CHAPTER 1

State of the Economy and the Plan

The Background

1. The Ninth Five Year Plan (1997-2002) was conceived against a backdrop of three consecutive years of high growth when the economy grew at an average rate of 7.2 per cent. The Approach Paper presented to the National Development Council (NDC) in February 1997 therefore proposed a growth target of 7 per cent for the Ninth Plan, which was accepted. However, the fall of the first United Front (UF) Government in 1997 and the second UF Government in 1998 led to a delay in finalising the Plan. The Ninth Plan was finally approved by NDC only in February 1999. It was evident by then that economic growth had slowed down to 5 per cent in 1997-98 and that recovery may also take time. Recognising the loss of momentum in the first year of the Plan, the growth target for the Ninth Plan proposed to the NDC was reduced to 6.5 per cent, which required an average growth of about 7 per cent in the last four years.

2. The state of the economy at the present stage shows many signs of strength, but also some looming problems. Fortunately, economic growth has accelerated from the low level of 5 per cent in 1997-98 to 6.8 per cent in 1998-99 and 6.4 per cent in 1999-2000, and the trend is expected to continue. On present prospects, the overall growth performance may be marginally short of what is needed to achieve the Ninth Plan target for the five years. However, this performance has to be evaluated in the context of a series of exceptional circumstances in recent years. The East Asian crisis in 1997 had a depressive effect on foreign investment in India and also on our potential export markets. The economic sanctions imposed by some countries in 1998 created some uncertainty initially, though investor confidence was quickly restored. The situation in Kargil in 1999 and the sharp increase in oil prices in 2000 were two other developments. The performance of the economy in the face of all these developments has been commendable and reflects the resilience that it has acquired. Through all these developments, the Government has pursued the objective of deepening and broadening the economic reforms.

3. In many other dimensions also the economy has performed very well. The rate of inflation has been under control, with an average rate of inflation of 4.5 per cent compared with 8.6 per cent in the Eighth Plan period. The balance of payments has been comfortable and our foreign exchange reserves are at 7 months of imports. Domestic investor confidence has been high and external investor perceptions have also been favourable. New sectors of the economy, such as Information Technology, have shown truly exceptional dynamism and have the prospect of bringing substantial gains to the economy in future. Preliminary estimates based on data available for the first six months of the NSS full sample survey from July, 1999 to June, 2000 suggest that poverty has

declined but the decline is much less than what was targeted. There are encouraging developments in the social sector. Population growth is also slowing down. Enrollment rates for girls is increasing steadily.

4. However, the economy also faces certain pressing problems which have come to the surface in recent years. Although the economy is likely to achieve the aggregate growth target, there are significant short-falls in some key sectors, which could lead to unsustainability of the growth process. The acceleration of growth in the economy in recent years has also been regionally differentiated. Some of the poorest States of the country are growing at less then half the rate of the faster growing States. Resource generation in both the Centre and the States has been below target forcing a heavy reliance upon borrowing, much more than was envisaged in the Plan. There is significant under-investment in the economic and social infrastructure. The effectiveness of public expenditure in many areas is also low, which has the implication that resource mobilisation alone is not the solution. Agricultural growth has slowed down, though food grain stocks are comfortable and there has been considerable diversification in agricultural production. The recent rise in international oil price and the uncertainties with oip prices in future is a matter of concern in the short run. The impact of these deviations from the Plan targets gets reflected in the shortfall that is likely to occur in the poverty reduction goal of the Plan.

5. In assessing the progress of the Plan over first three years of its operation, however, a serious problem has been encountered in the form of a substantial revision of the National Accounts Statistics (NAS) which forms the basis both of Plan formulation and of its monitoring. The targets and parameters specified in the Ninth Plan document are based on pre-revised National Accounts and are not directly comparable to the figures currently available from the revised National Accounts Statistics. Therefore, before any meaningful appraisal can be made of the state of the economy and the progress of the Plan, the targets and parameters of the Plan need to be suitably revised in order to make them consistent with the revised National Accounts Statistics. A description of the nature and magnitude of the revisions and a consistent revision of the plan targets are given in the Appendix to this Chapter. In what follows, an attempt has been made to present both the original and the revised targets to preserve full comparability with the original Plan document.

Growth Performance in First Three Years

6. The growth rate of the economy during first three years of the Plan appears to be significantly below the target rate of 6.5 per cent per annum. In 1997-98 the economy was estimated to have grown only at 5 per cent, which was a sharp reduction from the 7.5 per cent attained in the previous year. The principal cause of this reduction was the negative growth rate of Agriculture during 1997-98. The Manufacturing sector also witnessed a sharp decline in its growth just above 4 per cent as compared to the double-digit levels that had been attained during the previous three years. In 1998-99 the economy bounced back to record a growth of 6.8 per cent primarily on account of a sharp

recovery in agricultural growth. The Manufacturing sector, however, continued to perform badly and registered a growth rate marginally below 4 per cent. In both these years, the Services sectors continued to perform well and prevented the GDP growth from slipping further.

7. For 1999-2000, the quick estimate by Central Statistical Organisation (CSO) indicates a growth rate of only 6.4 per cent. On this basis, the average growth rate for first three years of the Plan will be 6.1 per cent per annum. However, it is felt that the CSO estimates for 1999-2000 may be on the lower side since they have not fully taken into account the positive developments in the latter half of the year, particularly in Agriculture and Manufacturing. Planning Commission's estimates would place the growth for this year in the range of 6.7 per cent to 6.9 per cent, which would yield an average growth rate for the first three years of 6.2 per cent.

8. Although a 6.1 per cent or 6.2 per cent growth rate may appear low as compared to the Plan target of 6.5 per cent, it needs to be recognised that the change of base affects the comparison quite substantially. If the sectoral target growth rates given in the Ninth Plan are applied to the sectoral structure of the economy given in the new NAS (column 3 of Appendix Table-3), the target growth rate of aggregate GDP falls from 6.5 per cent to 6.3 per cent. Looked at this way, the likely achievement of 6.2 per cent average growth rate is not too far from the comparable target. Indeed, in order to achieve the 6.3 per cent growth target, the economy would have to grow at an average rate of 6.45 per cent per year during the final two years of the Plan – which is well within the realm of the possible.

9. However, such a comparison would not be in keeping with the spirit and intent of the Plan. The policy and investment recommendations of the Plan are based primarily on the desired sectoral growth rates, which in the aggregate yield the target GDP growth rate. A more useful exercise, therefore, would be to compare the actual sectoral growth rates with the sectoral Plan targets in order to examine the sectoral performance of the economy and thereby the feasibility of retaining the earlier targets. This comparison is presented in **Table 1**. As can be seen, two sectors namely Mining & Quarrying and Manufacturing have performed well below their targets during the first three years. Three other sectors – Agriculture & Allied Activities, Electricity, Gas & Water, and Other Transport – too have not fared particularly well relative to their targets.

TABLE 1-1 : Rates of Growth in GDP and its Components in in the first Three Years of the Plan (1997-2000)

(per cent)

Sectors	Plan (3 Years)	1997-2000 (3 years)	Difference
1.Agri & Allied	3.9	2.7	-1.2
2.Mining&Quarrying	7.2	2.9	-4.3
3.Manufacturing	8.2	4.9	-3.3
4.Elect,Gas&Water	9.3	7.7	-1.6
5.Construction	4.9	8.3	3.4
6.Trade	6.7	6.1	-0.6
7.Rail Transport	3.9	3.1	-0.8
8.Oth Transport	7.4	5.6	-1.8
9.Communication	9.5	14.1	4.6
10.Financial Services	9.9	11.4	1.5
11.Public Administration	6.6	12.1	5.5
12.Other Services	6.6	8.8	2.2
Total GDP	**6.3**	**6.1**	**-0.2**

10. The poor performance of Mining & Quarrying has been on account of three main factors. First, domestic crude oil production has steadily declined over the recent years due to yield problems in the existing fields and due practically to no progress in bringing new fields into production. Second, iron ore production has stagnated due both to a slackening in world steel production and to a sharp decline in domestic steel demand during the two-year period 1997-99. Both these factors appear to have reversed in 1999-2000, and can be expected to improve further in the two coming years. Third, the expected growth in coal production has not materialised, due partly to a slower pace of growth in coal-based electricity generation and partly to tardy progress in encouraging private participation in coal mining which had been envisaged in the Plan. Although there is every expectation that the performance of this sector will improve in the next two years, it is unlikely to attain the Plan target since it would involve an average growth of above 13.5 per cent per year for two years.

11. Insofar as Manufacturing is concerned, the slow-down was entirely expected. The excessive build-up of capacities in the private sector during 1994-97 was clearly not sustainable on the basis of normal growth in domestic demand, and the only feasible outlet lay in export markets. The East Asian crisis and the general slow-down in world trade precluded recourse to this avenue as well. Thus it was expected that recessionary

conditions would prevail in this sector until aggregate demand caught up with the potential supply and capacity utilisation attained reasonable levels. However, the duration of slow-down had been longer than anticipated, and signs of industrial revival started becoming evident only in the last quarter of calendar year 1999. Attainment of the Plan target will require the Manufacturing sector to grow at over 13 per cent per year for the next two years. While such growth may not be entirely infeasible from the supply side given the existing capacities, it appears unlikely that demand conditions will permit such high growth within the time horizon. It may, therefore, be desirable to lower the target to some extent.

12. On the other hand, four sectors – Public Administration, Community & Social Services; Other Services; Communications; and Construction – have performed considerably better than expected. As far as Public Administration etc. is concerned, the bulk of the growth has emanated from a substantial revision in Government salaries and wages, both at the Centre and in the States, arising from implementation of the Fifth Pay Commission award. Over time, however, the impact of this factor will diminish, but it is most unlikely that the growth rate will actually be negative, which would be required to bring it in line with the Plan target. The greater emphasis that is being placed on Social sectors at all levels of Government will ensure a certain degree of growth. The growth in Other Services has been driven primarily by the Software sector, which is expected to maintain its strong growth performance in the future as well.

13. The Communications sector had been targeted for high growth and the actual has been even greater. Although some slowing down is to be expected, there is a case for increasing the target somewhat. The strong growth of Construction sector, though unanticipated, is to be welcomed. This sector has tremendous potential in terms of its linkages and in the generation of employment. The relatively low growth target set in the Plan arises from historical reasons in terms of the relationship between GDP growth and housing demand. This relationship appears to have been modified for the better due to two policy factors. First, the Indira Awas Yojana (IAY) and the housing component of the Basic Minimum Services (BMS) scheme have given a strong boost to rural housing activities. Second, policy measures have been taken in the Union Budget 1999-2000, which have been further reinforced in the Union Budget 2000-2001, for providing impetus to the housing sector; these measures appear to have had effect. In view of these developments, the target growth rate of this sector should perhaps be increased.

