Resource Mobilisation In The Private Corporate Sector

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NATIONAL INSTITUTE OF PUBLIC FINANCE
AND POLICY

The Private Corporate Sector occupies an important position in the industrial economy of the country. If the industrial sector has to grow in the country, the need for the mobilisation of adequate resources by the corporate sector, which plays the leading role in industry, becomes crucial. In this connection, one would like to know what have been the trends in resource mobilisation in the private corporate sector, how fast it has grown in relation to the needs for investment, and what have been the major avenues for mobilising the resources, and how the mobilised resources have been utilised.

The study presents a detailed assessment of the resource mobilisation effort in the large-scale segment of the Indian private corporate sector, engaged in manufacturing activities. The study covers the period 1962-63 to 1975-76, but the analysis of the major trends has been extended upto 1979-80. The study contains an analysis of trends in the mobilisation of gross resources (inclusive of depreciation), an assessment of the composition of resources mobilised and an econometric exercise on the determinants of gross resources mobilised. While the econometric exercises are related to aggregate data, the analysis of the trends and structural composition of mobilised resources is made both for the corporate sector as a whole and for different categories of companies classified according to the size of their total assets, their age and level of efficiency. An important contribution of the study consists of the empirical evaluation of the impact of government policies (in particular, fiscal and monetary policies) on the ratio of equity to debt finance and the composition of owned funds. Some policy implications are drawn on the basis of the empirical evidence, keeping in perspective the qualitative assessments by the leaders of industry, financial institutions and the government on the problems of resource mobilisation in the private corporate sector.

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PREFACE

The National Institute of Public Finance and Policy is an autonomous, non-profit organisation whose major functions are to carry out research, do consultancy work and undertake training in the area of public finance and policy. In addition to carrying out on its own research studies on subjects that are considered to be important from the national point of view in terms of policy formulation, the Institute also undertakes research projects on subjects of public interest, sponsored by member governments and other institutions.

The present study was sponsored by the Associated Chambers of Commerce and Industry of India (ASSOCHAM), one of the sponsors of the Institute. In April 1979, the President of Assocham, Mr. A.L. Mudaliar, proposed that the Institute undertake a fairly comprehensive study of the trends in resource mobilisation in the private corporate sector during the past 10-15 years. According to the terms of reference agreed upon between Assocham and the Institute, the study was to bring out the major trends in the volume and pattern of resource mobilisation in the private corporate sector and the problems faced by the corporate sector in this area, covering such aspects of the subject as (*i*) the components of resources mobilised, (*ii*) the sources of finance, (*iii*) the pattern of utilisation of resources, *i.e.*, the composition of gross capital formation by the corporate sector and (*iv*) the effects of governmental policies, especially fiscal and monetary policies, on the corporate sector's financing strategies and on its ability to mobilise resources. In analysing the various facets of the problem as detailed above, attention was to be paid to the differences in the composition of assets formation and in the pattern of resource mobilisation as between categories of companies classified according to size and industries. The Institute agreed also to make suggestions regarding major policy changes needed to promote healthier trends in, and a larger volume of, mobilisation of resources by the private corporate sector.

An Interim Report was submitted in November 1979, which formed the basis of discussion between the representatives of Assocham and the concerned staff of the Institute. In determining the contours and content of the study, the suggestions offered on the basis of the Interim Report have been kept in mind. The Final

Report was submitted to Assocham in April 1980 and a National Workshop to discuss the findings of the Report was organised by Assocham at Bombay on August 8, 1981, under the chairmanship of Dr. I.G. Patel, Governor, Reserve Bank of India.

The study has been conducted by a team of economists headed by V.D. Lall, who was the project leader. In this capacity, he planned and supervised the study. The other members of the project team were Srinivasa Madhur, K.K. Atri and Ranjana Ghoshal.

In addition to his over-all responsibilities as the project leader, V.D. Lall carried out the statistical and economic analysis on the pattern of resources mobilised and their use contained in Chapters II to IV. He also conducted most of the interviews with the leaders of industry and financial institutions. Srinivasa M. undertook the study of the impact of governmental policies on the resource mobilisation effort of the private corporate sector and was mainly responsible for carrying out the econometric exercises (except the computer operations) the results of which are reported in Chapters V and VI. K.K. Atri was largely responsible for the selection of the NIPFP sample and was in charge of processing the data on the computer. He prepared the programmes relating to the in-house processing of data on the Institute's computer. In addition, he undertook statistical exercises such as the deflation of current price series and carried out the econometric exercises relating to the determinants of resource mobilisation. R. Ghoshal worked on the definition of concepts in symbolic form to be reproduced in the Report and supervised the preparation of a number of tables. She also carried out part of the analysis of the trends in resource mobilisation on the basis of RBI data. The major part of her work, however, related to the Interim Report.

Chapters I to IV were drafted by V.D. Lall, Chapters V and VI by Srinivasa M and Chapter VII jointly drafted by R.J. Chelliah and V.D. Lall.

S. Gopalakrishnan and A.K. Gupta rendered research assistance throughout the duration of the project and helped the team in various ways. Vijaya Devi Kasana, Sujata Dutta and G. Narasingji also worked on the project for varying periods of time mainly in relation to data collection and tabulation and comparison of tables.

The Governing Body of the Institute does not take responsibility for any of the views expressed by the authors in the Report. The responsibility for the conclusions arrived at and the views expressed belongs to the Director and the staff of the Institute and more particularly to the authors of the Report.

March 23, 1982

R.J. CHELLIAH
Director

ACKNOWLEDGEMENTS

In any data-based empirical research work, a number of researchers have to work together as a homogeneous team. In this regard, I was fortunate to get full cooperation from my team members; the nature of their contributions has been specified in the preface. I must specially mention the contributions of Srinivasa Madhur, K.K. Atri, S. Gopalakrishnan and A.K. Gupta. R.J. Chelliah took keen interest in the project throughout its duration. I have drawn heavily on his time and expertise. He offered various suggestions from time to time and also went through the whole draft meticulously.

A number of leading industrialists and senior officials of companies, financial institutions and the government gave us time for discussions within their tight schedule, at short notice; these discussions turned out to be very enlightening. In particular, I wish to mention the discussions I had with S. Kumarasundaram (ICICI), P.K. Nanda (Metal Box), R.K. Hazari (Kamani), M.V. Arunachalam (Tube Investments), A.C. Shah (Bank of Baroda), S. Krishnamurthy (TELCO) and M.R. Mayya (Finance Ministry). A.L. Mudaliar offered useful comments on the Interim Report and M.H. Mody (Tata) on the Final Report. I.G. Patel, R.K. Hazari, P.R. Brahmananda, N.N. Pai and H.T. Parekh among others offered useful observations on the Report at a National Workshop organised by Assocham at Bombay on August 8, 1981 to discuss the findings of the study. These observations have been taken into account while revising the Report for publication.

The basic data were processed partly at the computer centre of the Indian Meteorological Department, Government of India and partly at that of the Council for Social Development. I am grateful to these two institutions for making available to us the computer time, and to K. Venkataramani, then of the Council for Social Development for writing a number of programmes.

Sushila Panjwani rendered valuable secretarial assistance throughout the duration of the project. The final typing of the report was done mainly by N. Natarajan and Satish Prabhu and partly by Suhas Kumar.

V.D. LALL
Project Leader

March 23, 1982

RESOURCE MOBILISATION IN THE PRIVATE CORPORATE SECTOR

I. OBJECTIVES, METHODOLOGY AND CONCEPTS

1. Objectives of the Study

The private corporate sector occupies an important position in the industrial economy of the country. While there has been some decline in its relative contribution to corporate investment and income generation over the years due to the phenomenal growth of the public sector, yet the contribution remains substantial. Precise estimates of the magnitude of investment in the private corporate sector are not available, but the Reserve Bank of India has presented estimates on the basis of identifiable sources of funds flowing into the sector through financial intermediaries and from internal sources. Such data show that total investible resources mobilised by the private non-financial corporate sector was Rs. 1,770 crore in 1975-76 and Rs. 1,777 crore in 1977-78. Investment in gross fixed assets and inventories during the same years amounted to Rs. 1,732 crore and Rs. 1,522 crore and these formed 98 per cent and 86 per cent, respectively, of gross capital formation in the private corporate sector in the two years (Table I.1).

If the industrial sector has to grow in the country, the need for the mobilisation of adequate resources by the corporate sector, which plays the leading role in industry, becomes crucial. In this connection, one would like to know what have been the trends in resource mobilisation[1] in the private corporate sector, how fast it has grown in relation to the needs for investment to create new

[1]By resource mobilisation in the country, we mean the total investment funds that have been mobilised. For the corporate sector, the term as used in the study, refers to the gross resources mobilised from within the corporate sector as well as from external sources such as the capital market, financial institutions, other lending agencies and trade and business associates. For a more comprehensive definition see section 8.

TABLE I.1

Investment by Private Non-Financial Corporate Sector
(At current prices)

(Rs. crore)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78
1. Capital raised (including debentures)	96	89	87	149	113	116	194	101	105
Less: intra-sector flows (estimated)	19	18	17	30	23	23	39	20	21
Net capital raised	77	71	70	119	90	93	155	81	84
2. Retained profits	142	168	158	168	367	497	219	215	193
3. Tax provision	—	—	—	—	—	—	—	—	46
4. Borrowings	391	387	424	765	894	1366	744	468	524
5. Sundry creditors	—	—	—	—	—	—	—	182	184
6. Depreciation	349	380	396	494	526	592	652	677	746
7. **TOTAL (1 to 6)**	**959**	**1006**	**1048**	**1546**	**1877**	**2548**	**1770**	**1623**	**1777**
8. Gross fixed assets and inventories	934	978	1022	1522	1684	2511	1732	1205	1522

Source: Reserve Bank of India, *Reports on Currency and Finance* (annual).
—: Indicates not available.

capacity as well as for replacements, what have been the major avenues for mobilising such resources and finally what has been the performance in the past. It would also be desirable to have an idea of the pattern of utilisation of the mobilised resources in order to see to what extent long-term fixed capital formation requirements could be met and whether long-term mobilised resources have been utilised for the purpose for which they were mobilised. One more aspect which assumes importance relates to the major determinants of the resource mobilisation effort, particularly, the factors which affect the principal components of mobilised resources. Hence the need for this study.

The major objectives of the study are, accordingly, as follows:

(*i*) Tracing the trends in resource mobilisation;
(*ii*) Assessing the pattern of resource mobilisation;
(*iii*) Offering an economic interpretation of the changes in the structural pattern of the resource mobilisation effort;
(*iv*) Analysing the utilisation of mobilised resources; and
(*v*) Quantifying the effects of government policy on the volume and composition of mobilised resources.

2. Period of Study

The analysis of the trends in resources mobilisation was carried out on the basis of data for a 15-year time period, 1961-62 to 1975-76[2]. This enabled us to measure growth over a 14-year period, 1962-63 to 1975-76. The analysis was divided into sub-periods that were marked off by the noticeable variations in the economic conditions that occurred during the longer period. During the early years of the sixties, which coincided with the Third Five Year Plan, there was a fairly widespread growth of the industrial base. Many new industrial products were introduced, among these being man-made fibres, electronic equipment, basic drugs, petrochemicals, industrial machinery and newsprint. The data on industrial production showed a definite and noticeable increase; the index of industrial production (base 1960 = 100) rose from 100 in 1960 to 150.9 in 1965. This achievement during the first half of the sixties was substantially better than the achievement during the fifties when the

[2] An analysis extending upto 1979-80, using data available after the completion of this study is presented in Annexure I.

index (base 1951 = 100) increased by 51.1 per cent between 1951 and 1959 (Table I.2).

In 1966, there was some setback in industrial operations caused particularly by the cut in plan expenditure during the non-plan years. The index of industrial production was 152.4 in 1966 (an increase of only one per cent over 1965 as compared to a minimum annual increase of 7.1 per cent during the first half of the sixties) and the index fell to 151.4 in 1967. The recessionary conditions which started from the structural fabrication industry soon spread to other engineering industries and then to chemicals and consumer goods industries. However, by the time other industries were affected by the recessionary forces, some of the industries affected earlier showed signs of recovery. The recovery even upto 1975-76 was, however, not enough to enable the industrial sector to attain an annual growth rate in their production of a level attained during the first half of the sixties. But definitely the low levels of 1966 and 1967 had been improved upon.

In the light of the changes in the economic conditions described above, we first divided the study period into three sub-periods: pre-recession period of good economic growth (1961-62 to 1964-65), the period of recession (1965-66 to 1968-69), and the post-recession period (1969-70 to 1975-76). The post-recession period was further divided into two sub-periods as inflationary pressures became quite noticeable particularly after the oil price hike in 1973. The four sub-periods then are as follows:

(*i*)	Pre-recession period	1961-62 to 1964-65
(*ii*)	Recession period	1965-66 to 1968-69
(*iii*)	Post-recession period (a)	1969-70 to 1971-72
(*iv*)	Post-recession period (b)	1972-73 to 1975-76

It may be mentioned here that the data on industrial production are in terms of the calendar year, but financial data that we used in our analysis are not in terms of the calendar year. Hence, the recovery in physical terms would be reflected in financial data only with a lag and a strict coincidence in the two sets of data cannot be expected.

TABLE I.2

Output of Manufacturing Sector (1951-52 to 1975-76)

	Index of industrial production		Income originating in registered manufacturing sector (1970-71 prices)	
	Index	Per cent change over the previous year	Income[1] (Rs. crore)	Per cent change over the previous year
	(Base 1951=100)			
1951	100.0	—[3]	—	—
1952	103.6	3.6	—	—
1953	105.6	1.9	—	—
1954	112.9	6.9	—	—
1955	122.4	8.4	—	—
1956	132.6	8.3	—	—
1957	137.3	3.5	—	—
1958	139.7	1.7	—	—
1959	151.1	8.2	—	—
	(Base 1960=100)			
1960	100.0	—	—	—
1961	109.2	9.2	2064	—
1962	119.7	9.6	2334	13.1
1963	129.7	8.4	2548	9.2
1964	140.9	8.6	2786	9.3
1965	150.9	7.1	2875	3.2
1966	152.4	1.0	2788	7.0
1967	151.4	—0.7	2780	—0.3
1968	161.1	6.4	2920	5.0
1969	172.5	7.1	3361	15.1
1970	180.7	4.8	3484	3.7
1971	188.3[2]	4.2	3550	1.9
1972	199.1[2]	5.8	3695	4.1
1973	202.4[2]	1.6	3896	5.4
1974	206.5[2]	2.0	3924	0.7
1975	215.6[2]	4.4	3970	1.2

Sources: 1. Government of India, C.S.O. (1976, 1979). *National Accounts Statistics.*
2. Government of India, C.S.O. (1977). *Statistical Abstract.*
3. Reserve Bank of India. *Reports on Currency and Finance* (annual).

Note : [1]The figures relate to financial year; for example, 1960 refers to 1960-61.
[2]These figures have been converted to 1960 base from their original base year 1970=100.
[3]—: Not computed.

3. Sources of Data

Two sources of data have been used in this study:

(*i*) Company finance data published periodically by the Reserve Bank of India (RBI data) for samples of large and medium public limited and private limited companies in the private corporate manufacturing sector;

(*ii*) Company finance data of a sample of 99 large public limited companies in the private corporate manufacturing sector (NIPFP sample). The sample was chosen from among all the large manufacturing companies operating in the private corporate sector, on the basis of stratified random sampling, and it represented 23 per cent of the paid-up capital of all large (with paid-up share capital of Rs. 1 crore or more) manufacturing companies operating in the country. The data were specially compiled for the sample companies from the *Bombay Stock Exchange Directory*.

Both the sources of data relate exclusively to manufacturing companies and, therefore, exclude investment, services, trading, mining, banking and other non-manufacturing units in the private corporate sector; they also exclude small companies, foreign companies and government companies.

The RBI data were classified only under three sub-periods, due to the changing size of the RBI sample, each sub-period coinciding with a change in the sample size. The NIPFP data were classified under more appropriate sub-periods as the data for the whole time series were homogeneous. The NIPFP sample fully represents the major areas of industrial operations in the private corporate sector. It was scientifically selected on the basis of stratified random sampling procedure.

This study is based primarily on the study and analysis of sample data canvassed by the NIPFP (NIPFP sample data); some comparisons with the results that emanate from an analysis of the RBI sample data are, however, presented. The disaggregated results by industry groups and other groups of public limited companies is based only on the NIPFP sample data. The analysis of private limited companies is based on the RBI data. The econometric exercises in chapters V and VI are also based on the RBI data. Even though the NIPFP sample data were available for 15 years, there

was some irregular behaviour in the data in three of the individual years and if these three years were excluded, the NIPFP sample would have left only 12 observations; statistically, these were inadequate to draw any definite conclusions. On the other hand, the RBI data were available for a longer time period. We have taken the RBI data for 20 years and in only two of these years there was some irregular behaviour, leaving 18 observations for our econometric exercises.

4. NIPFP Sample

(*a*) *Selection of NIPFP sample*

The list of all large and medium public limited companies operating in the private corporate sector with a paid-up share capital of Rs. 50 lakh or more was obtained from the Company Law Board, Ministry of Company Affairs; there were 1138 companies in this list compiled for the year 1975-76. From this list we first eliminated companies having paid-up share capital of less than Rs. 1 crore and secondly, from the remaining companies, also the companies which were not engaged in manufacturing activities but operating in the areas of trading, services, finance, agriculture and mining.

The company population from which the sample was constituted then consisted of 431 companies with a combined paid-up share capital of Rs. 1537 crore. We intended to have a sample coverage in terms of number of companies of about one-fifth of the company population as defined above. Random numbers were generated on the basis of a five-fold classification of the population companies by industry groups and a three-fold classification by size groups, size being measured in terms of paid-up share capital. The 431 companies in the population were then distributed among the five industry groups and the three size groups and the random numbers, generated on our own, were used to select the sample companies. Subsequently, we found that in the case of some companies we could not get all the required data from the *Bombay Stock Exchange Directory*. Further, as it was necessary for the purpose of our study to have a homogeneous sample for the whole period, we also excluded companies which were not operating throughout the period 1961-62 to 1975-76; in other words, we excluded the companies which were registered after 1961-62[3]. We replaced such

[3]There were only three such companies in the sample.

companies by others having subsequent serial numbers and thus we ultimately constituted a sample of 99 companies. The NIPFP sample, so constituted, accounted for 24 per cent of the total company population (in terms of numbers) and 25.7 per cent of their total paid-up share capital in 1975-76.

The coverage of the NIPFP sample, in terms of both the size of the company population and their paid-up share capital, can be considered to be satisfactory. As the stratifiied random sampling technique was adopted for the selection of the NIPFP sample and, further, as the NIPFP sample is homogenous throughout the period of study, unlike the RBI sample, we feel that our aggregate as well as the sectoral results derived on the basis of the NIPFP sample can claim to represent more faithfully the realities of the corporate situation.

(*b*) *Sectoral Break-up*

As has been indicated in sub-section 4(a), the NIPFP sample took into consideration the distribution of companies according to five industry groups and three size groups. As such, the sample reflects adequately the pattern of resource mobilisation that can be expected for the large-scale private corporate manufacturing sector as far as these industry and size groups are concerned. The five broad industry groups were, for the purpose of analysis, further categorised into several distinct industrial groups, 14 in number. Our analysis of the behaviour of the five broad industry groups is on firm grounds as the sample was chosen so as to represent them. As pre-determined weights were not given to the 14 individual industry groups, the results of our analysis may not fully reflect the pattern of resource mobilisation in each of these 14 industry groups in the whole relevant corporate population.

The size-wise analysis for the NIPFP sample, for the three size groups, was based on the following definition of size in terms of paid-up share capital and total assets:

		In terms of	
		Share capital	*Total assets*
(*i*)	Small companies	Less than Rs. 5 crore	Less than Rs. 15 crore

(*ii*)	Medium companies	Rs. 5 crore to less than Rs. 10 crore	Rs. 15 crore to less than Rs. 30 crore
(*iii*)	Large companies	Rs. 10 crore and above	Rs. 30 crore and above

The classification into 'small', 'medium', and 'large' companies, as defined above, is with reference to only the NIPFP sample of 99 companies. If we take the corporate population as a whole, none of the NIPFP sample companies could be termed small; in fact, they could be more appropriately termed medium and large companies. However, for facilitating our analysis of groups of companies within the NIPFP sample, the three-fold classification by size as defined above was adopted.

It may be pointed out that only the results that emerge from the size-wise analysis based on paid-up share capital can be construed to be representative of the situation in the large scale corporate sector (as the size groups were given appropriate weights in the sample selection); the results of the analysis based on the total assets as the measure of size cannot be so construed.

Even though at the stage of selecting the NIPFP sample, weights were given only to industry and size groups in the relevant corporate population, we classified the NIPFP sample companies also on the basis of some other criteria in order to assess the variations in the pattern of resource mobilisation by different groups of companies classified on the basis of such criteria. We classified companies on the basis of the year of their incorporation as a public limited corporate entity, according to their location (*i.e.*, the location of their registered office) and according to the level of corporate efficiency as measured by the compound growth rate of their gross fixed assets and their effective tax liability.

The age-wise analysis was made under the following four age groups:

(*i*) Very old companies: incorporated before and upto 1935;
(*ii*) Old companies: incorporated between 1936 and 1950;
(*iii*) Recent companies: incorporated between 1951 and 1955; and
(*iv*) New companies: incorporated between 1956 and 1961.

It may be pointed out that the age-wise classification into 'very-

old', 'old', 'recent' and 'new' was only introduced to facilitate the analysis of the differential behaviour of companies within the sample. As none of the sample companies were incorporated after 1961, and, therefore, all of them were in existence for 15 years or more, none of them could strictly be considered to be new.

The location-wise analysis, based on the location of the registered office of the company (irrespective of the location of the factory/factories) was made under the following three groups:

(*i*) Major industrial centres such as Bombay, Ahmedabad, Calcutta, Kanpur, Madras and New Delhi;

(*ii*) Locations adjacent to the major industrial centres such as Lucknow, Pune and Faridabad;

(*iii*) Other locations.

The efficiency-wise analysis was made under the following three groups in terms of the compound growth rate of gross fixed assets and the effective corporate tax liability;

(*i*) Companies with low average rates: less than 7.5 per cent for growth of gross fixed assets (compound rate) and less than 30 per cent for effective tax liability;[4]

(*ii*) Companies with average rates: between 7.5 per cent and 12.5 per cent for growth in gross fixed assets and between 30 per cent and 39 per cent for effective tax liability;

(*iii*) Companies with above average rates: above 12.5 per cent for growth in gross fixed assets and above 39 per cent for effective tax liability.

(*c*) *Sample Distribution*

The NIPFP sample of 99 companies had a total paid-up share capital of Rs. 395 crore in 1975-76. The distribution of the sample companies and their paid-up share capital into disaggregated groups is presented in Table I.3.

5. Aspects of Analysis

The analysis of trends in resource mobilisation and its changing composition over time was first made at the macro level. The

[4]Effective tax rate was measured in terms of tax provision as per cent of profits before tax.

TABLE I.3

Distribution of NIPFP Sample (1975-76)

	Number of companies		Paid-up share capital	
	Number	per cent	Rs. crore	per cent
I. Size-groups (by share capital)				
a. small	80	80.81	181.62	45.98
b. medium	12	12.12	85.63	21.68
c. large	7	7.07	127.76	32.34
II. Size-groups (by total assets)				
a. small	49	49.50	81.53	20.64
b. medium	28	28.28	90.04	22.79
c. large	22	22.22	223.44	56.57
III. Age groups				
a. very old	31	31.31	112.51	28.48
b. old	39	39.40	165.05	41.79
c. recent	4	4.04	15.29	3.87
d. new	25	25.25	102.16	25.86
IV. Location groups				
a. major industrial centres	23	23.23	72.09	18.25
b. around major industrial centres	68	68.69	292.06	73.94
c. far from major industrial centres	8	8.08	30.86	7.81
V. Industry groups				
a. chemicals	15	15.15	58.84	14.90
b. engineering	31	31.31	125.31	31.72
c. textiles	19	19.19	59.21	14.99
d. food products	7	7.07	14.24	3.60
e. miscellaneous	27	27.28	137.41	34.79
VI. Growth rate groups				
a. below average	21	21.21	78.85	19.96
b. average	36	36.36	110.18	27.90
c. above average	42	42.43	205.98	52.14
VII. Tax liability groups				
a. below average	45	45.46	173.53	43.93
b. average	14	14.14	85.78	21.71
c. above average	40	40.40	135.70	34.36
TOTAL	**99**	**100.00**	**395.01**	**100.00**

study of the salient structural changes in the pattern of resource mobilisation over the 14-year period was supplemented by an analysis of the trends in the sub-periods and also by year to year analysis. The main purpose was to identify and bring out the important structural variations and to attempt an economic explanation for the variations. The analysis was also supplemented by an econometric study of the year to year variation in gross mobilised resources. An analysis was then made of the pattern of use of the mobilised resources for both fixed capital formation and inventory build-up. The objectives were to assess the extent to which mobilised long-term resources could meet the requirements of fixed capital formation and to examine whether fixed capital formation had grown fast enough.

The analysis of the sources and uses of mobilised resources was made in current values and also in real terms, to arrive at the real growth in resources and in capital formation in the private corporate sector.

Certain econometric exercises were carried out to assess the extent to which, and the manner in which, selected categories of government policies could have affected the pattern of resource mobilisation. The government policies selected for the quantitative analysis were fiscal policy as reflected in the effective corporate tax rate at which the tax was paid by the private corporate sector and monetary policy as reflected by the bank rate and credit availability. The time horizon was extended to 20 years, 1956-57 to 1975-76, for the econometric exercises.

6. Sectoral Studies

The macro level analysis of the pattern of resource mobilisation was supplemented by micro level studies in respect of selected individual industries and different groups of companies, depending upon the size of operations, location, age and the level of economic efficiency, the last being taken to be reflected by the level of effective tax liability and the rate of growth of gross fixed assets. A comparative study was also made of public limited companies *vis-a-vis* private limited companies.

The purpose of such micro level studies was to examine various possible economic explanations for the observed structural changes in the pattern of resource mobilisation of the corporate sector.

7. Qualitative Assessment

In order to identify the problems encountered by the private corporate sector in raising resources for use in capital formation, and also to have an idea about the ways in which the private corporate sector felt such problems could be resolved, we discussed these issues with a number of selected leaders of industry and financial institutions. We also obtained their reactions to our major findings. These qualitative opinions were kept in perspective while framing the policy-oriented suggestions in chapter VII.

8. Definition of Concepts

Resource mobilisation in our study was defined as the sum of the net increase, between two points of time, in paid-up share capital, reserves and surplus, long-term and short-term borrowings, debentures, depreciation and net miscellaneous current and non-current liabilities. Net miscellaneous liabilities were worked out by deducting current assets (such as loans and advances, investment, cash and bank balances, other debtor balances and other assets) from miscellaneous liabilities (such as trade dues, tax provision, and other current and non-current provisions and liabilities).

The flow of funds data compiled from balance sheets, thus, formed the basis for the measurement of resource mobilisation.

Paid-up share capital, equity plus preference, is obtained partially from internal sources by capitalisation of reserves through issue of bonus shares and partially from external sources, as new issues from the capital market and the premium on new issues. We have not shown separately forfeited shares but these, according to the RBI data, were negligible at 0.06 per cent of the paid-up share capital of the RBI sample companies in 1975-76.

It may be mentioned here that bonus shares do not represent mobilisation, but rather a transfer of resources from reserves to share capital. Their issue does have, however, a significant bearing on the corporate image in the capital market.

Apart from internal resources mobilised as reflected in the bonus shares, the other internal sources are statutory reserves like the development rebate reserve, the capital reserves built out of the proceeds arising from revaluation of assets and from

capital gains on the sale of assets, and other reserves which are dependent exclusively upon the annual internal plough-back. Paid-up share capital and reserves and surpluses together represent the owned funds of the companies.

Besides the stock market, other external sources from where the corporate sector mobilises resources include institutional and non-institutional lending agencies. While long-term resources for fixed capital formation are obtained from the long-term financial institutions, the commercial banking sector, government agencies and other miscellaneous sources, short-term working capital accommodation is obtained from commercial banks, trade and business associates and miscellaneous sources. The factors which affect the volume of long-term and short-term borrowings are not necessarily identical.

We have made our estimates of the break-up of long-term and short-term borrowings for the RBI sample for the period 1970-71 to 1975-76 by applying the balance sheet (BS) derived ratio of long-term borrowings to total borrowings from 'banks' and 'others' to the data on total borrowings from these sources as available in the sources and uses of funds (SUF) statements. In the case of the earlier period 1960-61 to 1965-66, however, such comparable data were not available even in the BS statements and the ratio of long-term borrowings to total borrowings from banks and others in 1965-66 was used to split such total borrowings into long-term and short-term borrowings. Total long-term borrowings for 1960-61 to 1965-66 were then computed by aggregating the borrowings from statutory financial corporations, debentures and other mortgages and the estimated long-term borrowings from 'banks' and 'others'. For the NIPFP sample, data were available only under two broad categories: short-term and long-term loans.

Resources from net miscellaneous sources, as indicated earlier, are those mobilised from suppliers of equipment, trade associates and business partners, etc.

An important internal source of finance is the annual accretion of depreciation on corporate fixed assets. Such funds are often used for meeting working capital obligations, though they are primarily meant to finance replacement of fixed capital. These funds represent usable resources available to the corporation and should therefore be regarded as one of the constituents of resources that are mobilised by the corporate sector; to the extent these funds

are available, the dependence on external funds can be said to be reduced. For the purpose of the econometric exercises relating to the study of the effect of fiscal and monetary policies on the resource mobilisation effort, however, depreciation was excluded since it is a wholly allowable deduction under the Income-tax Act and it is not affected by tax laws relating to corporate profits tax rate and the package of fiscal reliefs.[5]

The development rebate was also a statutory obligation which was not influenced by year to year variation in fiscal and monetary policies (unless changes were incorporated which directly affected the scale of the development rebate itself). The development rebate was included among the components of mobilised resources, because, even though it was a statutory obligation, it was not binding when allocable profits were not available and if unavailed of, could be carried forward for eight years. The development rebate benefit automatically lapsed if allocable profits were not available during the eligibility period. Subsequent to the period covered in this study, the development rebate was replaced by an investment allowance.

Gross mobilised resources are utilised for financing capital formation in the form of fixed assets and inventories. As such, the concept of gross mobilised resources used in this study would be equal to gross capital formation. Symbolically, the presentation would be as follows:

$$GCF_C = GRM$$

$$GCF_C - (NW + D - M_A) = TB + M_L$$

or

$$GRM = NW + D + TB + (M_L - M_A) \quad .. \quad 1$$

where

$$NW = PUC + RS \quad .. \quad 1(i)$$

$$TB = LTB + Db + STB \quad .. \quad 1(ii)$$

$$M_L = (Pr + TrCL + NCL) \text{ and} \quad .. \quad 1(iii)$$

$$M_A = (LA + I + CB + OA) \quad .. \quad 1(iv)$$

[5]Exclusion of depreciation from the sources side of the flow of funds is a common practice in econometric studies on the pattern of corporate finances. See, for example; Venkatachalam and Sarma (1978), King (1977) and Sastry (1966).

The symbols have the following connotation:

CB	—	cash and bank balances,
D	—	depreciation provision in the current year,
Db	—	debentures,
GCF_C	—	gross capital formation,
GRM	—	gross resources mobilised,
I	—	investment,
LA	—	loans and advances and other debtor balances,
LTB	—	total long-term debt or long-term loans and debentures,
M_A	—	gross miscellaneous assets,
M_L	—	gross miscellaneous liabilities,
$(M_L—M_A)$	—	net miscellaneous liabilities or net of miscellaneous assets,
NCL	—	miscellaneous non-current liabilities,
NW	—	net worth,
OA	—	other assets,
P_r	—	provision for taxation (net of advance income tax) plus other current and non-current provisions,
PUC	—	paid-up share capital,
RS	—	reserves and surplus comprising of development rebate reserve, capital reserve and other reserves,
STB	—	short-term borrowings,
TB	—	total borrowings, consisting of debentures and long-term and short-term loans, and
TrCL	—	trade dues and other current liabilities.

9. Limitations of Data Used

(*a*) *RBI Data*

The composition of the RBI sample companies is not the same for the different periods; over the 15-year period that we covered, there were three different sample sizes for public limited companies, namely, 1333 companies for the period 1960-61 to 1965-66 (series I), 1501 companies for the period 1966-67 to 1969-70 (series II) and 1650 companies for the period 1970-71 to 1975-76 (series III). A growth rate analysis for the 15-year period was not possible unless the sample data were blown up; in fact, any analysis on the basis of

absolute amounts would have become inappropriate. The data were, however, useful in studying the variations in the structural composition of resource mobilisation from year to year and from period to period. The average annual growth rates for each of the periods do reflect to a considerable extent the variations in growth rates over the 15-year time horizon.

An operational problem arose in comparing the resource mobilisation data from the SUF statement with those derived from the BS data (difference between year t and year t_{-1}). The two sources did not always yield identical results. Our discussion with the Statistics Division of the Reserve Bank of India revealed that the discrepancy arose because of various adjustments made by the Reserve Bank of India for taking into account changes in the accounting years, amalgamation of companies and currency value adjustments due to devaluation and revaluation. The Reserve Bank of India does not provide data on such adjustments.

(*b*) *NIPFP Data*

The problems that arose in the handling of the RBI sample data due to variations in the accounting years, changes in currency values and amalgamation of companies hold true for the NIPFP sample. The last was not so serious as the NIPFP sample companies were the same throughout and there were no significant takeovers by these companies over the period of study.

Another limitation was that certain details about the sources of borrowings and the break-up of paid-up share capital were not available. This limitation was overcome by applying the RBI data break-up to the NIPFP sample figures so as to generate the requisite details.

As the NIPFP sample was homogeneous for the 14-year period, we were able to examine the growth rate over time in each of the major components of resource mobilisation. Such an analysis enabled us to identify the sources of fresh funds in the private corporate sector which had grown sharply and also those which had stagnated over time. We could then examine, after such an identification, the plausible explanations for the changing pattern of resource mobilisation, which would not have been possible without a homogeneous sample for the whole period.

An important difference between the RBI sample and the

NIPFP sample was that the latter had a lower proportion of companies which incurred losses in their operations than the former. This would result in some difference in the composition of the gross resources mobilised by companies in the two samples. Although the RBI sample had adequate coverage, since the NIPFP sample was homogeneous and uniform throughout the period of the study unlike the RBI sample, we have based our analysis largely on the basis of the NIPFP sample.

It may be emphasised again that the conclusions which emerge from this study relate to the large-scale manufacturing segment of the public limited companies in the private corporate sector. Small-scale units and all private limited companies were excluded; so also were non-manufacturing companies, government companies and foreign companies. (The RBI data were used for an analysis of private limited companies). The rationale for a restrictive coverage lay in the fact that the segment of the private corporate sector studied, though numerically not large, makes the major contribution to the resources mobilisation effort, as also to industrial capacity and investment in the private corporate sector.

10. Chapter Scheme

Following this introductory chapter, wherein the objectives, methodology and concepts of our study have been spelt out, we present in chapter II the macro level results based largely on the NIPFP sample data and supplemented by the analysis of the RBI sample data, wherever necessary. This is followed by an analysis at the aggregate level in chapter III on the utilisation of long-term and short-term gross mobilised resources for gross fixed assets and inventory formation; the changing pattern over time in the composition of the gross fixed assets would also be highlighted. The analysis in chapters II and III is first carried out in nominal terms and then in real terms.

In chapter IV, some disaggregated sectoral results are presented relating to industry groups, size groups, age groups, location groups, growth-rate groups and tax rate groups, primarily to bring out variations if any, in the pattern of resource mobilisation between different categories of companies.

The results of the econometric analysis of the effect of fiscal and monetary policies on the ratio of equity to debt finance and also on

the composition of owned funds are discussed in chapters V and VI. The qualitative assessment of the actual situation in the private corporate sector, as represented by the opinion of leaders of industry and financial institutions, is presented in the context of the major findings of our study in the concluding chapter VII, together with some broad policy implications of the findings.

II. MACRO LEVEL RESULTS

1. Magnitude of Resource Mobilisation

(*a*) *Broad Results*

The NIPFP sample of 99 companies together mobilised Rs. 1947.96 crore of additional gross resources in current prices during the 14-year period 1962-63 to 1975-76. The average annual gross resource mobilisation worked out to Rs. 139.14 crore. Net resource mobilisation excluding depreciation amounted to Rs. 1208.52 crore over the 14-year period, the annual average mobilisation being Rs. 86.32 crore (Table II.1).

The growth in the resource mobilisation effort in the private corporate sector as reflected in the operations of the NIPFP sample companies could be more appropriately evaluated in terms of the annual average growth in the mobilised resources over the period of the study. During the 14-year period, the annual average compound growth rate of gross mobilised resources was 7.8 per cent, while in terms of net mobilised resources the growth rate worked out to 4.9 per cent.

The analysis of annual data reveals that there were three distinct phases in resource mobilisation: general upward trend from 1962-63 to 1965-66, a plateau from 1965-66 to 1972-73 and then a crest covering 1973-74 and 1974-75, mainly due to inflationary pressures. Such a pattern emerged irrespective of whether we examined the resource mobilisation data in gross or net terms (Graph A).

