Corporate Investment in 2001-02: An Attempt at Projection*

Introduction

Capital investment is essential for modernisation of productive capacity and adding new capacity for current and future industrial growth. Projections of capital investment in the private corporate sector provide important insights into the business expectations about performance of economy in general and the infrastructure and manufacturing sectors in particular.

An attempt has been made in this study to capture the likely growth of corporate investment based on data on phasing details of projects sanctioned assistance by the major all-India financial institutions and the public sector banks. The approach is essentially based on the methodology developed by Dr. C. Rangarajan in an article captioned "Forecasting Capital Expenditure in the Corporate Sector" published in the December 13, 1970 issue of the 'Economic and Political Weekly'.

The study is organized into three sections. Section I elaborates on the methodology of projection. Limitations and challenges being faced in making the projections are dealt with in Section II. Salient features of the corporate projects sanctioned assistance by the major financial institutions and public sector banks during 2000-01, according to industry, size of investment, location of project as also the projected corporate investment in 2001-02 are presented in Section III.

SECTION I

Methodology of projection

The method of estimating corporate investment should ideally be based on the available means of financing an investment project. The bulk of the major projects in the Indian private corporate sector have been financed by the leading all-India term lending institutions namely the Industrial Development Bank of India (IDBI), the Industrial Credit and Investment Corporation of India (ICICI), the Industrial Finance Corporation of India (IFCI), the Industrial Investment Bank of India (IIBI), and the Infrastructure Development Finance Company (IDFC). The financial sector reforms in the 1990's have, in effect, enlarged the sources of financing corporate projects; in particular, major commercial banks have, in recent years, started providing financial support to corporate projects. Since a majority of the private corporate entities in India undertaking large projects, approach the term lending institutions and also banks for financing the project cost, at least partially, the phasing details of capital expenditure available in the relevant project reports would provide a base for estimation of likely capital expenditure one year ahead in the private corporate sector.

SECTION II

Assumptions and Limitations

The estimation of capital investment in this study is based on the assumption that most of the companies in the private corporate sector approach the term lending institutions and major commercial banks for financing their projects. The fixed capital cost of the projects assisted by term lending institutions and public sector banks, by and large reflect the trends in investment pattern of the private corporate sector.

Some companies may raise resources exclusively from capital markets to undertake large projects without seeking any assistance from the term lending institutions. It is difficult to get the phasing details of capital expenditures from the prospectus issued by such companies. At the same time, there is no reliable information on the end-use of funds raised from the markets. In view of these limitations, such projects are excluded from the purview of the study.

Aggregate capital expenditure on assisted projects in any given year comprises i) expenditure on all projects sanctioned in the previous years, and ii) expenditure on projects sanctioned in that year and over subsequent years. At the time of projection of the aggregate capital expenditure for the reference year, the data relating to the first component are available from the phasing details of the projects, whereas for the second component the estimate is essentially in the nature of a projection as the details of the data on the projects taken up in the reference year are not available. Major operating factors such as availability of necessary inputs, the performance of the infrastructure sectors like power, transport, etc., form the back drop in arriving at the estimate of likely corporate investment an year ahead, which is essentially judgmental in nature and depends on the investment climate, as it unfolds, in that year.

SECTION III

Corporate Investment in 2001-02

As already mentioned, this study attempts to estimate the likely growth of corporate investment in the reference year 2001-02, solely based on the envisaged phasing of capital projects assisted by term lending institutions and major commercial banks. The basic premise for arriving at the broad idea of corporate investment is that, by suitably aggregating the data on the phasing of capital expenditures over the individual years for the duration of projects, it should, at the beginning of any year, be possible to indicate the investment that is likely to be made in the course of that year on all the projects for which assistance has been sanctioned by the respective financial institutions/ banks, up to the end of the previous year.