14. Thus, the growth performance of the economy during first three years of the Plan suggests that there is a case for reconsidering the sectoral growth targets, in addition to taking account of changes in the NAS, such that the consistency between aggregate target and sectoral growth rates is re-established. Any such exercise, however, has also to take into account the investment that has taken place in these sectors during the past three years in order to ensure that there is sufficient pipeline investment available to support the revised growth targets.

Savings and Investment Behaviour

15. While growth rates may be affected by the base change, it may be argued, the absolute levels of savings and investment taking place in the economy would determine the absolute increase in GDP, which is what ultimately counts in terms of the standard of living of the people. Although such a view is not entirely correct, there is some merit to it; and a comparison of the actual quantum of savings and investment with the targets bears enumeration. The aggregate picture for first three years of the Plan is presented in **Table 2**. The Plan targets for savings and investment for the first three years have been derived on the assumption of a steady-state growth path, which yields a figure of roughly 56 per cent of the five-year target to be attained in the first three years. As can be seen, total domestic savings at constant 1996-97 prices has fallen short of the target by 5.2 per cent. Interestingly enough, the estimated private savings given in the Plan is only marginally higher than the actual, and even this difference can be entirely explained by the lower growth performance in the first three years. Thus the behavioural estimates underlying the Plan appear vindicated, at least on this count. The main shortfall in domestic savings has been in the public sector, which is 70 per cent below the target. This has occurred through both a worsening of fiscal positions of the Centre and State Governments and a lower-than-expected generation of internal resources by public sector enterprises.

Table 2 : Savings and Investment Profiles in the First Three Years of the Plan (1997-2000)

(Rs Crore in 1996-97 prices)

	Plan	Actual	Percentage difference
Savings- total	1132718	1073518	-5.2
Private Savings	1061124	1052142	-0.8
Public Savings	71595	21375	-70.1
Investment - total	1208307	1140730	-5.6
Private Investment	804031	829368	3.2
Public Investment	404276	311362	-23.0

16. As far as investments are concerned, real investment during first three years of the Plan has fallen short of the target by 5.6 per cent. A casual examination of the numbers seems to indicate that this is entirely on account of a 23 per cent shortfall in public investment. Private investment, on the other hand, appears to have exceeded the target by a little over 3 per cent. Such an interpretation, however, is not entirely correct. It may be recalled that private investment in the Plan had been targeted at a level lower than warranted by the relevant behavioural equation in order to make space for the significant step-up in public investment that had been envisioned. In order to ensure that an unconstrained private investment behaviour did not lead to an over-heating of the economy and an unsustainable current account position, the Plan had suggested a combination of aggressive disinvestment in public sector enterprises and control over

growth of credit to the private sector. In actual fact, progress on the disinvestment front has been significantly less than desired. Credit controls too have not been applied; neither was there need to do so in view of the shortfall in public investment. Therefore, the proper comparison should be with the private investment that would have occurred in the absence of these constraints. The relevant figure for first three years of the Plan works out to Rs.8,43,542 crore, which implies that private investment has been 1.7 per cent below the level dictated by its long-term behaviour.

17. Therefore, the slow-down in growth of the economy is not entirely due to cut-backs on public investment, as would appear from the unqualified comparison given in Table 1-2, but also partly due to insufficient private investment demand. This is a somewhat disquieting finding since it implies that private investment is unlikely to be able to make-up for shortfalls in public investment. There are two dimensions to this. One, it confirms the assessment made in the Plan that private investment demand in India today is not buoyant enough fully to compensate for shortfalls in public investment. Second, although it indicates that the fears of public investment ``crowding out'' the private are not entirely justified, high fiscal deficits arising from high revenue deficits may have led to a crowding out effect. Any re-specification of the Plan targets will have to take these factors into consideration.

18. On the whole, therefore, the basic assumptions of the Plan appear to have been vindicated by the actual investment figures during first three years of the Plan. It may be recalled that the Plan had specifically recognised that private investment demand in India is still not robust enough to sustain a 6.5 per cent growth path, let alone 7 per cent. It was, therefore, suggested that public investment would have to bridge the gap, for the immediate future at least. It was also believed that this would have a salutary effect on private investment as well. Consequently, the Plan had targeted public investment to rise sufficiently so that it accounted for 33.5 per cent of the total investment in the economy as compared to the 28.5 per cent figure that had been attained in the terminal year of the Eighth Plan (1996-97). This assumption has been belied and the share of public investment to the total has actually gone down even further to 27.3 per cent during first three years of the Ninth Plan. Unless this trend is reversed expeditiously, the realisation of Plan targets could become problematic.

19. The aggregate figures on investment, however, do not tell the full story. It is also necessary to examine the sectoral investment pattern that has taken place during first three years of the Plan. As has been discussed earlier, re-specifying the sectoral growth targets cannot be done without taking into account the pipeline investments that are necessary to support the revised growth targets. A comparison of the planned sectoral investment requirements with the actual investment pattern is given in **Table 3**. As before, the investment targets for first three years of the Plan have been derived on the assumption of a steady-state path, which may not necessarily be a justifiable assumption in this instance. The time paths of sectoral investment requirements are determined by the level of pipeline investment and the gestation lags which apply in each sector. Nevertheless, for expository purposes, this assumption is made. The first point to note is that with the exception of three sectors – Registered Manufacturing, Construction, and

Other Services – all others have received inadequate investment in varying degrees. On the positive side, two of the sectors which have been identified for an enhancement of growth rates – Construction and Other Services – have received sufficient investment to justify such an increase. The Communications sector is more or less on target, and with the recent resolution of the problems faced by private telecommunication operators, this sector should be able to move to a higher growth trajectory. Insofar as Public Administration etc, is concerned, the insufficiency of investment is worrying and arises almost entirely from fiscal problems being faced by Government at all levels. Nevertheless, given the importance of this sector, an enhancement of the growth rate is imperative and the appropriate investment will need to be made.

TABLE 3 : Planned and Actual Sectoral Investment in First Three Years of the Plan (1997-2000)

(Rs '000 Crore at 1996-97 prices)

Sectors	Plan	Actual	Percentage Change
Agriculture	133.6	100.7	-24.6
Forestry & Logging	2.5	1.9	-25.0
Fishing	11.1	8.7	-21.6
Mining	42.0	33.8	-19.6
Manufacturing-Registered	268.6	355.8	32.5
Manufacturing-Unregistered	92.7	82.6	-10.9
Electricity, Etc	151.9	125.3	-17.5
Construction	20.5	23.4	14.3
Trade	32.9	32.4	-1.5
Hotels	13.4	10.8	-19.9
Rail Transport	21.0	18.8	-10.6
Other Transport	77.0	69.0	-10.4
Communications	40.0	39.4	-1.3
Financial Services	63.4	30.3	-52.2
Real Estate	137.2	115.0	-16.2
Public Administration, etc	72.1	58.8	-18.5
Other Services	28.4	34.1	20.2
Total Investment	**1208.3**	**1141.0**	**-5.6**

20. The excess investment in Registered Manufacturing comes as a surprise, although the Plan had explicitly recognised the possibility of this sector receiving more investment than strictly required. It may be recalled from Table 1-1 that the Manufacturing sector as a whole has recorded a growth performance significantly below the Plan target. In such a situation, a strong investment performance by Registered Manufacturing is most unexpected. This factor perhaps explains the long period of capacity under-utilisation that has been experienced in this sector. Nevertheless, an inescapable implication of

such a dichotomous behaviour is that the industrial slow-down has led to the attrition of a fairly substantial amount of existing manufacturing capacity, and that the net addition to capacity may be significantly lower than indicated by the investment figures. It also suggests that investment in this sector may not be able to maintain the pace recorded in the last three years. On the positive side, it would appear that the revival of industrial activity is unlikely to be constrained by the availability of production capacities.

21. Unregistered Manufacturing, on the other hand, has experienced lower than desired investment. While this is in accordance with the industrial slow-down, it does not bode well for the overall structure of the manufacturing sector in India, in the sense that the share of unregistered sector in total Manufacturing will fall; nor does it bode well for the pace of employment generation. Fortunately, the magnitude of shortfall is not large and, with industrial revival, can be expected to make up some lost ground. The danger, however, lies in the increasing sensitivity of the Financial sector to risk exposure in recent years and its consequent unwillingness to provide investible resources to the small-scale units.

22. The shortfall in investment is quite severe in Agriculture & Allied Activities, which probably also reflects the reduction in public, particularly Government, investment during this period, with its consequent effect on private investment. It may be recalled that the Government, especially the States, was expected to contribute about 35 per cent of the desired investment in these sectors. It was further pointed out that there is strong complementarity between public and private investments, and inadequate public investment could lead to a 25 per cent lower private investment than desired. It is imperative that the rate of public investment in these sectors be restored if the Plan targets are to be achieved.

23. In most of the other sectors, the shortfall in investment is not large enough to be of serious concern. A revival of the investment climate, which appears to be very much on the cards, should lead to at least a part of the lost ground being made up in last two years of the Plan. As far as the Utilities Sector (Electricity, Gas and Water Supply) is concerned, the shortfall is large at 17.5 per cent, implying that only 37 per cent of the desired investment has materialised in first three of the Plan, but it is not entirely unexpected. It had been explicitly recognised in the Plan that there was an insufficiency of pipeline investment in this sector coming from the Eighth Plan period and, therefore, the investment pattern would necessarily have to be back-loaded. What is of concern, however, is that there is little evidence of any significant pick-up in investment in this sector. Unfortunately, in this case, revival in the economic and investment climate may not necessarily lead to an adequate acceleration in the pace of capacity creation since the main impediments lie in financial health of the state electricity boards and municipalities and in the tardy pace of sectoral reforms.

24. Another sector in which investment revival may not happen without deliberate policy initiatives is the Financial Services Sector (Banking & Insurance). It may be noted that the actual investment in this sector is less than half the desired level; which means that only about 29 per cent of the total investment required during the Plan period has

been realised in the first three years. On the other hand, it may be noted from Table 1-1 that this sector has actually recorded a higher growth rate than planned during first three years of the Plan. These two observations together suggest that the sector may be getting over-extended and may not be able to maintain its growth rate in the future. This has very serious implications for the economy as a whole during the coming years, and is therefore discussed at greater length later in this chapter.

