

3. *Growth of Government Expenditure*

Introduction

AN attempt is made in this chapter to trace the growth of government expenditure¹ in nominal and real terms. Analysis is made also in terms of expenditure per head of population as well as expenditure-GNP ratio. Just as changes in prices affect continuously the growth of government expenditure, changes in population and development (per capita GNP) also influence the growth of government expenditure. The reason for considering population as an important factor influencing expenditure is that with an increase in population, the demand for governmental services also would grow. A given level of services may no longer be sufficient for an increased level of population. Perhaps for this reason, many studies have considered population as a “permanent” factor influencing the growth of government expenditure. Equally important is the factor “economic development” in influencing the growth of government expenditure. As the level of development increases, new forms of consumption will arise and the government-financed communal consumption will also increase. It is expected that as the level of GNP rises, the proportion of different governmental services—education, health, transport, electricity, etc., in respect of which government provision may be efficient—to GNP would also grow. This has been so in the findings of most of the empirical studies. But under normal circumstances, an increased level of development should bring a reduction in the proportion of government expenditure. In the words of Peacock and Wiseman (1967, p. 22), “as the general level of individual income rises, dependence upon the State for the relief of extreme poverty and distress ought to diminish in importance.” But this corollary may not be valid in India; the level of service is so low that even with an increase in the level of GNP, the provision of services by government might be called for.

Government Expenditure in Nominal Terms

Government expenditure has grown tremendously in nominal terms from Rs. 504 crore in 1950-51 to Rs. 14986 crore in 1977-78—an increase of roughly 30 times during the period of just 28 years. The growth of expenditure, however, was not uniform throughout the whole period. It increased at the average compound growth rate of 15.96 per cent during 1950-51 to 1959-60, 16.67 per cent during 1959-60 to 1965-66, 3.44 per cent during 1965-66 to 1968-69 and 14.72 per cent during 1968-69 to 1977-78. Table 3.1 and Chart 3.I show the growth of expenditure clearly. It can be seen that there are four phases of growth: (i) the period of steady growth, 1950-51 to 1959-60; (ii) the period of rapid growth, 1959-60 to 1965-66; (iii) the period of slump, 1965-66 to 1968-69 and (iv) the period of rapid growth 1968-69 to 1977-78. It is possible to explain these phases in terms of occurrence of wars, commitments of the government (planning) to provide services and the acceptance of socialist pattern of society. But such an explanation would be of little value since a significant portion of the rise in expenditure may be on account of “permanent” factors—prices, population and income. Any meaningful explanation of the growth of expenditure should take account of ‘permanent’ factors. Chapter 4 is devoted to this purpose. Our concern here is to see how government expenditure has grown when the influence of prices and population is removed and how the expenditure ratios have moved in nominal and real terms.

Government Expenditure in Real Terms (at Constant 1970-71 Prices)

In clear contrast to the growth in nominal terms, government expenditure in real terms (i.e., when the influence of price changes is removed) increased at a slower pace— $8\frac{1}{2}$ times only as against 30 times in nominal terms during 1950-51 to 1977-78. At constant 1970-71 prices, expenditure which was Rs. 1022 crore in 1950-51 increased to only Rs. 8706 crore in 1977-78 (Table 3.2). The four phases seen above display a different growth pattern in real terms. For example, while expenditure in nominal terms increased at the average compound growth rate of

CHART 3.J
Indexes of Central Government Expenditure and Gross National Product at Current Prices
(1950-51 to 1977-78)