(*b*) *Analysis in Real Terms*

The 14-year study period, however, witnessed a significant increase in the price level. The price rise was sharp during the first half of the seventies, more particularly after the 1973 oil price hike. In order to arrive at the real growth in the volume of mobilised resources, it becomes necessary to eliminate, to the extent possible,

TABLE II.1

Trends in Resource Mobilisation by Public Limited Companies

(Rs. crore)

Period		NIPFP sample		RBI sample[1]	
		Total	Per corporate unit	Total	Per corporate unit
1962-63 to 1975-76	GRM(t)	1947.96	19.676	—	—
	(aa)	139.14	1.405	—	—
	NRM(t)	1208.52	12.207	—	—
	(aa)	86.32	0.872	—	—
1962-63 to 1964-65	GRM (t)	219.96	2.222	1543.11	1.158
	(aa)	73.32	0.741	308.62	0.232
	NRM(t)	143.07	1.445	965.68	0.724
	(aa)	47.69	0.482	193.14	0.145
1965-66 to 1968-69	GRM(t)	562.52	5.682	2302.49	1.534
	(aa)	140.63	1.420	460.50	0.307
	NRM(t)	391.83	3.958	1325.83	0.883
	(aa)	97.96	0.989	265.17	0.177
1969-70 to 1971-72	GRM(t)	397.25	4.013	—	—
	(aa)	132.42	1.337	—	—
	NRM(t)	212.65	2.148	—	—
	(aa)	70.88	0.716	—	—
1972-73 to 1975-76	GRM(t)	768.23	7.760	4697.28	2.847
	(aa)	192.05	1.940	939.46	0.569
	NRM(t)	460.97	4.656	3084.76	1.870
	(aa)	115.24	1.164	616.95	0.374

Sources:
1. Reserve Bank of India (1975). *Financial Statistics of Joint Stock Companies 1960-61 to 1970-71.*
2. Reserve Bank of India (1977). *Financial Statistics of Joint Stock Companies in India 1970-71 to 1974-75.*
3. Reserve Bank of India (1977). *Reserve Bank of India Bulletins.* (monthly)
4. NIPFP sample.

Note:
1. GRM: Gross resources mobilised
2. NRM: Net resources mobilised

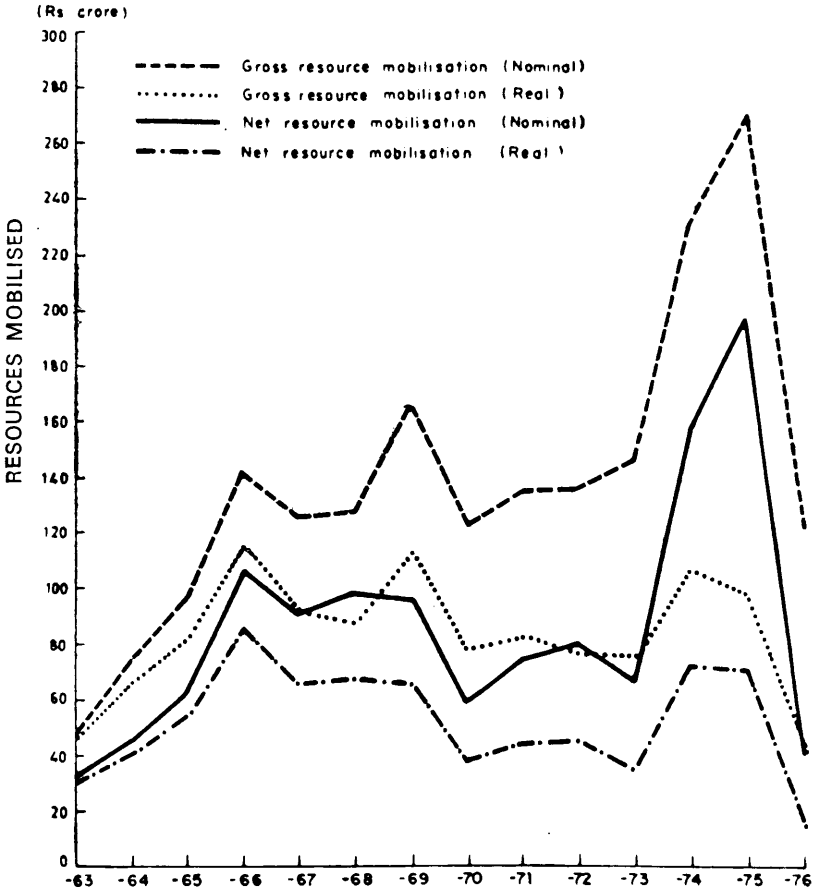
(t): Total during the period

(aa): Annual average during the period

[1]The RBI sub-periods are 1961-62 to 1965-66 (1,333 companies), 1966-67 to 1970-71 (1,501 companies) and 1971-72 to 1975-76 (1,650 companies). It is, therefore, not appropriate to work out the aggregates for the entire period, 1961-62 to 1975-76.

Graph A

TRENDS IN RESOURCE MOBILISATION: NIPFP Sample
(1962-63 to 1975-76)



the increase in the value of mobilised resources due to the price effect. We therefore converted through the use of an appropriate price deflator the volume of annually mobilised resources in current prices to constant prices[6].

The value of mobilised resources in real terms was found to be considerably lower than that in nominal terms. During the period 1962-63 to 1975-76, the gross mobilised resources at 1960-61 prices for the NIPFP sample added upto Rs. 1153.86 crore as compared to Rs. 1947.96 crore in nominal terms. While the broad trend in the mobilised resources in nominal terms, as indicated earlier, showed a rise upto 1965-66, remained relatively stagnant from 1965-66 to 1972-73, rose again in 1973-74 and 1974-75 and fell steeply in 1975-76, in real terms, the rise was upto 1965-66 but then there was a decline with some improvement in two years 1968-69 and 1972-73. What is more important is that after 1965-66 the percentage addition to capital stock in real terms has been falling. While the annual compound growth rate of gross mobilised resources in nominal terms over the 14-year period was 7.8 per cent, that in real terms was only 0.1 per cent; this indicated a stagnation in growth of gross resources in real terms.

The annual data on gross mobilised resources, net mobilised resources and corporate savings for the study period, in current as well as at 1960-61 prices, are presented in Table II.2. The annual trends in gross and net resources mobilised are depicted in Graph A.

(c) *Determinants of Resource Mobilisation*

An attempt is now made to explain econometrically the yearly behaviour of gross resource mobilisation in terms of certain explanatory variables. On an *a priori* basis, and also on the basis of a study of similar exercises done elsewhere, a few important determinants of resource mobilisation were first selected and from among them, three were finally selected[7].

[6]For a discussion on the method of constructing the price deflator. see Annexure II. A to this chapter.

[7]The determinants initially selected were profitability (profits after tax as per cent of net worth), sales turnover (net sales as per cent of total assets), effective tax rate (tax provision as per cent of profits before tax), sales income, prices of industrial manufactured products (base 1970-71=100), output and four dummy variables to represent the sub-periods.

TABLE II.2

Mobilised Resources in Nominal and Real Terms: NIPFP Sample

(Rs. crore)

Years	Corporate savings		Gross mobilised resources		Net mobilised resources	
	current prices	1960-61 prices	current prices	1960-61 prices	current prices	1960-61 prices
1962-63	21.70	20.33	49.87	46.73	32.97	30.89
1963-64	43.10	38.47	74.65	66.63	46.19	41.23
1964-65	48.22	41.40	95.44	81.92	63.19	54.24
1965-66	56.28	45.34	142.07	114.46	106.04	85.43
1966-67	68.78	49.47	126.01	90.62	90.19	64.86
1967-68	54.07	36.89	127.04	86.69	98.01	66.88
1968-69	89.60	59.82	167.40	111.77	97.59	65.16
1969-70	105.35	66.72	123.54	78.23	58.72	37.19
1970-71	104.76	61.98	137.05	81.09	73.78	43.65
1971-72	98.72	55.23	136.66	76.46	80.15	44.84
1972-73	139.00	71.87	145.57	75.23	66.20	34.23
1973-74	141.61	64.60	232.34	105.98	157.32	71.76
1974-75	161.74	58.48	269.47	97.43	196.91	71.19
1975-76	116.83	39.22	120.85	40.57	40.54	13.61
TOTAL	**1249.76**	**709.82**	**1947.96**	**1153.86**	**1207.80**	**725.16**

The three explanatory variables finally selected were:

(*i*) Profitability;
(*ii*) Nominal sales income which in turn was split up into price and volume of sales; and
(*iii*) Effective corporate tax rate.

A priori, it could be expected that an increase in the first two variables, *viz.*, profitability and sales income, would have a positive effect on gross resource mobilisation whereas an increase in the last variable, *viz.*, effective corporate tax rate, a negative effect. The effect of changes in sales income could, in turn, be seggregated into the effect due to changes in the volume of sales and that due to changes in the prices of the goods sold.

Based on the above specifications, we estimated a few versions of the gross resource mobilisation function using the NIPFP sample data for the period from 1962-63 to 1975-76; the results are presented in Table II.3. However, before we discuss these econometric

results, it may be proper to point out one aspect of the equations in Table II.3, *viz.*, the problem of identification. In the sources and uses of funds, gross resources mobilised (as we have defined it) is equal (except for a residual item) to the gross investment in the private corporate sector. Moreover, variables like profitability and sales income may also appear in the investment function of the corporate sector. It is well known that in situations such as these, there is a problem of identification, *i.e.*, the equation estimated may be either the resource mobilisation function, the investment function or a combination of both.

However, there is at least one reason why the estimated equations can be identified more as resource mobilisation functions than as investment functions, *i.e.*, that in an investment function, in addition to profitability and sales income, there may appear other variables like the rate of interest and the lagged capital stock.

The results presented in Table II.3 show that the signs of all the explanatory variables both in the linear and the log-linear forms, were as expected except that of the output variable in equation 4. The unexpected sign of the output variable in equation 4 could be due to the high collinearity the variable had with the price variable.

As judged by the statistical tests of significance of the regression coefficients of the explanatory variables, the percentage of variations explained and the 'F'—values, the log-linear model yielded slightly better results than the linear model. The equations 2 and 3 in the log-linear model explained 80 per cent of the variations in gross resource mobilisation. As between equation 2 and 3, we found that the latter which included prices as an explanatory variable in the place of sales income which was included in the former, appeared to be marginally better, as the statistical significance of the regression coefficients measured by the t-value and the F-value was slightly better; the problem of multi-collinearity was also not serious. Hence, equation 3 was selected as the most preferred variant of the gross resource mobilisation function.

It appears from equation 3 (log-linear model) that profitability, effective tax rate and prices were the most important factors which determined gross resource mobilisation during the study period. These three factors together explained 80 per cent of the variations in the dependent variable, this being one of the best explanations from among the alternative explanatory variables. Further, the

TABLE II.3

Determinants of Gross Resource Mobilisation: NIPFP Sample

Equation	Constant	Profitability	Effective tax rate	Prices	Sales income	Output	R^2	F-value	D.W. Statistic
I. Linear model									
1	—152.13**	20.92***			0.034**		0.67	11.19	1.77††
	(1.95)	(2.95)			(2.55)				
2	23.36	15.10*	—2.64		0.04**		0.70	7.94	1.76††
	(0.13)	(1.70)	(1.07)		(2.74)				
3	49.47	12.10	—3.52	1.11***			0.77	11.23	1.76††
	(0.13)	(1.51)	(1.58)	(3.55)					
4	138.73	12.01*	—4.50**	1.59***		—0.067	0.80	9.24	1.79†
	(0.81)	(1.54)	(1.95)	(3.21)		(1.23)			
II. Log-linear model									
1	0.102*	1.63***			0.69***		0.73	14.62	1.39†
	(1.69)	(3.04)			(3.12)				
2	8.98	1.00*	—0.92*		0.52***		0.80	11.79	1.70†
	(0.69)	(1.60)	(1.42)		(3.66)				
3	29.29	0.94*	—1.30**	0.91***			0.80	13.77	1.57†
	(1.10)	(1.59)	(2.01)	(4.05)					
4	35.52	0.94*	—1.32*	0.93**		—0.031	0.81	9.30	1.56†
	(0.77)	(1.51)	(1.78)	(2.32)		(0.06)			

Note: 1. The figures in brackets are t-values.
2. *, **, *** indicate that the regression coefficient is statistically significant at 10 per cent, 5 per cent and 1 per cent level, respectively, applying one tail t-test.
3. †Test of autocorrelation is inclusive.
4. ††Do not reject the hypothesis of 'no autocorrelation'.

problem of multi-collinearity was the least. The econometric results indicated that for every 1 per cent increase in profitability and prices, the increases that could be expected in gross resource mobilisation were likley to be 0.94 per cent and 0.91 per cent, respectively, while in the case of the effective tax rate, every 1 per cent increase in it tended to reduce gross mobilised resources by as much as 1.3 per cent. It could, however, be argued that although an increase in the corporate tax rate may lead to a reduction in the gross mobilised resources, the converse may not be true, *i.e.*, a reduction in the corporate tax rate may not lead to an increase in the gross mobilised resources due to the possibility of asymmetrical effect, and unless this asymmetrical effect of changes in corporate tax rate was actually tested, no firm conclusions can be derived.

(*d*) *Results Based on the RBI Sample*

In the case of the RBI data, it was not appropriate to add up the figures for the sub-periods to derive the aggregate for the period 1961-62 to 1975-76 due to the changing size of the sample for each sub-period. A time profile of resource mobilisation for the RBI sample was, therefore, made in terms of per sample company. The results which emerged from such an analysis of the RBI sample data was similar to that seen from an analysis of the NIPFP sample data. During the period 1971-72 to 1975-76, the resource mobilisation effort was the best among the sub-periods for which the RBI sample data were available. These results were found to be similar to those for the NIPFP sample for the comparable (though not identical) period, 1972-73 to 1975-76. Similarly, the poorest performance among the three RBI sample sub-periods was noticeable for the period 1961-62 to 1965-66 (comparable with the NIPFP sample sub-period 1962-63 to 1964-65) (Table II.1).

It is interesting to observe that the resource mobilisation effort was more successful during the period which included the years of industrial recession than during the years preceding this period, both for the NIPFP and the RBI samples; this was true irrespective of whether we examined the resource mobilisation data in gross or net terms. To some extent, such better results for the recession period may be due to the price rise; in real terms, resource mobilisation, as was shown earlier in sub-section II.1.b of this chapter, did not improve. It is also to be borne in mind (see section 5) that institutional support to long-term and short-term financing activities

cannot be abruptly stopped in the face of large-scale recessionary conditions in the private corporate sector; on the contrary, there is every likelihood of institutional support being stepped up to make good the shortfall from other sources.

2. Structural Pattern

There was a clear shift in the pattern of resource mobilisation in the private corporate sector. The shift was generally in line with the developments in the industrial sector, such as the increasing capital intensity in particular industries, rising capital outlay on new industrial projects, widespread growth of development banking operations and the sluggish nature of the capital market. Further, the pattern of resource mobilisation seemed to be influenced, to some extent, by the prevailing economic conditions in the country.

The significant aspects of the pattern of resource mobilisation in the private corporate sector which emerged from the NIPFP sample data and which also were corroborated by the RBI sample data, were the noticeable improvements over time in resource mobilisation through internal corporate savings, a net repayment of long-term funds to financial institutions and a low level of mobilisation through the equity market.

Depreciation provision emerged as the most important single component of the resources mobilisation effort, accounting for 38 per cent of the gross resources mobilised during the period 1962-63 to 1975-76 by the NIPFP sample companies and 37 per cent by the RBI sample companies. Net resource mobilisation thus constituted slightly over three-fifth of the gross resources mobilised by the private corporate sector (Table II.4.).

There were some basic changes in the relative contribution of the various components of resource mobilisation; these are examined in sections 3 to 6.

3. Corporate Savings

(*a*) *Broad Results*

Corporate savings, which we have defined to include depreciation, internal plough-back and bonus share capital, accounted for almost two-third of the gross resources mobilised by the private

TABLE II.4

Relative Importance of Corporate Savings and External Funds (Period-wise)

(Annual average in per cent)

	NIPFP sample 1962-63 to 1975-76	RBI sample 1961-62 to 1975-76	NIPFP sample			
			1962-63 to 1964-65	1965-66 to 1968-69	1969-70 to 1971-72	1972-73 to 1975-76
1. Corporate savings	64.15	58.94	51.39	47.77	77.74	72.78
(i) internal share capital	6.19	6.12	3.00	6.45	7.39	6.31
(ii) development rebate reserve	6.41	6.36	7.59	7.99	5.88	5.19
(iii) non-statutory reserves	13.59	9.39	5.84	2.99	18.00	21.28
(iv) depreciation	37.96	37.07	34.96	30.34	46.47	40.00
2. External share capital	5.69	4.84	15.17	6.07	5.80	2.64
3. Long-term funds	9.09	4.41	12.16	33.77	—1.78	—4.26
(i) long-term loans	7.16	4.41	6.25	28.49	—1.83	—3.56
(ii) debentures	1.93	—1	5.91	5.28	0.05	—0.70
4. Short-term funds	21.07	31.81	21.28	12.39	18.24	28.84
(i) short-term loans	19.32	25.58	25.38	19.03	13.66	20.72
(ii) net miscellaneous liabilities	1.75	6.23	—4.10	—6.64	4.58	8.12
5. Net resource mobilisation	62.04	62.93	65.04	69.66	53.53	60.00
6. **Gross resource mobilisation**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note : Not available.

corporate sector. During the period 1962-63 to 1975-76, corporate savings contributed on an average 64.2 per cent of the gross resources in the NIPFP sample, and 58.9 per cent of the gross resources in the RBI sample (1961-62 to 1975-76). Even though there was some difference seen between the proportions of corporate savings in the gross resources mobilised by the NIPFP and the RBI sample companies, it is important to note that corporate savings in both the cases were very substantial, between 59 and 64 per cent of the gross mobilised resources (Table II.4). That such a substantial proportion of corporate resources was generated from internal sources from within the corporate sector, partly due to statutory provisions and deductions like depreciation and development rebate and partly through a conscious policy to retain a part of the after-tax profits voluntarily rather than distribute them, as was reflected in non-statutory plough-back and bonus shares, is not only interesting but also surprising in view of the belief that corporate savings have been inadequate and that the private corporate sector has been unduly dependent on outside sources of finance.

(*b*) *Period Results*

The period-wise analysis further strengthens the overall finding about the important role of corporate savings in the resource mobilisation effort. In fact, the contribution of corporate savings considerably improved over the years. There was some setback during the period of industrial recession when the share of corporate savings in gross resource mobilisation declined from 51.4 per cent in 1962-63 to 47.8 per cent in 1964-65. There was a spurt in the subsequent sub-period, 1969-70 to 1971-72, to 77.7 per cent, but a fall in the following sub-period, 1972-73 to 1975-76; these were still significant at 72.8 per cent. It is, therefore, clear that not only were corporate savings an important component of gross resource mobilisation in the private corporate sector, but that their relative contribution also improved over the years.

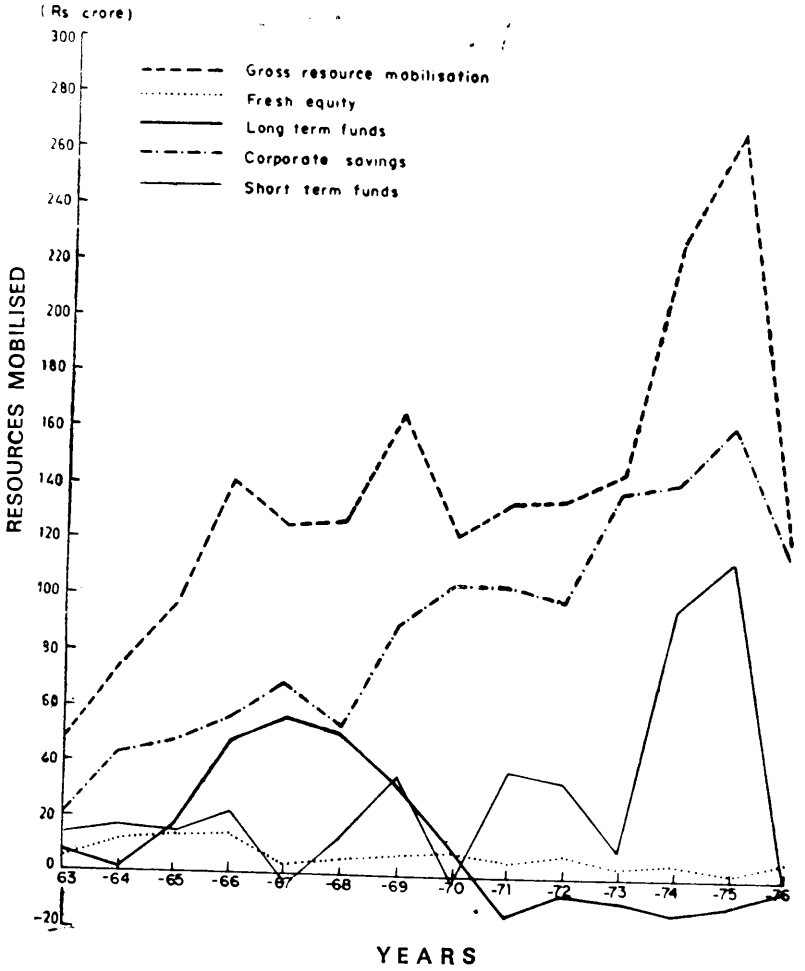
Graph B depicts the annual trends in corporate savings and other components of gross resources mobilised by the NIPFP sample companies.

(*c*) *Composition*

An analysis of the composition of corporate savings showed that depreciation was the most significant source, constituting as

Graph B

TRENDS IN PATTERN OF RESOURCE MOBILISATION: NIPFP Sample
(1962-63 to 1975-76)



much as 59.2 per cent of total corporate savings. Further, the share of depreciation considerably improved over the years. Thus, while during 1962-63 to 1964-65 depreciation constituted annually 35.0 per cent of gross resources, it constituted 46.5 per cent during 1969-70 to 1971-72 and 40.0 per cent during 1972-73 to 1975-76; only during the period which covered the recession years, the share was lower at 30.3 per cent. Non-statutory reserves accounted annually for 13.6 per cent of the gross resources during the 14-year period and the share of this source also improved considerably over time from 5.8 per cent of the annual gross resources mobilised during 1962-63 to 1963-64 to 21.3 per cent during 1972-73 to 1975-76. On the other hand, the share of statutory reserves, namely, the development rebate reserve, declined from 7.6 per cent during 1962-63 to 1964-65 to 5.9 per cent during 1969-70 to 1971-72 and to 5.2 per cent subsequently; the 14-year average worked out to 6.4 per cent (Table II.4).

It is interesting to see that bonus shares issued to shareholders through capitalisation of reserves was playing an increasingly important role in the resource mobilisation effort; the share of such funds in gross resources went up from 3.0 per cent during 1962-63 to 1964-65 to 6.3 per cent during 1972-73 to 1975-76; the average for the 14-year period worked out to 6.2 per cent. Strictly speaking, it would not be proper to take bonus shares as a separate component of fresh resources generated, as it represents only a book entry transfer from reserves (made up of internal plough-back of earlier years) to share capital. However, by showing it separately, we get an idea of the extent of capitalisation of reserves.

As was found in the case of total corporate savings, so also for individual components of corporate savings, the RBI data based results broadly corroborate the NIPFP data results. There are some differences, no doubt, but these have arisen due to two factors:

(*i*) The changing size and composition of RBI samples as compared to the homogeneous NIPFP sample;
(*ii*) A larger proportion of companies with operational losses in the RBI sample than in the NIPFP sample.

The RBI sample of 1650 companies for the period 1970-71 to 1975-76 had in different years loss-making companies ranging from 320 to 544 (only for this period, the RBI has presented such data). The NIPFP sample included fewer such companies,

their combined accumulated losses constituting only one per cent of the gross resources mobilised by them. However, though both the NIPFP and the RBI samples were selected on the basis of proper procedures, since, as was shown in chapter I, the former is also homogeneous over time, we place a greater degree of confidence on the NIPFP results. A comparative analysis, as in sub-section (*d*) below, shows that the NIPFP results were not very much out of tune with those derived from the RBI data.

(*d*) *Comparison with Results Based on RBI Data*

A comparative analysis of the NIPFP and the RBI data based results reveals that the share of internally generated share capital in the form of bonus share capital was almost identical, the respective shares being 6.2 per cent of the gross resources mobilised for the NIPFP sample and 6.1 per cent for the RBI sample. In the case of reserves and surplus, the NIPFP sample companies mobilised 20.0 per cent of the gross resources from this avenue as against 15.8 per cent by the RBI sample companies. While the contribution of development rebate, the statutory deduction, was also almost identical (at 6.41 per cent and 6.36 per cent, respectively), the share of other reserves was significantly different, due to, as was indicated earlier, the inclusion of a larger proportion of loss-making companies in the RBI sample. Thus, for example, reserves and surplus other than the development rebate reserve, accounted for 13.6 per cent of the gross resources mobilised by the NIPFP sample as against 9.4 per cent by the RBI sample (Table II.4).

Another constituent of resource mobilisation which is not linked to profitability after tax but is, however, a statutorily allowable deduction, namely, depreciation, was found to make an almost identical contribution to the gross resource mobilisation effort in the NIPFP and the RBI samples, the respective shares being 38.0 per cent and 37.1 per cent.

The fairly similar proportionate shares of development rebate and depreciation in gross mobilised resources found for both the RBI and the NIPFP samples, despite the distinct variations in voluntary plough-back, were due to the peculiarities of the respective samples (loss-making companies, growth companies, etc.), which had a bearing on the pattern of resource mobilisation and particularly that of mobilisation of internal sources. While obligatory provisions and deductions were found to be similar in importance,

voluntary generation of specific funds was not found to be so. There are segments in the private corporate sector which had a creditable performance, as reflected in our sectoral results of selected industry groups and other categories of companies, such as rapidly growing companies (see chapter IV).

It may be pointed out here that capital reserves, derived partly from capital gains on the sale of assets and partly from revaluation of assets, contributed only minimally to the resource mobilisation effort.

4. Role of Stock Market

The growth of the stock market did not keep pace with the requirements of the private corporate sector for fresh funds. The fall in the contribution of fresh share capital in the gross resource mobilisation effort was noticeable, the contribution falling from 15.2 per cent during 1962-63 to 1964-65 to 6.1 per cent during 1965-66 to 1968-69 and further to 2.6 per cent during 1972-73 to 1975-76. The overall average for the 14-year period worked out to 5.7 per cent; the RBI sample revealed a even lower proportion, *viz.*, 4.8 per cent (Table II.4).

While the bulk of such share capital was in the nature of equity shares, a small proportion, 4.9 per cent of the additional share capital mobilised by the private corporate sector during 1962-63 to 1975-76, was in the form of preference share capital. Of the total gross resources mobilised, preference shares accounted for a meagre 0.6 per cent as against 11.3 per cent raised through equity shares.[8]

An interesting development since 1971-72 was the contribution of premium on new shares to the resource mobilisation effort of the private corporate sector, its share fluctuating between one-half and one per cent. In earlier years, there may have been some recourse to mobilisation from this source, but the contribution appeared to have been too insignificant to warrant the inclusion of this detail in the RBI format for company finances data. The share price index (1970-71=100) increased from 78.7 in 1966-67 to 95.1 in 1971-72 and 112.5 in 1974-75 (Table A.3). The corporate sector, therefore, rightly decided to participate in the windfall arising out of the appreciation in the value of its shares in the capital market.

[8]This was based on the RBI data on large and medium public limited companies.

Inspite of share appreciation, resource mobilisation through the stock market was not substantial.

It appears that the stock market was not able to grow to the extent that may have been desriable in a capital scarce economy, inspite of the issue of bonus shares from time to time, appreciation in the values of major corporate shares, the premium commanded by leading corporate shares and increasing institutional support. That the stock market, in spite of the involvement of institutional shareholders, like the LIC, ICICI, UTI, IDBI and IFCI made only a token contribution towards the resource mobilisation effort of the private corporate sector, would suggest that institutional support was still insignificant in relation to needs, while the flow of individual private savings into the corporate sector was not large enough. It may be desirable to make a study of the factors which restrained individual investment in the corporate sector, as also of the reasons for inadequate institutional participation in corporate ownership. *A priori*, it appears that the share investment habit has not percolated to the masses, that the risks involved especially in investment in new industrial undertakings are too high to induce investors, that market prices of established shares are very high and that the rate of return on equity investment is not commensurate with investor's expectations. Also, although the shares of some companies have appreciated more than the rise in the price level, the general index of share prices rose too slowly (by 43 per cent between 1966-67 and 1974-75) to enable the investor to obtain capital appreciation in real terms.[9] Another factor is the fear of mal-practices which also induces people to rush in only for shares of good companies. Hence, the situation which prevailed in the stock market was that too many investors rushed in for a few good scripts, while other scripts went abegging.

There is, thus, no need to emphasise that efforts would have to be made to make corporate tapping of the stock market more effective and substantial.

5. Long-term Borrowings

Long-term borrowings from financial institutions, commercial banks and other sources were not found to be a major component

[9]The gain to the shareholders is not fully reflected in the rise in share prices because it is moderated by issue of bonus and rights shares.

of the gross resources mobilised by the private corporate sector. Further, the relative contribution from this source, significant only during the recessionary period, not only became less important but there was a net transfer of funds from the corporate sector to the financial institutions. These results, however, underestimate the extent of real fresh mobilisation of resources through borrowings, as the data presented are net of repayment of earlier loans.

Long-term borrowings during the period 1962-63 to 1975-76 averaged 7.2 per cent of the annual gross mobilised resources (for the RBI sample the share was still lower at 4.4 per cent). There was considerable improvement between 1962-63 and 1964-65 (when the average was 6.3 per cent) and further between 1965-66 and 1968-69 (when it was 28.5 per cent). The latter increase could be attributed to the recessionary conditions in the industrial sector. The capital market was sluggish, the share price index (base 1970-71=100) falling from 96 in 1962-63 to 84.5 in 1964-65 and 75.3 in 1967-68. (It was 80.2 in 1968-69). Further, during these years, the corporate sector's performance on the internal plough-back front was also not satisfactory, non-statutory reserves accounting for a lower proportion of mobilised resources than during most of the other years. In fact, during this period, there was a sharp decline in the share of capital reserves as well as other free reserves, in the face of a steadily maintained contribution from statutory development rebate reserve. At the same time, as on-going projects could not be completely and abruptly stopped, the sanctioned loans from long-term financial institutions must have been disbursed (Table II.4).

As a result of these factors operating simultaneously, long-term borrowings as a component of gross resources went up sharply during the recessionary period. In the subsequent period, however, when there was an improvement in the level of corporate savings and also repayment of loans taken earlier, there was a net transfer of resources from the corporate sector to the financial intermediaries; in fact, even though the data were not available with us, it may not be incorrect to presume that a part of such repayment may be the re-payment due earlier but which could not be effected because of the recessionary conditions. As a result, during the period 1969-70 to 1971-72, long-term borrowings made an annual negative contribution to the extent of 1.8 per cent to the gross resources mobilised by the private corporate sector. The proportion of negative contribution increased to 3.6 per cent during 1972-73 to 1975-76. Year

to year data show that in each of the years from 1970-71 to 1974-75, there was a net repayment by the private corporate sector to long-term financial institutions. In other words, the private corporate sector repaid long-term loans by amounts exceeding what it obtained as fresh borrowings.

On the face of it, a larger proportion of annual resources being mobilised by the corporate sector from long-term financial institutions during years of poor corporate performance may look unusual as there could be a theoretical argument that during periods of recessionary conditions, when the climate was not conducive to corporate growth, there should be a lower growth of corporate capital formation and, consequently, of disbursements by financial institutions. But the practical realities of financial operations in the corporate sector are such that once an industrial project has been initiated and is in the process of being built up, it becomes financially suicidal to abandon the project half-way. Institutional financial support becomes all the more an economic necessity in the face of the non-availability of expected financial support from other outlets such as the capital market and internal corporate savings, which tend to be particularly affected during periods of recession. As such, financial institutions feel that it would be a prudent long-term policy to give additional funds to otherwise potentially viable projects under construction, when other sources dry up due to abnormal situations. After financial institutions have pumped in large sums of money into the projects, denial of the additional finances may result in blocking the already invested institutional funds indefinitely and may possibly lead to their total loss.

6. Role of Debentures

Another source of long-term funds was the debentures issued by the corporate sector from time to time. On an average, during the period 1962-63 to 1975-76, such debentures contributed less than 2.0 per cent of the gross resources mobilised by the private corporate sector. There was also a noticeable decline in mobilisation through this source over the years. Period-wise data showed that while during the pre-recessionary period debentures contributed 5.9 per cent of the gross resources and during the recessionary period 5.3 per cent, the contribution was negligible at 0.05 per cent during

the period immediately following the recessionary period and further there was a net repayment to the extent of 0.7 per cent during the last period, 1972-73 to 1975-76.[10]

Debentures and preference share capital, as was seen earlier in this chapter, were found to be poor sources of fresh funds for the private corporate sector. However, as between the two, investors seemed to show some preference for debentures, with both offering an assured rate of return, though generally a slightly higher rate of return was offered by debentures. It would be interesting to examine the factors that can explain investor's preference for debentures.

While debentures have a disadvantage in that there is no possibility of accrual of capital gains, preference share capital provides scope for such appreciation in values even though in practice such appreciation is uncommon. Another plus point for preference share capital is that it makes the shareholder eligible for a higher rate of interest on his fixed deposits with the respective companies. The low relative contribution of preference share capital *vis a vis* debentures could then indicate possibly the desire of investors to opt for an assured high rate of return than for a possibly higher rate of gross return in the case of preference share capital. Further, while debentures are always secured against fixed assets, assuring the repayment of capital, preference share investments are not similarly protected. The preference for debentures could also suggest that corporations may be preferring recourse to fixed term debentures with a fixed total liability, which is tax deductible and which works out to be cheaper than comparable long-term borrowings. Corporations tend to weigh the cost of debentures with that of long-term borrowings, while shareholders may weigh the return on debentures with those on equity and preference share capital; the latter would either invest in equity share capital because of basically greater advantages, or if they want an assured rate of return, would prefer investment in debentures to investment in preference share capital.

[10]Subsequent to the period covered in this study, there has been a spurt (in 1980 and 1981) in the successful mobilisation of resources through convertible debentures (*i.e.* debentures to be partly or wholly converted into equity shares at pre-specified prices).

7. Short-term Funds

The components of resource mobilisation so far analysed related to long-term resources normally used for fixed capital formation. The private corporate sector also raised resources of a short-term nature, mainly to finance inventory holdings and to meet various short-term contingencies. On an average, over the 14-year period, such short-term funds constituted one-fifth of gross mobilised resources. Almost the whole of this contribution (9.3 per cent out of 21.1 per cent) of gross resources was through short-term loans. The analysis of short-term loans further showed that over the 14-year period, almost 75 per cent of short-term borrowings were obtained from the commercial banking system, the remaining being mobilised from business associates and other miscellaneous sources. During the recessionary years, the dependence on short-term bank credit became more pronounced (Tables II.4 and A.2).

The reason for this is obvious. During times of financial stringency, the corporate sector finds credits from the commercial banking sector more easily available than from business associates and trading partners, who may also in turn have to depend upon the commercial banking sector for financial support. This becomes clear when we examine the comparative data on the break-up of short-term borrowings as between years of normal economic operations, such as during the sixties and the recession years. Thus, the commercial banks provided on an average 77.1 per cent of the additional short-term annual borrowings during 1962-63 to 1964-65 as against 80.7 per cent during 1966-67 to 1968-69.

It may be pointed out that in two later years, 1973-74 and 1974-75, short-term funds formed an unusually high proportion of gross mobilised resources, 41.6 per cent and 42.4 per cent, respectively. To the extent that the increase in short-term funds was due to the increase in the nominal value of inventory (there may be no real growth or a negligible growth in inventory), the improvement in the level of gross resource mobilisation was only illusory.

8. Blown-up Estimates

(*a*) *The Estimates*

We blew up the NIPFP results for three years 1973-74, 1974-75 and 1975-76, both for the corporate population of 431 large manufac-

turing companies from which the NIPFP sample was selected and for the total corporate sector. The exercise relating to the total private corporate sector is subject to the limitation that the composition of the NIPFP sample, with its bias towards large companies, would tend to over-estimate the actual situation in the whole private corporate sector, which also included small companies and companies which grew at rates substantially different from those attained by the NIPFP companies; there may be differences in the respective rates of profitability also.

Gross mobilised resources during 1975-76 worked out to Rs. 475.93 crore for the corporate population of 431 large manufacturing companies and Rs. 830.32 crore for the total private corporate sector (Rs. 120.85 crore for the NIPFP sample).

Over the 14-year study period, the NIPFP sample companies annually averaged a mobilisation of gross resources to the tune of Rs. 139.14 crore; on this basis, the blown-up estimate of annual gross mobilisation of resources by the large-scale manufacturing segment of the private corporate sector, worked out to be Rs. 541.4 crore.

(*b*) *Comparability*

The gross mobilised resources for the total private corporate sector as estimated by us were found to be fairly similar to those made by the Reserve Bank of India. Thus, for example, the NIPFP estimate for 1973-74 was Rs. 1631 crore as compared to Rs. 1877 crore by the RBI, and for 1974-75 the NIPFP estimate was Rs. 2580 crore as compared to the RBI estimate of Rs. 2548 crore. But for 1975-76, the NIPFP estimate at Rs. 830 crore was much lower than the RBI estimate of Rs. 1770 crore (Table II.5 and I.1).