Targets and Prospects for Final Two Years

25. It is now possible to put together the assessment of first three years of the Plan and the revised targets discussed in the Appendix to present a consolidated picture of the recast Ninth Plan in comparison to the original and the targets for remaining two years of the Plan. The macroeconomic picture is presented in **Table 4**. The first column of the Table shows the original Plan parameters, which were based on an earlier NAS with 1980-81 base. Since these numbers are not directly comparable with the revised Plan parameters, the second column has been computed to reflect only the effect of the base change. The third column presents the revised Plan parameters, which take into account the effect of the base change as well as the revisions that have been necessitated by the needs of inter-sectoral consistency. The fourth column is the actual performance during first three years of the Plan; and the fifth shows the performance required in the final two years if the revised Plan targets are to be achieved. As can be seen, the revision of National Accounts in itself has necessitated significant changes in Plan parameters, particularly with regard to savings and consumption, which are central to the planning process. Further changes have had to be incorporated to take account of the serious shortfall in public savings in first three years of the Plan.

TABLE 1-4 : Macroeconomic Parameters of the Ninth Plan

(as a % to GDPmp)

	Plan TARGETS (5 Years)	Plan TARGETS on new Base (5 Years)	Revised Plan TARGETS (5 Years)	1997-2000 (3 years)	2000-2002 (2 years)
GDP Growth Rate	6.5	6.3	6.5	6.1	7.1
Investment – Total	28.20	26.40	25.70	25.02	26.73
Private Investment	18.80	17.60	18.50	18.20	18.96
Public Investment	9.40	8.80	7.20	6.82	7.77
Savings – Total	26.10	24.50	24.27	23.55	25.34
Private Savings	24.50	23.00	23.41	23.05	23.95
Public Savings	1.60	1.50	0.86	0.50	1.40
Consumption-Total	74.90	76.50	77.07	77.98	75.70
Private Consumption	63.60	65.30	65.62	66.34	64.55
Govt. Consumption	11.40	11.20	11.44	11.64	11.15
Current Account Deficit	2.10	1.90	1.43	1.47	1.39
ICOR	4.34	4.19	3.95	4.10	3.75

26. A comparison of the achievement in macro-economic targets during the first three years of the Ninth Plan and the corresponding period during the Eighth Plan is given in **Table 1-5**. As can be seen, the Eighth Plan had set fairly modest targets, almost all of which were exceeded in the first three years itself. The exceptions were Public Savings and Public Investment, which had fallen significantly short of the targets. During the Ninth Plan, however, the achievements have fallen short of the targets in practically all the parameters. Nevertheless, it should be noted that most of the Ninth Plan parameters are higher than their Eighth Plan counterparts, which reflects the more ambitious targets laid down for the Ninth Plan. Public Savings and Public Investment, however, continue to exhibit the negative trends that were perceptible during the Eighth Plan period, and have become even lower than the Eighth Plan achievements.

TABLE 1-5 : Targets and Achievements in Eighth and Ninth Plans (first Three Years)

(as a % to GDPmp)

	Eighth Plan		Ninth Plan	
	Targets	**Achievements**	**Targets**	**Achievements**
GDP Growth Rate	5.6	6.4	6..5	6.1
Investment Rate.	23.2	24.7	25.7	25.0
Private Investment	12.7	15.9	18.5	18.2
Public Investment	10.5	8.8	7.2	6.8
Savings	21.6	23.4	24.3	23.5
Private Savings	19.6	22.1	23.4	23.1
Public Savings	2.0	1.3	0.9	0.5
Consumption-Total		76.5	77.1	78.0
Private Conumption.		65.7	65.6	66.3
Govt. Consumption		10.9	11.4	11.6
Current Account Deficit	1.6	1.3	1.4	1.5
ICOR	4.1	3.9	3.9	4.1

Note: Eighth Plan figures are in earlier 1980-81 prices

27. The more interesting changes, however, have arisen from the revision in sectoral structure of the economy in the new NAS. Even with constant sectoral growth targets and unchanged sectoral Incremental Capital-Output Ratios (ICORs), the new structural configuration has led to a significant decline in the aggregate ICOR for the economy from 4.34 in the Plan to 4.19, and thereby to lower investment requirements. Reconfiguring the sectoral growth rates to make them consistent with the new base and full inter-sectoral consistency in the post-Plan period has led to even further decline in the aggregate ICOR to 3.94 and consequently in the required investment rate, which has declined from 28.2 per cent to 25.7 per cent. The net result has been a significant reduction in the current account deficit that the economy will have to run - from 2.1 per cent of GDP to 1.43 per cent - for meeting its growth objective.

28. The last two years of the Plan are expected to see a revival in both public savings and investment, but the improvement in savings is targeted to be marginally lower than in investment. This would suggest that the borrowing requirement of the public sector as a proportion of GDP would increase even further in the coming two years. While this is

true, most of the increase in the public sector borrowings rate is expected to be through higher borrowings by Public Sector Enterprisees (PSEs) and not on account of increases in fiscal deficit of the government. Indeed, as will be discussed later, the consolidated fiscal deficit to GDP ratio is expected to decline quite sharply. In order to appreciate the magnitude of effort that will have to be put in by the public sector, it is instructive to examine the growth rates of the macroeconomic aggregates over the Plan period. These are presented in **Table 1-6**.

TABLE 1-6 : Annual Growth Rates of Macroeconomic Aggregates

(percent per annum)

	Plan Targets (5 Years)	Revised Plan TARGETS (5 Years)	1997-2000 (3 years)	2000-02 (2 years)
GDP Growth Rate	6.5	6.5	6.1	7.1
Investment – Total	7.3	8.7	7.1	11.2
Private Investment	5.5	8.2	7.6	9.2
Public Investment	11.5	9.9	5.9	16.3
Savings – Total	7.4	8.6	6.4	11.9
Private Savings	7.0	8.7	9.0	8.2
Public Savings	12.2	7.2	-64.0	451.2
Consumption-Total	6.3	5.4	5.2	5.7
Private Consumption.	6.2	5.1	4.7	5.7
Govt. Consumption	7.2	7.3	8.5	5.5

29. There are a number of interesting issues which arise from the above Table. First, it may be noted, both savings and investment need to grow at much faster rates in the revised Plan than in the original. Therefore, the reduction in the savings and investment rates indicated in Table 1-4 does not imply any lessening of the need to make strenuous efforts at increasing domestic savings and investment behaviour. Second, the rate of growth of investment is projected to rise sharply in last two years of the Plan as compared to the first three years. This is true of both public and private investments. On the other hand, the rate of growth of private savings is expected to decelerate over these periods. This highlights the importance that needs to be placed on increasing public savings. As can be seen, the negative trend observed during first three years of the Plan has to be decisively reversed with immediate effect. Although the target growth rate of over 450 per cent in public savings appears formidable, it has to be seen in the context of the extremely low level attained in the third year of the Plan. In fact this target seen against

the low base appears eminently feasible. Nevertheless, the importance of public sector initiatives for attaining the growth targets of the Plan and for continuing strong growth performance in the post-Plan period cannot be over-emphasised.

30. The comparative picture regarding sectoral growth targets and requirements for final two years of the Plan is given in **Table 1-7**. The revised Plan targets shown in column 3 have been derived as discussed in the Appendix, and are consistent with the target average growth rate of GDP of 6.5 per cent per annum. The required growth rates during last two years of the Plan given in the final column have been computed with reference to the revised targets, and are therefore consistent with the post-Plan growth scenario discussed in the Plan.

TABLE 1-7 : Sectoral Growth Targets for the Ninth Plan

(Rate of Growth In GDP)

Sectors	Plan Targets (5 Years)	Revised Plan Targets (5 Years)	1997-2000 (Actuals) (3 years)	2000-02 (Required) (2years)
1.Agriculture & Allied Activities	3.9	3.9	2.7	5.7
2.Mining & Quarrying	7.2	5.1	2.9	8.5
3.Manufacturing	8.2	7.1	4.9	10.6
4.Electricity,Gas & Water	9.3	8.4	7.7	9.5
5.Construction	4.9	6.8	8.3	4.5
6.Trade	6.7	6.8	6.1	7.8
7.Rail Transport	3.9	3.6	3.1	4.2
8.Other Transport	7.4	6.8	5.6	8.7
9.Communications	9.5	11.9	14.1	8.5
10.Financial Services	9.9	10.4	11.4	8.8
11.Public Administration, etc.	6.6	8.5	12.1	3.2
12.Other Services	6.6	7.7	8.8	6.0
Total	**6.3**	**6.5**	**6.1**	**7.1**

31. At the sectoral level, the above Table would show that the target rate of growth for Agriculture & Allied Activities has been retained at the original figure of 3.9 per cent per annum, despite a fairly significant increase in the base-year share in GDP and a less than targeted growth performance during the first three years. This bears some explanation. In the first place, this sector has dimensions which go beyond the mere fulfillment of demand for its output. It is central to the Ninth Plan strategy for reduction in poverty and in regional imbalances. Any compromise in the growth target for this sector would be tantamount to compromising on these objectives of the Plan. Secondly, although the increase in the base-year size of this sector implies that an unchanged growth target will require much higher additions to output in absolute terms and therefore make the target that much more difficult to attain, there is a reasonable expectation that the task may not be impossible. In revising the value-added in Agriculture, the new NAS

has taken into account production in the fore- and back-yards of households and has added a few more horticultural products in the basket of commodities. Past data suggest that these additions may have grown at a faster rate than Agriculture on an average, and may continue to do so in the future as well.

32. In the case of Mining & Quarrying, Manufacturing, Electricity, Gas & Water Supply and Other Transport, the revised targets reflect the relatively poor growth performance during first three years of the Plan. The revised growth targets are, however, consistent with a 7 per cent plus growth rate of GDP in last two years of the Plan and into the post-Plan period. Although the targets for Mining & Quarrying and for Utilities sectors may be difficult to attain given the present trends, there is every expectation that Manufacturing, which has been targeted to grow at more than 10.5 per cent per annum in the last two years, may well exceed its revised target in the short run and make up any deficit on this account. Other Transport too should attain the revised target in view of the recent performance and the emphasis that is being placed on this sector in terms of investment priorities. In the longer run, however, inter-sectoral balance will demand that the relative growth rates become more or less aligned to the figures indicated.