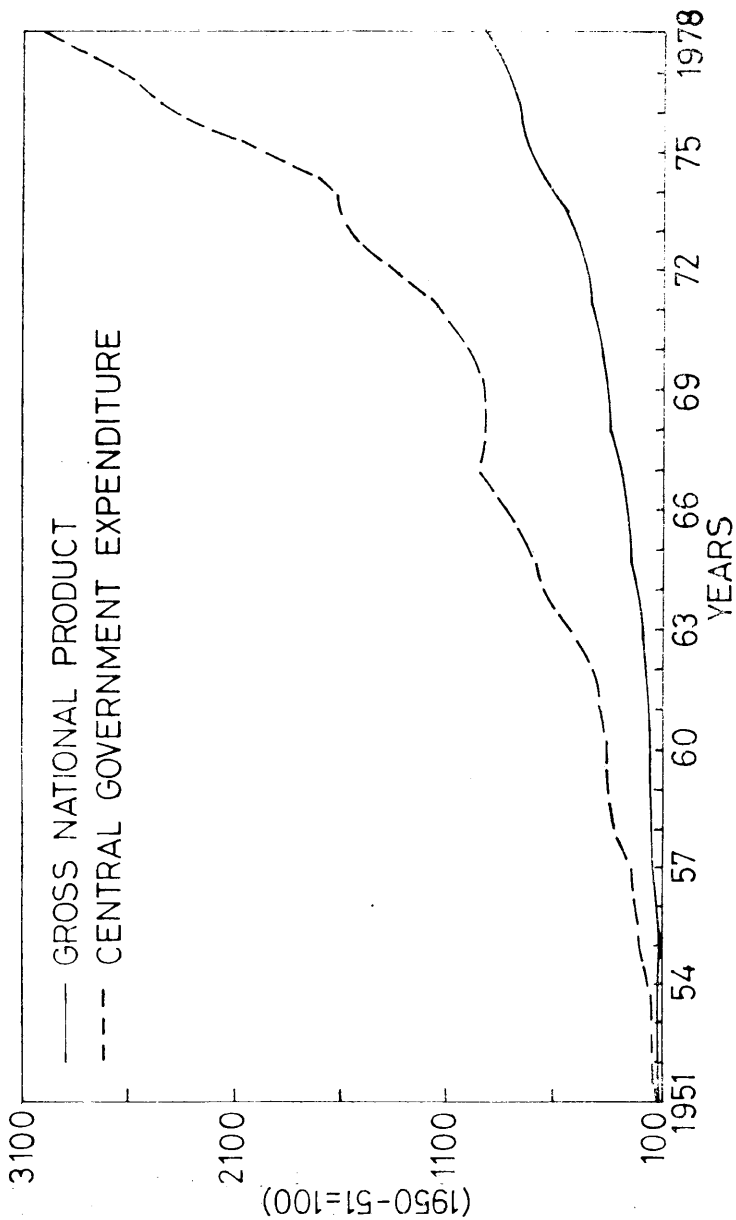


TABLE 3.1
Central Government Expenditure at Current and Constant 1970-71 Prices
(1950-51 to 1977-78)

Year	At current prices		At 1970-71 prices		As per cent of GNP	
	Total expenditure (Rs. crore)	Per head of population (Rs.)	Total expenditure (Rs. crore)	Per head of population (Rs.)	At current prices	At 1970-71 prices
	(1)	(2)	(3)	(4)	(5)	(6)
1950-51	503.70	14.03	1022.09	28.47	5.22	5.55
1951-52	610.10	16.72	1194.61	32.73	6.04	6.31
1952-53	585.10	15.73	1152.06	30.97	5.94	5.90
1953-54	661.00	17.44	1282.16	33.83	6.24	6.18
1954-55	920.50	23.85	1886.48	48.87	9.40	8.75
1955-56	974.50	24.80	1961.75	49.92	9.37	8.79
1956-57	1117.50	27.87	2111.85	52.66	9.33	8.99
1957-58	1551.00	37.92	2906.69	71.07	12.79	12.47
1958-59	1639.20	39.52	2896.80	69.30	12.05	11.51
1959-60	1709.30	40.12	2983.24	70.03	12.09	11.60
1960-61	1805.70	41.61	3079.51	70.96	12.08	11.35
1961-62	2039.20	45.93	3399.86	76.57	13.84	12.05
1962-63	2532.50	55.78	4069.51	89.64	14.90	14.04

TABLE 3.1 (Contd.)

