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**S**ubsidies of the Central government are discussed in three parts. In the first part, a comprehensive estimate of budget-based subsidies of the Central government are provided. In part two, subsidies given to Central public enterprises are estimated. In part three, the explicit subsidies of the Central government are discussed. It may be noted that subsidy estimates presented in parts two and three are components of the comprehensive estimates presented in part one.

### **COMPREHENSIVE ESTIMATION OF BUDGET-BASED SUBSIDIES**

#### **a. Aggregate Profile**

Estimates of budget-based subsidies for the Central government are presented in Table 2.1. Subsidies are classified into merit and non-merit categories, separately for social and economic services. Services are divided into two parts, viz., sectors where receipts fall short of the costs, implying the existence of subsidies, and sectors where receipts exceed costs. These groups are respectively called subsidy sectors and surplus sectors. Out of a total subsidy of Rs. 43089 crore, the social services account for only about 12 per cent. The bulk of the Central subsidies, therefore, arise in the provision of economic services.

The recovery rates in the social and economic services are extremely low, being 10.4 and 10.6 on average respectively. The surplus sectors generate surpluses amounting to about 10.8 per cent of total subsidies. As far as recovery rates for individual services are concerned, it may be noted that the recovery rates for industries (Annexure 4) is extremely low, being just 9 per cent.

**Table 2.1**  
**Central Government Subsidies: 1994-95**

<i>Services</i>	(Rs. Crore)			
	<i>Total Cost</i>	<i>Total Receipts</i>	<i>Subsidies/Surplus (-)</i>	<i>Recovery Rate (%)</i>
1. Merit Goods/Services (Subsidy Sectors)	5633.19	111.28	5521.91	1.98
a. Social Services	1198.07	35.14	1162.93	2.93
b. Economic Services	4435.12	76.14	4358.98	1.72
2. Non-Merit Goods/Services (Subsidy Sectors)	42558.26	4991.14	37567.12	11.73
a. Social Services	4496.32	556.79	3939.53	12.38
b. Economic Services	38061.94	4434.35	33627.59	11.65
3. Surplus Sectors (Merit and Non-Merit)	26132.90	30775.73	-4642.83	117.77
<b>Total Subsidies (1 + 2)</b>	<b>48191.45</b>	<b>5102.42</b>	<b>43089.03</b>	<b>10.59</b>
<b>Social Services (Merit and Non-Merit)</b>	<b>5694.39</b>	<b>591.93</b>	<b>5102.46</b>	<b>10.39</b>
<b>Economic Services (Merit and Non-Merit)</b>	<b>42497.06</b>	<b>4510.49</b>	<b>37986.57</b>	<b>10.61</b>
<b>Subsidies Net of Surplus (1 + 2 + 3)</b>	<b>74324.35</b>	<b>35878.15</b>	<b>38446.20</b>	<b>48.27</b>

The relative shares of category-wise aggregates (merit, non-merit, social and economic) in the total Central subsidies are given in Table 2.2. It is evident that non-merit economic services constitute the bulk of Central subsidies accounting for more than 78 per cent of the total Central subsidies.

**Table 2.2**  
**Relative Shares of Subsidy Aggregates in**  
**Total Central Subsidies: 1994-95**

	(Per Cent)		
	<i>Merit</i>	<i>Non-Merit</i>	<i>Total</i>
Social	2.70	9.14	11.84
Economic	10.12	78.04	88.16
Total	12.82	87.18	100.00

Non-merit subsidies amounted to Rs. 37567 crore of which economic services alone claimed Rs. 33628 crore. Merit subsidies on the other hand, amounted to Rs. 5522 crore of which social and economic services,

respectively accounted for Rs. 1163 crore and Rs. 4359 crore. Some of the main features of the Central government subsidies are indicated below.

- i. Subsidies on non-merit goods and services which are less defensible are more than 5 times those on merit goods. This points towards an unduly large and ill-directed subsidy regime.
- ii. The biggest subsidies among the merit goods have flown to roads and bridges, elementary education and various scientific research. Among the non-merit goods, the recipients of relatively large subsidies include industries, and agriculture and allied services (Annexure 4).
- iii. The bulk of the subsidies on non-merit goods are accounted for by subsidies on economic services, which should be more amenable to economic pricing. Even if one allows for a part of these subsidies being given in the interest of redistribution or provision of minimum needs, a substantial part must be due to inefficiency costs of public provision of services and/or inessential input or output subsidies.
- iv. Within economic services falling in the category of non-merit goods, the largest amounts of subsidies are being provided to industries, other economic services (mainly general economic services) and agriculture.

#### **b. Subsidies in Social and Economic Services**

Central subsidies pertaining to major heads in social and economic services (merit and non-merit taken together) are given in Table 2.3. The share of social subsidies in total Central subsidies is limited to 12 per cent, nearly half of which [Chart 2.1] pertains to education. The main sectors in the case of economic services are industry, agriculture, power and transport.

The recovery rates in social services are expectedly lower than in economic services, but by a very small margin. The two sectors mainly contributing towards recoveries, in the economic services, are cooperation and power. In other sectors, recovery rates are extremely poor [Chart 2.2].