It was only in respect of the last year, 1975-76, that there was a substantial difference between the NIPFP and the RBI estimates. In the preceding two years, the two estimates were fairly close. In general, the RBI estimates were higher than the NIPFP estimates. This was due to the fact that the RBI estimates were based wholly on data relating to corporate units which received financial assistance from financial institutions. It is a known fact that the operations of relatively small or non-growing or slow-growing corporate units do not get fully reflected in such financial institution-based data. Similarly, a large proportion of financial institution-assisted

TABLE II.5

Blown-up Estimates of Mobilised Resources

(Rs. crore)

		Gross resources mobilised	Net resources mobilised	Corporate savings
1. NIPFP sample (99 companies)	1973-74	232.34	157.33	141.61
	1974-75	269.47	196.91	161.74
	1975-76	120.85	40.54	116.83
2. Corporate population (431 companies)	1973-74	997.99	675.75	608.27
		(1.70)	(1.15)	(1.03)
	1974-75	1118.83	817.56	671.54
		(1.61)	(1.18)	(0.96)
	1975-76	475.93	159.65	460.10
		(0.65)	(0.22)	(0.62)
3. Private corporate sector limited by shares	1973-74	1630.92	1104.32	994.04
		(2.77)	(1.88)	(1.68)
	1974-75	2580.31	1885.51	1548.74
		(3.91)	(2.71)	(2.23)
	1975-76	830.32	278.54	802.70
		(1.13)	(0.38)	(1.09)

Note: Figures in parentheses are per cent of GNP (at current market prices).

units generally made profits or made higher profits than those not so assisted, and hence the large segment of the private corporate sector which did not make profits or made low profits were not adequately reflected in such estimates. This would be particularly true for internal plough-back and depreciation which are linked to corporate expansion, size of operations and level of profitability. The NIPFP estimates also suffer from the limitation that their base is the large manufacturing segment of the private corporate sector; however, unlike the financial institution-based estimates of the RBI, the NIPFP estimates take into account, to some extent, the operations of slow or non-growing as well as low-profit making companies.

What is more important than the extent of similarity between the NIPFP and the RBI estimates was their trend. Taking the three-year period for which the comparable estimates are presented, we find that both the NIPFP and the RBI estimates showed an upward trend in current prices in the volume of annual accretion of

mobilised resources between 1973-74 and 1974-75 and a fall in 1975-76.

The NIPFP estimates of net mobilised resources and corporate savings for the private corporate sector are presented in Table II.5. while the RBI estimates were presented earlier in Table I.1 in chapter I.

(*c*) *Share in GNP*

The gross resources mobilised by the private corporate sector, as estimated by us, constituted 2.8 per cent of GNP (at market prices) in 1973-74, 3.9 per cent in 1974-75 and 1.1 per cent in 1975-76. Corporate savings (gross) worked out to 1.7 per cent, 2.2 per cent and 1.1 per cent of GNP in 1973-74, 1974-75 and 1975-76, respectively. The corresponding figures for net private corporate savings from CSO's *National Accounts Statistics* (data in gross terms are not available) as per cent of GNP were 0.7, 1.0 and 0.4 for the respective years.

9. Conclusions

The analysis in this chapter has brought out the significant contribution of corporate savings to the resource mobilisation effort of the private corporate sector. The pattern of resource mobilisation is found to be influenced by the changes in the general economic conditions. During periods of financial stringency, the corporate sector depended relatively more on institutional financial support than during periods of normal economic conditions. The rationale for increasing institutional support during such times, when corporate performance was not otherwise worthy of such support, lay in the basic principle of saving the project as non-compliance with such a policy might, in the long-term, turn out to be suicidal. In this respect, financial institutions have played a positive role in promoting and nurturing industrial growth.

The significant contribution of corporate savings has great relevance for policy formulation. For one thing, it casts doubts on the generally propounded thesis that corporate units do not generate funds on their own to finance long-term capital formation. If we leave out short-term loans and net miscellaneous liabilities both of which could be construed to represent the use of mobilised resources for short-term purposes other than fixed capital formation,

only a small proportion of fixed capital formation is found to be financed by sources other than corporate savings.

In fact, as will be seen later in chapter III, 97.4 per cent of gross fixed asset formation was financed by corporate savings. This would suggest that either the private corporate sector was doing so well that it could meet all its fixed capital investment needs from internal sources, or, what was more likely (as we shall see in chapter III), the magnitude of capital formation had been at such a low level that there was no need to raise large amounts of funds from external sources. In real terms, the growth rate of resource mobilisation was found to be negligible. It is also likely that external funds were not readily available and the private corporate sector had to phase out its investment programme. Our results would, however, hold true only for established companies. As far as new companies are concerned, the situation would be quite different. In the case of new companies, internal sources would make only a nominal or no contribution at all, and resources would have to be raised from financial institutions, commercial banks and the equity market. An analysis of the pattern of resource mobilisation of new companies is presented later in chapter IV, section 4, and details are shown in Table A.10.

ANNEXURE II.A

Method of Deflation

The values of components of capital formation[11] in current and at constant prices as available in the CSO, *National Accounts Statistics*, formed the basis for calculating the implicit price deflators. The different series prepared by the CSO were available with regard to capital formation at constant prices. The first series was at 1960-61 prices, on the basis of which implicit deflators for the period 1962-63 to 1969-70 were derived and the other series was at 1970-71 prices, which was used to derive the implicit deflators for 1970-71 to 1975-76. The two separate deflators were formulated as follows:

$$P_{di} = \frac{CF_{ci}}{CF_{fi}} \times 100$$

where,

CF_{ci} — capital formation in current prices for the ith year,

CF_{fi} — capital formation at constant prices for the ith year, and

P_{di} — implicit price deflator for the ith year.

The two series of implicit price deflators with base 1960-61 = 100 and base 1970-71 = 100, worked out as above, were then merged by splicing them to derive an uniform index of price variations in capital goods, base 1960-61 = 100, for the period 1960-61 to 1975-76. The implicit price deflator for 'gross capital formation' was applied to the actual values of gross mobilised resources, net mobilised resources and corporate savings for the NIPFP sample to determine their values in real terms. Similarly, the implicit price deflator in respect of 'gross fixed capital formation in machinery and equipment' was used to arrive at the values, at 1960-61 prices, of gross fixed assets, net fixed assets, plant and machinery and depreciation[12].

[11]The three different measures used which relate to the total of public and private sectors of the economy are (*i*) Gross capital formation (*ii*) Gross fixed capital formation in plant and machinery and (*iii*) Changes in stocks.

[12]As the implicit price deflators, for arriving at gross and net mobilised resources and depreciation in real terms were different, the net mobilised resources and depreciation would not exactly add up to gross mobilised resources at 1960-61 prices.

In the case of inventories, the implicit price deflator for the 'changes in stock' component of gross capital formation was used. We have, thus, deflated the different components of gross resources and capital formation by the relevant price deflators individually for each year and then aggregated the annual deflated values.

Table A.4 shows the implicit price deflators used in the study.

III. UTILISATION OF MOBILISED RESOURCES

1. Gross Resource Mobilisation and Fixed Asset Formation

In the manufacturing segment of the private corporate sector, gross fixed assets were found to be the most important investible outlet for the mobilised resources. Over the 14-year period 1962-63 to 1975-76, as much as 65.9 per cent of the gross resources mobilised by the NIPFP sample companies were utilised in gross fixed asset formation; for almost the same period, 1961-62 to 1975-76, the RBI sample companies annually utilised 66.8 per cent of their gross resources on gross fixed asset formation. In other words, about two-third of the gross resources mobilised by the private corporate sector were used for building up gross fixed assets (Table A.5).

The NIPFP sample of 99 companies installed Rs. 1277.53 crore of gross fixed assets during the 14 years, 1962-63 to 1975-76, averaging an annual fixed capital formation of Rs. 91.25 crore in current prices (Table III.1).

A period-wise analysis reveals a falling trend in the percentage utilisation of gross mobilised resources for fixed capital formation in the private corporate sector. While the NIPFP sample companies annually utilised on the average 75.4 per cent of their gross mobilised resources for building up their gross fixed assets during the pre-recessionary period, 1962-63 to 1964-65 and 75.6 per cent during the recessionary period, 1965-66 to 1968-69, the proportion fell to 62.7 per cent during 1969-70 to 1971-72 and to 57.7 per cent during 1972-73 to 1975-76. The RBI sample data showed a similar falling trend, but the extent of the fall was not as sharp as in the case of the NIPFP sample companies (Table A.5).

The analysis of annual data brings out more clearly what was generally feared: the slow-down in gross fixed asset formation, especially during the seventies. The NIPFP sample results reveal that during 1962-63 to 1969-70, gross fixed assets absorbed between 67.7 per cent and 85.9 per cent of the gross mobilised resources (only in two of the years, the proportion was less than 70 per cent). On the other hand, in four of the six years during the seventies for which we analysed the data, the range was between 38.3 per cent

TABLE III.1

Long-Term Funds and Gross Fixed Asset Formation: NIPFP Sample

(Rs. crore per annum)

Period	Gross long-term mobilised resourecs	Gross fixed assets	Gross fixed assets as per cent of gross long-term mobilised resources
1962-63 to 1975-76	98.36 (73.08)	91.25 (65.88)	92.77
1962-63 to 1964-65	46.60 (63.57)	59.29 (75.43)	118.65
1965-66 to 1968-69	114.67 (81.54)	106.15 (75.57)	92.57
1969-70 to 1971-72	100.59 (75.96)	82.96 (62.70)	82.47
1972-73 to 1975-76	131.61 (68.54)	109.55 (57.72)	83.24

Note: Figures in parentheses are percentages of gross mobilised resources.

and 61.9 per cent; in the two exceptional years 1972-73 and 1975-76, the percentages were 71.3 and 91.9, respectively.

The lower proportion of mobilised resources being directed towards fixed capital formation in the private corporate sector subsequent to the industrial recession could imply, among other things, that the pace of capital formation slowed down or that the private corporate sector was successful in mobilising more resources than it could fruitfully utilise in fixed capital formation; the results could also mean that inventory holdings were rising considerably thereby absorbing a larger proportion of investible funds which could have otherwise gone into long-term fixed capital formation. These issues are examined in section 2 below.

2. Long-term Funds and Fixed Asset Formation

According to the analysis of the NIPFP sample data, all but a negligible proportion of long-term resources were channelised into avenues for which they were primarily mobilised: gross fixed assets absorbed 92.8 per cent of long-term resources mobilised during the

14-year period. We have not, however, included inter-corporate investment as one of the long-term uses of funds because such an investment only provides resources to some other corporate entity, which in turn may use it either for long-term or short-term purposes.

For companies in the RBI sample also, gross fixed assets were found to be only slightly less than the long-term funds that were mobilised: gross fixed assets absorbed 98 per cent of the gross long-term funds. This meant that some of the long-term funds were directed to meet short-term requirements.

The lower proportion of long-term funds being diverted to short-term purposes by the RBI companies than by the NIPFP companies arose due to the larger proportion of long-term funds mobilised by the companies in the latter sample, in the form of corporate savings, including depreciation. The NIPFP sample, as was indicated in chapter I, included a lower proportion of companies making losses than the RBI sample and further it excluded companies which were less than 15 years old, unlike the RBI sample which included recently established companies also.

We found some variation in the share of long-term gross resources in financing gross fixed asset formation, the proportion ranging from 10 per cent to 20 per cent in the four sub-periods, as can be seen from Table III.1. The period 1962-63 to 1964-65, which saw a sharp growth in corporate operations was, however, an exception; during this period some of the short-term funds were also used for long-term capital formation as is evident from the fact that gross fixed assets were 118.7 per cent of the gross long-term resources mobilised.

Our finding that the long-term funds had not been fully utilised for financing fixed capital formation could be explained partly by the low level of fixed capital formation in the private corporate sector on the one hand, and the rising interest rates and difficulty in obtaining short-term credit accommodation for maintaining high-priced inventories, on the other. As a result, it would not have been a prudent financial policy for the corporate sector to have kept its long-term funds idle rather than use them for meeting its short-term requirements.

3. Composition of Gross Fixed Assets

Among the gross fixed assets for the financing of which mobilised resources were used, the most important were plant and

machinery which represent basic manufacturing capacity. Fixed assets constituted between roughly two-third and three-fourth of the gross fixed assets. For the NIPFP sample, on the average, plant and machinery formed 70.6 per cent of gross fixed asset formation during the period 1962-63 to 1975-76; the corresponding proportion for the RBI sample for the period 1961-62 to 1975-76 was 74.9 per cent. As a proportion of the gross resources mobilised by the private corporate sector, investment in plant and machinery during these periods amounted to 46.5 per cent for the NIPFP sample and 50.1 per cent for the RBI sample (Table A.5).

If we take period averages, the proportion of plant and machinery in gross fixed assets was fairly stable, between 65 per cent and 67 per cent for the NIPFP sample, except for the recessionary period when the proportion shot up to nearly 79 per cent. This was the result possibly of dis-investment in miscellaneous fixed assets such as vehicles and office equipment in some of the years. The unusually high proportion of annual investment in plant and machinery during the recessionary period as compared to other periods needs to be studied in detail.

A nominal part of the annual investment was in work-in-progress, absorbing on the average 0.9 per cent of gross resources; such investments were subsequently transferred largely to plant and machinery and, to a small extent, to buildings; to that extent, the utilisation of gross mobilised resources in building up productive capacity would be higher than that indicated by our figures.

Another important component of gross fixed assets in the private corporate sector was factory and office buildings, which on the average, annually absorbed during the study period 8.9 per cent of the gross mobilised resources (also 8.9 per cent for the RBI sample), constituting 13.5 per cent of the annual gross fixed capital formation. A small proportion, 1.03 per cent of gross mobilised resources (1.08 per cent for the RBI sample), was annually invested in land.

A fairly substantial proportion of gross fixed assets took the form of miscellaneous fixed assets such as motor vehicles and office equipment; such assets on the average accounted for 8.6 per cent of the gross mobilised resources over the 14-year period (5.2 per cent for the RBI sample).

Time series data on depreciation bring out the substantial proportion of annual transfers to depreciation in gross resources

mobilised. On the average, as was shown in chapter II, 38.0 per cent of gross mobilised resources were contributed by depreciation during the period 1962-63 to 1975-76. This brought out the importance of depreciation provision as a source of funds for investment in the private corporate sector. If, in addition to depreciation, the available fiscal reliefs were also taken into account, the annual flow of resources by way of recoupment of earlier investment would have been even larger. We had separate data only for one of the fiscal incentives, namely, development rebate. If we added development rebate funds to depreciation, then, as much as 44.4 per cent of gross resources mobilised by the private corporate sector was found to be in the form of funds related to recoupment of earlier investment. As a proportion of annual gross fixed capital formation, depreciation and development rebate together constituted 67.4 per cent.

4. Inventory Financing

A little more than one-third of the gross mobilised resources were utilised by the private corporate sector in financing its inventory holdings. For the NIPFP sample, during the period 1962-63 to 1975-76, 34.1 per cent of the gross mobilised resources were invested in inventories.

The trend over the years showed an increase in the proportion of mobilised resources being invested in holding inventories. Thus, during the pre-recessionary and recession periods, inventories absorbed slightly less than one-fourth of the gross mobilised resources, but the share increased to 37.3 per cent during the post-recessionary period 1969-70 to 1971-72, and further to 42.3 per cent during 1972-73 to 1975-76. The increasing proportion of gross mobilised resources being directed towards non-fixed capital formation would suggest, on the one hand, the slow-down in fixed capital formation and, on the other, the piling up of inventory. An examination of the inventory holdings showed that the level of raw material holdings as a proportion of gross mobilised resources remained fairly stable at around 10 per cent. The proportion of miscellaneous inventory also remained fairly unchanged, around 7.5 per cent. What was noticeable was that a substantially larger proportion of investible funds was being used to hold finished goods and work-in-progress in the later years than in the earlier ones: 21.6 per cent

TABLE III.2

Utilisation of Gross Mobilised Resources in Inventory Holdings: NIPFP Sample

(In per cent of gross mobilised resources)

Year	Inventory	Finished goods and work-in-progress	Raw materials	Others
1962-63	17.62	—0.34	11.49	6.47
1963-64	20.08	3.42	10.90	5.76
1964-65	31.82	14.20	8.96	8.66
1965-66	32.26	15.46	10.89	5.91
1966-67	27.57	11.38	8.62	7.57
1967-68	27.36	15.12	9.73	2.51
1968-69	14.36	8.57	4.59	1.20
1969-70	28.47	12.36	10.08	6.03
1970-71	45.53	22.83	16.20	6.50
1971-72	38.12	12.18	14.99	10.95
1972-73	27.89	3.40	13.88	10.61
1973-74	47.13	19.81	14.40	12.92
1974-75	63.52	37.89	17.32	8.31
1975-76	6.74	11.24	—11.63	7.13
Pre recession	24.57	7.20	10.19	7.18
	(85.69)	(420.85)	(21.97)	(59.97)
Recession	24.43	12.13	8.22	4.08
	(—16.49)	(—8.15)	(—16.76)	(—40.97)
Post recession (a)	37.30	15.57	13.86	7.87
	(20.17)	(3.09)	(26.66)	(39.93)
Post recession (b)	42.28	21.60	10.77	9.91
	(—32.86)	(52.32)	(52.52)	(—15.25)
1962-63 to 1975-76	34.12	16.05	10.58	7.49
	(9.66)	(12.19)	(14.85)	(12.78)

Note : 1. Figures within parentheses are period compound growth rates.
2. While computing the growth rates, the years with negative figures are excluded; *viz.*, 1962-63 for finished goods and work-in-progress, and 1975-76 for raw materials.

of gross mobilised resources were invested in such inventories during the period 1972-73 to 1975-76 as compared to 15.6 per cent during 1969-70 to 1971-72, 12.1 per cent during 1965-66 to 1968-69 and 7.2 per cent during 1962-63 to 1964-65. A part of this increase in investment in finished goods and work-in-progress might have

been due to the spiralling price rise but a part could also have been due to the difficulties that the private corporate sector might have had in off-loading its stocks. There is also the possibility that some proportion of rising stocks was due to speculative hoarding tendencies.

The annual data on utilisation of gross mobilised resources in inventories (Table III.2) indicated that the trend was clearly upwards: the proportion of gross mobilised resources being invested in inventory in the private corporate sector was rising.

5. Analysis in Real Terms

As in the case of mobilised resources, we computed the values of gross fixed asset formation in real terms using the relevant price deflators.

In terms of constant (1960-61) prices, the gross fixed asset formation effort of the NIPFP companies over the 14-year period 1962-63 to 1975-76, resulted in a net addition of Rs. 809.60 crore as compared to Rs. 1277.53 crore in current values; the increase in nominal terms was 58 per cent higher than the increase in real terms. In the case of plant and machinery which constituted 68.9 per cent of the gross fixed asset formation, total investment in current values at Rs. 879.73 crore was 62.5 per cent higher than that in real terms, estimated at Rs. 550.23 crore (Table III.3).

In real terms, there was stagnation and decline in the volume of annual gross fixed asset and net fixed asset formation. The former grew at an annual compound rate of (—) 1.5 per cent and the latter at (—) 8.6 per cent (Table III.4). Of course, a fall in the growth rate of annual additions to fixed assets in real terms did not necessarily imply that the annual accretion to fixed assets was less than the fixed assets annually discarded or the wear and tear of such assets. What it meant was that there was a slow-down in the growth of assets, but not that there was an actual depletion in capital assets. But it did mean, however, that the annual percentage additions to capital stock declined. The investment in plant and machinery grew at an annual rate of 0.2 per cent in real terms as compared to 7.1 per cent in nominal terms.

The increase in the value of inventories in current prices during the 14-year period added upto Rs. 887.30 crore, higher by 87 per cent of the value of Rs. 474.11 crore at 1960-61 prices, the annual growth

TABLE III.3

Utilisation of Mobilised Resources in Nominal and Real Terms: NIPFP Sample

(Rs. crore)

Year	Gross fixed assets		Plant and machinery		Inventory		Net fixed assets		Depreciation	
	current prices	1960-61 prices	current prices	1960-61 prices	current prices	1960-61 prices	current prices	1960-61 prices	current prices	1960-61 prices
1962-63	41.94	39.87	21.13	20.09	8.79	8.60	25.04	23.81	16.90	16.07
1963-64	58.44	51.44	32.08	28.24	14.99	13.77	29.99	26.40	28.45	25.04
1964-65	65.48	56.97	34.65	30.15	30.37	24.96	33.94	29.53	31.54	27.44
1965-66	96.02	78.68	55.99	45.88	45.83	36.35	59.96	49.13	36.06	29.55
1966-67	91.78	64.54	42.16	29.65	33.09	22.07	55.96	39.35	35.82	25.19
1967-68	93.07	63.59	98.77	67.48	34.76	19.97	64.05	43.76	29.02	19.83
1968-69	143.71	97.15	136.48	92.26	240.40	145.12	73.90	49.96	69.81	47.19
1969-70	89.57	60.50	76.62	51.76	35.17	20.02	24.75	16.72	64.82	43.79
1970-71	74.69	46.67	51.56	32.22	62.40	34.59	11.42	7.14	63.27	39.53
1971-72	84.63	51.02	34.53	20.82	52.09	27.43	28.12	16.96	56.51	34.07
1972-73	103.80	57.62	52.39	29.08	40.60	19.72	24.43	13.56	79.37	44.06
1973-74	120.31	61.62	72.63	37.20	109.50	44.05	45.30	23.30	75.01	38.42
1974-75	103.07	40.96	98.38	40.00	171.17	54.84	30.51	12.12	72.56	28.84
1975-76	111.02	38.97	72.36	25.40	8.14	2.62	30.71	10.78	80.31	28.19
TOTAL	**1277.53**	**809.60**	**879.73**	**550.23**	**887.30**	**474.11**	**538.08**	**362.52**	**739.45**	**447.21**

TABLE III.4

Comparative Growth in Mobilised Resources, Fixed Assets and Inventories : NIPFP Sample

(Average annual compound growth rates in per cent)

	1962-63 to 1964-65		1965-66 to 1968-69		1969-70 to 1971-72		1972-73 to 1975-76		1962-63 to 1975-76	
	current prices	1960-61 prices	current prices	1960-61 prices	current prices	1960-61 prices	current prices	1960-61 prices	current prices	1960-61 prices
Corporate savings	49.08	42.70	12.23	5.53	— 3.20	— 9.02	— 3.81	—17.44	13.20	5.09
Gross mobilised resources	38.34	32.40	5.13	—1.15	5.18	— 1.14	— 4.02	—17.62	7.79	0.07
Net mobilised resources	38.44	32.51	—1.65	—7.52	16.83	9.80	—11.72	—24.23	4.86	—2.65
Gross fixed assets	24.95	19.54	13.01	6.37	— 2.80	— 8.17	0.47	—14.63	5.27	—1.50
Plant and machinery	28.06	22.51	42.25	33.89	—32.87	—36.58	13.57	—3.28	7.05	0.22
Inventory	85.88	70.36	65.22	49.98	21.70	17.05	—35.43	—44.21	8.85	0.29
Net fixed assets	16.42	11.37	7.92	1.58	6.59	0.72	2.95	—2.56	—2.29	—8.57
Depreciation	36.61	30.67	19.38	12.36	—6.63	—11.79	0.02	—15.01	11.23	4.08

in nominal terms being 8.9 per cent as against a marginal annual growth of just 0.3 per cent in real terms.

It is interesting to find that though the growth in gross fixed asset formation and particularly that in plant and machinery, was only nominal or even negative in real terms, data on installed capacity in major industries showed substantial increases. In most of the 20 major industries for the period 1961 to 1976, for which we have presented data in Table A.6, we have found significant increases in installed productive capacity. The discrepancy between productive capacity data in physical terms and in financial terms could arise due to the possibility of increasing physical capacity substantially by nominal increases in financial outlay through the installation of balancing equipment and working of additional shifts.

6. Blown-up Estimates

The gross fixed asset formation of the 99 NIPFP companies in 1975-76 amounted, in current prices, to Rs. 111.02 crore; that of the population of 431 large manufacturing companies from which the NIPFP sample was selected was estimated on the above basis to be Rs. 437.22 crore, and that of the total private corporate sector was estimated to be Rs. 762.79 crore. At the total private corporate sector level, the estimates of gross fixed asset formation were, for the two preceding years, Rs. 844.52 crore in 1973-74 and Rs. 986.95 crore in 1974-75 (Table III.5).

For 1975-76, gross fixed capital formation in the form of plant and machinery in the whole private corporate sector was estimated to be Rs. 497.16 crore and depreciation to be Rs. 551.79 crore. Investment in plant and machinery in the private corporate sector in 1973-74 and 1974-75 was Rs. 509·83 crore and Rs. 942.04 crore, respectively.

Total capital formation, consisting of investment in gross fixed assets and inventories, was estimated to be Rs. 818.72 crore in 1975-76 for the total private corporate sector; the estimate for 1974-75 was Rs. 2625.99 crore and for 1973-74, it was Rs. 1613.16 crore. These estimates are broadly comparable to the estimates made by the Reserve Bank of India of gross capital formation of the private corporate sector: Rs. 1684 crore in 1973-74, Rs. 2511 crore in 1974-75 and Rs. 1732 crore in 1975-76. While for 1973-74 and 1974-75, the NIPFP estimates were similar to the RBI estimates,

they were significantly lower than the RBI estimates for 1975-76, possibly due to the bias towards the larger and growing companies in the RBI estimates, as indicated in chapter II, section 8.

TABLE III.5

Blown-up Estimates of Asset Formation

(Rs. crore)

		Gross fixed assets	Plant and machinery	Inventory	Net fixed assets	Depre-ciation
NIPFP sample companies (99)	1973-74	120.31	72.63	109.50	45.30	75.01
	1974-75	103.07	98.38	171.17	30.51	72.56
	1975-76	111.02	72.36	8.14	30.71	80.31
Estimates for companies in population (431)	1973-74	516.78	311.97	470.35	194.58	322.20
		(0.88)	(0.53)	(0.80)	(0.33)	(0.55)
	1974-75	427..94	408.47	710.69	126.67	301.27
		(0.62)	(0.59)	(1.02)	(0.19)	(0.43)
	1975-76	437.22	284.97	32.06	120.94	316.28
		(0.59)	(0.39)	(0.04)	(0.16)	(0.43)
Estimates for the total private corporate sector	1973-74	844.52	509.83	768.64	317.98	526.54
		(1.43)	(0.87)	(1.31)	(0.54)	(0.89)
	1974-75	986.95	942.04	1639.04	292.15	694.80
		(1.42)	(1.35)	(2.36)	(0.42)	(1.00)
	1975-76	762.79	497.16	55.93	211.00	551.79
		(1.04)	(0.67)	(0.08)	(0.29)	(0.75)

Note : Figures in parentheses are per cent share of GNP (at current market prices)

On the basis of the annual average level of gross fixed asset formation and total capital formation of the NIPFP sample companies over the 14-year study period, we estimated that, on the average, the annual fixed asset formation and total capital formation by the large-scale manufacturing segment of the private corporate sector, were Rs. 355.1 crore and Rs. 601.7 crore, respectively.

7. Conclusions

Three important aspects of the utilisation of gross mobilised resources in the private corporate sector had come out in our analysis. Firstly, there was under-utilisation of long-term resources for

fixed capital formation, for which purpose they were primarily meant. As a corollary of this, we found that a portion of long-term resources were used to finance short-term corporate requirements for holding stocks. Here, long-term funds included depreciation also. During abnormal conditions, for example, when the industrial sector was affected by recessionary forces, an increasing proportion of long-term funds got diverted towards such short-term stock holdings partly because of difficulties in off-loading stocks. In some other unusual circumstances, such as when there was inflationary rise in prices, the increase in the cost of stock holdings and short-term credit squeeze might have necessitated the use of long-term funds for short-term purposes.

Another important finding was that long-term gross resources primarily meant for fixed capital formation were very largely mobilised from internal sources; as much as 88.6 per cent of long-term resources were mobilised in the form of gross corporate savings, including depreciation. That such a large proportion of long-term fixed capital formation could be financed out of internal resources needs to be interpreted in the light of the level of capital formation achieved. Also, this finding was mainly applicable to companies that existed for all the 15 years and not to new companies.

Thirdly, the growth in the fixed capital formation in the private corporate sector was not only lower than that of gross resource mobilisation, but in real terms, when price effect over the years was allowed for, we found that gross capital formation of the private corporate sector was far from satisfactory. We have not gone into the causes for the stagnation in real capital formation in the corporate sector. However, since the level of capital formation was fairly low and not growing, the finding that a large proportion of fixed capital formation was financed through internal sources cannot be interpreted to mean that the private corporate sector is able to raise an adequate level of resources on its own.

IV. SECTORAL RESULTS

1. Overall Perspective

(*a*) *Broad Issues*

The analysis of the pattern of resource mobilisation at the disaggregated level brings out several distinct features of the operations in the private corporate sector. We have found that the composition of mobilised resources varied among different categories of companies under each of the classification criteria that we used. We have also found shifts in the pattern of resource mobilisation during periods of industrial recession or of hyper-inflation or when there was stringency in the capital market. These changes were generally in line with the shifts at the aggregate level (as seen in chapter II) in the pattern of resource mobilisation under different economic situations.

Inter-industry differentials in the pattern of resource mobilisation could have arisen due to the operation of several factors, some among them being the differences in the capital requirements, the rate of growth, image in the capital market and credit-worthiness. These factors were, in turn, dependent upon some others like profitability, dividend payments, plan targets, production techniques, fiscal policy and monetary policy.

Among the other factors affecting the pattern of resource mobilisation which were examined at the disaggregated level were the size of the corporate units, their location, age, effective tax liability and actual growth rate attained. We have found that the resource mobilisation effort was, to some extent, influenced by these characteristics of corporate operations which bring about differences in the volume of resource requirements and also in the capacity to raise resources from among the alternative sources, both from within the corporate sector and from outside.

(*b*) *Distribution of Mobilised Resources among Sample Companies*

The industry-wise analysis was made mainly under five broad categories which were given appropriate weights in

selecting the NIPFP sample. Relevant details on 14 individual industries within these five groups are also presented. The largest proportion (31.6 per cent) of gross resources was mobilised by the engineering industry. Chemical and textile industries, also occupying important positions in the industrial sector, raised 16.1 per cent and 15.8 per cent, respectively, of the gross resources of the NIPFP sample companies (Table IV.1).

TABLE IV.1

Distribution of Gross Mobilised Resources Among NIPFP Sample Companies (1962-63 to 1975-76)

(Annual average)

	Number of companies		Gross mobilised resources	
	Number	Per cent	Rs. crore	Per cent
1. Industry group				
(i) chemicals	15	15.15	22.33	16.05
(ii) engineering	31	31.31	43.91	31.56
(iii) textiles	19	19.19	21.98	15.80
(iv) food	7	7.07	3.47	2.49
(v) miscellaneous	27	27.28	47.45	34.10
2. Size groups (share capital)				
(i) small (less than Rs. 5 crore)	80	80.81	64.14	46.10
(ii) medium (Rs. 5 crore to Rs. 10 crore)	12	12.12	31.66	22.75
(iii) large (above Rs. 10 crore)	7	7.07	43.34	31.15
3. Size groups (total assets)				
(i) small (less than Rs. 15 crore)	49	49.50	26.13	18.78
(ii) medium (Rs. 15 crore to Rs. 30 crore)	28	28.28	31.97	22.98
(iii) large (above Rs. 30 crore)	22	22.22	81.04	58.24

(Contd.)

TABLE IV.1. (contd.)

(Annual average)

	Number of companies		Gross mobilised resources	
	Number	Per cent	Rs. crore	Per cent
4. Age Groups				
(i) very old (before 1935)	31	31.32	40.87	29.37
(ii) old (1936 to 1950)	39	39.39	56.48	40.60
(iii) recent (1951 to 1955)	4	4.04	6.04	4.34
(iv) new (1956 to 1961)	25	25.25	35.75	25.69
5 Location groups				
(i) major industrial centres	23	23.23	26.73	19.21
(ii) adjacent to major industrial centres	68	68.69	100.09	71.93
(iii) others	8	8.08	12.32	8.86
6. Growth rate groups[1]				
(i) below average	21	21.21	22.11	15.89
(ii) average	36	36.36	38.01	27.32
(iii) above average	42	42.43	79.02	56.79
7. Tax liability groups[2]				
(i) below average	45	45.46	63.97	45.97
(ii) average	14	14·14	26.05	18.72
(iii) above average	40	40.40	49.12	35.31
TOTAL (All companies)	**99**	**100.00**	**139.14**	**100.00**

Note : [1]Annual compound growth rate.
[2]Average annual period effective tax rate as measured by tax provision to profits before tax ratio.

An analysis of the size-wise distribution of the NIPFP companies shows that large companies, even though numerically small, mobilised a very substantial proportion of the gross resources. A mere 7.1 per cent of the NIPFP companies, classified as large companies with individual paid-up share capital above Rs. 10 crore, together accounted for as much 31.2 per cent of gross

resources mobilised. On the other hand, 80.8 per cent of the NIPFP companies, relatively small in size, each with paid-up share capital less than Rs. 5 crore together mobilised 46.1 per cent, of gross resources. As a result, the annual gross resource mobilisation effort per large company during 1962-63 to 1975-76 amounted to Rs. 6.19 crore as compared to Rs. 2.64 crore per medium size company and Rs. 0.80 crore per small company. The predominant share of large companies in mobilised resources was in line with the well-known facts about the dominant shares of such companies in the corporate sector as a whole in the total paid-up share capital, installed capacity and value added.

The pattern of resource mobilisation was found to be similar for size-groups measured in terms of total assets as seen in Tables IV.1 and IV.2. These tables also present details for other disaggregated groups of NIPFP companies.

2. Industry-wise Differentials

By and large, the industry-wise findings substantiate those presented earlier in chapter II in the aggregated analysis of the NIPFP and the RBI sample data. Between the individual industries, there were, of course, noticeable differences in the shares of some of the components of resource mobilisation.

Corporate savings constituted the most important source of gross resources in the private corporate sector. In many of the individual industries, the proportion of corporate savings in the average annual gross mobilised resources exceeded the sample average of 64.2 per cent; these industries were tyres and tubes, chemicals, sugar, man-made fibres, electrical machinery, paper and paper products, highly diversified companies and cement. A large proportion of the corporate savings in these industries (except cement), as also in some other industries, was in the form of depreciation and voluntary non-statutory reserves (Tables IV.3 and A.7).

Internal share capital, in the form of bonus shares, is also found to be an important component of corporate savings among industries which had large corporate savings. The exceptions, however, were highly diversified companies and cement companies in both of which internal share capital contributed slightly less than the NIPFP sample average level.

