IMPACT OF TRADE UNIONISM ON THE INDUSTRIAL DEVELOPMENT OF KERALA

A STUDY WITH REFERENCE TO SMALL SCALE INDUSTRIES IN KERALA

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CERTIFICATE

Certified that the thesis "IMPACT OF TRADE UNIONISM ON THE INDUSTRIAL DEVELOPMENT OF KERALA - A STUDY WITH REFERENCE TO SMALL SCALE INDUSTRIES IN KERALA" is the record of bona fide research carried out by Mr. M. M. Thampy under my supervision. The thesis is worth submitting for the degree of Doctor of Philosophy under the Faculty of Social Sciences.

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CHAPTER I

INTRODUCTION

Kerala's development experience is marked by the attainment of high levels of social development which indicate that people enjoy high level of physical quality of life in India.[1] This is reflected in the indices of higher literacy, lower infant mortality, higher life expectancy, etc., . But paradoxically, one finds a number of areas in which Kerala is lagging behind . The state experiences low rate of growth in agriculture and industrial sectors.[2] It has a low percapita income and a high rate of unemployment.[3] The level of inflation in the state is so high that it erodes the living standards.[4] Being a food deficit state, which produces cash crops, it has always been more monetised than the rest of the country. This has been very much more so, due to the foreign remittances of the migrant workers.[5] Kerala produces very few of the goods that it consumes. It has to meet much of its local demands by inter-state trade.

Kerala economy has been predominantly agricultural. But a noteworthy feature of Kerala is that the proportion of work force engaged in agriculture is the lowest in the country. And interestingly, the proportion has declined from 50.6 per cent in 1981 to 46.7 in 1991, according to the Census data.[6] Similarly, the share of agricultural sector in State Domestic Product (SDP) has been declining while the share of the tertiary sector has been increasing. Kerala is found to be one of the few states where the proportion of tertiary sector in both work force and SDP is relatively high.

Kerala is an industrially backward state. This fact is reflected in many indicators. The real percapita state domestic product in the manufacturing sector in

Kerala was Rs.120 as against Rs.180.00 at all India level in 1994–'95. Further, the share of manufacturing sector in net domestic product in the same year was around 16% in the state as against 19% for all India.[7] Again, as against annual compound rate of 11.79 per cent (at 1980–'81 prices) for all India, Kerala has recorded a marginal growth rate of only 1.89 per cent in value added by manufacturing between 1982–'83 and 1994–'95. Kerala's performance is also poor as compared to the achievements of the neighbouring states; the manufacturing sector in Kerala showed a compound annual growth rate of 2.98% (at 70–'71 prices) between 1980–'81 and 1994–'95. The corresponding figures are 6.25% and 7.01% for Karnataka and Tamil Nadu.[8]

But the potential of industrial expansion is great as Kerala has industrial raw materials though of different sorts: forests, cash crops, etc. Kerala's hydro electric potential is one of the largest in the country. The infrastructural facilities that the state possess are also notable. Above all, the state has educated and intelligent workers who are profitably employed in various parts of India and the world. In spite of all these advantages, Kerala is slow in exploiting these resources, when rapid industrialisation is so necessary to arrest the mounting unemployment.

What causes Kerala's industrial backwardness - remains a puzzling question. A close analysis of the causative factors clearly shows that apart from the general causes, some region specific factors are also responsible for the industrial stagnation of Kerala. But it is not however, easy to identify them. Following conventional wisdom, one may list out some of them and it is found

that they include both demand and supply side factors. On the demand side, the relatively low percapita domestic product at first sight would present Kerala as an unattractive location for industrial investment. The supply side variables like rawmaterials, infra-structure, labour and other factors are found to be more strong. The state does not enjoy the locational advantage for mineral resources. This disadvantage gets compounded by the lack of "agglomeration economies". Again, Kerala is often cited as a typical case where industrial growth is constrained by a lack of adequate number of entrepreneurs. As pointed out by Raj (1960) there is no clear evidence yet of growth of entrepreneurship in Kerala except at fringes; this appears to be less due to the lack of necessary ability than to the other seemingly more attractive alternatives.[9] In Kerala's context, the government has got a key role to play. Historical evidence shows that the level of private investment in the state has been very low. It is the public sector investment that sustains industrial activity in the state. Indeed, the state government had made many daring attempts to boost the level of industrialisation in Kerala. Joint production ventures with private sector, industrial estates, etc., are some of the notable examples in this line.

One of the most important supply side variables is labour. A significant factor in the development of industries is efficient but also contented labour. There is a strong feeling among entrepreneurs, general public and the media that labour is more restive in Kerala than elsewhere. So they perceive that Kerala is a region lacking industrial peace. Whether this is only a simple perception or it has some factual basis has to be researched for.

Based on the classical 'least-cost' theory of location, one will be able to say that industries tend to be located on the basis of maximisation of profit and minimisation of cost. But there are several other factors which may have to be taken into consideration. These factors are pictured by the modern school of location theories.[10] In Weber's simplified world, three factors influence industrial location. These are the two general factors of transport, labour costs, and local factors of agglomerative or deglomerative forces. He illustrates that a place in which labour is relatively cheap is capable of getting the factory from the least transport cost location diverted. Following Weber, Palander, Hoover and Lösch have explained the location theory by giving much significance to market structure. Later Myrdal (1957), through his 'cumulative causation models' has argued that the play of forces in the market normally tends to increase rather than decrease the inequalities between regions with regard to industrialisation.[11] Kaldor (1970) has later translated the Myrdal's model into a formal one and has made it in to testable hypothesis.[12] Schmenner (1982) through a survey found that the site and plant difficulties such as obsolescent equipments, high labour cost and unfavourable labour climate were the most frequently quoted factors guiding locational decisions.[13] Stoper and Walker (1989) have made it clear that it is not only the direct labour cost, measured in terms of wage rates but also the quality, productivity and managability of labour that are important for determining location of industries.[14]

