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REVIEW ARTICLE

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# AN ANALYSIS OF NON-FINANCIAL NON-DEPARTMENTAL ENTERPRISES IN PUBLIC SECTOR (1961-62 TO 1980-81)

K.S. Ramachandra Rao*

## Introduction

In mixed economies like India, public sector enterprises play a vital role in economic development. The public sector enterprises are classified on the basis of the organisational forms, viz., departmental undertakings (such as railways, post and telegraphs and irrigation projects), non-departmental undertakings set up as companies[1] (Steel Authority of India Limited, Coal India Limited, etc.) and public corporations set up by an Act of Parliament (Industrial Develoment Bank of India, Life Insurance Corporation of India, etc.). There was a general expansion of public enterprises, but those organised on the lines of corporate structure gathered momentum in the context of industrialisation with particular emphasis on basic and heavy industries in the Second Five Year Plan.

The Second Five Year Plan stated that "if industrialisation is rapid enough the country must aim at developing industries which make machines to make the machines needed for the large number of industries in the field of consumer goods and intermediate goods."[2] The thrust of industrialisation continued in the subsequent Five Year Plans with a large participation of the public sector in capital goods industries.

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1. Any company under Section 617 of the Indian Companies Act, 1956, in which not less than 51 per cent of the share capital is held by the Central Government or by any State Government or partly by the Central Government and partly by one or more State Governments, is a government company.
2. Planning Commission, Government of India, Second Five Year Plan - A draft outline, (Summary) 1956.

In the process of economic development, the public sector[3] in India has significant achievement to its credit in various economic areas. Its contribution to net domestic product (NDP) at factor cost (current prices) increased from 12.3 per cent in 1961-66 to 22.8 per cent during 1981-84. Its share in total final consumption expenditure also increased from 10.4 per cent in 1961-66 to 13.5 percent in 1981-84. Its share in gross domestic saving recorded a marginal improvement during the period 1961-62 to 1983-84, but in net domestic saving, however, the share decreased steeply from 27.2 per cent in 1961-66 to 16.9 per cent in 1981-84.

Non-departmental enterprises of the public sector, are divided into financial enterprises and non-financial enterprises; the former covers institutions like, commercial banks, Industrial Development Bank of India, Rural Electrification Corporation, Housing and Urban Development Corporation, etc., which undertake borrowing and lending activities. The latter group is engaged in manufacturing of capital/consumer goods and rendering services (like the Shipping Corporation of India). These enterprises are owned by Central and State Governments[4]. During the Sixties and Seventies, the growth of the public sector enterprises was rapid in terms of both number and investment. This was the result of establishment of new companies and also nationalisation of some of the private companies for effective control, both to cure sickness and maintain employment of the labour force.

Growth of non-departmental non-financial enterprises was significant during the period of the study.

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3. Public sector includes administrative departments, its departmental enterprises, and non-departmental financial and non-financial enterprises of Central government, State governments and Local authorities.
4. A government company is said to be owned by Central government if it holds more than half of total goverment share holdings of the company and all other government companies are known as state government companies.

The share of such enterprises in public sector's gross capital formation increased from 23 per cent in 1961-62 to nearly 51 per cent in 1980-81[5]. Their share in net domestic capital formation also increased from about 13 per cent in 1961-62 to 24 per cent in 1980-81. Similarly, in terms of net domestic product, the enterprises increased their share from less than 1.0 per cent in 1961-62 to 6.0 per cent in 1980-81 while their share in net domestic product of public sector recorded a six-fold increase.

The objective of the paper is two fold: first, to review the functioning of non-departmental non-financial enterprises in relation to output, savings, investment and its financing. Second, to develop econometric relation among their important variables. The analysis is confined to a few components of their sources and uses of funds. The paper is organised in four sections. Section I discusses their overall structure with reference to their share in public sector vis-a-vis departmental enterprises, the distribution of ownership between Central and State Governments, capital-output ratio, capacity utilisation and state-wise distribution of gross block of assets. Section II presents the estimates of their net product, savings and investment vis-a-vis total public sector and aggregate economy. The section also presents an analysis of the enterprises' sources and uses of funds in financing their investment. Section III presents the empirical results analysing the behaviour of different corporate activities of the enterprises. Conclusions are given in the last Section. Different sources of data and the procedure of estimation of stock figures are given in Appendix-I. Selected regression equations are given in Appendix II and graphs for actual and expected values of selected variables are given in Appendix III.

The study relates to the period 1961-62 to 1980-81. It is divided into four sub-periods, viz., 1961-62 to 1965-66 (Period I), 1966-67 to 1970-71 (Period II), 1971-72 to 1975-76 (Period III) and 1976-77 to 1980-81 (Period IV).

5. The discussion relates only to non-financial enterprises.

## Section I

Considering departmental enterprises, and non-departmental non-financial enterprises[6] in the public sector, the former had a larger share in net domestic product, operating surplus and net capital formation compared to that of the latter during the Sixties (Table 1). The share of the former group was about 34 per cent of the NDP in public sector as against the share of only 8 per cent for the latter. Consequent to the general growth in public sector enterprises, their share in NDP increased sharply to 29.3 per cent in 1976-80 whereas that of departmental enterprises declined to 19.8 per cent. Similarly, the share of

**Table 1**

**Distribution of Departmental and Non-departmental Non-financial Enterprises (at current prices)**

(Rs. crores)

| Item | 1961-62 to 1965-66 | 1966-67 to 1970-71 | 1971-72 to 1975-76 | 1976-77 to 1980-81 |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 1. **Net Product of Public Sector** of which, | 10695 | 19950 | 39963 | 83947 |
| a. Departmental Enterprises | 3620 (33.8) | 5692 (28.5) | 8884 (22.2) | 16645 (19.8) |
| b. Non-Departmental Non-financial Enterprises | 891 (8.3) | 3114 (15.6) | 9112 (22.8) | 24627 (29.3) |
| 2. **Net Capital Formation in Public Sector** of which, | 7555 | 9919 | 21541 | 44326 |
| a. Departmental Enterprises | 2892 (38.3) | 3282 (33.1) | 5870 (27.3) | 12355 (27.9) |
| b. Non-Departmental Non-financial Enterprises | 1883 (24.9) | 4218 (42.5) | 10258 (47.6) | 21998 (49.6) |

6. Hereafter the non-departmental non-financial enterprises are referred to as public sector enterprises/government companies.

Table 1 (Contd.)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| 3. **Operating Surplus** | 1641 | 3158 | 5517 | 14763 |
| a. Departmental Enterprises | 1395 (85.0) | 1965 (62.2) | 2552 (56.3) | 5556 (37.6) |
| b. Non-departmental Non-financial enterprises | 246 (15.0) | 1193 (37.8) | 2965 (53.7) | 9207 (62.4) |

Figures in brackets are percentages to respective sub-totals.

public sector enterprises in net capital formation of public sector doubled to 49.6 per cent during the period 1961-62 to 1980-81 whereas for departmental enterprises it declined from 38.3 per cent to 27.9 per cent during the same period. Of the total operating surplus of the two categories of enterprises, the share of government companies increased remarkably from 15.0 per cent in 1961-65 to 62.4 per cent in 1976-80. On the other hand, the share of departmental enterprises reduced from 85.0 per cent to 37.6 per cent during the same period.

**Distribution of Central and State-owned Companies**

From the beginning of the Five Year Plans, the public sector enterprises were run by Central and State Governments, though the state government enterprises shared only 2.5 per cent of the total paid-up capital of all government companies in 1961. Table-2 gives the distribution of paid-up capital and gross capital assets between Central and State government companies. The share of the State Government companies in total paid-up capital of all government companies increased from 2.5 per cent in 1961 to 12.0 per cent in 1981. Thus a large share is held by the Central Government Companies mainly because a) major manufacturing industries in areas of steel, coal, chemicals, transport and oil production and b) Shipping Corporation of India, Indian Airlines, Air India, etc. in the services sector are owned by the Central Government. The paid-up capital held by the Central Government doubled during the period 1971 to 1976 which doubled again by 1981, reflecting their fast growth (Table 2).

**Table 2**

**Distribution of Government Companies**

(Amount in Rs. crores)

| Item | End March | | | | | |
|---|---|---|---|---|---|---|
| | 1961 | 1966 | 1971 | 1976 | 1981 | 1983 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. **Central Government Companies** | | | | | | |
| a) Number | 43 | 71 | 96 | 134 | 178 | 202 |
| b) Total Paid-up Capital | 556 | 1362 | 2261 | 4663 | 9821 | 14009 |
| c) Gross Capital Assets | 947 | 2683 | 5808 | 14190 | 31629 | 46781 |
| 2. **State Government Companies** | | | | | | |
| a) Number | 86 | 143 | 218 | 496 | 672 | 732 |
| | (20) | (47) | (57) | (103) | (104)* | . . |
| b) Total Paid-up Capital | 14 | 95 | 208 | 665 | 1341 | 1824 |
| | (11) | (46) | (70) | (237) | (336)* | . . |
| c) Gross Capital Assets | (33) | (186) | (314) | (805) | (1275)* | . . |
| 3. **Total** | | | | | | |
| a) Number | 129 | 214 | 314 | 630 | 850 | 934 |
| | (63) | (118) | (153) | (237) | (282) | . . |
| b) Total Paid-up Capital | 570 | 1457 | 2469 | 5328 | 11162 | 15833 |
| | (567) | (1408) | (2331) | (4900) | (10157) | . . |
| c) Gross Capital Assets | (980) | (2869) | (6122) | (14995) | (32904) | . . |

Figures in brackets for items 2 & 3 correspond to sample companies covered in the studies published by the RBI.

* Relate to the year 1979.

**Capital-Output Ratio**

While the enterprises manufacturing goods and rendering services are owned by the Government on a large scale with significant rise in their output, the quantum of funds ploughed back was relatively very low, as can be seen from Section II. It is well known that there are problems in the measurement of the performance of public enterprises as there is no single indicator which reflects their performance.

In the present exercise the capital-output ratio of the enterprises is examined. It is worked out as the ratio of current year's capital stock and the gross product with a lag of four years i.e., the investment-output gestation lag of 4 years is assumed. The lag is estimated as a weighted average of the gestation lag of different industrial groups[7]; weights being proportional to their share in NDP of all government enterprises. Looking at the capital-output ratio of the enterprises given in Table 3, the average ratio improved from 8.56 in 1960-61 to 6.32 in 1965-66 but increased to 6.41 in 1970-71. Though the ratio marginally declined to 5.89 in 1975-76, it increased again to 6.07 in 1979-80. The estimates show that 6.1 units of capital were used to produce one unit of output. Thus, there is a little improvement in the ratio during 1961-62 to 1979-80. Further, the incremental capital-output ratio increased from 5.05 in 1961-65 to 6.49 in 1976-79.

**Table 3**

**Public Sector Enterprises – Capital-Output Ratios**
(at 1970-71 prices)

(Amount in Rs. crores)

| Year | Gross Capital Assets+ | Gross Domestic Product+ (GDP) | Incremental | | Capital-Output Ratio | |
|---|---|---|---|---|---|---|
| | | | Gross Capital Assets | GDP | Average (ACOR) | Incremental (ICOR) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1960-61 | 3,357 | 392 | | | 8.56 | |
| 1961-62 to 1965-66 | 6,835 | 1,081 | 3,478 | 689 | 6.32 | 5.05 (5.4) |

7. The gestation lags for different industry groups are given by Kannan, R., in his study on 'Capital-output ratios in Indian Economy (1950-51 to 1979-80)', (Mimeo 1984). The gestation periods for electricity, mining, manufacturing, construction, transport, trade, agriculture and other sectors are given as 6, 4, 3, 3, 3, 2, 1, and 1 year, respectively.

Table 3 (Contd.)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 1966-67 to 1970-71 | 12,857 | 2,007 | 6,022 | 926 | 6.41 | 6.41 (4.9)* |
| 1971-72 to 1975-76 | 21,715 | 3,687 | 8,858 | 1,680 | 5.89 | 5.28 (6.4) |
| 1976-77 to 1979-80 | 32,108 | 5,289 | 10,393 | 1,602 | 6.07 | 6.49 (6.1)@ |

Note : 1) In the computation of the average C-O ratio, the gross capital assets relate to the year 't' and the GDP relate to the year 't + 4'.

2) Figures in brackets relate to the whole economy. They are taken from the paper by Shetty, S.L., Economic Planning in India: Achievements and Constraints, (Mimeo), DEAP, RBI, Bombay, May, 1983.

\+ Relate to non-financial enterprises of public sector.

* For the period 1966-67 to 1968-69.

@ For the period 1976-77 to 1980-81.

The ACORs worked out for individual years fluctuated between 5.97 and 7.20 during the Sixties and between 5.65 and 6.41 during the Seventies. On the other hand, the ICORs showed large fluctuations recording the peaks at 12.32 in 1966-67 and 9.22 in 1976-77 during the same periods (Statement 1).

The decline in the ACOR/ICOR is a healthy sign but compared with that for the entire economy, the ICOR is high except in two periods. There is scope for further improvement. The larger ACORs and ICORs, however, need not be directly related to low capacity utilization alone. They depend not only on (i) the state of demand, (ii) power shortage and failures, (iii) supply of raw material, iv) adequacy and quality of raw materials, (v) the extent of equipment breakdown and vi) shortcomings in managerial structure, but also on the infrastructural facilities.

**Capacity Utilization**

Based on the available statistics, the capacity utilization[8] in the manufacturing units of Central government undertakings for the period 1972-73 to 1982-83 is given in Table 4.

**Table 4**

**Capacity Utilization of Central Government Companies**

| | Item | 1972-73 | 1975-76 | 1980-81 | 1982-83 |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 1. | Number of enterprises | 66 | 84 | 93 | 110 |
| 2. | Total number of reporting units | 120 | 148 | 161 | 164 |
| 3. | Units under construction or initial stage of production | 29 | 25 | - | - |
| 4. | Units recording capacity utilization of | 91 | 123 | 161 | 164 |
| | a. more than 75% | 41(45.0) | 69(56.1) | 69(42.9) | 90(55.0) |
| | b. between 50% - 75% | 16(17.6) | 28(22.8) | 39(24.2) | 43(26.0) |
| | c. less than 50% | 25(27.5) | 15(12.2) | 42(26.1) | 31(19.0) |
| | d. Units for which data are not available | 9(9.9) | 11(8.9) | 11(6.8) | - |

Figures in brackets are percentages to total units reporting capacity utilization data .

The number of units with more than 75 per cent utilization of capacity increased from 41 in 1972-73 to 69 in 1975-76; that is, while only 45 per cent of the units recorded 75 per cent capacity utilization in 1972-73, the ratio increased to 56.1 per cent in

8. Capacity can be defined as 'rated', 'licenced', 'installed', 'attainable', 'potential', or 'developed' capacity. Data presented here are as published in the Annual Reports of Bureau of Public Enterprises, which are according to the project reports, enterprises' own contribution :· targets of production set by them individually. This method, though not satisfactory, provided some focus on capacity utilisation.

1975-76. However, the share decreased to 42.9 per cent in 1980-81, but rose to 55.0 per cent by 1982-83.[9] This indicates that still 45 per cent of the units were working with less than 75.0 per cent of their capacity. Further, one-fifth of the units were working with less than 50 per cent of their capacity. Thus, it indicates scope for further improvement.

**Distribution of Gross Block of Assets**

The assets of the Central government companies are distributed over all the states. The largest share of gross block of assets (including inventory stock) of these companies in 1963 was held in Madhya Pradesh (21.6%) followed by Orissa (19.6%), West Bengal (17.7%) and Bihar (14.5%) (Statement 2). With the establishment of new units/expansion of existing units after 1966, Bihar took the lead with 21.5 per cent of assets in 1971, followed by Madhya Pradesh (13.4 per cent) and other States. The shares of many States in total gross assets also underwent change. At the end of March 1983, Bihar still held a large share (14.7%) of gross assets, though the share declined, followed by Maharashtra (12.5%) and Madhya Pradesh (12.1%). A significant change is recorded in Maharashtra's share which rose from 1.9 per cent in 1963 to 12.5 per cent in 1983; the share of Orissa, on the other hand, declined to 4.8 per cent in 1983 from 19.6 per cent in 1963. Andhra Pradesh which shared only 0.7 per cent of total gross assets in 1963 increased its share to 6.6 per cent in 1983. A few other States, like Assam, Gujarat and Uttar Pradesh bettered their shares. The total gross block of assets of Central Government companies in absolute terms increased from Rs.1,223 crores as on March 31, 1963 to Rs.31,969 crores as on 31 March 1983 recording 251 per cent increase during the period. The coefficient of concentration declined from 39 per cent in 1963 to 29 per cent in 1983 indicating that the Central Government enterprises are spread more evenly in all States in 1983 than in 1963[10].

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9. Data relate only to the number of reporting units.

10. The coefficient of concentration is worked out as

$$\left[\sum_{i=1}^{n}\left(\frac{X_{it}}{X_t}\right)^2\right] \times 100$$

Where $X_{it}$ is the value of assets in the ith State in period t and $X_t$ is the total assets of all States in period t and 'n' the total number of States.

## Section II

**Domestic Product**

Gross value added, defined as gross output minus intermediate consumption, of government companies recorded a multifold increase from Rs.138 crores in 1961-62 to Rs.7,997 crores in 1980-81 (Statement 3). The growth rate was the highest at 34.8 per cent during the first half of the Sixties which declined to 17.3 per cent in the second half of the Seventies. The gross value added adjusted for depreciation yields net value added which is also defined as compensation of employees plus operating surplus. The annual rise in net product (also known as net value added) of the companies varied between 7.2 per cent and 64.4 per cent during 1961-62 and 1980-81. The annual average growth of government companies was 16.8 per cent for Period IV when the growth rates of 13.6 per cent and 11.2 per cent were recorded by total public sector and aggregate economy, respectively. The share of the government companies in net product of public sector was 8.3 per cent in Period I (Statement 4). This nearly doubled in Period II and increased further to about 30 per cent in Period IV. Similarly, their share in aggregate net domestic product also increased from 1.0 per cent in Period I to 5.9 per cent in Period IV. Of the two components of net value added, the share of 'operating surplus' increased from 27.6 per cent in Period I to 37.4 per cent in Period IV whereas the share of 'compensation of employees' declined from 72.4 per cent to 62.6 per cent during the corresponding periods.