TABLE IV.2

Annual Resource Mobilisation per NIPFP Sample Company

(Rs. crore)

	Number of companies	1962-63 to 1975-76				1962-63 to 1964-65	1965-66 to 1968-69	1969-70 to 1971-72	1972-73 to 1975-76
		gross mobilised resources	net mobilised resources	corpo-rate savings	total long-term resources	gross mobilised resources			
1. Industry groups									
(i) chemicals	15	1.49	0.81	1.15	1.29	0.67	2.04	1.37	1.64
(ii) engineering	31	1.42	0.98	0.85	0.99	0.74	1.41	1.38	1.96
(iii) textiles	19	1.16	0.65	0.69	0.79	0.81	0.81	1.20	1.72
(iv) food products	7	0.50	0.29	0.33	0.43	0.02	0.68	0.49	0.67
(v) miscellaneous industries	27	1.76	1.09	1.16	1.29	0.91	1.71	1.59	2.57
2. Size groups (shares capital)									
(i) small (less than Rs. 5 crore)	80	0.80	0.52	0.47	0.54	0.43	0.65	0.81	1.22
(ii) medium (Rs. 5 crore to Rs. 10 crore)	12	2.64	1.52	2.06	2.27	1.39	2.45	2.17	4.12
(iii) large (above Rs. 10 crore)	7	6.19	3.77	4.01	4.59	3.12	8.43	5.97	6.42

3. Size groups (total assets)									
(i) Small (less than Rs. 15 crore)	49	0.53	0.34	0.32	0.37	0.31	0.48	0.50	0.78
(ii) medium (Rs. 15 crore to Rs. 30 crore)	28	1.14	0.71	0.72	0.82	0.52	0.94	1.23	1.74
(iii) large (above Rs. 30 crore)	22	3.68	2.27	2.47	2.81	3.61	7.59	6.10	8.77
4. Age groups									
(i) very old (before 1935)	31	1.32	0.79	0.86	0.94	0.79	1.22	1.24	1.87
(ii) old (1936 to 1950)	39	1.45	0.89	0.90	1.03	0.83	1.59	1.30	1.88
(iii) recent (1951 to 1955)	4	1.51	1.07	0.95	1.16	0.76	1.01	1.30	2.74
(iv) new (1956 to 1961)	25	1.43	0.91	0.99	1.16	0.54	1.46	1.52	2.00
5. Location groups									
(i) major industrial centres	23	1.16	0.64	0.85	0.99	0.62	1.29	0.93	1.61
(ii) adjacent to major industrial centres	68	1.47	0.93	0.93	1.05	0.77	1.50	1.44	1.99
(iii) others	8	1.54	1.04	0.88	1.06	0.80	1.11	1.67	2.43
6. Growth rate groups									
(i) below average	21	1.05	0.58	0.62	0.70	0.68	1.09	1.18	1.20
(ii) average	36	1.06	0.67	0.71	0.79	0.69	0.89	0.75	1.62
(iii) above average	42	1.88	1.19	1.23	1.42	0.81	2.04	1.92	2.50
7. Tax liability groups									
(i) below average	45	1.42	0.87	1.00	1.13	0.71	1.41	1.25	2.09
(ii) average	14	1.86	1.09	1.22	1.42	1.08	1.94	2.20	2.11
(iii) above average	40	1.23	0.80	0.70	0.80	0.66	1.25	1.13	1.71
TOTAL (All companies)	**99**	**1.41**	**0.87**	**0.91**	**1.04**	**0.74**	**1.42**	**1.34**	**1.94**

TABLE IV.3

Pattern of Resource Mobilisation 1962-63 to 1975-76
(Sectoral Analysis)

(As per cent of gross mobilised resources)

	Corporate savings	Depreciation	External share capital	Long-term loans	Debentures	Short-term funds	Gross resources
1. Industry groups							
(i) chemicals	77.06	45.37	5.76	8.81	1.10	7.27	100.00
(ii) engineering	60.06	31.11	5.54	6.24	3.67	24.49	100.00
(iii) textiles	59.56	43.79	3.74	8.47	0.08	28.15	100.00
(iv) food products	66.94	42.01	7.46	19.09	0.27	6.24	100.00
(v) miscellaneous industries	65.80	37.81	4.55	5.75	1.69	22.21	100.00
2. Size groups (share capital)							
(i) small (less than Rs. 5 crore)	58.33	35.06	4.96	8.37	1.20	27.14	100.00
(ii) medium (Rs. 5 crore to Rs. 10 crore)	78.09	42.50	4.21	6.11	1.77	9.82	100.00
(iii) large (above Rs 10 crore)	64.81	38.92	5.63	6.14	3.11	20.31	100.00
3. Size groups (total assets)							
(i) small (less than Rs. 15 crore)	60.57	36.47	5.09	9.06	0.43	24.85	100.00
(ii) medium (Rs. 15 to Rs. 30 crore)	62.95	38.17	4.83	7.22	1.27	23.73	100.00
(iii) large (above Rs. 30 crore)	66.83	38.36	5.04	6.72	2.62	18.79	100.00

4. Age groups							
(i) very old (upto 1935)	65.47	39.92	5.31	5.44	0.31	23.47	100.00
(ii) old (1936 to 1950)	61.92	38.41	4.51	5.73	3.51	24.33	100.00
(iii) recent (1951 to 1955)	62.85	29.04	4.26	10.37	3.77	18.75	100.00
(iv) new (1956 to 1961)	69.13	36.50	5.54	10.81	0.97	13.55	100.00
5. Location groups							
(i) major industrial centres	73.54	45.20	4.33	10.51	0.81	10.81	100.00
(ii) adjacent to industrial centres	63.46	36.68	5.21	5.89	2.30	23.14	100.00
(iii) others	57.31	32.63	4.75	10.17	1.33	26.44	100.00
6. Growth rate groups							
(i) below average	58.65	45.36	3.48	5.33	2.58	29.96	100.00
(ii) average	66.96	36.59	4.45	5.80	2.13	20.66	100.00
(iii) above average	65.67	36.55	5.69	8.32	1.65	18.77	100.00
7. Tax liability groups							
(i) below average	70.62	38.95	4.71	7.49	1.44	15.74	100.00
(ii) average	65.31	41.64	4.99	5.65	5.34	18.71	100.00
(iii) above average	57.09	34.71	5.38	7.52	0.75	29.26	100.00
TOTAL (all companies)	**64.84**	**37.96**	**5.00**	**7.16**	**1.93**	**21.07**	**100.00**

It appears that the level of corporate savings in the gross resource mobilisation effort of the corporate sector was related to the level of corporate profitability. The industries which we identified as generating a substantial proportion of the gross resources from corporate savings were those which generally had not only a good growth in their gross fixed capital formation but also had above average profitability.

The relatively low contribution of long-term borrowings and debentures seen for the corporate sector as a whole, was also witnessed in the industry-wise analysis. In only three of the individual industries was the proportion found to be significantly above the average. In these industries, namely sugar, transport accessories and cement, long-term borrowings and debentures together constituted between 14.9 per cent and 23.4 per cent, respectively, of gross mobilised resources. These industries, however, had a low proportion of voluntary internal plough-back.

As a proportion of total long-term funds, primarily meant for fixed capital formation, the significance of corporate savings was found to be even greater. For four of the five broad industry groups, the proportion of corporate savings in such long-term resources during the 14-year period ranged from as high as 79.5 per cent to 84.6 per cent; and in the fifth group, namely, food products, the proportion was 71.4 per cent. In other words, about four-fifth of the gross long-term resources in the private corporate sector was raised from internal sources from within the corporate sector. Tax policy, no doubt, had an effect on such corporate savings as is revealed subsequently in section 7 of this chapter, but it was interesting to note that inspite of the various government policies, which are generally believed to be having inhibitive effects on the generation of internal funds by corporations the internal generation of corporate funds formed such a high proportion of long-term resources.

As regards short-term funds, we found that in only a few of the selected industries such resources were substantial; these industries included jute textiles, cotton textiles, transport accessories, paper and paper products, miscellaneous industries and highly diversified industries.

Period-data for the selected industries reveal that changing economic conditions influenced the pattern of resource mobilisa-

tion in particular industries. During the recessionary period, we find that corporate savings, as a source of gross resources, declined in six of the 14 selected industries. The fall was fairly sharp in chemicals, food products, paper and paper products and tyres and tubes industries. In fact, a study of data for voluntary internal plough-back only, showed that as many as eight industries had a set back, as compared to the pre-recessionary period. Another significant indicator, the proportion of gross resources raised through the stock market, declined in 12 of the 14 selected industries.

The impact of inflationary conditions on the pattern of corporate resources becomes clear when we see the distinct improvement in the contribution of corporate savings. At the aggregate level, the NIPFP companies raised 51.4 per cent of gross resources as corporate savings during the pre-recessionary period and only 47.8 per cent during the recessionary period and this proportion improved to 77.7 per cent in the post-recessionary period; a similar trend is seen at the disaggregated level in the case of important industries.

3. Impact of Size

The degree of success that companies had at the stock market, as is reflected in the share of externally mobilised share capital in the gross mobilised resources, was found to be marginally influenced by the size of the companies. The relatively small sample companies, (paid-up share capital of less than Rs. 5 crore) mobilised 5 per cent of the gross resources through the stock market during the period 1962-63 to 1975-76 as compared to 5.6 per cent by large companies (having share capital of above Rs. 10 crore) (Tables IV.3 and A.8).

The size-wise analysis shows that corporate savings, in particular, depreciation, formed the predominant source of funds for companies of all sizes. Corporate savings accounted for between 58.3 per cent and 78.1 per cent of the gross resources and depreciation provision between 35.1 per cent and 42.5 per cent of the gross resources mobilised by the different sized companies.

Analysis of the trends in corporate savings for different sized companies brings out two conclusions: (a) all sizes of companies had, over the years, improved the proportion of their resources raised

through corporate savings, which was the most important source of funds and (b) the improvement seemed to be more in the case of the relatively large companies.

The percentage share of mobilisation of resources through statutory provisions like the development rebate and depreciation was found to rise with the increase in the size of the company. In the case of voluntary internal plough-back, however, the position was just the opposite: the largest companies generated a lower proportion of gross mobilised resources from this source than the smaller companies. This would suggest a lower effective tax liability, a lower dividend pay-out ratio and/or higher profitability before tax.

We have found that the relatively small companies depended somewhat more on long-term loans from institutions than the larger companies: the small companies raised during the 14-year period 8.4 per cent of the gross resources mobilised by them from this source as compared to 6.1 per cent raised by both the medium and the large companies.

Size-wise analysis in terms of total assets brings out results similar to those presented above in terms of paid-up share capital (Table IV.3 and Table A.9).

4. Relevance of Age

While no clear cut differences emerge when we analyse sample data by the four age groups, namely, the very old, old, new and recent companies, a different pattern emerges when we restrict the classification to two broad categories: the old companies incorporated upto 1950 (groups 1 and 2) and the new companies incorporated between 1951 and 1961 (groups 3 and 4).

The new companies mobilised a larger proportion of their resources in the nature of long-term funds than the older companies (Table A.10). During the 14-year period, short-term funds constituted 23.5 per cent of gross resources for companies incorporated before 1935 and 24.3 per cent for companies incorporated between 1936 and 1950. The corresponding figures for the companies incorporated between 1951 and 1955 and for the companies incorporated between 1956 and 1961 were 18.8 per cent and 13.6 per cent, respectively. Further, the older companies mobilised only around 5 per cent of the gross resources through long-term

borrowings from financial institutions as compared to over 10 per cent by the new companies. As a corollary of this, short-term funds had a greater role to play in the case of the older companies. Three factors could explain this situation. First, the older companies were generally well established and did not need as much of long-term funds as the newer companies which might still have been in the process of building up their physical capacity. Secondly, as the older companies were already in full commercial operation, their need for short-term funds to maintain larger stocks and incur other miscellaneous operational expenses would have been greater than that of the newer companies, not yet in full operation. Thirdly, even when the older companies embarked on some fixed capital formation programme, they already had some corporate savings particularly in the form of depreciation provision, which would not have been the case in respect of the newer companies. Hence, long-term funds and also long-term institutional borrowings were more important components of gross resources in the case of newer companies.

A detailed analysis of the contribution of depreciation provision over the study period shows that as a source of fresh funds, its relative importance depended upon the age of the companies. As shown earlier in this section, depreciation was a relatively more important component of gross resources mobilised for older companies. This was true not only for the 14-year period but also for the four sub-periods. A question may arise as to why depreciation was a more important source of gross resources for the older companies, as the more recent companies were more capital-intensive in nature. The explanation lies in the fact that depreciation also depended upon the availability of chargeable income and that even older companies had, over the last decade and a half, undertaken large-scale modernisation and diversification programmes, also in fields which were highly capital-intensive in nature. In fact, the product pattern of the NIPFP companies reveals that a large proportion of older companies which were initially single-product units several decades ago were, at the time of this study, operating in diverse fields.

Age-wise analysis also showed that the development rebate reserve was a more important constituent of mobilised resources for the newer companies than for the older companies. In the case of the newer companies, as other internal resources, especially

depreciation, would not have been substantial (as in the case of the older companies), the share of development rebate as a proportion of gross resources and also of corporate savings worked out to be higher. Period analysis also supports this finding.

The analysis of the sample's 'new' companies, especially for the period 1962-63 to 1964-65, can be considered to be fairly representative of the situation of such new companies. In this period when the new companies were at most between five and eight years old and in many cases only two to four years old, the dependence on fresh share capital was very substantial (34.2 per cent of gross resources as compared to 8.3 per cent, 8.9 per cent and 19.1 per cent for the older companies in age groups one, two and three, respectively, for the same sub-period). In fact, with the passage of time as these new companies could mobilise other resources, the importace of fresh share capital fell drastically to 5.32 per cent of gross resources during 1965-66 to 1968-69, to 3.2 per cent during 1969-70 to 1971-72 and to 2.9 per cent during 1972-73 to 1975-76. Another interesting finding was about long-term funds, which averaged 17.8 per cent of gross resources mobilised during 1965-66 to 1968-69 when these companies could be expected to have gone into full swing with their fixed asset formation programme; thereafter, there was a net transfer of funds from such companies to the lending agencies (the projects would have started yielding positive cash flows and the instalments for repayment of long-term loans would have became due). Corporate savings also became more significant as companies started productive operations and generated taxable income; the share of depreciation increased gradually from 23.0 per cent during 1962-63 to 1964-65 to as much as 49.2 per cent during 1972-73 to 1975-76 and that of reserves from 11.6 per cent durnig 1962-63 to 1964-65 to 40.0 per cent by 1972-73 to 1975-76 (Table A.10). For companies which are new today, the pattern which emerges for the sample's 'new' companies in their initial years might be broadly similar though the dependence on long-term funds from external sources may be now even more.

5. Role of Location

The location of an industry did not seem to play a significant role in determining corporate behaviour in mobilising resources

from external sources, such as the stock market and long-term financial institutions. Hardly any difference was seen in the proportions of gross resources annually mobilised from the stock market during the period 1962-63 to the 1975-76 by the three location-based groups, the respective shares ranging between 4.3 per cent and 5.2 per cent (Tables IV.3 and A.11). Similarly, as regards long-term institutional finance, the proportions of gross resources mobilised from these sources were almost identical for companies located at the major industrial centres (10.5 per cent) and at a distance away from such centres (10.2 per cent).

This finding was contrary to the general belief that companies having their operational centre in the form of the registered office (the factories could be located elsewhere) in the midst of the major financial markets had *a priori* greater access to these markets and hence would be more successful there. The corollary which followed from such a belief was that companies with their centres located at distances away from major capital markets would tend to be discriminated against in terms of obtaining resources from these agencies. Such a belief was not found to be substantiated by empirical evidence.

The explanation for the above findings is that the NIPFP companies were fairly large-sized and could incur the expenditure on regular visits to the financial and capital centres and build up the necessary liaison. A distant location did not, therefore, produce any deterrent effect on the capacity to raise resources from such markets.

While location did not seem to have any distinct effect on corporate capacity or tendency to mobilise long-term external resources, it did seem to have a bearing on corporate behaviour in generating internal savings and mobilising short-term external funds. During the study period, companies having their location at the major industrial centres mobilised 73.5 per cent of the gross resources through corporate savings but this proportion was 63.5 per cent for companies located in the proximity of such centres and even lower at 57.3 per cent for companies located at a distance from such centres. However, the differentials arose mainly through substantial differences in the contribution of depreciation: the companies located in and near the major industrial centres, being larger and older than those located farther away, mobilised a substantially higher proportion of the resources from this source.

If we only took corporate savings in the form of internal plough-back and internal share capital, the contribution of such corporate savings was found to be roughly the same, between 24.7 per cent and 28.3 per cent of the gross resources.

Our analysis, thus, showed that location did not play a major role in determining the composition of long-term funds primarily meant for fixed capital formation. The position, however, was different as regards short-term resources. The proportion of total resources that were of a long-term nature got reduced as locations were shifted farther away from the industrial centres. We found that the major industrial-centre companies raised only 10.8 per cent of their gross resources in the form of short-term borrowings and net miscellaneous liabilities as compared to 23.1 per cent raised by companies located in the vicinity of such centres and 26.4 per cent raised by those located away from such centres.

These differences may have arisen due to the need to maintain larger stocks (raw-materials as well as finished goods) at locations away from the industrial centres as the major purchasing and selling centres, including ports (for imports and exports), are located in, or nearer to, the major industrial centres. The difficulties in geting adequate wagon space in time would have necessitated to some extent the maintenance of larger stocks, especially at distant locations, thereby resulting in the blocking of short-term and to some extent even long-term funds for holding inventories.

Recessionary conditions were found to affect companies located at the major industrial centres more adversely than those located near them; the adverse effects were the least for companies located at a distance. The reasons for such a rather unexpected finding need to be studied. Recovery was, however, also immediate for companies located at the major industrial centres.

6. The Growth Angle

Companies with a higher rate of growth of gross fixed assets mobilised a larger proportion of the gross resources in the form of long-term funds than companies which had a lower growth rate. Further, among the long-term funds, the proportion of long-term institutional finance was substantially higher for the former; so also was the case with fresh share capital mobilised from the stock exchange and from internal sources. Among the components of

corporate savings, the most significant difference was noticeable in respect of a statutory relief, the development rebate, which was linked exclusively to growth in gross fixed assets formation. Voluntary internal plough-back was also substantially higher for fast-growing companies as compared to slow-growing companies; in other words, it can be said that companies which ploughed back more obtained a higher growth rate in their gross fixed assets than others.

While short-term funds constituted 30 per cent of gross resources for companies whose gross fixed assets grew at a low rate (average annual compound rate of less than 7.5 per cent), the proportion was 20.7 per cent for companies having average growth rates (7.5 per cent and 12.5 per cent) and the proportion was reduced to 18.8 per cent for above average growth rate companies (more than 12.5 per cent). Similarly, while companies growing at above average rates mobilised 10 per cent of the gross resources through long-term institutional borrowings and debentures, the proportion was lower at 7.9 per cent for companies having average and below average growth rates (Tables IV.3 and A.12).

It was interesting to find that among the different categories of companies depreciation as a source of internal funds was most important for the companies having below average growth rates. This might have been due to the fact that the fixed assets of such companies were not growing fast and hence their requirement of additional funds was not as much as in the case of other categories of companies; at the same time since depreciation is an allowable charge on the existing fixed assets and remains fairly constant annually in absolute amounts when there is no growth in fixed assets, it would tend to increase as a proportion of declining total volume of fresh resources.

Growth was, thus, seen to have a favourable impact on the capacity of the companies to mobilise resources from the stock market and financial institutions and to also generate internal plough back. On the other hand, with inadequate growth companies utilised the mobilised resources more towards short-term inventory financing and for miscellaneous uses.

7. The Tax Liability Aspect

We found that the companies having a lower effective tax liability had a larger internal plough-back and were, therefore,

dependent on external funds to a lower extent than companies having a higher effective tax liability. Further, in such companies the proportion of short-term funds in the mobilised resources was lower as their lower effective tax liability emanated from the use of a larger proportion of the mobilised resources for fixed capital formation.

The companies having a low effective tax liability (less than 30 per cent) during the period 1962-63 to 1975-76 raised 70.6 per cent of gross resources through corporate savings as compared to the 65.3 per cent raised by the companies having an average effective tax liability (between 30 per cent and 39 per cent) and 57.1 per cent by the companies having an above average effective tax liability (exceeding 39 per cent). Statutory retentions in the form of development rebate, which influence the level of effective tax liability was, for the average and the below average tax liability companies, between $1\frac{1}{2}$ times and 3 times the level noticed for the above average tax liability companies (Tables IV.3 and A.13).

It is seen that among the long-term funds those from external sources like the stock and capital markets were relatively more important for the companies having high effective tax liabilities and conversely.

8. Private Limited Companies

Perceptible differences were noticed in the pattern of resource mobilisation as between private limited and public limited companies. The respective patterns of resource mobilisation seemed to be in line with the operational characteristics of the two types of companies. Mobilisation of long-term funds was relatively less important in the case of private limited companies than in the case of public limited campanies; hence, short-term funds occupied a more important position. As much as 33.4 per cent of the gross resources during 1961-62 to 1975-66 mobilised by private limited companies were of a short-term nature as compared to 31.8 per cent by public limited companies (Table A.14).

The analysis of the data on the use pattern of mobilised funds reveals that as much as 60.2 per cent of the gross mobilised resources were used for fixed assets formation by private limited companies, while public limited companies utilised a somewhat higher proportion, namely 66.8 per cent, for this purpose.

Depreciation provision was found to be a less important source of resource mobilisation in the case of private limited companies than in the case of public limited companies. Similarly, development rebate linked to fresh investment was also a less important component. Depreciation provision constituted 33.8 per cent of the gross resources mobilised and development rebate reserves another 4.6 per cent in the case of private limited, compared to 37.1 per cent and 6.4 per cent, respectively, in the case of public limited companies. That this happened in spite of a higher annual growth rate of gross fixed assets of private limited companies (11.2 per cent) than of public limited companies (10.4 per cent) was due to the composition of the respective gross fixed assets, plant and machinery being less important in the case of private limited companies.

It was interesting to find, however, that free reserves were relatively more important, contributing 11 per cent of the gross resources mobilised by private limited companies as against 9.4 per cent by public limited companies. The RBI data show that the profitability of private limited companies was lower than that of public limited companies. Therefore, one needs to examine further this aspect of the pattern of resource mobilisation. Our analysis shows that fresh share capital by way of equity subscribed by existing or new shareholders and by way of bonus shares made a more or less similar contribution towards the resource mobilisation effort of both private limited companies and public limited companies.

There was a perceptible difference in the proportions of resources mobilised through net miscellaneous sources by the two types of companies; this source provided 6.2 per cent of gross resources for public limited companies but only 3.2 per cent for private limited companies. The substantially lower proportion in the case of private limited companies could be due to their lower degree of credit worthiness among trade and business associates.

9. Conclusions

Sectoral analysis has brought out a number of illuminating facts on the mobilisation of resources by different types of companies. Corporate savings were the most important component of the gross mobilised resources for each of the category of companies

whose results were analysed. Further, the importance of corporate savings increased over the years for all categories of companies

Industries with high rates of profitability and good growth in fixed capital formation mobilised a larger proportion of the gross resources from internal sources than other industries. This was particularly true for voluntary internal plough-back.

The importance of long-term institutional funds in the pattern of corporate resource mobilisation was not found to be as much as one generally expected. This may be partly because the data used in this study, as in other similar studies, are shown net of repayments of earlier loans. Besides, as explained earlier, there was no company less than 15 years old in our sample. There is reason to believe that relatively new companies, set up in the seventies, would have depended more on institutional finance. The importance of long-term debt gets dwindled also owing to the large volume of internal resources, particularly depreciation, generated by the private corporate sector. In only three out of the 14 individual industries studied, namely, sugar, transport accessories and cement, were long-term borrowings and debentures somewhat higher, between 14.9 per cent and 23.4 per cent of the gross resources.

Short-term funds were relatively important only in a few industries, such as jute textiles, cotton textiles, transport accessories and miscellaneous industries; these industries were not as capital intensive as the other industries studied, and further, they also needed larger stock maintenance than others.

Economic conditions were found to have a bearing on the pattern of resource mobilisation in most industries. During the recessionary periods, corporate savings became less important and mobilisation of resources from the stock market was also reduced. Corporate savings declined during this period in six of the 14 industries, the proportion of internal plough-back fell in eight industries and resource mobilisation through the stock market suffered the set back in 12 industries. On the other hand, during the period of rising prices, the proportion of corporate savings in gross resources increased in six of the 14 industries.

Size, too, had a bearing on the proportion of resources mobilised through the stock market and also on the proportion of statutory corporate savings, such as development rebate and

depreciation. But size did not seem to play a role in determining the extent of success in mobilising resources from long-term financial institutions.

The size-wise analysis, however, also shows that corporate savings were to some extent influenced by the size of the companies; the proportion of corporate savings in gross resources mobilised was much higher in the case of large companies than in others.

By the very nature of operational realities in corporate life, companies require a gestation period before they can generate internal resources, even of a statutory nature. As such, external funds were found to be important when the companies were relatively new than when they became relatively old. The extent of dependence on external funds, especially long-term institutional assistance, would be found to be higher than what is true in the case of 'new' companies in the NIPFP sample, if we examined the pattern of resource mobilisation of companies in operation for even shorter periods, such as less than five years. With the passage of time, a normal corporate unit operating under normal economic and market conditions is able to generate more internal resources, particularly in the form of depreciation and development rebate; non-statutory retentions become important only when the corporate unit is fairly well-established.

The passage of time also seemed to change the pattern of use of mobilised resources. An increasing proportion of total resources in the case of older companies tended to be of a short-term nature. An increasing proportion of long-term mobilised resources was also diverted towards short-term inventory build-up.

Age-wise analysis also shows that recessionary conditions seemed to affect more immediately and adversely the capacity to generate internal funds by new companies than by old companies.

It was found that the location of an industrial unit did not play an important role in determining its success at the capital and stock markets. This result was probably obtained because the NIPFP sample did not include really 'small' companies, in the sense in which the term is generally understood. The NIPFP companies were large enough to afford the recurring expenses for maintaining the necessary liaison with the stock and capital markets when they needed to mobilise resources from such markets.

While location did not affect the capacity to mobilise long-term

internal funds, it did have a bearing on the extent of recourse to short-term resources. Generally, the more distant a unit was from the major industrial centres, the greater was its need to maintain larger stocks of materials.

We found that the growth rate of gross fixed assets formation and the effective tax liability level also influenced the pattern of resource mobilisation. Companies with high growth rates had a larger proportion of internal corporate savings; similarly, companies with lower effective tax liability had a larger proportion of internal corporate savings. In both cases, this was due to fiscal reliefs like development rebate and also due to depreciation. A corrollary of this was that such companies mobilised a lower proportion of short-term funds.

V. FISCAL AND MONETARY POLICY AND THE RATIO OF EQUITY TO DEBT FINANCE

1. Introduction

The analyses in chapters II and IV identified depreciation, borrowings, retained profits and fresh issue of share capital as the major sources of financing corporate investment in India. Except for depreciation, the others can, *a priori*, be considered to be affected by changes in fiscal and monetary policies[13]. While borrowings (long-term) are generally referred to as "debt finance", the sum of retained profits and fresh share capital constitutes "equity finance". We now turn to an econometric analysis of the factors determining the relative proportions of corporate investment financed by these two methods of financing.

Econometric studies on the determinants of the pattern of corporate finance in India have generally concentrated on such determinants as the availability of funds from alternative sources, the level of investment expenditure and the risk-factor represented either by the stock of debt or by the debt-equity ratio. The effects of fiscal and monetary policies were largely overlooked. In actual corporate operations, however, factors like discriminatory tax treatment of borrowed and owned funds, cost and availability of loanable funds and direct controls in the capital market, such as credit rationing, could be expected to have a close bearing on the pattern of financing corporate investment. Accordingly, we analysed the determinants of the pattern of financing corporate investment, paying special attention to those determinants which come under the purview of fiscal and monetary policies. More specifically, we concentrated on the effects of fiscal and monetary policies on

[13]Depreciation is the most important single source of corporate funds but we excluded depreciation from the econometric exercises as it is a statutory deduction allowable under the Income-tax Act and is not influenced by fiscal and monetary policies, unless the tax laws directly affect the depreciation base, method and/or rates.

one aspect of corporate finance, *viz.*, the ratio of equity to debt finance[14].

In section 2, we specify a model of the factors determining the ratio of equity to debt finance based partly on the recent theoretical developments in the theory of corporate finance and partly on the economic characteristics specific to the Indian capital market. Section 3 presents the principal conclusions that were derived from estimating alternative versions of this model using the company finances data published by the Reserve Bank of India on large and medium public limited companies for the period from 1956-57 to 1975-76. As a backdrop to the *a priori* model specification and econometric estimation exercises, it may not be out of place here to present the trend in the ratio of equity to debt finance.

Table V.1 presents the ratio of equity to debt finance for the large and medium public limited companies. The annual average of this ratio worked out to 1.54 for the 20-year period, 1956-57 to 1975-76. In two of the years during this period, namely, 1959-60 and 1972-73, the ratio was abnormally high, 5.54 in 1959-60 and 11.9 in 1972-73. These abnormal ratios created certain problems for the econometric exercise and hence they were excluded from the analysis.

It may be pointed out here that the equity to debt finance ratio presented in Table V.1 were based on the RBI data on companies which mainly included well established ones and might have also included some stagnating and loss making ones. If a study was made of the equity to debt ratios of only new companies, or for that matter, companies engaged in highly capital intensive activities, the ratio could have been higher than that depicted here.

No clear trend is visible in the long-run behaviour of the ratio. While upto the Third Plan period, the ratio was increasing (the average annual ratio were 0.70 and 0.87, respectively, during the Second and the Third Plan periods), it fell during the three years of the Annual Plans to 0.36, and then rose again to an average of 1.03 during the Fourth Plan period (excluding 1972-73); during the first two years of the Fifth Plan, the ratio fell to 0.50.

[14]The term equity to debt finance ratio is used to denote the ratio of two flows: the yearly changes in equity to the yearly changes in debt, whereas the term debt-equity ratio is used to denote the ratio of two stocks: the stock of debt to the stock of equity.

TABLE V.1

The Proportion of Equity to Debt Finance: Large and Medium Public Limited Companies 1956-57 to 1975-76

Year	Equity finance as a proportion of debt finance
1956-57	0.5333
1957-58	0.4226
1958-59	0.7607
1959-60	5.5370
1960-61	1.0984
1961-62	1.3435
1962-63	0.8171
1963-64	0.9119
1964-65	0.7291
1965-66	0.5335
1966-67	0.0953
1967-68	0.2333
1968-69	0.7418
1969-70	1.0696
1970-71	0.8191
1971-72	1.2704
1972-73	11.8983
1973-74	0.9521
1974-75	0.7679
1975-76	0.2291

Sources: 1. Reserve Bank of India (1977). *Financial Statistics of Joint Stock Companies in India 1970-71 to 1974-75.*
2. Reserve Bank of India (1975). *Financial Statistics of Joint Stock Companies in India 1960-61 to 1970-71.*
3. Reserve Bank of India (1967). *Financial Statistics of Joint Stock Companies in India 1950-51 to 1962-63.*

2. The Model

In the theory of corporate finance, the determinants of the ratio of equity to debt finance in the capital structure of a firm have received a good deal of attention. Modigliani and Miller (1958) showed that in a perfect capital market, in the absence of risk (arising out of the possibility of firms going bankrupt) and of relative tax effects depending on the financial structure of firms (*i.e.*, the absence of differing tax treatment of company earnings according to whether these were paid out as interest on debt, or were paid out as dividends, or were retained in the firm), the cost of capital to the firm, and consequently, the market value of the firm,

is invariant to the structure of financing. The Modigliani-Miller proposition that under some quite general circumstances the structure of a company's capital should not affect the cost of capital was both stimulating and challenging. Subsequently, attention was turned to an analysis of the effects of the corporate tax system and of the risk arising out of the possibility of firms going bankrupt on the relative cost of equity versus debt financing of corporate investment. Based on these theoretical developments as well as on the economic characteristics specific to the Indian capital market, we selected the following variables as being the most important determinants of the ratio of equity to debt finance.

(*a*) *The Corporate Tax Rate*

A common feature of corporate tax systems in many countries, including India, is the deductibility of interest payments by companies against earnings for computing the corporate tax liability. In other words, the interest payable on corporate debt is excluded in computing the taxable profits. Other things remaining the same, the existence of such a corporate tax system makes debt finance more profitable to the firm than equity finance. Accordingly, one of the fiscal determinants of the ratio of equity to debt finance, as suggested by the Modigliani-Miller theorem, is the corporate tax rate. Put formally, the ratio of equity to debt finance becomes a negatively sloped function of the corporate tax rate because of the existence of tax regulations which permit deduction of interest payments by the firm against its earnings for tax purposes.

The corporate tax rate which we used in our empirical exercise is the effective corporate tax rate (defined as the ratio of tax provision to profits before tax). The effective corporate tax rate represents the corporate tax system better than the statutory tax rate, since the former takes into account the various deduction clauses, exemption limits and the rebate structure.

(*b*) *The Debt-Equity Ratio*

Under a corporate tax system in which interest payments are tax deductible, the optimal financial policy for a firm may appear to be one which would finance the entire investment by debt. However, in actual practice, corporate units do not follow such an extreme

financial policy due to the possibility of the risk of bankruptcy. As enunciated by Kalecki (1937), the marginal risk of bankruptcy increases with every increase in the debt of a firm in relation to its equity. In turn, the increased risk of bankruptcy leads to a higher 'capitalisation rate' (at which a firm's expected net profit stream is discounted) and, consequently, to a fall in its 'market value'; this fall in the market value of the firm represents the cost of bankruptcy arising out of the increasing debt-equity ratio. The existence of such bankruptcy costs makes it non-optimal for a firm to have only debt in its capital structure. In other words, the debt-equity ratio itself becomes an important determinant of the ratio of equity to debt finance.

In our exercises, we used one-year lagged debt to equity ratio (including both long-term and short-term debt) as an explanatory variable. *A priori*, we expect the sign of this variable to be positive.

(*c*) *Interest Cost of Credit*

The relative cost of equity versus debt finance may also be influenced by the rate of interest at which companies can borrow from the capital market. In the Indian capital market, the major lending agencies, as brought out in chapter II, are the commercial banks and the financial institutions like the Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), Industrial Finance Corporation of India (IFCI), State Financial Corporations (SFCs) and Unit Trust of India (UTI). An increase in the interest rate at which companies can borrow from these financial intermediaries would raise the cost of debt finance relative to equity finance and, consequently, the ratio of equity to debt finance may also rise.

Three proxies for the cost of credit were used, namely, the simple bank rate, the weighted bank rate and the weighted advance rate of the commercial banks.

(*d*) *Direct Quantity-Controls in the Capital Market*

It is sometimes argued that in India corporate financial policy is affected more by direct controls such as credit rationing than by the interest cost of credit. One possible reason for such a behaviour on the part of firms is the persistent inflationary tendencies that have prevailed during the last two decades. In an inflationary economy,

the 'administered' interest rates may not represent the real cost of credit since these rates do not adjust fully to changes in the expected rate of inflation. Consequently, these rates are substantially below the 'equilibrium rates' thus leading to a persistent excess demand in the credit market. In such a market, it is only natural that direct 'quantity-controls' are more effective than variations in the interest-cost of credit.

The proxy for direct controls in the capital market which we used in our regression equations is the total credit sanctioned by the financial institutions (namely, the IDBI, ICICI, IFCI, SFCs and UTI) plus the commercial bank credit to the private sector.

(*e*) *Growth-Rate of Industrial Production*

The growth rate of industrial production could affect the ratio of equity to debt finance in two ways:

(*i*) As the growth-rate of industrial production is an important indicator of the performance of the corporate sector, changes in it may have a positive effect on the expected rate of profit. This, in turn, would have a positive effect on the demand for fresh shares; consequently, the value of fresh shares would go up in the equity market.

(*ii*) A higher-growth-rate of industrial production would also mean higher profits in the corporate sector. Given that the propensity of firms to save (*i.e.*, to retain profits) is positive, this would increase the amount of retained profits.

The growth-rate of industrial production would thus have a positive effect on the ratio of equity to debt finance. Accordingly, we incorporated in our empirical exercise the rate of growth of the index of industrial production (base year 1970 = 100) as an explanatory variable.

3. The Equations and Their Interpretation

We estimated alternative versions of the model of equity to debt finance using the data for the period from 1956-57 to 1976-77. None of the regression equations yielded meaningful results. As indicated in section 1, the sample period included two years in which the ratio of equity to debt finance rose abnormally. It is possible

that the inclusion of these two abnormal years in the sample was the main reason for such meaningless regression results. However, no particular economic factor could be identified as the cause of this abnormal increase in the ratio in these two years. Hence, we dropped the two years, *i.e.*, 1959-60 and 1972-73, from the sample period and re-estimated the equations. Some of these regression equations are presented in Table V.2. The dependent variable in all the regression equations is the ratio of equity to debt finance (EF/DF).

The first three equations of Table V.2 represent one version of our model of equity to debt finance — the version where only the interest cost of credit was the explanatory variable. The three interest rates mentioned in section 2, the simple bank rate (SBR), the weighted bank rate (WBR) and the weighted advance rate of the commercial banks (WCR) are tried one by one in these equations. It is interesting to note that none of the interest rates has a significant coefficient in these equations; what is more important, contrary to *a priori* expectations, all the three interest rates come out with negative coefficients. The DW statistic also points to positive autocorrelation of the regression residuals.

Equations from (4) to (6) include, in addition to the three interest rates, the one-period lagged debt-equity ratio $(D/E)_{t-1}$ as an explanatory variable. As explained in Section 2, this variable is a proxy for the risk factor and, *a priori*, the sign of its coefficient should be positive. Once again, none of the other variables come out with significant coefficients in these equations. However, the coefficient of the debt-equity ratio has the expected sign. The coefficients of the interest rates, although insignificant, still bear wrong signs. These results seem to indicate that the cost of credit does not have a significant impact on the ratio of equity to debt finance. Accordingly, in equation (7) we drop the interest rates and instead include the chosen proxy for direct quantity control in the capital market, *viz.*, the total credit sanctioned by the financial institutions (including the commercial banks) to the private sector (TC). Although the coefficient of this variable has the expected sign, it is not statistically significant. Neither the R^2 nor the DW statistic in equation (7) is better than in the preceeding equation.

In Table V.3 are presented the regression results of re-estimating some of the equations in Table V.2 after including the effective corporate tax rate (ECTR). The first interesting feature of these

TABLE V.2

The Ratio of Equity to Debt Finance: Regression Results with Interest Rates, Total Credit and the Debt-Equity Ratio as the Explanatory Variables

Equation No.	Constant	SBR	WBR	WCR	TC	$(D/E)_{t-1}$	R^2	F. value	D.W. Statistic
1	0.9457 (3.3072)***	—0.0375 (0.7504)					0.034	0.906	0.563
2	0.9243 (3.6648)***		—0.0302 (0.7725)				0.036	0.905	0.597
3	0.9559 (3.4372)***			—0.0263 (0.8122)			0.400	0.911	0.660
4	0.7287 (1.9437)**	—0.0807 (1.1627)				0.6037 (0.9027)	0.084	0.913	0.686
5	0.7267 (1.9202)**		—0.0503 (1.0309)			0.4256 (0.7098)	0.067	0.911	0.541
6	0.6673 (1.8250)**			—0.0714 (1.4438)*		0.8774 (1.1948)	0.123	0.913	1.052
7	0.4595 (1.1205)				—0.0002 (1.2964)	0.5331 (0.8898)	0.102	0.895	0.851

Note : (*i*) The figures in brackets are t-values.
(*ii*) ***, ** and * denote that the regression coefficient is significant at 1 per cent, 5 per cent and 10 per cent levels, respectively.