It may be true that locational decisions of many small scale entrepreneurs are not made on a strict calculus of costs and returns. Some may prefer a

steady return to higher profit and some others may look for a peaceful industrial atmosphere when compared to high profit. In his theory of industrial location, Greenhut (1956) points out the peculiar nature of small firms. They seek a relatively small market area, and will move to a distant point of the market more rapidly than a large firm. They may want a location from which they can serve a major part of the market. In addition to transportation, processing costs and the demand factor, he considers 'personal consideration' as very significant because it influences the precise choice of a location that provide the entrepreneur with 'psychic income'. Again, about this phenomenon, Richardson (1977) comments: "profit maximisation is an unsatisfactory goal for location decision makers for several reasons. For most type of establishments, a location decision, once taken must stand for a long time because of heavy relocation costs.... an entrepreneur may place a great deal of emphasis on security.... . There is increasing evidence, though much of it is impressionistic, that the location decisions more than most other managerial decisions, have to take in to account 'psychic income' influences and other personal factors, which are not easily compatible with narrow definitions of economic rationality".[15] So before finalising the location decision, every wise entrepreneur tries to assess the magnitude of psychic costs involved in his investment. In other words, even if there is prospect for a high return due to favourable location of many needed factors, the entrepreneur's perception of labour in a given region as trouble making may influence negatively his location decisions.

One of the most important requirements of development is the prevalence of a reasonable stable and peaceful industrial relations climate. The emergence of a mature and responsible unionism is regarded as quite essential for maintaining peaceful industrial relations climate.[16] Kerala is often described as a problem State in respect of industrial relations. It is one of the few states in India where strongly organised labour unions do exist. It seems that there is a correlation between trade union growth and growth of industrial disputes in the State. In the report of the High Level Committee of State Planning Board (1984), it is stated that "while employment creation has been slow due to low investment and low rate of growth, especially in industry, trade union movements backed by political parties, organised agitations and successfully pushed up wages and the other emoluments of the labour employed in the organised sector. For many years, the labour agitations in the State and the situations created in the industries as a result of such agitations was cited as one of the main reasons why industrialists both from with in and outside the state were shy to invest in the State".[17] It is in this context that we propose to conduct this study to examine the questions; whether labour in the State is more restive than in other States, whether they have been able to push up the wages and if so, what is the role of the trade unions in making them so.

I.1 Review of Literature

In this section, an attempt is made to review the available literature and to organise them in a chronological order. For the purpose of convenience, the studies

are classified into three groups; first studies on trade unions having international coverage, second, relevant studies in the context of India, and thirdly, studies relating to trade unionism and industrialisation particularly in the context of Kerala.

The actual impetus for a comprehensive theorisation of the labour movement and the trade unions was furnished by Karl Marx. Subsequently, theories of trade unionism have been developed by various scholars all over the world. The most important question that these theories are trying to answer is "why do workers join unions"?

According to Karl Marx[18], capitalism resulted in a free labour market where workers were forced to sell their labour to exist, in turn resulting in the emergence of unions aiming at obtaining a 'fair' wage. Unions developed because as capitalism matured, increased capital would flow into plant and equipment and relatively less into wages. Since, in Marx's labour theory of value, only labour was capable of producing a surplus over costs, profits would necessarily fall, resulting in a decrease in wages as employers attempt to cut costs. Unions would emerge in an attempt to slow down temporarily the Marxian process as well as to sharpen the struggle between classes with the eventual result of the over throw of capitalism and the establishment of communism.[19]

Sidney and Beatrice Webb[20], the leading British socialists, developed one of the most systematic, influential and comprehensive theories of the labour movement. Like Marx, they used the emergence of a separate working class to

explain the origin of labour movements. They considered the primary goal of labour unions as protecting the workers from the evils of industrial competition. Drawing on their examination of British trade unions, the Webbs developed an evolutionary theory of the trade union as an instrument to extend the principle of democracy into the work place and eventually the whole economic system. They formulated a series of stages characterised by regulations by which unions attempted to improve conditions in the work place.

Following the paradigms of Marx and of the Webbs, J. R. Commons[21] developed his theory of labour movements in U. S., which in turn formed a portion of his general theory of industrial development and used an empirical approach to labour as well as other economic problems. He felt that labour was a unique class with distinct interests that used unions as a means to furthering its interests. The working class emerged when the wage earner replaced the serf. Commons believed capitalism developed in three stages beginning with merchant capitalism that was followed by employer and finally banker capitalism.

A protege of Commons, Selig Perlman formulated a theory of labour "from the concrete and crude experience of the wage earners" that included the "psychology of the labouring man" formulated from the working rules, customs and practices of labour unions.[22] Using a model, Perlman deduced that two factors emerged as basic in any modern labour situation. First, the degree of dominance over the labour movements by intellectuals' 'mentality', which regularly under estimates labour's will to radical change; and secondly, the degree of maturity of

a trade union 'mentality'.[23] As opposed to Marx and Webbs, but like Commons, Perlman did not see the nationalisation of industry as the ultimate outcome of unionism, but rather the effective control of industry via workers' movements.

John. T. Dunlop[24] developed a more generalised theory of labour that included government in addition to workers and managers. Dunlop's model is institution (rule)-oriented. His purpose is to explain why particular rules are established in particular industrial relations system and how and why they change in response to changes affecting the system. Dunlop believed that technological characteristics (the production function) are important in that they go far to determine the size of the work force, its diffusion, the duration of employment etc. He further assumed that working conditions, wages and hours of work are influenced by market constraints faced by the firm. If the firm operates in a competitive output market, it enjoys less latitude with wages and other employee benefits than if the employer operates in a less than competitive market. Therefore, market constraints affect the growth of trade unionism in that competitive firms are faced with failure if they provide a greater than market wage and benefit package.

The movement away from primarily economic interpretations of union behaviour is found in Arther Ross.[25] By criticising Dunlop's Wage- employment relationship, Ross incorporated three distinct but interrelated goals for unions. They are: 1. maximisation of economic welfare of the membership; 2. the survival and growth of the union itself, and (3) the enhancement of the power of

union officials in an attempt to insure their personal survival. Wallace Atherton[26] later incorporates Ross's three categories of union interests to explain and predict the objectives but not the results of collective bargaining. His model incorporates a synthesis of both political and economic variables affecting union behaviour and unlike Ross's, the variables in Atherton's maximas for leaders as well as members are subject to an employment-wage constraint recognised by union leadership.