**Saving**

Though the share of the operating surplus in the net product of government companies increased, sufficient funds were not ploughed back for investment purpose to their reserves which may be called savings, because interest and dividend payments exceeded the operating surplus (Statement 5). Because of large amount of dissavings of the companies after 1978-79, the share of the public sector in net domestic savings was reduced. "General government"[11] contributed 28.0 per cent to net domestic savings in Period I and this share declined to 16.5 per cent in Period II. There-

11. Includes Government administrative departments, departmental undertakings and non-departmental financial enterprises.

after, the share increased to 20.0 per cent in Period IV. But, because of dissavings of the companies, the share of public sector, comprising general government and government companies, in net domestic savings was lower than that of General Government throughout the period of the study and stood at 18.3 per cent in Period IV. Even though the government enterprises shared 6.0 per cent of net domestic product and one-fourth of net domestic capital formation they did not contribute proportionally to the net domestic savings.

**Capital Formation**

Net capital formation of the enterprises showed a significant improvement from Rs.217 crores in 1961-62 to Rs.5,569 crores in 1980-81 (Statement 6). It recorded the largest growth rate (annual average) during Period III at 35.1 per cent mainly due to higher growth rates during the last three years of the quinquennium. Similarly, it recorded 32.2 per cent increase annually in Period I due to a spurt (128.2 per cent rise) in the capital formation in 1965-66. Period II witnessed a low ebb in the investment of the companies (a rise of 7.1 per cent per annum) except in 1970-71 while Period IV recorded the next lower growth of 9.1 per cent mainly due to a steep fall of 30.3 per cent in 1977-78. The large fluctuations are due to change in stocks (Statement 7). The share of government companies in net capital formation of the public sector went up from 24.9 per cent in Period I to nearly 50 per cent in Period IV. Their share in aggregate net domestic capital formation also increased from 16.2 per cent in Period I to 25.6 per cent in Period IV. A significant rise in their capital formation was first recorded in 1970-71 and rapid growth took place from 1973-74 onwards. However, during 1977-78 their net capital formation sharply declined mainly on account of the steep fall in stocks from Rs.1,565 crores in 1976-77 to Rs.125 crores in 1977-78.

**Production Costs**

The production costs of government companies are considered to include intermediate costs and the compensation of employees, i.e., wages and salaries. The former component covers the costs of raw materials, stores and spare parts, power and fuel, other manufacturing expenses

covering packing materials, printing expenses, P & T charges, bank charges and other expenses. Costs of repairs and maintenance of fixed assets are also included in the intermediate costs. Compensation of employees include salaries and wages and other benefits paid to all categories of employees.

Intermediate costs recorded a significant growth during the period under review. They witnessed the largest growth at the rate of 40.2 per cent per annum in Period I and 33.4 per cent in Period III. It recorded the lowest growth of 17.9 per cent per annum during the quinquennium of 1976-80. It is observed during the period of the Seventies, that the rate of growth in intermediate costs is higher than that observed in gross output (Statement 3). On the other hand, compensation of employees recorded the largest growth during Period III (i.e., 1971-75) at 30.7 per cent, the period in which a phenomenal growth in prices was observed. This growth in salaries and wages almost halved in the next quinquennial period, i.e., 1976-80.

The share of intermediate costs in the gross output increased from 62 per cent in Period I to 73 per cent in Period IV, whereas, the share of compensation of employees declined from 16 per cent in Period I to 11.5 per cent in Period II and remained thereafter around 12 per cent. At constant (1970-71) prices, only a marginal rise is observed in the share of intermediate costs from 65 per cent in Period I to about 67 per cent in Period IV while the share of compensation of employees was at 18 per cent in Period I, but declined subsequently and remained around 11-12 per cent.

Among various categories of intermediate costs, raw materials, stores and spare parts accounted for the largest share at about 80 per cent in 1961-62 [12]. This share increased marginally to about 83 percent in 1978-79. Among other components, the share of miscellaneous expenses increased from 7.4 per cent in 1961-62 to about 11.7 per cent in 1970-71 but declined to 8.4 per cent in 1978-79, whereas power and fuel, repairs and other manufacturing expenses had lower

12. The shares of the components are based on the RBI studies on Government companies.

order shares at about 3.5 per cent, 1.5 per cent and 3 to 6 per cent, respectively.

**Financing of Capital Formation**

Flow of funds accounts are presented under financial flows and non-financial flows (7). While the former indicates lending and borrowing acivities of the companies, the latter deals with their current account giving income, expenditure, and profits retained, and capital account showing saving, capital formation and capital transfers. The difference between capital formation and saving is known as 'resource gap'; the link between non-financial flows and financial flows is the resource gap. The financial flows explain how the resource gap adjusted for capital transfers is met by way of borrowing through capital, loans, and trade credit. They also present their lending activity in the form of trade debt, loans and advances, and financial investments. The flow of funds accounts for the government companies are given in Table 5.

**Table 5**

**Flow of Funds Accounts of Government Companies**

(Rs. crores)

| Item | Period I | Period II | Period III | Period IV@ |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 1. Savings* | - 74 | - 201 | - 248 | - 1440 |
| 2. Capital transfers (Net) | - | 2 | 44 | 278 |
| 3. Capital formation* | 1883 | 4218 | 10258 | 21998 |
| 4. Resource gap (3-2-1 ) | 1957 | 4417 | 10462 | 23160 |
| 5. Financial sources | 2001£ | 4733£ | 12097 | 27531 |
| 6. Financial uses | 134 | 391 | 2590 | 5766 |
| 7. Financial deficit (5-6) | 1867 | 4342 | 9507 | 21765 |
| 8. Discrepancy (4-7) | 90 | 75 | 955 | 1395 |

* Net of Depreciation @ Provisional £ Adjusted for coverage.

It may be seen from Table 5 that the resource gap is always higher than net capital formation. In the absence of savings, the entire capital formation was financed from the borrowed capital either through

equity capital or loans. Only during Period IV about 1-2 per cent of the capital formation was financed by capital transfers received from the Central Government, while in other periods the role of capital transfers was not that important.

**Financing of Resource Gap**

The resource gap is financed by government, banks and other financial institutions. Though the government sector contributed to the tune of 94.0 per cent of the resource gap in Period I, it financed only 70.0 per cent in Period IV (Table 6). Banking sector's share emerged next to government in financing this gap, which increased from 2.0 per cent in Period I to 19.9 per cent in Period III. But, it financed only 10.8 per cent in Period IV. On the other hand, other financial institutions, like IDBI, IFC, LIC, lent to the extent of 7.3 per cent of the resource gap in Period IV, while their contribution in Periods I and II was negligible. A part of the companies' resources in the form of trade credit and other dues, which have a rising trend, could not be allocated to any sector for want of details and shown under "items not classified elsewhere". Their share increased from 2.5 per cent of the gap in Period I to 10.1 per cent in Period IV.

Looking at the instruments through which the deficit was financed loans and advances emerged as the prime instrument. The share of loans increased from

**Table 6**

**Financing of Resource gap* of Government Companies**

(Rs. crores)

| Item | Period I@ (1961-62 to 1965-66) | Period II (1966-67 to 1970-71) | Period III (1971-72 to 1975-76) | Period IV (1976-77 to 1980-81)£ |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| Financial deficit, financed by | 1866 (100.0) | 4332 (100.0) | 9507 (100.0) | 21765 (100.0) |
| a. **Sectors** | | | | |
| i) Banking | 38 (2.0) | 306 (7.1) | 1894 (19.9) | 2363 (10.8) |

Table 6 (Contd.)

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| ii) | Other financial institutions | neg. | neg. | 501<br>(5.3) | 1586<br>(7.3) |
| iii) | Private corporate business | - 3<br>(-0.2) | 48<br>(1.1) | -109<br>(-1.1) | -53<br>(-0.2) |
| iv) | General government$ | 1754<br>(94.0) | 3327<br>(76.8) | 6290<br>(66.2) | 15220<br>(70.0) |
| v) | Rest of the world | 31<br>(1.7) | 154<br>(3.5) | 218<br>(2.2) | 447<br>(2.0) |
| vi) | Households | | | -124<br>(-1.3) | 3<br>(-) |
| vii) | Items not classified elsewhere | 46<br>(2.5) | 497<br>(11.5) | 837<br>(8.8) | 2199<br>(10.1) |
| b. | **Instruments** | | | | |
| i) | Currency & deposits | -25<br>(-1.3) | -18<br>(-0.4) | -320<br>(-3.4) | -271<br>(-1.2) |
| ii) | Investments | 781<br>(41.9) | 909<br>(21.0) | 2909<br>(30.6) | 6275<br>(28.8) |
| iii) | Loans & advances | 943<br>(50.5) | 2816<br>(65.0) | 5798<br>(61.0) | 11052<br>(50.8) |
| iv) | Small savings | -<br>(-) | -<br>(-) | -<br>(-) | 2<br>(-) |
| v) | Trade credit/debt | 181<br>(9.7) | 627<br>(14.5) | 46<br>(0.5) | 423<br>(1.9) |
| vi) | Others | -14<br>(-0.8) | -2<br>(-0.1) | 1074<br>(11.3) | 4284<br>(19.7) |

Figures in brackets are percentages to financial deficit.

* As derived from financial flow accounts.

@ Data are adjusted for under coverage.

£ Provisional; neg: Negligible.

$ Includes Administrative Departments and Departmental enterprises of Central Government, State Governments and Local Authorities.

50.5 per cent of the resource gap in Period I to 65.0 per cent in Period II which declined to about 51 per cent in Period IV. The issue of paid-up capital is next to loans with its share at 28.8 per cent of the

gap in Period IV. As stated earlier, the 'other dues' were on the rise in the Seventies and contributed about 20 per cent of the resource gap in Period IV.

**Financial Sources of Funds**

Of the total sources of funds received by government enterprises, the share of loans increased significantly from 42.1 per cent in Period I to 64.9 per cent in Period II but gradually declined to 49.0 per cent in Period IV (Statement-8). Similarly, the share of paid-up capital (including bonds of State Electricity Boards) declined from 37.7 percent in Period I to 23.1 per cent in Period IV. While three-fourths of borrowing were from government in Periods I and II, the share declined to 69.6 per cent in Period IV. The share of 'other dues' is remarkably large at 19.0 per cent in Period IV as against a near nil share in Period I.

**Financial Uses of Funds**

While funds were borrowed to meet their capital formation, government companies had re-lending activity also in the form of loans and advances, and financial investments (Statement 9). Loans and sundry debtors shared more than three-fourths of the total financial uses. Magnitude-wise, both loans and sundry debtors were very small upto 1970-71 but increased thereafter. In absolute terms loans increased from Rs.27 crores in 1961-62 to Rs.1,652 crores in 1980-81 whereas sundry debtors rose from Rs.2 crores to Rs.590 crores during the same period. The share of cash balances in total financial uses was about 16 to 18 per cent in Periods I & II which declined to 7.5 per cent in Period IV.

## Section III

An econometric analysis of the selected items of sources and uses of funds of the government companies is presented in this section. There are several studies investigating the behaviour of corporate activities of the private sector enterprises. For example, Divatia and Athawale (6) and Krishnamurthy and Sastry (13,14) analysed the behaviour of certain corporate activities in private sector, like, dividend policies, fixed investment, inventories, etc., while Swamy and Rao (26) and Venkatachalam and Sarma (27)

developed econometric models for the entire private corporate sector covering its financial aspects as well. However, studies for public sector enterprises are not as many. Singh (24) analysed their inventory behaviour. Even though the Government allocations for paid-up capital or loans is determined through government budgets, they are behaviouristically explained in this section. It presents an analysis of the production function and the behaviour of major corporate activities in the public sector, like, fixed and inventory investment, borrowing from financial institutions and operating surplus.

**Specifications**

Production function of linear type is estimated. Fixed capital and intermediate costs explain the variations in the output. The various relations determining other corporate activities of government companies are estimated mainly through stock adjustment type model. The accelerator variable viz., sales, is assumed to determine the growth in fixed capital stock, inventories, borrowings, trade dues and profitability. Besides sales, a few other variables, such as paid-up capital, borrowing from Government, borrowing from financial institutions which appear to explain the relevant activities are also considered in estimating the equations. For want of data, capacity utilisation, which affects the production and investment in fixed capital stock, could not be included as an explanatory variable. The annual reports of the Bureau of Public Enterprises, however, present only a limited information on the capacity utilisation of a few enterprises from 1972-73. It is observed in the previous sections that more than half of the sources of funds are received from the Government in the form of paid-up capital and loans. Demand for funds from financial institutions either for short-term or long-term purposes, generally depends upon their inventory levels, sales and also the cost of borrowing charged by alternative sources. In this exercise, the cost aspect of the funds is not taken into account as the enterprises in the public sector would not be affected much by the interest rates in the market because the receipt of funds to a large extent is regulated by the Government.

**Procedure of Estimation**

The equations are estimated by ordinary least squares (OLS) method. The goodness of fit of the equations is judged by the appropriateness of the sign of the regression coefficient, the magnitudes of elasticities, t-statistic values of regression coefficients and other statistical criteria such as, co-efficient of multiple determination adjusted for degrees of freedom ($\bar{R}^2$), Durbin-Watson Statistic (D.W.) and standard error of estimate (SEE) of the dependent variable. The closeness of the graph of expected values of the variable to the observed path of the variable is also taken into account while selecting the equation. Alternative formulations are attempted and those which are found satisfactory with regard to the above criteria, have been considered and presented in Appendix II. Graphs for actual observations and for estimated values of selected dependent variables are given in Appendix III. The analysis of results of the equations is given below.

**Production Function**

Cobb-Douglas type of production function is estimated at aggregate level for the government enterprises. The variations in gross output are explained through the stock of fixed capital, intermediate costs and labour. The labour variable is represented by salaries and wages, i.e.,compensation of employees. The production function is also estimated in linear form as also in exponential form. However, the latter did not give satisfactory results. In the linear relationship fixed capital and intermediate costs explain satisfactorily ($\bar{R}^2$ =0.995) the variations in output. All the co-efficients are statistically significant and have expected signs. Elasticity of output with respect to fixed capital is around 0.75, while that with intermediate costs is 0.43 (equation 7). When 'compensation of employees' (proxy for labour) is introduced in the equation as an additional variable, it did not improve the fit. Besides, its coefficient and that of intermediate costs were also statistically not significant. It appears that the two explanatory variables were highly correleted. The standard error of the estimate is about 6 per cent of the mean value of the dependent variable.

Alternatively, the gross value added by the undertakings is considered instead of gross output, and explained by the fixed capital and compensation of employees (equation 10). The fit is good and the co-efficients have expected signs besides being significant. The elasticity of gross value added with respect to fixed capital and compensation of employees are estimated at 0.89 and 0.29, respectively. The standard error of the estimate works out at about 5.0 per cent of the mean value of the dependent variable. It is, however, observed that elasticities of output and gross value added with respect to fixed capital stock appear to be on the high side. This may need further examination.

**Stock of Fixed Assets**

Stock of Gross Fixed Assets (GKT) is explained by the stock adjustment model or distributed lag of the Koyck[13] type in which the capital stock is explained by the stock in the previous year alongwith other variables which appear to describe the behaviour of the fixed capital assets. The analysis shows dependence of capital stock on the share capital provided by the government besides sales, and borrowing from government or total borrowing. The borrowing from government as an additionl variable in the equation though has expected sign, did not improve the fit besides being not significant.

Most of the specifications explain a large proportion of the variation in fixed capital stock. The residuals appear to be free from autocorrelation. The standard error of the estimate is about 1.3 - 1.4 per cent of the mean value of the dependent variable. The co-efficients of lagged capital stock and paid-up capital are significant. The short-run elasticity of capital stock with respect to paid-up capital is in the range of 0.22 to 0.25 and 1.07 to 1.20 in the long-run. The speed of adjustment is estimated at around 0.21.

Considering the equations for the fixed capital formation, paid-up capital, sales and capital stock in the previous year explain its variations to a large extent. The standard error of the estimate is about 8.4 per cent. The speed of adjustment for

13. Koyck, L.M. (12).

GKT, estimated from this equation, is 0.19 very close to that obtained in other equations explaining GKT. The elasticity of fixed capital formation with respect to sales and paid-up capital are 0.49 and 1.64, respectively.

**Inventories**

Inventory stock (INV) relate to the stocks of finished and semi-finished goods, work-in-progress, raw materials, packing materials, tools and other consumer durables. It is observed that the inventory-sales ratio has been around 38 per cent during 1971-72 to 1981-82. The inventory stock is also estimated through the stock adjustment type model. The variations in inventory stock is explained by its stock in the previous year, gross domestic product, and sales in current year. The regression co-efficients for sales and inventory stock in previous year were significant and residuals were free from autocorrelation. The standard error of the estimate was large at 6.2 per cent.

**Operating Surplus**

The operating surplus (OS) is estimated as gross output less the sum of i) intermediate consumption, ii) compensation of employees, iii) consumption of fixed capital and iv) indirect taxes net of subsidies. It thus represents the gross profits including interest, dividend payments and rent. Operating surplus is estimated as a function of sales, wholesale prices and the sales-fixed capital stock ratio. Though the co-efficients of wholesale price variable and sales-fixed capital stock ratio are not significant, they are considered because the equation has good explanatory power.