Accordingly, for the current study, data on the phasing of capital expenditures on projects sanctioned by the all-India financial institutions and the commercial banks during 2000-01 were collected and suitably aggregated. Where a company approached more than one institution for project assistance, care was taken to avoid duplication in the compilation. Efforts are made to incorporate the revisions in the phasing of projects sanctioned earlier, to the extent feasible. The data consolidated on these lines, are presented in Table 1. When horizontally read, it shows the capital expenditures that are expected to be incurred in various years on projects for which assistance was sanctioned in a given year. Vertically read, it shows the capital expenditures that are expected to be incurred in a year on projects to which assistance had been sanctioned in that year and in previous years.

Apart from the project expenditures, the companies also report the normal capital expenditures likely to be incurred in subsequent years. These expenditures are added to the project expenditures so as to obtain total capital expenditure planned by the private corporate sector.

Project expenditure during 2000-01

The details of phasing of capital expenditure in each of the years 1990-91 to 2001-2002 in respect of projects sanctioned by the financial institutions and the commercial banks are presented in Table 1.

TABLE 1: PHASING OF CAPITAL EXPENDITURE OF PROJECTS SANCTIONED ASSISTANCE BY TERM LENDING INSTITUTIONS

(Rs. crore)

Year of	**Capital Expenditure in**										
sanction	**1991-92**	**1992-93**	**1993-94**	**1994-95**	**1995-96**	**1996-97**	**1997-98**	**1998-99**	**1999-2000**	**2000-01**	**2001-02**
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Upto March 1990	6,804	3,395	2,723	1,583	1,620	1,399	1,205	309			
1990-91	3,969	2,207	912	704	711	717	662	439	90		
1991-92	8,276	8,103	4,746	1,387	720	648	600	540	454		
1992-93	527	11,492	10,041	3,074	2,677	762	787	661	527		
1993-94		1,121	13,319	13,714	6,943	1,885	708	564	752	762	591
1994-95			837	18,261	21,531	13,515	6,629	1,366	441	456	400
1995-96			10	2,519	26,531	24,442	12,590	3,971	892	770	782
1996-97				69	2,326	21,917	20,044	8,592	2,800	588	618
1997-98				8	1,165	4,437	21,359	19,980	11,074	5,195	2,455
1998-99			313	414	657	1,408	6,415	23,923	18,856	10,439	3,340
1999-2000					2	13	256	8,291	12,032	13,458	8,443
2000-01						22	32	36	5,711	18,264	19,214
Total upto 2000-01	19,576	26,318	32,901	41,732	64,883	71,166	71,287	68,672	53,629	49,932	35,843
2001-02										5,000*	18,500*
Grand Total #	19,884	26,777	33,362	41,948	65,074	71,446	71,479	68,780	53,709	55,032	54,343
Per cent change	4.2	34.7	24.6	25.7	55.1	9.8	0.0	-3.8	-21.9	2.5	-1.3

***** : Estimated capital expenditures incurred in 2000-01 and likely to be incurred in 2001-02 on the projects to be sanctioned in 2001-02 and 2002-03.
#: a) Includes assistance provided by the IDBI under Bills Rediscounting Scheme and Technical Development Fund Scheme b) The estimates of Corporate Investment are *ex ante* and differ in scope and methodology from the *ex post* estimates of corporate fixed investment as available in National Accounts Statistics (NAS). See also the technical note attached to 'Growth of Corporate Investment: An attempt at projection for 1999-2000' published in the Monsoon 1999 issue of the Reserve Bank of India Occasional Papers for details.

Capital expenditure of Rs. 31,668 crore was expected to have been incurred during 2000-01 in respect of the projects sanctioned up to 1999-2000. The project proposals sanctioned assistance during 2000-01 envisaged capital expenditure of Rs. 18,264 crore in the same year. A few large projects usually incur capital expenditure, which is not insignificant, before seeking assistance from lending institutions and such expenditure in 2000-01 in respect of projects likely to be sanctioned in 2001-02 is expected to be of the order of Rs. 5,000 crore. The total capital expenditure including assistance under Bill Rediscounting Scheme, that might have been incurred during 2000-01 works out to Rs. 55,032 crore, showing a rise of 2.5 per cent as compared with Rs. 53,709 crore estimated for 1999-2000 .