33. The revised targets for most other sectors are consistent with the inter-sectoral balancing requirements. Two sectors, however, which are of special interest are Construction and Public Administration, Community & Social Services. In the case of Construction, the sector has responded very favourably to recent policy initiatives and appears to have broken free from the past trends. This is indeed good augury since this sector has enormous potential for employment generation, but a certain degree of caution appears to be indicated before raising its growth target too much and disturbing the inter-sectoral balance at this stage. Most of the policy initiatives thus far are taken by the Central Government and follow-up action by the States is awaited for the most part. Since the bulk of the action in this sector is driven by State policies, any further revision of the target will have to be contingent on the progress made by States in this regard.

34. As far as Public Administration, etc. is concerned, the unnatural bulge in its measured "value-added" caused by the pay revision in first three years of the Plan becomes very difficult to accommodate in any reasonable manner. Nevertheless, real growth must be provided for since this sector encompasses two critical areas of health and education. In working out the target growth rate for the future, it has been estimated that this notional increase in the value-added will erode at the rate of 2.3 percentage points a year for the next few years. This arises from assumptions of (a) a stable 6 per cent inflation rate; (b) absence of the impact of arrears; (c) a roughly 2.1 per cent annual increase in pay and allowances; and (d) 100 per cent indexation of about 50 per cent of the pay and allowances. Thus the targeted rate of growth of 3.2 per cent translates to a real growth target of 5.5 per cent, which is somewhat lower than what is strictly desirable; nevertheless, fiscal considerations preclude any higher target.

35. The original and revised investment requirements for meeting the growth targets are presented in **Table 1-8**. The revised requirements are consistent with the revised

sectoral growth targets as discussed in the Appendix. The first point to note is that the total investment requirement for attaining the 6.5 per cent growth target stands reduced by almost Rs. 70,000 crore or 3.2 per cent. This is almost entirely an outcome of the fact that as per the new NAS, although the estimated GDP has increased, the investments over the period 1993-94 to 1996-97 have declined. The second noteworthy point at the aggregate level is that over 54 per cent of the revised investment requirements have actually materialised in first three years of the Plan. This is more or less in accordance with the steady-state projections, and gives assurance that the revised Plan targets and investment requirements can be met.

TABLE 1-8 : Sectoral Investment Requirements for the Ninth Plan

(Rs. '000 crore at 96-97 prices)

Sectors	Plan Requirements (5 Years)	Revised Plan Requirements (5 Years)	1997-2000 (Actuals) (3 years)	2000-02 (Required) (2 years)
1. Agriculture	245.7	230.5	100.7	129.8
2. Forestry & Logging	4.1	3.0	1.9	1.1
3. Fishing	22.6	19.2	8.7	10.5
4. Mining & Quarrying	84.5	77.1	33.8	43.3
5. Manufacturing – Registered	438.4	424.8	355.8	69.0
6. Manufacturing – Unregistered	173.3	164.4	82.6	81.8
7. Electricity, Gas & Water	336.7	299.3	125.3	174.0
8. Construction	39.9	43.4	23.4	20.0
9. Trade	47.2	56.6	32.4	22.2
10. Hotels, etc:	21.1	20.4	10.8	9.6
11. Rail Transport	35.0	34.7	18.8	15.9
12. Other Transport	129.0	134.7	69.0	65.7
13. Communications	69.2	78.6	39.4	39.2
14. Financial Services	104.4	97.1	30.3	66.8
15. Real Estate	249.0	233.9	115.0	118.9
16. Public Administration, etc.	121.8	131.1	58.8	72.3
17. Other Services	48.7	53.9	34.1	19.8
Total Investment	**2170.6**	**2101.0**	**1141.0**	**960.0**

36. At the sectoral level, however, matters are somewhat more complicated. Despite a 7.2 per cent reduction in the investment requirement for Agriculture & Allied Activities, the actual investment during first three years of the Plan has been only 44 per cent of the revised requirements. This is much too low and concerted efforts will have to be made to accelerate the pace of investment in this sector if the Plan targets are to be attained. For most part, investment in this sector lies in the domain of States and of the private sector, with the Centre contributing less than 10 per cent of the total investment requirement. An improvement in the fiscal position of the State Governments is therefore essential for revival of investment in this sector, both directly and through a "crowding

in" effect. Fortunately, however, the gestation lags of investment in this sector are by and large quite small, averaging just over one year, and therefore expeditious action can yield fairly quick results.

37. The situation in Mining & Quarrying is much worse than in Agriculture despite the similarities in broad figures: 8.8 per cent reduction in investment requirement and 44 per cent achievement of the revised requirement in the first three years. In the first place, the gestation lags of investment in this sector typically are large, and not too much can be expected in the near future even if there is an immediate revival in investment. Second, the bulk of investment now occurring in this sector is by Central Public Sector Enterprises (CPSEs). Unfortunately, the internal resources of many of these CPSEs, particularly in coal, have fallen significantly short of Plan estimates, which have also adversely affected their ability to raise extra-budgetary resources. There is some hope that with the revival of the economy, the internal resources of these enterprises will improve and will enable them to raise the pace of investment, but this may not be enough. The Plan had expected that about 40 per cent of investment in this sector would come from private sources, which would require policy and legislative changes outlined in the Plan. This expectation has been belied primarily due to inadequate movement on the policy front. Although enabling provisions for private involvement have been made, the procedural and legislative follow-up has been inadequate. The urgency for such movement cannot be overstated since lack of adequate investment in this sector within the next couple of years will seriously jeopardise the pipeline investment needed to accelerate the growth rate of the economy during the Tenth Plan period and beyond.

38. The situation is equally grim in Utilities sector, particularly in Electricity. Although the investment requirements have been reduced by over 11 per cent, only 42 per cent of the revised requirements have actually materialised during the first three years. This is again a sector which has relatively long gestation lags, especially in transmission, which underscores the necessity for rapid revival in investment activities for keeping up the growth momentum in the post-Plan period. The problems regarding the financial health of the state electricity boards (SEBs) and inadequate progress on the reform front have already been mentioned. In addition, the Plan had envisaged that over 44 per cent of the investment in this sector would have to come from the private sector. Not only has this not happened, the rate of progress is extremely slow. The principal factors for this are again the performance of the SEBs and lack of movement on the institutional front. Although some movement has been visible in the immediate past, in terms of some State Governments establishing independent Electricity Regulatory Authorities and unbundling the SEBs, it is nowhere near enough. There needs to be a considerably greater sense of urgency in implementing the necessary reforms if even the revised targets are to be met.

39. The case of the Financial Services sector is an interesting one. The output of this sector is determined primarily by the financing needs of the rest of the economy. As a result, the restoration of the target growth rate of GDP has necessitated an increase in the growth rate of this sector, but its investment requirement has been reduced by 7 per cent on consistency considerations. Despite this reduction, only 31.2 per cent of the revised

investment requirement has been achieved during first three years of the Plan. The seriousness of this development has already been mentioned, but it bears reiteration and elaboration since it may have strong adverse implications on the growth and investment prospects of other sectors of the economy.

40. The definition of 'investment' in the Financial Sector is somewhat different from that in other sectors. By and large, it comprises "owned" funds of the sector, and not funds that are placed with it for reinvestment by the public at large. It therefore represents the risk capital that provides the backing for the intermediation function that the sector carries out. In earlier years the quantum of such capital resources was not an issue of concern, and the volume of lending or 'investment' of the Financial Sector was determined almost entirely by "deposits" made by the public with these institutions. In recent years, however, prudential concerns have led to the imposition of "capital adequacy" norms, particularly for the banking sector and development finance institutions. These norms place an upper bound on the total volume of loans that can be made by these institutions at any given time on the basis of their "owned" funds. Thus, today the rate of growth of credit in the economy is governed by two distinct parameters : (a) the rate of growth of deposits; and (b) the rate of growth of "owned" funds. It is therefore entirely possible that a strong growth of deposits can be accompanied by a low growth of credit or loans arising from a binding capital adequacy requirement; this drives a wedge between savings and investment and becomes the binding constraint on economic activity in the country.

41. The growth of "owned" capital of the financial system is determined in turn by two major factors : (a) growth of retained profits of financial institutions; and (b) ability to raise capital from the promoters or from the market. In the past, growth of retained profits of the banking sector was constrained by the preemption of a sizeable proportion of loanable funds by the Government at below-market interest rates through mandatory reserve requirements. This handicap has been removed, both by reduction in the extent of preemption and by moving to market-related rates, and gross bank profits have grown rapidly in the 1990's. Yet stringent provisioning norms for non-performing assets (NPAs) have eroded much of these gains in the last two years. Moreover, since most of the banking sector is in the public domain, fiscal problems of the Government have precluded an adequate increase in the capitalisation of the banks. No doubt a certain amount of capital has been raised from the market by a few public sector banks, yet the figures cited above indicate that it is not enough. As a consequence, the risk-adjusted capital adequacy ratio (CRAR) of the banking sector taken as a whole has fallen from above 12 per cent at the end of 1997-98 to just over 10 per cent by the end of 1999-2000. This needs to be seen in the perspective of a mandated CRAR of 9 per cent at present, which is slated to go up to 10 per cent in 2001-2002. Clearly, if this trend continues, there is a strong possibility that a revival in the investment climate in the country can be choked off by the inability of the banking sector to make sufficient credit available, independent of the growth of deposits. To make matters worse, such a situation will also adversely affect the profitability of banking sector since the credit/deposit ratio will go down even further, thereby reinforcing this adverse trend.

42. The principal stumbling block appears to be inability of the Government to either provide adequate equity capital or permit public sector banks freely to raise equity from the market. The latter arises from dilution of Government holding that is implicit in any public issue where the principal shareholder does not increase its own equity on a commensurate basis. Although it is true that increasing the "owned" funds of banks without dilution of ownership can be effected by raising Tier-II capital from the market, there is a limit to which this can be done. Moreover, any relaxation of the existing limits will increase the extent of leverage of the banking sector and thereby its vulnerability. The obvious option is therefore to permit dilution in equity holdings of the Government in public sector banks. Although an in-principle decision has been taken to reduce Government's equity share to 33 per cent, actual dilution is still being processed on a case-by-case basis. Individual banks have been approaching the Government for enhancement of their equity base and receiving permission to do so. However, the data suggest that this is a systemic problem and should be viewed in its macro context. Moreover, dilution of Government holdings can be a short to medium term strategy at best. A longer view will have to be taken to ensure that this problem does not become an abiding feature of the Indian financial sector. For the immediate future, however, it is imperative that measures be taken to enhance the CRAR of the banking sector as a whole on an urgent basis. Otherwise the possibility exists that economic revival may be constrained by availability of credit.