	(1)	(2)	(3)	(4)	(5)	(6)
1963-64	3206.60	69.11	4785.36	103.13	16.41	15.60
1964-65	3488.90	73.51	4907.74	103.54	15.24	14.89
1965-66	3993.60	82.34	5195.24	107.12	16.68	16.48
1966-67	4665.40	94.25	5415.17	109.40	17.01	17.14
1967-68	4497.20	88.88	4866.74	96.18	14.04	14.24
1968-69	4525.80	87.37	4854.06	93.71	13.70	13.72
1969-70	4924.70	93.09	5097.39	96.36	13.46	13.53
1970-71	5576.60	103.08	5576.60	103.08	13.90	13.90
1971-72	6709.70	121.11	6369.47	114.97	15.52	15.52
1972-73	7849.30	138.68	6853.08	121.08	16.45	16.85
1973-74	8130.80	140.43	6198.20	107.05	13.81	14.65
1474-75	9784.90	165.57	6191.30	104.76	14.06	14.38
1975-76	12036.50	199.28	7612.68	126.04	16.35	15.98
1976-77	13150.10	213.48	7931.47	128.76	16.56	16.52
1977-78	14985.60	238.24	8705.84	138.41	16.86	16.75

TABLE 3.2
Compound Growth Rate of Central Government Expenditure at Current and Constant
1970-71 Prices for Selected Periods
(1950-51 to 1977-78)

	1950-51 to 1977-78	1950-51 to 1959-60	1959-60 to 1968-69	1968-69 to 1977-78	(Percentage per annum)
	(1)	(2)	(3)	(4)	(5)
I. Government Expenditure					
Total					
In nominal terms	13.04	15.96	16.67	3.44	14.72
In real terms (at constant 1970-71 prices)	7.59	14.27	11.06	3.06	6.07
Per head of population					
In nominal terms	10.67	13.76	14.15	1.20	12.26
In real terms (at constant 1970-71 prices)	5.34	12.11	8.67	5.16	3.79
II. Gross National Product					
Total					
In nominal terms	9.15	4.33	9.90	11.84	12.33
In real terms (at constant 1970-71 prices)	3.77	3.88	3.95	4.34	3.88
Per head of population					
In nominal terms	6.87	2.36	7.53	9.42	9.92
In real terms (at constant 1970-71 prices)	1.60	1.92	1.71	2.07	1.65

15.96 per cent, 16.67 per cent, 3.44 per cent and 14.72 per cent during 1950-51 to 1959-60, 1959-60 to 1965-66, 1965-66 to 1968-69 and 1968-69 to 1977-78, respectively, expenditure in real terms increased at the average compound growth rate of 14.27 per cent, 11.06 per cent, 3.06 per cent, and 6.07 per cent, respectively, during the same periods. It is clear that the periods of rapid growth, 1959-60 to 1965-66 and 1968-69 to 1977-78, are not truly the periods of rapid growth. Instead, the period 1950-51 to 1959-60 has turned out to be the period of rapid growth and the period 1968-69 to 1977-78 to be the period of slow growth. Much of the growth in the government expenditure since 1968-69 is only on account of inflation. A comparison of Chart 3.II with Chart 3.I indicates the difference between the growth of expenditure in nominal and real terms. The differences in growth rates are brought out more pointedly in semi-log form in diagram Chart 3. III.

Government Expenditure Per Head of Population in Real Terms

As has been pointed out earlier, population is another important permanent factor influencing the growth of government expenditure. It can be seen from Table 3.1 that expenditure per capita in real terms increased by five times only as against total expenditure in real terms by $8\frac{1}{2}$ times and expenditure in nominal terms by 30 times. The per capita government expenditure in real terms (at 1970-71 prices) increased from Rs 28.47 in 1950-51 to Rs 70.96 in 1960-61, Rs 103.08 in 1970-71 and Rs 138.41 in 1977-78.

Government Expenditure in Relation to GNP

Just as population is a factor that influences the growth of government expenditure, so also is community output. As has been mentioned earlier, income is another important factor that influences government expenditure ratio. The Wagnerian hypothesis is one of the several hypotheses built around this factor. Our concern here is not to test the validity of the Wagnerian hypothesis, but simply to observe whether government expenditure is increasing in proportion to national income. Table 3.2 shows the trend of the ratio of government

CHART 3.II
Indexes of Central Government Expenditure and Gross National Product at 1970-71 Prices
(1950-51 to 1977-78)