**Borrowings form Financial Institutions**

Borrowing from financial institutions (BFI) comprise borrowing from banks and term lending institutions, like IDBI, IFC, LIC. Generally, banks' finances are for short-term purposes while those of term lending institutions are for long-term purposes. Since the break-up details are not available in the basic source, the equations are estimated to explain the variations in borrowings from both categories of institutions. Sales and inventories explain the variations in the dependent variable. Demand for financial

assistance from financial institutions against inventories is indicated by the equation. The coefficient of inventories is significant and the elasticity is 1.3. Sales has negative sign as expected.

## Section IV

The following conclusions are drawn from the discussion presented in previous sections.

1. Capacity utilization of government companies although improved in 1982-83 compared with 1972-73 has further scope for imrovement. The ACOR had not made any significant decline as it hovered around 6 to 7 while the ICOR fluctuated very widely during the period of the study.

2. The gross block of assets of all central government companies in 1983 was well spread among the different States compared with that of 1963 which is also confirmed by the value of coefficient of concentration.

3. The share of government companies in net product of public sector increased significantly from 8.3 per cent in Period I (1961-66) to 30 per cent in Period IV (1975-81). Their share in net domestic product in Period IV was 5.9 per cent while the share in GDP was slightly higher at 7.7 per cent during the same period, which was lower than the share of 9.5 per cent in GDP during mid-Seventies, observed for developed (excluding USA) and developing countries by Short (23).

4. The Government companies recorded large financial deficits, i.e., dissavings, during 1977-78 to 1980-81 because of which the share of the public sector in net domestic savings was lowered. The same trend was noticed upto 1982-83.

5. Net capital formation in government companies recorded a significant growth during the period of study. While their share in public sector's net capital formation doubled (to 50 per cent), their share in aggregate net domestic capital formation

witnessed an increase from 16.2 per cent in Period I to 25.6 per cent in Period IV.

6. The entire capital formation was financed by borrowing from other economic units during the period of study. Only 1.2 per cent of the net capital formation was received through capital transfers in Period IV.

7. The resource gap was financed to a large extent by the government though its share declined remarkably from Period I to Period IV. The banking sector recorded a good growth in its share during Period I (1961-66) and Period III (1971-76) but it declined by 8 points in Period IV (1975-81). On the other hand, other financial institutions showed their emergence in financing the government companies by sharing 7.3 per cent of resource gap in Period IV.

8. During the second half of Seventies about 10 per cent of the resource gap could not be classified under any sector whereas 19.7 per cent was classified under other dues. Further, the sectoral details of trade credit were also not known. It would be useful if the companies present such institutional details in regard to their trade credit/debt and other dues.

9. (a) The stock of fixed assets and inventories are explained by the stock-adjustment type model. The investment expenditure in fixed assets is determined by sales and availability of funds. Inventories are explained by sales and gross domestic product.

(b) The gross profits of the enterprises represented by their operating surplus is explained satisfactorily by their sales and the wholesale price level. The surplus is reduced by 0.92 per cent with 1 per cent rise in the price index.

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Note : Review of the papers at Serial Nos.8, 9 and 23 was published in the Financial Express, dated December 1, 1984.

## APPENDIX - I

Information on assets and liabilities of all Central Government undertakings (including companies under construction) is available in the Annual Reports on Industrial and Commercial Undertakings of Central Government (now known as Public Enterprises Survey) published by the Bureau of Public Enterprises, Ministry of Finance, Government of India. However, it does not cover state government enterprises. Studies on 'Finances of Government Companies' published by the RBI in its monthly Bulletin provide data on selected number of non-financial non-promotional government

companies and do not include promotional and non-operating companies. These studies present data separately for central and state government companies.

Studies on 'Financial Flows Accounts' published by the RBI in its monthly Bulletin and in RBI's Report on Currency and Finance (Summary Statements on Financial Flows) present the financial sources and uses of funds classified by institution from/to whom the funds are received/lent. As the studies on financial flows upto 1969-70 include only non-promotional enterprises@, they are supplemented, wherever necessary, with those in National Accounts Statistics (NAS), published by the Central Statistical Organisation (CSO). The CSO publishes the data in respect of all Central and State Government enterprises together regarding their production account, income and outlay account, and capital finance account. Thus different sources of data are used to collect the required data, maintaining comparability of data.

The regression equations have been estimated for the Government enterprises using the data for the period 1960-61 - 1981-82. The stock data (i.e. outstandings) for some variables such as fixed assets, inventories, borrowings, etc., are not available uniformly in a single source. As such they are derived from the available data in different sources.

Mukherjee and Sastry (15) gave the estimates of reproducible tangible wealth by industry at the end of the year 1949-50. These estimates formed the basis to derive the stock series of gross fixed assets. Inventories in 1949-50 are assumed to be negligible. Estimates of fixed capital formation at current prices, of the government enterprises, published by the C.S.O., are added to the 1949-50 estimate to derive the series of stock of fixed assets for the period of the study. It may be stated that the series so derived would be at historical prices.

The outstandings of gross fixed assets and gross capital assets (gross fixed assets plus inventories) of the enterprises are estimated also at 1970-71 prices for the period 1950-51 to 1981-

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@ "Flow of Funds in the Indian Economy 1970-71 to 1976-77," RBI Bulletin, March 1980.

82. The capital stock figures in 1949-50, as mentioned earlier, are taken from the study by Mukherjee and Sastry and are revalued at 1970-71 prices with gross domestic capital formation (GDCF) deflator. Data on gross capital formation and gross fixed capital formation at current prices, for these enterprises are given in the NAS and they are deflated to 1970-71 prices with GDCF deflator. They are cumulated to the revalued figures of 1949-50 to get the series of gross capital assets/gross fixed assets of government enterrises at 1970-71 prices for the years 1960-61 to 1981-82.

The stock of inventories which includes the stocks of finished and semi-finished goods, work-in-progress, raw materials, packing materials, tools and other consumer goods are derived by cumulating the flow data from 1950-51 onwards. As mentioned, inventories at the beginning of the period, i.e., in 1949-50, are assumed to be negligible.

The stock data in respect of paid-up capital, borrowing from government, borrowing from financial institutions and total borrowing are derived by cumulating the flows to the outstandings available for 1960-61. The outstandings for 1960-61 are obtained by pooling the data published by the Bureau of Public Enterprises for Central Government enterprises and those by the RBI in its monthly Bulletin for State Government enterprises.

In order to estimate the production function in real terms, the gross output, intermediate costs and compensation of employees are estimated at 1970-71 prices by deflating their series at current prices, respectively, with public sector's GDP deflator, wholesale price index of manufactured products and consumer price index for industrial workers.

## APPENDIX II

**Notations of variables**

Notations of the variables used in estimating the equations are as given below. They are measured in Rupees crores except a few, like, dummy variable (DUM), time variable (T), and wholesale price index (WPI). Data relate to government enterprises unless otherwise specified.

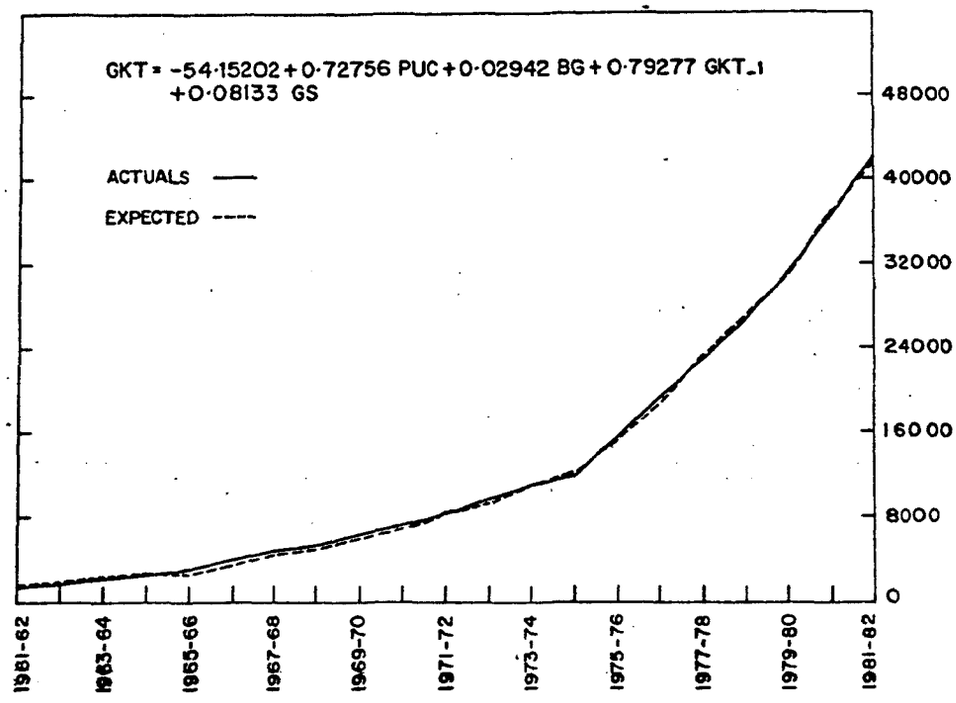
1. BFI : Borrowing from Financial Institutions (Outstandings).
2. BG : Borrowing from Government (Outstandings).
3. GIT : Gross Fixed Capital Formation at current prices.
4. GKT : Gross Fixed Assets at current prices (Outstandings).
5. GKTC : Gross Fixed Assets at 1970-71 prices (Outstandings).
6. GS : Sales during the year.
7. ICC : Intermediate Consumption at 1970-71 prices.
8. INV : Inventory stock (Outstandings).
9. OC : Gross Output at 1970-71 prices.
10. OS : Operating surplus during the year.
11. PUC : Paid-up capital (Outstandings).
12. TBR : Total Borrowing (Outstandings).
13. WC : Salaries and Wages at 1970-71 prices.
14. WPI : Wholesale Price Index for all commodities (Base 1970-71 = 100.0).
15. YR : Gross Domestic Product at factor cost, at current prices.

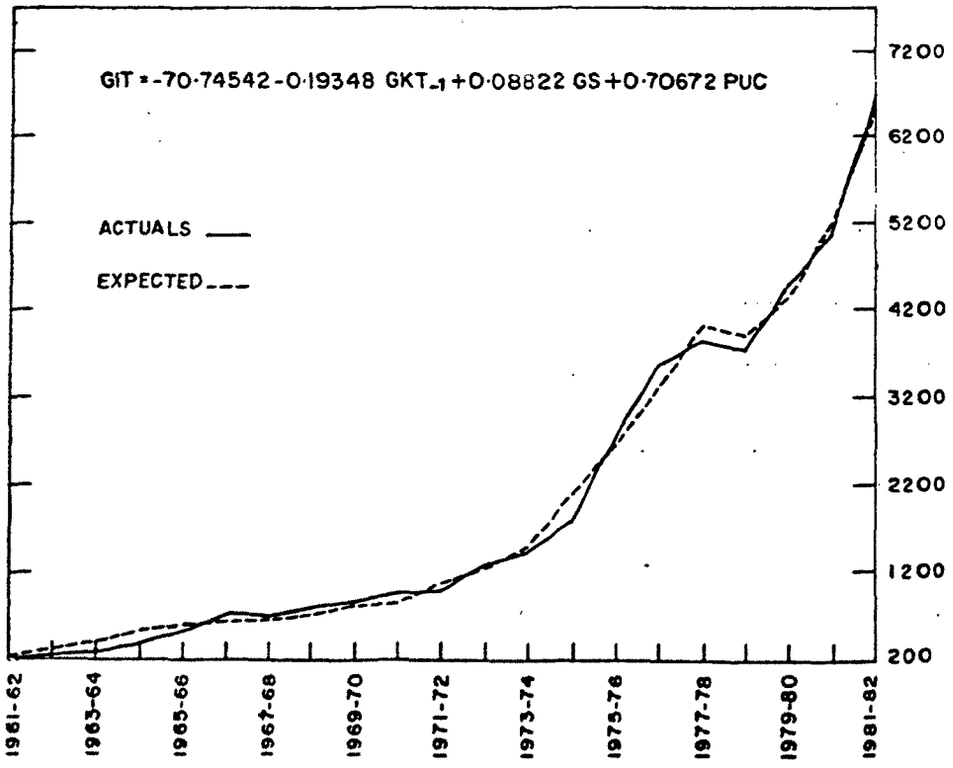
## APPENDIX - II (Contd.)

| | | | | | | | $\bar{R}^2$ | D.W. | S.E.E. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|
| **I.** | **Gross Fixed Capital Stock (GKT)** | | | | | | | | | |
| 1. | GKT | = -443.9152 | + 0.0812 GS | + 0.0515 TBR | + 0.6466 PUC | + 0.7874 $GKT_{-1}$ | 1.00 | 2.02 | 169.04 | 13245 |
| | t-Statistic | 1.008 | 1.908 | 0.890 | 3.733 | 14.266 | | | | |
| | Elasticity | | 0.068 | 0.071 | 0.225 | 0.669 | | | | |
| 2. | GKT | = -54.1520 | + 0.0813 GS | + 0.0294 BG | + 0.7276 PUC | + 0.7928 $GKT_{-1}$ | 1.00 | 2.17 | 172.78 | 13245 |
| | t-Statistic | 0.367 | 1.698 | 0.320 | 4.143 | 11.760 | | | | |
| | Elasticity | | 0.068 | 0.009 | 0.253 | 0.674 | | | | |
| 3. | GIT | = -70.7454 | + 0.0882 GS | + 0.7067 PUC | - 0.1935 $GKT_{-1}$ | | 0.99 | 2.17 | 167.97 | 1988 |
| | t-Statistic | 0.526 | 2.122 | 4.458 | 3.831 | | | | | |
| | Elasticity | | 0.491 | 1.641 | -1.096 | | | | | |
| **II.** | **Inventory Stock (INV)** | | | | | | | | | |
| 4. | INV | = 376.7854 | + 0.3346 GS | - 0.0131 YR | + 0.2601 $INV_{-1}$ | | 1.00 | 2.20 | 272.89 | 4385 |
| | t-Statistic | 1.166 | 4.621 | 0.868 | 1.679 | | | | | |
| | Elasticity | | 0.844 | -0.146 | 0.216 | | | | | |
| **III.** | **Operating Surplus (OS)** | | | | | | | | | |
| 5. | OS | = 347.9223 | + 0.1103 GS | - 5.6856 WPI | + 12.0913 $\frac{GS}{GKT}$ | | 0.98 | 2.21 | 131.81 | 820 |
| | t-Statistic | 1.763 | 5.195 | 1.088 | 0.024 | | | | | |
| | Elasticity | | 1.49 | -0.92 | 0.01 | | | | | |

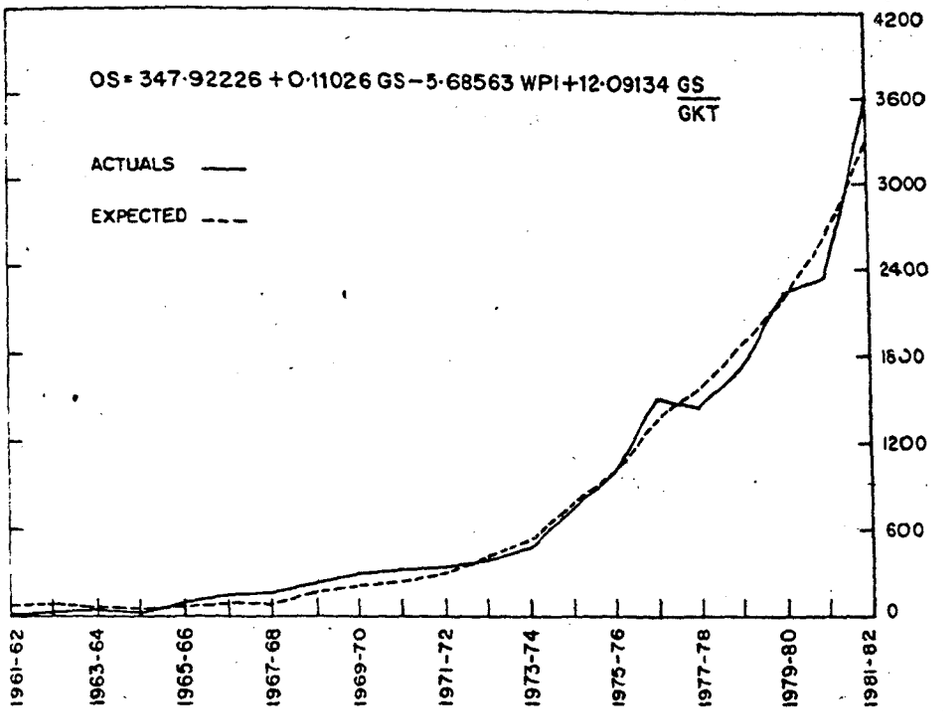
## APPENDIX - II (Concld.)