43. The investment profile of rest of the sectors during first three years of the Plan is more or less in line with their revised investment requirements. Thus, they can be expected to meet the targets without any great difficulty. Indeed, two sectors – Registered Manufacturing and Other Services – are well ahead of their respective steady-state paths. The Other Services Sector has received about 63 per cent of the required investment in the first three years, mainly on the strength of the Software sector. There is every expectation that this trend will continue, and that this sector may meet, or even exceed, its target comfortably. In the case of Registered Manufacturing, almost 84 per cent of the revised investment requirement has already occurred, which implies that there is a good chance that the target will be crossed. On the other hand, it also raises the possibility that future investment growth in this sector may not accelerate, and indeed may decelerate, in the immediate future as capacity utilisation will remain on the lower side. Domestic demand is unlikely to rise sufficiently to forestall this possibility and exports provide the only alternative. The implication of this possibility is that unless investment in the other sectors picks up strongly, there could be a lack of adequate investment demand in the economy leading to a weaker recovery than anticipated. This underscores the importance of a strong revival in public investment in last two years of the Plan, not merely for meeting its sectoral obligations but also for ensuring adequate aggregate demand in the economy and thereby sustaining the growth momentum.

44. Revision of aggregate and sectoral growth targets and investment requirements also necessitates a reconsideration of the investment responsibilities of public and private sectors and of the over-all savings-investment balances. In carrying out this exercise, a number of assumptions have had to be made in order to accommodate the changes in the data set. First, as far as private savings and investment behaviour is concerned, the

behavioural equations of the Plan model have had to be calibrated to the new data series. To the extent possible, the burden of calibration has been placed on changes in the intercept term rather than on the behavioural parameters. Second, cognisance also has had to be taken of the fiscal stress being faced by every level of Government and the extent to which these could reasonably be relaxed in the next two years. The outcome of this exercise is presented in **Table 1-9**.

TABLE 1-9 : Savings-Investment Balance

(Rs. '000 crore at 1996-97 prices)

	Plan	Revised Plan	1997-2000 (Estimated)	2000-2002 (Required)
Savings- total	2010.8	1983.5	1073.5	910.0
Private Savings	1883.7	1911.6	1052.1	859.5
Public Savings	127.1	71.9	21.4	50.5
Investment - total	2170.6	2100.8	1140.7	960.1
Private Investment	1444.4	1510.0	829.4	680.6
Public Investment	726.2	590.8	311.4	279.5
Foreign Savings	159.8	117.3	67.2	50.1

45. The first point to note in the above Table is that the revised estimate of Total Domestic Savings is only 1.4 per cent lower than the original Plan estimate though the savings in first three years of the Plan has been 5.2 per cent below the original steady-state projection as given in Table 1-2. This has come about both through a stronger-than-expected performance of private savings and an anticipated revival of public savings in last two years of the Plan. As can be seen, private savings is estimated to be higher by 1.5 per cent than the original Plan estimates, and even so 55 per cent of the revised estimate has already been achieved in first three years of the Plan. This is completely in accord with the projected time-path.

46. As far as public savings is concerned, it is not only expected to be 43.4 per cent lower than the original target, but the realisation of the revised estimate has been only 29.8 per cent in the first three years. Thus, in last two years of the Plan, public savings is expected to rebound strongly. This expectation is based on two main factors. First, the negative effect of the pay revision, especially of payment of arrears, on Government savings more or less ceases after 1999-2000. Second, performance of the Public Sector Enterprises, and thereby their internal accruals, is expected to improve with industrial revival. As a consequence, public savings as a percentage of total domestic savings is estimated to rise from the mere 2 per cent during the first three years to 5.5 per cent in the final two years. Although this will continue to be lower than the Plan target of 6.3 per cent, it represents a movement in the right direction.

47. Insofar as aggregate investment is concerned, as has already been discussed, the growth target of the Plan can be achieved with a 3.2 per cent lower investment than originally estimated. The decomposition of the revised investment requirement between the public and the private sectors, however, is very different from the original. It may be recalled that the Plan had targeted public investment to be 33.5 per cent of total investment in the economy. This target now appears unattainable since in the first three years this ratio has fallen to 27.3 per cent. A reasonable evaluation of the prospects for the last two years of the Plan suggests that it may be possible to raise this proportion to 29.1 per cent, and not much higher, which yields a full Plan figure of 28.1 per cent. However, it needs to be noted that the share of public investment to the total in the terminal year of the Ninth Plan is likely to be higher than what it was in the terminal year of the Eighth Plan. Nevertheless, public investment is a matter of serious concern, and issues relating to it and to the fiscal position of the Government are examined in greater depth later in this chapter and also in Chapter 2.

48. In order to accommodate the 18.6 per cent reduction in the public investment target, the revised target for private investment is 4.5 per cent higher than in the Plan. The feasibility of this higher target can be gauged from two factors. First, the private investment demand function used in the Plan yields roughly the same figure if not constrained by credit restrictions, as has been mentioned earlier. Second, 55 per cent of this higher target has already been achieved in first three years of the Plan, which is consistent with the steady-state path. Thus, both theoretically and empirically, there is every expectation that the revised investment target will be achieved by end of the Ninth Plan.

49. Finally, it should be noted that although both aggregate domestic savings and investment have been revised downwards, the reduction in the former (-1.4 per cent) is significantly lower than in the latter (-3.2 per cent). As a consequence, the requirement of foreign savings in the form of current account deficits (CAD) reduces sharply by 26.6 per cent, of which 57 per cent has been achieved in the first three years. Details of the balance of payments as originally planned and revised are given in **Table 1-10**, along with the performance in the first three years and expectations about the last two years. As can be seen, exports have been somewhat lower than targeted, having achieved about 51 per cent of the revised target. Imports, on the other hand, are more or less on target at 54 per cent. As a consequence, the trade balance during the first three years has been larger than expected. However, an unexpectedly strong performance of invisibles has kept CAD well below the expected. In the next two years, imports are expected to grow at about 14.5 per cent per annum, while exports need to grow at around 20 per cent if the aggregate demand conditions for the traded goods sectors are to be met. If these projections are realised, the trade deficit should narrow quite significantly. Nevertheless, CAD may actually widen due to an expected reversal on the invisibles account.

TABLE 1-10 : Balance of Payments and its Financing

(Rs. '000 crores at 1996-97 prices)

	Plan	Revised Plan	1997-2000 (Estimated)	2000-2002 (Expected)
Exports	800.9	775.0	401.7	373.3
	(226)	(218)	(113)	(105)
Imports	936.1	909.5	496.8	412.7
	(264)	(256)	(140)	(116)
Trade Balance	-135.2	-134.5	-95.1	-39.4
	(-38)	(-38)	(-27)	(-11)
Net Invisibles	-24.6	17.2	44.7	-27.5
	(-7)	(5)	(13)	(-8)
Current Account Balance	-159.8	-117.3	-50.4	-66.9
	(-45)	(-33)	(-14)	(-19)
Financed By:				
Net External Asst.	7.7	12.5	8.9	3.6
	(2)	(4)	(3)	(1)
Net External Debt	53.9	60.5	37.7	22.8
	(15)	(17)	(11)	(6)
FDI	92.3	70.8	32.8	38.0
	(26)	(20)	(9)	(11)
FPI	23.1	32.7	10.9	21.8
	(7)	(9)	(3)	(6)
Total Capital Inflow	177.0	176.5	90.3	86.2
	(50)	(50)	(26)	(24)
Net Accretion to Reserves	17.2	59.2	39.9	19.3
	(5)	(17)	(11)	(6)

Notes:(1) Figures in brackets are in US$ Billion.

(2) Above figures may not tally with the RBI Balance of Payments accounts due to two corrections that have been made :

(a) Software exports have been deducted from invisibles and added to exports;

(b) NRI gold imports have been deducted from both imports and invisibles.

50. At an aggregate level, capital inflows have more or less been in accordance with Plan targets, and there is no reason to believe they would not continue to be so in last two years of the Plan. Although this, taken with the CAD estimates, is most reassuring from the point of view of balance of payments management and external indebtedness, it also points to a deeper malaise, which needs to be discussed in more detail. First, it may be noted from the above Table that foreign direct investment (FDI) has fallen well short of the target (45 per cent of the planned). This has been made up primarily by external debt inflows, which have been 62 per cent of the target, driven largely by proceeds from the Resurgent India Bonds (RIBs). This is not particularly propitious since FDI has a dimension beyond mere financing of CAD. As has been mentioned in the Plan, FDI is an important component of the aggregate investment demand in the economy and is central to raising the rate of capacity creation in the country above what is likely to occur

through domestic investment alone. External debt does not have this characteristic. Secondly, this characteristic of FDI takes on added importance in view of the fact that in first three years of the Plan accretion to foreign exchange reserves (FER) at US$ 11 billion was considerably in excess of the requirement, which was placed at US$ 4 billion. In other words, the economy was simply unable to absorb the inflow of foreign savings and convert it into productive capacity.

51. Estimates for last two years of the Plan do not indicate either that FDI flows will be significantly stronger. Although there is some expectation of acceleration on this account, it is felt that foreign portfolio investment (FPI), which had underperformed in the first three years, is likely to do better. Thus, despite the expected revival in domestic investment, reserve accretion is likely to continue apace as the economy will not be able to absorb the available foreign savings fully. As has been pointed out in the Plan, a wide gap between the inflow of foreign resources and its absorption can create serious problems in the macro-management of the economy, particularly with respect to monetary and exchange rate policies. This observation underscores the importance of encouraging FDI, on the one hand, and making every effort to increase public investment, on the other.

Fiscal Considerations and Public Sector Plan

52. It should be clear from the above discussion on performance of the economy during first three years of the Plan that a major cause of the relatively slow growth has been the serious shortfall in public investment during this period. Almost all other macroeconomic variables appear to have behaved more or less according to Plan. Therefore, in order to assess future progress of the Plan, it is necessary to examine the extent and nature of the deviations that have occurred in public finances and expenditures. Although most of these issues has been dealt with in greater detail in Chapter 2, a broad overview may be desirable at this stage in order to motivate the changes that have become necessary in the Plan targets. A summary statement of Plan targets for both outlays and resources of the public sector and the performance during first three years of the Plan is presented in **Table 1-11**. The first point to note is the serious slippage in almost all Plan parameters, except in Centre's support to PSEs and in the current outlay component of State Plans. In particular, attention needs to be focussed on the fact that although all wings of the public sector, Centre, States and PSEs, have experienced shortfalls in their investment targets, the problem has been most acute in the States. The realisation of only 28 per cent of planned investment in the first three years against a normal realisation of 57 per cent over the same period is cause for serious concern. The magnitude of the problem becomes clearer by the fact that investments by the States have been only 1.24 per cent of GDP against a target of 2.48, thereby accounting for almost 60 per cent of the total slippage in the public investment rate from 8.91 per cent of GDP to 6.82 per cent.