TABLE V.3

The Ratio of Equity to Debt Finance : Regression Results with Interest Rates, Total Credit, Debt-Equity Ratio and the Effective Corporate Tax Rate as the Explanatory Variables

Equation No.	Constant	SBR	WBR	WCR	TC	$(D/E)_{t-1}$	ECTR	R^2	F-value	D.W. Statistic
8	2.6952	—0.0120				0.3781	—0.0453	0.330	2.297	0.899
	(2.9021)***	(0.1752)				(0.6298)	(2.2672)**			
9	2.7960		0.0047			0.2777	—0.0478	0.329	2.286	0.936
	(2.9547)***		(0.0959)			(0.5238)	(2.3355)**			
10	2.6363			—0.0124		0.4338	—0.0422	0.331	2.309	0.892
	(2.6360)***			(0.2352)		(0.6223)	(2.0860)**			
11	2.7134				—0.00001	0.3270	—0.0462	0.329	2.284	0.912
	(2.4671)**				(0.0645)	(0.6007)	(2.1739)**			

Note : (*i*) The figures in brackets are t-values.
(*ii*) ***, ** and * denote that the regression coefficient is significant at 1 per cent, 5 per cent and 10 per cent levels, respectively.

equations is that the coefficient of the corporate tax rate not only has the expected sign but also is statistically significant at the 5 per cent level. Secondly, the inclusion of the effective corporate tax rate enhances the explanatory power of these equations as is evident from the consistently higher R^2 of equations in Table V.3 than those of the equations in Table V.2; however, the F-values still continue to be below their respective Table-values at the 5 per cent level of significance. Thirdly, once again the coefficients of the interest rates, the total credit and the one-year lagged debt-equity ratio show no signs of improving in statistical significance. Moreover, the D.W. statistics in Table V.3 indicate that the residuals are positively autocorrelated. In section 2, we hypothesised that the growth rate of industrial production would have a positive effect on the ratio of equity to debt finance. It is possible that the positive autocorrelation of the residuals in equations from (8) to (11) is due to the omission of this variable. Accordingly, we re-estimated equations from (8) to (11) by including the rate of growth of industrial production (IND). The results of this exercise are presented in Table V.4.

It is revealing to note from equations (12) to (15) that the inclusion of the rate of growth of industrial production pushes the values of the D.W. statistic upto the inconclusive range. Secondly, the coefficient of the rate of growth of industrial production itself is highly significant with the expected sign. Thirdly, the inclusion of the rate of growth of industrial production enhances the statistical significance of the coefficients of the effective corporate tax rate and the one-year lagged debt-equity ratio. Fourthly, the incorporation of the growth-rate of industrial production as an additional explanatory variable leads to an appreciable increase in the explanatory power of these equations. The R^2s of equations from (12) to (15) are approximately two times the R^2s of equations from (8) to (11). The F-values which were, hitherto, below their respective Table-values are now above them. All these improvements in the test-statistics suggest that the equations from (12) to (15) are certainly better than their counterparts in Table V.3. However, the coefficients of the monetary policy variables, *viz.*, the interest rates and the credit sanctioned by the financial institutions are still statistically insignificant, indicating that neither the 'cost' nor the 'availability' of credit affect the ratio of equity to debt finance. This is further supported by equation (16) in Table V.4 in which we drop the chosen proxies for the

TABLE V.4.

The Ratio of Equity to Debt Finance : Regression Results with Interest Rates, Total Credit, Debt Equity Ratio, Effective Corporate Tax Rate and the Rate of Growth of Industrial Production as Explanatory Variables

Equation No.	Constant	SBR	WBR	WCR	TC	$(D/E)_{t-1}$	ECTR	IND	R^2	F-value	D.W. Statistic
12	1.8753	0.0241				0.7433	—0.0453	0.0618	0.610	5.084	1.445
	(2.3962)**	(0.4337)				(1.5169)*	(2.8614)***	(3.0562)**			
13	1.9272		0.0209			0.7563	—0.0464	0.0614	0.613	5.147	1.491
	(2.4182)**		(0.5368)			(1.6972)*	(2.8759)***	(3.0894)***			
14	1.7806			0.00001		0.8695	—0.0423	0.0599	0.604	4.965	1.328
	(2.1006)**			(0.0010)		(1.5122)*	(2.5009)**	(2.9972)***			
15	1.7922				0.00001	0.8643	—0.0425	0.0600	0.604	4.965	1.333
	(1.9313)				(0.0223)	(1.8429)**	(2.5084)**	(3.0107)***			
16	1.7802					0.8699	—0.0423	0.0599	0.604	7.129	1.328
	(2.4414)**					(2.2762)**	(3.0549)***	(3.1254)***			

Note : (*i*) The figures in the brackets are t-values.
(*ii*) ***, ** and * denote that the regression coefficient is significant at 1 per cent, 5 per cent and 10 per cent levels, respectively.

cost and availability of credit. The exclusion of these variables results in an appreciable increase in the F-value. Moreover, the statistical significance of the coefficients of the corporate tax rate, the rate of growth of industrial production and the one-year lagged debt-equity ratio is also enhanced by the exclusion of the monetary policy variables. We are thus inclined to select quation (16) as the most preferred specification of the factors affecting the ratio of equity to debt finance. However, this should not be taken to mean that the role of monetary policy variables such as the 'cost' and 'availability' of credit is settled once and for all, because we experimented with only a few rates of interest from among the wide spectrum of interest rates that exist in the economy. The use of other indicators of variations in monetary policy may help to settle the question of the role of monetary policy in the determination of corporate financial policy. This, however, is a matter for further research.

4. Major conclusions

Based on the interpretation of the results examined in section 3, we give below the major conclusions derived from our empirical exercise.

First, the effective corporate tax rate is found to be an important factor determining the yearly variations in the ratio of equity to debt finance. We hypothesised in section 2 that because of the deductibility of interest payments by companies against earnings for computing corporate tax liability, the corporate tax rate would have a negative effect on the ratio of equity to debt finance. This often-held hypothesis in the theory of corporate finance is, by and large, found to be supported by our econometric results. This result is of added importance in view of the fact that most of the earlier studies on the pattern of corporate finance in India generally neglected the role of this fiscal variable.

The magnitude of the effect of a change in the effective corporate tax rate on the ratio of equity to debt finance is quite high. Our results indicate (equation 16) that for every one percentage increase (decrease) in the effective corporate tax rate, the ratio of equity to debt finance falls (increases) by 2.7 per cent. Although this estimate of the effect is subject to a margin of error, the finding has important policy implications. It is generally agreed that one of the objectives of fiscal policy is to promote a 'desirable' balance

between the two major sources of financing corporate investment, *viz.*, equity and debt. Our econometric result suggests that the effective corporate tax rate can be a potent fiscal instrument to attain this objective, given the present base of the corporate profits tax.

Secondly, the one-year lagged debt-equity ratio appears to have a significant positive effect on the ratio of equity to debt finance thus supporting yet another often-held hypothesis in the theory of corporate finance that there are significant 'bankruptcy costs' associated with the temporal increases in the debt-equity ratio of a firm. From the point of view of the corporate unit, the existence of such 'bankruptcy costs' offsets a part of the gain from debt-financing of investment that accrues on account of the interest-deductibility feature of the corporate tax system.

The elasticity of the ratio of equity to debt finance with respect to the one-year lagged debt-equity ratio is 0.88. In other words, for every one per cent increase (decrease) in the debt-equity ratio, the ratio of equity to debt finance increases (decreases) by 0.88 per cent. This finding is of special interest since almost all the earlier studies on the effect of debt-equity ratio on the corporate financial policy in India have generally found this variable to be statistically insignificant.

Thirdly, our empirical results would suggest that the variations in the rate of growth of industrial production have a significant positive effect on the ratio of equity to debt finance. This is evident from the fact that in all our regression equations (in which it is included) this variable is statistically significant with a positive sign. Going beyond our regression equations, it is discernible that the sudden fall in the ratio of equity to debt finance took place in the two years 1966-67 and 1967-68 during which there was an unprecedented fall in the rate of growth of industrial production.

In terms of the magnitude of the effect of the growth of industrial production, our results indicate that, on the average, every one per cent increase (decrease) in the rate of growth of industrial production causes the ratio of equity to debt finance to rise (fall) by around 0.45 per cent. This suggests that the ratio of equity to debt finance would be higher when the industrial economy is marching ahead than when it is sluggish.

Finally, regarding the effect of the monetary policy variables such as the 'cost' and 'availability' of credit, the empirical evidence

seems to be inconclusive. The main difficulty in the empirical estimation of the effect of these factors on the pattern of corporate finance lies in the choice of variables to represent them quantitatively. For example, in the case of interest cost of credit, the selection of a particular rate of interest from among the wide spectrum is always beset with problems; nor is it possible to take into account all the interest rates in any empirical exercise. The three interest rates which we included in our empirical exercise, however, turned out to be statistically insignificant. The quantification of the restrictiveness of monetary policy in terms of the 'availability' of credit is no less problematic than the selection of the 'right' interest rate in view of the fact that in India (as in many other countries) monetary policy operates through a complicated system of differential interest rates, selective credit controls and varying debt-equity norms. The proxy which we used for the 'availability' of credit, *viz.*, the aggregate credit sanctioned by the financial institutions (including the banks) to the private sector, however, came out with a statistically insignificant coefficient. Considered against this background, we are inclined to conclude that the quantification of the effects of the monetary policy variables on the ratio of equity to debt finance is largely an unsettled issue that needs more rigorous and further research.

VI. FISCAL AND MONETARY POLICY AND THE RATIO OF RETENTIONS TO FRESH ISSUES

1. Introduction

In chapter V, we studied the effects of fiscal and monetary policies on the ratio of equity to debt finance. The empirical analysis indicated that the discriminatory tax-treatment of equity finance as compared to debt finance (by way of deducting interest payments for computing the taxable earnings of a company) has a significant effect on the proportion of corporate investment financed by equity and debt, respectively. In this chapter, we study another aspect of corporate financial policy, *viz.*, the effects of the differential tax-treatment of corporate retentions and distributed dividends (through the 'double-taxation' of distributed dividends) on the composition of equity finance represented by the ratio of corporate retentions to fresh issue of share capital. In section 2, we specify the factors which, on an *a priori* basis, may be expected to affect the ratio of retentions to fresh issues. In section 3, we discuss the econometric exercises carried out to ascertain the determinants of this ratio, using the company finance data published by the Reserve Bank of India and in section 4, we present the major conclusions derived from the econometric estimation of the effects of the selected factors on the same ratio. However, as a prelude to sections 2 and 3, we present here the general trend in the ratio of corporate retentions to fresh issues.

Table VI.1 depicts the ratio of retentions to fresh issues for the large and medium public limited companies for the period from 1956-57 to 1975-76. From the point of view of the temporal behaviour of the ratio, the whole period of study clearly falls into two distinguishable sub-periods; the period preceding 1966-67 and the period following it. The ratio shows a marked tendency to rise in the second period whereas no definite trend is discernible in the first period. An appreciation of the year to year variations in the ratio requires an analysis of the factors determining it. To

TABLE VI.1

The Ratio of Increase in Reserves and Surplus to Fresh Issues: Medium and Large Public Limited Companies: 1956-57 to 1975-76

Year	Reserves and surplus as a proportion of fresh issues
1956-57	1.4995
1957-58	0.5277
1958-59	0.5686
1959-60	1.3868
1960-61	3.2338
1961-62	1.3844
1962-63	1.5397
1963-64	2.1896
1964-65	2.8326
1965-66	2.5616
1966-67	0.1842
1967-68	0.6834
1968-69	1.2603
1969-70	2.1412
1970-71	5.4855
1971-72	5.3452
1972-73	6.8666
1973-74	10.6116
1974-75	11.8416
1975-76	2.0875
Annual average for 1956-57 to 1965-66	1.7724
Annual average for 1967-68 to 1975-76	5.1470

Sources: 1. Reserve Bank of India (1977): *Financial Statistics of Joint Stock Companies in India 1970-71 to 1974-75.*

2. Reserve Bank of India (1975): *Financial Statistics of Joint Stock Companies in India 1960-61 to 1970-71.*

3. Reserve Bank of India (1967): *Financial Statistics of Joint Stock Companies in India 1950-51 to 1962-63.*

this we turn in section 2, paying special attention to such determinants of the ratio, as the opportunity cost to the shareholders of retentions in terms of the net dividends foregone and the direct controls on the equity market imposed by the Controller of Capital Issues.

2. The Model

As in the case of the ratio of equity to debt finance, the determinants of the ratio of retentions to fresh issues have attracted much attention in the theory of corporate finance. Following Modigliani and Miller (1958), one of the conventional hypothesis in the theory of corporate finance is that in a perfect capital market and in the absence of differential tax-treatment of corporate retentions and distributed dividends, the cost of capital is independent of the composition of equity finance in terms of retentions and fresh share capital. Put differently, this hypothesis says that the composition of equity finance is a matter of indifference for corporate decision making. As a sequel to this conventional hypothesis, recent studies (*e.g.* King, 1977) concentrated on the implications of tax systems on the composition of equity finance in the capital structure of a firm as distributed profits are taxed at a different (generally higher) rate than retained profits. Against the backdrop of these theoretical developments and in the light of Indian experience, we selected the following variables as the principal determinants of the ratio of retentions to fresh issues.

(*a*) *The shareholders' personal income tax rate*

As was shown by King (1977), given the proportion of corporate investment financed by debt, the ratio of retentions to fresh share capital depend on the shareholders' opportunity cost of retained profits in terms of the net dividends foregone. A tax system in which retentions are taxed at the same rate as distributed dividends does not affect this opportunity cost. However, a common feature of most tax systems is the double taxation of distributed dividends, first when it accrues to the company (corporation tax) and second when it accrues to the individual shareholders as income (personal income tax). A tax system which involves such double taxation affects the opportunity cost to the shareholders of retained profits in terms of the net dividends foregone. King had further shown that in a perfect capital market and under a classical tax system this opportunity cost is a decreasing function of the personal income tax rate applicable to dividend income. In other words, as the personal income tax rate applicable to dividend income rises, the opportunity cost of retained profits in terms of the net dividends foregone falls; consequently, given the debt-financed

portion of corporate investment, the ratio of retentions to fresh share capital rises.

In a progressive personal income-tax system, the rates of income tax differ with the income of the shareholders and, as such, there is no common tax rate applicable to all the shareholders. However, it was not possible to take all these rates individually in our emprical work. Accordingly in our econometric exercise, we have represented the series of marginal personal income tax rates by their arithmetic mean. This mean marginal tax rate is computed as follows: *The All India Income Tax Statistics* published by the Directorate of Inspection, Ministry of finance gives data on the distribution of dividend income according to ranges of assessed in come of the individual shareholders. *The Finance Acts* published by the Ministry of Finance give the marginal personal income-tax rates applicable to different ranges of income. When these two pieces of information are juxtaposed, we obtain a frequency distribution giving the proportions of dividend income taxed at the respective marginal personal income tax rates. From this frequency distribution, we have computed the arithmetic mean of the marginal income tax rates applicable to dividend income.

(*b*) *The proportion of investment financed by debt*

A priori, it is not clear whether the relationship between the proportion of investment financed by debt and the ratio of retentions to fresh share capital is positive, negative or zero. To illustrate, suppose the proportion of investment financed by debt falls. At the one extreme, this fall in debt finance could be made good by an increase in fresh share capital, in which case the ratio would fall. At the other extreme, the fall in debt finance could be made good by an increase in retentions, in which case the ratio would rise. As an intermediate case, the fall in debt finance could be made good partly by an increase in fresh issues and partly by an increase in retentions. Thus, the effect of the fall in debt finance on the ratio of retentions to fresh issues would be positive, negative or nil according as the increase in retentions is greater than, smaller than, or equal to, the increase in fresh share capital. In other words, the effect of a change in the proportion of investment financed by debt on the ratio of retentions to fresh issues depends on two off-setting effects, one on the numerator and the other on the denominator of the ratio.

(*c*) *The Yield on Corporate Shares*

There are two channels *via* which the yield on corporate shares may affect the ratio of retentions to fresh share capital — one through the supply side of the equity market and the other through the demand side. On the supply side, given the debt financed portion of corporate investment and the personal income tax rates of the existing shareholders, an increase in the prevailing yield-rate on shares would increase the opportunity cost of fresh share capital *vis-a-vis* retentions, thereby reducing the flow-supply of equity. On the demand side, however, an increase in the yield-rate would increase the flow-demand for equity. Hence, the overall effect of changes in the yield on corporate shares on the ratio of retentions to fresh share capital would depend on these two offsetting effects.

(*d*) *Control of Capital Issues*

In his study, King assumes a perfect capital market in which, among other things, there are no direct controls on the quantum of fresh issues in the equity market. In such a model, flow-supply of and flow-demand for shares determine the amount of fresh issue of shares. However, the Indian equity market is not a completely free market. The government intervenes in determining the quantity-variables by fixing a limit to the fresh issue of shares. Like many other markets, the equity market in India is subject to direct controls over the amount of fresh issues by the Controller of Capital Issues. Companies have to obtain prior consent from the Controller of Capital Issues for fresh issues of share capital.

However, it is not easy to quantify the restrictiveness of the controls exercised by the Controller of Capital Issues; consequently, we used some proxy variables to represent this restrictiveness. In our empirical exercise, we used one such proxy, *viz.*, the ratio of the amount sanctioned by the Controller of Capital Issues to the amount applied for consents. *A priori*, we expect that the ratio of retentions to fresh issues would be a negatively sloped function of this variable.

(*e*) *The Corporate Tax Rate*

A priori, it appears that the major effect of the corporate tax rate would be on the ratio of equity to debt finance. However,

there is a general feeling in the private sector in India that the corporate tax rate also affects the composition of equity finance by affecting the availability of internal funds. More specifically, the argument runs as follows: given the profits before tax, an increase in the effective corporate tax rate reduces the profits after tax. The fall in the profits after tax compels firms to reduce retentions. Given the proportion of investment financed by debt, this fall in retentions compels firms to resort to more fresh share capital to finance a given level of investment, thereby leading to a fall in the ratio of retentions to fresh share capital. To test whether the corporate tax rate has this effect on the ratio of retentions to fresh share capital we included the effective corporate tax rate as one of the explanatory variables in our regression equations.

3. The Equations and Their Interpretation

Using the *a priori* specifications of section 2, we estimated a few regression equations of the factors affecting the ratio of retentions to fresh share capital. In this econometric exercise we confined ourselves to two alternative concepts of retentions:

(*i*) Aggregate reserves as shown in the Sources and Uses of Funds of the companies; and
(*ii*) Aggregate reserves less the development rebate reserve.

Conceptually, the latter concept corresponds to what can be called "free reserves". Analytically, the significance of the distinction between the two concepts of retentions is that free reserves would be largely dependent on the factors mentioned in section 2, whereas the development rebate reserve would be largely determined by the statutory provisions relating to fiscal incentives. We shall first discuss the econometric results obtained by using the concept of aggregate reserves and then shall go on to discuss the results obtained by using the concept of free reserves.

In Table VI.2 are presented the results of estimating a few equations on the determinants of the ratio of retentions to fresh issues for the medium and large public limited companies. These equations are estimated by using the data for the period from 1956-57 to 1975-76. The first equation in Table VI.2 has only one explanatory variable, *viz.*, the mean marginal rate of personal income tax applicable to dividend income (MITR). The coefficient of MITR is

TABLE VI.2

The Ratio of Retentions to Fresh Issues : Regression Results

Equation No.	Constant	MITR	DF/I	RD	CI	ECTR	R^2	F-value	D.W. Statistic
1	—15.9926	0.4624					0.320	8.468	1.0031
	(2.4149)**	(2.9099)***							
2	—9.1557	0.3766	—6.6178				0.463	7.329	1.203
	(—1.3357)*	(2.4980)**	(—2.1284)**						
3	1.7115	0.3054	—4.6835	—1.3478			0.662	10.444	1.454
	(0.2581)	(2.4342)**	(—1.7876)**	(—3.0685)***					
4	—2.1148	0.3286	—4.7829	—1.3047	0.0285		0.667	7.511	1.518
	(—0.2009)	(2.3895)**	(—1.7756)**	(—2.8409)***	(0.4759)				
5	—3.0433	0.2637	—7.2892	—1.2463		0.1503	0.690	8.357	1.739
	(—0.9747)	(2.0431)**	(—2.1347)**	(—2.8148)***		(1.1710)			

Note : (*i*) The figures in brackets are t-values.

(*ii*) ***, ** and * denote that the regression coefficient is significant at 1 per cent, 5 per cent and 10 per cent levels, respectively.

statistically significant at one per cent level with the theoretically expected sign. Taken alone, this variable explains around 32 per cent of the yearly variations in the ratio of retentions to fresh share capital. However, there are two aspects of equation (1) which are rather disturbing — one is the positive auto-correlation of the regression residuals as indicated by the D.W. statistic and the other is the unbelievably high constant term. These results could be the direct consequence of leaving out variables like the proportion of debt-financed investment and the yield-rate on corporate shares from the estimated equation. Accordingly, in equation (2) we introduce the proportion of debt-financed investment (DF/I) as an additional explanatory variable.

As can be seen from equation (2), the addition of DF/I as an explanatory variable leads to an increase of R^2 by around 45 per cent. Moreover, the D.W. statistic in equation (2) is in the inconclusive range. As regards the sign of the coefficient of DF/I, it is important to keep in mind that *a priori* we have hypothesised that the sign could be positive, negative or zero. Accordingly, the t-test relevant for assessing the significance of the coefficient of DF/I is a two-tailed one. On a two-tailed t-test, the coefficient of DF/I comes out significant at the 10 per cent level with a negative sign. This indicates that a change, say, a fall in the proportion of debt-financed corporate investment leads firms to "resort to" more of fresh equity than of retentions. As we mentioned in section 3, a possible interpretation of this result is that firms while deciding about the pattern of financing investment, attempt, among other things, to strike a balance between internal and external finance.

In equation (3), we introduce the yield-rate on corporate shares (RD). As in the case of DF/I, the t-test relevant for the coefficient of RD is a two-tailed one. However, even on a two-tailed test, the coefficient of RD in equation (3) is statistically significant at the five per cent level with a negative sign. The negative sign of RD indicates that the effect of a change in the yield rate on the flow-demand for shares outweighs the effect on the flow-supply of shares. The explanatory power of equation (3) is also higher than that of equation (2); the increase in the R^2 from equation (2) to (3) is of the order of 43 per cent. As regards the D.W. test, although the D.W. statistic in equation (3) is better than in equation (2), it is still in the inconclusive range. The constant term of equation (3) is not significantly different from zero as compared to the negative and significantly

higher constant terms of equations (1) and (2).

In section 2, we had mentioned that in the Indian equity market the government intervenes in determining the volume of fresh issue of shares. To capture the effect of such government intervention we have selected a proxy variable, *viz.*, the ratio of the amount sanctioned by the Controller of Capital Issues to the amount applied for consents (CI). Equation (4) introduces this proxy variable. As can be seen from this equation, the coefficient of this variable is not significantly different from zero. However, this result should not be interpreted to mean that the capital issues control has no effect on the pattern of corporate finance. It is possible that the proxy we have chosen does not prepresent the true restrictiveness of capital issues control. However, it is extremely difficult to model econometrically the effect of the capital issues control on the pattern of corporate finance.

In equation (5) we drop the capital issues control variable and include the effective corporate tax rate (ECTR) instead. However, this variable does not seem to have the type of effect we have hypothesised. It was hypothesised in section 2 that an increase in the effective corporate tax rate may reduce retentions and hence lead to a fall in the ratio of retentions to fresh issues. The coefficient of this variable, although insignificant, is positively signed in equation (5). However, the wrong sign of the coefficient of ECTR may be due to the high multi-collinearity between ECTR and DF/I; the simple correlation coefficient between these two variable is as high as 0.6. It is also possible that the sudden increase in the value of the coefficient of DF/I in equation (5) is the result of this multi-collinearity. However, we made an attempt to test the hypothesis that changes in the effective corporate tax rate affect retentions through a reduction in the profits after tax by regressing the dividend pay-out ratio on the effective corporate tax rate. The estimated equation is given below:

$$\frac{DD}{PAT}\% \quad 65.914 - 0.0307\ ECTR \qquad R^2 = 0.0002$$
$$=(2.2521)^{**}(-0.0636) \qquad D.W. = 0.961$$

where,

DD is distributed dividends, and
PAT is profits after tax.

It is important to note that
$(1 - DD/PAT) = RP/PAT$

where,

RP is retained profits.

The coefficient of ECTR in the above equation is not significantly different from zero, thus indicating that the dividend pay-out ratio and hence the ratio of retained profits to profits after tax is invariant to changes in the effective corporate tax rate. The implication of this result is that a change, say, a given percentage reduction in the profits after tax due to an increase in the effective corporate tax rate reduces retained profits by the same percentage. In the face of these two somewhat conflicting results we are inclined to conclude that the empirical quantification of the effect of the effective corporate tax rate on the composition of equity finance remains, largely, an unsettled issue.

The results obtained by using the concept of free reserves are presented in Table VI.3. Since the data on statutory reserves are not available for the fifties, the period covered in this exercise is from 1961-62 to 1975-76. The results of Table VI.3 are broadly comparable to those in Table VI.2 except for minor differences in t-value of the coefficients and the values of R^2. As mentioned earlier in this section, the rationale of differentiating between free reserves and statutoty reserves is the conjectural hypothesis that statutory reserves are largely determined by statutory provisions regarding fiscal incentives and as such are exogenous to the corporate units. However, since the results obtained by using an alternative concept of retentions are not very different from the ones obtained by using total retentions, it appears that this conjectural hypothesis is not supported by empirical evidence. The reason for this empirical result could be that there was not much variation in the rates relating to the development rebate reserves and/or that although the development rebate reserve is statutory in nature, corporate units have enough leeway in determing the yearly variations in the quantum of the development rebate reserve.

In the light of the above discussion of the regression results, it may be concluded that our econometric exercise has shown that the marginal rate of personal income tax of individual shareholders, the proportion of debt-financed investment and the yield rate of corporate shares each have an impact on the composition of equity finance but that it has not yielded a definite conclusion regard-

TABLE VI.3

The Ratio of Increase in Free Reserves to Fresh Issues : Regression Results

Equation No.	Constant	MITR	DF/I	RD	CI	ECTR	R^2	F-value	D.W. Statistic
1	—13.0030	0.3662					0.319	6.095	1.029
	(—2.0902)**	(2.4688)**							
2	—5.2374	0.2439	—5.4270				0.461	5.126	1.305
	(—0.7238)	(1.6117)*	(—1.7747)*						
3	2.9397	0.2173	—3.1734	—1.2908			0.728	9.807	1.554
	(0.4968)	(1.9302)**	(—1.3388)	(—3.2860)***					
4	1.6279	0.2241	—3.2361	—1.3099	0.0125		0.728	6.696	1.600
	(0.1158)	(1.6631)*	(—2.2656)**	(—2.9050)***	(0.1040)				
5	—2.1241	0.2137	—4.7505	—1.1795	—0.0145	0.1369	0.751	5.420	1.750
	(—0.1436)	(1.5657)*	(—1.5429)*	(—2.4698)**	(—0.1162)	(0.9021)			

Note : (*i*) The figures in brackets are t-values.
(*ii*) ***, ** and * denote that the regression coefficient is significant at 1 per cent, 5 per cent and 10 per cent levels, respectively.

ing the role of capital issues control and the corporate tax rate in determining the composition.

4. Major Conclusions

The conclusions summarised here are based on equation (3) in Table VI.2 which we have selected as the most preferred variant of the model of the ratio of retentions to fresh share capital.

The first important conclusion that we can draw from our econometric exercise is that the mean marginal rate of personal income tax of the shareholders has a significant effect on the composition of equity finance. In other words, the double taxation of distributed dividends in India seems to have a positive effect on retentions as compared to fresh equity. That is, the higher the rate, the higher is the ratio of retentions to fresh issues. This is evident from the fact that in all our regression equations this variable come out statistically significant with a positive sign. Viewed against the meagre econometric evidence that is available in India on the effects of the tax system on the pattern of corporate finance, this result is very interesting.

As regards the magnitude of the effect of the personal income tax rate on the ratio of retentions to fresh share capital, we find that, on an average, every one per cent increase (decrease) in the mean marginal rate of personal income tax induces the corporate units to increase (decrease) the ratio of retentions to fresh share capital by around 4 per cent[15]. The policy implication of this result is very important. Taken with our earlier result that the corporate tax rate has a significant effect on the ratio of equity to debt finance, this result suggests that the tax policy of the government has a significant impact on the pattern of corporate finance. More specifically, as a part of the total package of tax policy, the personal income tax structure can be used as one of the policy instruments to increase (or decrease) the internal plough-back of the corporate sector.

The second important conclusion is that an increase (decrease) in the yield rate on corporate shares has a significant negative

[15]In this context it may be mentioned that in his study of the effects of public policy on the pattern of corporate finance in the United Kingdom, King (1977) found a significant positive effect of the variations in the personal income tax rate applicable to the shareholders on the ratio of retentions to fresh share capital.

(positive) effect on the ratio of retentions to fresh share capital. In section 2, we have hypothesised that the direction of the effect of a change in the yield rate on shares on the ratio of retentions to fresh equity may depend on the two offsetting effects on the demand for and supply of fresh equity. It appears from the econometric results that the effect on the demand side outweighs the effect on the supply side.

As for the magnitude of the effect, we find that for every one per cent increase (decrease) in the yield rate on corporate shares the ratio of retentions to fresh equity falls (increases) by around 2.8 per cent. An important implication of this result is that the flow-demand for corporate shares in India tends to be highly elastic with respect to the yield rate on shares.

Thirdly, our econometric study indicates that the variations in the proportion of debt financed corporate investment have a significant effect on the ratio of retentions to fresh share capital. *A priori*, it was hypothesised in section 2, that the direction of the effect of this variable on the ratio of retentions to fresh share capital is indeterminate. However, the econometric results show that the ratio of retentions to fresh share capital is inversely related to the proportion of corporate investment financed by debt. This means that a fall in the proportion of debt-financed investment induces corporate units to opt for more of fresh issues than of retentions. The explanation for this result could be that firms generally try to maintain a balance between internal and external finance; consequently, any fall in the proportion of debt financed investment is made good by an increase in fresh equity rather than by retentions.

The elasticity of the ratio of retentions to fresh equity with respect to the proportion of debt financed investment is —0.7. In other words, a one per cent fall in the proportion of debt-financed investment leads to an increase in the ratio of retentions to fresh equity by 0.7 per cent and conversely.

Fourthly, the results of our econometric exercise do not throw much light on the role of capital issues control in determining the composition of equity finance. The coefficient of the proxy variable which we included to capture the restrictiveness of capital issues control turned out to be statistically insignificant in our regression equations. However, this result should not be interpreted to have settled the role of controls on capital issues in determining the pattern of corporate finance. It is possible that the

proxy which we considered, *viz.*, the ratio of the amount sanctioned by the Controller of Capital Issues to the amount applied for consents, is a poor surrogate for representing the restrictiveness of the complex structure of capital issues control. A more detailed analysis of the effects of capital issues control might help one to have a better understanding of its role in corporate financial policy.

Finally, regarding the effect of the corporate tax rate on the composition of equity finance, our result is largely inconclusive. In our regression equations on the ratio of retentions to fresh share capital, this variable turns out to be statistically insignificant. However, this statistical result could be mainly attributed to the presence of a high degree of multi-collinearity between the effective corporate tax rate and the proportion of debt-financed investment. However, it may be mentioned that an attempt by us to test independently the hypothesis that a higher effective corporate tax rate reduces the retained profits (by causing a reduction in profits after tax) yielded results which indicated that a one per cent increase (fall) in the effective corporate tax rate leads to a fall (increase) in the retained profits of the same order of magnitude; in other words, the ratio of retained profits to profits after tax seems to be invariant to variations in the effective corporate tax rate. Against the background of these conflicting and somewhat perplexing pulls of evidences, we are inclined to conclude that the effect of the corporate tax rate on the composition of equity finance is largely an unsettled issue.

VII. CONCLUDING OBSERVATIONS

1. Introduction

In this chapter, we highlight the main findings of the study and give a brief summary of the views of leaders of industry and of financial institutions with whom discussions were held on the subject. This is followed by a discussion of the major policy changes suggested by our findings.

This study of resource mobilisation was based mainly on data relating to two samples of manufacturing companies.

(*a*) A specially selected NIPFP sample of 99 large public limited companies; and

(*b*) Reserve Bank of India (RBI) samples of large and medium public limited companies.

These two samples had relative merits and demerits. The RBI samples for different time periods contained medium and large companies and might also have contained a number of companies with less than 15 years' life. Hence, the RBI samples may be said to be fairly representative of the private corporate sector. A disadvantage in using the data from these samples arose from the fact that the size of the sample as well as the companies covered were not the same as between different sample periods and further, that the companies covered were not the same in all the years of even one sample period during which the size of the sample was held constant. This heterogeneous nature of the RBI sample posed certain problems for time series analysis, especially when the values of the variables involved were absolute values rather than ratios.

The great advantage with the NIPFP sample was its homogeneity — not only the size but also the companies covered remained the same throughout the period; however, the limitation of the sample was that it did not include more recent companies. To have a representative cross-section of the latter, it would have been necessary to have a sufficient number of them and that would have

increased the size of the sample. Given the limitations of time and resources, a much larger sample was not considered feasible. The result was that the NIPFP sample did not fully capture the experiences of companies which are new today.[16] However, it was used to examine the behaviour of the companies which were 'new' at one stage of their existence. Thus, first, the sample included companies established in different years upto 1961, and secondly, the analysis relating to age-group 4 (companies established between 1956 and 1961), particularly for the sub-period 1962-63 to 1964-65, brought out the pattern of mobilisation of resources of companies when they were fairly new. The sample, however, included only large companies. It would, therefore, be more appropriate to say that the NIPFP sample, at the aggregated level, reflected largely the behaviour of the large established segment of the private corporate sector, which in any case accounted for the bulk of the private corporate capital, output, income and tax revenue.[17] While the econometric exercises were based mainly on the RBI data, the rest of the study was based primarily on the results of the analysis of the NIPFP sample data.

2. Main Findings

(*a*) *Trends in Total Mobilisation of Resources*

Gross resources mobilised by the NIPFP sample companies increased from about Rs. 50 crore in 1962-63 to Rs. 142 crore in 1965-66. After being more or less stagnant for several years, they rose sharply to Rs. 232 crore in 1973-74 and further to about Rs. 270 crore in 1974-75. Thus we found that, as measured in current prices, gross resources mobilised by the companies increased substantially upto the year 1965-66; after that year there seemed to have been no basic upward thrust in resources mobilised except for the abnormal increases in the two high-rate inflation years of 1973-74 and 1974-75.

The trends in gross resource mobilisation revealed by the RBI sample were similar to those revealed by the NIPFP sample. Gross resources mobilised per sample company, for the RBI sample,

[16]After the completion of this study, an analysis was made using more recent data on companies including new companies and this is presented in Annexure I.

[17]We used the term "corporate sector" as a short-hand expression for (mainly) the large industrial companies in the private sector.

increased from Rs. 20 lakh in 1962-63 to Rs. 33.3 lakh in 1966-67. The per company resource mobilisation for the RBI sample (as in the case of the NIPFP sample) fell and stagnated, but only upto 1969-70. Unlike in the case of the NIPFP sample companies, the level of gross resources mobilised recovered to some extent after that year. However, sharp increases took place only in 1973-74 and 1974-75 as in the case of NIPFP sample companies.

The increase in gross resources mobilised that we discussed above took place in nominal terms. If gross resources mobilised in different years were measured in real terms (at 1960-61 prices), we found that the volume of mobilisation increased upto the year 1965-66 and then declined significantly till the year 1973-74. In the year 1973-74, there was an increase in real terms but again there was a decline in the next year. Taking the period as a whole, one could say that gross resources mobilised stagnated in real terms except for two sharp upward thrusts in 1965-66 and in 1973-74.

Gross resources mobilised by the NIPFP sample companies during the entire period 1962-63 to 1975-76, aggregated to Rs. 1947.96 crore in nominal terms, whereas they aggregated to Rs. 1153.86 crore in real terms. The annual compound growth rate of gross resource mobilisation in current prices for the 14-year period worked out to 7.8 per cent, whereas it declined at a compound rate of 0.1 per cent per annum in real terms.

(*b*) *Determinants of Changes in Gross Mobilised Resources*

Among the factors that could be hypothesized to affect the volume of gross resources mobilised, profitability (profits after tax as per cent of net worth) and the price level were seen to be the most significant. The corporate tax rate were also seen to have an impact. It was found that for every 1 per cent increase in profitability, gross mobilised resources were expected to increase by 0.94 per cent and for every 1 per cent increase in prices, gross resources mobilised were expected to increase by 0.91 per cent: that is, the magnitude of the effect of these two factors was found to be almost the same. As regards the corporate tax rate, every 1 per cent increase in it tended to reduce gross mobilised resources by 1.3 per cent. However, it may not follow that a decline in the corporate tax rate would have necessarily led to an increase in the gross resources mobilised.

(*c*) *Blown-up Estimates*

The NIPFP sample data for the three years, 1973-74 to 1975-76, were blown-up to estimate total resource mobilistion in the private corporate sector. The resultant estimates were found to be comparable with those derived on the basis of the RBI sample for 1973-74 and 1974-75 (Rs. 1631 crore against Rs. 1877 crore for the former year and Rs. 2580 crore against Rs. 2548 crore for the latter year). On the basis of our estimates, the corporate sector could be said to have mobilised 19.5 per cent of gross domestic savings in 1974-75; the corresponding figure based on the RBI samples was 19.2 per cent.

On the average, the large scale manufacturing segment of the private corporate sector was estimated to have mobilised annually Rs. 541.4 crore of gross resources, built Rs. 355.1 crore of gross fixed assets and undertaken Rs. 601.7 crore of gross capital formation activity.