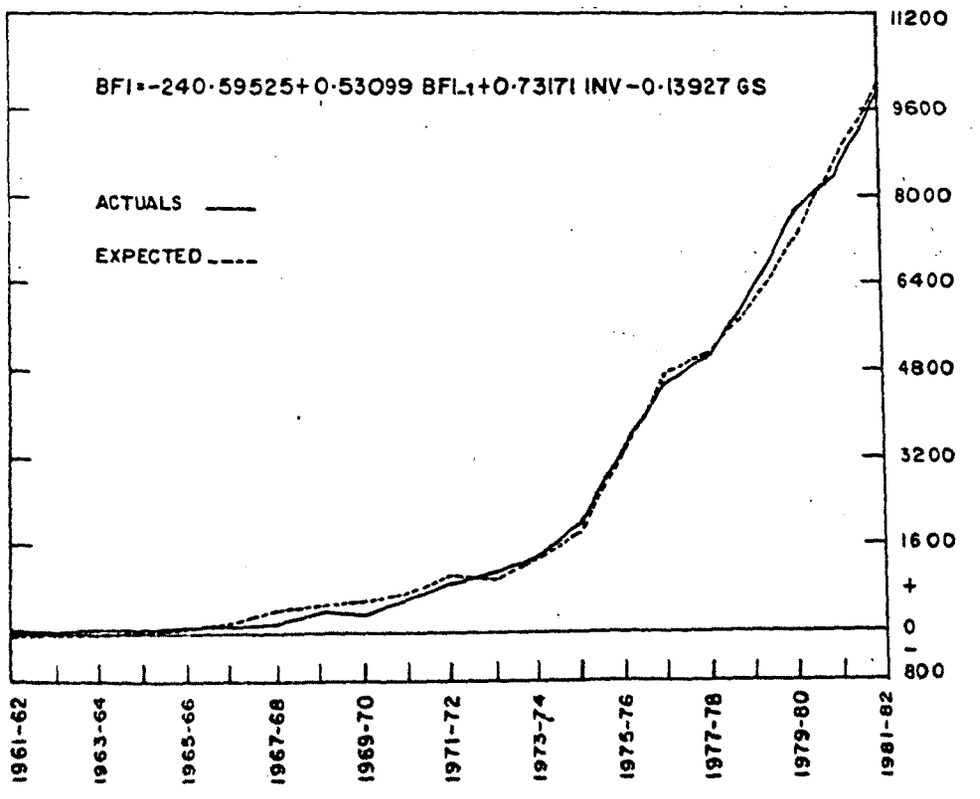
| | | | | | | | $\bar{R}^2$ | D.W. | S.E.E. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|
| **IV.** | **Borrowing from Financial Institutions (BFI)** | | | | | | | | | |
| 6. | BFI | = -240.5953 | + 0.7317 INV | - 0.1393 GS | + 0.5310 $BFI_{-1}$ | | 1.00 | 1.66 | 184.90 | 2511 |
| | t-Statistic | 3.208 | 4.939 | 2.456 | 5.249 | | | | | |
| | Elasticity | | 1.278 | -0.613 | 0.431 | | | | | |
| **V.** | **Production Function** | | | | | | | | | |
| 7. | OC | = -1224.4837 | + 0.6686 ICC | + 0.4125 GKTC | | | 1.00 | 0.97 | 410.88 | 6909 |
| | t-Statistic | 4.083 | 3.704 | 4.826 | | | | | | |
| | Elasticity | -0.177 | 0.433 | 0.745 | | | | | | |
| 8. | OC | = -1206.9210 | + 0.4109 ICC | + 1.9110 WC | + 0.3805 GKTC | | 1.00 | 0.96 | 413.49 | 6909 |
| | t-statistic | 3.990 | 1.184 | 0.872 | 4.069 | | | | | |
| | Elasticity | -0.175 | 0.266 | 0.222 | 0.687 | | | | | |
| 9. | OC | = -1342.4256 | + 4.1218 WC | + 0.3964 GKTC | | | 1.00 | 0.98 | 417.85 | 6909 |
| | t-Statistic | 4.744 | 3.555 | 4.238 | | | | | | |
| | Elasticity | -0.194 | 0.479 | 0.712 | | | | | | |
| 10. | GVA | = - 300.1339 | + 0.6081 WC | + 0.1179 GKTC | | | 1.00 | 0.71 | 84.34 | 1658 |
| | t-Statistic | 5.256 | 2.599 | 6.247 | | | | | | |
| | Elasticity | -0.181 | 0.294 | 0.887 | | | | | | |

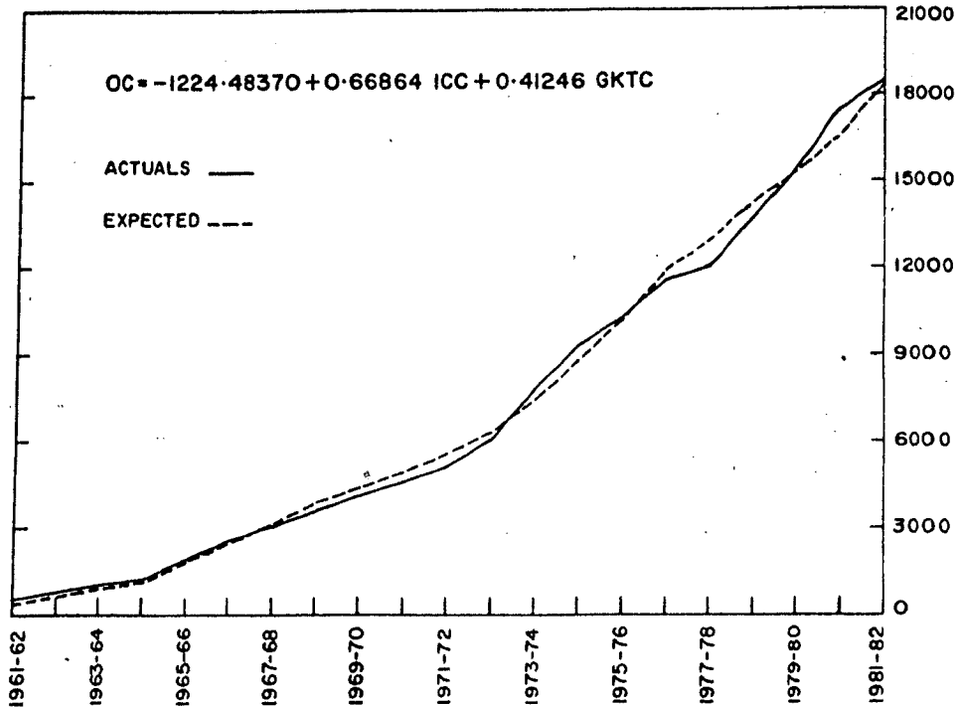

GKT = -54·15202 + 0·72756 PUC + 0·02942 BG + 0·79277 GKT_1
+0·08133 GS
ACTUALS
EXPECTED
48000
40000
32000
24000
16000
8000
0
1961-62
1963-64
1965-66
1967-68
1969-70
1971-72
1973-74
1975-76
1977-78
1979-80
1981-82

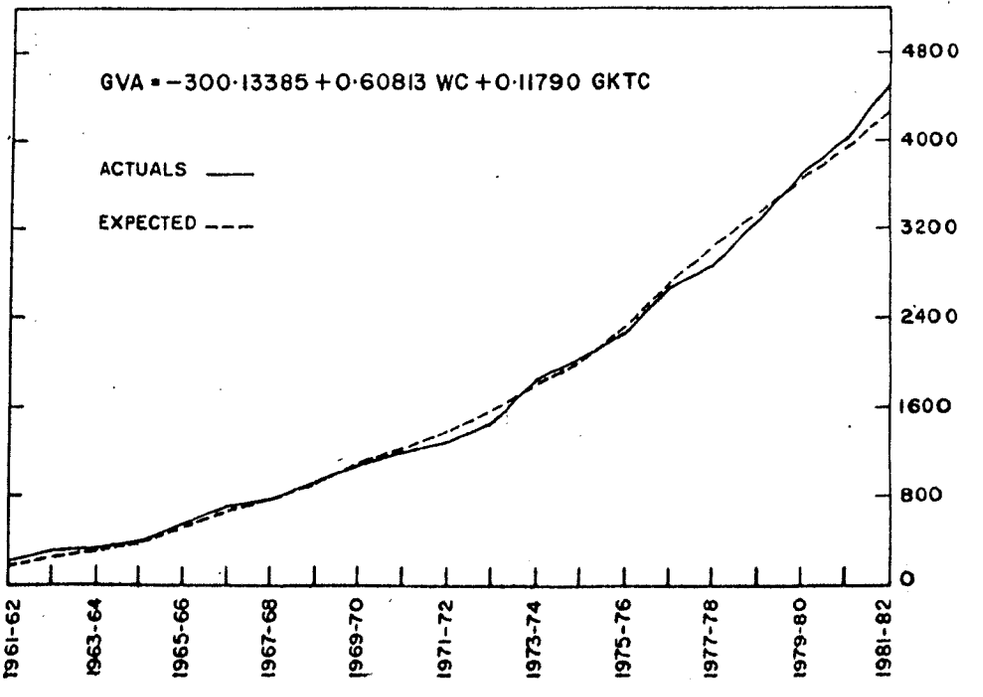

GIT = -70·74542 - 0·19348 GKT_1 + 0·08822 GS + 0·70672 PUC
ACTUALS
EXPECTED
7200
6200
5200
4200
3200
2200
1200
200
1961-62
1963-64
1965-66
1967-68
1969-70
1971-72
1973-74
1975-76
1977-78
1979-80
1981-82

## NON FINANCIAL ENTERPRISES




OC = -1224·48370 + 0·66864 ICC + 0·41246 GKTC
ACTUALS
EXPECTED
21000
18000
15000
12000
9000
6000
3000
0
1961-62
1963-64
1965-66
1967-68
1969-70
1971-72
1973-74
1975-76
1977-78
1979-80
1981-82


GVA = -300·13385 + 0·60813 WC + 0·11790 GKTC
ACTUALS
EXPECTED
4800
4000
3200
2400
1600
800
0
1961-62
1963-64
1965-66
1967-68
1969-70
1971-72
1973-74
1975-76
1977-78
1979-80
1981-82

**STATEMENT - 1**

**Gross Capital Stock of Government Enterprises**
(at 1970-71 prices)

(Amount in Rs.crores)

| Year | Gross Capital Assets (GCA) | Annual additions to GCA | Contribution to Gross Domestic Product (GDP) | Incremental GDP | Capital-Output Ratio | |
|---|---|---|---|---|---|---|
| | | | | | Average | Incremental |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1961-62 | 3819 | 462 | 207 | 48 | 6.68 | 2.57 |
| 1962-63 | 4336 | 517 | 294 | 87 | 6.11 | 3.75 |
| 1963-64 | 4902 | 566 | 351 | 57 | 6.15 | 6.51 |
| 1964-65 | 5557 | 655 | 392 | 41 | 5.97 | 4.89 |
| 1965-66 | 6835 | 1278 | 572 | 180 | 6.32 | 8.52 |
| 1966-67 | 8079 | 1244 | 710 | 138 | 6.84 | 12.32 |
| 1967-68 | 9269 | 1190 | 797 | 87 | 7.20 | 11.23 |
| 1968-69 | 10454 | 1185 | 931 | 134 | 7.16 | 6.89 |
| 1969-70 | 11511 | 1057 | 1081 | 150 | 6.25 | 2.77 |
| 1970-71 | 12857 | 1346 | 1182 | 101 | 6.41 | 8.16 |
| 1971-72 | 14194 | 1337 | 1288 | 106 | 6.29 | 5.37 |
| 1972-73 | 15447 | 1253 | 1460 | 172 | 5.80 | 3.07 |
| 1973-74 | 17136 | 1689 | 1842 | 382 | 5.86 | 6.45 |
| 1974-75 | 19024 | 1888 | 2007 | 165 | 5.84 | 5.65 |
| 1975-76 | 21715 | 2691 | 2256 | 249 | 5.89 | 6.30 |
| 1976-77 | 24591 | 2876 | 2664 | 408 | 6.15 | 9.22 |
| 1977-78 | 26767 | 2176 | 2926 | 262 | 5.92 | 4.13 |
| 1978-79 | 29384 | 2617 | 3260 | 334 | 5.65 | 3.85 |
| 1979-80 | 32108 | 2724 | 3687 | 427 | 6.07 | 4.01* |
| 1980-81 | 34875 | 2767 | 3999 | 312 | + | + |

Note : While compiling average capital-output ratio, the gross capital relates to the year 't' and the GDP relates to the year (t + 4).

* In the absence of data it is estimated with 3 year lag.

\+ Not compiled.

## Statement - 2

## Statewise Distribution of Gross Block of Assets* of Central Government Enterprises

(Rs. crores)

| | State | As on 31 March | | | | |
|---|---|---|---|---|---|---|
| | | 1963 | 1966 | 1971 | 1976 | 1983 |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. | Andhra Pradesh | 8.8 (0.7) | 45.6(2.0) | 113.8(2.6) | 310.9 (3.4) | 2118.6(6.6) |
| 2. | Assam | 17.1 (1.4) | 27.9(1.2) | 78.5(1.8) | 271.9 (3.0) | 1556.4(4.9) |
| 3. | Bihar | 177.5 (14.5) | 324.1(14.4) | 928.9(21.5) | 1882.8 (20.7) | 4692.3(14.7) |
| 4. | Gujarat | 0.3 (0.0) | 26.6(1.2) | 155.4(3.6) | 432.5 (4.7) | 1114.6(3.5) |
| 5. | Haryana | + | + | 7.8(0.2) | 51.6 (0.6) | 314.7(1.0) |
| 6. | Himachal Pradesh | 0.6 (0.0) | 0.1(0.0) | 0.3(0.0) | 4.2 (0.0) | 168.1(0.5) |
| 7. | Jammu & Kashmir | .. | .. | .. | 7.2 (0.1) | 23.9(0.1) |
| 8. | Karnataka | 40.1 (3.3) | 55.5(2.5) | 100.7(2.3) | 212.0 (2.3) | 1064.8(3.3) |
| 9. | Kerala | 2.1 (0.2) | 38.1(1.7) | 126.0(2.9) | 246.8 (2.7) | 617.5(1.9) |
| 10. | Madhya Pradesh | 264.8 (21.6) | 444.0(19.8) | 579.9(13.4) | 1366.3 (15.0) | 3861.0(12.1) |
| 11. | Maharashtra | 22.7 (1.9) | 60.1(2.7) | 130.8(3.0) | 371.5 (4.1) | 3993.2(12.5) |
| 12. | Orissa | 239.6 (19.6) | 290.4(12.9) | 470.8(10.9) | 619.6 (6.8) | 1532.5(4.8) |
| 13. | Punjab | 31.8 (2.6) | 39.0(1.7) | 34.7(0.8) | 165.2 (1.8) | 485.8(1.5) |
| 14. | Rajasthan | 1.8 (0.1) | 4.2(0.2) | 41.1(1.0) | 187.7 (2.1) | 543.5(1.7) |
| 15. | Tamil Nadu | 93.0 (7.6) | 174.6(7.8) | 329.5(7.6) | 498.6 (5.5) | 1332.8(4.2) |
| 16. | Uttar Pradesh | 2.0 (0.2) | 49.7(2.2) | 161.6(3.7) | 305.6 (3.4) | 2490.6(7.8) |
| 17. | West Bengal | 217.1 (17.7) | 329.3(14.7) | 473.7(11.0) | 566.0 (6.2) | 2394.1(7.5) |
| 18. | Delhi | 5.8 (0.5) | 33.4(1.5) | 19.1(0.4) | 274.9 (3.0) | 995.5(3.1) |
| 19. | Goa | .. | .. | .. | 2.9 (0.0) | 12.0(0.0) |

Statement - 2 (Concld.)

| 1 | | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 20. | Other States/U.Ts. | .. | .. | .. | 11.8 (0.1) | 242.8(0.8) |
| 21. | Unallocated@ | 98.0 (8.0) | 302.4(13.5) | 564.9(13.1) | 1322.3 (14.5) | 2424.0(7.6) |
| | Total | 1223.1 (100.0) | 2245.0 (100.0) | 4317.5 (100.0) | 9112.3 (100.0) | 31968.7 (100.0) |

Note : Figures in brackets are percentages to total.

* Gross block covers capital work-in-progress, unallocated capital expenditure and other miscellaneous assets besides the original cost of procuring and erecting the fixed assets.

@ Includes mainly (i) value of air crafts, ships, etc.,not assignable to any particular state and (ii) value of other miscellaneous assets like exploration equipments, storage installations, etc., for which statewise figures are not readily available.

+ Included in Punjab State.

## Statement - 3

### Gross Product of Government Enterprises (at factor cost, current prices)

(Rs. crores)

| Year | Gross output | Depre-ciation | Net Output | Inter-mediate consump-tion | Compen-sation of employees | Gross Value Added + |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1961-62 | 422 | 55 | 367 | 265 | 77 | 138 |
| 1962-63 | 581 | 66 | 515 | 355 | 100 | 196 |
| 1963-64 | 753 | 73 | 680 | 453 | 120 | 246 |
| 1964-65 | 914 | 94 | 820 | 556 | 145 | 285 |
| 1965-66 | 1569 | 125 | 1444 | 1005 | 203 | 439 |
| 1966-67 | 2191 | 171 | 2020 | 1434 | 257 | 579 |
| 1967-68 | 2666 | 208 | 2458 | 1755 | 311 | 694 |
| 1968-69 | 3374 | 242 | 3132 | 2255 | 364 | 849 |
| 1969-70 | 3921 | 283 | 3638 | 2524 | 451 | 1033 |
| 1970-71 | 4573 | 319 | 4254 | 2937 | 538 | 1182 |
| 1971-72 | 5329 | 385 | 4944 | 3459 | 609 | 1342 |
| 1972-73 | 6497 | 421 | 6076 | 4305 | 757 | 1570 |
| 1973-74 | 9203 | 548 | 8655 | 6320 | 1131 | 2155 |
| 1974-75 | 13715 | 538 | 13177 | 9879 | 1662 | 2959 |
| 1975-76 | 16497 | 651 | 15846 | 12040 | 1988 | 3629 |
| 1976-77 | 19936 | 796 | 19140 | 14703 | 2263 | 4563 |
| 1977-78 | 20967 | 957 | 20010 | 14928 | 2619 | 4996 |
| 1978-79 | 24424 | 1068 | 23356 | 17252 | 2982 | 5770 |
| 1979-80 | 29137 | 1286 | 27851 | 21142 | 3466 | 6975 |
| 1980-81 | 35102 | 1567 | 33535 | 26989 | 4090 | 7997 |
| Average Annual Percentage increase | | | | | | |
| 1961-62 to 1965-66 | 40.0 | 27.4 | 41.3 | 40.2 | 27.8 | 34.8 |
| 1966-67 to 1970-71 | 24.1 | 20.9 | 24.4 | 24.4 | 21.6 | 22.0 |
| 1971-72 to 1975-76 | 29.9 | 15.9 | 30.8 | 33.4 | 30.7 | 25.6 |
| 1976-77 to 1980-81 | 16.5 | 19.3 | 16.3 | 17.9 | 15.5 | 17.3 |

+ At factor cost, current prices; derived as the sum of operating surplus, compensation of employees and depreciation.