**Table 2.3**  
**Central Government Social and Economic Subsidies: 1994-95**

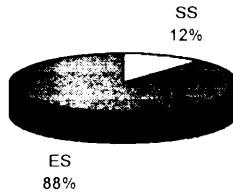
(Rs. Crore)

<i>Services</i>	<i>Total Cost</i>	<i>Total Receipts</i>	<i>Subsidies/ Surplus (-)</i>	<i>Recovery Rate (%)</i>
<b>1. Subsidy Sectors</b>	<b>48191.45</b>	<b>5102.43</b>	<b>43089.02</b>	<b>10.59</b>
i. Social Services	5694.39	591.94	5102.45	10.40
Education, Sports, Arts and Culture	2417.99	6.44	2411.55	0.27
Medical and Family Welfare	885.23	29.45	855.78	3.33
Water supply and Sanitation	130.54	0.38	130.16	0.29
Housing	506.56	71.97	434.59	14.21
Urban Development	102.81	0.03	102.78	0.03
Social Security and Welfare	291.12	0.00	291.12	0.00
Information and Publicity	113.86	23.11	90.75	20.30
Welfare of SC., ST., and OBCs	91.13	0.00	91.13	0.00
Nutrition	6.62	0.00	6.62	0.00
Other Social Services	1148.53	460.56	687.97	40.10
ii. Economic Services	42497.06	4510.49	37986.57	10.61
Agriculture and Allied Activities	8979.64	287.99	8691.65	3.21
Co-operation	140.61	102.18	38.43	72.67
Rural Development	0.80	0.00	0.80	0.00
Special Area Programmes	240.78	0.00	240.78	0.00
Irrigation	179.14	5.28	173.86	2.95
Power	6213.51	2284.57	3928.94	36.77
Industries	11953.35	1075.40	10877.95	9.00
Transport	3448.23	308.32	3139.91	8.94
Civil Supplies	27.90	0.13	27.77	0.47
Space Research	573.99	0.02	573.97	0.00
Oceanographic Research	62.01	0.00	62.01	0.00
Other Scientific Research	787.51	13.56	773.95	1.72
Ecology and Environment	165.97	0.00	165.97	0.00
Meteorology	96.10	0.00	96.10	0.00
Other Economic Services	9627.52	433.04	9194.48	4.50
<b>2. Surplus Sectors (Merit and Non-Merit)</b>	<b>26132.90</b>	<b>30775.73</b>	<b>-4642.83</b>	<b>117.77</b>
i. Social Services	0.00	0.00	0.00	0.00
ii. Economic Services	26132.90	30775.73	-4642.83	117.77
<b>3. Subsidies Net of Surplus (1 + 2)</b>	<b>74324.35</b>	<b>35878.16</b>	<b>38446.19</b>	<b>48.27</b>

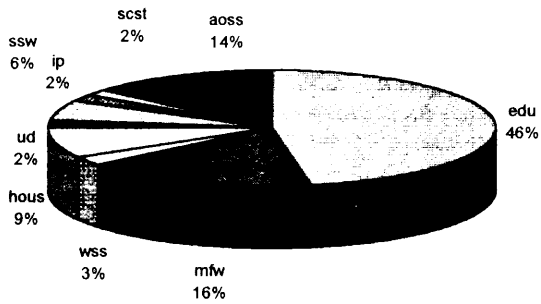
Surpluses arise only in the economic services. Of the total subsidies, surplus generated in the economic services account for about 10.8 per cent, implying that nearly 89 per cent of the Central subsidies must be financed by the taxpayers or non-(direct) users of the services.

Chart 2.1

**Relative Shares of Social and Economic Subsidies in Total Subsidies**



**Relative Shares of Major Social Services in Total Social Subsidies**



**Relative Shares of Economic Subsidies in Total Economic Subsidies**

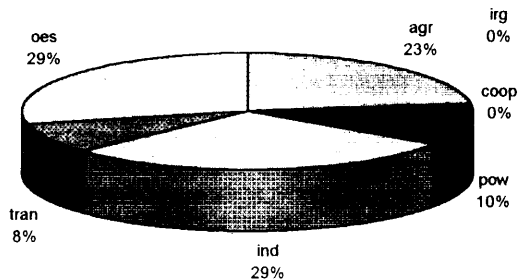
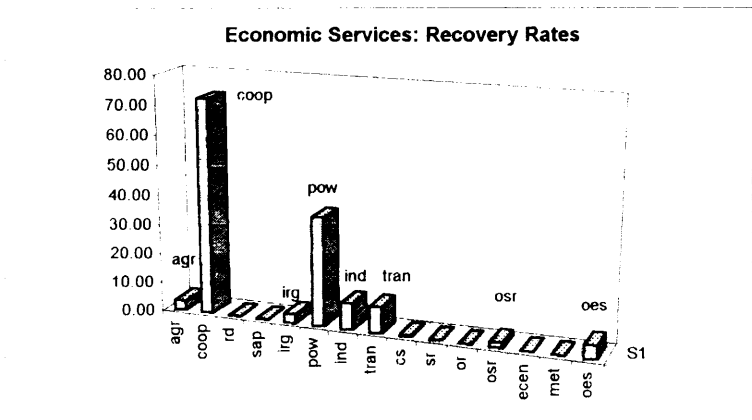
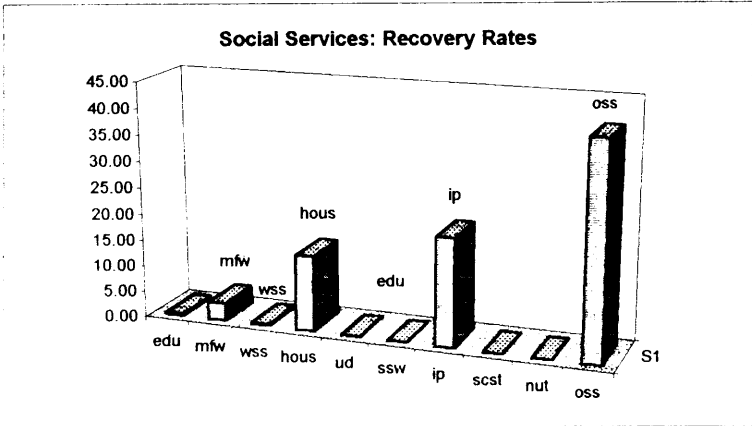
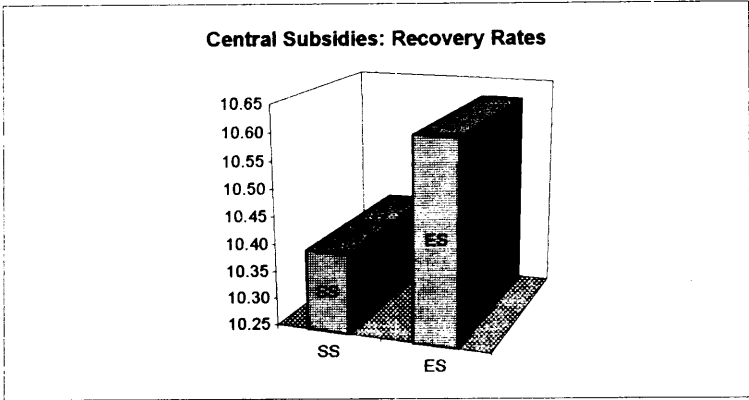