A relatively recent theory of unions has been posited by Richard. B. Freeman and James. L. Medoff.[27] Freeman and Medoff argue that current union behaviour is best predicted by a combination of a couple of traditional labour union theories; one believing in the role of unions' success in increasing labour productivity via an improvement in worker morale, increasing skill development, etc., and the other in interpreting unions as monopolies on supply side of the labour market, the effect of which is increasing wages and decreasing efficiency through the substitution of other inputs for labour. They further opine that although unions help their members in attaining a higher than competitive wage, there exists no one union versus non-union wage differential among all socio-economic groups. The effect of unions on wages is greatest in heavily organised and regulated industries. Also, Freeman and Medoff believe that unions increase the equality of income among workers, reduce the cost of worker' pensions, accident, health and life insurance, increase the stability of the work force by providing arbitration proceedings and in many industries have a higher rate of productivity than non-union establishments.

In the light of the foregoing review of the leading trade union theories, it may be asserted that an important aspect of the study of trade unions has been their impact on wages. Generally, the motive of trade unions is to bargain with employers and try to improve the economic condition of their members. A high degree of unionism would mean that workers are in a better position to bargain and hence increase the wages of the workers. Therefore, unions exert pressure and raise money wages if not real wages.

In India, some studies have empirically tested the impact of unions on wages. The pioneering work was undertaken by A. J. Fonsecca.[28] He studied the impact by testing the hypothesis that unions are a factor in raising money wages and analysed Indian data for the period 1939–'56. In his regression analysis, money wages paid to workers was taken as dependent variable, degree of unionisation, cost of living index and productivity were taken as independent variables. His results showed that impact of unionisation is positive but not significant.

Taking the same variables, C. K. Johri[29] re-tested the theory for the period 1951–'61. He used the correlation technique to study the relationship. The simple correlation between money wages and degree of unionism was found to be 0.75. When Consumer Price Index effect was singled out, it became-0.04. He came to the conclusion that the principal determinant of earnings in the manufacturing sector is the Consumer Price Index.

Another study of the same type was done by G. K. Suri[30] for the period 1959–'69. The main findings of Suri are that changes in money earnings are

largely explained in terms of changes in cost of living index and productivity index. He also finds that there is no evidence of the degree of unionism having a positive influence on money earnings. But he has observed that the influence of unionism could perhaps be understood indirectly in terms of union pressure for neutralising the cost of living and there is reason to believe that an increase in the degree of unionism is accompanied by rivalry and factionalism and to that extent it reduces its effectiveness.

Based on the studies of Johri and Suri, Ramjas[31] attempted to study the impact of unionism on wages for the period 1960–'80 in the manufacturing sector of the country. The ratio of mandays lost to industrial disputes has been used as a proxy for measuring degree of unionisation. The findings of the paper have rejected the hypothesis that trade unions positively influence the money earnings of workers in the manufacturing sector of India.

There exists a number of studies on trade union movement of the production sector in Kerala. K. Ramachandran Nair[32] attempted to examine the hypothesis that Kerala's labour and industrial unrest are direct manifestations of the underlying deficiencies of the system of labour-management relations that prevail in the State. The study has concluded that the general view regarding industrial unrest is considerably exaggerated and that the record of labour management relations and practices in the state, properly interpreted, does not lend support to it, though there is considerable scope for improvement.

One may also refer to the work of A. V. Jose[33], undertaken in the late 70's on agricultural labour. In his paper, Jose has attempted to unearth the major conditions leading to the emergence of militant labour organisation in the agricultural sector of Kerala till the beginning of seventies. He analysed the factors that led to the growth of agricultural, labour organisations in two selected regions of Kerala, where powerful trade unions among the workers were in existence. The study's major finding is that the rise of trade unions among the agricultural workers in early forties to sixties is linked to the institutional and technological changes associated with the permeation of capitalism into traditional agriculture. The other concomitant factor that promoted the growth of trade unionism in Kerala was the able and inspiring leadership of the pioneers and the active patronage rendered by the political parties.

The study conducted by M. A. Oommen[34] with a view to find out the causes for the flight of small scale industries, both traditional and modern from Kerala to neighbouring states, especially to Tamil Nadu and Karnataka, found that "if anticipated flow of profits are high in a region due to availability of cheap and non-unionised labour which adds to 'security' as against the area of high wage and labour trouble, the mobility of entrepreneurs is likely to be high, especially if there are complementary factors which reduce the social distance even though there may be other compelling environmental and other attractions in familiar areas".[35] The data used was based on a sample survey, covering the registered small scale units. The work could empirically prove the high labour cost hypothesis in the context of Kerala. It was indicated that cheap labour and peaceful

atmosphere are the most significant factors influencing the entrepreneur's decisions for locating the units outside Kerala.

K. P. Kannan[36] has tried to analyse the process of wage bargaining and its implications on the conditions of labour and the organisation of production in the cashew processing industry of Kerala. He has located the root causes responsible for the emergence of trade union organisation among the Cashew workers and efficiently mapped out its significant achievements in increasing wages and improving the working conditions. According to this study, the out migration of the cashew industries from Kerala to Tamil Nadu is due to high wages (compared to neighbouring states) and organised labour market (due to trade union activities) existing in Kerala. The study has concluded with a note that the existence outside state of a still cheaper and unorganised labour market threatens the prospects of employment to organised workers in Kerala.

Thomas Isaac[37] has studied the development of trade union movement in the coir weaving industry of Kerala. He has attempted to delineate the conditions that facilitated the growth of militant unions in the small scale coir weaving units and mapped out its consequences on the industrial structure. The important factors that emerged are the general political atmosphere of the Alleppey country side and the historical links of trade union movement in the small scale coir weaving units with the militant trade union movement in the large scale coir manufacturing units and the appropriate tactics of struggle that the trade union movements were able to forge in the informal sector.

The growing solidarity of Kerala's Coir workers (1930–'40) was again studied by Robin Jeffry.[38] Contradicting one strand of conventional wisdom about labour, Jeffry found that the coir workers' unions grew in strength and militancy during a depression and the unions successfully sublimated the deep caste and religious antagonisms of Kerala society such that by the 1940's it could fairly describe itself as a class conscious organisation.

