

**PRIVATE CORPORATE SECTOR IN KERALA  
(A STUDY ON GROWTH AND FINANCIAL PERFORMANCE  
IN MANUFACTURING INDUSTRY)**

**A dissertation submitted in partial fulfilment of  
the requirements for the degree of  
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I hereby affirm that the research for this dissertation titled "Private Corporate Sector in Kerala: A Study on Growth and Financial Performance in Manufacturing Industry" being submitted to the Jawaharlal Nehru University for the award of the Degree of Master of Philosophy was carried out entirely by me at the Centre For Development Studies, Trivandrum.

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Certified that this dissertation is the bonafide work of Nirmala Padmanabhan and has not been considered for the award of any other degree by any other university.

  
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## A C K N O W L E D G E M E N T

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## Chapter 1

### INTRODUCTION

#### The Setting

The manufacturing industry in Kerala is relatively backward. This fact is reflected in many indicators. For instance, the real per capita state domestic product in the manufacturing sector in Kerala was Rs.80 as against Rs.118 at the all-India level in 1984-85.<sup>1</sup> Further, the share of manufacturing sector in net domestic product in the same year was around 14 percent in the state as against 16 percent for all-India.<sup>2</sup> If we consider the factory sector, the Annual Survey of Industries (ASI) data for 1984-85<sup>3</sup> shows that Kerala's share is not even proportionate to its population base in the country. The state accounted for only 3.1 percent of the total number, 3.1 percent of the employment, 2.4 percent of the output and 3.0 percent of the net value added in India whereas, its share in the country's population was 3.6 percent. Kerala is also stated to have the lowest per capita investment in the manufacturing sector in India.<sup>4</sup> The depressing position of the state is further reflected in the relatively slow growth of its manufacturing output : the per capita state domestic product in manufacturing in Kerala recorded a low annual growth rate of 0.58 percent as against 2.48 percent at all-India during the period 1970-71 to 1984-85.<sup>5</sup> The relatively backward position and slow growth of the state's manufacturing sector thus become self-evident on the examination of relevant indicators.



The low industrial profile of Kerala has been a major source of concern and the need for industrialisation has been emphasized time and again.<sup>6</sup> Attempts have been made, though few in number, to comprehend the different facets of the growth and performance of the manufacturing sector in the state. Of these, some have focussed their attention on the aggregate factory sector in the state,<sup>7</sup> while others have dealt with the specificities of individual industry groups.<sup>8</sup> A few have also concentrated on the state sector enterprises in the region.<sup>9</sup> An area in which hardly any study exists at present is that of the private sector in the state.

There is a general belief that the role of private sector in promoting industrial growth in Kerala has been far from satisfactory. An examination of the available information indicates that the belief is not without foundation. For instance, Kerala accounted for only 2.1 percent of the total number of large private sector industrial units operating in the country and 1.7 per cent of their total sales in 1982-83 (see table 1.1). In fact, among fifteen major states considered Kerala ranked fourteenth and thirteenth with respect to the total number of large scale units and their sales respectively. Similarly, with regard to small scale units registered with the Small Industries Development Organisation, Kerala ranked thirteenth among the fifteen major states in terms of the number of units during the 1980's. Such evidences indicate the poor contribution of the private sector to the industrial growth of the region.

Table 1.1

Interstate Distribution of Industrial Units in the  
Private Sector in India

States	Large scale units 1982-83		Small scale units registered with Small Industries Development Corpn.
	Percentage Share in all-India total		Percentage Share in all-India total
	No. of Units	Sales	No. of Units
Andhra Pradesh	4.5 (7)	4.6 (7)	5.4 (8)
Assam	4.0 (8)	0.8 (14)	0.7 (15)
Bihar	2.4 (11)	5.3 (6)	4.7 (11)
Gujarat	10.2 (4)	11.0 (3)	5.7 (6)
Haryana	3.9 (9)	3.4 (9)	4.7 (10)
Karnataka	5.7 (6)	4.2 (8)	4.5 (12)
<u>Kerala</u>	<u>2.2 (14)</u>	<u>1.7 (13)</u>	<u>2.9 (13)</u>
Madhya Pradesh	2.6 (10)	2.7 (11)	10.3 (3)
Maharashtra	26.9 (1)	31.3 (1)	4.9 (9)
Orissa	1.0 (15)	0.7 (15)	1.6 (14)
Punjab	2.4 (12)	2.4 (12)	7.9 (4)
Rajasthan	2.3 (13)	2.9 (10)	5.5 (7)
Tamil Nadu	11.5 (2)	8.9 (4)	6.3 (5)
Uttar Pradesh	5.7 (5)	5.9 (5)	13.5 (2)
West Bengal	10.5 (3)	11.2 (2)	14.9 (1)

Note : Figures in bracket indicates rank.

Source: Calculated from Table 9.11 and 9.12, CMIE (1988)

On the other hand, there exists certain trends in Kerala which suggest that the private sector would have to bear greater responsibility for ensuring a rapid industrial growth in the state in future. In the first instance, Kerala's share in the total central investment has been declining over the years.<sup>10</sup> Secondly, the scope for state government's direct investment in industry is limited. For, whatever funds are available are inadequate even to deal with the rehabilitation and modernisation of existing units.<sup>11</sup> Finally, the financial performance of state sector enterprises in the region is rather poor and adequate resource generation by these units is a target yet to be reached.<sup>12</sup>

Apart from the trends of the type illustrated above, the increasingly important role now being ascribed to the private sector at the national level makes it all the more relevant for Kerala to promote the growth of its private sector. In this context, we may refer to the view of the State Planning Board in its approach to the Eighth Five Year Plan. To quote, "private investment, which in the state even now amounts to less than forty percent of the total investment in modern industry in the organised sector, has enormous potential to expand and it must be given all needed assistance to play its due role in invigorating the industrial economy of the state".<sup>13</sup>

It follows from the foregoing discussion that an understanding of the process of industrialisation, rather the lack of it, in the state, would call for an in-depth analysis of the growth dynamics of the private sector in the state. An enquiry of this nature assumes importance to place in a proper setting the type of policy measures required for the healthy growth of the private sector in the future. This is what is aimed at in the present study. We hasten to add at this juncture that the focus of our study shall be on a particular form of organisation within the private sector namely, the joint stock company.

#### The Joint Stock Company - its role in modern manufacturing

The corporate form (ie.the joint stock company) now constitutes the major type of organisation of capital in most of the industrialised countries of the world <sup>14</sup>. Certain properties

of a company like the limited liability of the share holders; the relatively high potentiality for permanence and stability (as compared to partnership and proprietorship) due to its existence as a legal entity; the easy transferability of its shares through the stock market; the provision for separation of the supplier of capital from exercising of detailed management over its use etc. have made it most suited to the modern manufacturing process. Indeed, it has been suggested that "something like the modern company is the inevitable product of an industrialising society whether it be organised on socialist or capitalist principles. In a situation where economic activity calls for the investment of a large fund of capital for long periods of time, the cooperation of a large group of men, and freedom for discretionary action within reasonably wide limits on the part of those who conduct operations of the business, the joint stock company or something very much like it, is the answer".<sup>15</sup>

The joint stock companies, by and large, are found to dominate the manufacturing sector in India also. The point may be illustrated with the data from the ASI. In 1984-85, the corporate sector accounted for about 24 percent of the number, 75 percent of the gross output, 80 percent of the invested capital, 74 percent of the productive capital, 63 per cent of the employment and 76 per cent of the net value added in the total factory sector in the country. Further, if we consider the non-Government companies alone, it can be seen that they constituted 22 per cent of the number, 51 per cent of the employment, 54 per cent of the invested capital, 52 percent of the productive capital, 64 per

cent of gross output and 68 per cent of net value added in the total factory sector in the country.

As for Kerala, the ASI information for 1982-83,<sup>16</sup> indicates that in terms of number, the share of the corporate sector within the factory sector in the state is more or less similar to that at the all-India level. For instance, joint stock companies constituted about 21 per cent of the total number of factories registered in Kerala. Of this private sector companies alone accounted for 19 per cent of the total factory units in the state. However, no information was forthcoming with respect to capital and other parameters and hence, no conclusive opinion about the relative significance of corporate investment in Kerala's factory sector at present can be offered.

However, a consideration of certain features of Kerala like the high savings habit of the people and the high levels of literacy point out that the joint stock companies (particularly the public limited companies) have the potential to emerge as the major means of organising capital on a large scale under private ownership. A related aspect, which deserves mention at this juncture, is the recent interest among Keralites in the institution of joint stock companies. The breakdown of such private financial agencies known as the 'blade' companies in the state coupled with the high literacy has created a new interest in share market operations which has obvious implications on the potential growth of the corporate sector. The Cochin Stock Exchange has emerged, of late, as the fourth largest in India, next only to Bombay, Delhi and Calcutta in terms of daily

turnover<sup>17</sup>. Viewed in a dynamic perspective, there seems to be emerging a strong capital market in the state which, if channelised in the proper direction, can facilitate the creation of a strong manufacturing private corporate sector in the state.

An interesting question, which surfaces at this juncture, is, what is it, that is necessary to transform this potentiality into a great strength. The answer, obviously, has to be sought in the growth dynamics of the manufacturing private corporate sector in the state. The growth of this sector is composed of (1) the speed with which new manufacturing companies come up and (2) the rate at which existing ones grow over time. One may, logically, expect the starting of new units to be influenced to a large extent by the overall financial performance and the growth buoyancy of existing units. It is the latter dimensions i.e., the financial performance and the dynamics of growth of existing manufacturing companies in the state, which constitute the core of our study. These issues are studied in an analytical framework that is based on the following review of theoretical approaches and empirical literature on the growth of the firm.

### Review of Literature

In the traditional theory, the growth of the firm was an incidental factor with the focus being placed on the objective of profit maximisation. The entrepreneur would increase output upto the minimum point of the 'U' shaped average cost curve which was considered to be the point of profit maximising equilibrium.

The size of the firm at this point was viewed as the 'optimum size', which the entrepreneur strives to reach in the equilibrium situation. In the traditional approach, the concept of optimum size of the firm was necessary to solve the so called 'Marshall's Dilemma'. However, the consideration of large scale economies had certain disquieting implications to the analysis. In the perfectly competitive model, the demand curve facing the firm is horizontal and each entrepreneur would go on expanding output so long as marginal cost is less than price. But, if the long run average cost falls as output expands, due to economies of scale, marginal cost is less than average cost, and hence, there will be no position of long run equilibrium until one firm has established a monopoly. Steindl, in fact, was of the opinion that large scale economies would result in monopolistic domination.

The theory of the growth of the firm, formulated by Edith Penrose and further perfected by others, challenged the traditional approach. Penrose emphasised that though in the short run there exists limits to the growth of the firm, in the long run firms can grow endlessly. She argued 'that there is no "optimum" or even most profitable size of the firm'.<sup>18</sup> Subsequent theoretical developments provided increasing support to alternative objectives of the firm such as the maximisation of the growth of the enterprise. [Baumol (1959), Marris (1964), Williamson (1966)]. Consequently, the firm has come to be viewed no longer as a profit maximising abstraction but as a unique administrative and social organization possessing the capacity for initiating its own biological growth. The rate of growth,

which was rarely discussed in traditional economic theory, thus came to the forefront of discussion and increasing emphasis was laid on the nature and determinants of the forces governing the growth of firms.

This naturally resulted in a significant volume of empirical literature, which traces the growth determinants of firms. A brief review of these indicates that a variable, often tested for its relationship with growth, is the size of the firm. [Hart and Prais (1956), Simon and Bonini (1958), Hymer and Pashigan (1962), Hart (1965), Singh and Whittington (1968 and 1975), Eatwell (1971), Subrahmanian and Papola (1971), Nagesh Kumar (1983), Prem Kumar (1985)]. The hypothesis generally tested in this context is the operation of the Law of Proportionate Effect, which in its simplest and strongest form states that the probability of a firm growing at a given rate during any specified period of time is independent of the initial size of the firm so that, a large firm has as much chance of growing at a given rate as a medium size or a small firm.

The underlying motivation for this Law has been detailed out as follows: "The proportionate change in the size of a firm during any period of time is a stochastic phenomenon which results from the cumulative effect of the chance operation of a large number of forces acting independently of each other. The chances of growth or shrinkage in the size of individual firms will depend upon their profitability as well as on the financial policy and other decisions of their respective managements. Profitability in turn will depend on a number of factors such as;



the quality of the firm's management, the range of its products, availability of particular inputs, general economic climate, political conditions and so on. During any particular period of time, some of these factors would make for an increase in the size of the firm, others for a decline, but their combined effect would yield a probability distribution of the rates of growth (or decline) for firms of each given size. The Law of Proportionate Effect assumes that the probability distribution is the same for all size classes of firms".<sup>19</sup>

Apart from its significance in serving as an explanation of the growth process of firms, this hypothesis has also certain important economic implications. In the first instance, the law implies that there is no optimum size of the firm as visualised in traditional theory. Secondly, the operation or otherwise of the law has also a bearing on the growth of concentration. If the law holds good, concentration increases over time. If not also, concentration increases but the increase will be faster, if size and growth are positively related, and vice versa, if they are negatively related.

The variable most often found to be having a systematic and significant impact on growth is profitability [Barna (1962), Singh and Whittington (1968), Eatwell (1971), Subrahmanian and Papola (1971), Pandey (1977), Nagesh Kumar (1983)]. A firm's rate of growth, it is well known, normally depends on its ability as well as willingness to grow. Its ability to finance growth in turn is closely related to its level of profitability. The higher the profitability, the better it would be in a position to

generate internal funds. Moreover, higher profits also result in brighter prospects for raising funds from the external capital market. Although the willingness of a firm to grow may differ from industry to industry, from period to period, and from size to size, (depending on a number of factors such as the state of competition, the nature of management, the state of demand, technological opportunities etc.) the business decisions in an expanding economy, would be growth-oriented. Therefore, a positive association between growth and profitability is generally postulated in an expanding economy, though the relationship cannot be predicted on an apriori basis.

Further, factors affecting the availability of finance and the efficiency with which it is utilised, can and do play a dominant role in the firm's growth. Thus, growth is also postulated to be influenced by variables like the retention ratio, debt-equity ratio, liquidity ratio etc. which reflect the financial policy decisions of the management. [Tew & Henderson (1959), Barna (1962), Singh & Whittington (1968), Pandey (1977) and Prem Kumar (1985)].

### Objectives and Methodology.

In this study, we analyse the growth dynamics of the manufacturing private companies in Kerala on the basis of the above framework. The appropriate starting point of the study, we felt, may be the outlining of the general profile of the corporate sector in Kerala, particularly the private corporate

sector, with due emphasis being placed on the manufacturing corporate sector.

The remarkable growth of the corporate sector in India during the last four decades has prompted quite a few studies examining, besides other aspects, the general features of this sector in the country such as its growth, ownership structure, industrial composition etc. Some of these have, in the course of an interregional analysis, very briefly touched upon Kerala's share in the corporate capital of the country.<sup>20</sup> Apart from this, very little is known about this sector in Kerala. This is indeed a major omission in a region, which is stated to have a tradition in the organisation of capital under the corporate form.<sup>21</sup> We, therefore, propose to trace certain important characteristics of this sector such as its origin and evolution in the state, its growth during 1961-85 of the planning era, the relative shares of the government and non-government within the total, the significance of the manufacturing group within this sector etc. A comparison shall also be made, wherever necessary, with the corporate sector in the country in general, and that in the southern states, in particular.

