

8. *Summary of Findings*

Introduction

THE main objectives of the study are to analyse the growth of the Central government expenditure in relation to such major variables as national income, population and prices, to assess the relative growth of expenditure under different functional and economic categories, to work out the commodity composition of the Central government expenditure and to measure its total impact on sectoral output. Among the factors that affect the growth of government expenditure, an attempt has been made to isolate the influence of change in the prices of commodities bought, the volume of commodities bought, growth in employment, change in real wages and change in money wages to counter inflation. The analysis of the impact of government's commodity expenditure on the economy is also carried out in relation to the expenditure of one State government, namely, Gujarat, as a case study.

Trends in Expenditure

During the period 1950-51 to 1977-78, the Central government expenditure increased by 30 times in nominal terms, $8\frac{1}{2}$ times in real terms and 5 times in per capita real terms. Government expenditure in nominal terms as a percentage of GNP increased from 5.22 in 1950-51 to 16.86 in 1977-78; in real terms this ratio increased from 5.5 per cent to 16.75 per cent during the same period (see p. 23).

Factors Contributing to the Growth of Central Government Expenditure

During 1950-51 to 1965-66, 40 per cent of the increase in the total Central government expenditure was on account of changes in prices and 60 per cent was on account of the increase in the quantity of goods and services purchased. During 1966-67 to 1977-78, as much as 71 per cent of the increase was on account of changes in prices and only 29 per cent of the

increase was on account of the increase in the quantity of goods and services purchased.

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 formed the major part of the increase. By contrast, during the period 1966-67 to 1977-78, much 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 share of volume increase was 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 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.

As regards the increase in the expenditure on wages and salaries of the Civil Departments, it has been estimated that 59 per cent of it was accounted for by inflation adjustments (intended or unintended), 28 per cent by the increase in real wages and 13 per cent by the increase in employment.

Structure of Central Government Expenditure

There has been a significant change in the composition of Central government expenditure with a pronounced increase in the share of expenditure on economic services. In terms of economic classification, the shares of transfer payments and financial investments and loans went up, while that of final outlays went down during the period under study. This leads to the conclusion that the expenditure policy of the Central government has been in favour of decentralisation in spending.

Expenditure on final outlays (consumption expenditure and capital formation) at current prices has grown continuously, but in per capita real terms it has remained roughly constant for the past 14 years. The main reason for this constancy seems to be the sluggish growth in direct capital formation.

As of 1977-78, transfer payments (current and capital) constituted 36 per cent of Central government expenditure at current prices, while current transfers and capital transfers accounted for 31.22 and 5.03 per cent, respectively. Subsidies, an important component of transfers, increased tremendously (49 times in nominal terms and 15 times in real terms) during the period under study. As of 1977-78 subsidies constituted 8.59 per cent of the Central government expenditure and 23.69 per cent of transfer payments (current and capital transfers combined) at current prices.

As of 1977-78, a substantial portion of subsidies (59.5 per cent) was given under "economic services", namely, agriculture, industry, transport and communication, while social services get very little. Among the economic services, industry including export promotion got the major share.

Between 1957-58 and 1965-66, the relative shares in total Central government expenditure of defence services, economic services and social services increased, while those of general services other than defence and unallocable services decreased. In the period 1966-67 to 1972-73, there was no marked shift in the shares of various functions. However, in the period 1973-74 to 1977-78, there was an upward shift in the share of economic services and a downward shift in that of defence services and near *status quo* in those of general services other than defence, social services and unallocable services. Particularly noteworthy is the fact that the share of economic services increased from 39 per cent in 1973-74 to 50 per cent in 1977-78, while that of defence services declined from 20 to 17 per cent.

Income Elasticities of Expenditure

During the period 1965-66 to 1977-78, the elasticity of per capita government expenditure under all the functional heads considered with respect to per capita GNP at current prices was greater than unity. The co-efficients of the elasticities of the

different categories of expenditure did not differ much, the range falling between 1.01 for education and 1.51 for medical and public health. If the elasticities are computed for per capita expenditure in real terms with reference to per capita GNP in real terms, they are found to diverge as between different kinds of expenditures. It is also found that the elasticities computed in real terms are higher than those computed in nominal terms except in the case of education. The income elasticity of per capita total current expenditure including defence was 1.17 in nominal terms and 1.83 in real terms.

Commodity Composition of Central Government Expenditure

a. Direct Demand

If Central government expenditure excluding departmental undertakings is considered, the largest share of expenditure (17.6 per cent) goes to construction materials (mainly road dressing and roof materials). Next comes the share of non-electrical machinery and transport equipment (14.9 per cent) followed by the shares of food items and petroleum products (12.2 and 12.0 per cent, respectively). Thus the above-mentioned four groups of items account for 56.7 per cent of total expenditure. Other groups whose shares exceed 5 per cent are chemicals and chemical products, metal and non-metal products, electrical machinery and cotton textiles. If these are added to the first four groups, the combined share will amount to 81.2 per cent. Thus over 80 per cent of the total Central government expenditure creates direct demand for the products of just eight broad groups of industries.