Projects sanctioned during 2000-01

An important development relating to the power projects, which were assisted in the recent years, was that some of the major projects have not commenced implementation so far while some others plan to implement with substantially revised phasing. In fact, the financial institutions cancelled assistance to twelve major power projects sanctioned in 1994-95 and later years, as these projects are not likely to be taken up in the near future. Companies implementing five other power projects, approached the financial institutions again, with substantial revisions in the phasing of capital expenditure. These two developments resulted in considerable changes in phasing pattern of capital expenditure and the data, are accordingly, modified taking into an account (i) cancellation of twelve power projects; and (ii) revised phasing of five power projects. The five power projects with revised phasing of capital expenditure are considered as new projects and the twelve power projects for which assistance was cancelled in 2000-01 were deleted from the scope of this study. The number of projects sanctioned during 1999-2000 consequent upon revisions and cancellations now stands revised to 369 with the revised project cost of Rs. 47,009 crore as against 373 projects with aggregate cost of projects at Rs. 53,581 crore considered in the earlier study.

This study covers 332 projects sanctioned assistance by term lending institutions and major commercial banks during 2000-01 with an aggregate cost of projects at Rs. 69,400 crore, spread over a ten year period spanning 1996-97 to 2005-06. The number of projects covered for 1999-2000 was a little higher at 369, but their aggregate cost of projects was much lower at Rs. 47,009 crore. The normal capital expenditure of the 332 projects amounted to Rs. 1,588 crore phased out over the ten year period 1997-98 to 2006-07. The total fixed capital expenditure of these projects amounted to Rs. 70,989 crore (Table 2). The phasing details of the projects sanctioned during 2000-01, showed that about one-fourth of aggregate cost of projects amounting to Rs. 18,264 crore (25.7 per cent) is planned to be incurred in the year of sanction and a higher quantum of investment of Rs.19,214 crore (27.1 per cent) in the following year 2001-02 and in the third year also, the share of capital expenditure was substantial at 22.8 per cent; the phasing pattern of these projects is some what different from that of the projects sanctioned assistance in 1999-2000. In respect of projects sanctioned assistance in 1999-2000, about one fourth (24.1 per cent) of the total expenditure was planned to be spent in the initial year of sanction i.e., 1999-2000, and another 27.0 per cent in the following year, while in the third year the share was lower at 16.9 per cent. It may be mentioned that in respect of projects sanctioned assistance in 2000-01, expenditure in the year preceding the year of sanction, i.e.1999-2000 amounted to Rs.5,711 crore accounting for 8.0 per cent of total expenditure.

TABLE 2: PHASED PROJECT AND NORMAL CAPITAL EXPENDITURE OF PROJECTS SANCTIONED IN 1999-2000 AND 2000-2001

(Rs. crore)

Project expenditure	1995-96 to 1997-98	1998-1999	1999-2000	2000 - 2001	2001-2002	2002-2003	2003 - 2004	2004-05 to 2006-07	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
I : 1999-2000				**Number of projects: 369**					
i) Phased capital exp.	271	8,208	11,832	13,064	8,023	5,414	197	—	47,009
	(0.6)	(17.5)	(25.2)	(27.8)	(17.1)	(11.5)	(0.4)	—	(100.0)
ii) Normal capital exp.	—	83	200	394	420	484	498	746	2,825
Total	**271**	**8,291**	**12,032**	**13,458**	**8,443**	**5,898**	**695**	**746**	**49,834**
	(0.5)	**(16.6)**	**(24.1)**	**(27.0)**	**(16.9)**	**(11.8)**	**(1.4)**	**(1.5)**	**(100.0)**
II : 2000-01				**Number of projects: 332**					
i) Phased capital exp.	45	31	5,549	18,024	19,019	15,980	6,890	3,862	69,400
	(0.1)	— ( )	(8.0)	(26.0)	(27.4)	(23.0)	(9.9)	(5.6)	(100.0)
ii) Normal capital exp.	10	5	162	240	194	211	227	539	1,588
Total	**54**	**36**	**5,711**	**18,264**	**19,214**	**16,192**	**7,117**	**4,401**	**70,989**
	(0.1)	**(0.1)**	**(8.0)**	**(25.7)**	**(27.1)**	**(22.8)**	**(10.0)**	**(6.2)**	**(100.0)**