We shall then move on to examine the relationship of size, profitability and other financial variables with the growth of the private corporate units in Kerala. The analysis shall be based on a sample of private manufacturing companies in the state. The study shall cover a relatively longer period of fourteen years from 1971-72 to 1984-85. For it is the long run factors rather than the short term ones, which are seen to

predominate in the estimation of the above relationship.<sup>22</sup> The analysis will serve a dual purpose in that, besides facilitating a better understanding of the process of industrialisation in the state, it also seeks to examine the empirical validity of the theoretical paradigms on the growth of the firm in a regulated and planned economy as prevalent in Kerala.

Finally, we also propose to examine the financial performance of our sample of companies over the period. Notwithstanding the possible impact on the rate of growth of the firm, a study of financial performance is important in itself in that "financial health, as one aspect of general economic health, is essential if business is to perform its social function well and play its proper part in the general well being of the economy".<sup>23</sup> Recognising the significance of financial analysis, institutions like the Reserve Bank of India periodically publish information on the financial performance of the private corporate sector in India. The financial performance of the group of companies in our sample shall, therefore, be examined in relation to that of the manufacturing private corporate sector in India during the corresponding period. The comparison may facilitate a better judgement of the performance of the private corporate sector in Kerala. Since it is quite possible for considerable variations to exist between different industry groups, the analysis shall also be supplemented by an examination of the industry-wise variations in the financial performance.

In short, the present study is designed with the following objectives:

1. To trace the growth trends of the corporate sector in Kerala as compared to all-India and other southern states and also to outline the broad features of this sector in the State.
2. To assess the influence of size, profitability and some financial variables (like debt-equity ratio, retention ratio and liquidity ratio) on the growth of the manufacturing private companies in Kerala.
3. To evaluate the financial performance of the manufacturing private corporate sector in the State.

The study is empirical in nature. On the basis of received theories, certain relationships are postulated and the relevant data are analysed by using certain standard statistical tools in order to draw some inferences concerning the growth dynamics of the private corporate sector in Kerala. The various statistical tools used in the course of the study include compound growth rates and percentages for examining the broad features of the corporate sector in Kerala; correlation and regression analysis for examining the growth dynamics of the manufacturing private companies; and the ratio analysis for examining the financial performance. A detailed description of the concepts and methods used in each case are given as and when they are dealt with.

#### Data Base, Sample Description and Limitations of the Study

The basic data used for examining the inter-regional differences in the growth and other related features of the corporate sector were collected from secondary sources, such as the different issues of the 'Directory of Joint Stock Companies in India' (earlier known as Joint Stock Companies in India) and

'The Statistical Abstract'. The analysis relating to our second and third objectives, is based on primary data meticulously and laboriously collected from the annual accounts of the companies, filed at the office of the Registrar of Companies at Cochin. For this purpose, information relating to fourteen years annual accounts was collected for each of the fifty public limited companies constituting our sample.

The decision to confine our sample to public limited companies was determined by the fact that though smaller in number, they account for a major part of the paid up capital (PUC) in the manufacturing private corporate sector in the state. For instance, in the year 1970 with which we begin our analysis, the paid up capital of the sample companies accounted for around 85 percentage of the total paid up capital of the manufacturing private corporate units in the state.

Originally, our intention was to cover all those non-government manufacturing public limited companies which existed in Kerala as on thirty first March 1970, and which continued to exist over the period of study. It was found that there were ninety three such companies. However, all these could not be considered since some were taken over by the government during the period of study while for some others financial statements on a continuous basis were not available for the entire period. Apart from the difficulty in locating the files concerning a long period of time, a major problem encountered in this context was the failure of the companies to file the annual accounts regularly. The number of firms finally included in the study were

fifty in number, which accounted for 50 per cent of the total paid up capital in the manufacturing private corporate sector in the state in 1970. The classification of the fifty firms according to different industrial groups indicated the sample to have an industrial distribution broadly similar to the industrial composition of the manufacturing private corporate sector in the state in 1970. (See table 1.2) To that extent, the sample can be considered as representative of the private corporate sector in the manufacturing industry in Kerala.

The basic information given in the balance sheet and profit and loss accounts of each of these fifty firms were standardised to the concepts and forms used in the Reserve Bank of India studies on company finances.<sup>24</sup> Such standard annual accounts were prepared for each firm for each of the fourteen years constituting the period of study. The accounts of individual companies were used to estimate the financial variables needed for the analysis of growth dynamics. For evaluating the overall financial performance, the combined balance sheet of all the fifty firms was prepared. Similarly, combined balance sheet for each industry was prepared for the industry-wise analysis of financial performance.

Table 1.2

Weightage of Different Industry Groups Within the Sample and the  
Total Manufacturing Private Corporate Sector in Kerala

Industry code	Industry group	Sample		Manufacturing private corporate sector in Kerala (1970)	
		% share of industry groups in Number	% share of industry groups in PUC	% share of industry groups in Number	% share of industry groups in PUC
<u>2</u>	<u>Processing &amp; manufacturing of food, textiles and products thereof</u>	<u>26.00</u>	<u>31.58</u>	<u>26.83</u>	<u>33.55</u>
of which 2-2.3	Food products	4.00	0.75	11.22	3.67
" 2.6-2.8	Textiles & Textile products	22.00	30.83	15.61	29.88
<u>3</u>	<u>Processing &amp; Manufacturing of metals, chemicals and products thereof</u>	<u>32.0</u>	<u>52.29</u>	<u>30.29</u>	<u>47.32</u>
of which 3-3.5	Metals & metal products	18.00	45.68	18.78	34.88
" 3.6-3.8	Chemicals & Chemical products	14.00	7.15	11.51	12.44
<u>4</u>	<u>Processing &amp; Manufacturing not elsewhere classified</u>	<u>42.00</u>	<u>15.61</u>	<u>42.73</u>	<u>19.16</u>
of which 4.2-4.3	Non-metallic mineral products	10.00	1.32	9.70	4.72
" 4.4	Rubber & Rubber products	2.00	0.35	3.64	2.67
" 4.5	Wood products	8.00	6.10	6.97	4.25
" 4.7	Paper & Paper products	2.00	2.32	1.82	1.45
" 4.8	Printing & Publishing	16.00	0.86	15.45	1.89
	Total	100.00	100.00	100.00	100.00

Note: The industrial codes correspond to the revised industrial classification of joint stock companies followed by the Company Law Board.

Source: The figures for manufacturing private corporate sector in Kerala are compiled from information on the PUC of three hundred manufacturing companies in Kerala furnished in the Directory of Joint Stock Companies in India, 1970.

Finally, the combined accounts of the manufacturing private corporate sector in India, needed for the comparative analysis of financial performance, (done in chapter four), was prepared from industry group-wise accounts of non-government public limited companies published periodically by the Reserve



Bank of India. The accounts of the three broad industry-groups (1) processing and manufacture :foodstuffs, textiles, leather & products thereof, (2) processing and manufacture: metals, chemicals and products thereof, and (3) processing and manufacture: not elsewhere classified, were combined to get the accounts of the total manufacturing private corporate sector in India.

It needs to be mentioned at this juncture that the Reserve Bank of India data (used for comparative purpose) available from 1971-72 upto 1982-83 relate to the medium and large scale public limited companies (with PUC greater than five lakhs) alone whereas, after that the scope of the Reserve Bank of India studies has been widened to include even small scale units. Strictly speaking, the latter is more suited to the group of companies in our study which consists of small, medium and large sized companies. In the absence of such comprehensive information relating to earlier years we have made use of what is available primarily due to two reasons. The first is that a comparison of performance indicators for the year 1982-83 for which information is given on medium and large scale companies as well as small, medium and large scale companies did not show much differences in performance.<sup>25</sup> Secondly, since our objective is only to use broad performance indicators of the manufacturing private corporate sector in the country over the years to get a comparative picture of the performance of our sample companies as a group, the Reserve Bank of India data more than served our purpose.

The information furnished by the Reserve Bank of India, we note, is based on periodically revised samples of public limited companies. It may be admitted that our sample, which is representative of the manufacturing private corporate sector in the state in 1970, does not include the new private corporate units which have come up since then. Ideally speaking, our sample should also have been revised for different periods for the purpose of financial analysis. But this was not done due to the fact that the analysis of the growth dynamics necessitated a fixed group of companies. Despite this limitation, the sample, it may be noted, accounted for more than one fourth (27 per cent) of the total paid up capital in the manufacturing private corporate sector in Kerala in 1985.

#### Chapter Scheme

The study is organised in four chapters. The profile of the corporate sector in Kerala is discussed in Chapter 2. Here, we analyse the changes in the growth and structure of the corporate sector in Kerala and also make a comparison with the overall trends in the corporate sector in India and other southern states. The specificities of growth of the manufacturing private companies is examined in chapter 3 in terms of the relationship between growth and other dependent variables. In chapter 4, the financial performance of the manufacturing private corporate sector is assessed and compared with the performance of the sector at the all-India level. Analysis is also done for different industries and their implications assessed. Finally, we sum up in chapter 5 the major findings of the study.

## Notes and References

1. Centre for Monitoring Indian Economy (CMIE) (1988), Table 9.6.
2. Ibid.
3. Central Statistical Organisation (1988) p 117.
4. CMIE (1986), Table 9.25 and 9.29.
5. CMIE, (1988), Table 9.6.
6. One of the earliest in this context was a seminar organised in New Delhi in 1960 where notable contributions were made by Rao V.K.R.V., Lokanathan P.S., Raj, K.N. and Rudra Asok, [See Pillai N.N.Omcherry (ed.) (1960)]
7. For Example, see Subramanian K.K. and Pillai Mohanan P. (1985) and Alice Albin (1988).
8. For example see Rajagopalan V. (1986), Bose A.J.C. (1987), Isaac Thomas T.M. (1984), Beevi Imam (1978), Raghavan Pyaralal (1986), Subrahmanian K.K. and Joseph K.J. (1988).
9. See for instance Pillai, Mohanan P. (1989) and Pillai, Gangandharan (1970).
10. Kerala State Planning Board (1984), p. 100-101.
11. Ramachandran V. (1988).
12. See for instance, Pillai, Mohanan P. (1989) and Kerala State Planning Board (1984).
13. Kerala State Planning Board (1989).
14. See for example, Mason Edward S. (1960), Branton Noel (1974) and Florence Sargent (1953).
15. Branton Noel (1974). p.25.
16. Department Of Economics And Statistics (1987), Table 2.
17. Patrick Jonas (1989).
18. Penrose Edith (1958), p.2.
19. Singh, A. and Whittington, G. (1968). p.73.
20. See for instance, Singh Manmohan (1964), Panda J. and Sahu P.K. (1985), Nigam R.K. and Chaudhri N.C. (1964) and Lall Shadi (1977 and 1981).
21. For example see, Isaac Thomas and Tharakan Michael (1984); Mahadevan, Raman (1988).

22. Barna, T. (1962).
23. Guthman H.G.(1962). p.4.
24. For details see Reserve Bank of India (1975), Chapter II, and Appendix II of Chapter III.
25. For instance, the gross profitability ratio of the manufacturing private corporate sector in India (non government, non financial manufacturing public limited companies) in 1982-83, based on all size classes indicated a value of 10.11 percent whereas the corresponding figure for the same year based on medium and small scale units alone was seen be 10.04 percent.



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## Chapter 2

### GROWTH PROFILE OF THE CORPORATE SECTOR IN KERALA

This chapter outlines certain broad features of the corporate sector in Kerala. Initially, we trace the origin and growth of the corporate form of organisation in the erstwhile princely states of Travancore and Cochin, which formed a part of Kerala state at the time of its formation in 1956. This historical view provides the perspective for analysing the growth of the total corporate sector as well as the manufacturing corporate sector in the state during the last two decades. Here, we have made an inter-regional comparison: the growth trends of the corporate sector in Kerala are compared with that in southern states and all-India. The growth phenomenon is also examined in terms of its components, the government sector and the private sector. In the course of the analysis, certain other important features of the corporate sector in Kerala such as the relative significance of the government and private sector within the total, industrial composition etc., have been looked into. Here also, wherever needed, we have supplemented the analysis with inter-state comparison.

#### Origin and Growth of the Corporate Sector in Kerala

The genesis of the corporate form of organisation in Kerala could be associated with the twin phenomena of commercialisation and industrialisation in the region subsequent to its exposure to international commerce. Needless to say, the gradual development of organised commercial and industrial undertakings highlighted the necessity to encourage the

combination of large capital and skill in them which could prove to be too much for the individual. Regulation I of 1063 M.E. (1888 A.D.) was passed in Travancore which gave birth to the legal institution of joint stock companies in this erstwhile princely state. The Regulation enacted that the Indian Companies Act of 1882, as amended by Act VI of 1887, shall 'mutatis mutandis' come into force throughout Travancore.<sup>1</sup>

Accordingly, the first joint stock company to be legally incorporated was Punalur Paper Mills in 1889. This was followed by Malayala Manorama in the same year. Since then an increasing number of companies came up in the region resulting in the organisation of a large quantum of capital under this form. Thus, on the eve of Independence (1946-47) the paid up capital (PUC) in joint stock companies in the princely state of Travancore (Rs.12.65 crores) exceeded that in other princely states of Mysore (Rs.6.76 crores), Hyderabad (Rs.8.88 crores), Indore (Rs.4.60 crores), Gwalior (Rs.4.95 crores) and Cochin (Rs.2.09 crore).<sup>2</sup>

The major part of corporate PUC in Travancore in the early days was accounted for by the growth of banking, insurance and plantation companies.<sup>3</sup> For instance, in 1931-32, 35.6 per cent of the total PUC was associated with banking and insurance, and 47.3 per cent with plantation, whereas trade and manufacturing accounted for a mere 15.3 per cent. Since the thirties, however, the policy of encouragement to private initiative as well as the direct participation in industrial activity, of the Travancore Government imparted a new dynamism to

corporate activity in the field of manufacturing. "As a result of this policy several large scale industries covering a very wide and diversified field of production were started in the period 1935-48. Some of them may be said to have been pioneering attempts in the production of goods, which were till then never tried in India. These were Rayons, Titanium Dioxide, Ammonium Sulphate, Rayon Grade Caustic Soda, Aluminum etc....."<sup>4</sup> Consequently, the period witnessed a gradual change in the sectoral distribution of paid up capital: in 1946-47 for the first time, trading and manufacturing sector (46.8 per cent) dominated over the plantation sector (35.5 per cent) in terms of paid up capital. Travancore was also seen to have a strong manufacturing corporate sector (5.92 crores in 1946-47) comparable to, in fact larger than, most of the other princely states viz., Mysore (Rs.4.18 crores), Hyderabad (Rs.6.35 crores.), Gwalior (Rs.2.62 crores), Indore (Rs.4.03 crores) and Cochin (Rs.1.53 crores). In fact, it was the paid up capital in these industrial enterprises which together with the growth of plantation companies, enabled Travancore, to overcome the total corporate paid up capital in the other princely states by 1946-47.<sup>5</sup>

The picture in the erstwhile princely state of Cochin was slightly different from that in Travancore. For one, the paid up capital in the corporate sector was relatively small in Cochin. For instance, the total paid up capital in the state of Cochin, as stated earlier, was only Rs.2.09 crores as against Rs.12.65 crores in Travancore in 1946-47. Secondly, even in 1938-39 (the earliest year for which detailed information on

Cochin is available) the trade and manufacturing activity accounted for the largest share (51.33 percent) of total paid up capital in Cochin state.<sup>6</sup> Next in importance was banking and insurance (35.71 per cent), followed by plantation companies (9.16 per cent). Apart from this, a structural diversification broadly similar to that observed in Travancore, was also witnessed in Cochin during 1938-39 to 1946-47 with an increasing amount of paid up capital being absorbed by the trade and manufacturing sector relative to other sectors. As a consequence, trade and manufacture accounted for about 73 per cent of the total corporate paid up capital in the state of Cochin on the eve of Independence (1946-47).