Chart 2.2



### c. Comparisons With Previous Studies

The results of the present study may be compared with those of two previous studies on estimation of subsidies in India, viz., Mundle and Rao (1991) and Tiwari (1996) [Table 2.4]. Although the assumptions regarding the interest and depreciation rates themselves account for some of the differences, the general pattern indicated is that while the recovery rate declined from 1987-88 upto 1992-93, it appears to have picked up in the reform years. The comparisons are made when the surpluses are adjusted with the subsidies in presenting an aggregate picture. A distinction between subsidy sectors and surplus sectors was not made in the earlier two studies. When this distinction is made, the recovery rate in the economic services in the subsidy sectors is almost as low as that in the social services.

**Table 2.4**  
**Subsidies in Central Government Social and Economic Services: A**  
**Comparison With Previous Studies**

Year	Category	Rs. Crore			Recovery Rate (%)
		Total Cost	Total Receipts	Subsidies/ Surplus (-)	
1987-88 (M-R)	Social	2522	222	2300	8.82
	Economic	28496	14731	13765	51.70
1992-93 (TIW)	Social	4535	521	4014	11.49
	Economic	59988	27173	32815	45.30
1994-95 Present Study	Social	5694	592	5102	10.40
	Economic (Subsidy)	42497	4510	37987	10.61
	Economic (Surplus)	26133	30776	-4643	117.77
	Net Subsidies	74324	35878	38446	48.27
<b>Parameters (Per Cent Per Annum)</b>					
		<i>Interest Rate</i>		<i>Nominal Depreciation Rate</i>	
M-R		6.04		9.4	
TIW		8.06		12.0	
Present Study		9.60		11.0	

Notes: M-R refers to the Mundle and Rao (1991) study and  
 TIW refers to the Tiwari (1996) study.

The Tiwari study for 1992-93 estimated a total of Central subsidies worth Rs. 36,829 crore, when surpluses and subsidies are aggregated

together. This was 5.87 per cent of GDP. In the Mundle and Rao study, the comparable figure for subsidies was 5.46 per cent of GDP. In our estimates, when subsidies are considered independent of the surpluses (as they ought to be), the total amount of social and economic subsidies emanating from the Central budget amount to Rs. 43089 crore, representing 4.52 per cent of GDP. When surpluses are adjusted against the subsidies to provide a figure comparable with the earlier studies, the amount of net subsidies becomes Rs. 38446 crore, which is 4.03 per cent of GDP. Either way, it seems that the Central government subsidies have fallen as percentage of GDP as compared to the 1987-88 and 1992-93 figures. Compared to 1987-88, the overall recovery rate in 1994-95 was lower, although it was higher than in 1992-93. The fact that the volume of subsidies in 1994-95 was lower than in 1987-88 as percentage of GDP implies that the government expenditures at the Centre were lower as a percentage of GDP in 1994-95 as compared to 1987-88. It may be noted that the earlier studies did not make a distinction between merit and non-merit services, therefore, a comparison is only possible with respect to aggregate subsidies belonging to both categories.

### **SUBSIDY TO CENTRAL PUBLIC ENTERPRISES**

Subsidies to Central public enterprises have been estimated separately. This does not represent a subsidy additional to the one presented in the comprehensive estimate, but is, in fact, included there. The estimates are based on enterprise-wise data taken from the Public Enterprises Survey. This survey covers 246 enterprises (as on March 31, 1995) which are included in the Fourth Schedule to the Rules of Procedure and Conduct of Business in Lok Sabha. In particular, they do not include departmentally run public undertakings and banking institutions. The paid-up capital in these public enterprises comes primarily from the Central government with some equity participation by State governments, holding companies, foreign collaborators, public financial institutions and workers. Similarly, loans to these enterprises are given by the Central government, as also by the State governments, financial institutions including banks and mutual funds and other domestic and foreign sources. The share of Central government in the total equity of these enterprises is much higher (96 per cent) as compared to its share in total loans (26.4 per cent).

Subsidies are estimated as the excess of imputed return on the equity held and loans given by the Central government to these enterprises over actual receipts in the form of dividends and interest. On both equity and



loans, the expected rate of return is taken to be the opportunity cost of funds to the government taken here as the average rate of interest of government borrowing. Thus, for any enterprise, the imputed subsidy (S) is given by:

$$S = i(E_0 + L_0) - (D + I)$$

where

$E_0$  = Total equity held by the Central government at the beginning of the period,

$L_0$  = Total loans advanced by the Central government to the public enterprise upto the beginning of the period,

$D$  = Dividends received from the public enterprise in the financial year,

$I$  = Interest received from the public enterprise in the financial year and

$i$  = Average interest rate (= 9.6 per cent per annum).

Subsidy is calculated in this manner for each enterprise. They are aggregated according to cognate groups. For aggregation, enterprises that receive a subsidy and those that emerge with a surplus are aggregated separately. Total subsidies to the Central government public enterprises are taken as the sum of subsidies in each group of enterprises (without setting off the surpluses). For 1994-95, this comes to Rs. 4273 crore excluding units relating to industrial development, technical consultancy services and financial services, and to Rs. 4667 crore including these categories. These results are given in Table 2.5. These results are not comparable with the results of the two previous studies [Mundle and Rao (1991) and Tiwari (1996)] because of the difference in the methodology and the data source.