Note : Figures in brackets denote percentage share in the total.
— ( ) : Nil/Negligible.

A discernable feature of phasing of projects in the recent years is that, some of the corporates have been investing considerably large amounts in capital expenditure even before approaching institutions for assistance. It is possible that these funds were from their own and other resources, or were obtained as short-term funds from banks/ financial institutions on a roll over basis. In fact, the share of expenditure incurred on projects in the year prior to the year of sanction has been on the rise from 3.9 per cent in 1996-97 to 8.0 per cent in 2000-01; the share was considerably high at 16.6 per cent in 1999-2000 (Table 3). This aspect has also to be factored in while arriving at the one-year ahead projection of corporate investment.

TABLE 3: CAPITAL EXPENDITURE IN THE YEAR OF SANCTION AND THE PRECEDING YEAR

Year of sanction	Number of projects	Capital expenditure				
			Amount (Rs. crore)		Per cent share in total project cost	
		Aggregate project cost	Year prior to the year of sanction	Year of sanction	Year prior to the year of sanction	Year of sanction
1	2	3	4	5	6	7
1996-97	1117	58,940	2,326	21,917	3.9	37.2
1997-98	899	81,533	4,444	23,621	5.5	29.0
1998-99	620	83,268	6,561	25,731	7.9	30.9
1999-2000	369	49,834	8,291	12,032	16.6	24.1
2000-01	332	70,989	5,711	18,264	8.0	25.7

Industrial pattern of projects

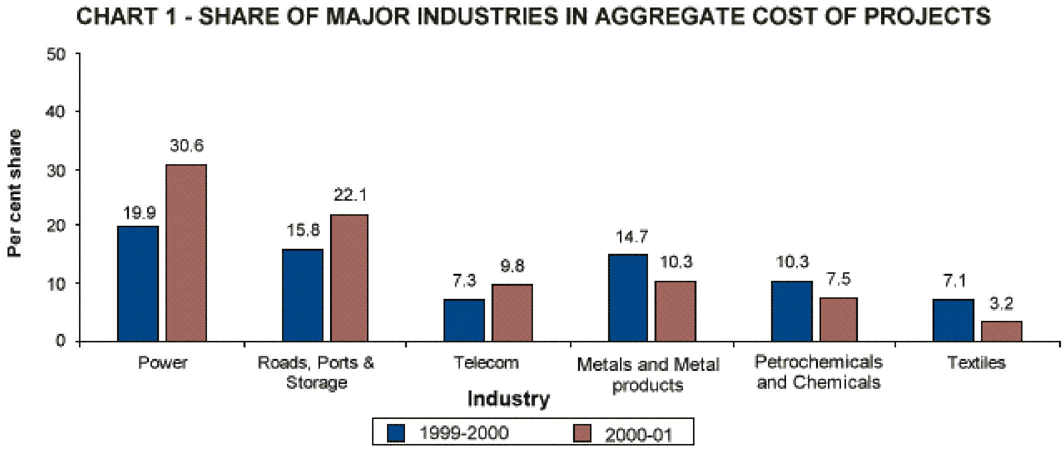
The industrial classification of projects adopted for this study is based on the industrial activity as indicated in the project reports. Reflecting the national priority accorded to the investment in infrastructure projects, share of such projects in the aggregate cost of projects moved up from 42.9 per cent in 1999-2000 to as high as 62.5 per cent in 2000-01(Table 4). Power projects numbering 20 accounted for 30.6 per cent in 2000-01, followed by projects of roads, ports and storage sector (22.1 per cent) and telecom projects (9.8 per cent). The shares of power, roads, ports & storage as also telecom projects were considerably higher in 2000-01, than the corresponding shares in the previous year.