The decade prior to independence had, thus, witnessed some dynamic changes in the corporate sector in both Travancore and Cochin regions of the present day Kerala state. The total corporate sector had grown at such a rapid rate that Travancore in 1946-47 stood far above other princely states in corporate capital. The period also witnessed distinctive and desirable structural changes with an increasing share of paid up capital being absorbed by trade and manufacturing in both Travancore and Cochin.

Thus, we see that Kerala has a tradition of manufacturing and trading activities organised under joint-stock companies. Having started on a firm foundation, did the corporate sector maintain the tempo of growth after the independence? We propose to examine this question in the following sections.



## Growth Trends in Total Corporate Sector during 1960-61 to 1984-85

The growth of the corporate sector in Kerala shall be examined in relation to that in all-India and other southern states at least two of which were seen to have had a lower corporate base than Kerala on the eve of independence. The analysis relates to a period of two and a half decades from 1960-61 to 1984-85. The choice of 1960-61 as the base year is influenced by the fact that since the formation of the states in 1956, sufficiently detailed information on the corporate sector in individual states was first made available for this year.

A comparison with other southern states shows that Kerala, which once had a strong corporate base, had, by 1985 declined to the last position among the southern states in terms of both the number of companies as well as the total paid up capital in them. (See Table 2.1) The table shows that even by 1961 Karnataka had outstripped Kerala in terms of paid up capital though it was yet to do so in terms of number. During the subsequent years, which constituted the period of our study, the average annual growth of the number of corporate units (registered and at work) in Kerala was lower than all the other southern States as well as all-India as a consequence of which it had the smallest number of companies in 1985. The state's growth in terms of paid up capital during the period was also lower than both Karnataka and Andhra Pradesh though it was slightly higher than Tamil Nadu and all-India. As a consequence of a growth rate marginally higher than all-India, the corporate sector in Kerala did show a nominal increase in its share in total corporate paid

up capital in the country during 1961 to 1985. But the growth performance of Karnataka and Andhra Pradesh was much more remarkable with their percentage share in paid up capital increasing by 2.35 per cent and 4.65 per cent respectively. In relative terms, therefore, Kerala in 1985 was reduced to the last position among southern states in terms of corporate paid up capital also.

Table 2.1

Growth of the Corporate Sector in the southern states (1961-85)

States	1961		1985		Average Annual Growth Rate* 1961-85					
	No.	PUC	No.	PUC	No.	PUC				
	% share Rank	% share Rank	% share Rank	% share Rank	% share Rank	% share Rank				
Kerala	3.98	2	1.70	3	2.32	4	2.06	4	3.92	12.96
Karnataka	2.48	3	3.21	2	4.96	2	5.56	3	9.17	14.55
Andhra Pradesh	1.68	4	1.36	4	4.26	3	6.01	1	10.20	19.09
Tamil Nadu	9.99	1	7.75	1	9.42	1	5.83	2	4.76	10.63
India	100.00		100.00		100.00		100.00		6.06	11.95

Note: \* Growth rates calculated are the end point compound growth rates.

Source: Compiled from Statewise data published in Joint Stock Companies in India 1960-61 and Directory of Joint Stock Companies in India, 1985.

An examination of the percentage shares of some of the major states in India reveals that not only did Kerala slip in its ranking among the southern states but also experienced a slide (in both number and paid up capital) as compared to some of the major states with the fall being steeper in the number of units than in the paid up capital (see Appendix I of this chapter).

## Relative significance of Government and Private Corporate Sectors

Let us now examine the growth of the corporate sector in terms of its two major components i.e. corporate private sector and the corporate government sector. A major phenomenon observed in the sphere of the corporate sector in India since the advent of planning has been the rapid growth of the Corporate Government Sector. The policy of nationalisation of industries and the emphasis laid on further development of the public sector in order to achieve the objective of planned economic development based on socialistic principles brought about a resounding growth in the public sector during the Plan periods. As a consequence, the Government corporate sector, which accounted for a mere thirty per cent of the paid up capital in the total corporate sector in India in 1960-61 increased its share to around seventy nine per cent in 1985. (See Table 2.2)

Table 2.2

### Relative Proportion of Government and Non-Government within the Corporate Sector in each State in South India

States	1960-61		1984-85	
	Government PUC	Non-Government PUC	Government PUC	Non-Government PUC
Kerala	21.06	78.94	78.82	21.18
Karnataka	60.23	39.77	80.69	19.31
Andhra Pradesh	24.44	75.56	83.96	16.04
Tamil Nadu	30.14	69.86	66.99	33.01
All-India	30.08	69.92	78.64	21.36

Source: Same as Table 2.1

This phenomenon was also observed in all the southern states under consideration (see Table 2.2). The only difference was that the growth in share of Government over private corporate was less pronounced in the state of Tamil Nadu, which has always been characterised by a strong private sector.

#### Growth of the Government Corporate Sector

So far as the Government Corporate sector is concerned, the state of Kerala recorded a faster growth rate in terms of number of units than all-India and all other states except Tamil Nadu during 1961-1985. As a consequence, Kerala had the largest number of government companies in 1985 and its ranking improved from second in 1961 to first in 1985. (see table 2.3) The paid up capital of government companies also recorded a relatively higher growth rate in Kerala as compared to all-India as well as all the states considered with the exception of Andhra Pradesh. To some extent, the higher growth of paid up capital recorded in Kerala should be treated as a statistical illusion arising out of the low initial base in 1961. In any case, Kerala, ranked lowest among the southern states in 1985 in terms of total paid up capital in government corporate sector, the higher rate of growth notwithstanding. Paradoxically, Kerala ranked the first in terms of number of units but the last in terms of paid up capital, of government corporate sector among the four southern states. The difference in Kerala's position in terms of number of units and paid-up capital indicated the smaller capital size of government companies in the state.

Table 2.3  
Growth of the Corporate Government Sector in the southern states (1961-85)

States	1961		1985		Average Annual Growth Rate* 1961-85					
	No.	PUC	No.	PUC	No.	PUC				
	% share Rank	% share Rank	% share Rank	% share Rank	% share Rank	% share Rank				
Kerala	7.04	2	1.19	3	8.57	1	2.07	4	9.27	19.24
Karnataka	8.45	1	6.43	2	7.04	3	5.71	2	7.56	15.95
Andhra Pradesh	4.23	3	1.11	4	4.80	4	6.41	1	8.96	25.37
Tamil Nadu	3.52	4	7.76	1	4.98	2	4.96	3	12.36	14.38
India	100.00		100.00		100.00		100.00		8.38	16.53

Note: \* Growth rates are the end point compound growth rates.

Source: Same as Table 2.1

Interestingly, a change in Kerala's ranks in both number and paid up capital over time on a pattern somewhat similar to the one described above was observed when compared with the major states in India (see Appendix II of this chapter).

### Growth of the Corporate Private Sector

Unlike the Government Corporate Sector the growth of the corporate private sector during 1961-85 (in terms of both number of units and capital) was the lowest in Kerala among all the southern states (see Table 2.4). It was also lower than all-India in terms of number. Consequently, Kerala witnessed a decline in its share in number of units in the Indian corporate private sector. With respect to paid up capital Kerala recorded a growth rate equal to (marginally higher) all-India level; but significantly lower than other southern states. The better

growth performance of other southern states pushed down Kerala, which in 1961 had stood next only to Tamil Nadu in terms of both number of companies and paid up capital, to the lowest position in 1985.

Table 2.4

Growth of the Corporate Private Sector in the Southern States 1961-85

States	1961		1985		Growth Rate 1961-85					
	No.	PUC	No.	PUC	No.	PUC				
	% share Rank	% share Rank	% share Rank	% share Rank	% share Rank	% share Rank				
Kerala	3.96	2	1.92	2	2.27	4	2.05	4	3.61	6.84
Karnataka	2.45	3	1.83	3	4.94	2	5.03	2	9.20	11.15
Andhra Pradesh	1.69	4	1.47	4	4.26	3	4.51	3	10.21	11.16
Tamil Nadu	10.02	1	7.74	1	7.41	1	9.01	1	4.72	7.23
India	100.00		100.00		100.00		100.00		6.03	6.56

Note: Growth rates are the end point compound growth rates.

Source: Same as Table 2.1

A decline in Kerala's ranking over time in terms of both number of units and paid up capital in the corporate private sector, was also observed when compared to the major states in India (see Appendix III of this chapter).

We saw earlier that the growth of the total corporate sector in the state during the period of study was lower than all the southern states in terms of number, but the growth in paid up capital was better than at least one state namely, Tamil Nadu. It now transpired that the relatively better growth record of Kerala vis-a-vis Tamil Nadu was accounted by the growth dynamism of the corporate government sector in the former. In other

words, the Private Corporate Sector in Kerala was seen lagging behind all the southern states in its growth in terms of number of units as well as paid up capital over the period. Thus, the backwardness and slow growth of the private corporate sector in Kerala as compared to other southern states as well as all-India became self-evident.

#### Industrial Structure - Changes overtime

Within the facet of the slow growth, however, the period under study witnessed major structural diversification in the corporate sector in the state. In 1961, Kerala as compared to all-India, was seen to have a high proportion of paid-up capital invested in the agricultural and allied activities (which includes the sub-group, plantation) whereas, the proportion in the manufacturing group was relatively low (see Table 2.5).. Overtime, however, an increasing portion of the PUC as well as the new units was absorbed by the manufacturing sector. As a result, manufacturing accounted for the highest share of about 73 per cent of paid up capital and 47 per cent of the number of companies in the state as against 64 per cent of the paid up capital and 51 percent of the number of units at all-India in 1985. (The lower share in paid up capital of manufacturing group at all-India can be explained by the higher share of the mining sector). Consequently, the significance of both agricultural and commerce sectors have declined in the state's corporate sector. This decline was very much noticeable in the plantation group, which once had dominated the corporate sector in the state.

Within manufacturing, the fastest growth (in terms of number and paid up capital) in both India and Kerala had taken place in the second sub-group, Metals and chemicals. The proportion of units in the first sub-group, namely, Food, textiles, leather and products thereof, had more or less stagnated whereas it increased in the third sub-group viz., Manufacture not elsewhere classified. But both these groups (groups one and three) saw a decline in the proportion of capital in them. On the whole, we may not be far fetched in saying that the structure of the corporate sector in Kerala was gradually conforming to that at all-India.

Table 2.5  
Industrial Structure of the Corporate Sector in Kerala and India (%)

Industrial Class	1961				1985			
	Kerala		India		Kerala		India	
	No.	PUC	No.	PUC	No.	PUC	No.	PUC
Agriculture and allied	15.96	25.26	4.91	2.54	7.26	6.42	2.62	1.29
Mining	0.48	1.87	3.34	7.39	0.53	5.57	1.38	22.52
Manufacture	<u>31.83</u>	<u>48.29</u>	<u>38.67</u>	<u>66.40</u>	<u>47.15</u>	<u>72.64</u>	<u>50.98</u>	<u>64.24</u>
Of which								
Food & textiles	9.42	14.63	10.68	17.78	9.96	5.71	10.31	7.27
Metals, chemicals	8.75	24.71	19.63	40.12	20.65	59.06	29.03	49.42
Net elsewhere	13.65	8.95	10.36	8.50	16.54	7.86	11.64	7.55
Construction	0.29	0.42	2.56	2.98	2.16	0.40	3.91	2.21
Trade and finance	43.46	20.19	36.18	15.90	30.77	9.50	28.88	6.25
Transport	4.04	3.26	6.75	3.36	2.11	0.76	3.64	1.35
Comm. sector	1.06	0.06	2.34	0.53	4.32	2.53	4.73	1.45
Business sector	2.88	0.65	5.29	0.91	5.69	2.18	3.86	0.70
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Note: The different industry groups correspond to the main Industry divisions given in the 'Revised Industrial Classification of Joint Stock Companies' used by the Company Law Board.

Source: The figures for 1961 were compiled from relevant data published in Joint Stock Companies in India 1960-61.  
Figures for 1985 were obtained from Directory of Joint stock Companies in India 1985.



## Growth of the Manufacturing Corporate Sector (1961-85)

Kerala's manufacturing corporate base, it may be noted, was eroded by the early 1960s indicating that the statistically recorded failure of the state's economy to partake in the general growth buoyancy in the country during the first two five year plan periods<sup>7</sup> pertained to the state's manufacturing corporate sector also. Yet, the channelisation of a large proportion of additional capital organised under the corporate form in the state into the manufacturing sector, must have enabled the state to improve its share in the total corporate capital (paid up) in manufacture in the country. This is depicted in table No.2.6. In fact, the estimation of annual growth rates showed that the paid up capital in the manufacturing corporate sector in Kerala during 1961-83 recorded a growth rate higher than all-India and other southern states with the exception of Andhra Pradesh! To some extent the higher growth recorded by the data may be a statistical illusion arising out of the small amount in the base year, 1961. Further, Kerala's share in the paid up capital of the manufacturing corporate sector in the country was one of the lowest in the south India even by 1983. Also, Kerala witnessed the slowest rate of growth among the southern states as far as the number of units in the manufacturing corporate sector is concerned. All considered, the high growth observed from the available data on PUC in Kerala's manufacturing corporate sector should be interpreted with caution.

Table 2.6

Manufacturing Corporate Sector in Southern States (1961-83)

States	1961		1983		Growth Rate 1961-83	
	No. of companies	PUC (crore)	No. of companies	PUC (crore)	No. of companies	PUC
Kerala	330(3.27)	15.26(1.24)	1000(2.36)	342.3(3.33)	5.16	15.01
Karnataka	276(2.76)	55.21(4.07)	2312(5.46)	451.7(4.40)	10.14	10.83
Andhra Pradesh	181(1.71)	17.98(1.47)	1899(4.48)	579.8(5.65)	11.27	17.10
Tamil Nadu	836(7.30)	79.47(5.61)	3225(6.61)	536.9(5.23)	6.32	9.07
India	9889(100.0)	1328.99(100.0)	423.67(100.0)	102.64(100.0)	100.00	100.00

Note: Figures in brackets indicate percentage shares in the total Indian manufacturing corporate sector

Source: Compiled from the details on Corporate sector published in relevant issues of Statistical Abstract (India).

Detailed state-wise information relating to the share of government and non-government companies within the total manufacturing corporate sector, unfortunately, was not available. However, the lower rate of growth in the number of manufacturing companies (the trend in the total number of companies was generally found to be determined by the number of companies in the private sector) coupled with the overall low growth of the total private corporate sector in Kerala would suggest that the high growth observed from the statistics on paid up capital in the manufacturing corporate sector in the state could be primarily ascribed to the rapid expansion of the government corporate sector. It would follow that the growth rate of the private corporate sector in Kerala's manufacturing industry must have been marginal during the period under consideration.

## Industrial Structure of the Corporate Private Sector in Kerala

Within the facet of lower growth significant structural changes similar to the total corporate sector in the state were seen to have occurred in the private corporate sector as was evident from table 2.7 which gave the pictures of the industrial composition of the sector at different points in time.