(*d*) *Composition of Resources Mobilised*

The most significant feature of the pattern of resource mobilisation was the large share of corporate savings in gross resources. Corporate savings consisting of depreciation and internal plough-back (including bonus shares) accounted, on the average, for 64.2 per cent of the gross resources during the period under study. Such a high proportion of corporate savings was partly due to the relatively low level of capital formation which did not require much recourse to be made to external resources and partly due to the rising value of new capital assets, which increased the monetary value of chargeable depreciation.

The average share of the other components of long-term resources for the study period were: Long-term loans from financial institutions, 7.2 per cent; debentures, 1.9 per cent; fresh equity capital, 5.7 per cent; the remaining proportion of gross resources, namely, 21 per cent, was of a short-term nature (short-term loans from commercial banks, trade dues and other miscellaneous net current liabilities).

Among the components of gross corporate savings, the most important was depreciation, which provided 59 per cent of gross savings and 38 per cent of the gross resources. "Other reserves" and surpluses contributed 22 per cent of gross corporate savings, develop-

ment rebate reserve 10 per cent and bonus shares 9 per cent. Including development rebate reserve, internal plough-back contributed 41 per cent of gross savings and 26.2 per cent of the gross resources.

The relative contribution of corporate savings improved over the years: As against the average share of corporate savings during 1962-63 to 1964-65 of 51.4 per cent, it was 72.8 per cent in the period 1972-73 to 1975-76. The share fell in some years and was much higher than 73 per cent in certain other years. But the fluctuations were around a rising trend. Depreciation provision contributed to this trend; but more importantly, the average relative contribution of net savings (*i.e.*, development rebate and other reserves and bonus shares) increased from 16.4 per cent to 32.8 per cent between the two end periods.

The growth of the stock market did not keep pace with the requirements of the private corporate sector for funds. There was a fall over the period in the proportion of fresh share capital in total resources mobilised: from 15.2 per cent during 1962-63 to 1964-65, it fell to 2.6 per cent during 1972-73 to 1975-76. Of course, one does not expect established companies to depend on the share market as much as the corporate sector as a whole including new ventures. Nevertheless, it is worrisome that the proportionate contribution of fresh equity capital should have fallen so steeply.

There was an increase in the share of loans from financial institutions in the earlier years of the sample period. Their share in total mobilisation of resources increased from an average of 6.3 per cent during 1962-63 to 1964-65 to 28.5 per cent during 1965-66 to 1968-69. Thereafter, there was a continuous decline in their share. In fact, between 1970-71 and 1974-75, their contribution was negative. This result was obtained because we took borrowings net of repayments. Also, our sample excluded more recent companies.

We may legitimately conclude that the large established companies were not unduly, or even substantially, dependent on financial institutions for financing their capital formation. This could partly be due to the relatively low level of capital formation, the finances for which were largely mobilised from internal sources.

The proportion of short-term funds increased significantly in the seventies. In the years from 1973-74, their share was quite high: for example, 41.6 per cent in 1973-74 and 42.4 per cent in 1974-75. And for the period 1972-73 to 1975-76, the annual average

was fairly high at 28.4 per cent. The major cause of this increase in the importance of short-term funds was the steep rise in the cost of holding inventories, as was revealed by the increase in the proportion of inventories to gross capital formation in the later years. To the extent that the increase in short-term funds was due to the increase in the value of inventory, the improvement in the level of gross resources mobilised was only illusory.

The above findings on trends in gross resource mobilisation and changes in the pattern of mobilised resources based on the data for the NIPFP sample were broadly corroborated by the results of the analysis of the data for the RBI samples.

The conclusion is inescapable: The significant increase in the annual flow of resource mobilisation that occured during this period was all but neutralised by the rise in the costs of capital formation. And an increasing proportion of these resources, remaining constant in real terms, was absorbed by inventory holdings towards the end of the period. The effect on fixed capital formation was adverse, as will be seen later in sub-section (g.)

(*e*) *The Dilemma for Equity Investments*

Risk, uncertainty, low returns and low capital appreciation on equity capital discouraged investors from making equity investments, while the low level of capital formation and the high cost of servicing fresh equity discouraged good existing companies from floating fresh issues. New companies, which cannot attract equity capital from investors because returns on them start accruing only after a fairly long gestation period, burden financial institutions and underwriters with their fresh issues as these generally devolved on them. Issues by well-established and reputed companies, which are very popular with the investor, do not come often; also, such companies prefer to make right issues rather than new issues, because, the latter involve obtaining clearances, procedural delays and a higher cost for managing the issue. Hence, the supply of good shares in the market is meagre and intermittent, and equity capital from investors is attracted only to that extent. At the same time, the over-subscription of good issues also leads to blocking of investible funds for long periods of time and this places a restriction on the financial capability of investors, particularly the small investors. Our study brought to light such a situation during the period covered.

(*f*) *The Issue of Convertible Debentures*

The issue of convertible debentures which, after a specific period of time, can be converted into equity shares, is open to the same objection as convertible loans. There is, however, one point in favour of convertible debentures. One of the leading companies pointed out to us that they preferred to issue convertible debentures to the public rather than equity share capital, first, because the retun on debentures was tax deductible, and secondly, because enlarging the equity base could affect the capacity to maintain the dividend rate on the equity capital, old as well as the new. The issue of convertible debentures did not affect the return on existing equity and only when the project financed by the convertible debentures became operational and generated allocable profits, the debentures could be converted into equity. Companies seemed to feel that by alloting the convertible debentures to the existing shareholders, employees, trade associates, collaborators and the promoters, and by not getting them underwritten by financial institutions, to whom they devolved, if not fully subscribed, they restricted the possibility of financial institutions getting large chunks of equity capital in the future. Lately, several leading corporate units have issued convertible debentures with a return comparable to, or better than, that on similar long-term investment outlets (12 per cent to 14 per cent). At times, these bonds are not underwritten but offered partly to existing shareholders, employees, associates, etc., and partly to the public directly.

(*g*) *Utilisation of Funds*

Gross fixed asset formation by the 99 NIPFP sample companies during the 14-year period amounted to 66 per cent of the gross resources mobilised during that period and 92.8 per cent of the gross resources of a long-term nature. Of the total gross fixed asset for mation, plant and machinery accounted for 70.6 per cent; of the gross resources mobilised, they accounted for 46.5 per cent. Over the period, there was a general trend towards a decline in the proportion of gross resources utilised for gross fixed asset formation. In the years 1962-63 to 1964-65, gross fixed assets absorbed 75.4 per cent of mobilised resources, whereas this proportion was much lower at 57.7 per cent during the period 1972-73 to 1975-76.

The fall in the proportion of resources utilised for gross fixed asset formation could be due to several causes : A slow down in the pace of capital formation, the need to divert a larger proportion of resources for inventory financing because of the steep rise in the price of inputs and the credit squeeze applied from time to time.

There used to be a complaint in the early sixties that short-term funds were being used for long-term purposes, *i.e.*, for fixed capital formation. The analysis of our data showed that apart from the period 1962-63 to 1964-65, the amount of gross fixed asset formation fell short of the total volume of long-term resources mobilised. While for the period as a whole, gross fixed asset formation absorbed 92.8 per cent of long-term resources mobilised, in some of the years the proportion of such resources utilised for other purposes varied between 10 and 20 per cent. Here again one has to keep in mind the increase in the cost of inventories that took place after 1973-74.

Among the gross fixed assets, the most important were found to be plant and machinery. They formed, on the average, 70.6 per cent of gross fixed asset formation during the period 1962-63 to 1975-76. This proportion was fairly stable, varying between 65 and 67 per cent, except for one abnormal year. During the period under study, factory and office buildings absorbed 8.9 per cent and miscellaneous fixed assets, such as motor vehicles and office equipment, 8.6 per cent of the gross resources mobilised.

(*h*) *Trends in Capital Formation in Real Terms*

It was important to know whether annual gross fixed capital formation and its major components had grown in real terms over the years. For this purpose, the annual figures in current prices were deflated by price indices applicable to each of the years and to each of the components concerned. It was found that there was no clear rising trend in the annual gross fixed asset formation at constant prices over the period as a whole. A rising trend could be discerned upto 1968-69; however, there was near stagnation in the early seventies and a decline in 1974-75 and 1975-76. In the case of plant and machinery too, a rise in trend was discernible upto 1968-69, but after that year there was a clear falling trend. The conclusion can then be drawn that the annual rate of fixed capital formation and

additions to plant and machinery in real terms formed a declining percentage of the existing capital stock.

(*i*) *Sectoral Results*

Sectoral analysis brought out some important results. The size of a company seemed to have a bearing on both the level and pattern of resource mobilisation; with the increase in the size of the company, corporate savings, especially development rebate and depreciation, became particularly high as a proportion of gross resources. Size, however, did not seem to have had any distinct effect on the success of companies in obtaining external funds from financial institutions.

The very nature of operations in the corporate manufacturing sector is such that internal corporate savings, even of a statutory nature, cannot be generated in the absence of net income to which they can be charged: as such, external funds were found to be more important than internal funds when a company was new. In particular, long-term institutional finance was found to be especially higher in new companies than in old companies. With the passage of time, an average company operating under normal economic conditions was able to generate more internal resources and also reduce its outstandings to financial institutions.

The passage of time was found to also change the pattern of use of resources. After a firm or project was well established, a lower proportion of gross mobilised resources was spent on fixed capital formation unless expansion was taking place; consequently, a larger proportion of resources, even of a long-term nature, was spent on financing inventories, the requirements of which seemed to rise as sale and distribution operations grew larger.

The location of a large industrial unit did not seem to have played an important role in determining its success in mobilising resources from financial institutions and the stock market. This finding is subject to the limitation that in the NIPFP sample there was no company which could really be classified as 'small'. The NIPFP sample incjuded companies having paid-up share capital in 1975-76 of Rs. 1 crore or more; companies of such a size are able to afford the recurring expenses for maintaining necessary liasion with the financial and the capital markets. However, location seemed to have played some role in the composition of long-term

and short-term funds; generally, the more distant an industrial unit was from the major industrial centres, the greater was found to be its need for maintaining stocks of materials and also a higher level of stock of finished goods.

The analysis by the level of growth of companies and their effective tax liability showed that companies with a high rate of growth of gross fixed assets and a low effective tax liability, generated a larger proportion of corporate savings than other companies. This may be because a higher growth rate enabled the company to get the benefit of more fiscal reliefs.

It was found that mobilised resources of a long-term nature were less important in the case of private limited companies than in the case of public limited companies. This was due to the difference in the pattern of use of mobilised resources: private limited companies utilised 60.2 per cent of gross resources for fixed capital formation as compared to 66.8 per cent by public limited companies.

There was a noticeable difference in the proportion of resources mobilised through net miscellaneous sources, public limited companies mobilising 6.2 per cent of gross resources from this source as compared to 3.2 per cent by private limited companies. The reason for the difference might be the lower degree of credit worthiness which private limited companies — largely family concerns— had with trade and business associates.

(*j*) *Factors Affecting Equity to Debt Finance Ratio*

(*i*) *Corporate tax.* We found that the effective corporate tax rate was an important determinant of the equity to debt finance ratio. The magnitude of the effect of a change in the effective corporate tax rate on the ratio was fairly high: a one per cent increase in the effective-corporate tax rate was found to decrease the ratio by 2.7 per cent, and conversely. Fiscal policy can thus, play through changes in the effective corporate tax rate, an important role in promoting the desirable composition of equity and debt finance.

(*ii*) *Existing debt-equity ratio.* Significant 'bankruptcy costs' are associated with a temporal increase in the debt-equity ratio. The elasticity of the ratio of equity-debt finance with respect to one year-lagged debt-equity ratio was found to be 0.88, indicating that for every one per cent increase in the debt-equity ratio, the ratio of equity to debt finance increased by 0.88 per cent.

(*iii*) *Industrial production.* Changes in the growth rate of industrial production have a close bearing on the ratio. It was found that a one per cent increase in the rate of growth of industrial production led to a 0.45 per cent increase in the equity to debt finance ratio, and conversely.

(*iv*) *Monetary policy.* Our econometric exercise attempting to measure the effect of monetary policy, as measured by the cost and availability of credit, on the equity to debt finance ratio was inconclusive. There is a need to do further studies on this aspect of corporate finances.

(*k*) *Factors Affecting Retention to Fresh Issues Ratio*

(*i*) *Mean marginal rate of personal income-tax.* We found that the mean marginal rate of income-tax on dividend recipients had a significant effect on the composition of equity finance. It was seen that for every one per cent increase in the mean marginal rate of personal income tax, the companies tended to increase the ratio of retentions to fresh share capital by about four per cent. It follows that fiscal policy can, through the personal income-tax system, play an important role in changing the composition of equity finance in terms of retentions and fresh share capital.

(*ii*) *Yield on corporate shares.* The yield on corporate shares had an immediate effect on the ratio: every one per cent increase in the yield decreased the ratio of retentions to equity capital by almost three times.

(*iii*) *Debt financed investment.* We found that the proportion of investment financed by debt had an inverse relationship with the ratio, a one per cent fall in the proportion of debt financed investment led to an increase in the ratio by 0.7 per cent.

(*iv*) *Controls on capital issues.* Our econometric exercise attempting to measure the effect of controls on capital issues on the ratio was inconclusive. This might be due to the fact that the proxy variable which we used to represent the restrictiveness of capital issues control, *viz.*, the ratio of consents to applications, was a poor surrogate to the complex structure of capital issues control.

3. Qualitative Assessment

The leaders of industry and financial institutions with whom we held discussions were in general agreement that our findings

presented a fairly realistic picture of the pattern of resource mobilisation by the private corporate sector.[18] We found that fixed capital formation had been at a comparatively low level and stagnant; that was one of the reasons why there was no need to resort to external finances on a large scale. However, the leaders of industry were quick to point out that with the extremely high cost of plant and machinery prevailing in the domestic as well as in the external markets and with the near impossibility of obtaining equity capital from the stock market on any significant scale for new ventures, new projects could be started only with large dependence on financial institutions. Financial institutions pointed out that the long gestation period in the manufacuring sector limited the capacity to generate sufficient plough-back, particularly of new industrial undertakings. This in turn also increased their dependence on the financial institutions, even to meet cost overruns.

There was appreciation among the leaders of industry of the benefits flowing from the fiscal incentives. They felt, however, that the real value of these benefits were substantially diminished because of the steep rise in capital costs since the early seventies. As depreciation was linked to historical costs, in the continuing inflationary conditions, it would not be possible to replace plant and machinery on the basis of depreciation provision, although it was true that if a company was in a position to avail itself of all the benefits provided for — investment allowance, backward area concession, capital subsidy, export market development allowance, tax holiday, etc. — then its tax liability would be fairly low and it would have sufficient resources for expansion. It was their view, however, that the average effective rate applicable to profit-making manufacturing companies taken as a whole was by no means as low as it was sometimes thought.

Because of the fear of consequences that might flow from the convertibility clause insisted upon by financial institutions, the leaders of industry pointed out that there was an inclination among a large number of existing companies to either phase out their long-term capital projects so as to avoid recourse to financial assistance from long-term financial institutions or go to them only for marginal

[18]A specially prepared questionnaire was sent in advance to the Chief Executives of selected companies and financial institutions. Discussions were subsequently held with the chairmen, managing directors, finance directors and others from 22 companies, financial institutions and other agencies.

assistance.[19] When, however, large projects had to be implemented and could not be phased out, a number of corporate units preferred to implement such projects through associate companies, which might in turn borrow from the financial institutions. The parent companies could thus avoid the acquisition of their equity capital by those institutions.

Several leaders of industry stressed that the low level of capital formation in the private corporate sector was also due to restrictions on the areas in which companies, capable of growing (such as, the FERA companies and companies belonging to large business houses), could operate and expand their capacity. Thus, according to them, the non-availability of permission to undertake growth programmes by that segment of the private corporate sector which could effectively undertake such programmes and the fear of the convertibility clause together could explain both the low level of capital formation in the private corporate sector and the low proportion of term-loans in gross mobilised resources.

Another important factor that affected the capacity of companies to mobilise resources, according to the general views expressed by the leaders of industry, was the operation of price control in several important industries. The price control formulae that were generally applied yielded only a moderate rate of after-tax profits, while capital costs were rising steeply. This led to a situation in which neither the existing units could generate internal funds for significant expansion programmes nor the new enterprises could find it profitable to enter the areas subject to price control. In some of the capital-intensive industries under price control such as fertilisers, it was felt that it was virtually impossible to bring about any expansion without massive financial assistance either from the financial institutions or from the Government. The above views were expressed by a number of business executives with whom we

[19]The convertibility clause irritant was based on the fact that if the public sector financial institutions came to jointly hold 51 per cent or more of the equity capital, then sections 617 and 619 of the Indian Companies Act would become operational: if these sections were invoked, a corporate unit would be liable to have its operations scrutinised by the Comptroller and Auditor General of India and the Parliamentary Committee on Public Sector Undertakings. However, subsequent to the completion of this study, the Government announced in the 1980 Budget, some concessions on the convertibility issue. Also, the financial institutions, while exercising the convertibility option, do it in such a way as to jointly own not more than 40 per cent of the equity stock.

held discussions. Although we did not make any special study of the impact of price control in our study, we draw attention to this problem because we concur with the view that price control does have an impact on the capacity to mobilise resources.

4. Some Policy Implications

One of the most important findings of the study was that the level of corporate capital formation in real terms was stagnating since the mid sixties. From independent data supplied by the Central Statistical Organisation (CSO), we also know that the relative contribution of corporate savings to total domestic savings was fairly small and as a proportion of the GNP, such savings were negligible. Although the rate of domestic savings has registered impressive increases in recent years, there has been no improvement in the contribution of corporate savings. As the private corporate sector is expected to play an important role within the overall framework of the national plan, it is of the gravest concern that corporate savings should be at a low level and that its capital formation should result in decreasing percentage additions to the capital stock.

Action would have to be taken on several fronts in order to bring about conditions in which the corporate sector could grow more vigorously so that its contribution to domestic savings and investment could rise over the years. One of the important areas in which remedial action has to be taken relates to the taxation of corporate profits. We have seen that the effective tax rate had an important bearing not only on the volume of resources mobilised but also on the ratio of equity to debt finance and that of retentions to fresh issues. In more recent years, the effective tax rate applicable to our sample companies generally fluctuated between 45 and 48 per cent.[20] Under the existing tax system, the effective tax rate comes down only if fresh investment eligible for investment allowance is undertaken; it does not change with such factors as the dividend payout ratio or the ratio of retentions to fresh issues. Another important feature of our corporate tax system is that depreciation is computed on the basis of historical costs and no significant adjustments are allowed for the increase in the cost of capital goods.

[20]The effective tax rate of the RBI sample companies also fluctuated between 45 and 48 per cent

Given the poor performance of the corporate sector in terms of capital formation and in the light of our findings, it can be argued that a thorough-going reform of the corporate tax structure should be contemplated. In undertaking such a task, one could consider such questions as whether we should opt for an alternative system of corporate taxation such as, the split-rate system or the imputation system, whether the investment allowance and certain other reliefs should be discontinued and the nominal rate of corporate tax should be reduced and whether some form of accelerated depreciation or even 100 per cent instant depreciation should be contemplated with corresponding changes in the definition of the tax base. Under the present inflationary conditions, some adjustments to the system of writing off the value of depreciable assets would also be called for.

The finding that a reduction in the corporate tax rate would have a favourable impact on the equity to debt finance ratio as well as on the capactiy to mobilise resources would also indicate that such a reduction in the tax rate should be considered if the aim is to encourage the utilisation of more equity finance and to increase the capacity of the corporate sector to mobilise resources.

We had found that the mean marginal personal income-tax rate applicable to dividend recipients had an impact on the ratio of retentions to fresh issues: The higher the rate, the higher the ratio. A lowering of the marginal income-tax rate or, alternatively, some other device such as the exemption of a part of dividend income upto a ceiling, could be considered.

A lowering of the marginal income-tax rate applicable to individuals and a reduction in the corporate tax rate would tend to stimulate savings and investment and encourage the growth of a more broad-based equity market. However, unless such reductions are accompanied by the withdrawal of certain fiscal reliefs which may not be considered to be very effective now, the Government would stand to lose revenue. Hence, it could be seriously contemplated whether a lowering of the corporate tax rate could not be, at least partially, compensated by the introduction of a moderate tax on indirect expenditures by corporations. Such a tax would redistribute the burden of corporate taxation in favour of the more efficient and more prudent companies and bring in some revenue to the Government on a part of the expense account consumption indulged in by some of the corporate owners.

Our finding was that the market for equity capital had not been growing in line with the requirements of the corporate sector. If the corporate sector is to grow and flourish under healthy conditions, it would be necessary to revive the equity market. In this connection, it is necessary to educate potential investors on the advantages of equity investment, for they now appear to be unduly swayed by what they consider to be the risks of such investment.[21] Equally important is the need to improve the shareholders' confidence in the corporate sector. For this purpose professional corporate management should be strengthened so as to ensure honest and efficient running of companies.

Another measure which would contribute towards the revival and healthy development of the stock market is the extension of the scope of investment by corporate and individual shareholders. In the case of corporate shareholders, there is some case for relaxing the restrictions on inter-corporate investments, at least when a share issue is under-subscribed; corporate shareholders could be given the first option to subscribe to the shares beyond the level presently permissible under the Indian Companies Act before these are allowed to be taken up by the underwriters. In the case of individual shareholders, there seems to be a case for raising the exemption level of dividend income for computing the tax base, in view of the sharp erosion in the value of money.

In relation to reviving the equity market, we should examine not only the interest of the new issue market, but also of the secondary issue market, as there is an umbilical cord relationship between the two, which cannot be cut. Unless the secondary issue market is buoyant and active, the new issue market cannot become buoyant, because when the investor does not get any return on his investment in the existing companies, he would shy off from investing in any new company.

It is also desirable to create a bond market and to encourage the floating of fully convertible bonds at fixed rates of interest which could be subsequently converted into equity capital in two or three phases.

It would seem that the question of granting an adequate measure of short-term credit for inventory financing by the manu-

[21]In the Ahmedabad, Bombay and Calcutta regions, where there was better awareness of the advantages of equity investment, resource mobilisation through the equity market was seen to be more substantial.

facturing corporate sector should be reconsidered in the light of the steep increase in the prices of inputs that have taken place. While tight monetary policies need to be followed under conditions of inflationary pressures, denial of credit to the manufacturing sector would also accentuate the rise in prices by slowing down the rate of production. Alternatively, long-term funds tend to get diverted for short-term purposes with undesired implications for the growth of investment.

ANNEXURE I

RESOURCE MOBILISATION IN THE PRIVATE CORPORATE SECTOR: RECENT TRENDS[1]

1. Introduction

On two aspects of the problem of resource mobilisation, both of which are very relevant today, our study (completed in May 1980) did not shed any light. These were, first, the pattern of resource mobilisation in more recent years, in particular, during the latter half of the seventies; and secondly, the pattern of resource mobilisation of new companies. While the first aspect was beyond the purview of our study, the analysis on the second aspect was not adequate, because it related only to companies which had been in existence for 15 years or more. These two inadequacies in the study arose due to non-availability of published data for more recent years and constraints of time which did not permit us to compile more recent data ourselves.

2. Sources of Data

The Reserve Bank of India (RBI) made available in 1981 data for recent years for two samples, namely, 1720 medium and large public limited companies in the private corporate sector for the period 1975-76 to 1977-78 and 421 large public limited companies (paid-up share capital of Rs. 1 crore or more) for two years, 1977-78 and 1978-79. Around the same time, the Industrial Credit and Investment Corporation of India (ICICI) published data for 417 assisted companies for the period 1975-76 to 1978-79 and the Economic Times (ET) for 251 industrial giants for 1978-79 and 1979-80. While the RBI and the ICICI provided details on all sources and

[1]This study was presented at a Workshop in Bombay on August 8, 1981 to supplement the findings in the basic study.

uses of corporate funds, the ET data related to a few variables, on the basis of which estimates of gross resources mobilised and some components of corporate savings could be worked out. Using these three sources of data, the analysis of major components of mobilised resources was extended upto 1979-80. The ICICI data, as they relate to industrial units (new as well as existing units) implementing some investment programme, becomes very relevant in the context of actual operations.

3. Results

(*a*) An analysis of the pattern of resource mobilisation during the latter half of the seventies has brought out a definite change in the structural pattern. The significance of gross corporate savings declined. The RBI data show that, whereas corporate savings annually constituted during the first half of the seventies 57.2 per cent of the gross mobilised resources for the RBI sample of 1650 companies (and 73.2 per cent in the case of the NIPFP sample), these accounted for 45.3 per cent and 46.9 per cent, respectively, during the second half of the seventies for the RBI samples of 1720 and 421 companies.[2] The ICICI data show that the proportion of gross corporate savings was still lower at 39.9 per cent for the period 1975-76 to 1978-79 and the ET data show that the 251 industrial giants mobilised 39.3 per cent of their gross resources in 1979-80 through gross corporate savings (Tables A I.1 and A I.2).

The most noticeable decline among the components of gross corporate savings was found to be that in the case of depreciation. The RBI data showed that depreciation, which accounted for 34.3 per cent of the gross mobilised resources during the first half of the seventies (41.0 per cent, according to NIPFP data), accounted for 31.4 per cent and 29.6 per cent, respectively, of the gross mobilised resources during the latter half of the decade, as revealed by the RBI data on 1720 companies (for the period 1976-77 to 1977-78) and on 421 companies (1977-78 to 1978-79), respectively. The proportion was even lower, at 29.1, per cent for the ICICI-assisted companies and 22.1 per cent for the ET industrial giants. Annual data for the years 1975-76 to 1979-80 also brought out clearly the

[2]The latter RBI sample included companies, with a paid-up share capital of Rs. 1 crore or more, and is therefore, more comparable to the NIPFP sample.

TABLE A.I. 1

Structure of Gross Mobilised Revenues During the Sixties and the Seventies

(Per cent)

	Sixties	First half of the seventies		Second half of the seventies			
	NIPFP (1962-63 to 1969-70)	NIPFP (1970-71 to 1975-76)	RBI (1971-72 to 1975-76)	RBI (1976-77 to 1977-78)	RBI (1977-78 to 1978-79)	ICICI (1975-76 to 1978-79)	ET (1979-80)
Sample size (number of companies)	223	223	1650	1720	421	417	251
1. Corporate savings	53.7	73.2	57.2	45.3	46.9	39.9	39.3
(*a*) Internal share capital	5.5	6.8	5.5	7.4	7.3	—	—
(*b*) Statutory reserves	8.0	5.0	5.4	4.8	3.2	10.8*	17.2*
(*c*) Non-statutory reserves	5.7	20.4	11.9	1.7	6.8	—	—
(*d*) Depreciation	34.5	41.0	34.3	31.4	29.6	29.1	22.1
2. External share capital	8.4	3.4	2.5	2.6	2.6	9.3	3.2
3. Debt	25.1	—4.8	1.5	9.5	10.2	8.3	57.5**
(*a*) Long-term loans	20.3	—4.3	1.5	9.5	10.2	6.9	—
(*b*) Debentures	4.8	—0.5	—	—	—	1.4	—
4. Short-term funds	12.8	28.2	38.8	42.6	41.3	42.5	—
(*a*) Loans	20.0	18.7	24.3	16.3	26.6	20.0	—
(*b*) Miscellaneous	—7.2	9.5	14.5	26.3	14.7	22.5	—
5. **Gross mobilised resources**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Note: *Includes all reserves.
**Includes debt and short-term funds.
—Indicates not available or not compiled.

TABLE A.I. 2

Trends in Structure of Gross Mobilised Resources, 1975-76 to 1979-80

(Per cent)

	1975-76			1976-77		1977-78			1978-79		1979-80
	NIPFP	RBI	ICICI	RBI	ICICI	RBI	RBI	ICICI	RBI	ICICI	ET
Sample size (number of companies)	223	1650	417	1720	417	1720	421	417	421	417	251
1. Corporate savings	96.7	54.4	39.9	46.0	38.2	45.2	47.7	38.2	46.2	42.1	39.3
(*a*) Internal share capital	11.3	7.1	—	8.7	—	7.3	9.3	—	5.8	—	—
(*b*) Statutory reserves	—10.5	0.2	12.8*	0.9	3.0*	9.1	2.4	8.4*	3.6	16.2*	17.2*
(*c*) Non-statutory reserves	29.4	7.0	—	2.1	—	—	3.6	—	9.4	—	—
(*d*) Depreciation	66.4	40.1	27.1	34.3	35.2	28.8	32.3	29.8	27.4	25.9	22.1
2. External share-capital	5.5	3.5	7.0	3.4	15.8	2.0	2.3	10.5	2.8	6.1	3.2
3. Debt	—2.6	6.8	2.7	10.4	7.8	8.8	14.6	10.3	9.0	11.8	57.5**
(*a*) Long-tern loans	0.9	6.8	2.2	10.4	7.7	8.8	14.6	9.1	9.0	10.6	—
(*b*) Debentures	—3.5	—	0.5	—	0.1	—	—	1.2	—	1.2	—
4. Short-term funds	0.4	35.3	50.4	40.2	38.2	44.0	35.4	41.0	42.1	40.0	—
(*a*) Loans	29.1	39.8	44.7	16.1	38.2	16.1	23.2	38.2	32.8	42.8	—
(*b*) Miscellaneous	—28.7	—4.5	5.7	24.1	—	27.9	12.2	7.8	9.2	—2.8	—
5. **Gross mobilised resources**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Note: *All reserves

**All loans and miscellaneous funds

—Indicates break-up not available or not compiled

declining contribution of depreciation as a source of corporate funds.

The declining proportion of depreciation in gross resource mobilisation suggests several possibilities. First, it suggests that the companies were becoming more dependent on external funds. Secondly, corporate savings were becoming less and less adequate to meet the requirements of the private corporate manufacturing sector. Thirdly, (which we feel is quite important) there was not enough generation of income on the basis of which the corporate units were able to take full advantage of the provisions relating to depreciation under the income-tax law.

(*b*) The mobilisation of resources through the equity market continued to be poor during the second half of the seventies. The RBI data showed that, as against 2.5 per cent of the gross resources being mobilised through the equity market during the first half of the seventies, the proportion was 2.6 per cent during the second half. However, the proportion of resources mobilised through the equity market was substantially higher, at 9.3 per cent, in the case of the ICICI-assisted companies, which had undertaken investment programmes. During the period 1975-76 to 1978-79, even though the annual data on ICICI companies revealed some fluctuations in the proportionate mobilisation of resources through the equity market by the ICICI-assisted companies, from 6.1 per cent to 15.8 per cent, the proportion, in any case, was substantially higher than during the first half of the seventies and also during the sixties. To some extent, this high proportion of resource mobilisation through the equity market by companies implementing some investment programmes may be due to the requirement by financial institutions and the government for the maintenance of a stipulated equity debt ratio. Another reason for the high mobilisation through the equity market could be that these companies were generally well-established companies or were promoted by well-established companies, having a readily acceptable image in the capital market and were, therefore, able to successfully tap this source for fresh funds.

(*c*) The proportion of long-term debt had also increased during the second half of the seventies: the RBI data showed that the proportion increased from 1.5 per cent of the gross resources mobilised during the first half of the seventies to 9.5 per cent for medium and large companies and to 10.2 per cent for only large companies. In the case of the ICICI-assisted companies also, the

proportion at 6.9 per cent was higher than what was noticed during the first half of the seventies, as seen for both the RBI and the NIPFP samples.

(*d*) The ICICI data have shed some light on the pattern of resource mobilisation of new companies, as the sample included existing companies as well as new industrial undertakings (the break-up into new companies and existing companies was, however, not available). The results represent the operations of companies which had undertaken and implemented an investment programme, *i.e.*, they relate to the growing segment of the private corporate sector. As such, they are of special interest from the point of view of resource mobilisation.

The analysis of the ICICI data showed that the proportion of corporate savings in gross mobilised resources fell for such companies as were implementing an investment programme. Such a situation arose largely due to the low level of retentions and almost little or no generation of share capital internally, due to, possibly, gestation-period difficulties. In fact, resource mobilisation through the equity market became more important in order to maintain a specified level of equity to obtain long-term debt (in the absence or inadequacy of retentions, it was possible to maintain the equity level only through fresh equity). The ICICI data also has brought out the increased importance of debt. Together, the fall in the proportion of internal resources and the growing need to mobilise resources from outside substantially raised the proportion of external funds in the capital structure.

(*e*) It might be mentioned that in the last two to three years, major corporate units have been able to successfully mobilise resources directly from foreign lenders. In the foreign currency market, while the share of corporate units in developing countries is rising over the years, Indian corporations have yet to fully tap this source. During the eighties, this source of funds, as also the secondary bond market already being developed, will play a major role in the resource mobilisation effort of the private corporate sector.

ANNEXURE II

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ANNEXURE III

REVIEW OF ECONOMETRIC STUDIES ON THE PATTERN OF CORPORATE FINANCE IN INDIA

Econometric studies on the pattern of corporate finance in India are rather few. Among the important studies are those of H. Mazumdar (1959), V.K. Sastry (1966), K. Krishnamurthy and D.U. Sastry (1971 and 1975), D. Swamy and V.G. Rao (1975) and T.R. Venkatachalam and Y.S.R. Sarma (1978).

Mazumdar presented a time series analysis of corporate savings for the period from 1946 to 1955. Using the corporate finances data available in the *Taxation Enquiry Committee Report* (for the period 1946 to 1951) and the Reserve Bank of India studies (for the period 1951 to 1955), Mazumdar attempted to explain corporate savings (or retained profits) in terms of profits and net worth.

While Mazumdar's study (1959) concentrated mainly on the determinants of internal financing, the study by Sastry concentrated on the determinants of external financing, V.K. Sastry's model explained external financing in terms of gross retained earnings, investment and the stock of net debt; the results suggested that the net flow of external finance was a negatively sloped function of stock of net debt and gross retained earnings and a positively sloped function of investment outlays. The negative effect of the stock of net debt on external finance seemed to support the Kaleckian principle of increasing risk.

In their cross-section study of the finances of a sample of public limited companies in the chemical industry, Krishnamurthy and Sastry (1971) estimated an external finance equation, very much similar to the one estimated by Sastry (1966). However, as regards the role of the debt-stock variable it was interesting to note that unlike Sastry's results, the results of Krishnamurthy and Sastry did not support the principle of increasing risk.

In their more elaborate study of the financing of corporate investment in India, Krishnamurthy and Sastry (1975) estimated equations for net flow of debt (flow of debt—short and long, but net of financial

assets) as a proportion of gross fixed assets for selected industries. The explanatory variables were gross retained earnings representing internal resources available to the firm, investment outlays representing the demand for funds and the stock of net debt representing the risk-factor. The Ordinary Least-Squares (OLS) estimates they presented for the pooled cross section exercise generally supported principle of increasing risk. The coefficient of the stock of net debt variable was negative for all the seven industries studied and significant in five, *viz.*, jute, sugar, paper and paper board, chemicals and engineering. In line with the results obtained by other researchers, the impact of retained earnings on the flow of external finance was negative and significant in all the industries. Fixed investment expenditures had positive impact in all the industries and were significant except in the case of cement. Their two stage least-squares (2 SLS) results were broadly in line with the *OLS* results.

In addition to the pooled cross section exercise, Krishnamurthy and Sastry presented some industry-wise time series results for the period 1955-56 to 1970-71. Retained earnings and investment (fixed and inventory) once again emerged as the major determinants of external finance. Fixed investment expenditures seemed to have a larger impact on external finance than retained profits. However, it was interesting to note that the impact of the stock of debt observed in three industries in the cross section exercise was generally absent in the time series exercise except in the case of cement.

Whereas the studies reviewed so far attempted to explain aggregate external finance, Swamy and Rao in their study (1975) of the flow of funds went beyond aggregate external finance and estimated equations for short-term bank borrowings and long-term loans separately. They attempted to explain bank-finance in terms of liquidity ratio and investment (fixed and inventory separately) and the rate of interest on bank borrowings as well as on other sources of finance. Long-term borrowing was made a function of fixed investment and interest rates—own and on alternative sources. The most important inference that Swamy and Rao drew from their exercise was that "availability" rather than the "cost" of funds was the major factor affecting the pattern of corporate finance.

The study by Venkatachalam and Sarma (1978) was modelled more or less on the lines of that of Swamy and Rao in that they used

the analytical framework of sources and uses of funds. Venkatachalam and Sarma presented an econometric model of the sources and uses of funds in the private corporate sector covering non-financial public and private limited companies. The basic data for the analysis were drawn from the studies on finances of public and private limited companies published by the Reserve Bank of India. The sample period of the study was from 1958-59 to 1974-75.

On the sources' side of corporate finance, Venkatachalam and Sarma estimated separate equations for fresh capital raised from the equity market, borrowings from banks, borrowings from others and trade dues. Fresh capital raised was found to be related negatively to the average yield on variable dividend industrial securities and positively to sales. Bank borrowings was explained by the cost of credit represented by the advance rate of scheduled commercial banks and the cost of borrowing from alternative sources represented by the bazar bill rate. Thus, one of the important findings of this study was that the "cost" of credit was an important factor in determining the volume of borrowings from the commercial banks by the private corporate sector. This conclusion was in direct contrast to the one reached by Swamy and Rao that it was the "availability" rather than the "cost" of credit that affected the pattern of corporate finance.

It was revealing to find that available studies on the pattern of corporate finance in India had, by and large, attempted to explain the demand for finance from each source as a function of availability of funds from other sources, the level of investment expenditure and a proxy for the risk-factor, represented either by the stock of debt or by the debt-equity ratio. Almost all of the studies found that the first two of these factors had significant effects on the demand for external finance in the Indian private corporate sector. However, the evidence on the role of the risk-factor in the demand for external finance by corporate firms seemed inconclusive. Generally, cross section studies reported a significant negative effect of this variable on the demand for external finance, whereas time series studies did not show such an effect.