## Statement - 4

## Net Product of Government Enterprises

(Rs. crores)

| Year | Net Product+ of Government Enterprises * | | | Net Product + of Public Sector | Net Domestic Product+ (NDP) | Percentage share of Col.4 in Col.5 | Percentage share of Col.4 in Col.6 |
|---|---|---|---|---|---|---|---|
| | Operating Surplus | Compensation of Employees | Total (2+3) | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1961-62 | 6 | 77 | 83 | 1602 | 14085 | 5.18 | 0.59 |
| 1962-63 | 30 | 100 | 130 | 1836 | 14903 | 7.08 | 0.87 |
| 1963-64 | 53 | 120 | 173 | 2133 | 17089 | 8.11 | 1.01 |
| 1964-65 | 46 | 145 | 191 | 2381 | 20148 | 8.02 | 0.95 |
| 1965-66 | 111 | 203 | 314 | 2743 | 20801 | 11.45 | 1.51 |
| 1966-67 | 151 | 257 | 408 | 3068 | 24078 | 13.30 | 1.69 |
| 1967-68 | 175 | 311 | 486 | 3465 | 28312 | 14.03 | 1.72 |
| 1968-69 | 243 | 364 | 607 | 3939 | 28862 | 15.14 | 2.10 |
| 1969-70 | 299 | 451 | 750 | 4471 | 31877 | 16.77 | 2.35 |
| 1970-71 | 325 | 538 | 863 | 5007 | 34519 | 17.24 | 2.50 |
| 1971-72 | 348 | 609 | 957 | 5621 | 36864 | 17.03 | 2.60 |
| 1972-73 | 392 | 757 | 1149 | 6214 | 40572 | 18.49 | 2.83 |
| 1973-74 | 476 | 1131 | 1607 | 7228 | 50749 | 22.23 | 3.17 |
| 1974-75 | 759 | 1662 | 2421 | 9526 | 59737 | 25.41 | 4.05 |
| 1975-76 | 990 | 1988 | 2978 | 11374 | 62324 | 26.18 | 4.78 |
| 1976-77 | 1504 | 2263 | 3767 | 13379 | 66987 | 28.16 | 5.62 |
| 1977-78 | 1420 | 2619 | 4039 | 14530 | 75712 | 27.80 | 5.33 |
| 1978-79 | 1720 | 2982 | 4702 | 16139 | 81351 | 29.13 | 5.78 |
| 1979-80 | 2223 | 3466 | 5689 | 18488 | 88353 | 30.77 | 6.44 |
| 1980-81 | 2340 | 4090 | 6430 | 21481 | 105536 | 29.93 | 6.09 |
| 1961-62 to 1965-66 | 246 (27.6) | 645 (72.4) | 891 (100.0) | 10695 | 87026 | 8.33 | 1.02 |
| 1966-67 to 1970-71 | 1193 (38.3) | 1921 (61.7) | 3114 (100.0) | 19950 | 147648 | 15.61 | 2.11 |
| 1971-72 to 1975-76 | 2965 (32.5) | 6147 (67.5) | 9112 (100.0) | 39963 | 250246 | 22.80 | 3.64 |
| 1976-77 to 1980-81 | 9207 (37.4) | 15420 (62.6) | 24627 (100.0) | 84017 | 417939 | 29.31 | 5.89 |

Note : Figures in brackets are percentages to column (4).

+ At factor cost, current prices.

* Non-financial, Non-departmental.

## Statement - 5
## Net Savings of Government Enterprises

(Rs.crores)

| Year | Net Savings of | | | Net Domestic Savings (NDS) | Percentage share of | |
|---|---|---|---|---|---|---|
| | Government Enterprises | General Government* | Public Sector | | Public Sector in NDS | General Government in NDS |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1961-62 | - 20 | 383 | 363 | 1281 | 28.3 | 29.9 |
| 1962-63 | - 19 | 427 | 408 | 1544 | 26.4 | 27.7 |
| 1963-64 | - 1 | 540 | 539 | 1825 | 29.5 | 29.6 |
| 1964-65 | - 15 | 626 | 611 | 2023 | 30.1 | 30.8 |
| 1965-66 | - 19 | 611 | 592 | 2562 | 23.1 | 23.8 |
| 1966-67 | - 38 | 445 | 407 | 3112 | 13.1 | 14.3 |
| 1967-68 | - 61 | 416 | 355 | 2939 | 12.1 | 14.2 |
| 1968-69 | - 57 | 579 | 522 | 3011 | 17.3 | 19.2 |
| 1969-70 | - 33 | 678 | 645 | 4129 | 15.6 | 16.4 |
| 1970-71 | - 12 | 816 | 804 | 4566 | 17.6 | 17.9 |
| 1971-72 | - 74 | 836 | 762 | 5099 | 14.9 | 16.4 |
| 1972-73 | - 68 | 807 | 739 | 5100 | 14.5 | 15.8 |
| 1973-74 | - 84 | 1165 | 1081 | 8369 | 12.9 | 13.9 |
| 1974-75 | + 83 | 1888 | 1971 | 9127 | 21.6 | 20.7 |
| 1975-76 | -105 | 2598 | 2493 | 10800 | 23.1 | 24.1 |
| 1976-77 | + 98 | 3087 | 3185 | 13428 | 23.7 | 23.0 |
| 1977-78 | -234 | 3235 | 3001 | 14808 | 20.3 | 21.9 |
| 1978-79 | -240 | 3707 | 3467 | 18386 | 18.9 | 20.2 |
| 1979-80 | -366 | 3750 | 3384 | 18214 | 18.6 | 20.6 |
| 1980-81 | -698 | 3377 | 2679 | 21166 | 12.7 | 16.0 |
| 1961-62 to 1965-66 | - 74 | 2587 | 2513 | 9235 | 27.2 | 28.0 |
| 1966-67 to 1970-71 | -201 | 2934 | 2733 | 17757 | 15.4 | 16.5 |
| 1971-72 to 1975-76 | -248 | 7294 | 7046 | 38495 | 18.3 | 19.0 |
| 1976-77 to 1980-81 | -1440 | 17156 | 15716 | 86002 | 18.3 | 20.0 |

* Includes Non-departmental Financial Enterprises and Departmental Enterprises of Government, besides Administrative Departments.

## Statement - 6

## Net Capital Formation of Government Enterprises

(Rs. crores)

| Year | Net Capital Formation of | | | Net Domestic Capital Formation | Percentage share of Col.(2) in Col.(5) |
|---|---|---|---|---|---|
| | Government Companies | Public Sector | Share of Col. (2) in Col.(3) | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1961-62 | 217 | 1016 | 21.36 | 1626 | 13.35 |
| 1962-63 | 247 | 1287 | 19.19 | 1984 | 12.45 |
| 1963-64 | 290 | 1511 | 19.19 | 2265 | 12.80 |
| 1964-65 | 344 | 1742 | 19.75 | 2623 | 13.11 |
| 1965-66 | 785 | 1999 | 39.27 | 3161 | 24.83 |
| 1966-67 | 843 | 1874 | 44.98 | 4035 | 20.89 |
| 1967-68 | 826 | 2019 | 40.91 | 3776 | 21.88 |
| 1968-69 | 810 | 1831 | 44.24 | 3427 | 23.64 |
| 1969-70 | 712 | 1871 | 38.05 | 4370 | 16.29 |
| 1970-71 | 1027 | 2324 | 44.19 | 4960 | 20.71 |
| 1971-72 | 1028 | 2649 | 38.81 | 5577 | 18.43 |
| 1972-73 | 1007 | 3014 | 33.41 | 5397 | 18.66 |
| 1973-74 | 1646 | 4088 | 40.26 | 8761 | 18.79 |
| 1974-75 | 2525 | 4959 | 50.92 | 9780 | 25.82 |
| 1975-76 | 4052 | 6831 | 59.32 | 10683 | 37.93 |
| 1976-77 | 4364 | 7513 | 58.09 | 12119 | 36.01 |
| 1977-78 | 3040 | 6283 | 48.38 | 13343 | 22.78 |
| 1978-79 | 4091 | 8336 | 49.08 | 18514 | 22.10 |
| 1979-80 | 4934 | 10233 | 48.22 | 18794 | 26.25 |
| 1980-81 | 5569 | 11961 | 46.56 | 23270 | 23.93 |
| 1961-62 to 1965-66 | 1883 | 7555 | 24.9 | 11659 | 16.2 |
| 1966-67 to 1970-71 | 4218 | 9919 | 42.5 | 20568 | 20.5 |
| 1971-72 to 1975-76 | 10258 | 21541 | 47.6 | 40198 | 25.5 |
| 1976-77 to 1980-81 | 21998 | 44326 | 49.6 | 86040 | 25.6 |

## Statement - 7

### Gross Capital Formation of Government Enterprises - By type of assets
(at current prices)

(Rs. crores)

| Year | Gross Fixed Capital Formation | | | Change in Stocks | Gross Capital Formation (4+5)+ |
|---|---|---|---|---|---|
| | Construction | Machinery | Total@ | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1961-62 | 104 | 114 | 218 | 52 | 270 |
| 1962-63 | 117 | 129 | 246 | 62 | 308 |
| 1963-64 | 137 | 151 | 288 | 71 | 359 |
| 1964-65 | 177 | 195 | 372 | 61 | 433 |
| 1965-66 | 349 | 382 | 731 | 167 | 898 |
| 1966-67 | 376 | 419 | 795 | 210 | 1005 |
| 1967-68 | 357 | 398 | 755 | 275 | 1030 |
| 1968-69 | 389 | 433 | 822 | 224 | 1046 |
| 1969-70 | 412 | 458 | 870 | 115 | 985 |
| 1970-71 | 454 | 506 | 960 | 370 | 1330 |
| 1971-72 | 455 | 549 | 1004 | 399 | 1403 |
| 1972-73 | 624 | 754 | 1378 | 34 | 1412 |
| 1973-74 | 653 | 788 | 1441 | 734 | 2175 |
| 1974-75 | 812 | 980 | 1792 | 1256 | 3048 |
| 1975-76 | 1250 | 1510 | 2760 | 1926 | 4686 |
| 1976-77 | 1533 | 2041 | 3574 | 1565 | 5139 |
| 1977-78 | 1654 | 2201 | 3855 | 125 | 3980 |
| 1978-79 | 1602 | 2132 | 3734 | 1398 | 5132 |
| 1979-80 | 1925 | 2562 | 4487 | 1689 | 6176 |
| 1980-81 | 2144 | 2854 | 4998 | 2075 | 7073 |
| 1961-62 to 1965-66 | 884 (47.7) | 971 (52.3) | 1855 (100.0) | 413 (18.2) | 2268 (100.0) |
| 1966-67 to 1970-71 | 1988 (47.3) | 2214 (52.7) | 4202 (100.0) | 1194 (22.1) | 5396 (100.0) |
| 1971-72 to 1975-76 | 3794 (45.3) | 4581 (54.7) | 8375 (100.0) | 4349 (34.2) | 12724 (100.0) |
| 1976-77 to 1980-81 | 8858 (42.9) | 11790 (57.1) | 20648 (100.0) | 6852 (24.9) | 27500 (100.0) |

Note : Figures in brackets in colums (2) & (3) are percentages to column (4) and those in column (5) are with respect to column (6).

@ Break-up into construction and machinery is estimated on the basis of the data available for all non-departmental enterprises of government.

+ Excludes value of land purchased.

## Statement - 8

## Financial Sources of Government Enterprises £

(Rs. crores)

| Year | Paid-up Capital@ | Borrowings | | Trade Credit | Other Liabilities | Total |
|---|---|---|---|---|---|---|
| | | Total | Of which from Government | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1961-62 | 7 | 64 | 60 | 14 | 1 | 86 |
| 1962-63 | 79 | 23 | 19 | 27 | - | 129 |
| 1963-64 | 100 | 45 | 31 | 35 | 1 | 181 |
| 1964-65 | 109 | 71 | 39 | 46 | - | 226 |
| 1965-66 | 50 | 183 | 142 | 59 | 2 | 294 |
| 1966-67 | 111 | 580 | 489 | 145 | 6 | 842 |
| 1967-68 | 136 | 610 | 461 | 152 | 14 | 912 |
| 1968-69 | 196 | 763 | 627 | 65 | 6 | 1030 |
| 1969-70 | 275 | 306 | 343 | 164 | 12 | 757 |
| 1970-71 | 239 | 720 | 338 | 62 | 25 | 1046 |
| 1971-72 | 540 | 597 | 299 | 93 | 125 | 1353 |
| 1972-73 | 401 | 964 | 667 | 46 | 148 | 1559 |
| 1973-74 | 389 | 910 | 579 | 436 | 377 | 2112 |
| 1974-75 | 642 | 1572 | 987 | 335 | 406 | 2955 |
| 1975-76 | 938 | 2661 | 1281 | 158 | 361 | 4118 |
| 1976-77* | 1029 | 2709 | 1602 | 366 | 485 | 4589 |
| 1977-78* | 1637 | 1358 | 978 | - 33 | 735 | 3697 |
| 1978-79* | 1049 | 2761 | 1993 | 284 | 556 | 4650 |
| 1979-80* | 1198 | 3296 | 2380 | 938 | 1659 | 7091 |
| 1980-81* | 1436 | 3379 | 2440 | 907 | 1782 | 7504 |
| 1961-62 to | 345 | 386 | 291 | 181 | 4 | 916 |
| 1965-66 | (37.7) | (42.1) | (75.4) | (19.8) | (0.4) | (100.0) |
| 1966-67 to | 957 | 2979 | 2258 | 588 | 63 | 4587 |
| 1970-71 | (20.9) | (64.9) | (75.8) | (12.8) | (1.4) | (100.0) |
| 1971-72 to | 2910 | 6704 | 3813 | 1068 | 1417 | 12097 |
| 1975-76 | (24.0) | (55.4) | (56.9) | (8.8) | (11.7) | (100.0) |
| 1976-77 to | 6349 | 13503 | 9393 | 2462 | 5217 | 27531 |
| 1980-81* | (23.1) | (49.0) | (69.6) | (8.9) | (19.0) | (100.0) |

Note : Figures in brackets except in column (4) are percentages with respect to column (7) and those in column (4) are with column (3).

£ Non-financial Non-departmental.

@ Includes bonds/debentures of State Electricity Boards.

* Provisional.

## Statement - 9

## Financial Uses of Government Enterprises £

(Rs. crores)

| Year | Currency and Deposits | Investments | Loans and Advances | Sundry Debtors | Other Assets | Total |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1961-62 | 3 | 3 | -27 | -2 | -1 | -24 |
| 1962-63 | -1 | - | - 3 | 8 | -4 | neg. |
| 1963-64 | 10 | - | 36 | 13 | 1 | 60 |
| 1964-65 | 18 | - | 18 | 10 | 1 | 47 |
| 1965-66 | -6 | - | 39 | 18 | - | 51 |
| 1966-67 | -2 | -14 | 8 | 58 | - | 50 |
| 1967-68 | 21 | - | -11 | 42 | -1 | 51 |
| 1968-69 | 26 | 8 | -5 | 31 | 2 | 62 |
| 1969-70 | 8 | 5 | -2 | 53 | 1 | 65 |
| 1970-71 | 11 | 13 | 135 | 19 | 30 | 163 |
| 1971-72 | 56 | 75 | - | 126 | 58 | 315 |
| 1972-73 | 81 | -50 | 53 | 241 | 159 | 484 |
| 1973-74 | 70 | 3 | 279 | 377 | -72 | 657 |
| 1974-75 | 59 | -15 | 483 | 291 | 151 | 969 |
| 1975-76 | 59 | -11 | 91 | -14 | 40 | 165 |
| 1976-77* | 226 | - 4 | 331 | 302 | 25 | 880 |
| 1977-78* | 227 | 32 | 190 | 302 | 167 | 918 |
| 1978-79* | -19 | 55 | 377 | 331 | 226 | 969 |
| 1979-80* | - 6 | -15 | 65 | 514 | 273 | 830 |
| 1980-81* | 4 | 5 | 1489 | 590 | 81 | 2169 |
| 1961-62 to 1965-66 | 24 (17.9) | 3 (2.2) | 63 (47.0) | 47 (35.1) | -3 (-2.2) | 134 (100.0) |
| 1966-67 to 1970-71 | 64 (16.4) | 12 (3.1) | 125 (32.0) | 203 (51.9) | 32 (8.2) | 391 (100.0) |
| 1971-72 to 1975-76 | 325 (12.5) | 2 (0.1) | 906 (35.0) | 1021 (39.4) | 336 (13.0) | 2590 (100.0) |
| 1976-77 to 1980-81* | 432 (7.5) | 63 (1.1) | 2452 (42.5) | 2039 (35.4) | 772 (13.4) | 5766 (100.0) |

Note : Figures in brackets are percentages to total.

£ Non-financial Non-departmental.

Neg.: Negligeble.

* Provisionel.

# SOME ASPECTS OF TERM LENDING BY SCHEDULED COMMERCIAL BANKS (1972-1981)

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**Introduction**

This note attempts to analyse some of the important aspects of term loans extended by Scheduled Commercial Banks during the period 1972 to 1981. The analysis is done on the basis of data collected under the Basic Statistical Returns Surveys.