Table 2.7

Industrial Composition of the Corporate Private Sector in Kerala and in India

Industrial Class	1961		1970				1985					
	Kerala		India		Kerala		India		Kerala		India	
	No.	PUC	No.	PUC	No.	PUC	No.	PUC	No.	PUC	No.	PUC
Agriculture and allied	16.02	31.60	4.93	3.62	16.61	22.56	-	-	7.11	9.65	2.56	3.11
Mining	0.39	0.32	3.31	4.82	0.57	0.27	-	-	0.50	0.10	1.34	1.79
Manufacture	<u>31.46</u>	<u>37.82</u>	<u>38.52</u>	<u>60.38</u>	<u>37.8</u>	<u>59.39</u>	-	-	<u>46.45</u>	<u>69.31</u>	<u>50.97</u>	<u>72.22</u>
Of which												
Food, textiles	9.51	18.51	10.67	25.14	11.00	19.99	-	-	9.80	13.12	10.23	16.87
Metals, chemicals	8.25	8.43	19.51	23.86	11.65	28.10	-	-	20.00	35.39	29.23	16.87
Manf. Net elsewhere	13.69	10.88	10.34	11.39	15.35	11.30	-	-	16.58	20.80	11.66	14.13
Construction	0.29	0.52	2.56	4.17	0.57	0.80	-	-	2.20	1.19	3.90	2.84
Trade and finance	43.88	25.57	36.30	22.25	39.92	15.33	-	-	31.57	12.10	29.03	13.72
Transport	3.98	3.23	6.76	2.86	3.09	1.91	-	-	2.09	1.04	3.64	2.46
Community sector	1.07	0.10	2.34	0.71	1.03	0.10	-	-	4.24	2.63	4.70	1.31
Business sector	2.97	0.84	5.28	1.18	2.41	0.60			5.84	3.98	3.86	2.56
	100.00	100.00	100.00	100.00	100.00	100.00	-	-	100.00	100.00	100.00	100.00

Note: The different industry groups correspond to the main Industry divisions given in the 'Revised Industrial Classification of Joint Stock Companies' used by the Company Law Board.

Source: The figures for both India and Kerala were compiled from relevant data published in Joint Stock Companies in India 1960-61 and 1970 and also Directory of Joint Stock Companies in India, 1985.

The figures revealed that overtime the share of the manufacturing group had been continuously increasing in terms of both number as well as capital indicating that a major chunk of

corporate private capital in the state, which in the past had fought shy of this group, was now being invested in this sector. Correspondingly, the importance of both the agricultural and commerce group had declined (in terms of both number and paid up capital). The decline in the case of the agricultural group was very marked. It must be admitted that, compared to all-India the proportion of capital in this group in Kerala was higher in 1985 but the difference narrowed down considerably from 1961 within the manufacturing sector. The fastest growth over the entire period took place in the metals and chemicals sub-group followed by the sub group manufacture not elsewhere classified. The first group i.e. food, textiles, leather and products thereof seemed to have experienced the slowest growth rate as indicated by the decline in the proportion of capital invested in it over time.

A more detailed industry-wise break down of the manufacturing private corporate sector at different time points indicated that metals and metal products, chemicals and chemical products, and rubber and rubber products exhibited greatest dynamism overtime (see Table 2.8). Of these, the group, metals and metal products, was observed to be the fast expanding one in the early decade as a consequence of which it was seen to dominate the private corporate capital in 1970. However, the next fifteen years witnessed a decline in its significance with the chemicals group emerging as the dominant group within manufacturing private corporate sector. The group, rubber and rubber products also rose to prominence during the latter period. The textiles and textile product group, which dominated the private corporate sector in 1961, was seen to be continuously decli-

ning in significance over time. Another significant group, which declined in importance overtime, was that of food products.

Thus, private corporate capital in Kerala's manufacturing sector today (1985) is seen to be dominated by the chemical and chemical products group followed by metals and metal products and rubber products respectively. The group, textiles and textile products, is only the fourth largest in significance. These four groups together accounts for about 76 percent of the total paid up capital (PUC) in the manufacturing sector in the state. Though, the groups, food products, and printing & publishing have a relatively good number of units in them, they account for only a small share of the paid up capital.

Table 2.8

Industry-wise Breakdown of the Manufacturing Private  
Corporate Sector  
(percentages)

Industrial Class	1961		1970		1985	
	No.	PUC	No.	PUC	No.	PUC
Food Products	14.18	12.07	11.22	3.67	11.02	4.25
Textiles & Textile Products	14.48	36.65	15.61	29.88	7.70	11.44
Metals & Metal Products	13.86	15.67	18.78	34.88	25.24	24.21
Chemicals & Chemical Products	12.34	6.65	11.51	12.44	17.90	26.99
Non metallic minerals	12.02	6.52	9.70	4.72	5.69	3.56
Rubber & Rubber Products	2.46	3.49	3.64	2.67	8.29	13.21
Wood	8.64	7.75	6.97	4.25	4.38	4.14
Paper & Paper products	0.61	1.70	1.82	1.45	2.01	4.29
Printing & Publishing	17.90	2.77	15.45	1.89	10.43	3.07
Others	3.68	6.70	5.15	4.18	4.85	1.74
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Same as Table 2.11

Summarising the findings, we note that Kerala, on the eve of independence, had a strong corporate base and a tradition of organising manufacturing and trading activities under the Joint Stock Companies. However, by the early 1960's its base had eroded and in 1985 Kerala was found to have the smallest number of companies as well as the lowest quantum of paid up capital among the southern states. In terms of the number of companies, Kerala's growth was lower than other southern states as well as all-India. So far as the paid up capital in the total corporate sector was concerned, the state was observed to have recorded a growth rate lower than that of Karnataka and Andhra Pradesh but marginally higher than that of Tamil Nadu. The slightly better growth performance of total corporate sector in Kerala vis-a-vis Tamil- Nadu was accounted by the government corporate sector. The corporate private sector in Kerala, on the other hand, grew at a rate lower than in other the southern states and at all-India.

Within the ambit of slow growth, major structural changes in favour of manufacturing took place within the corporate sector of the state. As a consequence, Kerala increased its share in the total paid up capital in the manufacturing corporate sector in the country. This increase however was primarily accounted by the government corporate sector. The growth of the private corporate sector in Kerala's manufacturing industry was low and far from satisfactory as compared to all-India as well as other southern states. Within this facet of overall low growth, major structural changes were observed and manufacturing emerged as the dominant activity of the private corporate sector in Kerala.

## Notes and References

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APPENDIX I

% Share of Major States in India's Total Corporate Sector

	1960-61		1984-85		1960-61		1984-85	
	% share	Rank	% share	Rank	% share	Rank	% share	Rank
W. Bengal	40.40	1	24.39	1	22.44	2	16.12	2
Maharashtra	18.46	2	24.39	1	26.24	1	11.10	3
Tamil Nadu	9.99	3	7.42	4	7.75	4	5.83	5
Delhi	6.20	4	15.44	3	5.35	5	35.50	1
Uttar pradesh	4.11	5	4.43	7	2.21	9	2.47	9
Kerala	3.98	6	2.34	10	1.70	10	2.86	11
Gujarat	3.10	7	6.25	5	3.35	6	2.99	8
Punjab, Haryana Chandigarh	3.08	8	4.01	9	0.81	14	1.63	12
Mysore	2.48	9	4.96	6	3.21	7	5.56	6
Andhra Pradesh	1.70	10	4.26	8	1.36	12	6.01	4
Rajasthan	1.68	11	2.04	11	1.09	13	1.20	14
Bihar	1.37	12	1.39	13	19.11	3	3.85	7
Assam, Meghalaya Mizoram	1.35	13	1.04	14	1.52	11	1.30	13
Madhya Pradesh	1.23	14	1.79	12	3.18	8	0.81	15
Orissa	0.79	15	0.98	15	0.64	15	2.47	10
Himachal	0.04	16	0.35	17	0.04	16	0.18	17
Jammu & Kashmir	0.00	17	0.44	16	0.00	17	0.21	16
India	100.00		100.00		100.00		100.00	

Source: Department of Company Affairs, Joint Stock Companies in India, 1960-61 and

Department of Company Affairs, Directory of Joint Stock Companies in India, 1985



## APPENDIX II

Percentage Share of Major States in India's Government  
Corporate Sector

	Number				Paid up Capital			
	1960-61		1984-85		1960-61		1984-85	
	% share	Rank	% Share	Rank	% share	Rank	% share	Rank
Orissa	32.39	1	4.90	10	0.21	10	2.75	8
Delhi	11.97	2	5.41	9	11.03	2	42.07	1
Maharashtra	9.86	3	7.45	6	5.49	5	7.56	3
Karnataka	8.45	4	7.04	7	6.43	4	5.71	5
Kerala	7.04	5	8.57	3	1.19	7	2.07	10
W. Bengal	4.93	6	8.67	2	0.85	9	15.32	2
Andhra Pradesh	4.23	7	4.80	11	1.11	8	6.41	4
Tamil Nadu	3.52	8	8.37	4	7.76	3	4.96	6
Uttar Pradesh	3.52	9	9.49	1	0.05	13	2.14	9
Bihar	2.82	10	5.92	8	60.72	1	4.62	7
Madhya Pradesh	2.82	11	3.37	14	4.92	6	0.50	15
Gujarat	2.82	12	4.29	13	0.02	15	1.32	11
Rajasthan	1.41	13	2.14	15	0.09	11	1.00	14
Himachal Pradesh	1.41	14	1.53	16	0.08	12	0.18	17
Assam, Meghalaya								
Mizoram	1.41	15	4.39	12	0.03	14	1.28	13
Punjab, Haryana								
Chandigarh	0.70	16	8.27	5	0.01	16	1.32	12
Jammu & Kashmir	0.00	17	1.43	17	0.00	17	0.24	16
India	100.00		100.00		100.00		100.00	

Source: Department of Company Affairs, Joint Stock Companies in India 1960-61 and  
Department of Company Affairs, Directory of Joint Stock Companies in India, 1985

APPENDIX III

Percentage Share of Major States in Indian Non-Government  
Corporate Sector

	Number				Paid up Capital			
	1960-61		1984-85		1960-61		1984-85	
	% share	Rank	% Share	Rank	% share	Rank	% share	Rank
West Bengal	40.59	1	17.63	2	31.73	2	19.09	2
Maharashtra	18.51	2	24.55	1	35.17	1	24.16	1
Tamil Nadu	10.02	3	7.41	4	7.74	3	9.01	5
Delhi	6.16	4	15.53	3	2.90	6	11.33	3
Uttar Pradesh	4.12	5	4.38	8	3.14	5	3.69	8
Kerala	3.96	6	2.27	10	1.92	9	2.05	10
Gujarat	3.10	7	6.27	5	4.78	4	9.13	4
Punjab, Haryana								
Chandigarh	3.09	8	4.97	6	1.15	14	2.75	9
Karnataka	2.45	9	4.94	7	1.83	10	5.03	6
Andhra Pradesh	1.69	10	4.26	9	1.47	12	4.51	7
Rajasthan	1.68	11	2.04	11	1.52	11	1.64	12
Bihar	1.36	12	1.35	13	1.21	13	1.01	15
Assam, Meghalaya								
Mizoram	1.35	13	1.01	14	2.16	8	1.38	14
Madhya Pradesh	1.22	14	1.78	12	2.43	7	1.97	11
Orissa	0.62	15	0.95	15	0.82	15	1.43	13
Himachal Pradesh	0.03	16	0.34	17	0.02	16	0.19	16
Jammu & Kashmir	0.00	17	0.44	16	0.00	17	0.12	17
India	100.00		100.00		100.00		100.00	

Source: Department of Company Affairs, Joint Stock Companies in India, 1960-61 and  
Department of Company Affairs, Directory of Joint Stock Companies in India, 1985.

## Chapter 3

### GROWTH, SIZE AND PROFITABILITY

The analysis in the previous chapter indicated that the growth of the manufacturing private corporate sector in Kerala during the past two decades has been rather slow. In this chapter we propose to examine the long run growth dynamics of the existing manufacturing private companies in Kerala. This exercise, we expect, will be of significance in explaining certain facets of the growth of the manufacturing private corporate sector in Kerala. The growth of the sector, we realise, depends not only on the growth of the existing companies but also on the speed with which new units are incorporated. But logically, one may expect the latter to be influenced by the former and hence the focus of any analysis should naturally be on the factors influencing the growth of the existing units. In our study we examine three different aspects of the growth phenomena of the existing manufacturing private companies in the state viz., (1) its relation with the size of the firm (2) the relation with profitability and (3) its relation with certain financial policy variables.

#### Issues examined

Is there any significant relationship between size and growth of firms? In other words, do large and smaller firms differ significantly in terms of their rates of growth? This is the first question we address ourselves to. While trying to answer this question, the basic hypothesis for empirical testing is the validity of the 'Law of Proportionate Effect' which, as

explained earlier, states that the probability of a firm growing at a given rate during any given time period is independent of the initial size of the firm.

If the law in its strongest form is to hold true, it must be proved that

- (a) the firms of different size-classes have the same average growth rates, and
- (b) the dispersion of the growth rates about the mean is the same for all size classes.

It may be mentioned at this juncture that quite a few of the empirical investigations of the growth-size relation to date have indicated some consistency with the operation of the law. For instance, the studies of Hart and Prais (1956), Simon and Bonini (1958), Hymer and Pashigan (1962), Singh and Whittington (1975) and Eatwell (1971) have all shown that the average rate of growth does not vary significantly with the initial size of the firm. However, the second condition of the law, that the dispersion in growth rates is the same for firms of different size classes is only rarely confirmed [Simon and Bonini (1958)]. In fact, most of the studies seem to indicate that the dispersion is either negatively correlated with size [Hymer and Pashigan (1962) and Hart (1962)] or varies between size classes with an overall tendency towards negative correlation [Singh and Whittington (1968)].

In India, investigation when confined to the largest firms have indicated an inverse relation between growth and size of firms and also a tendency for the standard deviation to

decline with size [Nagesh Kumar (1983), Prem Kumar (1985)]. On the other hand, specific industry studies irrespective of size classes revealed no significant relation between size and mean growth [Subrahmanian and Papola (1971)]. Here we propose to examine the nature of this relationship among our sample of manufacturing private corporate units in Kerala.

The second aspect we address ourselves to is the relationship between growth and profitability. A priori theoretical reasoning as well as existing empirical work lead us to expect this variable to be a major one connected with growth. For, as mentioned earlier, both the direct as well as indirect ability to finance growth is closely related to the level of profitability.

A number of studies have found growth to be positively related to the profitability of the firms.<sup>1</sup> To recapitulate empirical analysis in Indian context, a study on the chemical industry (Subrahmanian and Papola, 1971) revealed that almost the entire variations among the rates of growth of firms were explained by their profitability. Another study on different industry groups observed that profitability acted as an inducement to future growth (Pandey, 1977). The study by Nagesh Kumar (1983) on the top two hundred and eighty nine non-government corporate giants in India also observed growth to be positively related to profitability to a certain extent beyond which they varied in different directions. However another study (Prem Kumar, 1985) on the hundred largest non-banking, non-financial, joint stock companies in India revealed no

statistically significant relationship between the two variables. In this chapter we have examined on the basis of our sample companies the nature and magnitude of this relationship in the manufacturing private corporate sector in Kerala.

Finally, since growth at the micro levels may be mostly influenced by the internal policies of firms, we have also examined the impact of certain important financial policy variables on the growth process. The variables considered include (a) retention ratio (b) debt-equity ratio and (c) liquidity ratio.