In their pioneering work, K. K. Subrahmanian and P. Mohanan Pillai[39] have advanced an alternative hypothesis to explain the industrial backwardness of Kerala. The study focused on examining the empirical basis of the alleged inefficiency of Kerala's industrial system in terms of labour militancy, high wage cost and low productivity. They used the data from ASI for the factory sector and examined the phenomenon in the context of Kerala's large scale industries. The analysis brought forth the conclusion that "the high wage cost hypothesis to explain stagnation in industrial growth rate and its regional differentiation process is devoid of empirical support in the case of Kerala. If industrialisation in Kerala has not progressed, the root cause has to be searched not along the labour cost but in other dimensions".[40] But the study has spotlighted the supply side factors, especially some degree of labour discipline and the creation of a climate of confidence for private investment as very crucial for rapid industrialisation of the state.

C. Radhakrishnan[41], in his study on productivity trends in Kerala industries has tried to study the wage-productivity relationship in manufacturing industries of Kerala. Based on ASI data, the work analyses both Census and Sample

sector industries. The analysis points out that ten industries accounting for 26 per cent of the total value added in Census sector in Kerala have higher wages while remaining 14 industries mark lower or same levels of emoluments per employee compared to rest of India. Contrastingly, in the sample sector, 12 industries, accounting for 52 per cent of the value added have registered higher emoluments per employee. The study has spotlighted the fact that the relatively higher emoluments per employee observed in the case of sample sector (SSI) of Kerala may be mainly attributed to the bargaining power of trade unions which are dominant in the small scale industries than in their counterparts in other states. The work has come to the significant conclusion that the revalence of relatively high wage rate in the small scale industries of Kerala appears to have important implications for the industrial development of the State.

Thomas Isaac and Michael Tharakan[42] have made an enquiry into the historical roots of industrial backwardness of Kerala. They have centered their study around Travancore region and the study has inferred that the last 15 years of the colonial era in Travancore were characterised by considerable industrial dynamism and growth of modern industries but by contrast, the first 15 years of the post independence period proved to be one of industrial stagnation. Lack of sufficient initiative taken by the new State Government in keeping up the pace of industrialisation due to fiscal crisis, administrative problems and political instability, scant attention that the needs of the state received from the Central Government due to inadequate political pressure, and the drying up of the inflow

of Tamil capital, were identified as the main causes for industrial backwardness in the state during the post independence period.

Vijay Sankar[43] has studied the development of trade union movement and its consequences on an important segment of the urban informal (unregistered) sector in Kerala. The focus of the study was the casual wage labourers in the urban tertiary sector namely the head load workers of Trichur. He argues that unionisation constitutes the single most important difference between the urban casual labour market in Kerala and the rest of India. The study has reached the conclusion that the unions were able to create barriers to entry in the labour market as a whole and prevent the free flow of labour in the labour market through extreme level of labour market segmentation. The hightened bargaining power has resulted in significant improvements in wages and the conditions of work.

The study made by B. A Prakash[44] on the economic causes of unemployment in Kerala is also relevant here. He has pointed out that the 'restrictive labour practices, imposed by labour and labour organisations had distorted the labour market operations in Kerala. Based on the available literature on traditional and non-traditional industrial sectors of the State, the study has concluded that the unfavourable labour atmosphere arising out of the frequent strikes, confrontations, bandhs, inter-union rivalries and prolonged closure of industrial units due to militant trade union activities have created a bad impression about the industrial climate of Kerala, which is one of the major causes for the low pace of industrialisation in the state.

In his study, S. Mohanakumar[45] has made a descriptive and empirical analysis of the trends and patterns of industrial disputes in the organised sector of Indian Economy covering the period 1951–'85. The analysis is carried out not only at the aggregate level but also at varied levels of disaggregation viz. according to region, industries, and public/private sectors. The study has made the finding that the mandays lost ratio sharply increased from 1978 onwards, while the average duration of disputes, on the other hand, increased only during 1980's. It is also found that the proportion of lock out to strikes has considerably increased over time, particularly from the late seventies. When compared to the private sector, the share of public sector in total disputes has been rising over time and the number of workers involved per dispute in public sector is larger than in private sector. It is also argued that the industrial deceleration and predominance of crisis-ridden and 'sun set' industries in West Bengal and Kerala are responsible for the high incidence of disputes.

Based on a Survey, the Task Force for review of implementation of plan scheme under industries sector[46] has made an important finding that the biggest bottle neck in industrialising Kerala at present is the labour front outside the factory (*i.e.*, construction, loading and unloading workers).

K.K.Subrahmanian and P. Mohanan Pillai [47], in their recent study on modern small scale industry in Kerala, have made an attempt at reviewing the relative growth and structual change of small industry in Kerala compared to all India. The study, by using the data from the Report on Second All India Census of

Small Scale Industrial Units, has highlighted some of the major problems that the small scale industry in Kerala is faced with. Particular mention has been made here on the relatively small size, low capacity utilisation, low factor productivity and unfavourable wage-productivity relationship. Among these problems, the wage-productivity relationship has been noted as specially relevant. "For average money wages was not what mattered in investments decisions, what would matter to the entrepreneurs was the wage-productivity relationship. The share of wages in the net value added would therefore be the relevant parameter for considering the wage-cost hypothesis. Thus viewed, it was disturbing to find from the Census data that Kerala was one among the few states with high proportion of wages in value added. The share of wages in value added in Kerala was much higher than what it was in neighbouring states as well as in other industrially advanced states including West Bengal. In Kerala, the wage share in value added on an average (42%) was nearly twice as high that of all India (22%) level. Apparently, wage-productivity relationship in Kerala was found relatively unfavourable for prospective investment in the small scale industry".[48]

The foregoing literature review shows that already there exists a number of studies on the trade union movement in the formal and informal sectors of Kerala. But none of these studies makes an indepth analysis of the interrelationship between trade union growth, industrial disputes and industrialisation of the state. Hence the proposed study is relevant and may fill in the research gap that exists in the area.

I.2 Objectives of the Study

The study tries to probe into the inter-relationship between trade union growth, high labour costs and industrial atmosphere in the state and attempts to analyse the impact of these factors on the growth of small scale industries in Kerala.