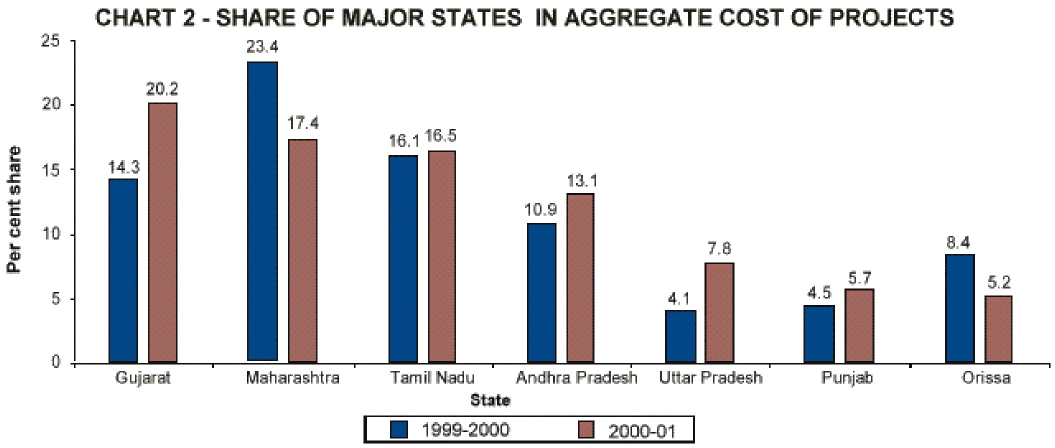
While the share of engineering industry in the aggregate cost of projects came down from 18.1 per cent in 1999-2000 to 10.9 per cent in 2000-01, that of chemical industry declined from 10.5 per cent to 9.8 per cent over the same period. Metals and metal products (10.3 per cent) of the engineering industry and petrochemicals and chemicals (7.5 per cent) of the chemical industry predominated the respective industry groups in 2000-01. The three major industry groups viz., infrastructure, engineering and chemicals together claimed 83.2 per cent of the total cost of projects in 2000-01 as compared to 71.5 per cent in 1999-2000. The shares of industries such as textiles, fertilizers and pesticides, cement, electronics, hotels & restaurants and construction varied between 1 per cent and 3 per cent.

