonnes in 1997-98 (Table 2.1). Wheat production estimated at 71.0 million tonnes in 1998-99 is not only higher by 7.7 per cent than the previous year's output of 65.9 million tonnes, but has surpassed the previous peak of 69.4 million tonnes attained in 1996-97. The production of pulses is estimated to have crossed the 15 million tonnes mark for the first time and is anticipated to rise by 21.6 per cent[1] to 15.9 million tonnes in 1998-99. Foodgrains production would have been further high but for the lower outturn of coarse cereals, which at 30.9 million tonnes in 1998-99 showed a decline of 0.3 million tonnes from that in 1997-98.

Table 2.1 : Agricultural Production

(Million tonnes)

Crop	1998-99A	1997-98P	1996-97
1	2	3	4
All crops: Annual Growth Rate+ (per cent)	7.6	-5.6	9.3
Foodgrains	202.5	192.4	199.4
Rice	84.7	82.3	81.7
Wheat	71.0	65.9	69.4
Coarse Cereals	30.9	31.2	34.1
Pulses	15.9	13.1	14.2
Non-Foodgrains			
Oilseeds	25.7	22.0	24.4
Sugarcane	290.7	276.3	277.6
Cotton @	12.8	11.1	14.2
Jute and Mesta #	9.8	11.1	11.1
Tea*	870.4	810.6	780.3
Coffee*	230.0	228.0	205.0

A Advance estimates as on June 25, 1999.
P Provisional.
+ Based on the Index of Agricultural Production with base triennium ending 1981-82=100.
@ Million bales of 170 kg. each.

Million bales of 180 kg. each.
* Million kg. And data for tea are on calender year basis.

Source : Ministry of Agriculture, Government of India.

2.9 All the major non-foodgrain crops displayed resurgent trends in production during 1998-99. Production of oilseeds (9 out of 11 in all) is estimated to touch yet another peak of 25.7 million tonnes, representing a rise of 16.6 per cent over 22.0 million tonnes during 1997-98 and 5.2 per cent over 24.4 million tonnes in 1996-97. This is facilitated by the record production of soyabean estimated at 6.9 million tonnes during the year. Sugarcane output is likely to touch a new high of 290.7 million tonnes during 1998-99. Notwithstanding the adverse climatic condition, cotton production is estimated to have recovered to 12.8 million bales in 1998-99 from 11.1 million bales in 1997-98, but lower than 14.2 million bales in 1996-97. Production of tea and coffee is anticipated to rise by 7.4 per cent to 870.4 million kg. and by 0.9 per cent to 230.0 million kg., respectively. However, the production of jute and mesta is expected to decline by about 12.1 per cent to 9.8 million bales during 1998-99 from 11.1 million bales in 1997-98.

2.10 Against the backdrop of the deceleration in the annual trend rate of growth (1.7 per cent) of foodgrains production in the 'nineties so far, compared with that of the 'eighties (3.4 per cent), there is a growing realisation that foodgrains production would reach a plateau in near future if yields do not improve substantially to compensate for the limited possibility of increasing the area under cultivation. Apart from the fact that yield levels are low in India compared to some of the agriculturally advanced developing economies, year-to-year variation in yields has contributed to sharp fluctuation in the level of foodgrains output. During 1998-99, the overall yield in the foodgrains sector increased by 3.9 per cent in contrast to a decline of 3.9 per cent in 1997-98. A year before, the yields had risen by 8.2 per cent. During 1998-99, a sharp rise in yield was observed in the case of wheat (5.1 per cent) and pulses (15.6 per cent). During this year, the rise in yield was also prominent in the non-foodgrains segment, with a steep rise recorded for oilseeds (12.9 per cent) and cotton (12.7 per cent). However, sugarcane and jute and mesta displayed negative trends in yield growth with yield levels falling by 1.8 per cent and 3.6 per cent over their respective levels in the previous year.

1. Percentage changes shown here are on the basis of thousands of tonnes/bales and hence may differ from those computed on the basis of million tonnes/bales.