The major objectives of the study are:

1. to examine the present industrial status of Kerala.
2. to make an assessment of the growth and characteristics of trade unionism in Kerala.
3. to analyse the industrial disputes in Kerala at both aggregate and disaggregate levels.
4. to study the extent of labour cost difference in the small scale sector of Kerala compared to neighbouring states and all India.
5. to empirically verify the effect of trade unionism on the high labour costs in the small scale sector of Kerala.
6. to examine the perception of entreprenuers on the industrial relations climate of the state and to find out whether their perception in this regard adds to their psychic costs.
7. to examine whether the high labour costs - both wage cost and psychic cost - discourage small entreprenuers from investing in Kerala or encourage them to shift their units to neighbouring states like Tamil Nadu.

I.3 Methodology and Data Base

We have attempted to study the impact of trade unionism on the industrial development of the state by making a detailed industry-wise as well as a firm-wise analysis. The industry-wise analysis was based on secondary (time series) data where as the firm-wise study was made using primary data collected through a sample survey.

The main sources of secondary data are the Reports of the Annual Survey of Industries, published by the Central Statistical Organisation, Government of India. The Annual Survey of Industries (ASI) was publishing two sets of industrial data separately, one, on large scale industries (Census Sector) and the other on small scale industries (Sample Sector) till 1971. From 1971 onwards, it started publishing a new set of data covering the entire industrial sector (Factory sector) along with Census Sector and the publication of data on sample sector has been stopped. Again, the data on Census sector was available only till 1985–'86 at the time of our study. Hence the present publication of ASI is covering the entire manufacturing sector and is known as the Factory Sector.

But for the present study, we required the data regarding small scale industrial sector (SSI) and they are not readily available. So they have been computed by deducting the ASI Census sector (which includes only large scale industries) from ASI Factory Sector (which consists of the entire industrial sector). Thus we have got the time series data for the small scale sector (SSI) covering the period 1970–'71 to 1985–'86.

This has been supplemented by the reports of the Industries Division of the Directorate of Economics and Statistics, Government of Kerala. The trade union data for the study is collected from 'Indian Labour Statistics' and 'Indian Labour Year Book', two annual publications of Central Labour Bureau and from the official records of the Labour Department, Government of Kerala.

The chief source of primary data is the sample survey conducted among small scale entrepreneurs. For getting a representative sample, we have decided to take 201 small scale registered units[49] representing modern small scale industries in Kerala. The traditional industries like Coir, Cashew, Beedi, etc. are purposefully avoided because they are already covered by certain studies.[50] Based on the number and concentration of Small Scale Units, three districts; Trivandrum, Ernakulam and Palghat (the first two representing the two erstwhile princely states of Kerala namely Travancore and Cochin and the third representing Malabar, formerly a part of Madras Presidency) were selected for the Survey. Among the different modern industries, ten were selected for the study. This selection was mainly on the basis of the nature and concentration of modern industries in the State. After locating the ten industries, we calculated the proportion of each group in the district to the State total and thus the number of units in each district were identified. By using the random number table, the exact sample units in each district were selected. Finally, the survey was conducted through personal interview of entrepreneurs with the help of structured questionnaires.

It is understood from the pilot Survey that a good number of SSI units of modern type have been shifted from Kerala to Coimbatore in Tamil Nadu during the last 15 years. So, as a second part of the survey, we covered Coimbatore by selecting a sample of 50 units at random covering the same ten industries.

To collect more details in respect of working condition in the units, and the trade union activities, the workers and trade union leaders were directly contacted by the researcher for discussion. Supplementary information and materials are collected from the published literature.

Data collected from various sources were analysed by using statistical tools and techniques such as averages, percentages, regression and Scalogram.

In this study 'labour cost' is defined not only in terms of wages and welfare costs but also in terms of loss and inconvenience due to strikes and disputes and phobia about militant labour. Hence for operational convenience, 'labour cost hypothesis' has been split up into two; 'wage cost hypothesis' and 'psychic cost hypothesis'.

For the purpose of our study, we have constructed a phobia index which is not commonly used in industrial studies. Here, by phobia, we have meant the extreme fear of the industrialists to make investments mainly due to the fear of excess trade union activities in the state. As phobia relates to the psychological state of the entrepreneurs, no direct measurement will be pragmatic. Hence we have made use of the Scalogram technique for quantifying the qualitative opinions given by the entrepreneurs covered by our survey. The scaling is the process of ordering qualitative characteristics. The widely accepted

scalogram technique is the 'Cornell Technique of Scaling'[51] developed by Louis Guttman which mainly deals with a scalable unidimensional universe. Here Guttman considered an area scalable if responses to a set of items in that area arranged themselves in certain specific ways. In particular, it must be possible to order the items such that, ideally, persons who answer a given question favourably, all have higher ranks than persons who answer the same question unfavourably. From a respondent's rank or scale score we know exactly which items he indorsed.

The mechanism of the technique is that first of all a few questions are put up in an intelligent way so as to catch the respondents' attitude to the problem under study. For each question, different scales are given. For eg: if we have selected a seven point scale, the values are given as 6, 5, 4, 3, 2, 1 and 0; strongly agree - 6, agree - 5, partially agree - 4, undecided - 3, partially disagree - 2, disagree - 1, strongly disagree - 0. Then by adding the scale values for each question, we get necessary quantified data of a particular variable.

I.4 Scope and Limitations of the Study

The area of enquiry of the study is confined to Small Scale Industrial Sector (SSI)[52] of Kerala and it does not cover the Large Scale Industries. This has been done because the latter has already been the subject matter of many studies.[53] Moreover, taking into consideration the employment potential, the development of the SSI Sector is assuming greater significance in the face of grave unemployment problem in the state.

The scope of the study is limited to the organised small scale sector (registered units) which is the formal sector coming under the perview of Factories Act of 1948. This is not because of the lack of relevance of the informal sector (unregistered units) in the Kerala economy, but because of the paucity of reliable data on it.

The major source of secondary data for the study is the Reports of the Annual Survey of Industries (ASI). But the main limitation of ASI data is that while all units in the Census sector are enumerated completely, the sample sector (SSI) units are covered on the basis of a probability sample. Hence ASI data with regard to small scale units (Sample Sector) till 1971 may not be useful for comparison. Moreover, The ASI data on Census Sector were published regularly only till 1985–'86. Therefore, only the ASI data from 1970–'71 to 1985–'86 were used for the present study.