**Source and Coverage of Data**

A brief mention may be made here about the data on commercial bank credit, being collected under the half yearly-as on the last Friday of June and December-BSR-1 Survey (return on advances) which was introduced in December 1972. The BSR-1 return has two parts. In part A account-wise details are collected of each advance with credit limit of over Rs.10,000 and only occupation-wise consolidated information for accounts having credit limit of Rs.10,000 and less are recorded in Part B of the return. The share of small accounts (i.e. those accounts with credit limit of Rs.10,000 and less reported in Part B of BSR-1) remained more or less constant around 92 per cent in terms of number of accounts whereas the share of amount outstanding increased from 9 per cent to 14 per cent over the period from December 1972 to December 1981. So the share of number of accounts reported in Part A remained around 8 per cent but in terms of amount it declined from 91 per cent to 86 per cent. This shows the importance of accounts coming under Part A of the return, in terms of amounts, though not in terms of accounts. The analysis of term loans here is confined to the data reported in Part A of the BSR-1 return.

In Part A of the return, account-wise data are recorded by the branches on organisation, type of account, rate of interest, credit limit, amount outstanding, etc. Under the type of account each advance is to be classified under eight heads viz; (1) Cash credit, (2) Overdraft, (3) Demand Loans, (4) Term Loans,

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(5) Packing Credit, (6) Export Bills, (7) Inland Bills and (8) Advances against Import Bills. As such, it is possible to know the share of term loans as compared to other categories.

**Definition**

Under the BSR Survey, term loans have been defined as (a) loans originally sanctioned for a period exceeding one year with specific schedule of repayment, (b) interim cash credits/bridge loans pending disbursement of sanctioned term loans and (c) instalment credit where repayment is spread over more than one year.

**Significance of Term Loans**

Out of these eight heads of the type of account mentioned above, cash credit and overdrafts accounted for about one half of the total credit in December 1981. But a significant amount of credit is extended by the banks only under two heads, viz: cash credit and term loans. The percentage share of credit in terms of accounts and amount outstanding against these two categories of types of account is given below.

**Table 1**

**Category-wise Distribution of Scheduled Commercial Banks' Advances in terms of Percentages**

| As on the last Friday of December | Cash Credit | | Term Loans | | Others | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No. of accounts | Amount | No. of accounts | Amount | No. of accounts | Amount | No. of accounts | Amount |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1972 | 33.0 | 50.4 | 21.4 | 11.9 | 45.6 | 37.7 | 100.0 | 100.0 |
| 1973 | 32.8 | 47.2 | 23.4 | 13.0 | 43.8 | 39.8 | 100.0 | 100.0 |
| 1974 | 32.8 | 46.8 | 25.7 | 13.9 | 41.5 | 39.3 | 100.0 | 100.0 |
| 1975 | 32.7 | 46.9 | 28.4 | 14.5 | 38.9 | 38.6 | 100.0 | 100.0 |
| 1976 | 31.8 | 46.2 | 31.6 | 15.1 | 36.6 | 38.7 | 100.0 | 100.0 |
| 1977 | 30.5 | 44.8 | 33.8 | 16.1 | 35.7 | 39.1 | 100.0 | 100.0 |
| 1978 | 29.8 | 43.5 | 34.3 | 17.9 | 35.9 | 38.6 | 100.0 | 100.0 |
| 1979 | 28.7 | 43.3 | 37.0 | 20.4 | 34.3 | 36.3 | 100.0 | 100.0 |
| 1980 | 27.8 | 42.4 | 39.1 | 22.2 | 33.8 | 36.3 | 100.0 | 100.0 |
| 1981 | 26.1 | 43.7 | 40.9 | 23.9 | 33.0 | 32.4 | 100.0 | 100.0 |

As shown in Table 1, the share of cash credit has slowly declined over a period of eight years from 50 per cent to 43 per cent and from 33 per cent to

26 per cent in terms of amount and accounts respectively. In contrast, during this period, the share of term loans in respect of number of accounts, as also the amounts has nearly doubled.

In Appendix I, the data on term loans for each half year from December 1972 to December 1981 are presented along with the total credit reported in Part A of the BSR-1 returns (i.e. accounts with credit limit over Rs.10,000). The share of term loans in total credit and non-food credit is also presented.

The share of term loans in respect of number of accounts and amount outstanding has doubled over a period of nine years and its share in non-food credit has more than doubled during the same period.

**Occupation-wise Distribution**

In Table 2 given below, distribution of term loans according to some important occupations is given for June 1973, 1977 and 1981 and for December 1981. However, for more detailed statistics, a reference may be made to Apendix II.

**Table 2**

**Occupation wise Distribution of Term loans by Scheduled Commercial Banks**

(Amount in lakhs of rupees)

| Occupational Category | As on the last Friday of | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | June 1973 | | June 1977 | | June 1981 | | December 1981 | |
| | No. of accounts | Amount | No. of accounts | Amount | No. of accounts | Amount | No. of accounts | Amount |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Agriculture | 39,398 (38.1) | 148,85 (21.0) | 95,396 (40.2) | 402,61 (20.5) | 281,673 (48.5) | 1441,58 (28.6) | 312,487 (48.0) | 1709,17 (29.5) |
| i) Direct | 32,556 (31.5) | 69,88 (9.9) | 90,411 (38.1) | 294,99 (15.0) | 257,076 (44.3) | 978,24 (19.4) | 284,806 (43.7) | 1243,61 (21.5) |
| ii) Indirect | 6,842 (6.6) | 78,97 (11.1) | 4,985 (2.1) | 107,62 (5.5) | 24,597 (4.2) | 463,34 (9.2) | 27,681 (4.3) | 465,57 (8.0) |
| 2. Industry | 19,750 (19.1) | 335,45 (47.3) | 38,043 (16.0) | 848,48 (43.2) | 77,177 (13.3) | 1756,05 (34.9) | 85,506 (13.1) | 2000,88 (34.6) |
| 3. Transport Operators | 20,099 (19.4) | 63,92 (9.0) | 47,765 (20.1) | 258,28 (13.2) | 109,855 (18.9) | 1000,36 (19.9) | 126,020 (19.3) | 1144,31 (19.8) |

(Contd.)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| 4. Personal & Profe-ssional Services | 4,863 (4.7) | 34,50 (4.9) | 9,905 (4.2) | 111,11 (5.7) | 20,163 (3.5) | 178,72 (3.5) | 22,045 (3.4) | 257,20 (4.4) |
| 5. Trade | 2,841 (2.8) | 30,55 (4.3) | 6,435 (2.7) | 106,90 (5.4) | 16,429 (2.8) | 219,20 (4.4) | 19,381 (3.0) | 151,85 (2.6) |
| 6. Personal Loans | 10,743 (10.4) | 38,01 (5.4) | 28,675 (12.1) | 114,77 (5.8) | 62,822 (10.8) | 258,14 (5.1) | 71,374 (11.0) | 308,33 (5.3) |
| 7. Others | 5,646 (5.5) | 54,41 (7.8) | 110,59 (4.7) | 121,96 (6.2) | 12,276 (2.2) | 182,41 (3.6) | 14,498 (2.2) | 218,29 (3.8) |
| 8. Total | 103,340 (100.0) | 705,72 (100.0) | 237,278 (100.0) | 1964,11 (100.0) | 580,395 (100.0) | 5036,46 (100.0) | 651,671 (100.0) | 5790,08 (100.0) |
| 9. Of which Small-Scale Industry | N.A. | N.A. | 34,934 (14.7) | 234,33 (11.9) | 65,451 (11.3) | 554,16 (11.0) | 73,083 (11.2) | 667,94 (11.5) |

Note : Figures in brackets represent percentages to total.

In terms of number of accounts, it is agriculture that dominates whereas in terms of amount, industry has got the largest share. The share of industry in terms of accounts declined from 19.4 per cent to 13.1 per cent over a period from December 1972 to December 1981. Even in respect of amount, it is interesting to note that its share has come down from 48 per cent to 35 per cent during the same period. Agriculture showed a steady increase from 37.4 per cent in December 1972 to 48.0 per cent in December 1981 in respect of accounts. As regards amount, there was a decline from 22.5 per cent in December 1972 to 20.5 per cent in June 1977 and then an increase to 29.5 per cent in December 1981. In the case of 'transport operators' the share of number of accounts by and large remained around 19 per cent during this period but the share of amount witnessed a significant increase from 9.4 per cent to 19.8 per cent.

**Distribution according to Organisation** Classification of term loans according to type of organisation is given in Table 3 for June 1980 and December 1981.

**Table 3**

**Distribution of Term loans according to Type of Organisation**

(Amount in lakhs of rupees)

| Type of organisation | As on the last Friday of | | | |
|---|---|---|---|---|
| | June 1980 | | December 1981 | |
| | No. of accounts | Amount outstanding | No. of accounts | Amount outstanding |
| Central Govt. Undertakings | 108 (..) | 387,44 (9.9) | 283 (..) | 319,32 (5.5) |
| State Governments | 75 (..) | 28,66 (0.7) | 83 (..) | 28,10 (0.5) |
| State Govt. Undertakings | 880 (0.2) | 237,53 (6.1) | 1,247 (0.2) | 369,85 (6.4) |
| Quasi govt. Bodies | 745 (0.2) | 141,07 (3.6) | 1,334 (0.2) | 270,27 (4.7) |
| Co-operative Sector | 9,191 (2.0) | 135,10 (3.4) | 11,039 (1.7) | 167,61 (2.9) |
| Govt. Managed Public, Private Ltd. Cos. | 219 (..) | 40,61 (1.0) | 346 (0.1) | 56,33 (1.0) |
| Public/Private Ltd. Cos. | 9,329 (2.0) | 932,98 (23.8) | 11,276 (1.7) | 1207,67 (20.8) |
| Partnership, Proprietary concerns etc. | 101,607 (22.0) | 777,37 (19.8) | 145,756 (22.4) | 1339,90 (23.1) |
| Individuals | 339,769 (73.6) | 1246,85 (31.7) | 480,307 (73.7) | 2031,03 (35.1) |
| TOTAL | 461,923 (100.0) | 3927,61 (100.0) | 651,671 (100.0) | 5790,08 (100.0) |

**Note** : Figures in brackets represent percentages to total.
(..) means negligible

The highest percentage distribution both in terms of number of accounts (73.7) and amount outstanding (35.1) is seen in the case of 'Individuals' as on December 1981. It is mainly because borrowing for activities such as agriculture (purchase of agriculture implements and machinery), professional services, personal requirements and for transport are under

term loans. The share of number of accounts at 74 per cent remained constant in June 1980, June 1981 and December 1981 but the share of amount increased from 32 per cent in June 1980 to 34 per cent in June 1981 and 35 per cent in December 1981. Next was the category, 'Partnership, Proprietary concerns, etc.' (22 per cent) followed by 'Public/Private Ltd. Cos'. (2 per cent) which remained constant in these periods. In terms of amounts the share was 23.1 per cent and 20.8 per cent for 'Partnership, Proprietary concerns, etc.' and 'Public/Private Ltd. Cos.' respectively as on December 1981. Over the three periods, the share of amount showed an increasing trend for 'Partnership' Proprietary concerns, etc.' whereas there was a declining trend for other category 'Public/Private Limited Cos.'. In December 1981, these three categories together accounted for 98 per cent of the total borrowal accounts and 79 per cent in terms of amount outstanding. The share of small-scale industry in 'Public/Private Ltd. Cos.' and 'Partnership, Proprietary concerns, etc.' is given below for December 1981 :

| | December 1981 | | | | Percentage share of SSI | |
|---|---|---|---|---|---|---|
| | Total | | Of which SSI | | | |
| | No. of accounts | Amount out-standing (Rs. lakhs) | No. of accounts | Amount out-standing (Rs.lakhs) | No. of accounts | Amount out-standing |
| Public/Private Ltd. Cos. | 11,276 | 1207,67 | 4,715 | 130,72 | 41.8 | 10.8 |
| Partnership, Proprietary concerns, etc. | 145,756 | 1339,90 | 59,723 | 486,44 | 41.0 | 36.3 |

In both the types of organisation the share of small-scale industry was 41 per cent for number of accounts but there was a wide variation in the share of amount outstanding.

**Distribution according to Interest Range**

Distribution of term loans according to interest range is given in Table 4 for June 1980 and December 1981 :

**Table 4**

**Distribution of Term Loans according to Interest Range**

(Amount in lakhs of rupees)

| Interest Range | (As on the last Friday of) June 1980 No. of accounts | June 1980 Amount outstanding | December 1981 No. of accounts | December 1981 Amount outstanding |
|---|---|---|---|---|
| Upto 9% | 47,442 (10.3) | 274,74 (7.2) | 59,621 (9.1) | 395,50 (6.8) |
| 9% to 10% | 25,664 (5.6) | 180,40 (4.6) | 15,628 (2.4) | 183,17 (3.2) |
| 10% to 11% | 194,837 (42.2) | 1507,16 (38.4) | 104,115 (16.0) | 723,44 (12.5) |
| 11% to 12% | 31,448 (6.8) | 197,95 (5.0) | 94,109 (14.4) | 864,70 (14.9) |
| 12% to 13% | 58,822 (12.7) | 498,92 (12.7) | 196,898 (30.2) | 1422,32 (24.6) |
| 13% to 14% | 29,416 (6.4) | 413,94 (10.5) | 53,871 (8.3) | 607,60 (10.5) |
| 14% to 15% | 46,550 (10.1) | 496,36 (12.6) | 62,331 (9.6) | 683,46 (11.8) |
| 15% to 16% | 5,967 (1.3) | 76,19 (1.9) | 15,364 (2.4) | 213,59 (3.7) |
| 16% to 17% | 8,511 (1.8) | 115,13 (2.9) | 13,319 (2.0) | 169,40 (2.9) |
| 17% to 18% | 12,180 (2.6) | 149,57 (3.8) | 13,162 (2.0) | 151,49 (2.6) |
| More than 18% | 1,086 (0.2) | 17,25 (0.4) | 232,53 (3.6) | 375,41 (6.5) |
| TOTAL : | 461,923 (100.00) | 3927,61 (100.00) | 651,671 (100.00) | 5790,08 (100.00) |

Note : Figures in brackets represent percentages to total.

In June 1980, the highest percentage share of term loans both in terms of accounts (42 per cent) and amount (38 per cent) was seen in the interest range 10 per cent to 11 per cent. The next two ranges,

viz., 11 per cent to 12 per cent and 12 per cent to 13 per cent had a share of 6.8 per cent and 12.7 per cent in terms of accounts and 5.0 per cent and 12.7 percent in terms of amount respectively. These three ranges together accounted for a major portion both in terms of accounts (62 per cent) and amount (56 per cent). As on June 1981, due to revision in the interest rate structure in July 1980, there was a shift from interest range 10 per cent to 11 per cent to next two ranges i.e. 11 per cent to 12 per cent and 12 per cent to 13 per cent. But as witnessed in June 1980, the share of these three ranges remained at 62 per cent in terms of number of accounts and at 56 per cent in terms of amount. These three ranges shared the 62 per cent accounts more or less equally whereas the share in terms of amount was marginally lower in the interest range 11 per cent to 12 per cent as compared to remaining two interest rate ranges. The next change in the interest rate structure was from March 1981 and a shift was seenin the distribution of term loans in December 1981. The concentration in terms of both accounts (30 per cent) and amount (25 per cent) was in the range 12 per cent to 13 per cent. The share of this range doubled as compared to its share in June 1980. However, even in December 1981, the importance of these three ranges together was more or less to the same extent as in the earlier two periods. The range, less than 9 per cent, had a constant share both in terms of accounts and amounts for all the three periods at 9 per cent and 7 per cent respectively.

Out of these interest ranges, the share of small scale industry was noticeable in the five ranges as given in the following table.

(Amount in lakhs of rupees)

| Interest Range | December 1981 | | | | | |
|---|---|---|---|---|---|---|
| | Total | | Of which SSI | | % Shares of SSI | |
| | No. of accounts | Amount out-standing | No. of accounts | Amount out-standing | No. of accounts | Amount out-standing |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 13% to 14% | 53,871 | 607,60 | 19,555 | 185,74 | 36.3 | 30.6 |
| 14% to 15% | 62,331 | 683,46 | 9,424 | 83,57 | 15.1 | 12.2 |

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 15% to 16% | 15,364 | 213,59 | 2,872 | 36,19 | 18.7 | 16.9 |
| 16% to 17% | 13,319 | 169,40 | 2,786 | 40,65 | 20.9 | 24.0 |
| 17% to 18% | 13,162 | 151,49 | 1,894 | 22,58 | 14.4 | 14.9 |

However, it was significant at over 30% in the interest range 13% to 14% and around 20% in the ranges 16% to 17% and 15% to 16%.

**Distribution according to Credit Limit**

An analysis of the distribution of term loans according to the size of credit limit is given in Table 5 below, for June 1980 and December 1981.

**Table 5**

**Distribution of Term Loans according to Size of Credit Limit**

(Amount in lakhs of rupees)

| Credit Limit Range | As on the last Friday of | | | |
|---|---|---|---|---|
| | June 1980 | | December 1981 | |
| | No. of accounts | Amount out-standing | No. of accounts | Amount out-standing |
| Rs.10,000 to Rs.50,000 | 334,594 (72.4) | 806,84 (20.5) | 430,189 (66.0) | 1102,56 (19.1) |
| Rs.50,000 to Rs.1 lakh | 81,128 (17.6) | 482,78 (12.3) | 139,108 (21.3) | 922,58 (15.9) |
| Rs.1 lakh to Rs.5 lakhs | 38,095 (8.2) | 601,76 (15.3) | 70,875 (10.9) | 1100,20 (19.0) |
| Rs.5 lakhs to Rs.10 lakhs | 3,697 (0.8) | 231,91 (5.9) | 5,112 (0.8) | 312,40 (5.4) |
| Rs.10 lakhs to Rs.25 lakhs | 2,773 (0.6) | 389,14 (9.9) | 3,848 (0.6) | 540,86 (9.3) |
| Rs.25 lakhs to Rs.50 lakhs | 902 (0.2) | 261,67 (6.7) | 1,473 (0.2) | 414,53 (7.2) |
| Rs.50 lakhs to Rs.1 crore | 416 (0.1) | 231,50 (5.9) | 535 (0.1) | 296,10 (5.1) |

(Contd.)

| | | | | |
|---|---|---|---|---|
| More than Rs.1 crore | 318<br>(0.1) | 922,01<br>(23.5) | 531<br>(0.1) | 1100,85<br>(19.0) |
| TOTAL | 461,923<br>(100.0) | 3927,61<br>(100.0) | 651,671<br>(100.0) | 5790,08<br>(100.0) |

Note : Figures in brackets represent percentages to total

In the category of 'Rs.50,000 and less' credit limit, the share of number of accounts, which was 72 per cent in June 1980, declined by 3 per cent in June 1981 and further by the same magnitude in December 1981 and stood at 66 per cent. However, the share of amount which was 21 per cent in June 1980 showed a decline and was 19 per cent in June 1981 and December 1981. The next two categories of credit limits, viz. Rs.50,000 to Rs.1 lakh and Rs.1 lakh to Rs.5 lakhs witnessed a marginal increase in share of accounts and amount outstanding. The share of next four categories of credit limit ranges remained constant in these three periods whereas the share of more than Rs.1 crore showed a declining trend in respect of the amount outstanding.