2.11 Sustained improvement in agricultural production would be facilitated if appropriate policy initiatives are in place and critical inputs are rendered easily available. The system of periodic monitoring of crop prospects *vis-a-vis* changing weather scenario, development of irrigation potential and input supply and better input-management assume special significance in this connection. Measures undertaken to ensure improved and easy availability of fertilisers, *viz*., urea, DAP (Di-ammonium Phosphate) and MOP (Muriate of Potash) are expected to push up the NPK consumption. Emphasis needs to be placed also on improved seeds distribution as well as on pest control.

2.12 Total procurement of wheat and rice during 1998-99 stood at 24.08 million tonnes indicating a rise of 1.1 per cent from 23.82 million tonnes during 1997-98 (Appendix Table II.4).

During 1998-99, procurement of rice at 11.43 million tonnes was lower by 21.2 per cent than 14.51 million tonnes procured during the previous year. In contrast, total procurement of wheat rose sharply by 36.0 per cent to 12.65 million tonnes in 1998-99 from 9.30 million tonnes in 1997-98. The perceptible rise in procurement reflected essentially the elimination of market price uncertainty, helped by the announcement of minimum support prices and procurement prices. The total offtake of rice and wheat during 1998-99 aggregating 20.73 million tonnes was higher by 8.4 per cent as compared with 19.12 million tonnes in the previous year. The rise in offtake may be attributed to higher offtake under Targeted Public Distribution System (TPDS) (10.1 per cent), as also to higher open market sales (OMS) of foodgrains. The offtake under other welfare schemes (OWS) forms a small share in total, but has declined significantly during the year. The sharp rise in procurement of wheat in 1998 along with a moderate growth in offtake helped to improve the stocks of foodgrains by 19.5 per cent to 21.66 million tonnes at the end of March 1999 from 18.12 million tonnes at the end of March 1998. It is important to recognise that foodgrains stocks have remained well above the buffer stock norms throughout the year 1998-99.

2.13 Procurement of wheat during April-June 1999 increased by 1.53 million tonnes (12.1 per cent) to 14.13 million tonnes, as compared with 12.60 million tonnes procured during the corresponding period of the previous year, surpassing even the total procurement of 12.65 million tonnes of wheat in 1998. This sharp increase in procurement was indicative of the bumper wheat crop in surplus wheat producing areas. The procurement of rice during April-June 1999 at 1.88 million tonnes was higher than the procurement of 1.84 million tonnes during the corresponding period of the previous year. However, the total offtake of rice and wheat at 4.03 million tonnes during April-June 1999 was marginally lower than that of 4.16 million tonnes during the corresponding period of the previous year. Consequently, at the end of June 1999, total stock of rice and wheat aggregated 32.37 million tonnes (28.52 million tonnes, a year ago) ruling much above the minimum buffer stocking norm of 24.3 million tonnes for July 1, 1999.

2.14 The building-up and maintenance of buffer stocks has been an important plank of the national food policy. The underlying objective of buffer stock policy in general is to eliminate both intra-year and inter-year instability in foodgrains prices. In fact, most of the developing countries have adopted buffer stock policy as food price stabilisation measure, though some have opted for a combination of buffer stock and trade policy. The objective being, in case of variations in production, consumption can be maintained either through changes in stocks or changes in net imports, while keeping the price-fluctuations within a desired limit. The rationale and incentive for holding stocks is much stronger in cases where seasonality is strong, say, when the output is harvested in the first quarter and consumption requirement has to be met in the next three quarters from the stocks.

2.15 In India, the stance of buffer stock policy is determined by a host of factors including the objective of containing price fluctuations. Sale of foodgrains to states' procurement agencies is voluntary for farmers at the minimum support price (MSP) fixed by the Government. In years of high production, the MSP virtually becomes the market price. Since the procurement prices are revised upwards periodically, every year, guaranteed returns to farmers over cost are assured, augmenting the flow of marketed surplus to the Food Corporation of India (FCI). The offtake of foodgrains depends upon the availability factor as well as the price differential between open

market prices and the PDS prices. During the 'nineties so far, notwithstanding fluctuations, foodgrains production has remained comfortable and with successive MSP revisions, the incentive for farmers to sell at MSP has increased. Thus, increased procurement coupled with lower offtake from the PDS has resulted in substantial increase in stocks in the Central pool. The actual stocks of wheat and rice which declined below the minimum norms for most periods up to April 1993, subsequently remained above the minimum requirements in most quarters even when the norms were moved upward, since October 30, 1998 (Table 2.2).