TABLE 1-11 : Outlays and Resources of the Public Sector during First Three Years of the Ninth Plan

(Rs. Crore at 1996-97 prices)

	IX Plan Projection		Realisation (1997-2000)		Realisation
	Rs. crore	% GDP	Rs. crore	% GDP	as % of Plan
Centre:					
Central Plan Outlay	374,000	4.59%	181,527	3.98%	48.54%
of which					
(a) Support to State Plans	170,018	2.09%	81,528	1.79%	47.95%
(b) Support to CPSEs	38,000	0.47%	21,477	0.47%	56.52%
(c) Support to Ministries	165,982	2.04%	78,521	1.72%	47.31%
(i) Investment	106,482	1.31%	50,373	1.10%	47.31%
(ii) Current Outlay	59,500	0.73%	28,148	0.62%	47.31%
Financed by:					
(a) Borrowings	384,700	4.72%	240,314	5.27%	62.47%
(b) Other resources	-10,700	-0.13%	-58,787	-1.29%	549.41%
States:					
State Plan Outlay	275,500	3.38%	113,516	2.49%	41.20%
of which					
(a) Investment	202,000	2.48%	56,651	1.24%	28.05%
(b) Current outlay	73,500	0.90%	56,865	1.25%	77.37%
Financed by:					
(a) Central support	170,018	2.09%	81,528	1.79%	47.95%
(b) Borrowings	127,082	1.56%	132,233	2.90%	104.05%
(c) Other resources	-21,600	-0.26%	-100,245	-2.20%	464.10%
PSEs:					
Outlay/Investment	417,718	5.12%	204,338	4.48%	48.92%
Financed by:					
(a) Central Support	38,000	0.47%	21,477	0.47%	56.52%
(b) IEBR	379,718	4.66%	182,861	4.01%	48.16%
Total Plan Outlay of Public Sector	859,200	10.54%	396,376	8.69%	46.13%
Total Public Investment	726,200	8.91%	311,362	6.82%	42.88%

NOTES:

(1) All Union Territories (UTs) are clubbed with the States.

(2) A part of the investment outlay of the States will be towards budgetary support to State PSEs for investment purposes. Since this quantum is not yet known, it is being carried in the State budgets.

(3) The 'borrowings' of PSEs include all market-related funds including new equity issues, if any.

(4) 'Other resources' of the Centre and the States include balance on current revenues (BCR), miscellaneous capital receips (MCR) and external grants, less non-Plan capital expenditures.

(5) EBR of state PSEs and central PSEs are clubbed together under IEBR.

53. In order to appreciate the extent of slippage that has taken place in the Public Sector Plan during the first three years, the performance during the first three years of the Eighth Plan is presented in **Table 1-12**. As can be seen, by and large, the achievement in most of the items was well above the 50 per cent mark during the Eighth Plan, whereas they are significantly lower during the Ninth Plan (Table 1-11, last column). This indicates the seriousness of the short-fall that has occurred during the Ninth Plan, which has grave implications for the growth process, both in the short- and medium-term.

TABLE 1-12 : Share of Centre and States in Public Sector Plan Outlay Realisation during first three years of Eighth Plan

(Rs. Crore at 1991-92 prices)

	Eighth plan target	Realisation 1992-95	Realisation as % of target
1. Central Deptts.			
1.1 Outlay	247865	147404	59.47
1.2 Budgetary Support	103725	57982	55.90
1.3 IEBR	144140	89422	62.04
2. States & Uts			
2.1 Outlay	186235	96286	51.70
2.2 Central Assistance	84750	48953	57.76
2.3 States own Resources	101485	47333	46.64
Total Plan Outlay(1.1+2.1)	434100	243690	56.14

54. The over-2 percentage drop in public investment rate has occurred despite a sharp increase in government borrowing of almost 2 percentage points of GDP, from 6.3 per cent in the Plan to 8.2 per cent. Thus, there has been a turnaround of over 4 percentage points of GDP in the investment-cum-borrowing profile that had been targeted in the Plan. In contrast, the net position on the non-plan account, ie. non-plan expenditures less all non-debt resources, has gone up by 3.1 percentage points of GDP, from 0.39 per cent to 3.49 per cent. Therefore, the contribution of the public sector to aggregate demand in the economy has actually slipped by about 1 percentage point of GDP over this period in an *ex-post* sense. In *ex-ante* terms the situation would have appeared even worse since the deceleration of the economy consequent to this reduction in aggregate demand has reduced the denominator. Further, it must be emphasised that an increase in public consumption expenditure is an inadequate substitute for a decline in public investment. The latter has considerably stronger multiplier effect than the former, and is therefore more growth-enhancing both in the short -run as well as in the medium run. .

55. The essential problem stems from fiscal difficulties that have been faced by both Central and State Governments, by which the need to protect public investment has run

directly counter to the need to contain the fiscal deficit in the face of burgeoning current expenditures. In order to appreciate the magnitude and trend of those fiscal problems, various measures of deficit are presented in **Table 1-13**. The gross fiscal deficit of the Centre has been calculated on the basis of the new definition, i.e. by eliminating the share of small savings accruing to States. The net fiscal deficit further excludes other loans from the Centre to States, primarily through the Plan.

TABLE 1-13 : Measures of Deficit of The Government

(% of GDP)

	1996-97	1997-98	1998-99	1999-2000
(A) Combined Centre and States:				
1.Fiscal Deficit	5.9	6.8	8.5	8.8
2.Revenue Deficit	3.6	4.1	5.8	6.2
3.Primary Deficit	0.7	1.4	2.9	2.9
(B) Centre:				
1.Gross Fiscal Deficit	4.1	4.8	5.1	5.6
2.Loans from Centre to States	0.9	0.9	0.9	1.1
3.Net Fiscal Deficit (1-2)	3.2	3.9	4.2	4.5
4.Revenue Deficit	2.4	3.1	3.4	3.8
5.Primary Deficit*	-0.2	0.5	0.7	0.9
(C) States:				
1.Fiscal Deficit	2.7	2.9	4.3	4.3
2.Revenue Deficit	1.2	1.1	2.4	2.4
3.Primary Deficit	0.9	0.9	2.2	2.0

*** Includes loans from Centre to the states, but excludes small savings and interest paid thereon**

56. The most significant feature of this Table is the sharp increase that has taken place in the combined fiscal deficit of the Centre and the States during the Plan period, which has risen by almost 3 percentage points of GDP. However, the source of this increase has been different in the three years. In 1997-98, the first year of the Plan, bulk of the increase was on the Central account, and all of it due to a rise in the primary deficit. This was entirely expected as it reflects the impact of wage revision and payment of arrears by the Central Government. In fact the Plan had explicitly taken this into account and had expected a decline in the following year, which did not entirely materialise due to problems arising from the tax revenue side.

57. Nevertheless, the 1.7 percentage point deterioration in the combined fiscal deficit in 1998-99 was mainly due to a severe worsening of state finances, again primarily on account of wage revision and arrears payments. Although some of this was anticipated and built into the Plan, the magnitude was larger than expected and has spilled over into

1999-2000. Indeed, the dangers of delay become apparent from this episode. The Central pay revision involved arrears of about 20 months spread over two years, while the States have had to pay over 30 months of arrears on the average. The impact of such bunching can be very severe on fiscal management efforts. To complicate matters, tax devolution to the States from the Centre declined by over 0.6 percentage points of GDP in 1998-99 as compared to 1997-98. The combined effect has been to increase the borrowing requirements of the States to well above sustainable levels.

58. The increase in combined fiscal deficit in 1999-2000 is estimated to be almost entirely due to a further worsening of the Centre's budgetary position, despite some recovery in the tax/GDP ratio. The main contributing factors have been increases in Plan allocations, interest payments and defence expenditure as percentages of GDP. The last item was necessitated by the Kargil conflict, and marks a turning point in the trend of defence expenditure to GDP ratio. It appears that in the immediate future, there may be no option but to increase it even further. Although there appears to be no further deterioration of the fiscal deficit of States in relation to GDP, there has been no improvement either, and the level continues to be much too high for sustainability. It may be recalled that the Plan had estimated that a sustainable fiscal deficit ratio of the States could be no higher than 2.8 per cent of GDP if interest payments to current revenue ratios are not to increase explosively. In the case of the Centre too, the net fiscal deficit ratio of 4.5 per cent of GDP in 1999-2000 is significantly higher than the sustainable level of 3.4 per cent calculated in the Plan for stabilising the debt/GDP ratio.

59. The principal factor underlying the dismal performance of the public sector plan appears to be the failure to achieve tax targets that had been laid down in the Plan and on which the entire structure of financing of the Plan had been based. In order to appreciate the magnitude and composition of the shortfalls, the targets and achievements in the tax/GDP ratios of the Centre and the States are presented in **Table 1-14**. All figures in this Table, including the targets, have been expressed in terms of the new NAS series in order to ensure comparability. In the case of the Centre, the figures reported are for gross tax collection, ie. prior to devolution to States. For the States, only the states' own taxes are given.