The retention ratio, which is an indicator of thrift or the propensity to save of the firms, is considered to reflect the capacity of the firms to finance their growth from internal sources. The ratio may differ with differing attitudes of management towards financial policy. Generally, a positive relationship between this ratio and growth is postulated. While a higher retention may certainly result in higher growth, the actual financing of growth, may be only marginally dependent on retained profits. One may, therefore, through the debt-equity ratio, consider the indirect effects of profitability in terms of ability to raise a larger quantum of external finance. Hence, the relation of growth to external funding has also been considered by means of the debt/equity ratio. And lastly, we have examined the impact of liquidity on growth. While of course, a certain level of current assets in relation to current liabilities is needed to ensure smooth functioning, the maintenance of too large an amount of current assets may result

in wastage of resources which could have been put to other productive use. Hence, generally a negative relation between growth and liquidity is visualised.

### Concepts and methods

In the analysis, growth has been considered as the dependent variable and its relations with the above mentioned indicators have been estimated using linear regression method. The indicators have been computed, as explained below, from each company's accounts for the period 1971-72 to 1984-85.

#### (1) Growth

The growth of a firm can be defined in terms of employment, output, turnover, capital or profits. Employment may be relatively stable even when capital and output are expanding fast. On the other hand, output and especially profits tend to fluctuate and it is difficult to trace a trend from them. Some measure of capital asset would show relatively regular changes from year to year and, therefore, this is most often considered suitable. The capital measure, we have used, is the book value of net assets which is defined as the book value of fixed assets plus current assets net of current liabilities. (This is also equal to the sum of share capital, reserves and surplus and long term liabilities.) The imperfections in its use as a measure of size, in this study, arises from the undervaluation of fixed assets as a result of price changes. It can be assumed, however, that price changes have affected valuation of firms to more or less a comparable extent and that differences between firm's net

assets do reflect real differences in rates of growth. The simple arithmetic average of annual changes in the net assets for the period is taken as the indicator of average growth rate of individual firms. While calculating this growth rate, we have omitted the revaluation of the capital that has taken place during the period of analysis.

(2) Size

The book value of net assets in the firm's balance sheet at the beginning of the period of study i.e. 1971 is taken as a measure of the size of the firm.

(3) Profitability

As in the case of growth, a variety of measures may be utilized to measure the profitability of firms and in the process of examining the growth-profitability relationship different studies have made use of different measures. For instance, Subrahmanian and Papola have used a measure indicating the returns on net worth; Singh & Whittington (1968) have considered measures reflecting the rate of return on net assets as well as equity assets; and Nagesh Kumar has used a measure indicating the return on total assets of the firms.

Since it is quite possible for variations to exist between the return on owned resources and total resources, we shall, in our analysis, make use of two measures of profitability one ( $p_1$ ) reflecting the rate of gross return on net assets or total long term capital employed by the firm and the other, ( $p_2$ ) indicating the net return on net worth or owned resources.



They are defined as follows:

$$p_1 = \frac{\text{Gross Profit}}{\text{Net Asset.}}$$

$$p_2 = \frac{\text{Net Profit}}{\text{Net worth}}$$

where, gross profit is the profit before tax and interest but net of depreciation, and net profit is the profit after tax, interest and depreciation. Net worth is sum of paid up capital and reserves and surplus. Net asset is sum of paid-up capital, reserves & surplus and long-term liability.

(4) Retention

The undistributed profits as a percentage of total net profits is taken as the measure of the retention ratio which proxies the thrift or the propensity of the firm to save.

(5) Debt-equity

The amount of loans and advances secured as a percentage of the total net worth less preference capital of the firm, has been used to indicate the management's attitude towards capital gearing. The arithmetic mean of this variable for all the years will constitute the average debt-equity ratio which is postulated to show a positive relationship with growth.

(6) Liquidity

Liquidity has been defined as the ratio of net liquid assets to total assets. That is to say,

$$\text{liquidity} = \frac{\text{current assets} - \text{current liabilities}}{\text{total assets}}$$

Our objective is to examine the effect of the average liquidity over the period on the average growth rate.

## Characteristics of the sample

The sample of companies, when classified according to size, showed a larger proportion of firms in the smallest size class as compared to the other size groups. Thus, forty-four percent of the total number of firms was seen to belong to the smallest size group. The rest of the firms were found more or less equally distributed among the other three size classes. Further, the sample suggested a negatively skewed distribution when classified according to both the annual rate of growth as well as the rate of return on net assets. The distribution based on net profitability, on the other hand, resembled more a positively skewed distribution with a large number of firms in the low value category.

## Size and Growth of firms

The simplest way in which we tried to examine whether there exists any relationship between the size and growth was by means of a tabular presentation of the firms by the groups of growth rates and size. ( Table 3.1)

Table 3.1  
Size and Growth

Size (Rs. in lakhs)	Annual Rate of Growth (%)				Total number
	<0	0 - 5	5 - 15	>15	
1. <10	4	8	4	6	22
2. 10 - 50	0	2	4	3	9
3. 50 - 100	1	0	5	2	8
4. >100	1	1	5	4	11
Total number	6	11	18	15	50

It is seen from the table that the smallest size group (less than Rs.10 lakhs), relative to the three larger size classes, has a greater proportion of firms clustered in the lower growth range implying the existence of a tendency for growth to increase with size. However, the comparison among the next three size groups revealed no clear and steady association between the two variables. The testing for the operation of the Law of Proportionate Effect, we hope, will help make the relationship more explicit.

In order to test for the operation of the law, the mean and standard deviation of the growth of firms for the different size classes were calculated (see table 3.2) and the Welch Aspin test used to test the significance of differences between average growth rates. (The Welch Aspin test was considered to be the most suitable for the purpose since considerable differences were observed to exist between the group variances.)<sup>2</sup> The results of the test revealed no statistically significant differences between the mean growth rates of the three larger size groups. The average growth rate of the lowest group on the other hand, was found to be significantly lower than at least two of the larger groups considered.

As regards the second requirement of the law, the dispersion of growth rates was not found to display considerable differences between the size classes except in the case of the second size class. Thus, the often observed tendency for dispersion to vary negatively with size certainly didn't seem to hold true in our case. These results neither totally confirm

Table 3.2

Variations in Growth Rates

Opening Size (Rs. in lakhs)	Number of firms	Arithmetic mean growth rate	Standard deviation
1. <10	22	7.82	11.01
2. 10 - 50	9	12.65	4.27
3. 50 - 100	8	12.54	10.48
4. >100	11	15.63	11.52

Welch Aspin test:

Significant differences between means

at 1% level = none

at 5% level = 1 < 2

1 < 4

nor reject the validity of the Law of Proportionate Effect so far as the entire group was considered, but revealed a relatively strong tendency for the growth rate to be lower in the smallest size group in the manufacturing private corporate sector in Kerala.

Profitability and growth of firms

The bi-variate classification of firms by their growth and profitability indicated a positive relationship between the two, so far as the first measure of profitability (gross profitability or return on capital employed) was concerned (see Table 3.3). Nearly half the number of firms were found to be strictly on the diagonal from the top left hand corner to the bottom right hand corner and the majority of the remaining ones were seen to be positioned at only by one cell away from it.

Table 3.3  
Gross Profitability (p1) and Growth

Profitability (P1)	Growth (%)				Total number
	<0	0 - 5	5 - 15	>15	
<0	3	3	2	2	10
0 - 10	3	6	4	3	16
10 - 20	-	-	10	5	15
>20	-	-	4	5	9
Total number	6	9	20	15	50

But no such relation was indicated when the firms were cross classified according to growth and the second measure of profitability i.e, net profitability (return on owned resources) (see table 3.4). The firms were seen to be more scattered indicating the absence of any strong positive relation between the two.

Table 3.4  
Net Profitability (p2) and Growth

Profitability (P2)	Growth (%)				Total number
	<0	0 - 5	5 - 15	>15	
<0	3	6	11	7	27
0 - 5	1	3	1	2	7
5 - 15	2	-	6	1	9
>15	-	-	3	4	7
Total number	6	9	21	14	50

The relationship can be further explored by means of regression analysis. A simple linear regression exercise yielded the following two equations for the two cases.

$$\text{Equation I } g = 10.28 + .2656 p1^{**}$$

(2.386)  
(R<sup>2</sup> = .1060; F = 5.693<sup>\*\*</sup>)

$$\text{Equation II } g = 11.14 - .017p2$$

(-.210)  
(R<sup>2</sup> = .0009; F = .044)

where g = growth rate  
 p1 = return on capital employed  
 p2 = return on net worth

Note: \* significant at 1% level  
 \*\* Significant at 5% level  
 figures in brackets give the 't' value

The equations confirmed our earlier findings that in the Kerala context, it was the first measure of profitability rather than the second which was related to the growth phenomenon. The first equation thus suggested that in the long run, one per cent increase in the rate of return on total capital employed of a firm, would lead to approximately 0.27 per cent increase in its rate of growth. The F test also confirmed the linear relationship to be statistically significant at the 5 per cent level. However, it must be noted that the explanatory power of the model was not very high as indicated by the lower value of R<sup>2</sup>. The second profitability ratio i.e., the rate of return on net worth, on the other hand, was not found to have any statistically significant relationship with the long run growth of the firms.

#### Growth and other financial variables

The influence of the other financial variables shall now be examined by calculating the partial correlation coefficients between growth and the respective variables. The

partial correlation coefficient as we know, would measure the relationship between any two variables assuming all other variables as given and constant. The estimated coefficients were the following:

$$r(g, d)_{p, r, l} = .3394$$

$$r(g, r)_{p, l, d} = -.0423$$

$$r(g, l)_{p, r, d} = -.2780$$

where g = growth rate  
d = debt equity  
r = retention ratio  
l = liquidity and  
p = gross profitability

The analysis revealed that given the level of profitability and all other variation, there was a strong positive association between growth and the gearing-ratio indicating that growing firms tended to depend to a large extent on external sources to finance their growth process. Further, the liquidity ratio was found to be negatively correlated with growth suggesting that high growth firms tended to keep less of their capital blocked up in current assets relative to the firms growing at a slower pace. Finally, the retention ratio, contrary to expectation, revealed a negative correlation with the rate of growth but the value seemed to be very weak indicating that the relationship was not very significant.

#### Determinants of Growth

We shall, now, examine the determinants of the growth process in an integrated way by making use of the multiple

regression of the growth rates on all the independent variables considered above. This technique will serve to demonstrate the cumulative impact of financial policy along with profitability on the growth of firms. The model when fitted as yielded the following relationships:

$$\text{Equation I: } g = 5.59 + .2555 p1^{**} - .0105r + .0288 d^* - .0162 l^{**}$$

$$\begin{array}{cccc} (2.423) & (-.328) & (2.632) & (-2.156) \\ (R^2 = .2521; F = 3.7928^*) \end{array}$$

$$\text{Equation II: } g = 8.0498 + .0433 p2 - .0074 r + .0309 d^* - .0178 l^*$$

$$\begin{array}{cccc} (.538) & (-.218) & (2.577) & (-2.208) \\ (R^2 = .1600; F = 2.1426) \end{array}$$

where g = growth rate  
d = debt equity  
r = retention ratio  
l = liquidity and  
p1 = gross profitability  
p2 = net profitability

Note: \* Significant at 1 per cent level  
\*\* Significant at 5 per cent level  
Figures in brackets gives the 't' value

The equations further reaffirmed our earlier findings that it was the profitability measured by the rate of return on total capital employed which had a significant influence on the growth process of firms. Among the other dependent variables considered, debt-equity and liquidity were found to be significantly related to the rate of growth while the relation of relation ratio was not statistically significant in both the equations. The F test revealed that only the first linear relation was statistically significant at the five per cent level. Further, the explanatory power of the multivariate model was also found to be better than the simple regression model.



## Size and Profitability of firms

The growth-size analysis done earlier, we may recall, had revealed the lowest size group to be characterised by a rate of growth lower than the other size classes. Further examination of the growth process showed that the growth of the firms was significantly and positively associated with their level of gross profitability (as measured by the rate of return on net asset). These two results taken together pointed towards the possibility of yet another interesting relationship among the manufacturing private corporate units in the state: between gross profitability and size. We shall therefore, examine the nature of this relationship among our sample firms with the help of (1) a contingency table of firms classified according to size and profitability (Table 3.5) and (2) average measures of profitability in each size class (Table 3.6).

Table 3.5

### Size and Profitability of firms

Size (lakhs of Rupees)	Gross Profitability (P1) range				Total number
	<0	0 - 10	10 - 20	>20	
<10	9	8	4	1	22
10 - 50	-	3	2	4	9
50 - 100	-	1	5	2	8
>100	1	4	4	2	11
Total number	10	16	15	9	50

The bivariate classification revealed that the smallest size class relative to other size groups had a larger proportion of firms concentrated in the lowest profitability group. Further

the Welch Aspin Test when done also revealed the average rate of return in this class to be significantly lower (at 1% level) than

Table 3.6  
Variations in Gross Profitability

	Size (Rs. in lakhs)	Number of items	Average profitability (%)	Standard deviation (%)
1.	<10	22	3.15	9.70
2.	10 - 50	9	20.41	15.01
3.	50 - 100	8	18.65	12.01
4.	>100	11	11.90	7.67

Welch Aspin Test:

Significant difference between means

at 1% level      1<2  
                         1<3  
                         1<4

at 5% level      none

that in all the other size classes. However, no statistically significant differences were observed to exist between the average profitability of the remaining three size groups.

Analysis of Growth in the Profitable Companies

The growth relationships estimated above, it may be noted, are based on the entire sample which consists of companies making a profit as well as those incurring losses. The growth paradigms under consideration particularly, the growth-profitability and the growth-retention relationships are generally believed to be applicable primarily to the firms making a profit, i.e. which are capable of initiating their own growth process in the long run. Hence, we now propose to examine the

nature of the above relationships in the case of the profitable companies alone. For this purpose, profitable companies are defined as those which earned a positive average net profit over the period under consideration.

It was found that there were 23 such profitable companies in our total group. The relationship when estimated for this group of companies yielded the following results:

Simple regression equations

$$\text{Equation I } g = 4.94 + .3380 p1^{**}$$

(2.58)

(R<sup>2</sup> = .2406; F = 6.6540<sup>\*\*</sup>)

$$\text{Equation II } g = 9.04 + .1576 p2$$

(1.312)

(R<sup>2</sup> = .0758; F = 1.7225)

Partial Correlation Coefficients

$$r (g, d) \quad p, r, l = 0.4594$$

$$r (g, r) \quad p, l, d = -.0831$$

$$r (g, l) \quad p, d, r = -.4457$$

Multiple Regression Equation

$$\text{Equation I } g = .3501 + .3589 p1^* - .0123r + .0413 d^* - .0160 l^*$$

(2.996)            (-.504)    (2.785)        (2.703)

(R<sup>2</sup> = 51.03;      F = 4.6899<sup>\*</sup>)

$$\text{Equation II } g = 6.7798 + .1167 p2 - .0063r + .0307d - .0169 l^{**}$$

(1.019)            (-.213)    (1.762)        (-2.394)

(R<sup>2</sup> = .3062;      F = 1.9864)

Note: \* Significant at 1% level  
 \*\* Significant at 5% level  
 Figures in brackets give the 't' value

The results revealed that even among the group of profitable companies it was the return on total capital employed

(gross profit upon net assets) which showed a statistically significant impact on the long term growth of individual enterprises. It was shown by the simple regression equation that one per cent increase in this measure of profitability would lead to approximately 0.36 per cent increase in the rate of growth in the long run. Besides this variable, both debt-equity and liquidity were also found to be statistically significant with the former indicating a positive relation and the latter a negative one with the dependent variable. Retention ratio here also was found to have no significant relation with growth. However, the explanatory power of the model was found to be much higher with our independent variables explaining about 51 percent of the total variation in the dependent variable.