Another interesting feature of these studies was that these studies generally ignored the effects of fiscal and monetary policies on the pattern of corporate finance. It is generally agreed in the theory of corporate finance—(Modigliani and Miller 1958), (Fama and Miller 1972), (King 1977) and (Miller 1977)—that double taxation

of dividend income (first, when it accrues to the firms and second, when it is distributed to the shareholders)—which is a common feature of almost all tax systems—does affect the relative cost of different methods of financing corporate investment. The provision for deducting interest costs from the earnings of a company while computing the tax liability also affects the relative costs of different methods of financing. Moreover, the cost and the availability of loanable funds in the economy—both of which can be affected by monetary policy—could also affect the pattern of corporate finance. More direct controls such as the control of capital issues may also affect the pattern of financing corporate investment. The role of these macro policy variables on the pattern of financing corporate investment in India thus needs examination.

ANNEXURE IV

LIST OF INDUSTRIALISTS AND OFFICIALS OF COMPANIES, FINANCIAL INSTITUTIONS AND THE GOVERNMENT WITH WHOM DISCUSSIONS WERE HELD

1. Mr. S.P. Acharya, Chairman and Managing Director, Shaw Wallace & Company Limited.
2. Mr. M.V. Arunachalam, Managing Director, Tube Investments of India Limited.
3. Mr. R.J. Ghandy, Chief Accountant, Tata Iron and Steel Company Limited.
4. Mr. S.K. Guha Roy, Finance Director, ICI (India) Private Limited.
5. Mr. C.K. Hazari, Joint Managing Director, Escorts Limited and President, Punjab, Haryana and Delhi Chambers of Commerce.
6. Dr. R.K. Hazari, Director, Kamani Engineering Corporation Limited.
7. Mr. N.J. Jhaveri, Chief Economist, Industrial Credit and Investment Corporation of India Limited.
8. Mr. L.A. Joshi, Deputy General Manager, Industrial Development Bank of India.
9. Mr. C.D. Khanna, Chairman, Risk Capital Foundation.
10. Mr. S. Krishnamurthy, Chief Accountant, Tata Engineering and Locomotive Company Limited.
11. Mr. S.T. Kulkarni, General Manager (Finance), Larsen & Toubro Limited.
12. Mr. S. Kumarasundaram, Joint Managing Director, Industrial Credit & Investment Corporation of India Limited.
13. Mr. M.R. Mayya, Joint Director (Stock Exchange), Ministry of Finance, Government of India.

14. Mr. S.K. Mehera, Chairman and Managing Director, Tata-Finlay Limited and President, Bengal Chambers of Commerce.
15. Mr. P.K. Nanda, Chairman and Managing Director, Metal Box India Limited.
16. Mr. S. Narayanaswamy, Chairman and Managing Director, Mettur Chemical and Industrial Corporation Limited.
17. Mr. S.K. Neogi, Secretary and Chief Accountant, Calcutta Electric Supply Company Limited.
18. Dr. A. Sen, Finance Director, Chloride India Limited.
19. Dr. A.C. Shah, Deputy General Manager and Economic Adviser, Bank of Baroda.
20. Mr. S.B. Somani, Somani Group.
21. Mr. J.E. Talaulicar, Joint Managing Director, Tata Engineering and Locomotive Company Limited.
22. Mr. S. Venkitaramanan, Vice-Chairman and President, Southern Petrochemical Industries Corporation Limited.

ANNEXURE V

STATISTICAL TABLES

TABLE A.1

Pattern and Structure of Resource Mobilisation in Private Corporate Sector: NIPFP Sample

(Rs. crore)

	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
1. Corporate savings	21.70	43.10	48.22	56.28	68.78	54.07	89.60
	(43.51)	(57.74)	(50.53)	(39.61)	(54.59)	(42.57)	(53.53)
(*i*) internal share capital	3.03	3.03	0.53	5.87	16.36	10.59	3.44
	(6.08)	(4.06)	(0.55)	(4.13)	(12.98)	(8.34)	(2.06)
(*ii*) development rebate reserves	2.40	6.02	8.29	10.86	9.03	9.55	15.50
	(4.81)	(8.06)	(8.69)	(7.64)	(7.17)	(7.52)	(9.26)
(*iii*) non statutory reserves	—0.63	5.60	7.87	3.52	7.57	4.90	0.85
	—(1.27)	(7.51)	(8.25)	(2.48)	(6.01)	(3.86)	(0.51)
(*iv*) depreciation	16.90	28.45	31.53	36.03	35.82	29.03	69.81
	(33.89)	(38.11)	(33.04)	(25.36)	(28.43)	(22.85)	(41.70)
2. External share capital	6.86	12.59	13.93	14.57	4.48	7.08	8.04
	(13.76)	(16.86)	(14.59)	(10.25)	(3.55)	(5.57)	(4.80)
3. Long-term funds	7.08	2.18	17.49	48.06	56.80	51.95	33.17
	(14.20)	(2.92)	(18.33)	(33.83)	(45.07)	(40.39)	(19.81)
(*i*) long-term loans	4.85	1.55	7.34	42.80	52.21	43.77	21.50
	(9.73)	(2.08)	(7.69)	(30.13)	(41.43)	(34.45)	(12.84)
(*ii*) debentures	2.23	0.63	10.15	5.26	4.59	8.18	11.67
	(4.47)	(0.84)	(10.64)	(3.70)	(3.64)	(6.44)	(6.97)

4. Short-term funds	14.23 (28.53)	16.78 (22.48)	15.80 (16.55)	23.16 (16.31)	—4.05 —(3.21)	13.94 (10.97)	36.59 (21.86)
(*i*) short-term loans	16.52 (33.12)	23.85 (31.95)	15.45 (16.19)	16.91 (11.90)	31.23 (24.78)	48.36 (38.06)	10.55 (6.30)
(*ii*) net miscellaneous liabilities	—2.29 —(4.59)	—7.07 —(9.47)	0.35 (0.36)	6.25 (4.41)	—35.28 —(27.99)	—34.42 —(27.09)	26.04 (15.55)
5. Net resource mobilisation	32.97 (66.11)	46.20 (61.89)	63.91 (66.96)	106.04 (74.64)	90.19 (71.57)	98.01 (77.15)	97.59 (58.30)
6. Gross resource mobilisation	**49.87 (100.00)**	**74.65 (100.00)**	**95.44 (100.00)**	**142.07 (100.00)**	**126.01 (100.00)**	**127.04 (100.00)**	**167.40 (100.00)**

(contd.)

TABLE A.1 (*Contd.*)

Pattern and Structure of Resource Mobilisation in Private Corporate Sector: NIPFP Sample

(Rs. crore)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
1. Corporate savings	105.35	104.76	98.72	139.00	141.61	161.74	116.83
	(85.28)	(76.44)	(72.24)	(95.48)	(60.95)	(60.02)	(96.67)
(*i*) internal share capital	7.48	12.31	9.56	8.32	16.92	9.54	13.68
	(6.05)	(8.98)	(7.00)	(5.71)	(7.28)	(3.54)	(11.32)
(*ii*) development rebate reserves	10.72	5.10	7.56	10.55	19.86	22.12	—12.66
	(8.68)	(3.72)	(5.53)	(7.25)	(8.55)	(8.21)	—(10.47)
(*iii*) non statutory reserves	22.33	24.08	25.09	40.76	29.82	57.52	35.50
	(18.08)	(17.57)	(18.36)	(28.00)	(12.84)	(21.34)	(29.37)
(*iv*) depreciation	64.82	63.27	56.51	79.37	75.01	72.56	80.31
	(52.47)	(46.17)	(41.35)	(54.52)	(32.28)	(26.93)	(66.45)
2. External share capital	8.45	6.15	8.45	4.26	6.38	2.97	6.66
	(6.84)	(4.49)	(6.18)	(2.93)	(2.74)	(1.10)	(5.51)
3. Long-term funds	10.50	—12.42	—5.15	—7.82	—12.38	—9.41	—3.13
	(8.50)	—(9.06)	—(3.76)	—(5.37)	—(5.33)	—(3.49)	—(2.59)
(*i*) long-term loans	9.86	—10.15	—6.99	—17.42	—6.80	—4.22	1.07
	(7.98)	—(7.40)	—(5.11)	—(11.96)	—(2.93)	—(1.57)	(0.88)
(*ii*) debentures	0.64	—2.27	1.84	9.60	—5.58	—5.19	—4.20
	(0.52)	—(1.66)	(1.35)	(6.59)	—(2.40)	—(1.92)	—(3.47)

4. Short-term funds	—0.76	38.56	34.64	10.13	96.73	114.17	0.49
	—(0.62)	(28.13)	(25.34)	(6.96)	(41.64)	(42.37)	(0.41)
(*i*) short-term loans	18.15	21.23	14.89	14.22	66.46	43.34	35.15
	(14.69)	(15.49)	(10.89)	(9.77)	(28.61)	(16.08)	(29.08)
(*ii*) net miscellaneous liabilities	—18.91	17.33	19.75	—4.09	30.27	70.83	—34.66
	—(15.31)	(12.64)	(14.45)	—(2.81)	(13.03)	(26.29)	—(28.67)
5. Net resource mobilisation	58.72	73.78	80.15	66.20	157.33	196.91	40.54
	(47.53)	(53.83)	(58.65)	(45.48)	(67.72)	(73.07)	(33.55)
6. Gross resource mobilisation	**123.54**	**137.05**	**136.66**	**145.57**	**232.34**	**269.47**	**120.85**
	(100.00)	**(100.00)**	**(100.00)**	(100.00)	**(100.00)**	**(100.00)**	**(100.00)**

Note : Figures in parentheses indicate percentages of gross mobilised resources.

TABLE A.2

Structure of Gross Resource Mobilisation: RBI Sample

(per cent of gross mobilised resources)

	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
1. Paid-up capital	16.44	15.95	11.68	7.71	8.54	25.16	15.20	17.19	16.25	9.52
a. internal	2.46	4.95	2.26	0.28	2.45	19.75	9.11	5.14	7.63	6.35
b. external	13.91	11.00	9.42	7.43	6.09	5.41	6.09	12.05	8.62	3.17
i. net issues	13.98	11.00	9.42	7.43	6.09	5.41	6.09	12.05	8.62	3.17
ii. premium on shares	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Reserves and surpluses	19.36	16.94	20.62	21.05	15.60	—1.00	4.16	15.18	18.46	17.40
a. capital reserve	0.57	0.00	0.28	—0.06	—0.02	—0.04	—0.32	0.62	—0.11	0.31
b. development rebate reserve	7.41	10.62	7.37	8.96	7.82	8.07	7.79	8.24	8.18	3.47
c. others	11.38	6.31	12.97	12.15	7.80	—9.02	—3.31	6.32	10.39	13.62
3. Borrowings	24.82	34.20	32.94	39.07	40.66	46.34	43.97	36.71	25.31	25.10
a. long-term	2.73	3.61	10.99	7.29	6.88	15.93	12.02	16.32	4.22	0.84
i. banks	0.00	0.00	0.00	0.00	0.00	0.12	0.53	2.86	0.52	—0.07
ii. industrial finance corporation and state finance corporations	0.26	1.23	1.70	1.33	1.48	1.85	1.33	1.37	0.04	—0.17
iii. other institutions	0.91	0.92	0.96	2.98	3.46	7.20	5.12	0.43	—0.46	2.06
iv. government	1.56	1.46	8.34	2.98	1.93	0.80	—0.23	—0.89	—1.17	0.38
v. others	0.00	0.00	0.00	0.00	0.00	5.97	5.28	12.55	5.29	1.08

	b. short-term	22.09	30.59	21.95	31.78	33.78	30.40	31.94	20.39	21.09	25.93
	i. banks	19.25	24.91	12.32	25.46	31.30	25.95	27.24	14.48	16.21	19.81
	ii. others	2.84	5.68	9.62	6.32	2.48	4.45	4.70	5.90	4.88	6.12
4.	Net miscellaneous liabilities	4.61	—4.60	—3.77	—8.09	—0.75	—3.71	—0.60	—23.38	—8.67	5.00
5.	Depreciation	34.77	37.50	38.53	40.26	35.94	33.21	37.28	54.28	48.65	42.99
6.	Net resources mobilised	65.23	62.50	61.47	59.74	64.06	66.79	62.72	45.72	51.35	57.01
7.	**Gross resources mobilised**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(contd.)

TABLE A.2 (*contd.*)

Structure of Gross Resource Mobilisation: RBI Sample

(per cent of gross mobilised resources)

	1971-72	1972-73	1973-74	1974-75	1975-76	1961-62 to 1965-66	1966-67 to 1970-71	1971-72 to 1975-76	1961-62 to 1975-76
1. Paid-up capital	7.94	8.76	6.88	6.92	10.58	11.67	16.49	8.02	10.96
a. internal	4.21	5.79	5.00	5.28	7.11	2.39	9.89	5.50	6.12
b. external	3.73	2.97	1.88	1.64	3.47	9.27	6.59	2.52	4.84
i. net issues	3.05	2.69	1.52	1.59	2.77	9.27	6.59	2.16	4.64
ii. premium on shares	0.68	0.28	0.36	0.05	0.70	0.00	0.00	0.36	0.20
2. Reserves and surpluses	19.92	20.39	19.99	19.44	7.24	18.63	10.57	17.34	15.75
a. capital reserve	0.95	0.61	1.13	0.91	0.05	0.14	0.07	0.75	0.46
b. development rebate reserve	4.97	10.30	6.99	5.85	0.11	8.38	6.95	5.40	6.36
c. others	14.00	9.48	11.87	12.68	7.08	10.11	3.55	11.19	8.94
3. Borrowings	18.61	1.96	22.98	27.45	46.72	34.88	35.31	25.78	29.99
a. long-term	—3.61	— 0.53	1.36	1.46	6.82	6.48	8.91	1.52	4.41
i. banks	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.17
ii. industrial finance corporations and state finance corporations	— 0.16	— 0.07	—0.33	0.21	0.35	1.23	0.84	0.04	0.47

iii. other institutions	—2.72	—1.23	0.65	0.48	2.22	1.97	2.09	0.18	1.02
iv. government	—0.73	0.76	1.05	0.77	4.25	3.27	—0.14	1.30	1.27
v. others	0.00	0.00	0.00	0.00	0.00	0.00	5.48	0.00	1.48
b. short-term	22.22	2.50	21.62	25.99	39.90	28.40	26.40	24.27	25.59
i. banks	11.66	—8.07	16.49	21.61	28.54	23.09	21.21	16.68	19.06
ii. others	10.56	10.57	5.13	4.39	11.36	5.31	5.20	7.58	6.53
4. Net miscellaneous liabilities	12.09	19.51	16.69	23.63	—4.58	—2.60	—4.78	14.53	6.23
5. Depreciation	41.44	49.38	33.46	22.56	40.06	37.42	42.42	34.33	37.07
6. Net resources mobilised	50.56	50.62	66.54	77.44	59.94	62.58	57.58	65.67	62.93
7. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Same as Table II.1 for the RBI sample.

Note: The RBI sample consists of large and medium public limited companies, the sample sizes for different years being as follows:
1333 companies (1961-62 to 1965-66),
1501 companies (1966-67 to 1970-71) and 1650 companies (1971-72 to 1975-76).

TABLE A.3

Share Price Index

Year	Index of security prices (Base 1970-71 = 100) for all industries
1961-62	98.3
1962-63	96.0
1963-64	89.4
1964-65	84.5
1965-66	75.3
1966-67	78.7
1967-68	75.3
1968-69	80.2
1969-70	91.0
1970-71	100.0
1971-72	95.1
1972-73	96.3
1973-74	114.6
1974-75	112.5
1975-76	97.3

Source : Reserve Bank of India. *Reserve Bank of India Bulletins* (monthly).

TABLE A.4

Implicit Price Deflators

(Base 1960-61=100)

Year	Gross capital formation	Machinery and equipment	Inventory
1960-61	100.00	100.00	100.00
1961-62	103.79	102.48	101.12
1962-63	106.73	105.18	102.11
1963-64	112.04	113.60	108.88
1964-65	116.50	114.94	121.66
1965-66	124.12	122.04	126.07
1966-67	139.05	142.20	149.90
1967-68	146.54	146.37	174.02
1968-69	149.77	147.93	165.66
1969-70	157.91	148.07	175.68
1970-71	169.02	160.04	180.38
1971-72	178.74	165.88	189.89
1972-73	193.38	180.18	205.93
1973-74	219.22	195.23	248.57
1974-75	276.59	252.73	312.10
1975-76	297.89	284.85	310.86
1976-77	304.77	284.89	321.03

Source: Computed from: Government of India, C.S.O. (1976, 1979), *National Accounts Statistics*

TABLE A.5

Utilisation of Gross Mobilised Resources in Fixed Asset Formation

(per cent of gross mobilised resources)

		Gross fixed assets	Land[1]	Buildings[1]	Plant and machinery	Work-in[2] progress	Others[3]	Depreciation	Net fixed assets	Gross resources mobilised
1962-63	N	84.09	1.10	18.51	42.37	—	22.11	33.94	50.15	100.00
	R	71.79	0.95	13.47	51.53	—	5.84	37.50	34.29	100.00
1963-64	N	78.28	1.99	12.42	42.97	—	20.90	37.62	40.66	100.00
	R	76.35	1.94	10.49	59.34	—	4.58	38.53	37.82	100.00
1964-65	N	68.61	0.69	12.95	57.26	—	—2.29	33.19	35.42	100.00
	R	69.19	0.70	14.62	47.37	—	6.50	40.26	28.93	100.00
1965-66	N	67.59	1.40	8.42	39.41	—	18.36	25.46	42.13	100.00
	R	63.56	1.32	11.13	46.35	—	4.75	35.94	27.62	100.00
1966-67	N	72.84	0.89	9.74	33.46	—	28.75	28.41	44.43	100.00
	R	86.30	1.06	8.94	70.42	—	5.88	33.20	53.10	100.00
1967-68	N	73.26	1.65	8.89	77.75	—	—15.03	22.16	51.10	100.00
	R	68.15	1.54	9.00	51.86	—	5.75	37.28	30.87	100.00
1968-69	N	85.85	0.73	14.91	81.53	—	—11.32	40.45	45.40	100.00
	R	87.63	0.75	16.82	63.03	—	7.03	54.29	33.34	100.00
1969-70	N	72.50	1.02	10.12	62.02	—	—0.66	53.00	19.50	100.00
	R	69.74	0.99	12.00	49.46	—	7.29	48.65	21.09	100.00
1970-71	N	54.50	1.19	9.54	37.62	—	6.15	47.26	7.24	100.00
	R	55.66	1.22	5.42	41.88	—	7.14	42.99	12.67	100.00
1971-72	N	61.93	0.69	6.93	25.27	1.33	27.71	42.83	19.10	100.00
	R	57.68	0.65	9.51	40.93	2.14	4.46	41.44	16.24	100.00

1972-73	N	71.31	1.29	1.44	35.99	2.44	30.15	54.52	16.79	100.00
	R	81.14	1.47	11.06	58.61	3.42	6.58	49.37	31.77	100.00
1973-74	N	51.78	0.86	3.76	31.26	2.69	13.21	32.28	19.50	100.00
	R	58.54	0.98	5.93	42.21	5.20	4.21	33.47	25.07	100.00
1974-75	N	38.25	0.62	4.77	36.51	0.28	—3.93	26.74	11.51	100.00
	R	49.61	0.81	5.56	39.45	0.75	3.04	22.56	27.05	100.00
1975-76	N	91.87	1.21	17.52	59.88	3.94	9.32	58.59	33.28	100.00
	R	83.26	1.10	8.48	64.36	4.29	5.03	40.06	43.20	100.00
Annual average pre-recession	N	75.43	1.23	14.02	49.00	0.00	11.18	34.88	40.55	100.00
(1962-63 to 1964-65)	R	69.58	1.32	12.05	50.64	0.00	5.58	37.42	32.16	100.00
Annual average recession	N	75.57	1.14	10.78	59.62	0.00	4.03	29.89	45.68	100.00
(1965-66 to 1968-69)	R	72.22	1.14	9.84	54.65	0.00	6.59	42.42	29.80	100.00
Annual average post recession	N	62.70	0.97	8.83	41.11	0.45	11.34	47.57	15.13	100.00
(1969-70 to 1971-72)	R	—	—	—	—	—	—	—	—	—
Annual average post recession	N	57.72	0.92	6.08	38.94	2.03	9.75	39.08	18.64	100.00
(1972-73 to 1975-76)	R	63.24	0.96	7.48	47.60	2.87	4.32	34.33	28.91	100.00
Annual average sample period	N	65.88	1.03	8.88	46.50	0.90	8.57	37.61	28.27	100.00
(1962-63 to 1975-76)	R	66.81	1.08	8.94	50.05	1.58	5.16	37.07	29.74	100.00

Source : Same as Table II.1

Notes : [1]The RBI proportions for land and buildings were used to split the NIPFP sample figures into these items.

[2] and [3] Similarly, the RBI proportions for work-in-progress and others were used to split the NIPFP sample figures into these items. However, since the RBI breakup is not available prior to 1971-72, the NIPFP sample figures are not given separately for work-in-progress. In other words, the NIPFP sample figures on 'others' include work-in-progress for the period 1962-63 to 1970-71.

[4]RBI sample data are not available for the sub-period 1969-70 to 1971-72. The RBI sample data are grouped under the following three sub-periods: a. 1962-63 to 1965-66 (1333 companies), b. 1966-67 to 1970-71 (1501 companies), and c. 1971-72 to 1975-76 (1650 companies).

N: NIPFP sample R: RBI sample

TABLE A.6

Trends in Installed Capacity in Selected Industries

	1961	1962	1963	1964	1965	1966	1967	1968
1. Cotton yarn[1] ('000 spindles)	—	—	—	—	—	—	—	—
2. Cotton cloth[1] ('000 looms)	—	—	—	—	—	—	—	—
3. Jute ('000 looms)	—	—	—	—	—	—	—	—
4. Paper and paper boards ('000 tonnes)	410	410	502	556	644	644	701	730
5. Automobile tyres and tubes (lakh nos.)	30	35	41	50	49	52	56	56
6. Cycle tyres and tubes (lakh nos.)	339	316	295	279	329	404	421	430
7. Tractor tyres and tubes (lakh nos.)	971	1075	1145	1330	1530	2180	2440	2440
8. Sulphuric acid ('000 tonnes)	564	702	821	1011	1103	1328	1583	1835
9. Caustic soda ('000 tonnes)	124	125	188	203	269	323	378	365
10. Soda ash ('000 tonnes)	216	261	297	330	330	363	396	396
11. Nitrogenous fertilizers ('000 tonnes)	306	—	—	—	—	503	—	—
12. Staple fibre ('000 tonnes)	25	26	26	26	26	25	25	25
13. Cement ('000 tonnes)	9474	9728	10285	10768	11694	12497	12781	14760
14. Aluminium ('000 tonnes)	42	53	53	53	53	73	94	118
15. Diesel engines ('000 nos.)	41	41	44	43	49	71	69	62
16. Filament lamps (lakh nos.)	474	626	654	654	654	654	608	593
17. Domestic refrigerators ('000 nos.)	14	—	—	—	25	25	27	27
18. Dry cells (million nos.)	224	224	224	224	289	289	379	379
19. Electric motors ('000 HP)	602	1136	1136	1136	1352	1358	1416	2218
20. Power transformer ('000 KVA)	1244	1404	1999	1999	2122	2182	5066	4946

(*Contd.*)

TABLE A.6 (*contd.*)

Trends in Installed Capacity in Selected Industries

	1969	1970	1971	1972	1973	1974	1975	1976
1. Cotton yarn[1] ('000 spindles)	—	—	2167	2201	2214	2263	2337	—
2. Cotton cloth[1] ('000 looms)	—	—	2496	2484	2472	—	—	—
3. Jute ('000 looms)	—	—	387	387	387	—	—	—
4. Paper and paper boards ('000 tonnes)	733	768	901	902	902	902	1068	1116
5. Automobile tyres and tubes (lakh nos.)	66	66	66	77	83	77	94	96
6. Cycle tyres and tubes (lakh nos.)	464	466	608	608	616	629	639	639
7. Tractor tyres and tubes (lakh nos.)	3250	3250	3250	3250	3250	3250	3250	3250
8. Sulphuric acid ('000 tonnes)	1921	1921	1969	1969	1969	2234	2537	2784
9. Caustic soda ('000 tonnes)	367	367	395	438	439	509	569	690
10. Soda ash ('000 tonnes)	435	469	471	500	508	508	633	633
11. Nitrogenous fertilizers ('000 tonnes)	—	944	1534	1534	1704	1980	2458	2508
12. Staple fibre ('000 tonnes)	64	64	72	82	82	82	89	89
13. Cement ('000 tonnes)	15560	16961	18491	19776	19776	19865	21120	21468
14. Aluminuim ('000 tonnes)	118	148	168	197	197	197	230	221
15. Diesel engines ('000 nos.)	69	77	155	184	184	296	296	304
16. Filament lamps (lakh nos.)	773	834	834	834	894	1534	1709	1649
17. Domestic refrigerators ('000 nos.)	37	37	108	176	176	176	183	183
18. Dry cells (million nos.)	469	469	563	638	638	1231	1344	1291
19. Electric motors ('000 HP)	2569	2569	2569	2735	5008	5012	5418	6652
20. Power transformer ('000 KVA)	5995	6265	6265	6688	12570	14878	22162	20162

Source : Government of India, C.S.O. *Statistical Abstract.*

Note: [1] Comparable data are not available for the earlier years in the case of cotton yarn and cotton cloth.

— : Data are not available.

TABLE A-7

Structural Pattern of Resource Mobilisation, Selected Industries : NIPFP Sample (1962-63 to 1975-76)

(annual average per cent)

	A. Chemicals		B. Engineering			
	total	chemicals other than pharmaceuticals	total	electrical machineries	transport accessories	other engineering goods
		(1)		(2)	(3)	(4)
Number of companies	15	14	31	4	4	23
1. Corporate savings	77.06	77.98	60.06	71.98	48.51	63.36
i. internal share capital	7.93	8.11	7.63	14.02	5.32	7.51
ii. development rebate	11.03	11.46	4.42	2.93	3.45	5.18
iii. other reserves	12.73	12.36	16.90	22.48	9.95	19.19
iv. depreciation	45.37	46.05	31.11	32.55	29.79	31.48
2. External share capital	5.76	5.88	5.54	10.18	3.87	5.45
3. Long-term funds	9.91	9.67	9.91	4.59	15.57	8.19
i. long-term loans	8.81	8.52	6.24	1.58	14.12	3.33
ii. debentures	1.10	1.15	3.67	3.01	1.45	4.86
4. Short-term funds	7.27	6.47	24.49	13.25	32.05	23.00
i. short-term loans	16.70	15.82	19.80	25.86	16.45	20.25
ii. net miscellaneous liabilities	—9.43	—9.35	4.69	—12.61	15.60	2.75
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7. (*contd.*)
(1962-63 to 1975-76)

(annual average per cent)

	C. Textiles				D. Food products		
	total	cotton textiles	jute textiles	man-made fibres	total	sugar	food products other than sugar
		(5)	(6)	(7)		(8)	(9)
Number of companies	19	14	2	3	7	5	2
1. Corporate savings	59.56	53.41	60.87	73.68	66.94	74.18	45.79
i. internal share capital	5.15	5.65	5.39	3.94	10.27	11.60	6.36
ii. development rebate	6.20	4.49	4.08	10.48	6.67	7.29	4.86
iii. other reserves	4.42	1.60	13.44	9.67	7.99	9.46	3.72
iv. depreciation	43.79	41.67	37.96	49.59	42.01	45.83	30.85
2. External share capital	3.74	4.11	3.92	2.86	7.46	8.43	4.62
3. Long-term funds	8.55	8.86	1.25	8.90	19.36	23.36	7.66
i. long-term loans	8.47	8.84	3.13	8.40	19.09	22.67	8.63
ii. debentures	0.08	0.02	—1.88	0.50	0.27	0.69	—0.97
4. Short-term funds	28.15	33.62	33.96	14.56	6.24	—5.97	41.93
i. short-term loans	23.58	27.11	27.67	17.75	17.68	3.33	59.63
ii. net miscellaneous liabilities	4.57	6.51	6.29	—0.19	—11.44	—9.30	— 17.70
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A. 7 (*contd.*)
(1962-63 to 1975-76)

(annual average per cent)

	E. Miscellaneous						All industries total
	total	cement	paper and paper products	tyres and tubes	highly diversified	others	
		(10)	(11)	(12)	(13)	(14)	
Number of companies	27	6	3	2	8	8	99
1. Corporate savings	65.80	64.91	68.88	81.75	67.82	48.74	64.15
i. internal share capital	6.27	5.92	1.99	7.28	6.47	5.31	6.19
ii. development rebate	6.16	8.96	6.91	8.46	5.22	4.15	6.41
iii. other reserves	15.56	4.00	11.81	20.03	21.44	9.87	13.59
iv. depreciation	37.81	46.03	48.17	45.98	34.69	29.41	37.96
2. External share capital	4.55	4.30	1.45	5.28	4.69	3.85	5.69
3. Long-term funds	7.44	14.94	6.35	3.80	4.47	9.09	9.09
i. long-term loans	5.75	10.44	2.91	3.80	3.42	7.16	7.16
ii. debentures	1.69	4.50	3.44	0.00	1.05	1.93	1.93
4. Short-term funds	22.21	15.85	23.32	9.17	23.02	37.41	21.07
i. short-term loans	18.26	12.14	11.93	19.35	17.55	32.42	19.32
ii. net miscellaneous liabilities	3.95	3.71	11.39	—10.18	5.47	4.99	1.75
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1962-63 to 1964-65)

(annual average pea cent)

	A. Chemicals		B. Engineering			
	total	chemicals other than pharmaceuticals	total	electrical machineries	transport accessories	other engineering goods
		(1)		(2)	(3)	(4)
Number of companies	15	14	31	4	4	23
1. Corporate savings	47.77	48.36	53.31	50.06	42.33	58.48
i. internal share capital	10.71	11.22	3.28	2.33	2.68	3.74
ii. development rebate	8.97	9.26	6.60	5.59	7.85	6.33
iii. other reserves	2.99	2.99	16.72	24.74	8.59	18.18
iv. depreciation	25.10	24.89	26.71	17.40	23.21	30.23
2. External share capital	41.81	43.76	12.81	9.08	10.48	14.58
3. Long-term funds	11.93	12.49	9.33	2.33	22.54	5.59
i. long-term loans	9.60	10.05	4.11	2.33	19.03	—1.49
ii. debentures	2.33	2.44	5.22	0.00	3.51	7.08
4. Short-term funds	—1.51	—4.61	24.55	38.53	24.65	21.35
i. short-term loans	21.54	22.55	13.79	25.97	—1.00	16.98
ii. net miscellaneous liabilities	—23.05	—27.16	10.76	12.56	25.65	4.37
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1962-63 to 1964-65)

(annual average per cent)

	C. Textiles				D. Food products		
	total	cotton textiles	jute textiles	man-made fibres	total	sugar	food products other than sugar
		(5)	(6)	(7)		(8)	(9)
Number of companies	19	14	2	3	7	5	2
1. Corporate savings	57.27	53.41	43.52	74.26	491.63	—327.95	90.70
i. internal share capital	0.79	0.76	1.48	0.68	42.47	0.00	11.72
ii. development rebate	4.62	7.83	5.18	—6.44	61.55	— 6.93	15.51
iii. other reserves	6.61	3.41	23.75	12.73	58.20	—68.60	11.21
iv. depreciation	45.25	41.41	13.11	67.29	329.41	—252.42	52.26
2. External share capital	3.08	2.99	5.76	2.64	165.72	—108.31	45.71
3 Long-term funds	5.44	4.08	0.00	11.58	94.75	—110.85	—3.19
i. long-term loans	5.44	4.08	0.00	11.58	94.75	—110.85	—3.19
ii. debentures	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Short-term funds	34.21	39.52	50.72	11.52	—652.10	647.11	—33.22
i. short-term loans	28.06	32.17	52.28	7.31	—552.52	580.14	— 12.98
ii. net miscellaneous liabilities	6.15	7.35	—1.56	4.21	— 99.58	66.97	— 30.24
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1962-63 to 1964-65)

(annual average per cent)

	E. Miscellaneous						All industries total
	total	cement	paper and paper products	tyres and tubes	highly diversified	others	
		(10)	(11)	(12)	(13)	(14)	
Number of companies	27	6	3	2	8	8	99
1. Corporate savings	46.66	32.03	68.27	45.33	50.08	46.82	51.39
i. internal share capital	2.81	2.33	4.90	5.03	1.82	3.39	3.00
ii. development rebate	9.47	7.04	9.47	21.18	10.41	5.62	7.59
iii. other reserves	—4.00	—16.20	—2.70	42.00	1.22	7.51	5.84
iv. depreciation	38.38	38.86	56.60	77.12	36.63	30.30	34.96
2. External share capital	10.96	9.11	19.11	19.64	7.09	13.23	15.17
3. Long-term funds	18.57	37.87	13.47	—11.46	10.65	10.55	12.16
i. long-term loans	6.81	6.46	—16.32	—11.46	9.37	10.61	6.25
ii. debentures	11.76	31.41	29.79	0.00	1.28	—0.06	5.91
4. Short-term funds	23.81	20.99	—0.85	—53.51	32.18	29.40	21.28
i. short-term loans	39.85	35.81	12.09	36.91	41.26	53.92	25.38
ii. net miscellaneous liabilities	—16.04	—14.82	—12.94	—90.42	—9.08	—24.52	—4.10
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1965-66 to 1968-69)

(annual average per cent)

	A. Chemicals		B. Engineering			
	total	chemicals other than pharmaceuticals	total	electrical machineries	transport accessories	other engineering goods
		(1)		(2)	(3)	(4)
Number of companies	15	14	31	4	4	23
1. Corporate savings	26.61	26.11	50.74	68.67	42.41	52.90
i. internal share capital	7.47	7.28	7.45	10.48	2.47	10.11
ii. development rebate	1.88	1.91	8.73	10.03	9.29	8.15
iii. other reserves	—8.66	—9.03	10.28	14.62	10.67	9.25
iv. depreciation	25.92	25.95	24.28	33.54	19.98	25.39
2. External share capital	5.27	5.14	5.26	7.40	1.75	7.14
3. Long-term funds	58.01	59.42	33.96	18.93	38.06	34.01
i. long-term loans	55.42	56.77	23.32	10.12	37.14	16.79
ii. debentures	2.59	2.65	10.64	8.81	0.92	17.22
4. Short-term funds	10.11	9.33	10.04	5.00	17.78	5.95
i. short-term loans	19.12	15.34	26.77	30.80	14.39	34.01
ii. net miscellaneous liabilities	—9.01	—6.01	—16.73	—25.80	3.39	—28.06
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1965-66 to 1968-69)

(annual average per cent)

	C. Textiles				D. Food products		
	total	cotton textiles	jute textiles	man-made fibres	total	sugar	food products other than sugar
		(5)	(6)	(7)		(8)	(9)
Number of companies	19	14	2	3	7	5	2
1. Corporate savings	64.06	47.10	85.85	124.63	44.12	40.25	59.34
i. internal share capital	4.65	5.34	0.00	2.69	7.19	5.92	12.21
ii. development rebate	11.63	6.17	15.84	31.52	5.60	5.34	6.62
iii. other reserves	—4.83	—7.41	12.09	2.49	7.64	5.51	16.00
iv. depreciation	52.61	43.00	57.92	87.93	23.69	23.48	24.51
2. External share capital	3.28	3.78	0.00	1.91	5.08	4.18	8.62
3. Long-term funds	18.59	19.15	13.61	17.18	6.42	9.10	—4.13
i. long-term loans	13.34	11.77	27.22	17.18	7.05	9.10	—1.01
ii. debentures	5.25	7.38	—13.61	0.00	—0.63	0.00	—3.12
4. Short-term funds	14.07	29.97	0.54	—43.72	44.38	46.47	36.17
i. short-term loans	22.44	35.96	—15.30	—22.88	49.69	45.31	66.92
ii. net miscellaneous liabilities	—8.37	—5.99	15.84	—20.84	—5.31	1.16	—30.75
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1965-66 to 1968-69)

(annual average per cent)

	E. Miscellaneous						All industries total
	total	cement	paper and paper products	tyres and tubes	highly diversified	others	
		(10)	(11)	(12)	(13)	(14)	
Number of companies	27	6	3	2	8	8	99
1. Corporate savings	56.64	54.83	41.44	99.34	53.13	82.67	47.77
i. internal share capital	8.07	10.05	2.33	1.88	7.61	8.41	6.45
ii. development rebate	10.37	10.29	7.53	11.05	10.73	9.71	7.99
iii. other reserves	5.97	1.90	—1.46	45.06	5.52	12.31	2.99
iv. depreciation	32.23	32.59	33.04	41.35	29.27	52.24	30.34
2. External share capital	5.70	7.10	1.64	1.33	5.38	5.94	6.07
3. Long-term funds	25.41	22.75	19.62	0.50	30.95	14.11	33.77
i. long-term loans	22.79	22.75	12.52	0.50	26.61	15.37	28.49
ii. debentures	2.62	0.00	7.10	0.00	4.34	—1.26	5.28
4. Short-term funds	12.25	15.32	37.30	—1.17	10.54	—2.72	12.39
i. short-term loans	7.37	4.49	25.21	—4.49	8.92	—7.59	19.03
ii. net miscellaneous liabilities	4.88	10.83	12.09	3.32	1.62	4.87	—6.64
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1969-70 to 1971-72)