Every cognate group has some enterprises that receive a subsidy except telecommunication services, where all units show a surplus. On the other hand, there are four groups where no unit is able to show a surplus viz., coal and lignite, power, agro-based goods and tourist services. In the remaining groups, there are some subsidy units and some surplus units. In some of these groups, e.g., minerals and metals, textiles and trading and marketing services, there are large subsidies relative to the surpluses generated by a few units.

**Table 2.5**  
**Subsidy to Public Enterprises (1994-95) - Government of India**

(Rs. Crore)

<i>Sectors</i>	<i>Central Govt. Inv. (Equity + Loans + Wkg. Cap.)</i>	<i>Imputed Cost of Capital [(2) x 9.6%]</i>	<i>Receipts from PSUs (Dividend + Interest)</i>	<i>Recovery Rate (%) [(4)/(3)]</i>	<i>Subsidy to Units Columns [(3)-(4), (3) &gt; (4)]</i>	<i>Surplus in Units Columns [(3)-(4), (3) &lt; (4)]</i>	<i>Net Subsidy or Surplus Columns [(6) + (7)]</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Steel	11393	1094	226	20.68	868	0	868
Mineral & Metals	3911	375	169	45.06	223	-17	206
Coal & Lignite	11798	1133	28	2.40	1105	0	1105
Power	17629	1692	618	36.51	1075	0	1075
Petroleum	3196	307	536	174.62	28	-257	-229
Fertilizers	5077	487	637	130.61	120	-269	-149
Chemicals & Pharmaceuticals	1183	114	117	103.23	50	-54	-4
Heavy Engineering	1522	146	216	147.86	17	-87	-70
Medium & Light Engineering	1122	108	73	67.49	57	-21	35
Transport Equipment	2085	200	271	135.53	57	-128	-71
Consumer Goods	2561	246	216	87.99	82	-52	30
Agro-Based Goods	62	6	1	23.61	5	0	5
Textiles	3600	346	42	12.02	330	-26	304
Trading & Marketing	2474	238	100	42.07	166	-28	138
Transportation	2667	256	384	149.91	32	-160	-128
Contract & Construction	979	94	73	77.31	57	-36	21
Tourist Services	78	7	6	78.04	2	0	2
Telecommunication	722	69	93	134.35	0	-24	-24
<b>Total*</b>	<b>72057</b>	<b>6918</b>	<b>3805</b>	<b>55.00</b>	<b>4273</b>	<b>-1160</b>	<b>3113</b>
Industrial Devt. & Tech. Const.	3559	342	138	40.37	266	-62	204
Financial Services	5597	537	408	76.03	129	0	129
<b>All Units</b>	<b>52468</b>	<b>7796</b>	<b>4351</b>	<b>55.81</b>	<b>4667</b>	<b>-1222</b>	<b>3446</b>

Source: *Public Enterprises Survey, 1993-94 and 1994-95*, Department of Public Enterprises, Ministry of Industry, Government of India.

Note: \* Excludes enterprises under construction, financial units, industrial development and finance units and Section 25 units.

Subsidies estimated in this manner do not take into account any budgetary support for writing off any losses of the public enterprises fully or partially except when the support is in the form of loans. They also do not take into account any revenue receipts other than those in the form of dividend or interest, and any expenditures other than investment in the form of loan or equity. A comparison of group-wise figures for retained profit/loss for the concerned year (1994-95) indicates that heavy subsidies are involved even in those sectors which are generating profits in the aggregate, e.g., steel, mineral and metals, coal and lignite, power, and chemicals and pharmaceuticals. In these cases, the government may insist upon declaration of higher dividends. On the other hand, there are some groups with losses, viz., fertilisers, heavy engineering, medium and light engineering, consumer goods, textiles, and contract and construction. Units in these groups may be receiving direct budgetary support (for meeting losses or writing off previous loans/interest due) which is not reflected in the estimation of subsidies here.

The group-wise rates of return (aggregate receipts/total government investment) can be decomposed into the relative contribution from returns on equity and those on loans. Thus,

$$r = (D + I)/(E_0 + L_0) = w(D/E_0) + (1 - w)(I/L_0)$$

where

$$w = E_0/(E_0 + L_0).$$

The average rate of return on government equity investment is 2.47 per cent per annum (2.36 when industrial development and technical consultancy units and units providing financial services are also included). On the other hand, the return on loans is much higher, being 10.69 per cent (10.83 for the larger group). These results are given in Table 2.6. In columns 6 and 7, the relative contribution of returns on equity (dividends) and that on loans (interest) are given. In spite of a lower investment in the form of loans relative to that in the form of equity, the contribution of interest is much higher than that of dividends in the overall rate of return. It would appear that the government should consider the relative merits of the forms of investment in the public sector enterprises apart from the overall size of investment.

**Table 2.6**  
**Return on Government Investments in Public**  
**Enterprises (1994-95) - Government of India**

(Per Cent)

<i>Sectors</i>	<i>Dividend/ Equity</i>	<i>Interest/ Loans<sup>#</sup></i>	<i>Share of Equity in Total Investment</i>	<i>Aggregate Rate of Return</i>	<i>Weighted Return on Equity<sup>@</sup></i>	<i>Weighted Return on Loans<sup>\$</sup></i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Steel	2.09	1.07	90.04	1.98	1.88	0.11
Mineral & Metals	3.04	13.06	87.18	4.33	2.65	1.67
Coal & Lignite	0.00	0.68	66.09	0.23	0.00	0.23
Power	0.99	12.24	77.63	3.50	0.77	2.74
Petroleum	20.72	12.27	53.16	16.76	11.01	5.75
Fertilizers	2.56	25.47	56.45	12.54	1.45	11.09
Chemicals & Pharmaceuticals	11.98	8.51	40.35	9.91	4.83	5.08
Heavy Engineering	3.92	23.87	48.49	14.19	1.90	12.30
Medium & Light Engineering	1.85	13.57	60.50	6.48	1.12	5.36
Transport Equipment	2.43	20.44	41.24	13.01	1.00	12.01
Consumer Goods	0.08	16.38	48.67	8.45	0.04	8.41
Agro-Based Goods	0.63	10.12	82.72	2.27	0.52	1.75
Textiles	0.00	1.34	14.19	1.15	0.00	1.15
Trading & Marketing Services	2.41	5.48	47.02	4.04	1.13	2.91
Transportation Services	6.77	18.56	35.36	14.39	2.39	12.00
Contract & Construction Services	0.31	12.37	41.04	7.42	0.13	7.30
Tourist Services	8.40	1.40	87.07	7.49	7.31	0.18
Telecommunication Services	13.10	12.25	75.94	12.90	9.95	2.95
<b>Average of Above Units*</b>	<b>2.47</b>	<b>10.69</b>	<b>65.78</b>	<b>5.28</b>	<b>1.62</b>	<b>3.66</b>
Industrial Devt. and Tech. Const.	0.66	20.39	83.68	3.88	0.55	3.33
Financial Services	2.34	10.25	37.31	7.30	0.87	6.43
<b>All Units</b>	<b>2.36</b>	<b>10.83</b>	<b>64.61</b>	<b>5.36</b>	<b>1.52</b>	<b>3.83</b>