Summing up, we note that the private manufacturing companies in Kerala, notwithstanding their operation in an atmosphere of controls that prevails in a planned and regulated economy, broadly shows conformity with the theory of firm propounded by Penrose and others to explain the growth of the firm in an unregulated market economy. Thus, the growth that has taken place in the joint-stock companies in Kerala has been related to the levels of profitability though not in the direct sense of the term where high net profit and a large retention of surplus within the firm leads to rapid growth through self-financing. On the contrary, the high correlation with debt-equity suggests that growth has taken place primarily through external borrowings, with the extent of efficiency in total resource utilisation (as, reflected by the gross return on capital) providing the inducement to expand in the long run.

The relationships, it is found, are much more clear cut in the case of the profitable companies. It has to be underlined in this connection that the absence of any significant relationship between growth and net profitability may indicate the fact that the quantum of surplus has not been sufficient to generate internal growth. Explanation on this point shall be sought in due course.

Finally, the analysis has also indicated that the small sized companies in the state exhibit lower resource use efficiency as reflected in the profitability criteria and correspondingly their prospects for growth are also seen to be lower. This can primarily be ascribed to the fact that due to the too small a size a number of advantages - technical and non-technical - which are available to the larger size forms are not open to them. But apart from this smallest size group, no systematic tendency for growth performance to vary with size is observed in the Kerala context indicating that the profitability and hence growth in the other size groups are dependent on firm specific-factors.

Having observed that the growth of the individual manufacturing private companies (and hence the growth trends of the manufacturing private corporate sector in Kerala) is related to their overall efficiency in resource utilisation as reflected in profitability, dependence on external funds etc. we shall now proceed to examine in detail the overall financial performance and pattern of financing in the manufacturing private corporate sector in the state.

### Notes and References

1. These studies have been referred to in the section on review of literature in chapter 1.
2. Aspin, A.C. and Welch, B.C. (1949).

## Chapter 4

### FINANCIAL PERFORMANCE

The focus of the present chapter is on the financial performance of non-governmental (private sector) companies in Kerala's manufacturing industry. The analysis of financial performance is significant in itself in that sound financial health of any business is a condition essential for it to perform its social function well and play its proper part in the general well being of the economy. Besides, it is very much entrenched with the growth dynamics of the private corporate sector. Here, we shall examine certain indicators reflecting the different facets of the financial performance of our sample companies as a group, which, as stated in the first chapter, can be taken as representative of the manufacturing private corporate sector in Kerala. This exercise, besides highlighting the degree of efficiency in total resource use, may enable us to bring out some operational features of the private corporate sector in the manufacturing industry of the state.

#### Methodology

In the study, financial performance as reflected in the financial statements of companies, has been taken as an indicator of their overall performance. Financial statements are useful, if properly read and interpreted, to view business behaviour since significant aspects of the economic behaviour of business often show themselves in company accounts. The common technique employed for evaluating financial performance is the 'ratio analysis'. Since any single ratio taken alone may cloak the

strength or weakness of others, we have made use of a number of ratios, each of which is estimated from the combined balance sheet of the sample companies.

As mentioned in the introductory chapter, the overall analysis relates to a period of fourteen years from 1971-72 to 1984-85. The efficiency of the private corporate sector in Kerala cannot be fully understood without having an idea about the corresponding performance-indicators of the manufacturing private corporate sector at all-India. A comparison has therefore, been made with information on the finances of manufacturing companies published by the Reserve Bank of India. Another important exercise which forms an integral supplement to the above analysis, is the examination of industry-wise financial performance. For, it is quite possible that considerable variations exist between different industrial groups which may have got ironed out in the overall analysis. Here, the analysis shall be related to those modern industry-groups for which comparable data are available.

The chapter is divided into two sections. In the first is presented the analysis relating to the sample companies as a group. The second section gives industry-wise analysis of financial performance.



## Section 1

### Profit-Sales Ratio

The basic objective of a business, we know, is to earn a satisfactory return from it. An important measure, which indicates the general profitability of business, is the profit margin or the profit-sales ratio. The ratios we have used in this connection include (1) the gross profit-sales ratio and (2) the net profit-sales ratio.

The gross profit-sales ratio (i.e. gross profit expressed as a percent of net sales) indicates the sales margin left over as profit after meeting the costs of production. This margin should be adequate to cover fixed interest charges, dividends and reserves for future expansion. Normally, a higher value of the ratio can be expected to result in a higher gross profitability of total funds invested in the business. The second ratio i.e., net profit-sales ratio (i.e. net profits as percent of net sales) indicates the sales margin that is ultimately left as a return to the owner's funds after meeting all expenses including interest and taxes and hence, is of greater relevance to the shareholders. Other conditions being the same, the higher value of the profit-sales ratio indicates greater efficiency in the production system.

These two ratios estimated for the sample companies as a group indicated that in most of the years the gross profit margin earned by the companies in Kerala was lower than the

corresponding values of the corporate sector at all-India. (see table 4.1) The annual average gross profit-margin during 1972-85 was only 6.26 per cent in Kerala as against 9.50 per cent at all-India. The net profit-sales ratio was also found to be lower in Kerala in most of the years. In fact, in certain years the net sales of the year was not sufficient to cover the overall expenditure of the companies resulting in losses. The burden of such years was so high that the annual average of the net profit margin for the whole period was found to be negative, (-1.33 per cent) in Kerala as against 2.70 per cent at all-India.

Table 4.1  
Profit-Sales Ratio  
(percentages)

Year	Gross Ratio		Net Ratio	
	Kerala	All-India	Kerala	All-India
1972	9.56	10.51	3.56	3.80
1973	8.45	9.52	3.06	3.07
1974	-1.69	10.60	-10.04	3.64
1975	12.10	10.91	4.96	3.41
1976	7.61	9.20	1.22	1.74
1977	6.77	9.08	0.92	1.88
1978	5.20	9.15	-1.92	2.12
1979	8.36	10.16	2.17	3.28
1980	9.56	10.58	2.79	3.73
1981	8.11	9.80	0.89	3.23
1982	7.15	9.28	-1.36	2.85
1983	3.11	8.80	-6.86	2.44
1984	-0.29	7.74	-11.27	1.24
1985	3.64	7.82	-6.72	1.43
Average 1972-85	6.26	9.51	-1.33	2.70

### Activity Ratio

Another important ratio used to measure the performance is the asset turnover ratio. The funds of creditors and owners are invested in various kinds of assets to generate sales and profits. The better the management of assets, the larger will be the amount of sales and the brighter the profit possibilities. The total asset turnover (activity) ratio, defined as the ratio of net sales to total assets, is often used to indicate the efficiency with which firms manage their assets. The higher the ratio, the better the generation of sales, the more effective the utilisation of total assets, and hence the better the profit prospects.

The estimated asset-turnover ratio indicated that except in a few years (1973, 1976 and 1977) Kerala companies had a lower value than that at all-India (see Table 4.2). The annual average of the ratio of our sample companies as a group for the entire period was seen to be 1.05 percent as against 1.17 percent at all-India, indicating a slightly lower efficiency in the utilisation of assets by the companies in Kerala.

Table 4.2

Asset Turnover Ratio

Year	Asset Turnover	
	Kerala	All-India
1972	0.99	1.06
1973	1.12	1.11
1974	0.92	1.08
1975	1.06	1.15
1976	1.20	1.18
1977	1.27	1.25
1978	1.10	1.25
1979	1.21	1.27
1980	1.20	1.27
1981	1.24	1.26
1982	1.03	1.25
1983	0.88	1.15
1984	0.83	1.06
1985	0.72	1.06
Average 1972-85	1.05	1.17

Profitability Ratio

Profitability or the rate of return on investment in business is considered to be the key-ratio in judging the overall performance. The ratios we have utilised to measure profitability include (1) the gross profitability ratio and (2) the net profitability ratio.

The gross profitability ratio, (i.e. gross profits as percent of total assets) unifies the two concepts of gross profit-margin and total asset-turnover and is considered to be a concrete ratio in judging the overall rate of return on total investment in the business. This ratio reflects all the consequences of the operations of the firm as well as the external events that might have affected it. It condenses the operations of the entity as a whole along with the specific

facets of those operations. A smaller value of the ratio indicates a lower degree of efficiency in the utilisation of total resources invested in the business.

The second measure of profitability, the net profitability ratio, (defined as the percentage of net profits earned in relation to the net worth) measures the investor's rate of return (in the form of dividends and profits retained in the business) on his funds in business comprising of the capital paid by him and the accumulated profits of past years. This ratio is crucial to the investor in deciding whether the investment would be worth making in terms of the return as compared to the risk involved in it.

The gross profitability ratio estimated for the sample companies as a group was found to be lower than that at all-India level in most of the years. (see Table 4.3) In other words, the rate of return on total resources invested in manufacturing in Kerala was relatively poor. A comparison of table 4.3 with tables 4.1 and 4.2 shows that years of very low gross profitability (1974, 1978, 1983, 1984, 1985) were also characterised by both lower gross profit margin as well as lower asset turnover indicating that both these factors were contributory to the lower gross return on funds invested. When we considered the entire fourteen years period, it was seen that the manufacturing companies as a group in Kerala earned on an average a gross return of about 7 per cent per year on their total invested funds whereas, the corresponding value at all-India was 11 percent per annum.

A comparison of the net profitability ratios also showed a lower value for Kerala companies as a group in almost all the years with significant differences in quite a few years. In fact, the annual average net profit for Kerala companies as a whole was negative (-4.95 percent) whereas, the corresponding value for the Indian corporate sector as a whole was 9.29 percent. In other words, the shareholders earned an average annual return of 9 percent on their investment at the national level, whereas they incurred in Kerala on an average a loss of about 5 per cent per annum during the period of study.

The differential performance of Kerala companies as a whole, it may be noted, was particularly pronounced in terms of net profitability. While the difference in the average gross profitability ratio as between all-India and Kerala over the period was 4 per cent, it was as high as 14 per cent in the average net profitability ratio. It appeared that the relatively poor performance of Kerala companies as compared to all-India, was perhaps not so much in terms of the overall resource use efficiency as in the profitability netted out for such expenses as interest and tax payments. In other words, the unsatisfactory financial performance of Kerala companies should be seen in the context of the particular pattern of financing of the capital structure and the resultant interest component in the cost structure.

Table 4.3

Profitability Ratios

Year	Gross Profit as % of Total Asset		Net Profit as % of Net Worth	
	Kerala	India	Kerala	India
1972	9.43	11.09	9.15	10.34
1973	9.45	10.58	8.65	8.66
1974	-1.55	11.42	-24.43	10.24
1975	12.84	12.53	13.74	10.51
1976	9.11	10.86	4.09	5.69
1977	8.61	11.31	3.64	6.64
1978	5.70	11.47	-6.91	7.67
1979	10.13	12.88	9.65	12.05
1980	11.50	13.47	12.97	14.21
1981	10.10	12.31	4.53	12.84
1982	7.33	11.59	-6.36	11.91
1983	2.74	10.11	-30.39	9.76
1984	-0.24	8.24	-50.32	4.55
1985	2.64	8.30	-17.26	4.98
<u>Average</u> 1972-85	6.99	11.15	-4.95	9.29

Cost Structure

We shall now attempt a comparison of the cost structure of our sample companies with that of the manufacturing private corporate sector as a whole in the country. The cost structure, viewed in terms of percentage shares of its major components (cost of raw materials, fuel and power, other direct manufacturing expenses, emoluments and supplements to emoluments, repairs, administrative and general expenditure, interest and depreciation) can be expected to reveal the directions of Kerala's cost advantage/disadvantage, as compared to all-India for the location of manufacturing units.

The analysis of cost structure assumes significance as there exists a popular notion of the high wage-cost inhibiting industrial development in the state. It has been argued that the highly militant and unionised labour in Kerala have succeeded in pushing up wages to the extent that the region's industrial system has been in a disadvantageous position with respect to wage cost.<sup>1</sup> In some circles, the high wage cost is thus considered to be the major factor explaining the industrial backwardness of the state. At the same time, there are studies, which discount the high wage cost hypothesis and have put forward on alternative industrial structure hypothesis. Here, the structural constraints of the regional economy like the lack of inter-industry linkage and agglomeration economies, are emphasised as the primary factor adversely affecting the industrial growth.<sup>2</sup>

Reverting to our analysis of the private corporate sector, the cost structure of our sample companies taken as a whole, is compared with that at the all-India level. Instructively, the company accounts data indicates no evidence to support the notion of a higher wage cost in Kerala's manufacturing private corporate sector. (see Table 4.4) Instead, the wage share in total cost is found to be consistently lower in Kerala companies as a group than at the all-India level in most of the years. There is an apparent suggestion that the roots of poor performance would need to be searched for not along the labour-cost lines but in other directions.



Among such directions the one that easily suggests itself as a revealing one is the capital costs. As is evident from table 4.4, the interest component in the total cost of our sample companies remained always higher relative to all-India. For the period of study as a whole, it was 5.54 per cent in our sample companies as against a corresponding figure of 3.89 per cent at all-India. We also noted that the margin of difference in the interest component between Kerala and all-India, widened over the years and marked significant levels during the eighties. Thus by 1985, the interest cost of our sample companies as a group hovered around 8 per cent of the total cost of production while at all-India level it remained at less than 5 per cent. It was relevant to note that the eighties was a period of very low net profitability for the sample companies. On the basis of the pieces of evidence it was reasonable to consider the interest cost component as being one of the major factors accounting for the very low levels of net profitability of the private corporate sector in the manufacturing industry of Kerala. Obviously, a pattern of financing marked by heavy dependence on external borrowings, may have contributed to this phenomena.

Yet one another direction for exploration is the infrastructural cost of manufacturing operation in Kerala. Table 4.4 reveals that the shares of power & fuel and repairs & maintenance components in the cost structure are consistently higher in our sample of Kerala companies. The higher share of power and fuel despite the lower tariff rates in the state may be due to proportionately larger share of power intensive-industries (like aluminium and chemicals) in the industrial structure and

the use of outdated fuel inefficient techniques of production. The higher proportion of expenditure on repairs and maintenance may be attributed to the use of obsolete and the age-old machinery, equipment and other capital stocks. These are similar factors affecting the efficacy of the production system may have rendered the manufacturing operation less cost effective and hence, less profitable in Kerala as compared to all-India.