TABLE 4: INDUSTRY-WISE DISTRIBUTION OF PROJECTS AND THEIR COST, 1999-2000 AND 2000-01

Industry	1999-2000 Number of Projects	1999-2000 Project cost Amount (Rs. crore)	1999-2000 Per cent share	2000-01 Number of Projects	2000-01 Project cost Amount (Rs. crore)	2000-01 Per cent share
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Infrastructure (i + ii + iii)	**37**	**20,178**	**42.9**	**43**	**43,373**	**62.5**
i) Power	17	9,353	19.9	20	21,207	30.6
ii) Telecom	4	3,409	7.3	8	6,814	9.8
iii) Roads, ports and storage	16	7,416	15.8	15	15,352	22.1
2. Engineering (i + ii + iii + iv)	**69**	**8,508**	**18.1**	**51**	**7,579**	**10.9**
i) Metals and metal products	23	6,917	14.7	28	7,161	10.3
ii) Automobiles and auto-ancilliaries	22	567	1.2	14	274	0.4
iii) Electrical equipments	14	380	0.8	7	121	0.2
iv) Non-electrical machinery	10	644	1.4	2	24	—
3. Chemicals (i + ii + iii)	**35**	**4,940**	**10.5**	**36**	**6,770**	**9.8**
i) Petrochemicals and chemicals	27	4,823	10.3	17	5,220	7.5
ii) Pharmaceuticals and drugs	8	117	0.2	12	424	0.6
iii) Fertilizers and pesticides	—	—	—	7	1,126	1.6
4. Mining and quarrying	5	794	1.7	—	—	—
5. Cement	8	1,627	3.5	6	1,883	2.7
6. Textiles (other than jute)	82	3,335	7.1	70	2,252	3.2
7. Sugar	22	998	2.1	10	339	0.5
8. Paper and paper products	12	457	1.0	9	638	0.9
9. Electronics	9	490	1.0	13	1,312	1.9
10 Hotels and restaurants	13	1,603	3.4	14	1,619	2.3
11. Construction	3	1,461	3.1	4	710	1.0
12. Others *	74	2,617	5.6	76	2,926	4.2
Total	**369**	**47,009**	**100.0**	**332**	**69,400**	**100.0**

* : Comprise industries, each with a share of less than 1 per cent in total cost of projects in 1999-2000 and 2000-01.
— : Nil/Negligible.





Size-wise pattern of projects

Very large projects each costing Rs.100 crore and above, numbering 69, dominated with an aggregate cost of projects Rs.62,381 crore accounting for 89.9 per cent of the total cost of projects in 2000-01 (Table 5).

In the preceding year, such very large projects, numbering 72, formed 84.4 per cent of the aggregate cost of projects.

State-wise pattern of projects

The state-wise classification of projects is based on the location of the projects as stated in the project reports. Gujarat occupied the top position with an aggregate cost of projects at Rs. 14,052 crore accounting for one-fifth of the total cost of projects in 2000-01 followed by Maharashtra (17.4 per cent), Tamil Nadu (16.5 per cent), Andhra Pradesh (13.1 per cent), Uttar Pradesh (7.8 per cent). Punjab (5.7 per cent) and Orissa (5.2 per cent) (Table 6).

TABLE 5: SIZE-WISE DISTRIBUTION OF PROJECTS AND THEIR COST, 1999-2000 AND 2000-01

Size of Projects (Rs. Crore)	1999-2000 Number of Projects	Project cost Amount (Rs. crore)	Per cent share	2000-01 Number of Projects	Project cost Amount (Rs. crore)	Per cent share
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Less than 5.0	38	114	0.2	19	62	0.1
2. 5.0 - 7.5	29	181	0.4	23	140	0.2
3. 7.5 - 10.0	22	191	0.4	17	145	0.2
4. 10.0 - 15.0	38	462	1.0	43	531	0.8
5. 15.0 - 20.0	38	645	1.4	35	614	0.9
6. 20.0 - 50.0	90	2,849	6.1	86	2,781	4.0
7. 50.0 - 100.0	42	2,898	6.2	40	2,747	4.0
8. 100.0 & above	72	39,668	84.4	69	62,381	89.9
Total	**369**	**47,009**	**100.0**	**332**	**69,400**	**100.0**

TABLE 6: STATE-WISE DISTRIBUTION OF PROJECTS AND THEIR COST, 1999-2000 AND 2000-01

State/Union Territory	1999-2000 Number of Projects	Project cost Amount (Rs. crore)	Per cent share	2000-01 Number of Projects	Project cost Amount (Rs. crore)	Per cent share
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Andhra Pradesh	29	5,147	10.9	26	9,088	13.1
2. Delhi	7	971	2.1	12	1,374	2.0
3. Gujarat	35	6,707	14.3	30	14,052	20.2
4. Haryana	20	466	1.0	14	887	1.3
5. Karnataka	17	2,021	4.3	24	2647	3.8
6. Kerala	5	581	1.2	6	177	0.3
7. Madhya Pradesh	11	1,289	2.7	10	988	1.4
8. Maharashtra	66	10,987	23.4	64	12,061	17.4
9. Orissa	3	3,926	8.4	5	3,591	5.2
10. Punjab	16	2,123	4.5	22	3,955	5.7
11. Tamil Nadu	80	7,571	16.1	61	11,419	16.5
12. Uttar Pradesh	26	1,946	4.1	18	5,401	7.8
13. West Bengal	16	2,146	4.6	10	651	0.9
14. Others*	38	1,127	2.4	30	3,110	4.5
Total	**369**	**47,009**	**100.0**	**332**	**69400**	**100.0**