For outside State comparison, the primary survey covers only 50 units and that too only in Tamil Nadu (Coimbatore).

I.5 Organisation of the Study

The study is presented in seven chapters. The present introductory chapter provides the statement and significance of the problem, the review of literature, objectives, methodology and the scheme of the study. The second chapter analyses the trends in industrial growth of Kerala covering both Census and Sample sectors. A picture of trade union growth in Kerala and its various dimensions

are given in the third chapter. The fourth chapter contains a period-wise analysis of industrial disputes in Kerala along with an all India Comparison. This is followed by an industry wise and a firm-wise empirical analysis of the 'labour cost hypothesis' in the context of industrial development in Kerala in the fifth Chapter. The sixth Chapter deals with the psychic cost analysis of the Small Scale entrepreneurs. The last Chapter summaries the main findings and provides policy implications.

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52. Here, the small scale industrial sector (SSI) has been defined as per the definition given by Annual Survey of Industries (ASI). According to the classification given by ASI, the registered Factory Sector is divided into two: Census Sector and Sample Sector. The Census sector covers all units employing 50 or more workers using power and also units employing 100 or more workers without power. The Sample Sector (SSI) comprises of all factories employing 10 to 49 workers using power and units employing 2 to 99 workers without power.

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CHAPTER II

INDUSTRIAL STATUS OF KERALA

II.1 Introduction

It is usually found that successful development of an economy is associated with structural changes marked by a sharp increase in the share of manufacturing industry in total output. To quote Kaldor "it is the rate of growth of manufacturing production (together with ancillary activities of public utilities and construction) which is likely to exert a dominating influence on the overall rate of economic growth, partly on account of its influence on the rate of growth of productivity in the industrial sector itself and partly so because it will tend, indirectly to raise the rate of productivity growth in other sectors"[1]. More generally as a process in economic growth, industrialisation diversifies the production base, raises productivity of factors, accelerates the rate of technological change throughout the economy, and thereby expands the capacity of the society to meet its material wants[2].

In this chapter, an attempt is made to look into the long term trends in the industrial growth of Kerala. It begins with a look at the rate and pattern of industrialisation in the State. This is followed by an empirical analysis of the evidence relating to the structural diversification that took place in the Kerala economy. We have also tried to examine the percapita income (NDP) at current prices and at constant prices (1970–71) with a view to understand the extent to which economic growth as a whole has occurred in the State. Finally, the question of "Industrial Deceleration" in the context of Kerala economy is dealt with at length.

II.2 The magnitude of Industrialisation in Kerala

The comparative picture of the Census sector (large scale) and the Sample Sector (small scale) with regard to the number of factories registered, gives us an idea about the nature of industrialisation in Kerala. Though both large scale and small scale units in the State increased in number during the period 1970-'94, the annual rate of increase was notably lower compared to the neigbouring states like Tamil Nadu and Karanataka and also with all India[3]. In the year 1993 - '94, the number of registered factories in the Census Sector were 926, while that in the Sample Sector were 96,934 in Kerala. Based on the employment potential, compared to Census Sector, the Sample Sector of Kerala occupies a prominent place[4]. But in terms of investment, both sectors are far behind the national average[5].

Table 2.1 gives a district-wise break-up of the number of small scale industries in Kerala for the year 1994-'95. Among the different districts, Eranakulam tops the list, followed by Cannanore, Trichur and Kottayam. Alleppey, and Quilon which had traditions of industrialisation were found to be accounting for only smaller share of units now. Kasargod and Pathanamthitta, the new districts have only smaller number of small scale units. In terms of number of units registered, among the districts of Kerala, Eranakulam is the most industrialised and Wayanad the least.

Table 2.1
Small Scale Industrial Units in Kerala in 1994–95
(District-wise)

District	No. of Units	Percentage of Total
1. Trivandrum	7651	7.89
2. Quilon	8925	9.20
3. Pathanampthitta	2989	3.08
4. Alleppey	7994	8.24
5. Kottayam	9280	9.57
6. Idukki	2875	2.96
7. Ernakulam	14909	15.38
8. Trichur	9879	10.19
9. Palaghat	7503	7.74
10. Malappuram	4740	4.86
11. Calicut	7218	7.44
12. Wayanad	1363	1.40
13. Cannanore	10197	10.85
14. Kasaragod	1411	1.45
Total	96934	100

Source: Directorate of Industries and Commerce, Govt. of Kerala, Trivandrum 1996.

II.3 The structure of Growth

Table 2.2 shows a state-wise comparison of the overall growth pattern. The annual growth rate of percapita SDP in Kerala between 1971 and 1991, in real terms has been as small as 0.5 percent as against 1.1 percent for all India. The annual rate of growth at current prices for Kerala was only 7.1% as compared to the national average of 9.5% per annum during the same period.

Table 2.2
Growth of Percapita State Income
(Net Domestic Product) (Rupees)

States	At current prices				At constant prices			
	1970–71	1980–81	1990–91	Annual rate of growth (percent	1970–71	1980–81	1990–91	Annual rate of growth (percent)
Andhra Pradesh	586	1313	2113	7.5	586	649	760	1.1
Assam	535	1221	1835	8.9	535	538	601	0.9
Bihar	402	927	1590	8.1	402	447	460	1.3
Gujarat	829	1828	2632	8.0	829	861	930	1.1
Hariyana	877	2331	3200	10.5	877	1061	1175	2.0
Karnataka	685	1314	2390	7.8	685	637	738	1.0
Kerala	594	1379	2030	7.1	594	619	662	0.5
Madhya Pradesh	484	1131	1672	8.2	484	493	516	0.4
Maharashtra	783	2261	3931	12.4	783	980	1399	2.4
Orissa	478	1101	1717	8.5	478	529	590	1.3
Punjab	1070	2771	4081	11.3	1070	1380	1509	2.9
Rajasthan	620	1238	1176	6.5	620	542	502	1.2
Tamil Nadu	581	1197	2280	7.9	581	615	706	0.9
Uttar Pradesh	486	1280	1895	9.8	486	518	578	0.8
West Bengal	722	1553	2810	8.8	722	761	801	0.8
All India	633	1559	2483	9.5	633	697	729	1.1

Source: CSO- Estimates of State Domestic Product 1960–61 to 1992–93.