2.16 Notwithstanding the recent increase in the procurement operations, the total availability has suffered due to lack of proper storage facilities and poor marketing. As a result, it is roughly estimated that about 10 per cent of foodgrain production is lost before it reaches the consumer. It is, therefore, imperative that adequate storage facilities are provided to minimise the loss of availability of foodgrains. With this end in view, the Union Budget for 1999-2000 envisaged a new credit-linked capital subsidy scheme for construction of cold storage and godowns.

2.17 An important area of concern in the context of agricultural growth relates to poverty alleviation. In 'nineties, while the population growth has continued to decelerate to 1.9 per cent from 2.1 per cent in 'eighties, the average annual growth rate of agricultural production has fallen sharply from 5.2 per cent to 2.6 per cent during the same period. This has affected per capita availability of agricultural goods. However, as the index of prices of agricultural products relative to prices of manufactured products has moved up by 18.0 per cent between 1989-90 and 1998-99, farm incomes have improved with favourable impact on rural poverty. Besides, there has been a steady increase in the level of average real wages for unskilled agricultural labour in recent years: it moved from 0.72 per cent in 1995-96 to 4.67 per cent in 1996-97 and 4.88 per cent in 1997-98. Reflecting these developments, there has been a significant reduction in the poverty ratio (as per government estimates) from 56.4 per cent in 1973-74 to 37.3 per cent in 1993-94 in rural areas and 49.0 per cent to 32.4 per cent in the urban areas.

Table 2.2 : Norms for Buffer Stocks *vis-a-vis* Actual Stocks

(Million Tonnes)

		As on April 1			As on July 1			As on October 1			As on January 1		
		Rice	Wheat	Total	Rice	Wheat	Total	Rice	Wheat	Total	Rice	Wheat	Total
1		2	3	4	5	6	7	8	9	10	11	12	13
Eighth Plan Norms		**10.8**	**3.7**	**14.5**	**9.2**	**13.1**	**22.3**	**6.0**	**10.6**	**16.6**	**7.7**	**7.7**	**15.4**
Actuals	1992-93	8.9	2.2	11.1	7.4	6.5	13.9	5.1	4.4	9.4	8.5	3.3	11.8
	1993-94	9.9	2.7	12.7	9.3	14.9	24.2	7.2	13.7	20.9	11.2	10.8	22.0
	1994-95	13.5	7.0	20.5	13.3	17.5	30.7	10.9	15.6	26.4	17.4	12.9	30.3
	1995-96	18.1	8.7	26.8	16.4	19.2	35.7	13.0	16.9	29.9	15.4	13.1	28.6
	1996-97	13.1	7.8	20.8	12.9	14.1	27.0	9.3	10.5	19.9	12.9	7.1	20.0
Ninth Plan Norms*		**11.8**	**4.0**	**15.8**	**10.0**	**14.3**	**24.3**	**6.5**	**11.6**	**18.1**	**8.4**	**8.4**	**16.8**
Actuals	1997-98	13.2	3.2	16.4	11.0	11.4	22.4	7.0	8.3	15.3	11.5	6.8	18.2
	1998-99	13.0	5.1	18.1	12.0	16.5	28.5	9.0	15.2	24.2	11.7	12.7	24.4
	1999-2000	11.7	9.9	21.7	10.7	21.6	32.4						

* Effective since October 30, 1998.