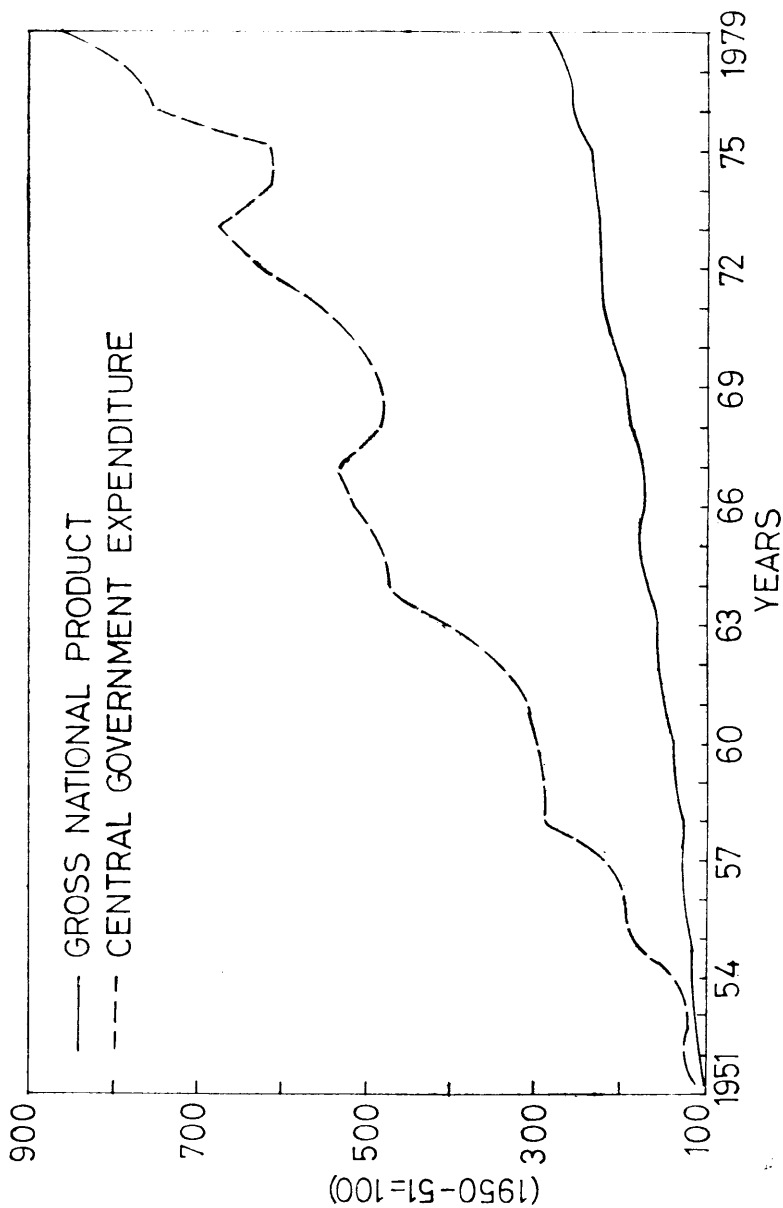
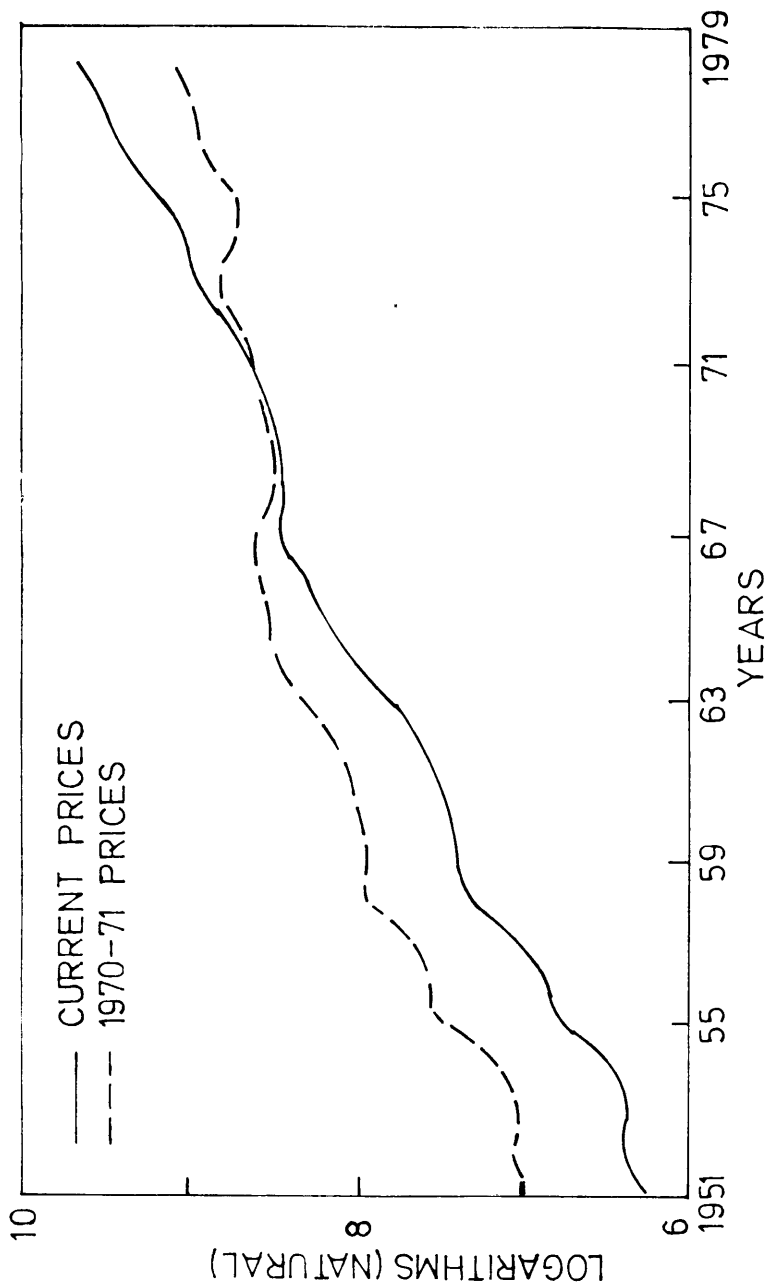