TABLE 1-14 : Tax Performance of the Government

(% of GDP)

Year		Direct	Indirect	Total	Target	Shortfall (% GDP)	Shortfall (Rs crore)
1996-97							
	Centre	2.93	6.53	9.46	9.86	0.40	5584
	States	0.16	5.08	5.23	5.48	0.25	3405
	Combined	3.09	11.61	14.69	15.34	0.65	8853
1997-98							
	Centre	3.26	5.92	9.18	10.01	0.83	11741
	States	0.62	4.74	5.36	5.52	0.16	2231
	Combined	3.88	10.66	14.54	15.53	0.99	14028
1998-99							
	Centre	2.72	5.44	8.16	10.21	2.05	31195
	States	0.61	4.69	5.30	5.55	0.25	3734
	Combined	3.33	10.13	13.46	15.76	2.30	34442
1999-2000							
	Centre	3.03	5.68	8.71	10.41	1.70	27568
	States	0.65	5.05	5.70	5.59	-0.11	-1845
	Combined	3.68	10.73	14.41	16.00	1.59	25755

60. The problem begins from the base year (1996-97) itself. As can be seen, the actual tax/GDP ratios in 1996-97 were significantly lower than the revised budget estimates (RE), which formed the basis of the Plan targets. As a consequence, the magnitude of tax effort required to meet the Plan targets would have had to be considerably greater than originally envisaged. Not only did this not happen, the first two years of the Plan (1997-98 and 1998-99) witnessed even further slippage in the tax/GDP ratios, particularly at the Centre. Matters would have looked even worse but for the Voluntary Disclosure of Income Scheme (VDIS) launched in 1997-98, which garnered a little over 0.65 per cent of GDP as additional income tax. However, since this was a one-time scheme, its effect did not carry through to 1998-99, which witnessed a very sharp decline in the tax/GDP ratios. Although the performance did improve significantly in 1999-2000, primarily due to the additional excise (cess) on diesel, there is a long way to go before the original Plan targets can be attained.

61. The main problem area appears to be indirect taxes collected by the Centre. A further break-down of the data reveals that although both Customs and Excise have contributed to the decline, the behaviour of the former has been more or less consistent with the behaviour of the relevant tax base, viz. value of imports. The latter, however, shows a massive reduction in buoyancy which is not explained by the behaviour of the tax base. The conclusion is inescapable – excise collections have been hampered either by inadequate tax effort or by misuse of the expanded MODVAT facility since 1996-97. Credence is lent to this view by the sharp increase that has taken place in MODVAT

offset as a percentage of gross excise, especially between 1996-97 and 1998-99. Measures to check such misuse are imperative if the fiscal position of the Centre is to improve at all.

62. The tax revenues of the States, however, have performed more or less up to expectation. In fact, in 1999-2000, the State taxes to GDP ratio may actually cross the target. This should not, however, be a ground for complacency. In the first instance, the Plan had set fairly modest targets for tax collection by States, primarily because it was felt that not too much could be achieved without coordinated action among all States on taxation matters, which had not seemed likely at the time of Plan formulation. Moreover, the Plan had factored in the removal of a number of State taxes which are impediments to inter-state commerce, which continue to be in existence. Nevertheless, the tax potential of most States is considerably higher than actual collections. The large differences that exist between States in terms of tax performance are the surest indicators of this. However, it also needs to be mentioned that the fiscal problems faced by the States during first three years of the Plan, and the resulting high levels of borrowing, to a substantial extent are due to the shortfalls in Central tax collections. Even at a conservative estimate, the fiscal deficit of the States has been higher by about 0.5 per cent of GDP due to a lower-than targeted devolution of Central taxes.

63. The consequence of these shortfalls in tax collection has been both a reduction in Plan outlays and an unsustainable increase in fiscal deficits. As can be seen from the last column of Table 1-14, the total loss of revenue on this account during first three years of the Plan has been Rs.74,225 crore in 1996-97 prices, as compared to the Rs.59,750 crore shortfall in the Plan outlay of the Centre and States taken together (see Table 1-11). Thus, if tax collections had met the targets, full achievement of the target outlays would have been possible with an average 0.3 percentage point lower combined fiscal deficit to GDP ratio. Indeed, the situation would probably have been even more positive since account has not been taken of the multiplier effect of the higher public expenditures on GDP or of the lower interest burden arising from lower borrowing needs.

64. Despite the serious slippages that have taken place in public finances during first three years of the Plan, there are some positive indications that need to be taken note of. As can be seen, tax performance both at the Centre and in the States has shown significant improvement in 1999-2000. It is expected that this trend will strengthen in the future. In particular, two positive developments need to be mentioned. The first is the agreement that has been arrived at between the States to end `tax wars' by implementing a uniform set of floor sales tax rates and doing away with sales tax concessions. This measure alone should improve the buoyancy of sales tax receipts substantially. Second, in the Union Budget 2000-01, an effective cap has been placed on the extent of MODVAT misuse, which should not only improve excise collections but corporate tax collections as well.

65. The impact of the wage revisions and payment of arrears too is more or less over. This alone should reduce both the non-Plan expenditure and the current outlays in the Plan as percentages of GDP quite significantly. The gradual reduction that has taken

place in interest rates, particularly the decision to reduce interest rates on small savings, should lead to a deceleration in the rate of increase in the interest payments by Government. This is of particular importance to the States since first three years of the Plan have witnessed a sharp and unsustainable increase in the share of interest payments in current revenues. The States should also get some succour from the interim award of the Eleventh Finance Commission and the decision to move to the sharing of pooled taxes of the Centre that had been recommended by the Tenth Finance Commission. Finally, in 1999-2000 the PSEs have again started to raise funds from the market to finance their investment, which had virtually ceased in the previous two years.

66. On the negative side, the substantial addition to public debt that has occurred during the last three years will keep interest payment relatively high for the next few years, both at the Centre and in the States. Disinvestment proceeds too have not materialised to the extent targeted, and it is difficult to assess future progress on this account since there is still no clear policy on disinvestment and privatisation. The States, in particular, have shown little movement in this area. Moreover, as has been already mentioned, there is reason to believe that defence expenditure as a percentage of GDP may increase further, and provision will have to be made for it. Finally, the impact of the Fifth Pay Commission award on pension liabilities of the Government is severe and need to be explicitly taken into account.

67. Keeping these factors in mind, the public sector plan has been recast in its entirety on the basis of actual performance in the first three years and projections of most probable fiscal configurations for the Centre and the States during last two years of the Plan. This is shown in **Table 1-15**. Clearly, these calculations are highly sensitive to the assumptions made regarding the time path of the fiscal deficits of the Centre and the States. It is always possible to provide higher support to the Plan by relaxing the fiscal deficit targets, but it has a cost in terms of the sustainability of public finances in the post-Plan period. Therefore, a balance has to be drawn between the need to provide sufficient resources for public investment for maintaining present and future growth and the requirements of macroeconomic stability.

TABLE 1-15 : Revised Outlays and Resources of the Public Sector

(Rs. Crore at 1996-97 prices)

	Revised IX Plan		Last two years (2000-02)		Revised as %
	Rs. crore	% GDP	Rs. crore	% GDP	of Original
Centre:					
Central Plan Outlay	325,227	3.99%	143,700	4.00%	86.96%
of which					
(a) Support to State Plans	147,628	1.81%	66,100	1.84%	86.83%
(b) Support to CPSEs	37,977	0.47%	16,500	0.46%	99.94%
(c) Support to Ministries	139,621	1.71%	61,100	1.70%	84.12%
(i) Investment	89,573	1.01%	39,200	1.08%	84.12%
(ii) Current Outlay	50,048	0.60%	21,900	0.62%	84.12%
Financed by:					
(a) Borrowings	419,514	5.15%	179,200	4.99%	109.05%
(b) Other resources	-94,287	-1.16%	-35,500	-0.99%	881.19%
States:					
State Plan Outlay	235,316	2.88%	121,800	3.39%	85.41%
of which					
(a) Investment	135,151	1.65%	78,500	2.19%	66.91%
(b) Current outlay	100,165	1.23%	43,300	1.20%	136.28%
Financed by:					
(a) Central support	147,628	1.81%	66,100	1.84%	86.83%
(b) Borrowings	195,086	2.39%	83,500	2.32%	153.51%
(c) Other resources	-107,398	-1.32%	-27,800	-0.77%	497.21%
PSEs:					
Outlay/Investment	366038	4.49%	161,700	4.51%	87.60%
Financed by:					
(a) Central Support	37,977	0.47%	16,500	0.46%	99.94%
(b) IEBR	328,061	4.02%	145,200	4.05%	86.40%
Total Plan Outlay of Public Sector	740,976	9.09%	344,600	9.60%	86.24%
Total Public Investment	590,762	7.25%	279,400	7.80%	81.35%

68. It has, therefore, been assumed that the gross fiscal deficit of the Centre will be brought down to 4.8 per cent of GDP in the terminal year of the Plan (2001-02), yielding a net fiscal deficit to GDP ratio of about 3.8 per cent. Even this may be considered relatively high as compared to the sustainable figure of 3.4 per cent. Further correction is precluded by the fact that the expected impact of the Eleventh Finance Commission award in terms of additional tax devolution and non-Plan revenue deficit grants will have to be absorbed by the Centre. In the case of States, the terminal-year fiscal deficit, including loans from the Centre and small savings, is placed at about 3 per cent of GDP, which is again higher than the sustainable value of 2.8 per cent. Thus, the combined fiscal deficit of the Government is targeted to reduce to 6.8 per cent of GDP in the terminal year of the Plan, which is 2 percentage points lower than the peak value of 8.8

per cent expected to obtain in 1999-2000. Nevertheless, it should be apparent that further fiscal correction will be required during the Tenth Plan period if public finances are to be put on a sound footing.

69. The most important point to note in the above Table is that despite significant improvements in the last two years of the Plan, there is likely to be major shortfalls in every aspect of the public sector plan. Total outlay of the public sector is expected to be just over 86 per cent of the original Plan target and public investment even lower at only about 81 per cent. The comparable figures for the Eighth Plan were 90 per cent and 85.4 per cent respectively. Central budget support to the Ninth Plan is likely to be about 87 per cent of the target, which compares unfavourably with the 93 per cent realisation that was attained during the Eighth Plan. The main problem, however, is clearly in investment by States, which is expected to be no more than 67 per cent of the original target. This is a serious matter indeed since public investments in the State sector are essential for development of most of the key segments of the economy such as agriculture, health and education. A number of critical physical infrastructure sectors too involve significant State investment. The consequence of a shortfall of this magnitude is that there is likely to be a considerable backlog of capacities in these sectors and a shortage of pipeline investments for the post-Plan period.