If Central government expenditure excluding departmental undertakings is considered, the largest share of expenditure (19.7 per cent) goes to non-electrical machinery and transport equipment. Next comes the share of construction material (14.6 per cent), followed by petroleum products (13.5 per cent), food items (9.5 per cent), metals, non-metals and products (7.2 per cent) and minerals (6.4 per cent). These six broad groups of items constitute 71 per cent of government purchases.

b. Direct and Indirect Demand

The aggregate output multiplier of the Central government

commodity expenditure works out to approximately 2.6. That is, if the government spends Rs. 100 crore on goods and services the total demand for output in the economy would go up by Rs. 260 crore.

While the major portion of direct demand is for machinery and transport equipment, petroleum products, construction materials and food products, the major portion of indirect demand is for minerals (22.24 per cent) including petroleum crude and coal, edible oils (10.75 per cent) chemicals and chemical products (20.8 per cent), metal and non-metal products (15.40 per cent) and petroleum products (10.87 per cent)

The demand for output as a result of government purchases constitutes approximately 8 per cent of the total supply of goods and services in the economy. Of this, the direct demand by the government constitutes only 3 per cent and induced demand approximately 5 per cent.

The pattern of total (direct+indirect) demand generated resembles little that of direct demand by government. Three patterns have emerged:(i) commodities for which the ratio of indirect demand to direct demand is high; (ii) commodities for which the ratio of indirect demand to direct demand is low; (iii) commodities for which the ratio of direct to indirect demand is near unity. Prominent among the first one are coal and other minerals, edible oils, tobacco and tobacco products, beverages, wood and wood products, paper and paper products, rubber products, public utilities such as gas, electricity, water supply and communications, as well as other services. Other sectors that fall into this category are jute textiles, leather and leather products, metal and non-metal products. These are intermediate types of commodities which are needed in the production of most of the commodities. Thus, indirect demand for them is high though government does not purchase them directly. The second one includes woollen and silk textiles, food, non-electrical machinery and transport equipment. These are mainly final consumption goods. In the third category fall petroleum products, construction materials and electrical machinery. In the resultant pattern of total demand, minerals, petroleum products, chemicals and chemical products, machinery and transport, construction,

metal and non-metal products and food items come out to be prominent.

Though the direct government demand for imports is relatively small, the indirect demand for imports generated in the economy as a result of government purchases is sizeable.

Commodity Composition of Gujarat Government Expenditure

a. Direct Demand

Three items, namely, construction materials; gas, electricity, water supply and communication; and chemicals and chemical products accounted for more than 90 per cent of the government purchases in 1977-78. Other products like jute textiles, woollen and silk textiles, wood and wood products, paper and paper products, leather and leather products accounted for negligible proportions.

b. Direct and Indirect Demand

The output multiplier of the Gujarat government purchases is somewhat lower than the output multiplier of the Central government purchases. It is 1.91 for the year 1977-78. That is, if Gujarat government spends Rs. 100 crore on goods and services, the total demand for output in the economy would go up by Rs. 191 crore. The indirect demand arising from government expenditure for petroleum products, wood products, jute and textiles and metal and non-metal products is high relatively to the direct demand for them by the government. But the direct demand for construction and gas, electricity, water supply and communications is low relatively to the indirect demand for them arising from government purchases.

The aggregate output multiplier has declined during the past five years: from 2.22 in 1973-74 to 1.91 in 1977-78. Since we have used the same input-output matrix and since we have kept the pattern of all expenditures other than construction the same for all the years, the fall in the value of the multiplier should be traced to the increase in the proportion of construction expenditure.

Future Research

As stated at the outset, in order to gain an adequate idea of

the impact of public expenditure in the country, it would be necessary to include in the study the expenditures of at least the Central and State governments. For various reasons, it has not been possible to cover the State governments in the present study. This is indeed a limitation of the study. Hence, our attempt may be looked upon as constituting the first stage of an extended programme of work. It may be also recalled that since a proper functional break-down of expenditure was not available even for the Central government for the years prior to 1966-67, our analysis of the relative growth of expenditures under different functional categories could not be extended to cover the entire period of study. The agenda of future research in this area should, *inter alia*, aim to make a more comprehensive study of public expenditure through the inclusion of the expenditures of State governments and tracing the growth of functional categories of expenditure over a somewhat longer span of time.