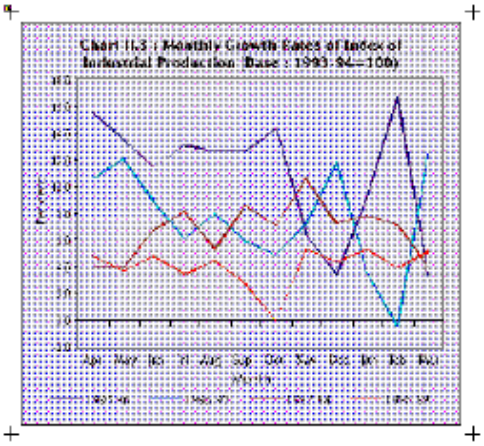
INDUSTRY

Overall Performance

2.18 The deceleration in industrial production witnessed from 1996-97 deepened during 1998-99, with the Index of Industrial Production (IIP) showing a growth of 4.0 per cent during 1998-99 as compared with 6.6 per cent in 1997-98 (Appendix Table II.5 and Chart II.3). The current trend has been led by a contraction in the growth of manufacturing output to 4.4 per cent - the lowest since the mid 1990s so far - compared with that of 6.7 per cent during 1997-98. The output of the mining and quarrying sector declined by 1.8 per cent in contrast to an increase of 5.9 per cent during 1997-98, while the growth of electricity generation slipped down to 6.4 per cent from 6.6 per cent. Notwithstanding the steep deceleration in the manufacturing sector, its contribution to growth in overall Index of Industrial Production (IIP) rose from 82.2 per cent in 1997-98 to 89.1 per cent in 1998-99[2]. The contribution of the electricity sector was also higher at 15.5 per cent than 9.6 per cent in 1997-98. The sector showing negative contribution was mining and quarrying whose share in the growth in overall index fell from 8.4 per cent in 1997-98 to (-)4.2 per cent during 1998-99. The data for the year 1999-2000 available so far indicate early signs of recovery in industry. The IIP grew by 5.6 per cent in April-June 1999-2000 as compared with 4.5 per cent in April-June 1998-99, mainly due to a significant improvement in manufacturing output growth to 6.5 per cent from 4.2 per cent. On the other hand, the electricity sector recorded a lower growth of 4.1 per cent in April-June 1999-2000 than 10.2 per cent in April-June 1998-99 and mining sector registered a growth of (-)0.6 per cent in April-June 1999-2000 as against (-)0.3 per cent in April-June 1998-99.

Manufacturing Sector

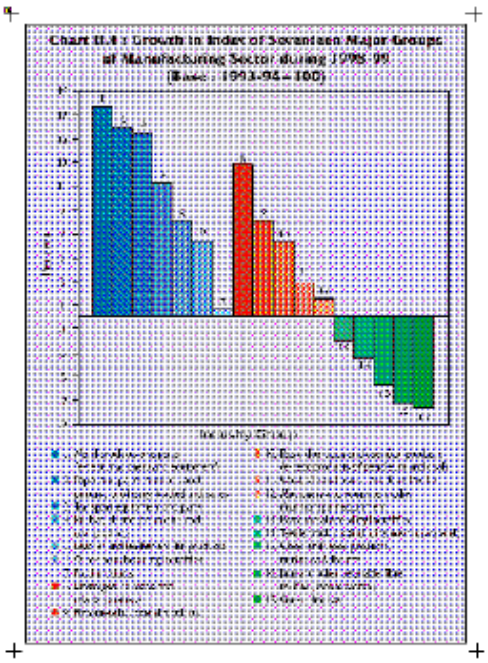
2.19 A disaggregated analysis of the manufacturing sector at the two digit level classification reveals that out of seventeen industry groups, twelve groups have shown positive growth during 1998-99. 'Metal products and parts (except machinery and equipment)' has shown the highest growth of 17.7 per cent followed by 15.9 per cent in 'paper and paper products and printing, publishing and allied industries' and 15.4 per cent in 'transport equipment and parts'. On the other hand, 'cotton textiles' has shown a negative growth of 7.7 per cent followed by 'jute and other vegetable fibre textiles except cotton' (-7.3 per cent) and 'wood and wood products, furniture and fixtures' (-5.8 per cent). During 1998-99, 7 groups (27.95 per cent weight in IIP) registered accelerated growth, while 5 groups (32.61 per cent weight in IIP) recorded decelerated growth and remaining 5 groups (18.80 per cent weight in IIP) registered negative growth (Appendix Table II.6 and Chart II.4).