Notes: # Including investments in working capital.

@ Column (2) x Column (4)

\$ Column (3) x [1 - Column (4)]

\* Weighted average by taking ratios of the denominators  
and numerators summed separately

## EXPLICIT SUBSIDIES OF THE CENTRE

Important among the explicit subsidies administered through the Central government budget are food and fertiliser subsidies, and until recently, export subsidies. The list of explicit Central subsidies, however, is much longer. It includes, among others, interest subsidies, on controlled cloth, and for railways, imported cotton and vegetable oil, new industrial units in backward areas, maintenance of river dredging, and crop insurance. The overall trends in the explicit subsidies of the Central government, and some of the major explicit subsidies are discussed below.

### a. Overall Trends

The aggregate explicit subsidies of the Central government have increased from Rs. 140 crore in 1971-72 to Rs. 16694 crore in 1996-97 (RE) (Table 2.7). This represents an average growth of about 20 per cent per annum. At constant 1980-81 prices, total explicit subsidies of the Centre (Annexure 2) have risen from Rs. 312.36 crore in 1971-72 to Rs. 4398.37 crore in 1996-97 (RE), reaching a peak figure of Rs. 5454.71 crore in 1990-91. The average growth during the period 1971-72 to 1996-97 for explicit Central subsidies in real terms thus works out to a little more than 10 per cent per annum, which is much higher than the growth rate of the economy during the period.

The relative importance of different explicit subsidies has changed over the years. For example, food subsidies accounted for about 70 per cent of total Central explicit subsidies in 1974-75 (Annexure 3). Since then, its relative share steadily fell reaching its lowest percentage share (20.15) in 1990-91. From this time onwards, it has risen steadily reaching a figure of 40 per cent in 1995-96. The profile of relative shares of the major explicit subsidies of the Centre indicates that export subsidies have been on the decline except for a spurt in the late eighties, whereas the relative share of the food subsidies has been rising although in a cyclical pattern (Chart 2.4), and the food subsidies had become relatively less important from the late seventies until the beginning of the eighties.

The growth pattern of the major subsidies has been summarised in Table 2.8. Since there are clear and different patterns in the time profile of the three major explicit subsidies (as shown in Charts 2.3 and 2.4), growth rates are estimated using a linear spline function for estimating growth in a kinked time profile (Table 2.8). For food subsidy, however, one average subsidy growth rate for the entire period from 1971-72 to 1996-97 has been

**Table 2.7**  
**Explicit Subsidies in the Central Budget**

(Rs. Crore)

Year	Food Subsidy	Fertiliser Subsidy	Assistance for Export Promotion and Market Development	Subsidy on Railways	Interest Subsidy*	Others	Grand Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1971-72	47	0	54	0	5	34	140
1972-73	117	0	62	0	12	14	205
1973-74	251	0	66	0	20	24	361
1974-75	295	0	80	0	30	14	419
1975-76	250	0	149	0	47	24	470
1976-77	506	60	241	0	66	74	947
1977-78	480	266	324	0	88	129	1287
1978-79	570	342	375	0	59	129	1475
1979-80	600	603	361	56	92	109	1821
1980-81	650	505	399	69	253	152	2028
1981-82	700	381	477	78	102	203	1941
1982-83	711	603	477	97	217	157	2262
1983-84	835	1042	463	93	118	198	2749
1984-85	1101	1928	518	100	135	256	4038
1985-86	1650	1924	603	128	271	220	4796
1986-87	2000	1898	785	144	229	395	5451
1987-88	2000	2164	962	174	393	287	5980
1988-89	2200	3201	1386	207	406	332	7732
1989-90	2476	4542	2014	233	881	328	10474
1990-91	2450	4389	2742	283	379	1915	12158
1991-92	2850	5185	1758	312	316	1832	12253
1992-93	2800	5796	818	353	113	2115	11995
1993-94	5537	4562	665	412	113	1393	12682
1994-95	5100	5769	658	420	76	909	12932
1995-96	5377	6735	16	418	34	725	13305
1996-97	6066	7767	400	466	1257	738	16694

(RE)

Source: *Indian Economic Statistics and Budget Documents*.

Notes: \* Does not include subsidy to: (i) Shipping Development Fund Committee which was treated as grants in the economic classification in the absence of details available then (upto 1977-78) and (ii) States and Union Territories for Janata cloth in the handloom sector which is treated as grants to States in the economic classification.

estimated. The fertiliser subsidy growth rate has been estimated with a kink at 1981-82, upto which the average annual growth rate was 38.46 per cent. It fell to 16.57 per cent from this point in the next sub-period. For export subsidies, two intermediate kinks at 1986-87 and 1990-91 are indicated. After the latter point, there is a very sharp decline in these subsidies.