Table 4.4  
Cost Structure

(percentages)

Year	Materials		Power & Fuel		Other Mfg. exp.		Emoluments		Repair		Other Expn.		Depreciation		Interest		Total	
	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I
	1972	59.60	60.62	5.50	4.16	1.05	1.16	14.58	16.06	2.73	1.73	8.35	8.60	3.87	4.22	4.30	3.49	100.00
1973	58.70	59.04	5.28	4.14	1.03	1.17	15.79	16.99	2.76	1.80	8.50	9.34	4.05	4.19	3.87	3.35	100.00	100.00
1974	58.00	59.57	6.22	3.99	1.06	1.03	15.55	17.44	3.52	1.89	8.37	8.95	3.09	3.98	4.18	3.16	100.00	100.00
1975	57.10	60.70	5.36	4.54	0.96	1.01	15.95	16.62	3.10	1.88	9.14	8.33	3.40	3.45	5.03	3.33	100.00	100.00
1976	58.90	60.40	6.74	5.31	1.02	0.86	14.31	15.91	2.64	1.78	8.61	8.64	3.08	3.29	4.71	3.85	100.00	100.00
1977	61.30	60.41	6.52	5.87	0.86	0.91	13.25	15.05	2.61	1.88	7.83	8.81	3.13	3.09	4.49	3.89	100.00	100.00
1978	58.69	60.83	6.73	5.60	1.10	0.94	14.22	15.10	2.87	1.86	8.24	8.71	3.15	3.04	5.13	3.93	100.00	100.00
1979	59.70	61.28	6.64	5.74	0.85	0.94	13.71	14.95	3.13	1.99	8.45	8.50	2.66	2.98	4.88	3.62	100.00	100.00
1980	58.80	60.97	7.22	5.90	0.83	1.00	13.94	14.85	3.81	2.09	8.30	8.61	2.39	2.99	5.25	3.59	100.00	100.00
1981	52.80	61.06	8.15	6.26	0.86	1.02	13.56	14.43	3.34	2.01	7.33	8.42	2.79	2.96	5.15	3.05	100.00	100.00
1982	56.70	61.98	7.94	6.67	0.94	0.97	13.56	13.14	3.25	1.85	8.76	8.52	2.59	2.81	6.22	4.04	100.00	100.00
1983	53.40	60.41	8.25	7.14	0.97	1.02	14.72	13.14	3.09	1.95	8.51	8.95	3.28	2.89	7.77	4.60	100.00	100.00
1984	57.49	58.48	8.12	7.27	0.95	1.04	15.37	13.37	2.94	1.88	8.90	9.20	3.58	3.86	8.65	4.86	100.00	100.00
1985	54.57	58.53	7.06	7.41	1.25	1.05	13.34	12.84	2.52	1.80	10.08	9.56	3.22	3.93	7.96	4.86	100.00	100.00
<u>Average</u>																		
1972	57.55	60.32	6.84	5.72	0.98	1.01	14.41	14.99	2.99	1.88	8.53	8.79	3.16	3.40	5.54	3.89	100.00	100.00

K = Kerala  
I = All-India

### Inventory-Sales Ratio

Another dimension to be examined in the context of financial performance is the managerial efficiency. While this is a nebulous concept, an important facet of it is reflected in the inventory management. As for Kerala, it is generally argued that the economic remoteness and insularity of the state makes the holding of a large inventory stock an unavoidable necessity for the manufacturing enterprises. In the case of state sector enterprises it has been shown that the maintenance of large inventory stock, resulting in the blocking of considerable amount of productive capital in them, is a major cause of inefficiency.<sup>3</sup> Does this phenomenon also apply to the private corporate sector in Kerala? This is the question that we may now examine. The estimation of the number of months of sales maintained as total inventory stock in our sample companies indicated that on an average, Kerala companies maintained an inventory stock approximately equivalent to three and a half months of sales in the year which was also the case for the manufacturing private corporate sector at all-India. (see Table 4.5) It follows that managerial inefficiency, as proxied by the inventory-sales ratio cannot be considered as a decisive factor in making the manufacturing activity relatively less profitable in Kerala as compared to all-India so far as the private corporate sector is concerned. This is not to suggest that all is well with the management policies in Kerala companies.

Table 4.5

Inventory Sales Ratio  
(Number of Months of sales kept as inventory stock)

Year	Kerala	All-India
1972	3.96	4.03
1973	3.60	3.82
1974	5.04	4.09
1975	4.20	4.16
1976	3.24	3.86
1977	3.12	3.45
1978	3.60	3.38
1979	3.12	3.42
1980	3.36	3.54
1981	3.24	3.40
1982	3.48	3.19
1983	3.84	3.54
1984	3.12	3.31
1985	3.12	3.10
<u>Average 1972-85</u>	3.60	3.59

Asset Structure and sources of funds

The relatively higher interest cost in the Kerala companies as compared to all-India which we observed earlier, remains a factor reflecting the financial policies of the management, particularly the type of financing they resort to. It is this interesting aspect that we now examine.

The nature of financing can be examined from two different angles. The first one is the asset structure of the companies at specific points in time while the second is based on the sources of funds statements which reflect the flow of funds over a period of time. Two ratios deserve consideration in this context.

- (1) Total borrowings as percentage of total assets, and
- (2) Total borrowings as percentage of net worth

The first ratio indicates what proportion of the total resources of firms are financed by borrowing whereas the second explicitly expresses the relationship between borrowed funds and shareholder's funds. On the whole, both these ratios would indicate the management's attitude towards capital gearing. A lower value for the ratios is generally considered to indicate better financial soundness of the capital structure as it signifies greater dependence on owned resources.

The estimated ratios revealed that the pattern of financing of the companies in Kerala remained tilted in favour of debt. Thus, in 1972 borrowings accounted for about 42 per cent of the total resources invested in the sample companies whereas the corresponding figure for all-India was only around 38 per cent (see table 4.6). Further, while the next fourteen years witnessed greater dependence on external sources of financing in both the cases, the reliance was much more in Kerala companies where approximately 62 per cent of the total sources of finance was generated from outside as against 54 per cent at all-India. (see table 4.7). Of the various sources of finance over the period, borrowing constituted the single largest source in Kerala accounting for nearly 35 percent of the total. (The corresponding value for all-India was only around 26 per cent). As a consequence, by 1985 borrowings in the sample of companies taken together, constituted nearly half of the total invested resources whereas, the share of borrowings in total assets at all-India remained at approximately 37 per cent.

Correspondingly, we also find that the debt-equity ratio remained consistently high in the sample companies indicating a capital gearing policy of the management very much in favour of outside resources in the private corporate sector in Kerala.

A very high gearing is generally considered to be less sound financially. Besides it drains out a substantial portion of the operating surplus in the form of fixed interest payments and correspondingly leaves very little to the shareholders as the return to their own funds invested in the company. This depressing situation gets compounded when the very operating surplus itself is low due to inefficiency of the production system. The experience of Kerala companies clearly reflects this phenomenon.

Table 4.6

Asset Mix Ratios

(percentage)

Year	Debt/Asset		Debt/Net Worth	
	Kerala	All-India	Kerala	All-India
1972	42.31	37.83	110.01	97.32
1973	42.14	35.77	107.68	91.23
1974	39.29	34.27	104.22	104.45
1975	37.81	32.92	99.34	88.92
1976	42.08	34.18	117.54	95.45
1977	43.20	34.75	134.68	99.05
1978	44.88	34.80	147.18	101.16
1979	47.18	34.15	173.34	99.82
1980	46.86	34.03	181.76	102.45
1981	45.08	33.15	184.92	105.77
1982	46.28	36.18	210.02	121.50
1983	50.53	37.57	254.67	131.56
1984	47.37	38.09	168.25	126.88
1985	44.80	35.44	162.39	105.93
<u>Average</u> 1972-85	44.27	35.22	153.57	104.57

On the whole, the foregoing analysis of the financial performance of the sample companies as a group leads us to conclude that the high capital gearing policy of the management and consequent interest burden combined with a low gross profit arising out of inefficient production may have proved equity investment in Kerala companies less attractive as compared to all-India. The growth of the private corporate sector has therefore remained tardy in the state. And whatever limited growth has taken place, has been largely related to the borrowings, which in itself was related to and hence constrained by, the gross profitability of the public limited companies in the state.

Table 4.7

Sources of Finance (percent)

Year	Internal Sources								External sources									
	Depreciation		Reserves & Surplus		Others		Total		Paid up capital		Borrowings		Current liabilities		Others		Total	
	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I
1972	36.15	35.48	-3.74	16.93	8.45	10.55	40.86	62.96	23.62	2.95	26.27	15.39	9.27	18.70	-0.01	0.01	59.15	37.05
1973	32.61	46.17	19.62	17.81	2.22	16.29	54.45	80.27	16.63	2.75	26.94	-2.56	1.89	19.35	0.09	0.19	45.55	19.73
1974	16.38	26.55	17.20	16.39	20.49	12.78	54.07	55.64	6.49	1.57	20.87	15.56	18.56	27.98	0.00	-0.75	45.92	40.19
1975	34.34	19.49	30.33	15.72	-4.86	12.66	49.81	47.87	3.51	1.35	4.96	21.59	31.66	29.19	0.06	-0.01	40.19	52.12
1976	33.63	-	-4.29	-	-6.20	-	23.15	-	9.67	-	59.54	-	7.75	-	-0.10	-	76.86	-
1977	39.08	37.86	-11.90	-1.25	-4.44	7.46	22.74	44.07	0.53	3.24	36.24	28.00	40.48	24.66	0.01	0.03	77.26	55.93
1978	23.82	33.07	12.63	3.45	2.38	6.37	38.83	42.89	-0.08	1.77	43.93	25.88	17.32	29.30	0.00	0.15	61.17	57.10
1979	13.54	24.60	5.38	13.70	4.98	7.57	23.90	45.87	2.71	2.59	51.69	23.06	21.70	28.51	0.00	-0.02	76.10	57.88
1980	22.00	19.83	12.15	16.26	8.27	4.49	42.42	43.48	0.12	1.63	34.73	26.66	22.93	27.98	0.00	0.15	57.88	56.42
1981	19.08	19.67	9.53	13.88	11.64	6.10	39.65	39.65	3.84	1.08	28.18	27.43	27.74	31.59	0.00	0.25	59.76	60.35
1982	12.97	15.59	6.57	10.62	5.38	3.09	24.92	29.30	2.68	1.73	44.66	36.64	29.74	32.02	0.00	0.31	77.08	70.70
1983	23.85	10.03	0.78	9.86	-2.02	3.97	22.61	31.86	1.11	1.78	65.89	41.39	10.39	24.81	0.15	0.17	77.54	60.95
1984	23.75	26.35	2.37	6.51	-0.79	2.79	25.33	35.65	1.44	4.91	52.66	41.13	20.42	17.71	0.00	0.61	74.52	64.36
1985	24.17	28.53	43.23	7.41	-1.23	3.05	66.17	38.99	0.60	3.71	24.50	35.18	8.73	21.67	0.12	0.39	33.85	60.95
<u>Average</u>																		
1972	25.38	27.02	9.99	11.34	3.02	7.70	38.39	46.06	5.20	2.39	37.22	25.80	19.17	25.65	0.01	0.01	61.60	53.95

Note: The average for India has been calculated for a period of 13 years excluding 1976 for which data is not available.

## Section II

### Industry-wise Analysis

The purpose of this section is to provide a brief industry wise supplement to the foregoing analysis of the corporate sector as a whole. Its significance lies in the fact that the economic behaviour of companies can vary greatly between individual industries. An analysis of all the industry groups would have, of course, been ideal, but in the absence of comparable data for the Indian manufacturing private corporate sector, we restricted our analysis to three important modern industry groups in Kerala namely, (1) textiles, (2) engineering and (3) chemicals. It may be recalled that these three groups, along with the group rubber and rubber products dominated the private corporate sector in Kerala. Further, the period of analysis shall be limited upto 1981 since disaggregated industry-wise information at all- India level is available only upto that year.<sup>4</sup> This exercise, we feel, would reveal some interesting features of the financial performance of each industry group considered.

### Profitability Differential

We begin the analysis by noting the inter-industry differences in the profitability within the state as seen in the ratio of gross profit to total asset as well as the ratio of net profits to net worth. The industry-wise estimates of the average profitability ratios over the entire fourteen year period



revealed significant variations in the financial performances with certain groups like 'textiles', and 'engineering' reflecting a relatively poor performance and other groups like chemicals, printing, wood products and non-metallic minerals faring far better.<sup>5</sup> (see table 4.8).

Table 4.8

Average Profitability of Kerala Companies (1972-85)  
(percentages)

Industry Group	Gross Profitability (Gross Profit as % of Total Asset)	Net Profitability (Net Profit as % of Net Worth)
Textiles	4.26	-12.84
Engineering	4.09	-23.78
Chemicals	12.62	7.33
Printing	10.86	11.91
Non-metallic - Minerals	19.02	15.81
Wood	16.17	13.46
Others	5.24	-10.24
Total	6.99	-4.95

A comparison of Kerala with all India revealed that all the three modern industry-groups under consideration had a lower rate of return on total assets reflecting a low level of resource-use efficiency. In terms of the net profitability, (ie. the rate of return to net worth), however, the situation was slightly better with the chemical group recording a higher rate of net return (15.39 percent) as compared to all-India (14.31 percent). It was disturbing to note that the engineering industries on an average was running on a loss in terms of net profitability (-4.01 percent) during the period of study whereas at the all-India level it was one which had a high rate of return (11.27 percent).

Table 4.9

Average Profitability 1972-81: Industry-wise  
(percentage)

		Textiles	Engineering	Chemicals
Gross Profitability	K	6.66	5.69	14.37
	I	10.04	12.15	15.81
Net Profitability	K	1.45	-4.01	15.39
	I	8.27	11.27	14.31

K = Kerala

I = All India

Profit Margin And Asset turnover

As stated earlier, the gross profitability would be influenced by the ratios of gross profit margin and the asset turnover. Both these ratios were found lower than all-India in the textiles and engineering groups in Kerala. (see Table 4.10) This in turn was consistent with low gross profitability ratio in these two industries. In the case of the chemical industry the gross profit margin (also the gross profitability) was lower in Kerala. The asset turnover ratio, however, was slightly better than all-India, but the difference was negligible. The ratio of net profit margin was also lower in all the three industry-groups in Kerala.

All these ratios consistently point out the general inefficiency of the production system in Kerala as compared with all-India irrespective of the type of industry considered in the modern sector.

Table 4.10

Average Profit Margin and Asset Turn-over- 1972-81: Industry-wise  
(percentages)

		Industry Groups		
		Textiles	Engineering	Chemicals
Gross Profit Margin	K	5.45	-0.95	9.83
	I	6.79	9.87	14.37
Net Profit Margin	K	1.18	-7.97	2.94
	I	1.57	0.03	5.83
Asset Turnover	K	1.17	1.02	1.44
	I	1.50	1.12	1.10

K = Kerala  
I = All India

Cost Components

Let us now consider the cost structure in each of the industries. Table 4.11 giving the details of the average cost structure for the period as a whole, revealed that the share of wages in total cost of production was lower in the state relative to all-India in all the three modern industry-groups considered. It must also be noted that the relatively low wage cost in Kerala was observed in each and every year in all these industrial groups. (see Table 4.12). Thus, the analysis further imparted strength to our earlier observation based on the corporate sector as a whole, that wage cost in Kerala's manufacturing was not higher than at all-India level.

Table 4.11

Cost Components in individual industries (1972-81)  
(percentages)

Cost Component		Industry-groups		
		Textiles	Engineering	Chemicals
Raw Materials	K	56.43	67.98	60.16
	I	59.76	63.53	60.21
Power and Fuel	K	8.18	1.79	6.92
	I	5.74	2.43	5.67
Other Manufacturing Expenses	K	0.10	0.27	0.67
	I	1.14	1.37	0.51
Emoluments	K	17.87	11.87	9.46
	I	19.94	15.77	11.82
Repairs	K	3.57	1.50	4.57
	I	1.49	1.25	2.07
Selling Cost	K	0.83	2.47	4.68
	I	0.94	0.90	1.63
Other expenditure	K	5.35	5.83	6.87
	I	4.56	7.54	10.13
Depreciation	K	3.56	2.10	2.73
	I	2.60	3.02	4.63
Interest	K	4.11	6.20	3.95
	I	3.83	4.09	3.84
Total	K	100	100	100
	I	100	100	100

K = Kerala  
I = All-India

Table 4.12  
Percentage share of wages and total emoluments in  
the Total cost of production : Industry-wise

Year	Industry Groups					
	Textiles		Engineering		Chemicals	
	K	I	K	I	K	I
1972	18.84	19.11	9.98	16.17	8.15	12.69
1973	19.35	21.82	10.98	16.85	8.72	13.28
1974	17.90	23.21	14.01	17.30	7.95	13.91
1975	19.70	21.54	13.75	16.29	8.81	12.37
1976	17.29	20.99	11.89	16.03	10.32	11.39
1977	16.16	18.66	10.83	15.40	9.25	10.85
1978	16.10	19.90	13.36	16.01	10.44	10.88
1979	16.59	18.23	11.78	15.44	10.53	11.37
1980	18.23	19.02	11.26	14.44	10.18	11.09
1981	18.51	18.91	10.89	13.81	10.28	10.42
<u>Average</u> 1972-81	17.87	19.94	11.87	15.77	9.83	11.83

K = Kerala  
I = All-India

Hence, the poor financial performance of the companies in Kerala vis-a-vis all-India, would need to be viewed in terms of non-wage cost-components. Instructively, a higher average interest cost component in Kerala relative to all-India was found in all the three industry groups considered. Year wise details of the cost components also indicated a higher value for all the three industry groups under consideration in almost all the years considered, the difference being particularly higher in the engineering group. (see Table 4.13). Here again, the industry-wise analysis lent support to the earlier conclusions derived from the analysis of the sample companies as a whole that the high interest component put the corporate sector in the state in a disadvantageous position. This reflected upon the capital-gearing policy of the management in Kerala companies.