**Analysis of Growth of types of Deposits and Maturity-wise Distribution of Term Deposits**

It would be interesting and useful to analyse in this context, the composition and growth of commercial bank deposits, especially the maturity pattern of term deposits, which, by their nature enable banks to advance credit for relatively longer durations. The distribution of deposits according to the three categories-current, savings and term is given in Table 6. This indicates that term deposits have been the most important category of deposits. The share of this category, which constituted one-half of the total deposits in 1969 increased to 56 per cent by 1976 and has remained at that level in 1980.

A more important and relevant aspect is the growth in the maturity pattern of such deposits, which is given in Table 7. As will be seen from this table, there has been a continuous and sharp increase in deposits of maturity of over five years. Such deposits,

which constituted just 6 per cent of the total term deposits in 1969 increased to 13 per cent in 1972, to 39 per cent in 1976 and further to 62 per cent in 1980. If deposits having maturity period of over three years and upto five years are also taken into account, these categories (i.e. deposits with maturity of 3 years and above) formed about three-fourths of the total term deposits and about two-fifths of the total deposits in 1980. On the basis of this trend, it seems quite possible that presently deposits of over three years maturity would form more than four-fifths of the total term deposits and about one-half of the aggregate deposits with commercial banks.

**Table 6**

**Category-wise Growth of Deposits with Scheduled Commercial Banks**

(Amount in crores of rupees)

| Year ended March | Current Deposits | Saving Deposits | Term Deposits | Total |
|---|---|---|---|---|
| 1969 | 1149 | 1112 | 2255 | 4516 |
| | (25.4) | (24.6) | (50.0) | (100.0) |
| 1972 | 1739 | 1846 | 3691 | 7276 |
| | (23.9) | (25.4) | (50.7) | (100.0) |
| 1976 | 2782 | 3605 | 7070@ | 14357 |
| | (19.4) | (25.1) | (55.5) | (100.0) |
| 1978 | 3926 | 5595 | 11966 | 21487 |
| | (18.3) | (26.0) | (55.7) | (100.0) |
| 1980 | 5400 | 8561 | 17581 | 31542 |
| | (17.1) | (27.2) | (55.7) | (100.0) |

Source - Survey of Ownership of Deposits - BSR - 4

@ Inclusive of Rs.148 crores of other deposits also.

Note : Figures in brackets represent percentages to total.

**Refinance Facilities**

The liberal refinancing facility provided by the term lending institutions has been another factor helping the commercial banks to extend term loans. Thus the total amount disbursed to commercial banks by Industrial Development bank of India increased from Rs.7 crores

in 1971-72 to Rs.250 crores in 1981-82. As a proportion of the total refinance disbursements by IDBI, the share of commercial banks increased from 29 per cent to 45 percent during this period. Similarly, disbursements by National Bank for Agriculture and Rural Development to commercial banks (including Regional Rural Banks) increased from Rs.4 crores in 1971-72 to Rs.351 crores in 1981-82 (July-June). The share of commercial banks in the total disbursements by NABARD showed an increase from 3 per cent to 16 per cent during this period.

**Table 7**

**Maturity-wise Distribution of Term Deposits with Scheduled Commercial Banks**

(Amount in crores of rupees)

| | Period | Year ended March | | | | |
|---|---|---|---|---|---|---|
| | | 1969 | 1972 | 1976 | 1978 | 1980 |
| 1) | Less than 1 year | 1338 | 1646 | 1060 | 1134 | 1289 |
| | | (59.3) | (44.6) | (13.8) | (9.6) | (7.5) |
| 2) | One year and above but less than 3 years | 316 | 818 | 2574 | 2625 | 3074 |
| | | (14.0) | (22.2) | (33.6) | (22.4) | (17.9) |
| 3) | 3 years and above | 461 | 733 | 1076 | 1569 | 2194 |
| | | (20.5) | (19.8) | (14.1) | (13.3) | (12.8) |
| 4) | Above 5 years | 140 | 494 | 2944 | 6427 | 10616 |
| | | (6.2) | (13.4) | (38.5) | (54.7) | (61.8) |
| | Total | 2255 | 3691 | 7654 | 11755 | 17173 |
| | | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) |

Source - Survey of Ownership of Deposits - BSR - 4.

N.B : Figures in brackets represent percentages to total.
Data for 1976, 1978 and 1980 exclude inter-bank deposits.

The main points arising from this brief analysis are :

1. The share of term loans increased from 12 per cent of the total advances of commercial banks in December 1972 to 24 per cent in December 1981.

2. During the period June 1973 to December 1981, occupation-wise distribution of term loans indicated that in terms of number of accounts, agriculture dominated whereas amount-wise industry got the largest share.

3. Distribution of term loans according to organisation as at the end of December 1981 showed that both amount-wise and account-wise 'Individuals' got the largest share followed by the category 'Partnership Proprietary concerns, etc.'.

4. The highest percentage of term loans, account-wise and amount-wise, according to interest range, was seen in the interest range 10 to 11 per cent in June 1980 and 12 to 13 per cent in December 1981.

5. An analysis of the distribution of term loans according to the size of credit limits indicated that during the period June 1980 - December 1981, the share of number of accounts and amounts showed a small decline in the size of Rs.50,000 and less. Credit limits between Rs.50,000 to Rs.5 lakhs witnessed a marginal increase in the share, account-wise as well as amount-wise. There was no change in the share in the range of credit limit between Rs.5 lakhs to Rs.1 crore and the share of more than Rs.1 crore showed a declining trend in respect of the amount outstanding.

6. An analysis of the composition and growth of commercial bank deposits indicates that 'term deposits', which by their nature enable the commercial banks to advance credit for relatively larger durations, have been the most important category. The share of these deposits increased from one-half of the total in 1969 to 56 per cent by 1976 and remained at that level in 1980. More important than this is the fact that there has been a continuous and sharp increase in deposits of maturity of over five years. Such deposits which constituted just 6 per cent of the total term deposits in 1969 increased to 13 per cent in 1972, to 39 per cent in 1976 and further to 62 per cent in 1980.

7. The liberal refinancing facility provided by the term lending institutions (IDBI and NABARD) has been another factor facilitating the commercial banks to extend term loans.

**Conclusion**

The two important factors which facilitated the doubling of the share of term loans in the total advances of commercial banks during the period 1972 to 1981 were the sharp increase in term deposits (especially those with more than five years duration) and the liberal refinance facilities provided by the term lending institutions.

## APPENDIX I

### SCHEDULED COMMERCIAL BANKS' TERM LOANS (OUTSTANDING) 1972-81

(Amount in crores of rupees)

| As on last Friday | No. of Accounts | | Credit Limit | | Amount Outstanding | | Total Bank Credit (outstanding) excluding food procurement advances |
|---|---|---|---|---|---|---|---|
| | Term Loans | Total of all Accounts | Term Loans | Total Bank Credit | Term Loans | Total Bank Credit | |
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| December 1972 | 89,231 | 416,567 | 839 | 9,702 | 601 | 5,051 | 4,892 |
| | (21.4) | | (8.6) | | (11.9) | | (12.3) |
| June 1973 | 103,340 | 460,384 | 974 | 10,428 | 706 | 5,771 | 5,303 |
| | (22.4) | | (9.3) | | (12.2) | | (13.3) |
| December 1973 | 119,385 | 509,424 | 1,067 | 11,370 | 832 | 6,396 | 6,044 |
| | (23.4) | | (9.4) | | (13.0) | | (13.8) |
| June 1974 | 129,894 | 535,204 | 1,280 | 12,881 | 924 | 7,289 | 6,766 |
| | (24.3) | | (9.9) | | (12.7) | | (13.7) |
| December 1974 | 141,701 | 550,330 | 1,354 | 12,362 | 1,021 | 7,359 | 7,150 |
| | (25.7) | | (11.0) | | (13.9) | | (14.3) |
| June 1975 | 152,998 | 572,306 | 1,554 | 13,589 | 1,148 | 8,180 | 7,385 |
| | (26.7) | | (11.4) | | (14.0) | | (15.5) |
| December 1975 | 171,536 | 605,046 | 1,612 | 14,468 | 1,307 | 9,030 | 8,094 |
| | (28.4) | | (11.1) | | (14.5) | | (16.1) |
| June 1976 | 196,123 | 643,382 | 1,840 | 16,740 | 1,516 | 10,568 | 8,383 |
| | (30.5) | | (11.0) | | (14.3) | | (18.1) |
| December 1976 | 220,148 | 696,927 | 2,205 | 17,701 | 1,765 | 11,721 | 9,555 |
| | (31.6) | | (12.5) | | (15.1) | | (18.5) |

(Contd.)

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|---|---|---|---|---|---|---|---|
| June 1977 | 237,278 | 733,578 | 2,337 | 18,503 | 1,964 | 12,064 | 9,528 |
| | (32.3) | | (12.6) | | (16.3) | | (20.6) |
| December 1977 | 271,610 | 803,602 | 2,611 | 20,163 | 2,171 | 13,456 | 11,100 |
| | (33.8) | | (12.9) | | (16.1) | | (19.6) |
| June 1978 | 302,244 | 869,280 | 3,194 | 21,914 | 2,516 | 14,145 | 11,620 |
| | (34.8) | | (14.6) | | (17.8) | | (21.7) |
| December 1978 | 332,732 | 970,053 | 3,490 | 22,164 | 2,765 | 15,505 | 13,121 |
| | (34.3) | | (15.8) | | (17.9) | | (21.1) |
| June 1979 | 373,794 | 1047,325 | 3,879 | 24,487 | 3,142 | 16,826 | 13,830 |
| | (35.7) | | (15.8) | | (18.7) | | (22.7) |
| December 1979 | 420,848 | 1138,517 | 4,428 | 25,639 | 3,640 | 17,854 | 15,155 |
| | (37.0) | | (17.3) | | (20.4) | | (24.0) |
| June 1980 | 461,923 | 1201,912 | 4,849 | 26,952 | 3,928 | 18,426 | 16,016 |
| | (38.4) | | (18.0) | | (21.3) | | (24.6) |
| December 1980 | 519,635 | 1328,278 | 5,468 | 29,780 | 4,492 | 20,221 | 18,186 |
| | (39.1) | | (18.4) | | (22.2) | | (24.7) |
| June 1981 | 580,395 | 1440,250 | 6,292 | 30,385 | 5,036 | 21,322 | 190,18 |
| | (40.3) | | (20.7) | | (23.6) | | (26.5) |
| December 1981 | 651,671 | 1593,113 | 8,076 | 36,347 | 5,790 | 24,190 | 219,77 |
| | (40.9) | | (22.2) | | (23.9) | | (26.3) |

Note : 1) Data relate to accounts with credit limit over Rs.10,000/-

2) Figures in brackets given under Cols.1, 3 and 5 indicate percentages of term loans to totals reported in Cols.2, 4 and 6 respectively.

3) Figures in brackets under Col.7 indicate percentages of term loans under Col.5 to Total in Col.7.

(Source : Basic Statistical Returns)

# RESERVE BANK OF INDIA OCCASIONAL PAPERS

## APPENDIX II - OCCUPATION-WISE CLASSIFICATION OF OUTSTANDING CREDIT OF SCHEDULED COMMERCIAL BANKS-FOR TERM LOANS

(As on the last Friday of)

(Amount in lakhs of rupees)

| OCCUPATION | December 1972 | | | June 1973 | | | June 1975 | | | June 1977 | | | June 1980 | | | June 1981 | | | December 1981 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No.of accounts | Credit Limit | Amount outstanding | No.of accounts | Credit Limit | Amount outstanding | No.of accounts | Credit Limit | Amount outstanding | No. of accounts | Credit Limit | Amount outstanding | No. of accounts | Credit Limit | Amount outstanding | No. of accounts | Credit Limit | Amount outstanding | No. of accounts | Credit Limit | Amount outstanding |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| I. AGRICULTURE | 33,373 | 191,40 | 135,19 | 39,398 | 203,13 | 148,85 | 60,814 | 344,24 | 234,71 | 95,396 | 533,51 | 402,61 | 219,342 | 1,400,07 | 1,034,92 | 281,673 | 2,014,65 | 1,441,58 | 312,487 | 2,634,88 | 1,709,17 |
| 1. Direct Finance | 32,322 | 112,86 | 84,26 | 32,556 | 92,71 | 69,88 | 57,799 | 218,57 | 159,84 | 90,411 | 382,19 | 294,99 | 207,932 | 893,07 | 738,16 | 257,076 | 1,203,89 | 978,24 | 284,806 | 1,755,58 | 1,243,61 |
| 2. Indirect Finance | 1,051 | 78,54 | 50,93 | 6,842 | 110,42 | 78,97 | 3,015 | 125,67 | 74,87 | 4,985 | 151,32 | 107,62 | 11,410 | 507,00 | 296,76 | 24,597 | 810,76 | 463,34 | 27,681 | 879,30 | 465,57 |
| II. INDUSTRY | 17,229 | 393,88 | 289,99 | 19,750 | 446,17 | 335,45 | 28,547 | 650,67 | 534,69 | 38,043 | 982,40 | 848,48 | 61,343 | 1,675,51 | 1,389,96 | 77,177 | 2,094,48 | 1,756,05 | 85,506 | 2,859,30 | 2,000,88 |
| 1. Mining & Quarrying | 392 | 11,11 | 9,03 | 323 | 11,07 | 8,78 | 359 | 11,11 | 9,88 | 431 | 11,98 | 10,38 | 901 | 17,15 | 14,22 | 1,008 | 19,31 | 17,45 | 1,134 | 22,77 | 20,65 |
| 2. Food Manufacturing & Processing | 258 | 13,89 | 10,48 | 305 | 13,84 | 10,51 | 2,939 | 53,93 | 43,16 | 4,379 | 97,19 | 84,86 | 9,664 | 201,85 | 157,71 | 11,887 | 209,61 | 174,86 | 13,022 | 319,23 | 200,31 |
| 3. Beverage and Tobacco | 176 | 9,23 | 7,96 | 187 | 10,53 | 9,27 | 279 | 17,59 | 16,65 | 404 | 23,91 | 23,37 | 633 | 27,20 | 27,12 | 730 | 38,57 | 35,26 | 798 | 45,68 | 43,13 |
| 4. Textiles | 1,416 | 55,62 | 48,77 | 1,653 | 59,27 | 51,44 | 2,578 | 76,34 | 65,79 | 3,940 | 117,43 | 102,04 | 6,206 | 198,26 | 159,12 | 7,784 | 242,69 | 205,65 | 8,812 | 277,23 | 243,52 |
| 5. Paper, Paper Products and Printing | 1,311 | 17,16 | 14,54 | 1,513 | 19,53 | 17,01 | 2,013 | 28,73 | 22,44 | 2,636 | 40,84 | 34,85 | 4,978 | 124,03 | 118,32 | 6,236 | 169,03 | 136,17 | 6,912 | 190,78 | 152,48 |
| 6. Leather & Leather Products | 86 | 1,03 | 98 | 117 | 1,25 | 1,10 | 158 | 1,93 | 1,71 | 265 | 5,27 | 4,69 | 523 | 15,40 | 12,18 | 676 | 18,58 | 15,23 | 813 | 21,40 | 18,46 |
| 7. Rubber & Rubber Products | 329 | 4,05 | 3,70 | 355 | 3,90 | 3,39 | 583 | 11,89 | 10,85 | 755 | 31,81 | 30,92 | 1,271 | 44,77 | 46,22 | 1,528 | 49,70 | 52,35 | 1,709 | 58,09 | 53,77 |
| 8. Chemicals & Chemical Products | 1,729 | 45,16 | 37,28 | 2,016 | 70,00 | 49,75 | 2,907 | 114,68 | 107,45 | 3,785 | 152,68 | 153,08 | 6,782 | 341,18 | 262,35 | 7,982 | 363,22 | 339,44 | 8,622 | 418,97 | 350,54 |
| 9. Manufacture of Basic Minerals | - | - | - | 87 | 7,83 | 6,44 | 93 | 6,05 | 6,42 | 180 | 11,92 | 11,51 | 252 | 18,17 | 17,19 | 256 | 26,54 | 22,23 | 313 | 29,98 | 24,17 |
| 10. Cement | 29 | 1,11 | 99 | 24 | 1,01 | 75 | 46 | 5,37 | 4,54 | 52 | 4,27 | 4,05 | 510 | 15,95 | 12,95 | 649 | 31,83 | 27,16 | 727 | 34,61 | 26,80 |
| 11. Basic Metals & Metal Products | 1,599 | 47,29 | 34,31 | 1,921 | 52,87 | 35,83 | 2,942 | 77,53 | 62,66 | 3,539 | 112,90 | 108,71 | 6,974 | 170,04 | 160,49 | 8,728 | 214,98 | 196,91 | 9,240 | 257,89 | 236,34 |
| 12. Engineering | 2,456 | 73,91 | 39,19 | 2,764 | 73,20 | 43,60 | 4,233 | 96,37 | 63,33 | 5,448 | 128,77 | 103,18 | 9,476 | 232,45 | 182,14 | 11,463 | 296,99 | 219,07 | 12,659 | 586,76 | 240,34 |
| 13. Vehicle, Vehicle Parts & Transport Equipment | 1,748 | 13,82 | 11,34 | 1,979 | 16,69 | 13,40 | 2,237 | 28,35 | 20,81 | 2,134 | 31,39 | 26,48 | 2,715 | 68,19 | 56,56 | 3,985 | 80,71 | 59,33 | 4,813 | 92,87 | 71,46 |
| 14. Electricity-Generation, Transmission & Distribution | 225 | 13,38 | 13,39 | 229 | 23,95 | 22,57 | 278 | 37,48 | 28,78 | 279 | 78,77 | 45,28 | 142 | 59,59 | 38,03 | 303 | 143,19 | 92,17 | 476 | 198,91 | 128,68 |
| 15. Construction | 614 | 6,19 | 5,17 | 707 | 8,29 | 6,60 | 981 | 14,61 | 12,36 | 1,463 | 37,61 | 23,78 | 1,937 | 41,97 | 36,79 | 2,235 | 54,78 | 42,50 | 2,394 | 50,53 | 44,24 |
| 16. Others | 4,861 | 79,93 | 52,86 | 5,570 | 72,94 | 55,01 | 5,921 | 68,71 | 57,86 | 8,253 | 95,66 | 81,30 | 8,372 | 99,31 | 88,57 | 11,727 | 134,75 | 120,27 | 13,062 | 253,60 | 145,20 |
| III. TRANSPORT OPERATORS | 17,741 | 74,95 | 56,76 | 20,099 | 83,13 | 63,92 | 28,039 | 172,55 | 128,05 | 47,765 | 314,58 | 258,28 | 85,933 | 867,96 | 741,80 | 109,855 | 1,221,96 | 1,000,36 | 126,020 | 1,387,49 | 1,144,31 |
| IV. PERSONAL & PROFESSIONAL SERVICES | 4,256 | 32,89 | 28,60 | 4,863 | 41,36 | 34,50 | 6,818 | 62,78 | 55,76 | 9,505 | 97,99 | 111,11 | 16,925 | 194,23 | 161,59 | 20,163 | 205,20 | 178,72 | 22,045 | 249,59 | 257,25 |
| V. TRADE | 2,624 | 47,26 | 16,50 | 2,841 | 71,11 | 30,55 | 3,592 | 49,42 | 41,78 | 6,435 | 120,91 | 106,90 | 12,068 | 242,44 | 201,18 | 16,429 | 231,26 | 219,20 | 19,381 | 178,48 | 151,85 |
| VI. PERSONAL LOANS (INCLUDING CONSUMER DURABLES) | 9,146 | 42,55 | 31,14 | 10,743 | 43,67 | 38,01 | 17,858 | 140,34 | 76,65 | 28,675 | 130,79 | 114,77 | 54,591 | 266,92 | 227,09 | 62,822 | 297,42 | 258,14 | 71,374 | 397,95 | 308,33 |
| VII. ALL OTHERS | 4,862 | 56,54 | 42,93 | 5,646 | 85,19 | 54,44 | 7,330 | 134,46 | 76,67 | 11,059 | 156,33 | 121,96 | 11,721 | 201,62 | 171,07 | 12,276 | 227,31 | 182,41 | 14,498 | 368,65 | 218,29 |
| TOTAL BANK CREDIT (I+II+III+IV+V+VI+VII) | 89,231 | 839,47 | 601,11 | 103,340 | 973,76 | 705,72 | 152,998 | 1,554,46 | 1,148,31 | 237,278 | 2,336,51 | 1,964,11 | 461,923 | 4,848,75 | 3,927,61 | 580,395 | 6,292,28 | 5,036,46 | 651,671 | 8,076,33 | 5,790,08 |
| Of which Small-scale Industry | NA | NA | NA | NA | NA | NA | 24,985 | 227,35 | 161,20 | 34,934 | 276,44 | 234,33 | 52,172 | 515,71 | 432,90 | 65,451 | 644,81 | 554,16 | 73,083 | 1,235,17 | 667,94 |