It is highly significant to note that the proportion of the work force engaged in agriculture in Kerala is the lowest in the country. The percentage of workers engaged in agricultural sector has declined from 55.5 in 1971 to 41.2 in 1991[6]. It has been noted by early researchers[7] that the heavy decline in the proportion of agricultural work force in the State stands in contrast to the minute decline at the national level. Table 2.3 presents the composition of Net Domestic Product (NDP) in Kerala and all India. In terms of its share in the State income, the primaty sector in Kerala has been declining. The contribution made by primary sector has fallen from 56% in 1960–61 to 33% in 1993–94, when calculated at current prices. But it may be seen that the contribution by primary sector to NDP at the national scene has not been declining as fast as in Kerala. In fact, it improved especially during 90's.

Table 2.3
Sectoral Contribution of Net Domestic Product
of Kerala and All India (Percentages)

Sector	Kerala, (at current prices)					All India (at current prices)				
	1960–61	1970–71	1980–81	1990–91	1993–94	1960–61	1970–71	1980–81	1990–91	1993–94
Primary	56.0	51.8	44.2	33.9	33.31	52.2	50.1	40.6	37.9	41.3
Secondary	15.2	18.9	17.4	19.9	20.01	19.1	19.7	22.7	26.8	28.5
Tertiary	28.8	31.1	33.6	42.4	43.68	28.7	30.2	36.7	35.3	30.2

Source: Economic Review-various issues. State Planning Board, Govt. of Kerala. Trivandrum.

The growth trends of industrial sector in Kerala, on the other hand, seem to be at variance with that of the country as a whole. Though there has been significant slow down in the growth of industrial sector in India after the mid sixties[8], it did not happen in Kerala[9]. Similarly when 80's showed signs of growth in the industrial sector for the country as a whole, Kerala presented only signs of deceleration in it's industrial economy. On the contrary, the tertiary sector in Kerala has been presenting commendable growth during the last three decades.

II.4 Analysis of Kerala's industrial base

Table 2.4 presents data on employment and value added in different industries in Kerala and all India for the year 1993-94. It reveals that Kerala's industrial base consists of a set of interrelated and non-metalic mineral based industries. From the point of view of employment, industries such as Food Products, Electricity, Textiles, Chemical products, Wood and Wood Products and paper products are important. When value added is considered, Rubber Products and Electrical Machinery get added to the list. Among the different industries, the share of electricity generation in employment and value added is, more or less, equal. Food products offers more employment but low value added. It may, however, be noted that industries such as Basic Metal and Alloys, Machinery and Machine Tools and Transport Equipments coming under the category of Engineering Industries do not have a fair share in the industrial structure of the

Table 2.4
Kerala's Industrial Base 1993–94

NIC	Industry	Employment		Value added	
		Percentage share in Kerala's Aggregate Factory sector	Percentage share in All India Total for Industry	Percentage share in Kerala's Aggregate Factory sector	Percentage share in All India Total for Industry
20+21	Food Products	33.69	17.81	9.82	8.14
22	Beverages	6.20	4.93	3.61	1.45
23	Textiles	6.45	15.11	4.02	9.59
26	Textile products	6.01	6.25	3.75	3.91
27	Wood & wood products	5.15	1.11	3.10	.59
28	Paper Products	4.61	3.01	2.14	4.41
29	Leather Products	0.42	.91	0.25	.44
30	Rubber & Plastics	3.65	2.20	12.89	4.51
31	Chemical products	6.52	6.41	22.17	10.77
32	Non-metalic mineral	2.01	3.14	2.89	4.05
33	Basic metal & Alloy	1.62	4.71	4.51	5.11
34	Metal product	1.01	1.80	.71	2.05
35	Non-electric Machinery	1.62	3.17	2.01	5.08
36	Electrical Machinery	2.74	2.91	5.11	5.61
37	Transport Equipments	1.51	3.65	2.21	4.12
38	Other Manufactures	1.11	3.80	2.91	6.79
40	Electricity	15.04	15.75	14.51	19.80
97	Repair services	1.64	3.33	3.39	3.58

Source: Calculation based on data from ASI 1993–94 "Summary Results for Factory" CSO, 1996.

Note: Since the table is calculated from the factory sector, it includes both large scale and small scale industries, in accordance with the definition given for ASI, Factory Sector.

state. But for the country as a whole, it appears that the engineering industries contribute a much higher share in both employment and value added.

From the above analysis, it is clear that Kerala lacks a balanced industrial base. The development of engineering industries in the region is rudimentary and domestic demand is largely met by imports from other states. Based on the experience of industrially advanced regions, one can see that as the process of industrialisation gains momentum, the industrial base of the region gets diversified and the share of agro-based industries starts to fall. In this sense, the trend in Kerala's industrial structure is not very encouraging.

A state - wise disparity in industralisation based on the share in value added in the factory sector from 1960-'61 to 1993-'94 is given in table 2-5. Kerala accounts for only 2.5 percent of the national industrial output from factories and ranks 12th among Indian states in 1993-'94. The data show that many states like Andhra Pradesh, Bihar and Madhya Pradesh showed signs of improvement especially by the beginning of eighties. But for Kerala, the performance has been poor throughout. In terms of industrial development, as reflected in per-capita value added, Kerala remained below the national average in sixties and even today.

II.5 Empirical evidence of Industrial Deceleration in Kerala

A recent study[10] analysing the spatial variations in the rate of industrial growth in some of the leading states of India, identified three broad patterns of industrial growth and accordingly classified the states (12 states for which data could

be available) into three groups; (a) states in which industrial output grew by and large at a uniform rate (b) states which experienced a significant deceleration in growth rate after mid-sixties and significant recovery after the mid-seventies and (c) states which experienced a continuing deceleration in the rate of industrial growth [Table 2.6]. It is found that Kerala, Andhra Pradesh and Karnataka were the three states experiencing continuous deceleration till mid-eighties. But extending the analysis from 1985-'86 to 1992-'93, we can see that Andhra Pradesh and Karnataka could better their growth rates from 6.03 to 7.05 and from 6.76 to 7.62 respectively. Thus among these states of India, it is only Kerala that witnessed an unhealthy trend of continuing deceleration in the rate of industrial growth since the second half of the sixties.