CHART 3.III
Trends in Central Government Expenditure
1951 to 1979



expenditure to GNP in nominal as well as real terms. Although there is not much difference between the expenditure ratios in nominal and real terms, it can be seen that the expenditure ratio in nominal terms moved slightly faster than in real terms. Taking the expenditure ratios in real terms for our purpose, it can be said that the expenditure ratio increased by three times during the period 1950-51 to 1977-78. Thus *in real terms*, government expenditure has increased much faster than have both population and national product.

It is interesting to note that while expenditure in nominal terms increased by 30 times, expenditure in real terms (i.e., when the effect of price change is removed) increased by 8.5 times, expenditure per head of population (i.e., when effect of population is removed) increased by 4.8 times and expenditure in relation to community output (i.e., to GNP) increased by 3 times.

One might wish to find out the relative contribution of each of the factors—prices, population and per capita income in real terms—to the growth of government expenditure. While we attempted to find an answer to this question, we have not entirely succeeded in quantifying their contribution since many non-economic factors might have contributed to the growth of government expenditure. But quantifying the contributions of the known factors at least must be made, howsoever rough it might be, if our analysis has to be of some use to policy making.

Accordingly, an attempt is made here to quantify the contribution of (i) changes in prices, (ii) changes in the magnitude of goods and services purchased and in real transfers (including loans), (iii) changes in the number of employees in the Central government, (iv) changes in the real wages and (v) changes in nominal wages given to Central government employees as inflation adjustment. The first two are assumed to influence the growth of government expenditure other than the expenditure on wages and salaries while the last three are assumed to influence the growth of government expenditure on wages and salaries.

Quantification of the contribution of (i) and (ii) has been carried out with respect to commodities and services, gross

capital formation, current transfers, capital transfers and financial investments and loans. The equation used is as follows:

$$E_N = \frac{P}{100} \cdot E_R$$

$$\Delta E_N = \frac{P_t}{100} (E_{Rt} - E_{Rt-1}) + \frac{E_{Rt}}{100} (P_t - P_{t-1})$$

where

E_R = real expenditure

E_N = nominal expenditure

P = price index.

Strictly speaking, the above formula gives correct answers only when the time intervals considered and the relative changes of the variables are very small. Hence the relative contributions of volume increase and price increase to the total increase in expenditure that we have derived through the use of the formula are only approximations. The contributions of the two factors to the increase in expenditure during the period 1950-51 to 1965-66 and to that in the period 1966-67 to 1977-78 are given in Table 3.3.