Table 4.13  
Percentage Share of Interest in Total Cost of Production :  
Industry-wise

Year	Industry Groups					
	Textiles		Engineering		Chemicals	
	K	I	K	I	K	I
1972	3.32	3.62	6.50	3.84	3.63	3.89
1973	3.08	3.60	6.07	3.80	3.23	3.52
1974	3.45	3.25	6.98	3.57	3.07	3.22
1975	4.67	3.36	7.23	3.92	3.62	2.93
1976	4.55	3.88	5.75	4.62	3.92	3.52
1977	3.92	3.99	5.68	4.57	3.97	3.35
1978	4.30	4.21	7.29	4.54	4.59	3.28
1979	3.83	4.04	5.75	4.02	4.24	2.99
1980	4.97	4.07	5.59	3.92	4.32	3.06
1981	5.04	4.27	5.19	4.11	4.88	3.61
<u>Average</u> 1972-81	4.11	3.83	5.83	4.09	3.95	3.34

K = Kerala  
I = All-India

### Capital Gearing

The examination of the gearing ratio for the individual industries revealed that the capital structure of two industry-groups viz., metals and chemicals on an average was tilted in favour of external debt relative to all-India (see table 4.14). The textile group presented a slightly different picture with a lower average ratio for the whole period. Textile group had operated initially with a lower gearing ratio, but gradually resorted to it more and more and as a consequences by the end of the 1980-81 it was found to have an equal if not higher reliance on borrowings than the corresponding group in India. Thus, the industry-wise analysis reaffirmed our earlier observation that on an average manufacturing private companies in Kerala operated on a capital structure geared more towards borrowing as compared to companies at the all-India level.

One could venture to generalise that a high gearing and the corresponding high interest burden in turn rendered the net returns to shareholders low and even in some cases negative specially when the gross profitability was significantly low. Textiles and engineering were typical examples. On the other hand, in industries where the gross profitability was high, the capital gearing policy characterised by the greater dependence on borrowing facilitated the trading on share capital as a result of which the shareholders could earn a better rate of return on their investment. The chemical industry in Kerala illustrated this case. The capital gearing policy thus exerted differential net-return impact on different industries depending upon the level of production efficacy (as reflected in gross profit ratio) in them.

Table 4.14  
Industry-wise gearing ratio over the years  
(Borrowings as % total asset)

Year	Industry Groups					
	Textiles		Engineering		chemicals	
	K	I	K	I	K	I
1972	37.48	47.42	52.16	38.56	44.44	38.74
1973	37.67	44.54	53.64	37.67	44.42	34.93
1974	33.74	39.67	52.34	35.96	39.88	32.08
1975	34.35	39.62	46.55	35.92	35.12	28.77
1976	38.82	42.49	47.81	36.41	39.85	31.29
1977	38.71	45.77	49.60	36.88	45.00	29.78
1978	40.93	47.66	49.61	36.21	51.63	28.66
1979	49.32	46.44	49.32	35.41	48.97	27.31
1980	46.01	45.66	46.70	35.71	50.12	28.41
1981	47.29	32.93	43.29	32.93	47.43	32.38
<u>Average</u> 1972-81	40.43	43.22	49.10	36.16	44.68	31.23

K = Kerala  
I = All-India

## Inventory Management

We may now examine the industry wise details of another dimension of managerial efficiency, namely the efficiency in inventory management. The industry-wise estimates of the inventory sales ratio revealed inter-industry differences. In the engineering group the inventory management was seen to be significantly different from that at all-India. The engineers group on an average maintained an inventory equivalent to five months sales as against approximately four months at all-india. The textiles group also indicated a higher inventory stock, but the difference was not as significant. In contrast the chemical industry in Kerala maintained roughly the all-India pattern with three months of sales as inventory as against a corresponding figure of 3.4 months at all-India.

Table 4.15  
Inventory-Sales Ratio : Industry-wise  
(No. of months of sales)

Year	Industry Group					
	Textiles		Engineering		Chemicals	
	K	I	K	I	K	I
1972	3.36	3.73	5.52	4.78	3.00	3.47
1973	2.88	3.62	4.80	4.63	3.36	3.38
1974	4.68	3.85	1.22	4.76	3.24	3.38
1975	5.52	3.67	4.56	4.90	3.00	3.85
1976	3.24	3.39	3.96	4.44	2.40	3.49
1977	3.12	3.22	3.60	3.98	3.00	3.13
1978	3.60	3.11	4.56	3.84	3.24	3.10
1979	3.84	3.02	3.24	3.78	2.76	3.06
1980	3.84	3.00	3.96	3.98	2.88	3.42
1981	3.48	2.98	3.96	3.71	2.64	3.43
<u>Average</u> 1972-81	3.76	3.40	5.04	4.28	2.95	3.37

K = Kerala  
I = All-India



### Other Cost Components

A similar trend of inter-industry differential was observed with respect to other components such as power & fuel and repairs & maintenance in the total cost structure. For instance, the shares of these components were higher in the textile group in Kerala relative to all-India. This was suggestive of the use of old plant and machinery and inefficient techniques of production. A similar situation was also observed in the case of the chemical industry. The engineering group reflected a higher material cost component than all-India. In this context the observation of a study would be worth mentioning. To quote, "In view of the locational disadvantages in material cost and interest cost, however, the profitability in the region is low particularly in engineering industries....".<sup>6</sup>

On the whole, the industry-wise analysis did show inter-industry differences in Kerala vis-a-vis all-India in respect of some components of the cost structure. This suggested that the cause of poor performance in different industry groups could lie in different directions. Hence, detailed analysis of industry specific characteristics are warranted to pin point precisely the factors responsible for the poor performance in each industry group. However, to the extent that the interest cost component was found to be uniformly high in all industries in Kerala vis-a-vis all-India, it seemed logical to suggest at least as a hypothesis, if not as a conclusion, that the poor financial performance of Kerala companies was linked interalia with the pattern of financing biased in favour of borrowings in the capital-structure.

To recapitulate the main findings of the analysis done in this chapter, the rate of return on funds in the non-governmental (private sector) companies in Kerala's manufacturing industry was found to be much lower than at all-India. This was reflected by the low average gross and net profitability ratios of the sample companies of Kerala as a group for the period 1972-85. The poor financial performance of Kerala companies was particularly marked in terms of the rate of net return on the net worth. In an attempt towards seeking explanations for the poor financial performance, we found that the high wage cost hypothesis often put forward in the context of Kerala, was not empirically valid as far as the private corporate sector was concerned. What came out as strikingly clear from the analysis of the sample companies as a whole as well as by major industry groups was the incidence of high interest cost, consequent upon a managerial policy of capital gearing in favour of external borrowings. This in the wake of low gross profit margins (production inefficiency) rendered the return on net worth abysmally low (often negative) and the investment climate not conducive for the growth of the private corporate sector in Kerala. The positive relationship of gross profitability and debt-equity ratio with the growth of the firm observed earlier (chapter 3) thus fitted well with the profile of the financial performance of the private corporate sector (chapter 4) in the manufacturing industry in Kerala.

### Notes and References

1. Oommen, M.A. (1981), Albin Alice (1988), Government of Kerala (1984)
2. Subrahmanian K.K. and Mohanan Pillai (1985)
3. Pillai, Mohanan (1989)
4. From 1982 onwards, only information pertaining to the three broad industrial groups processing and manufacture of food stuff, textiles, processing of manufacturing metals and chemicals..... and processing of manufacture of products not elsewhere classified has been furnished.
5. The number of companies and the weightage of each industrial group within the sample has already been furnished in chapter I in the course of our sample description. For the purpose of convenience and easily readability the names of the group have been shortened thus (i) textiles and textile products is referred for as just textiles; (2) metals and metal products as engineering (since engineering companies were greater in number in the group); (3) chemicals and chemical products as chemicals; (4) printing and publishing as first printing; (5) non metallic mineral products as just non metallic minerals; (6) wood products as wood. The firms belonging to the remaining industrial groups have been classified into a common group - others.
6. Subrahmanian, K.K. and Pillai, Mohanan (1985)

## Chapter 5

### SUMMARY AND CONCLUSION

In the context of the backwardness and slow growth of manufacturing industry in Kerala we examined in this study the origin, growth and financial performance of the private corporate sector in the state. To facilitate a better understanding we adopted a static comparative framework incorporating the trends of other southern states and at all-India.

The analysis revealed that Kerala, which had a strong corporate manufacturing base prior to independence has at present, the smallest number of companies and the lowest quantum of risk capital invested, as compared to other southern states. The manufacturing corporate sector of Kerala, we found, was reduced to the lowest position among the southern states even by the early 1960s. Despite the fact that the overall structural changes in the total corporate sector during 1961 - 1985 enabled Kerala to improve its share in the manufacturing paid up capital in all-India, the state even in 1985 continued to have the smallest corporate manufacturing base in south India. Further, a consideration of certain trends indicated that the increase in Kerala's share of paid up capital in all-India was mainly accounted by the government sector; the growth of the private sector in the manufacturing industry of the state remained relatively low as compared to other southern states and all-India.

Within the facet of low growth, important structural changes were observed during the period of study with the manufacturing group increasing in significance to become the most important business of the private corporate sector. As a consequence, chemicals & chemical products, metals & metal products (engineering) and rubber & rubber products emerged as the top three industry-groups in the private corporate sector by 1985. Of these, the growth dynamism of metals & metal products group was seen confined to the first half of the period considered i.e. 1961-70. During the second half of the period (i.e. 1971-85) it was the chemicals and rubber products groups, which exhibited considerable growth dynamism. The textiles group, on the other hand, declined in importance and was reduced to the fourth largest group in terms of paid up capital in 1985. These four groups taken together accounted for about 76 per cent of the total paid up-capital in the manufacturing private corporate sector in Kerala in 1985.

Having examined the growth trends and other related features of the corporate sector in Kerala, we moved on to analyse in detail the growth dynamics of a representative sample of companies in the manufacturing private corporate sector of the state. A brief review of the literature revealed that certain directional relationships could be postulated between the growth of the firm and a number of explanatory variables such as size, profitability, retention, debt-equity, liquidity etc. specific to the firm. The empirical testing of the postulated relationships with the relevant data on our sample of Kerala companies revealed that the growth of the firm was related to the level of

profitability, though not in the direct sense of high net profit and large retention of surplus leading to rapid growth through internal self-financing. On the contrary, the high correlation with debt-equity suggested that growth had taken place mainly through external borrowings with the efficiency in total resource use (as reflected by the gross profitability) acting as the incentive to expand. The relationships were found to be statistically stronger in the case of profitable companies. The fast growing firms were also found to maintain less of their capital blocked up in unproductive liquid assets.

The analysis reflected a lower resource-use efficiency and lower prospects for growth in the smallest-size group (less than Rs.10 lakhs) of firms. This could probably be due to too an uneconomic size of the capital-base of the firms in the group. Given exception to the behaviour of this particular group, no systematic tendency for growth or profitability to vary with the size of the firm was observed in the Kerala context. This suggested that the profitability and hence, the growth of the firms were independent of their initial size. In other words, given exception to the firms in the "tiny" sector, both small and large firms had the same chance of growing in Kerala.

Lastly, the analysis of financial performance of our sample companies indicated that the rate of return on funds invested in the manufacturing private corporate sector in the state remained low as compared to that at all-India. The average gross profitability as well as the net profitability ratios of the sample companies as a group were found to be lower than that

in the manufacturing private corporate sector at all-India. The poor performance was particularly marked in terms of net profitability ratio.

Further, the industrywise analysis revealed considerable variations in financial performance across industries. A comparison of three major modern industry-groups with the corresponding groups, in the Indian corporate sector indicated a relatively poor performance of two, namely, textiles and engineering in Kerala. In chemicals the performance was not significantly different from the corresponding group at all-India.

The analysis of the cost-structure of sample companies as a whole as well as industry-wise, suggested that the high wage-cost hypothesis generally put forward to explain the poor performance of the industrial sector in Kerala has no strong empirical base. Evidently, causative factors of poor performance seemed to lie in other directions such as, old and obsolete machinery & capital equipments, inefficient production techniques, raw material disadvantage, high interest cost etc. Among these, the notable feature was the high interest burden of the sample companies which could be traced to their capital structure. Both the overall as well as industry-wise analysis indicated that Kerala companies in general tended to operate on a highly debt-oriented capital structure, which on the face of low gross profitability, besides being financially unsound, rendered the net return to shareholders abysmally low, and even negative, as was particularly seen in the engineering and textile groups of

industries. In an atmosphere of general production-inefficiency in the manufacturing industry caused by a complex set of constraints embedded in the structure of the region's economy, the high interest cost arising from a pattern of financing tilted in favour of external borrowings, rendered the net return to investors less attractive than alternate avenues and depressed the climate for the growth of the private corporate sector and of the manufacturing industry in Kerala.

By way of general conclusion, we may say that the growth of private corporate form of capital is imperative for the healthy development of the manufacturing industry in Kerala. The state has had a tradition in the past, and has the potential now, to organise capital in joint-stock companies for manufacturing activity. In this context, developments like the high rate of household savings and buoyancy of stock-exchange market in the region are encouraging portents. No doubt, the growth-rate recorded during the last two decades by the private corporate sector in the state has been, as documented in our study, poor by all standards. A low level of net profitability has hindered the process of internal growth of the existing companies and acted as dis-incentive for new entrants with the result that the overall growth of the private corporate sector has been relatively low. The poor growth performance, we put forward as a hypothesis, is accounted mainly by the corporate financial policy tilted in favour of borrowings and the general production inefficiency in the region's manufacturing industry. Therefore, the responsibility of the government, both at the state as well as



the Centre, is greater today to kindle the necessary growth-stimuli in the private corporate sector.

In particular, the state government has to device policies and programmes to improve the productive efficiency of manufacturing activity as well as the climate for long-term industrial investment. At present, the state government offers a number of incentives and fiscal concessions to attract private investment from within and outside the region. Are these adequate enough? May be the state has to take initiatives to influence the business to follow a financial-management policy healthier than what is practiced today. May be, the efforts of the government should primarily be directed towards ensuring inter-industry linkages, agglomeration economies, technological modernization, marketability etc. that will raise the region's cost-effectiveness in manufacturing skill-intensive and high-value added products, and those that have backward-linkages with the regional economy. It is beyond the scope of our study to deal with such policy issues. Perhaps, further studies examining these in greater detail in the context of specific industries, are called for. Nevertheless, the findings of our study, when pieced together, provide a framework in which relevant issues can be studied and policy measures explored for strengthening the growth dynamics of the private corporate sector in the state's manufacturing industry.

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