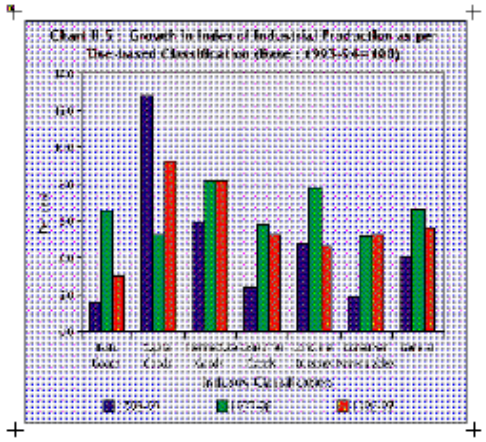


Use-based Classification

2.20 An important aspect of the industrial growth situation in 1998-99 is that the capital goods sector showed a sharp improvement with the growth rate in this sector rising to 12.7 per cent during 1998-99 from 5.3 per cent during 1997-98. Given the relatively low weight of capital goods sector in the overall index (9.69), high growth rate in this sector did not have significant impact on the overall industrial performance. However, it did give evidence of prospective domestic investment climate. The sharpest deceleration was recorded in the basic goods sector which grew at 1.5 per cent in 1998-99 as compared with 6.5 per cent during the preceding year. With a weight of 35.51 per cent in IIP, basic goods sector contributed 12.5 per cent to the industrial growth during 1998-99, which was much lower than that of 33.8 per cent during the previous year. Intermediate and consumer goods sectors also recorded lower growth rates. The former registered a growth rate of 5.9 per cent during 1998-99 compared with 8.1 per cent during 1997-98, while the latter grew by 2.4 per cent in 1998-99 as compared with 5.7 per cent during the previous year. The contribution of the intermediate goods sector (weight being 26.44) went up from 34.2 per cent in 1997-98 to 42.1 per cent in 1998-99. The consumer goods sector (weight in IIP of 28.36) witnessed a decline in its contribution to 17.9 per cent during 1998-99 from 25.0 per cent during 1997-98 (Appendix Table II.7 and Chart II.5). But it is important to note that intermediate goods and capital goods sectors together contributed 71 per cent to industrial growth during 1998-99 as against 41.5 per cent during 1997-98. As far as the year 1999-2000 is concerned, the available data for the first quarter point to a recovery in all the sectors except the basic goods sector. Growth in the capital goods, intermediate goods and consumer goods sectors accelerated to 10.3 per cent, 9.1 per cent and 3.7 per cent, respectively, in April-June 1999-2000 from the growth rates of 9.4 per cent, 5.4 per cent and 3.1 per cent recorded in April-June 1998-99. However, the basic goods sector showed a lower growth of 2.8 per cent in April-June 1999-2000 as against 3.5 per cent in April-June 1998-99. In the consumer goods sector, while the durables recorded a substantially higher growth of 15.0 per cent in April-June 1999-2000 than 2.7 per cent in April-June 1998-99, the non-durables registered a lower growth of 0.9 per cent than 3.1 per cent.

2. The relative contribution is computed as the ratio (in percentage terms) of the change in the index of the respective industry group to the change in the overall index adjusted for the weight of the relevant industry group.





2.21 The sluggish growth of the industrial sector during 1998-99 has come about notwithstanding the initiatives taken in the 'nineties to further deepen the industrial sector reforms. In order to appropriately reflect the effect of the structural changes taking place in the industry on the industrial output, the index of industrial production was revised in May 1998, by shifting the base year from 1980-81 to 1993-94 (Box II.3).

2.22 Several domestic and external factors seem to have contributed to the current industrial slowdown. Among the major domestic factors, mention may be made of the lower demand for certain industrial products partly due to decline in agricultural production in 1997-98, depressed capital market and its associated dampening impact on the financial wealth and consumption of the households, the sharp build-up of excess capacities in some industries in the past, and lack of adequate infrastructure facilities. The growth in the composite index of six infrastructure industries (Base: 1993-94=100), *viz*., electricity, coal, steel, cement, petroleum crude and