(annual average per cent)

	A. Chemicals		B. Engineering			
	total	chemicals other than pharmaceuticals	total	electrical machineries	transport accessories	other engineering goods
		(1)		(2)	(3)	(4)
Number of companies	15	14	31	4	4	23
1. Corporate savings	93.03	90.96	62.73	86.05	66.97	56.40
i. internal share capital	5.17	5.91	8.84	6.21	15.71	7.04
ii. development rebate	5.18	5.92	4.67	1.34	—2.32	7.77
iii. other resources	33.78	24.58	11.49	44.02	0.87	8.31
iv. depreciation	48.90	54.55	37.73	34.48	52.71	33.28
2. External share capital	4.28	4.89	7.33	5.14	13.01	5.64
3. Long-term funds	—20.50	—23.44	—1.14	—2.82	—18.89	5.29
i. long-term loans	—21.04	—24.05	—0.50	—2.82	—20.76	6.92
ii. debentures	0.54	0.61	—0.64	0.00	1.87	—1.63
4. Short-term funds	23.19	27.59	31.08	11.63	38.91	32.47
i. short-term loans	20.00	23.45	20.10	41.81	27.37	13.04
ii. net miscellaneous liabilities	3.19	4.14	10.98	—30.18	11.54	19.43
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A.7 (*contd.*)
(1969-70 to 1971-72)

(annual average per cent)

	C. Textiles				D. Food products		
	total	cotton textiles	jute textiles	man-made fibres	total	sugar	food products other than sugar
		(5)	(6)	(7)		(8)	(9)
Number of companies	19	14	2	3	7	5	2
1. Corporate savings	68.24	66.05	52.89	77.09	81.88	94.69	56.41
i. internal share capital	6.19	8.13	4.60	2.20	11.92	17.65	0.54
ii. development rebate	1.06	0.59	1.65	1.94	11.32	16.22	1.59
iii. other reserves	14.42	11.75	12.37	21.05	4.51	—4.65	22.71
iv. depreciation	46.57	45.58	34.27	51.90	54.13	65.47	31.57
2. External share capital	5.13	6.74	3.81	1.86	9.88	14.61	0.44
3. Long-term funds	12.37	9.57	3.61	20.84	36.39	40.18	28.85
i. long-term loans	13.18	9.57	3.61	23.69	36.39	40.18	28.85
ii. debentures	—0.81	0.00	0.00	—2.85	0.00	0.00	0.00
4. Short-term funds	14.26	17.64	39.69	0.21	—28.15	—49.48	14.30
i. short-term loans	16.59	24.00	24.99	—2.18	7.22	—10.91	43.29
ii. net miscellaneous liabilities	—2.33	—6.36	14.70	2.39	—35.37	—38.57	—28.99
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1969-70 to 1971-72)

(annual average per cent)

	E. Miscellaneous						All industries total
	total	cement	paper and paper products	tyres and tubes	highly diversified	others	
		(10)	(11)	(12)	(13)	(14)	
Number of companies	27	6	3	2	8	8	99
1. Corporate savings	89.59	86.51	205.45	45.13	116.09	46.04	77.74
i. internal share capital	6.74	0.25	—4.18	0.86	14.12	3.77	7.39
ii. development rebate	9.57	17.93	43.78	12.65	4.16	3.11	5.88
iii. other reserves	19.92	7.80	22.79	8.98	32.93	13.57	18.00
iv. depreciation	53.36	60.53	143.06	22.64	64.88	25.59	46.47
2. External share capital	5.58	0.21	—3.47	0.72	11.69	3.12	5.80
3. Long-term funds	—4.06	—5.30	—21.97	22.42	—16.00	6.80	—1.78
i. long-term loans	—5.05	—6.14	—16.85	22.42	—18.32	6.91	—1.83
ii. debentures	0.99	0.84	—5.12	0.00	2.32	—0.11	0.05
4. Short-term funds	8.89	18.58	—80.01	31.73	—11.78	44.04	18.24
i. short-term loans	3.17	—0.50	—66.62	3.45	—4.43	32.79	13.66
ii. net miscellaneous liabilities	5.72	19.08	—13.39	28.28	—7.35	11.25	4.58
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1972-73 to 1975-76)

(annual average per cent)

	A. Chemicals		B. Engineering			
	total	chemicals other than pharmaceuticals	total	electrical machineries	transport accessories	other engineering goods
		(1)		(2)	(3)	(4)
Number of companies	15	14	31	4	4	23
1. Corporate savings	133.52	140.18	66.81	76.58	47.01	74.55
i. internal share capital	3.96	4.27	7.87	29.36	3.35	6.14
ii. development rebate	26.73	28.80	0.58	—1.55	—0.42	1.45
iii. other reserves	29.19	29.57	24.58	12.63	13.32	32.15
iv. depreciation	73.64	77.54	33.78	36.14	30.76	34.81
2. External share capital	1.61	1.73	3.20	11.93	1.36	2.50
3. Long-term funds	—31.62	—36.20	—1.37	1.03	8.04	—6.33
i. long-term loans	—30.84	—35.36	—1.86	—1.31	6.81	—6.13
ii. debentures	—0.78	—0.84	0.49	2.34	1.23	—0.20
4. Short-term funds	—3.51	—5.71	31.36	10.46	43.59	29.28
i. short-term loans	10.13	11.03	16.35	12.22	18.10	16.25
ii. net miscellaneous liabilities	—13.64	—16.74	15.01	—1.76	25.49	13.03
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*contd.*)
(1972-73 to 1975-76)

(annual average per cent)

	C. Textiles				D. Food products		
	total	cotton textiles	jute textiles	man-made fibres	sugar	total	food products other than sugar
		(5)	(6)	(7)		(8)	(9)
Number of compauies	19	14	2	3	7	5	2
1. Corporate savings	54.32	50.75	71.90	59.17	70.94	88.29	9.99
i. internal share capital	7.00	7.00	11.84	6.60	11.50	14.77	0.00
ii. development rebate	6.87	4.24	0.70	11.96	3.80	3.85	3.61
iii. other reserves	2.80	0.61	7.87	6.20	9.02	18.72	—25.05
iv. depreciation	37.65	38.90	51.49	34.41	46.62	50.95	31.43
2. External share capital	2.84	2.84	4.81	2.69	4.67	6.01	0.00
3. Long-term funds	2.90	4.44	—7.08	1.03	21.16	26.26	3.32
i. long-term loans	4.77	8.70	—7.08	—1.12	19.83	24.54	3.32
ii. debentures	—1.87	—4.26	0.00	2.15	1.33	1.72	0.00
4. Short-term funds	39.94	41.97	30.37	37.11	3.23	—20.56	86.69
i. short-term loans	26.20	21.53	34.19	33.72	5.47	—16.45	82.36
ii. net miscellaneous liabilities	13.74	20.44	—3.82	3.39	—2.24	—4.11	4.33
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-7 (*concld.*)
(1972-73 to 1975-76)

(annual average per cent)

	E. Miscellaneous						All industries total
	total	cement	paper and paper products	tyres and tubes	highly diversified	others	
		(10)	(11)	(12)	(13)	(14)	
Number of companies	27	6	3	2	8	8	99
1. Corporate savings	65.47	85.82	53.94	124.94	64.99	49.70	72.78
i. internal share capital	5.24	3.83	0.81	27.32	4.30	5.62	6.31
ii. development rebate	0.88	—1.35	—1.42	—4.30	1.23	3.24	5.19
iii. other reserves	25.20	19.77	19.50	14.96	31.53	14.51	21.28
iv. depreciation	34.15	63.57	35.05	86.96	27.93	26.33	40.00
2. External share capital	2.13	1.56	0.33	11.10	1.75	2.28	2.64
3. Long-term funds	—2.19	2.42	3.72	—25.04	—5.66	10.61	—4.26
i. long-term loans	—0.89	5.78	5.90	—25.04	—4.38	10.61	—3.56
ii. debentures	—1.30	—3.36	—2.18	0.00	—1.28	0.00	—0.70
4. Short-term funds	34.59	10.20	42.01	—11.00	38.92	37.41	28.84
i. short-term loans	26.76	22.18	20.91	65.52	23.95	32.42	20.72
ii. net miscellaneous liabilities	7.83	—11.98	21.10	—76.52	14.97	4.99	8.12
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

TABLE A-8
Structural Pattern of Gross Resource Mobilisation by Size of Paid-up Capital: NIPFP Sample

(annual average per cent)

	1962-63 to 1975-76			1962-63 to 1964-65		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Number of companies	80	12	7	80	12	7
1. Corporate savings	58.33	78.09	64.81	51.87	59.87	46.53
i. internal share capital	6.84	5.81	7.75	3.24	6.14	2.58
ii. development rebate	4.87	7.44	7.94	8.16	4.63	8.98
iii. other reserves	11.56	22.34	10.20	7.66	6.05	2.80
iv. depreciation	35.06	42.50	38.92	32.81	43.05	32.17
2. External share capital	4.96	4.21	5.63	12.64	23.95	10.07
3. Long-term fund	9.57	7.88	9.25	9.84	4.38	21.82
i. long-term loans	8.37	6.11	6.14	6.97	0.41	9.58
ii. debentures	1.20	1.77	3.11	2.87	3.97	12.24
4. Short- term funds	27.14	9.82	20.31	25.65	11.80	21.58
i. short-term loans	26.71	8.09	16.57	31.75	10.65	26.54
ii. net miscellaneous liabilities	0.43	1.73	3.74	—6.10	1.15	—4.96
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-8 (*contd.*)

(annual average per cent)

	1965-66 to 1968-69			1969-70 to 1971-72			1972-73 to 1975-76		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Number of companies	80	12	7	80	12	7	80	12	7
1. Corporate savings	55.26	53.83	40.26	66.46	114.18	71.98	57.21	81.11	97.73
i. internal share capital	8.48	3.54	8.22	6.02	3.48	11.38	6.87	6.21	5.42
ii. development rebate	6.58	8.00	9.22	5.52	4.02	7.61	2.74	9.18	10.60
iii. other reserves	5.14	1.23	1.99	15.26	42.89	6.77	14.21	30.89	21.67
iv. depreciation	35.06	41.06	20.83	39.66	63.79	46.22	33.39	34.83	60.04
2. External share capital	5.99	2.50	5.80	4.99	2.88	9.43	2.79	2.52	2.20
3. Long term funds	19.04	42.28	42.59	6.42	—4.77	—12.59	6.00	—6.68	—23.88
i. long-term loans	13.90	39.85	35.76	6.48	—5.67	—12.30	6.72	—7.85	—21.17
ii. debentures	5.14	2.43	6.83	—0.06	0.90	—0.29	—0.72	1.17	—2.71
4. Short-term funds	19.71	1.39	11.35	22.13	—12.29	31.18	34.00	23.05	23.95
i. short-term loans	31.65	11.38	11.64	23.55	—11.98	14.31	24.30	13.40	20.99
ii. net miscellaneous liabilities	—11.94	—9.99	—0.29	—1.42	—0.31	16.87	9.70	9.65	2.96
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Notes : Group 1: Paid-up capital less than Rs. 5 crore.
Group 2: Paid-up capital from Rs. 5 crore to Rs. 10 crore.
Group 3: Paid up capital above Rs. 10 crore.

TABLE A-9

Structural Pattern of Gross Resource Mobilisation by Size of Total Assets : NIPFP Sample

(annual average per cent)

	1961-62 to 1975-76			1962-63 to 1964-65		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Number of companies	49	28	22	49	28	22
1. Corporate savings	60.57	62.95	66.83	47.07	73.64	44.91
i. internal share capital	7.02	6.65	6.94	4.59	2.84	3.62
ii. development rebate	4.85	6.15	7.02	6.81	8.00	7.72
iii. other reserves	12.23	11.98	14.51	6.11	13.47	1.52
iv. depreciation	36.47	38.17	38.36	29.56	49.33	32.05
2. External share capital	5.09	4.83	5.04	17.92	11.06	14.38
3. Long term funds	9.49	8.49	9.34	13.83	2.49	16.56
i. long-term loans	9.06	7.22	6.72	9.41	0.32	8.86
ii. debentures	0.43	1.27	2.62	4.42	2.17	7.70
4. Short-term funds	24.85	23.73	18.79	21.18	12.81	24.15
i. short-term loans	24.19	22.31	16.56	28.16	16.90	27.23
ii. net miscellaneous liabilities	0.66	1.42	2.23	—6.98	—4.09	—3.08
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(contd.)

TABLE A-9 (*contd.*)

(annual average per cent)

	1965-66 to 1968-69			1969-70 to 1971-72			1971-72 to 1975-76		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Number of companies	49	28	22	49	28	22	49	28	22
1. Corporate savings	51.80	59.40	44.75	73.25	71.55	81.95	62.06	58.16	83.56
i. internal share capital	8.37	7.48	7.03	3.79	6.53	8.70	7.21	7.11	5.70
ii. development rebate	6.65	8.59	8.16	6.74	6.63	5.24	2.23	4.17	6.73
iii. other reserves	3.96	6.75	1.65	19.04	16.15	18.61	15.33	12.51	27.55
iv. depreciation	32.82	36.58	27.91	43.68	42.24	49.40	37.29	34.37	43.58
2. External share capital	5.91	5.28	4.97	3.13	5.41	7.20	2.93	2.89	2.32
3. Long-term funds	19.28	14.02	43.19	1.37	16.31	—11.43	6.63	2.47	11.33
i. long-term loans	17.44	12.57	35.92	2.08	15.73	—11.43	7.22	1.36	9.75
ii. debentures	1.84	1.45	7.27	—1.71	0.58	0.00	—0.59	1.11	—1.58
4. Short-term funds	23.01	21.30	7.09	22.25	6.73	22.28	28.38	36.48	25.45
i. Short-term loans	27.84	36.87	11.62	27.86	4.36	13.24	18.97	25.18	19.28
ii. net miscellaneous liabilities	—4.83	—15.57	—4.53	—5.61	2.37	9.04	9.41	11.30	6.17
5. Gross resource mobilisation	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Notes : Group 1 : Total assets less than Rs. 15 crore.
Group 2 : Total assets from Rs. 15 crore to Rs. 30 crore.
Group 3 : Total assets from Rs. 30 crore and above.

TABLE A.10

Structural Pattern of Gross Resource Mobilisation by Age of Companies : NIPFP Sample

(per cent of gross resource mobilisation)

	1962-63 to 1975-76			
	Group 1	Group 2	Group 3	Group 4
Number of companies	31	39	4	25
1. Corporate savings	65.47	61.92	62.85	69.13
i. internal share capital	7.31	6.21	5.86	7.64
ii. development rebate	5.19	4.72	7.77	10.26
iii. other reserves	13.05	12.58	20.18	14.73
iv. depreciation	39.92	38.41	29.04	36.50
2. External share capital	5.31	4.51	4.26	5.54
3. Long-term funds	5.75	9.24	14.14	11.78
i. long-term loans	5.44	5.73	10.37	10.81
ii. debentures	0.31	3.51	3.77	0.97
4. Short-term funds	23.47	24.33	18.75	13.55
i. short-term loans	22.12	18.68	7.18	19.17
ii. net miscellaneous liabilities	1.35	5.65	11.57	—5.62
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**
	1962-63 to 1964-65			
1. Corporate savings	52.43	55.37	48.81	48.14
i. internal share capital	2.12	2.29	4.90	13.50
ii. development rebate	9.35	7.65	6.73	4.44
iii. other reserves	1.48	8.08	11.54	7.16
iv. depreciation	39.48	37.35	25.64	23.04
2. External share capital	8.32	8.92	19.12	34.19
3. Long-term funds	6.63	13.36	19.08	17.81
i. long-term loans	3.79	2.71	12.46	17.81
ii. debentures	2.84	10.65	6.62	0.00
4. Short-term funds	32.62	22.35	12.99	—0.14
i. short-term loans	31.36	23.29	1.54	24.81
ii. net miscellaneous liabilities	1.26	—0.94	11.45	—24.95
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**

(contd.)

TABLE A.10 (*contd.*)

(per cent of gross resources mobilised)

	1965-66 to 1968-69			
	Group 1	Group 2	Group 3	Group 4
Number of companies	31	39	4	25
1. Corporate savings	54.77	51.30	58.61	36.77
i. internal share capital	6.54	7.32	13.52	7.50
ii. development rebate	10.08	8.33	13.99	4.60
iii. other reserves	2.73	5.05	0.68	0.02
iv. depreciation	35.42	30.60	30.42	24.65
2. External share capital	4.62	5.18	9.55	5.30
3. Long-term funds	24.60	26.49	41.01	54.82
i. long-term loans	20.12	18.84	36.25	52.67
ii. debentures	4.48	7.65	4.76	2.15
4. Short-term funds	16.01	17.03	—9.17	3.11
i. short-term loans	25.53	21.65	7.87	9.08
ii. net miscellaneous liabilities	—9.52	—4.62	—17.04	—5.97
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**
	1969-70 to 1971-72			
1. Corporate savings	92.29	75.36	59.60	67.66
i. internal share capital	9.22	8.86	0.49	3.91
ii. development rebate	2.77	7.77	6.40	6.44
iii. other reserves	27.48	7.35	12.08	23.05
iv. depreciation	52.82	51.38	40.63	34.26
2. External share capital	7.64	7.33	0.41	3.23
3. Long-term funds	—5.40	2.90	—11.86	—2.59
i. long-term loans	—4.07	2.49	—14.96	—3.16
ii. debentures	—1.33	0.41	3.10	0.57
4. Short-term funds	5.47	14.41	51.85	31.70
i. short-term loans	13.48	10.01	18.71	18.05
ii. net miscellaneous liabilities	—8.01	4.40	33.14	13.65
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A.10 (*concld.*)

(per cent of gross resources mobilised)

	1972-73 to 1975-76			
	Group 1	Group 2	Group 3	Group 4
Number of companies	31	39	4	25
1. Corporate savings	63.20	65.28	67.41	96.28
i. internal share capital	8.65	4.42	4.09	7.06
ii. development rebate	1.87	—0.91	6.18	17.75
iii. other reserves	16.08	23.13	32.00	22.30
iv. depreciation	36.60	38.64	25.14	49.17
2. External share capital	3.51	1.79	1.66	2.87
3. Long-term funds	—1.11	—3.43	12.47	—12.79
i. long-term loans	1.30	—2.69	9.42	—13.31
ii. debentures	—2.41	—0.74	3.05	0.52
4. Short-term funds	34.40	36.36	18.46	13.64
i. short-term loans	21.25	19.16	4.00	26.06
ii. net miscellaneous liabilities	13.15	17.20	24.46	—12.42
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**

Notes: Group 1 : Companies established upto 1935.
Group 2 : Companies established between 1936 to 1950.
Group 3 : Companies established between 1951 to 1955.
Group 4 : Companies established between 1956 to 1961.

TABLE A.11

Structural Pattern of Gross Resource Mobilisation by Location of Companies : NIPFP Sample

(annual average per cent)

	1962-63 to 1975-76			1962-63 to 1964-65		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Number of companies	23	68	8	23	68	8
1. Corporate savings	73.54	63.46	57.31	53.84	52.70	43.31
i. internal share capital	5.97	7.17	6.54	6.74	2.99	2.78
ii. development rebate	8.66	5.75	6.88	6.56	8.15	5.37
iii. other reserves	13.71	13.86	11.26	5.62	5.32	10.63
iv. depreciation	45.20	36.68	32.63	34.92	36.24	24.53
2. External share capital	4.33	5.21	4.75	26.32	11.69	10.83
3. Long-term funds	11.32	8.19	11.50	10.69	12.53	12.38
i. long-term loans	10.51	5.89	10.17	5.24	6.09	9.79
ii. debentures	0.81	2.30	1.33	5.45	6.44	2.59
4. Short-term funds	10.81	23.14	26.44	9.15	23.08	33.48
i. short-term loans	15.45	19.30	27.82	12.40	26.42	45.71
ii. net miscellaneous liabilities	−4.64	3.84	−1.38	−3.25	−3.34	−12.23
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A.11 (*contd.*)

(annual average per cent)

	1965-66 to 1968-69			1969-70 to 1971-72			1972-73 to 1975-76		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Number of companies	23	68	8	23	68	8	23	68	8
1. Corporate savings	40.89	49.20	68.51	113.95	73.68	47.52	84.76	71.30	60.86
i. internal share capital	4.93	8.22	5.24	5.98	7.64	6.12	3.51	6.85	8.42
ii. development rebate	6.49	8.17	10.95	8.46	5.00	8.21	11.08	3.65	4.71
iii. other reserves	—2.93	3.41	17.99	29.03	17.80	1.75	22.72	22.05	13.25
iv. depreciation	32.40	29.40	34.33	70.48	43.24	31.44	47.45	38.75	34.48
2. External share capital	3.48	5.81	3.70	4.96	6.32	5.06	1.43	2.78	3.42
3. Long-term funds	41.90	32.37	22.70	—6.62	—2.99	14.90	—5.18	—5.25	4.43
i. long-term loans	40.46	25.64	21.29	—5.44	—3.10	13.27	—5.01	—4.19	0.82
ii. debentures	1.44	6.73	1.41	—1.18	0.11	1.63	—0.17	—1.06	3.61
4. Short-term funds	13.73	12.62	5.09	—12.29	22.99	32.52	18.99	31.17	31.29
i. short-term loans	19.14	19.26	15.99	8.06	14.60	15.80	16.60	19.80	34.95
ii. net miscellaneous liabilities	—5.41	—6.64	—10.90	—20.35	8.39	16.72	2.39	11.37	—3.66
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note : Group 1: Companies located in major industrial centres.
Group 2: Companies located around major industrial centres.
Group 3: Companies not located in or around industrial centres.

TABLE A-12

Structure of Gross Resources Mobilised by Growth of Gross Fixed Assets of Companies : NIPFP Sample

	(annual average per cent)			
	1962-63 to 1975-76			
	Group 1	Group 2	Group 3	Total
Number of companies	21	36	42	99
1. Corporate savings	58.65	66.96	65.57	64.84
i. internal share capital	4.78	6.12	7.84	6.89
ii. development rebate	4.76	4.20	7.94	6.41
iii. other reserves	3.75	20.05	13.24	13.58
iv. depreciation	45.36	36.59	36.55	37.96
2. External share capital	3.48	4.45	5.69	5.00
3. Long-term funds	7.91	7.93	9.97	9.09
i. long-term loans	5.33	5.80	8.32	7.16
ii. debentures	2.58	2.13	1.65	1.93
4. Short-term funds	29.96	20.66	18.77	21.07
i. short-term loans	23.36	16.27	19.65	19.32
ii. net miscellaneous liabilities	6.60	4.39	—0.88	1.75
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**
	1962-63 to 1964-65			
1. Corporate savings	63.17	51.58	47.84	52.10
i. internal share capital	1.58	2.54	5.45	3.71
ii. development rebate	7.23	7.80	7.59	7.59
iii. other reserves	1.09	6.94	7.03	5.84
iv. depreciation	53.27	34.30	27.77	34.96
2. External share capital	6.18	9.93	21.26	14.46
3. Long-term funds	15.14	6.73	14.89	12.16
i. long-term loans	—1.69	1.02	13.40	6.25
ii. debentures	16.83	5.71	1.49	5.91
4. Short-term funds	15.51	31.76	16.01	21.28
i. short-term loans	37.40	22.72	22.29	25.38
ii. net miscellaneous liabilities	—21.89	9.04	—6.28	—4.10
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**

(contd.)

TABLE A-12 (*contd.*)

(annual average per cent)

	1965-66 to 1968-69			
	Group 1	Group 2	Group 3	Total
Number of companies	21	36	42	99
1. Corporate savings	54.59	60.08	41.25	48.67
i. internal share capital	4.65	6.24	6.90	7.34
ii. development rebate	9.95	7.83	7.52	7.99
iii. other reserves	—5.88	6.08	4.23	3.00
iv. depreciation	45.87	39.93	22.60	30.34
2. External share capital	13.29	4.41	4.87	5.18
3. Long-term funds	18.52	17.18	44.05	33.77
i. long-term loans	13.89	12.11	38.52	28.49
ii. debentures	4.63	5.07	5.53	5.28
4. Short-term funds	13.60	18.33	9.83	12.38
i. short term loans	19.51	28.88	15.22	19.03
ii. net miscellaneous liabilities	—5.91	—10.55	—5.39	—6.65
5. **Gross resources mobilised**	**100.00**	**100.00**	**100.00**	**100.00**
	1969-70 to 1971-72			
1. Corporate savings	62.32	102.53	73.90	66.96
i. internal share capital	1.80	5.33	9.51	7.21
ii. development rebate	3.69	3.54	7.34	5.88
iii. other reserves	10.14	34.29	14.96	7.40
iv. depreciation	46.69	59.37	42.09	46.47
2. External share capital	1.49	4.41	7.87	5.98
3. Long-term funds	—1.54	—2.69	—1.54	—1.78
i. long-term loans	—1.09	—1.56	—2.15	—1.83
ii. debentures	—0.45	—1.13	0.61	0.05
4. Short-term funds	37.73	—4.25	19.77	28.84
i. short-term loans	17.66	1.62	16.46	20.72
ii. net miscellaneous liabilities	20.07	—5.87	3.31	8.12
5. **Gross resources mobilised**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A-12 (*contd.*)

(annual average per cent)

	1971-72 to 1975-76			
	Group 1	Group 2	Group 3	Total
Number of companies	21	36	42	99
1. Corporate savings	51.61	63.43	83.50	72.81
i. internal share capital	2.37	7.27	6.77	6.34
ii. development rebate	—0.55	1.46	8.71	5.19
iii. other reserves	9.25	26.57	21.13	21.28
iv. depreciation	40.54	28.13	46.89	40.00
2. External share capital	0.97	2.96	2.76	2.61
3. Long-term funds	2.10	6.98	—12.45	—4.26
i. long-term loans	5.23	6.39	—11.57	—3.56
ii. debentures	—3.13	0.59	—0.88	—0.70
4. Short-term funds	45.32	26.63	26.19	28.84
i. short-term loans	25.10	12.60	24.48	20.72
ii. net miscellaneous liabilities	20.22	14.03	1.71	8.12
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**

Note : Group 1: Slow growing companies having annual average compound growth rate of gross fixed assets less than 7.5 per cent.

Group 2: Average growing companies having annual average compound growth rate of gross fixed assets between 7.5 per cent and 12.5 per cent.

Group 3: Fast growing companies having annual average compound growth rate of gross fixed assets more than 12.5 per cent.

TABLE A-13

Structure of Gross Resources Mobilised by Tax Liability of Companies

(annual average per cent)

	1962-63 to 1975-76			1962-63 to 1964-65		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Number of companies	45	14	40	45	14	40
1. Corporate savings	70.62	65.31	57.09	53.29	54.65	49.19
i. internal share capital	6.50	6.87	7.40	5.76	2.34	2.00
ii. development rebate	7.08	8.46	4.46	6.50	8.76	8.25
iii. other reserves	18.09	8.34	10.52	4.31	4.96	8.23
iv. depreciation	38.95	41.64	34.71	36.72	38.59	30.71
2. External share capital	4.71	4.99	5.38	22.46	9.14	7.82
3. Long-term funds	8.93	10.99	8.27	8.70	19.82	11.93
i. long-term loans	7.49	5.65	7.52	4.17	1.73	11.37
ii. debentures	1.44	5.34	0.75	4.53	18.09	0.56
4. Short-term funds	15.74	18.71	29.26	15.55	16.39	31.06
i. short-term loans	14.78	16.40	26.77	14.66	23.73	39.35
ii. net miscellaneous liabilities	0.96	2.31	2.49	0.89	—7.34	—8.29
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(contd.)

TABLE A-13 (*contd.*)

(annual average per cent)

	1965-66 to 1968-69			1969-70 to 1971-72			1972-73 to 1975-76		
	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Number of companies	45	14	40	45	14	40	45	14	40
1. Corporate savings	46.24	56.30	47.58	83.02	61.27	81.87	84.00	80.66	54.10
i. internal share capital	7.33	9.46	6.19	5.22	4.17	11.78	4.81	8.08	7.76
ii. development rebate	5.45	10.69	9.75	4.78	12.88	2.50	9.35	2.84	0.47
iii. other reserves	0.76	2.73	5.97	25.58	2.71	18.96	29.92	19.24	10.31
iv. depreciation	32.70	33.42	25.67	47.44	41.51	48.63	39.92	50.50	35.56
2. External share capital	5.18	6.68	4.37	4.32	3.45	9.75	1.95	3.29	3.15
3. Long-term funds	41.54	25.59	28.35	—5.43	13.99	—7.95	—6.54	—8.25	0.60
i. long-term loans	37.38	12.40	25.96	—4.45	13.31	—8.87	—6.45	—5.07	1.07
ii. debentures	4.16	13.19	2.39	—0.98	0.68	0.92	—0.09	—3.18	—0.47
4. Short-term funds	7.04	11.43	19.70	18.09	21.29	16.33	20.59	24.30	42.15
i. short-term loans	16.28	13.49	25.55	15.36	5.07	17.39	13.55	25.12	28.71
ii. net miscellaneous liabilities	—9.24	—2.06	—5.85	2.73	16.22	—1.06	7.04	—0.82	13.44
5. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note : Group 1: Companies with below average tax liability, less than 30 per cent.
Group 2: Companies with average tax liability, between 30 per cent and 39 per cent.
Group 3: Companies with above average tax liability of 39 per cent.

TABLE A-14

Structural Pattern of Gross Resource Mobilisation of Private Limited Companies : RBI Sample

(per cent of gross resources mobilised)

	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
1. Paid-up capital	13.42	9.42	13.38	4.31	11.62	39.10	28.37	11.78	12.62
a. internal	7.09	2.55	0.97	0.00	6.47	32.46	19.15	4.09	10.59
b. external	6.33	6.87	12.41	4.31	5.15	6.64	9.22	7.69	2.03
i. net issue	6.33	6.87	12.41	4.31	5.15	6.61	9.22	7.69	2.03
ii. premium on shares	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
2. Reserves and surpluses	22.07	21.46	75.91	28.27	16.54	—3.03	12.99	21.80	12.96
a. capital reserves	1.40	6.33	5.32	2.98	1.29	1.16	—0.68	0.15	—0.43
b. development rebate reserve	4.71	4.56	13.46	4.54	4.70	6.71	7.63	5.35	3.35
c. others	15.96	10.57	57.13	20.75	10.55	—10.90	6.04	16.30	10.04
3. Borrowings	19.36	42.48	—9.11	50.30	43.73	43.87	63.28	39.34	37.24
a. long-term	3.59	1.94	1.13	7.42	5.58	5.82	6.40	0.93	—0.61
i. banks	2.23	3.16	—1.45	3.86	2.71	—0.95	1.73	—1.97	0.64
ii. industrial finance corporations and state finance corporations	1.27	0.48	1.53	0.13	1.38	4.11	3.96	0.41	—0.18
iii. debentures and mortgages	0.48	—2.24	0.73	3.18	0.79	—1.00	—1.44	—0.89	—0.41
iv. others	—0.39	0.54	0.32	0.25	0.70	3.66	2.15	3.38	—0.66

(contd.)

TABLE A-14 (*contd.*)

	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
b. short-term	15.77	40.54	—10.24	42.88	38.15	38.05	56.88	38.41	37.85
i. bank	22.13	31.63	—14.75	38.48	26.98	31.86	49.21	26.34	35.51
ii. others	—6.36	8.91	4.51	4.40	11.17	6.19	7.67	12.07	2.34
4. Net miscellaneous liabilities	21.11	—0.95	—53.51	—15.75	2.65	—12.80	—53.92	—22.14	—1.83
5. Depreciation	24.04	27.59	73.33	32.87	25.46	32.86	49.28	49.22	39.01
6. Net resources mobilised	75.96	72.41	26.67	67.13	74.54	67.14	50.72	50.78	60.99
7. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*contd.*)

TABLE A.14 (*contd.*)

(per cent of gross resources mobilised)

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1961-62 to 1965-66	1966-67 to 1970-71	1971-72 to 1975-76	1961-62 to 1975-76
1. Paid-up capital	7.70	6.67	5.16	8.71	3.77	12.72	10.19	18.45	6.57	10.23
a. internal	4.80	1.84	1.53	6.55	2.39	6.05	4.02	13.41	3.55	6.10
b. external	2.90	4.83	3.63	2.16	1.38	6.67	6.17	5.04	3.02	4.13
i. net issue	2.80	4.83	3.63	2.16	1.33	6.67	6.17	5.00	3.01	4.11
ii. premium on shares	0.10	0.00	0.00	0.00	0.05	0.00	0.00	0.04	0.01	0.02
2. Reserves and surpluses	11.23	11.30	19.90	18.98	16.05	—8.29	26.10	10.50	14.14	15.53
a. capital reserves	0.51	1.32	1.35	—0.02	0.35	2.45	3.00	0.22	0.79	1.07
b. development rebate reserve	2.30	4.90	6.23	6.34	3.71	—2.89	5.37	4.58	4.29	4.57
c. others	8.42	5.08	12.32	12.66	11.99	—7.85	17.73	5.70	9.06	9.89
3. Borrowings	50.89	46.88	30.65	37.06	25.45	36.04	35.26	46.84	33.71	37.27
a. long-term	7.26	14.99	10.16	2.71	4.11	30.98	4.45	4.33	9.21	7.07
i. banks	4.12	2.02	1.72	3.52	2.09	19.55	2.58	1.21	4.12	3.10
ii. industrial finance corporation and state finance corporations	—0.13	0.32	0.41	1.02	2.95	5.33	0.93	1.36	1.89	1.57
iii. debentures and mortgages	0.51	8.60	6.93	—1.49	—1.14	3.49	0.61	—0.45	2.12	1.19
iv. others	2.76	4.05	1.10	—0.34	0.21	2.61	20.33	2.21	1.08	1.21

(*contd.*)

TABLE A-14 (*contd.*)

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1961-62 to 1965-66	1966-67 to 1970-71	1971-72 to 1975-76	1961-62 to 1975-76
b. short-term	43.63	31.89	20.49	34.35	21.34	5.06	30.81	42.51	24.50	30.20
i. bank	33.41	20.11	17.17	35.17	20.94	17.34	25.77	34.81	23.33	26.66
ii. others	10.22	11.78	3.32	—0.82	0.40	—12.28	5.04	7.70	1.17	3.54
4. Net miscellaneous liabilities	3.30	2.49	2.50	8.33	31.26	—8.96	—2.68	—12.74	12.36	3.22
5. Depreciation	26.88	32.66	41.79	26.92	23.47	68.49	31.13	36.95	33.22	33.75
6. Net resources mobilised	73.12	67.34	58.21	73.08	76.53	31.51	68.87	63.05	66.78	66.25
7. Gross resources mobilised	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note : RBI sample of large and medium private limited companies have different sample sizes for different years as follows: 501 companies (1961-62 to 1965-66), 701 companies (1966-67 to 1970-71) and 1001 companies (1971-72 to 1975-76).

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Trends and Issues in Indian Federal Finance (1981). Allied Publishers

Sales Tax System in Bihar (1981). Somaiya Publications

Incidence of Indirect Taxation in India (Hindi Version) (1981). NIPFP

The Impact of the Personal Income Tax (1982). NIPFP

Measurement of Tax Effort of State Governments (Forthcoming). Somaiya Publications.

The Impact of The Personal Income Tax

(National Institute of Public Finance and Policy)

ANUPAM GUPTA with Contributions by PAWAN K. AGGARWAL

The study seeks to examine the impact of the personal income tax on the basis of the data published by the Income Tax Department.

The study first examines critically the available data on income tax assessments and the characteristics of assessees in order to evaluate their reliability and comparability over time. In the light of the limitations of the data made available by the Income Tax Department, recommendations for improvement in the collection and presentation of income tax data are put forward. Second, estimates of the elasticity of the personal income tax with respect to the tax base and income are computed and are explained in terms of the progressivity of the tax structure and the distribution of income. Third, the impact of the personal income tax on the distribution of income among the tax payers is examined on the basis of the comparisons of pre-tax and post-tax distributions.

Further, the redistribututive impact of the tax is explained in terms of the progressivity of the tax structure and effective rates of tax. Finally, the study estimates the impact of inflation on the progressivity of the tax structure and the distribution of the real burden of tax.

The Study is first of its kind in India in as much as no attempt has so far been made to empirically examine the manner in which the personal income tax affects the distribution of income and distributes the tax burden. It is likely to be of interest not only to scholars but also to policy makers and the general public.

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Measurement of Tax Effort of State Governments 1973-76

(National Institute of Public Finance and Policy)

RAJA J. CHELLIAH and NARAIN SINHA

Questions concerning taxable capacity and tax effort have been of long standing interest among economists and policy makers. Recently, attempts have been made to develop measures of relative tax effort by the governments of different countries and by those of different States within the same country. The study attempts to measure the relative tax efforts of the different State Governments in India using the representative tax system approach for determining their relative taxable capacities. It explains the methodology employed in detail and examines the mertis of the representative tax effort approach vis-a-vis the alternative aggregate regression approach. In applying the method to each major tax, it points out the various compromises that have to be made mainly because of data limitations and their likely effects on the value of the results.

The calculation in the study and the tax effort indices relate to the period 1973-76 covering 15 states. A post-script attempts briefly to examine if the relative positions of the different State governments in terms of tax effort have undergone any significant change since those years.

This work, which presents a cross section of the tax system of each major State in the country and brings out their basic structure along with the analysis of relative tax effort, will be of undoubted value to policy makers as well as to students and scholars in the area of public finance.

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