70. Thus, although the Ninth Plan growth target of 6.5 per cent per annum is likely to be achieved, with the growth rate rising to over 7 per cent in the last two years, the sustainability of this growth path in future years, let alone any further acceleration, remains suspect. Furthermore, the non-economic objectives of the Plan relating to quality of life are unlikely to be attained since these are driven primarily by State Government expenditures. The private sector can no doubt take up some of the slack in aggregate terms, but sectoral inconsistencies will inevitably widen and may eventually retard private dynamism. It is imperative, therefore, that conditions for accelerating public investment with fiscal prudence be created as expeditiously as possible, especially in the State sector. In this regard, attention needs to be drawn to the possibility that the Centre's fiscal position may actually turn out better than projected. The projections have been based on relatively conservative assumptions with regard to tax revenues and disinvestment proceeds. In particular, the Centre's tax/GDP ratio has been projected to rise to 9.2 per cent in 2000-01 and further to 9.5 per cent in the terminal year of the Plan. There is scope for further improvement. If this happens, it is suggested that more focus should be placed on increasing public investment by States rather than on raising Central sector plan outlays. The modalities of doing so already exist through such schemes as Accelerated Irrigation Benefit Programme (AIBP), Accelerated Power Development Programme (APDP) and sharing of diesel cess for rural and district roads. Such initiatives need to be carried forward.

APPENDIX

Impact of Revision of National Accounts Statistics (NAS) on Parameters of the Ninth Five Year Plan

71. All Five Year Plans are based on the National Accounts Statistics (NAS) brought out by the Central Statistical Organisation (CSO) of the Ministry of Statistics and Programme Implementation. The Ninth Plan was based on the most recent NAS series available at the time, which used 1980-81 as its base year. In February 1999, however, the CSO brought out a new series of NAS with 1993-94 as the base year and discontinued the earlier 1980-81 base series. As a consequence, the performance of the economy during first three years of the Plan is available only in the new series, which is not comparable with the earlier series on which the Plan was based. In compiling the new series, the CSO changed not only the base year but also the coverage in terms of economic activities and commodities. As a result, there is no easy methodology by which the data available for the new series can be made comparable to the earlier.

72. In order to appreciate the magnitude of changes that have been effected in the new series, **Table 1** presents the macro-economic aggregates for the base year of the Plan (1996-97) as per the earlier series and the new series. As can be seen, the revisions are not only not uniform across the various aggregates, even the direction of change differs quite substantially. Thus, although the Gross Domestic Product (GDP) has been revised upward by 7.7 per cent, both investment and savings have been reduced in absolute terms. The magnitude of reduction is again not even between private and public investments and savings. In order to maintain macro balances, overall consumption has been revised significantly upwards, as has been the case with the current account deficit.

TABLE 1 : Macro Aggregates of the Base Year (1996-97)

(Rs Crores)

	As per Plan (1980-81 base)	Revised (1993-94 base)	percentage change
GDP	1149215	1237290	7.7
Investment	348487	335305	-3.8
Private Investment	251851	239895	-4.7
Public Investment	96636	95410	-1.3
Savings	334041	317567	-4.9
Private Savings	309710	294609	-4.9
Public Savings	24331	22958	-5.6
Consumption-Total	956778	1037999	8.5
Private Consumption.	824612	892392	8.2
Govt. Consumption	132166	145607	10.2
Current Account Deficit	14446	17738	22.8

73. The implication of these changes is that the base figures on which the Ninth Plan projections have been made can no longer be assumed to hold. Therefore, the application of various growth rates that have been estimated for the Plan period to the new base year figures will lead to inconsistent projections for future years. It needs to be recalled that the Plan models ensure macroeconomic equilibrium at each point in time in terms of the macro aggregates, and the growth rates of the various variables are derived from such balancing. Thus the growth rates derived from a particular configuration of macro aggregates in the base year -- if they are applied to a different set of base year figures -- will inevitably lead to inconsistent or non-equilibrium values for all future years.

74. The second set of problems that arise from the NAS revision relates to the validity of the macro-economic parameters which underlie plan projections and formulation of plan targets. The macro parameters of the base year (1996-97) as per the earlier and the new series are presented in **Table 2**. As can be seen, the changes are substantial and thereby render the parametric targets of the Plan non-monitorable on the basis of the new series. A particularly vexing issue that arises from such large changes in macro parameters is the validity of the various behavioral equations that have been used in Plan formulation. For instance, the sharp reduction in the private savings rate from

24.3 per cent in the old series to 21.6 per cent in the new raises doubts about the parametric estimates of the savings and consumption functions. These equations were estimated on the basis of the 1980-81 base NAS series, and a reasoned judgement has to be taken regarding the likely change in the behavioral parameters to make them consistent with the new.

TABLE 2 : Macro Parameters of the Base Year (1996-97)

(As % of GDPmp)

	As per Plan (1980-81 base)	Revised (1993-94 base)
Investment	27.3	24.6
Private Investment	19.7	17.6
Public Investment	7.6	7.0
Savings	26.2	23.3
Private Savings	24.3	21.6
Public Savings	1.9	1.7
Consumption-Total	74.9	76.2
Private Consumption.	64.6	65.5
Govt. Consumption	10.3	10.7
Current Account Deficit	1.1	1.3

75. The macro-economic variables apart, the new NAS series also embodies significant changes in the sectoral structure of the economy. A comparative picture for the year 1996-97 is presented in **Table 1-3**. As can be seen, some of the changes are substantial. In particular, the share of Agriculture & Allied Activities and of Other Services has been increased substantially, while that of Manufacturing reduced. Since the Plan model is based on achieving a particular sectoral structure of the economy in some terminal year, which represents inter-sectoral consistency from the demand side, any change in the base year structure renders sectoral growth targets of the Plan invalid. Moreover, since the overall growth target is a weighted average of the sectoral growth targets, there is every likelihood of a mismatch between the mandated overall target and that arising from the sectoral targets. Resolution of these problems involves an entire reconsideration of the sectoral pattern of growth in order to ensure both inter-sectoral consistency as well as consistency with the macro-economic targets.

TABLE 3 : Sectoral Structure of GDP in Base Year (1996-97)

(Rs. Crore)

Sectors	As per Plan (1980-81 base)	Revised (1993-94 base)	Percentage Changes
1.Agri & Allied	310111 (27.0)	362605 (29.3)	16.9
2.Mining&Quarr	20531 (1.8)	27568 (2.2)	34.3
3.Manufacturing	222575 (19.4)	214690 (17.4)	-3.5
4.Elect,Gas&Water	32869 (2.9)	29944 (2.4)	-8.9
5.Construction	68661 (6.0)	63315 (5.1)	-7.8
6.Trade	156502 (13.6)	160323 (13.0)	2.4
7.Rail Transport	13185 (1.1)	13256 (1.1)	0.5
8.Oth Transport	58806 (5.1)	51922 (4.2)	-11.7
9.Communications	15690 (1.4)	17201 (1.4)	9.6
10.Financial Services	75928 (6.6)	72044 (5.8)	-5.1
11.Public Administration	60619 (5.3)	65146 (5.3)	7.5
12.Other Services	113736 (9.9)	159276 (12.9)	40.0
Total GDP	**1149215** **(100.0)**	**1237290** **(100.0)**	**7.7**

NOTE : figures in brackets are % to total

76. Since there is no easy and technically correct way of recalibrating the Plan targets to the new NAS, it becomes necessary completely to recast the Plan in terms of the new data series. In doing so, however, the broad targets and the imperatives of the Plan need to be preserved. First and foremost, the target growth rate of 6.5 per cent per annum for the full five-year period as mandated by the NDC has been retained. This is not simply because of the mandate but also because it is eminently attainable, given the present trends. Second, the target growth rate for the Agriculture Sector also needs to be retained since it has dimensions beyond satisfying the requirements of demand and of inter-sectoral consistency. Finally, it is quite clear that the inter-sectoral consistency as given

in the Plan will not obtain in the terminal year (2001-02) given the structural changes in the economy in the base year indicated by the revised NAS.

77. In order to recast the Plan targets with the above considerations in mind, full inter-sectoral consistency has been deferred to the post-Plan period, and the effective base for the reworking of the model has been taken to be the second year of the Plan (1998-99), for which full data are available. The revised sectoral growth targets, which yield the target GDP growth rate of 6.5 per cent per annum, are given in **Table 4**. It may be seen that the original sectoral growth targets with the new sectoral shares would have yielded an aggregate GDP growth rate of only 6.3 per cent per annum. The revisions, however, are not uniform across all sectors. The reason for this is that the steady-state paths from the new base year shares to the terminal year inter-sectorally balanced shares now reflect the performance of the different sectors during first two years of the Plan. As a consequence, the targets for the Services sectors by and large have been revised upwards, whereas for most others they have had to be revised downwards.

TABLE 4 : Original and Revised Sectoral Growth Targets

(per cent)

Sectors	Plan Targets (5 Years)	Revised Plan Targets (5 Years)
1.Agriculture & Allied Activities	3.9	3.9
2.Mining & Quarrying	7.2	5.1
3.Manufacturing	8.2	7.1
4.Electricity,Gas & Water	9.3	8.4
5.Construction	4.9	6.8
6.Trade	6.7	6.8
7.Rail Transport	3.9	3.6
8.Other Transport	7.4	6.8
9.Communications	9.5	11.9
10.Financial Services	9.9	10.4
11.Public Administration, etc.	6.6	8.5
12.Other Services	6.6	7.7
Total	**6.3**	**6.5**

78. Revision of the growth targets also necessitates a revision of the sectoral investment requirements. In doing so, however, the incremental capital-output ratios (ICORs) also have to be reconsidered in certain cases in order to have consistency with the revised NAS series. Therefore, for the most part, the ICORs derived from the earlier NAS series have been retained with some minor calibration for ensuring consistency with the new series. The net result of this exercise has been a significant reduction in the investment requirements of most sectors, resulting in a decline in the total investment

requirement of the economy for achieving the target rate of growth. This fact, taken with the increase in the absolute value of GDP, has led to a sharp decline in the aggregate ICOR.

TABLE 5 : Original and Revised Sectoral Investment Requirements

(Rs. '000 crore at 1996-97 prices)

Sectors	Plan Requirements (5 Years)	Revised Plan Requirements (5 Years)
1. Agriculture	245.7	230.5
2. Forestry & Logging	4.1	3.0
3. Fishing	22.6	19.2
4. Mining & Quarrying	84.5	77.1
5. Manufacturing – Registered	438.4	424.8
6. Manufacturing – Unregistered	173.3	164.4
7. Electricity, Gas & Water	336.7	299.3
8. Construction	39.9	43.4
9. Trade	47.2	56.6
10. Hotels, etc:	21.1	20.4
11. Rail Transport	35.0	34.7
12. Other Transport	129.0	134.7
13. Communications	69.2	78.6
14. Financial Services	104.4	97.1
15. Real Estate	249.0	233.9
16. Public Administration, etc.	121.8	131.1
17. Other Services	48.7	53.9
Total Investment	**2170.6**	**2101.0**