**Table 2.8**  
**Explicit Subsidies of the Centre: Profile of Growth Rates\***

<i>Period</i>	<i>Food</i>	<i>Fertiliser</i>	<i>Exports</i>
1971-72 to 1996-97	17.06		
1976-77 to 1981-82		38.46 (I)	
1981-82 to 1996-97		16.57 (II)	
1971-72 to 1986-87			17.42 (I)
1986-87 to 1990-91			21.90 (II)
1990-91 to 1996-97			-33.93 (III)
Comments		I > II	II ≥ I > III

- Notes: \*
1. Kinked exponential growth rates.  
I > II or I > III implies that the growth rate in period I is significantly greater than the growth rates in period II or III. II ≥ I implies that these two growth rates are not significantly different.

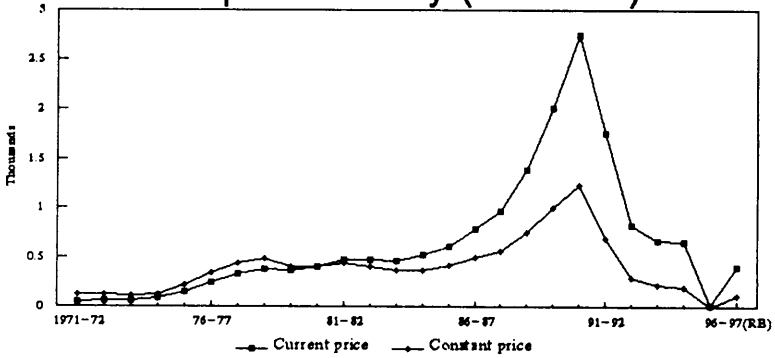
As percentage of GDP, explicit Central government subsidies were just about 0.30 per cent in 1971-72. They continued to increase steadily reaching a peak figure of 2.38 in 1989-90. After this, i.e., during the reform years, the explicit subsidies as a proportion of GDP have continued to decline. Growth rates of some of the important explicit subsidies of the Centre are profiled in Table 2.8.

## b. Food Subsidy

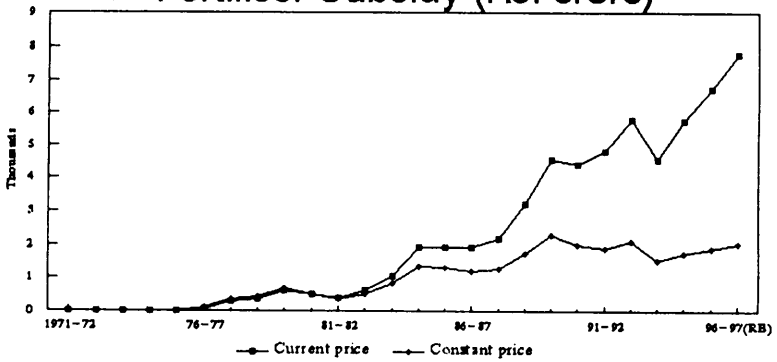
Food subsidy is administered in the following manner. The Food Corporation of India (FCI) purchases foodgrains at procurement prices fixed by the government and places them in a Central pool. Releases from this pool are made for (i) sale through the Public Distribution System (PDS), (ii) revamped PDS/Integrated Tribal Development Projects and (iii) rural employment programme and other relief schemes, at issue prices fixed by the Government. The difference between the two prices, viz., procurement and issue prices, is reimbursed to the Corporation as food subsidy. Reimbursement is also made for the carrying cost of buffer stock which includes handling, storage, interest and administrative charges. The provision for food subsidy<sup>6</sup> also includes sugar subsidy.

Chart 2.3  
Time Profile of Major Central Government Subsidies

Export Subsidy (Rs. crore)



Fertiliser Subsidy (Rs. crore)



Food Subsidy (Rs. crore)

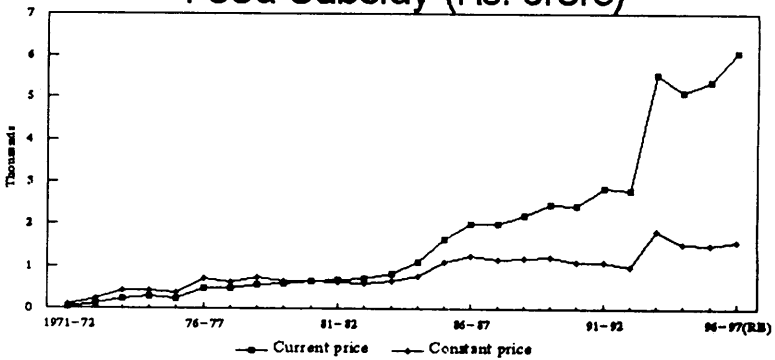
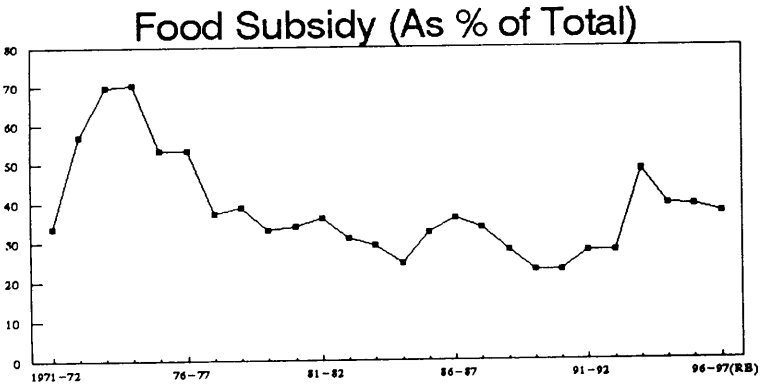
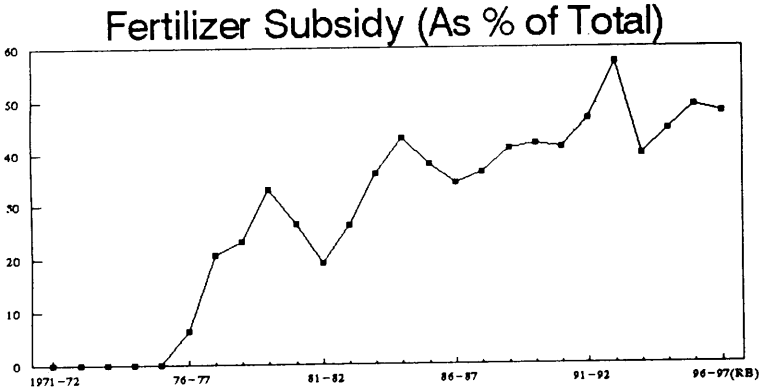
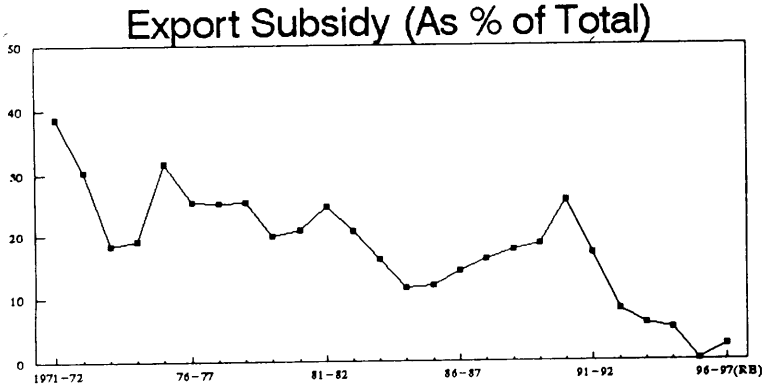