Source - Basic Statistical Returns

**Review Article**

# ECONOMIC POLICY AND PLANNING IN INDIA

Professor Baljit Singh Commemoration Volume (eds.) A.K. Singh, T.S. Papola and R.S. Mathur, Sterling Publishers Private Limited, New Delhi 1984, pp.xviii + 467; Rs.200

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The volume under review has been brought out to commemorate the late Professor Baljit Singh, Head of the Department of Economics, Lucknow University (1954-74) who was a distinguished teacher, a keen researcher and an eminent educationist.

The volume contains twenty three essays organised into four parts dealing with (1) technology, manpower, demographic change and development, (2) institutions and development planning, (3) development patterns - national, regional and sectoral and (4) trade, fiscal and monetary policies for development.

It is rather difficult to review a book like this with such a wide coverage. The review therefore necessarily focuses attention on a few selected papers.

A key element in development is the problem of providing access to advanced technology at reduced cost. This is examined in the opening paper on 'Technological Transformation of the Third World' by Surendra J. Patel. Since the agreements on the transfer of technology contain several restrictive clauses like exclusive grant-back provisions, constraints on use and adaptation, price-fixing, double-tying and export restrictions, the developing countries have been attempting to restructure the legal environment for the transfer of technology. More specifically, they have attempted to bring about a revision of the Paris Convention and the Industrial Property System and establish an international code of conduct on the transfer of technology. The monopolistic rights conferred by the Paris Convention were consolidated in its six revisions but, of late, because of the initiative of the LDCs a new revision reflecting the changed historical circumstances and responsive to the needs and requirements of the LDCs is being negotiated in the World Property

**Technology Planning**

System. While the International Code of Conduct adopted by the U.N. General Assembly contains some provisions of far-reaching significance, Patel rightly pleads for strengthening the technological capacity of the Third World to reduce their dependence on advanced countries.

The obsession of many newly-freed Third World countries to achieve a metamorphosis on the economic front without undergoing the succession of stages of the developed countries has spawned indiscriminate and ill-planned import of technology resulting in a culture of dominance and dependency. This is what makes K.K. Subrahamanian's paper entitled 'Some Observations on Technology Planning' timely and welcome. The author rightly makes a strong case for technology planning as an integral part of the development strategy. Here he could have drawn on the Japanese experience to substantiate the point that improved technology should be sought. But before it is adopted, it should be thoroughly adapted to local conditions and further refined.

Ram Das in his paper 'Appropriate Technology: Scope and Rationale' lays down some important criteria for selection such as economic viability, technical feasibility, production of surplus, release of drudgery, adaptability to local socio-economic conditions, diffusion and dispersal, improvement in the quality of life, organisational, managerial and educational process. Some models of appropriate technology have already been developed and in fact are being widely used today. It is to be hoped that this would gain increasing acceptance in the coming years.

In India the variations in birth rate illustrate the correlation between female literacy, women's economic status and fertility. J.N. Srivastava ('Education and Demographic Behaviour') establishes a negative influence of education on fertility and infant and child mortality and its positive influence on family planning acceptance and marriage ages. Further the influence of female education on fertility, family planning acceptance, mortality and marriage is shown to be markedly higher than that of male education. The paper by Srivastava

**Population Policy**

thus provides important guidelines for population policy.

**Mixed Economy**

The adoption of planning in a democratic and mixed economy like India's is of considerable interest to scholars and critics the world over. A.K. Singh's paper on 'Planning in a Mixed Economy: The Indian Experience' opens with a brief but critical discussion on the theoretical framework of the mixed economy which provides the perspective for a refreshingly candid assessment of the Indian economy. A mixed economy generally implies the co-existence of the public and private sectors. But since the two co-exist in every economy, be it capitalist, socialist or mixed, albeit in different proportions, the existence of a 'substantial' public sector is, by itself, inadequate to characterise an economy as a 'mixed economy'. This necessitates, as the author rightly points out, an examination of the ideology behind the public sector, the environment in which it has to function and the class interest of the ruling elite which determines whether the public sector serves the interests of the selected few or becomes an instrument of socialist transformation of the country.

According to the author, in a mixed economy like ours it is by no means easy to ensure that the volume and the pattern of investment are in line with the Plan priorities because of the private ownership of property. To direct Plan investment into desired channels and/or sectors and to the desired extent, a variety of public policy measures including monetary, fiscal and direct controls are used. The regulatory mechanism has failed to develop and regulate industries in conformity with the Plan priorities and balanced regional development of the country because of the policy of ad hocism, the absence of any coherent policy frame and the operation of strong pressure groups both at the level of legislation and implementation.

A.K. Singh does not confine himself to a catalogue of India's achievements and failures but provides an insight into what ails the Indian economy and why. While the system has produced some important results like the growth in agriculture and industry, self-reliance and expanded social and economic infrastructure

it has failed abysmally to realise the objective of social justice. Poverty, inequality and unemployment still continue despite India's commitment to democratic socialism because of "the prevailing power structure and class relations, inadequacy of the planning techniques and policies, the weaknesses in the administrative process and the constraints imposed by the democratic political system".

**Land Reforms**

The purpose of land reforms is to streamline the social relations of production so that agricultural productivity can be maximised and a measure of social justice achieved. But because of the loopholes and deficiencies in administration, faulty administration, and political and social factors, land reforms have miserably failed to fundamentally alter the agrarian structure. P.C. Joshi in his perceptive paper 'Land Reforms and the Indian Elite: Problems and Dilemmas of Land Reforms in the Second Stage' advances the thesis that the qualitatively different social milieu necessitate a new perspective in relation to land reforms. The crux of his argument lies in a decisive shifting of the power base of the socio-political system from the rural rich to the rural poor and the involvement of the rural poor themselves in the process of altering the balance of power in rural areas because land reforms imply both the demolition of the old socio-economic order and the reconstruction of a new order.

**Public Distribution System**

The system of public distribution (PDS) in India which forms an integral part of the government's welfare policy has now been in vogue for more than four decades. Though the system was introduced with multiple objectives it can perhaps be maintained that the main purpose has been to provide essential commodities at reasonable prices to the public, particularly the weaker sections, and to bring about some price stability over time and in per capita availability through appropriate buffer stock and grain release operations. Kamta Prasad's paper on 'Scope and Functioning of the Public Distribution System in India' demonstrates that because of the inadequate stocks, the gradual rise in the procurement support prices and the absence of any clear idea about the quantity of commodities to be released,

the objective of price stability has met with limited success.

Despite the considerable increase in the number of fair price shops and coverage of population (both in absolute and percentage terms), the scope of the PDS, as the author brings out, continues to be inadequate in terms of the range and quantities of the commodities supplied. Further though the system is justified apparently for the poor, available supplies are largely pre-empted by the urban population. There are also the problems of inadequate and erratic supply, inadequate storage capacity, finance, administrative capability, high costs and microlevel difficulties in administering the PDS.

Despite the failure of the PDS in India to realise its avowed objectives fully it would be wrong to abolish the system. The author would have done well to suggest the extension of fair price shops to each village panchayat, regular replenishment of these shops with essential commodities including cloth, special quota for the weaker sections, operation of these shops by actual beneficiaries, some protection to consumers in relation to quantity, quality and prices of at least essential consumer goods, careful selection, special training and proper motivation of the personnel to make the system more meaningful and effective.

**Agricultural Growth and Stability**

At the time of the launching of the planning process in India agriculture was in a bad shape despite being the mainstay of the economy. India has succeeded in increasing the trend agricultural growth rate from 0.3 per cent during the period 1900-50 to 2.7 per cent in the last three decades and the total production of foodgrains has also trebled since Independence. But this growth has been characterised by violent fluctuations. Since past experience demonstrates that the growth of this sector determines the overall growth of the economy, the problem of sustaining a steady growth rate in agriculture has acquired a fundamental significance. S.R. Sen observed in 1967 that fluctuations were increasing in the period 1950-65 - a period of unprecedented growth. To examine whether

the situation has changed in the HYV period, M.V. Nadkarni ('Growth and Instability in Indian Agriculture') adopts the simple method of looking at each of the national level droughts since 1949-50 defined in terms of a conspicous decline in the production of foodgrains over the preceding two years. In view of the increased frequency of droughts he stresses the need for what he calls 'Agricultural Stabilization Tax Expenditure', instead of crop insurance, by which some farmers and regions would pay more in terms of premia than they would receive by way of indemnities, whereas others would receive more than they would pay. He also advocates a rural works programme, improved irrigation facilities, increased access to fertilisers and other modern inputs and removal of institutional constraints.

**Sectoral Shifts**

Structural transformation, the process by which a predominantly agrarian economy evolves into a diversified industrial economy, is a salient feature of modern economic growth. In almost all countries significant changes in the occupational pattern of population has been part of the process of structural transformation of the economy. R.S. Mathur's examination of the changes in the occupational pattern of population in an inter-State framework ('Dynamics of Sectoral Shifts in Employment: An Inter-State Analysis') reveals that not only most States (except Orissa, U.P. and West Bengal) have experienced shifts in employment in favour of the non-agricultural sectors, inter-State disparities in this respect have narrowed over time. The author has tried to explain these shifts in terms of demand and supply variables with a regression analysis. The results indicate that increasing capital intensity in the non-agricultural sector as well as the high labour-absorptive capacity of the new farm technology have tended to retard the process of structural changes in agriculture.

Indian planners have heavily emphasised industrialization for the amelioration of the socio-economic conditions of the rural poor. In a refreshingly original article, T.S. Papola ('Industrialisation for Rural Development') castigates the *a priori* notions of planners which have inhibited the treatment of the problem

with an open mind. Consequently rural industry has remained a marginal supplementary activity in the rural areas and an inefficient and unlinked appendage to the industrial structure of the country. The author cogently argues that for being an effective tool of rural development rural industries need to be linked up and integrated with the overall industrialisation process. This would require a dynamic approach to the questions of technology, employment, productivity, etc., in the rural areas.

**Rural Industrialisation**

While the legislative and executive relations between the Centre and the States have not been left uncriticised, the devolution of financial resources between the Centre and the States has evoked heated controversies. The transfers through the Finance Commission have increased from Rs.429 crores (30.3 per cent of the Centre-State resource transfers) in the I Plan to Rs.13,079 crores (47.2 per cent) in the V Plan but the transfers through the Planning Commission rose from Rs.880 crores in the I Plan to Rs.10,595 crores in the V Plan. In percentage terms this meant a decline from 62.3 to 38.4. Though the per capita Plan assistance is fairly progressively distributed, Plan assistance constitutes a higher proportion of poorer States' Plan outlay. D.T. Lakdawala's suggestion ('Plan Finances in a Federal Economy') to reduce the disparities between the rich and the poor States through changes in the level of administration of the States and other financial institutions, attitudes and approaches to development planning is sound.

**Transfer of Finances to States**

No economy, howsoever progressive or self-reliant, can remain immune to the interplay of international economic factors. Hence there is a strategic link between international economic issues and national development strategies of the developing countries. J.C. Saigal ('The Present World Economic Crisis and the International Economic Policy') relates the present world economic crises to the structure of world capitalism. The favourable conditions which spurred the post-Second World War economic growth no longer exist leading to the weakening of the accumulation process

**International Dimensions**

at the Centre. The impact on the economies at the periphery is far-reaching because of their structural dependence on the major industrial centres. The response of the policy makers in countries like India is based on the understanding of strengthening collective self-reliance because of the worsened world economic situation and the lack of proper response from the developed countries.

**Concluding Observations**

A broader technological base, a larger pool of scientific and technical personnel, a wider and deeper industrial base, the institutional and technological changes in agriculture, the increase in the savings rate, the impressive mobilisation of tax revenue, progress towards self-reliance and the improvement in the quality of physical life index are some of the hopeful aspects of India's development performance. These advantages now need to be consolidated, the growth of the economy accelerated and development efforts focused on the needs of the poor and the deprived.

The examination of a wide array of issues in development economics from the perspective of the developing economies both in their national and international settings makes the present volume a welcome addition to the growing body of literature on development in general and the transformation of the Indian economy in particular.

**Manoranjan Sharma***

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## CORRIGENDUM

In the article entitled 'Impact of Administered Prices on Wholesale Price Level (1970-71 to 1983-84)' published in December 1984 issue of the Reserve Bank of India Occasional Papers, the following corrections in the presentation of equations on page 244 have to be made. However, the results remain unaffect·

| Line No. from above | Printed as | To be read as |
|---|---|---|
| 5 | $P = A'.P + T_1.PR + M_1.PL + G_1.PG$ | $P = A'.P + PR.T_1 + PL.M_1 + PG.G_1$ |
| 6 | $P = (I-A')^{-1} (T_1.PR + M_1.PL + G_1.PG)$---(3) | $P = (I-A')^{-1} (PR.T_1 + PL.M_1 + PG.G_1)$ --- (3) |
| 8 | respectively. | respectively of order (n, 1); PR, PL and PG are diagonal matrices of order (n,n) |
| 18 | $P = (I-A'_1)^{-1}(B.P_k + T_1.PR + M_1.PL + G_1.PG)$ --- (5) | $P_1 = (I-A'_1)^{-1} (B'.P_k + PR_1.T_2 + PL_1.M_2 + PG_1.G_2)$ --- (5) |
| 20 | order (k,n-k). | order (k, n-k); $P_k$ is of order (k, 1); $P_1$, $T_2$, $M_2$ and $G_2$ are vectors of order (n-k, 1) and $PR_1$, $PL_1$ and $PG_1$ are diagonal matrices of order (n-k, n-k). Here A', B', etc., represent transpose of the matrices A, B, etc. |