petroleum refinery products, declined to 2.4 per cent during 1998-99 from 5.7 per cent during the year 1997-98. Electricity sector recorded a growth rate of 6.6 per cent. Petroleum refinery products sector improved its growth performance from 3.7 per cent in 1997-98 to 5.2 per cent in 1998-99. While cement recorded a lower growth rate of 5.6 per cent in 1998-99 than 9.1 per cent in the previous year, coal, steel and petroleum crude showed negative growth rates of 2.0 per cent, 0.7 per cent and 2.8 per cent, respectively, in 1998-99 as against the positive growth rates of 3.6 per cent, 6.3 per cent and 2.9 per cent in 1997-98 (Appendix Table II.8). Barring petroleum refinery products, actual outturns were far short of the targets in all the infrastructure industries (Table 2.3). The composite index of six infrastructure industries recorded a growth of 5.3 per cent during April-June 1999-2000 as compared to 4.9 per cent during the corresponding period in the previous year. Further, as per the Flash Report on Central Sector Projects[2] for June 1999, published by the Ministry of Planning and Programme Implementation, 149 of a total of 193 projects are not performing well, with most of the projects being affected by considerable delays due to problems of civil works, equipment supply, mobilisation of funds and land and award of contracts leading to escalation of costs. These delays in completion of the central sector projects might have negatively impacted on industrial growth apart from creating infrastructural bottlenecks. Besides, policy uncertainties and the long drawn process of industrial restructuring being undertaken to exploit the scale and scope economies through mergers and acquisitions and product and line diversification seem to have contributed to the hesitant turnaround in some of the segments of the industrial sector which have high potential for growth. Among the external factors, the important ones seem to be the low world demand for exports, continuing uncertainties regarding growth prospects in several economies, including Japan, Russia and East Asia and the sharp reduction in world manufacturing prices in case of certain industrial products such as steel, chemicals and electronic components which may have affected domestic offtake.

2. Relating to Central Projects costing Rs.100 crore and above.

Box II.3
Revision of Index Number of Industrial Production (Base: 1993-94)

The Index Number of Industrial Production (IIP) is the most comprehensive indicator of the performance of the Indian industry that is available on monthly basis since 1950. It has been revised from time to time by the Central Statistical Organisation (CSO) by shifting the base year to a recent period, by including additional items and deleting items which were no longer considered necessary. On May 26, 1998, following the recommendations of the Technical Advisory Committee set up in 1995 by the Ministry of Planning and Programme Implementation, CSO revised the IIP. A summary of the revisions is presented below:

- The base year for IIP has been shifted from 1980-81 to 1993-94, marking the sixth such shift since the construction of the IIP for the first time, using 1946 as the base year.

- The coverage of IIP basket has increased from 352 to 543 items with 188 of the additional 191 items accounted for by the 'manufacturing sector'.

- Reflecting the changes in the industrial structure, weights of both 'mining and quarrying' and 'electricity' have gone down to 10.473 and 10.169, respectively, from 11.464 and 11.429,

while the share of manufacturing sector in IIP has gone up to 79.358 from 77.107.

- Recognising the importance of the unorganised sector, for the first time the weighting diagram of the revised series has accounted for the contribution of the unorganised manufacturing sector along with the organised manufacturing sector.

- The new series follows National Industrial Classification (NIC) 1987 classification as compared to NIC 1970 followed in the 1980-81 series.

As per the Special Data Dissemination Standards (SDDS) guidelines, the existing time lag for the release of IIP is six weeks from the reference month. In order to finalise the index of a particular month within the next three months, since July 1998, the number of revisions effected on that index have been curtailed to two (*i.e.*, once each along with the releases of estimates of the next month and for the third month) from the earlier practice of three revisions (*i.e.*, once each along with the releases of indices for next month, fourth month and thirteenth month).

With the upward revision of data especially in various months the growth rate of capital goods sector has gone up to 10.2 per cent during 1998-99 from the unrevised position of 9.6 per cent. The growth rates in other sectors, *viz*., the basic, intermediate and consumer goods sector have been affected marginally by this revision.