Chart 2.4  
Share of Major Central Government Subsidies in Total Explicit Subsidies



The difference between procurement price and market price which the farmers would otherwise have obtained would determine the farmers' share in food subsidy. The rest can be considered as having two components, viz., (i) consumer subsidy and (ii) subsidy pertaining to the carrying cost of buffer stock. The amount of consumer subsidy depends on the volume of foodgrains distributed through the PDS and the rate of subsidy which, in turn, depends on the difference between market and issue prices and the handling charges of the FCI. The handling charges have steadily increased over the years. In 1974-75, this cost was Rs. 145.7 per tonne. By 1993-94, it had become Rs. 1,800 per tonne [FCI reports; also George (1996)]. The share of consumer subsidy in aggregate food subsidy had gradually increased to a level of 90 per cent by 1989-90. But subsequently it declined to 72 per cent in 1993-94, because of an increase in the carrying cost of buffer stock [see, George (1996)] of which interest payments are a major component. The actual costs of FCI exceed the corresponding norms by a substantial margin. As per an appraisal by the Comptroller and Auditor General of India (CAG), against a distribution cost norm of Rs. 64 per quintal for wheat and Rs. 70.60 for rice, the actual distribution costs in 1993-94 were Rs. 117 and Rs. 124 per quintal, respectively. Erratic movements in the procurement and issue prices have also contributed towards a significant rise in subsidy for the PDS.

The primary objective of food subsidies is to facilitate and ensure subsistence of the economically weaker sections of the society, through a low-priced supply of essential foodgrains. In this context, the management of food subsidies through the PDS has been considered to be poorly targeted and wasteful. A large proportion of poor are not covered by the PDS. Further, the PDS is characterised by extensive leakages and a clear urban bias. In the case of wheat, only 32 per cent of rural poor and 36.7 per cent of urban poor were covered by the scheme. For rice, these percentages were 41.8 per cent for rural and 19.1 per cent for urban areas. Relative distribution of the benefits of food subsidies is reviewed in greater detail in Chapter 5.

A noticeable feature in the operation of the PDS in recent years has been a marked decline in the off-take by the States from their allocation. In the aggregate, roughly 11-12 million tonnes of rice and 9-10 million tonnes of wheat have been allocated to the States. However, the actual off-take has been much lower. As percentage of allocation, the off-take for wheat has been less than fifty per cent in some years as given in Table 2.9.

It is clear that the off-take from the PDS allocation has been declining in recent years. This may reflect a narrowing down of the differential between the market and the PDS prices, and a better availability of foodgrains in the free market.

**Table 2.9**  
**Foodgrains Allocation and Off-Take Under PDS**

Year	Wheat			Rice		
	Allocation	Off-Take	Off-Take as Percentage of Allocation	Allocation	Off-Take	Off-Take as Percentage of Allocation
1990-91	9.50	7.08	74.5	9.61	7.87	81.9
1991-92	10.36	8.83	85.2	11.36	10.17	89.5
1992-93	9.25	7.47	80.8	11.48	9.55	83.2
1993-94	9.57	6.15	64.3	12.41	9.07	73.1
1994-95	10.80	5.11	47.3	13.32	8.01	60.1
1995-96 (P)	11.31	5.29	46.8	14.61	9.46	64.8

Source: *Economic Survey, 1995-96.*

A further revamping of the PDS is now being undertaken. In this scheme, now being called the Targeted PDS (TPDS), 10 kilograms of foodgrains (wheat and rice) would be supplied to a family (of five) per month at half the regular PDS price. It is estimated that six crore families below the poverty line would be covered by this scheme. The estimated annual cost of running this scheme at current price levels would be around Rs. 2,000 crore. In order to get an allocation under the scheme, each State will have to prepare a list of the qualifying beneficiaries. While the States would be induced to lift this part of their allocation, some of it may substitute for the off-take of the regular quota. There may now be additional leakages, to the benefit of the shops running the PDS and the supervisory staff monitoring it.

The government should examine alternative systems of administering its food subsidy programme. In particular, it should examine the viability of administering food subsidies through a 'food coupon' system. The coupon may be issued periodically (quarterly/ six-monthly) to qualifying beneficiaries to supplement their purchases of specified items from the free market. The sellers are then reimbursed by the government for the coupons on which actual purchases have been made. The system can start on a trial basis in any

State which volunteers for it and in the Union Territories. Countries where a food coupon scheme has been launched have reported much better targeting, reduction in leakages, and substantial reduction in the magnitude of food subsidy. In effect, much of the malaise of the present system can be remedied at one stroke, by leaning on the market rather than physically running an extensive system of procurement, storage, transportation and distribution, all of which have lapsed into excessive costs and inefficiency. Although a buffer stock would still be maintained, it would be of a smaller quantum and meant primarily for strategic interventions in the market to keep prices stable and at desired levels. Another possibility is to use 'self-selection' to the extent feasible. For example, subsidies may be confined to coarse varieties of rice or "inferior" foodgrains consumed mainly by the poor.