* Comprise states/ union territories, each with share of less than 1 per cent in aggregate cost of projects in 1999-2000 and 2000-01and those reporting single project in1999-2000 and/or 2000-01.

TABLE 7: PURPOSE-WISE DISTRIBUTION OF PROJECTS AND THEIR COST, 1999-2000 AND 2000-01

Purpose	1999-2000 Number of Projects	Project cost Amount (Rs. crore)	Per cent share	2000-01 Number of Projects	Project cost Amount (Rs. crore)	Per cent share

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	New Projects	113	24,719	52.6	120	53,533	77.1
2.	Expansion	135	12,443	26.5	124	7,630	11.0
3.	Overrun	38	6,245	13.3	19	6,818	9.8
4.	Diversification	16	2,124	4.5	8	124	0.2
5.	Modernisation	52	1,277	2.7	45	1,093	1.6
6.	Others	15	202	0.4	16	203	0.3
	Total	**369**	**47,009**	**100.0**	**332**	**69,400**	**100.0**

Purpose-wise pattern of projects

New projects, numbering 120 with aggregate cost of projects of Rs.53,533 crore, accounted for more than three-fourths of aggregate cost of projects (77.1 per cent) in 2000-01, which was much higher than the share of such projects at 52.6 per cent in the previous year (Table 7).

The share of aggregate cost of 124 projects for expansion (Rs.7,630 crore), was much lower at 11.0 per cent in 2000-01 as compared with 26.5 per cent observed for the previous year.

CHART 3: PURPOSE-WISE DISTRIBUTION OF AGGREGATE COST OF PROJECTS

Corporate Investment in 2001-02

The projection of growth of private corporate investment for 2001-02, as already explained, is based on i) planned capital expenditure on projects sanctioned assistance up to 2000-01 and ii) capital expenditure on projects sanctioned /to be sanctioned assistance in 2001-02. The total envisaged project expenditure in 2001-02 for which sanctions were accorded up to 2000-01, amounted to Rs.35,843 crore. Developments in current economic situation will to a large extent be dependent on twin aspects viz., i) the monsoon conditions which so far have not been unfavourable and ii) the industrial outlook which continues to be uncertain and of considerable concern. Development of favourable climate for investment will then be dependent upon the revival of industry in the second half of the current fiscal year. Also some favourable developments relating to the power and telecom sectors would need to be considered in this context. A Bill captioned "Electricity Bill 2001" was introduced in the parliament which would enable the power generating companies to sell power directly to bulk consumers like corporate entities and residential complexes. In regard to the telecom sector, the Government is planning to issue licenses to Fourth Cell Operators, which is likely to encourage investment in the telecom sector. Conscious efforts are also being made to encourage investment with a view to supporting the activity of building roads, ports and storage facilities. These developments may have a positive impact on the flow of investment into the infrastructure industry. Against this backdrop, the capital expenditure in 2001-02 on the projects likely to be sanctioned during 2001-02 could be placed at around Rs. 18,500 crore. The aggregate capital expenditure in 2001-02 would be Rs.54,343 crore, which will be nearly of the same quantum of investment as in the preceding year. By way of caution, it may be mentioned that the realisation of the projected investment in 2001-02 will, *inter alia*, be contingent upon the strict adherence to the implementation of power projects as scheduled, their share in aggregate investment being substantial.

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