Table 2.3: Targets and Achievements of Infrastructure Industries

Industry	Weight*	Unit	1998-99 P			1997-98		
			Target	Achieve-ment	Gap (%)	Target	Achieve-ment	Gap (%)
1	2	3	4	5	6	7	8	9
1. Power	10.17	Billion Units	450.00	448.41	- 0.4	429.00	420.62	- 2.0
2. Coal	3.22	Million Tonnes	306.50	290.03	- 5.4	297.45	295.81	- 0.6
3. Finished Steel (main plants)	5.13	Million Tonnes	12.32	10.16	- 17.6	15.27	10.69	- 30.0
4. Cement	1.99	Million Tonnes	90.50	87.84	- 2.9	81.00	83.16	2.7
5. Petroleum Crude	4.17	Million Tonnes	34.72	32.91	- 5.2	34.02	33.86	- 0.5
6. Petroleum Refinery Products	2.00	Million Tonnes	67.86	68.56	1.0	58.50	65.17	11.4

P Provisional
* Weight in the overall Index of Industrial Production with Base: 1993-94=100.
@ Represents 93 per cent of refinery throughput.

Note: A negative sign indicates shortfall.
Source: Ministry of Planning and Programme Implementation, Government of India.

2.23 Mergers and acquisitions (M&A) are gaining increasing acceptance as a way of augmenting growth. This process in the Indian context seems to have started after 1994 when the necessity of formulating a new take-over code was felt by the regulating agencies. The present

trend is towards restructuring firms through consolidation with growing awareness of concentrating on main line of activity so as to face intensified foreign competition. Many companies are coming out of their non-core activities by selling their non-profitable assets, hiving off their loss making divisions and reducing non-economical joint ventures. M&A deals worth Rs.151 billion were reported during the financial year 1998-99. There were 66 open offer documents filed with the SEBI as against 37 open offers in the previous year. Take-over bids by creeping acquisitions and asset bought-outs and mergers within the group companies to consolidate business activity were also on the rise. M&A activity was pronounced in industrial sectors like cement, steel, computer software, finance, pharmaceuticals, consumer durables, food products, agro-chemicals and textiles.

Small Scale Industries

2.24 The Small Scale Industries sector (SSI), with high potential for gainful employment opportunities, contributes nearly 40 per cent of the total industrial output. At 30.14 lakh units, the number of units under SSI has increased by 5.5 per cent in 1997-98, as against 4.9 per cent in 1996-97. However, the growth of production in SSI at constant prices has decelerated from 11.3 per cent in 1996-97 to 8.4 per cent in 1997-98.

2.25 While encouragement of the SSI sector is essential for boosting employment, dereservation of certain products is considered necessary for ushering in competitive prices for these products. The policy measures announced in the Union Budget 1998-99 to encourage the SSI sector included raising of the exemption limit for excise purposes from Rs.30 lakh to Rs.50 lakh, setting a flat nominal excise rate of 5 per cent for clearances between Rs.50 lakh and Rs.100 lakh, doubling of the ceiling of bank advances for working capital to Rs.4 crore, *etc*. Commercial banks have been directed to give greater weightage to overdue outstandings of large units to SSI suppliers, while appraising credit proposals. The Reserve Bank has accepted some of the recommendations of the High Powered Committee, which had submitted its report in June 1998, regarding improvement of credit delivery system to SSI and simplification of procedures. These include increase in limit of composite loan from Rs.2 lakh to Rs.5 lakh, delegation of more powers to branch managers for granting ad-hoc facilities to the extent of 20 per cent of the sanctioned limit, strengthening of recovery mechanism, opening of more SSI bank branches, *etc*.

Sick Industrial Units

2.26 An analysis of industrial sickness shows that there has been a decline in the number of sick/weak units from 2,37,400 units as on March 1997 to 2,24,012 units as on March 1998, due to decline in the SSI sick units. However, the amount of outstanding bank credit to sick units has increased from Rs.13,787 crore to Rs. 15,682 crore during the same period, with the share of non-SSI units increasing from 73.8 per cent to 75.4 per cent. Sickness in the industrial sector is attributed to a number of factors like inefficiency in management, over-ambitious projects, dispute among partners, non-availability of raw materials, power shortage, transport bottlenecks, adverse developments in marketing *etc*.