To summarise, the basic flaws of our food subsidy programme may be listed as:

- it is unduly costly;
- the PDS is poorly targeted; in particular, it is pro-urban, and does not cover a significant proportion of the poor;
- the magnitude of subsidy actually enjoyed by the poor is very small;
- there are extensive leakages;
- the operation of procurement, storage, transportation and distribution is quite costly, and has become more inefficient over time; and
- the off-take by the States from their respective allocations is quite inadequate and has been falling in recent times.

A complete overhaul of the system of administering the food subsidy programme of the government is called for.

### **c. Fertiliser Subsidy**

Fertiliser subsidies<sup>7</sup> relate to indigenous as well as imported fertilisers. For indigenous urea, a retention price (price paid to the industry) scheme has been in operation since 1977. This scheme aims at making urea available to farmers at reasonable prices while giving the domestic producers also a reasonable rate of return on their investment. The retention price is

determined for each plant. It is revised quarterly to take account of increase in costs of inputs. Subsidy is calculated as the difference between the retention price so fixed less the distribution margin and the statutorily controlled consumers' price. The magnitude of the subsidy thus depends on the two prices (consumers' and retention) and the quantity of production. A freight subsidy for moving fertilisers from factory to delivery points is also allowed for.

Subsidy is also provided for the import of fertilisers. Mainly three types of fertilisers are imported, viz., Urea, Di-ammonium Phosphate (DAP) and Muriate of Potash (MOP). Only nitrogenous fertilisers are under price control and subsidy is given on imported urea. In addition, there is a scheme for providing subsidies pertaining to decontrolled fertilisers. The prices of phosphatic and potassic fertilisers were decontrolled in August, 1992. At the same time, a scheme was introduced to provide a subsidy to manufacturers/agencies for the concessional sale of decontrolled fertilisers to farmers. The concessions presently being given are as under:

- (i) Rs. 3000 per tonne for Di-ammonium Phosphate (DAP)
- (ii) Rs. 1500 per tonne for Muriate of Potash (MOP)
- (iii) Rs. 500 per tonne for Single Super Phosphate (SSP).

A concession of Rs. 1500 per tonne is given for the imported DAP to keep its price comparable to indigenous DAP, while giving the latter also an edge.

The burden of the fertiliser subsidy is considerable. A reduction in the use of fertilisers may have serious adverse impact on agricultural output. In one study [Sidhu and Sidhu (1991)], it was estimated that a 30 per cent hike in the real price of fertilisers would lead to a 18 per cent decline in fertiliser consumption, which in turn would lead to a 5.4 per cent fall in the foodgrain production. In a general equilibrium framework, [Parikh and Suryanarayana (1992)], it was worked out that fertiliser subsidy does increase the welfare of the poor, and withdrawal of fertiliser subsidy releases funds for making investment in irrigation and in other productive activities, which finally augments growth.

#### **d. Export Subsidy**

Export subsidy, i.e., use of cash assistance for the promotion of exports has been in vogue in India till the launching of Trade Reform Policies during 1991-92. The available incentives were primarily (i) duty drawback, (ii) cash

compensatory support and (iii) import replenishment. Under the drawback scheme, import duties paid on inputs used in export products are refunded in full, or upto 90 per cent if the imported article is re-exported. Similarly, excise duty on input is also refunded. Under the scheme of cash compensatory support (CCS), assistance is provided for the export of specific non-traditional products to make Indian goods competitive in the international markets. This is provided mainly to compensate for unrefunded taxes paid on export goods and the inputs going into their manufacture.

Two major problems regarding the operation of export incentive schemes have often been highlighted,<sup>8</sup> viz., (i) that many domestic inputs were over-valued either due to an over-valued exchange rate or high rates of effective protection and if 'value-added' in export activity was estimated at an appropriate price, it may not have received any effective export subsidy; and (ii) that although expenditure incurred by the government on export incentives had gone up significantly, the comparative advantage did not register any substantial improvement. The Committee on Export Strategy (1980), headed by Shri Prakash Tandon had earlier recommended a rationalisation of the structure of export subsidies and a reduction of their volume. As already noted, export subsidies have been drastically reduced in recent years.

#### **e. Other Subsidies**

There is a wide range of other subsidies explicitly provided for in the Central budget. Interest subsidies arise when concessions in the prescribed rate of interest on sanctioned loans are given or when exemption from payment of interest on the loans is given. Railway subsidies arise due to concessions given in the payment of dividend to General Revenues on a number of items. Exchange loss subsidies relate to compensation for exchange loss involved in the repayment of foreign lines of credit by financing institutions such as HDFC, IDBI, ICICI, and National Housing Bank which are involved in repayment of foreign lines of credit. Handloom subsidies relate to continuing schemes of special rebate on handloom cloth and subsidy on dhotis and sarees produced in the handloom sector. Some subsidies arise when loans to public enterprises are written off.

In conclusion, it may be noted that explicit subsidies in the budget of the Central government accounted for only about 30 per cent of total Central subsidies in 1994-95. As such, a much better idea about subsidies is obtained when the remaining 70 per cent of the implicit subsidies are also considered. It was indicated that when a comprehensive view of the Central subsidies is

taken, it is the subsidies on economic services of the non-merit kind that dominate the scenario. Recovery rates of less than ten per cent in these cases indicate oversubsidisation by a wide margin, and highlight the considerable potential for raising recovery rates and thereby mitigating the draft on fiscal deficit that originates from maintaining subsidies at such unduly high levels.