During the period 1950-51 to 1965-66, in regard to goods and services (on current account), the relative contributions of volume increase and price rise were almost equal (49 and 51 per cent) and in regard to capital formation, equal; in regard to transfers, the contribution of volume increase has formed the major part of the increase. By contrast, during the period 1966-67 to 1977-78, much the greater part of the increase in expenditure was accounted for by the price rise: the increase in the volume of goods and services expenditure contributed only 18 per cent, that of capital formation 1.3 per cent and that of loans and investments 22 per cent. The shares of volume increase were higher in the case of transfers but still less than 40 per cent. If we take all the five components together, it is seen that during the first period considered 60.9 per cent of the increase in the five components of expenditure was due to the increase in real expenditure and 39.1 per cent was reflective of price rise. On the other hand, during the second period, as much as 73.3 per cent of the increase in nominal expenditure was reflective of price rise and only 26.7 per cent represented the increase in real

TABLE 3.3
 Central Government Expenditure—Decomposition of Growth into Price and Real
 Components: 1950-51 to 1965-66 and 1966-67 to 1977-78

	1950-51 to 1965-66			1966-67 to 1977-78		
	Change in real expendi- ture	Change due to price rise	Total change	Change in real expendi- ture	Change due to price rise	Total change
	(1)	(2)	(3)	(4)	(5)	(6)
1. Commodities and services	230.8 (48.6)	244.3 (51.4)	475.1 (100)	206.4 (17.9)	942.6 (82.1)	1149.0 (100)
2. Gross capital formation	221.3 (50.2)	219.0 (49.8)	440.3 (100)	7.8 (1.3)	599.2 (98.7)	607.0 (100)
3. Current transfers	410.0 (63.8)	232.9 (36.2)	642.9 (100)	1320.2 (36.4)	2303.8 (63.6)	3624.0 (100)
4. Capital transfers	70.4 (55.9)	55.5 (44.1)	125.9 (100)	204.5 (33.4)	408.4 (66.6)	612.9 (100)
5. Financial investments and loans	949.6 (67.5)	456.8 (32.5)	1406.4 (100)	662.3 (22.0)	2347.9 (78.0)	3010.2 (100)

Note: Figures in parentheses are percentage shares of the components in total change.

expenditure. Thus the greater part of the additional resources mobilised by the Central government went to maintain the real value of the base-year expenditure in the face of price rise.

We have so far dealt with the relative contributions of volume increase and price increases to the total increase in expenditure on goods and services, transfers and financial investments. We shall now deal with wages and salaries. Since we do not have the number of defence services personnel, we shall exclude wages and salaries under the head "Defence". Table 3.4 shows wages and salaries of the Civil Departments (excluding Departmental Undertakings) in 1960-61 and 1977-78 and the increase between the two years. Alongside are shown the employment in Civil Departments and the consumer price index in the two years and their increases. The last row gives the same information in relation to the nominal wage rate.

TABLE 3.4
Increases in Wages and Salaries, Employment, Price and
Nominal Wages*
(1960-61 to 1977-78)

	<i>1960-61</i>	<i>1977-78</i>	<i>Increase</i>
	(1)	(2)	(3)
1. Wages and Salaries (Rs. crore)	129.39	1146.30	1016.91
2. Employment** (lakh nos.)	6.07	12.16	6.09
3. Prices*** (1948-49=100)	124	390	214.52 per cent
4. Nominal wage rates (Rs./annum)	2131.63	9426.81	7295.18

* Civil Departments only

** As at the beginning of the year

*** Consumer Price Index

On the basis of the above figures, we have worked out the relative contributions of employment, real wage rate and inflation to the total increase in the expenditure on wages and salaries. They are as follows:

	(Rs. crore)
a. Due to increase in employment	129.82
b. Due to increase in real wage rate	282.05
c. Due to inflation	605.04

It is thus seen that the major part (59 per cent) of the increase in wages and salaries expenditure was accounted for by inflation adjustment (whether intended or not). Of the three factors, the smallest percentage of the increase was accounted for by increase in employment. The real wage at 1960-61 prices increased from Rs. 2131.63 per annum in that year to Rs. 2993.0 in 1977-78; the share of the increase contributed by the rise in real wages (28 per cent) is higher than that contributed by the increase in employment (13 per cent).

NOTES

1. Since the study is largely devoted to an analysis of Central government expenditure, we simply refer to "government expenditure". Unless otherwise specified, or the context so requires, the term is to be taken to mean "Central government expenditure."