Analysing the trend of manufacturing in Kerala, one study[11] has noted two kinks over the period 1960–'61 to 1992–'93; one in 1973–'74 and another in 1983–'84. Among the two kinks, the first one of 1973-'74 is found to be more significiant than the second one. The study has reached this result by fitting the kinked exponential curve.

$$\log Y = a + aD + bt + bDt$$

where D is a dummy variable with values equal to zero for years up to kink and one thereafter. The kinks usually represent some sort of irregularity in the production and is reflected in sudden variation in the quantity of output produced. During the two kink periods and the period immediately following the kinks, we observe a sudden fall in both employment generation and net value added in the registered manufacturing sector of Kerala. [Table 2–7].

Table 2.5
Disparity in Industrialisation (State-wise)

States	Share in Population	Share in Value added in Factory Sector									
		1960–61		1970–71		1980–81		1990–91		1993–94	
		Percent	Rank	Percent	Rank	Percent	Rank	Percent	Rank	Percent	Rank
Andhra Pradesh	11.95	3.01	8	4.00	8	4.90	8	6.09	7	6.14	6
Assam	1.82	3.00	9	1.40	14	1.07	15	0.91	15	1.01	15
Bihar	4.25	6.50	9	5.50	7	4.20	9	6.73	6	5.62	7
Gujarat	11.08	10.50	3	9.10	3	9.50	4	11.00	2	10.01	4
Haryana	1.86	–	–	2.20	12	2.90	12	3.11	11	3.49	11
Karnataka	5.95	3.20	7	5.70	6	5.10	6	6.79	5	7.24	5
Kerala	3.86	2.70	11	2.90	10	3.30	10	2.81	12	2.50	12
Madhya Pradesh	3.51	2.40	12	3.80	9	5.00	7	5.73	8	4.81	8
Maharastra	17.55	26.70	1	26.80	1	25.00	1	24.59	1	27.12	1
Orissa	1.21	0.90	14	1.90	15	1.70	14	1.38	14	1.42	14
Punjab	4.92	3.00	10	2.30	11	3.20	11	4.09	10	4.61	9
Rajasthan	2.20	1.00	13	2.01	13	2.80	13	2.21	13	2.01	13
Tamil Nadu	11.51	7.90	4	9.80	4	10.30	3	10.45	3	11.35	2
Uttar Pradesh	9.44	6.30	6	6.60	5	6.30	5	5.61	9	3.89	10
West Bengal	8.89	20.50	2	13.60	2	11.50	2	10.05	4	11.17	3

Source: Based on ASI data for Factory Sector

Table 2.6
Growth rate of Real Net Value added in Registered Manufacturing in different States

State	Relative weight (70–71) Percentage	Growth rate per cent per annum			
		1960–61 to 1965–66	1965–66 to 1975–76	1975–76 to 1985–86	1985–86 to 1992–93
Andhra Pradesh	4	6.84	6.71	6.03	7.05
Bihar	6.2	4.26	2.40	6.07	6.89
Gujarath	10.1	4.57	3.80	4.11	5.34
Karnataka	5.7	8.24	7.39	6.76	7.62
Kerala	2.7	10.80	4.59	3.03	2.92
Madhya Pradesh	3.6	9.62	6.95	7.43	6.81
Maharashtra	30.6	5.81	5.53	5.98	6.72
Orissa	2.2	7.17	3.35	9.84	7.91
Rajasthan	1.9	7.32	3.95	5.80	5.94
Tamil Nadu	10.1	6.49	5.67	5.73	6.34
Uttar Pradesh	7.2	6.00	4.13	9.09	8.14
West Bengal	15.7	6.23	-1.53	1.88	3.57

Source: adopted from Biswanath Goldar and Vijay Seth - Spatial variations in the Rate of Industrial Growth in India, Economic and Political Weekly, vol. XXIV, No. 22, June, 1989 and Reserve Bank of India, 1993–'94.

Table 2.7
Relative Share of Kerala in value added and
Employment in Factory Sector

Period	Employment	Net value added
1970–71	3.43	2.86
1971–72	4.51	3.10
1972–73	4.29	2.85
1973–74	4.20	2.70
1974–75	3.25	1.83 ↓
1975–76	4.11	2.09
1976–77	4.29	2.82
1977–78	4.22	2.80
1978–79	4.31	2.89
1979–80	4.34	2.79
1980–81	4.89	3.13
1981–82	4.73	2.96
1982–83	3.68	2.91
1983–84	3.17	2.82
1984–85	2.80	2.01
1985–86	3.10	2.68
1986–87	3.21	2.72
1987–88	3.27	2.64
1988–89	3.65	2.62
1989–90	3.75	2.79
1990–91	4.09	2.63
1991–92	3.61	2.67
1992–93	3.84	2.59

Source: Calculatuions based on data from CSO, ASI (various issues)

II.6 Conclusion

We have made an attempt to bring forth the different trends in the industrial growth pattern of Kerala. We have noted that the industrial sector in Kerala is not

showing adequate growth. The number of new factories registered has recorded only marginal increase. The analysis clearly shows that Kerala lacks a balanced industrial base. The development of engineering industries in the region is found to be rudimentary whereas it appears that the engineering industries contribute a large share in both employment and value added in the national scene.

Kerala has been occupying only a very low position (12th rank) in the national scene of industrialisation; accounting for only a very low percentage of value added. Among the different states of India, it is only Kerala that witnessed an unhealthy trend of continuing deceleration in the rate of industrial growth since the second half of sixties. It appears that industrial development in Kerala has not gone hand in hand with all India pattern in different time periods. Strangely, when the country as a whole stagnated in industrial growth, Kerala prospered; whereas it showed signs of slow down when the country as a whole was reviving.

Notes and References

1. Kaldor Nicholas, 1966, *Causes of slow Rate of Economic growth of United Kingdom,* Cambridge University Press, London, p. 18.
2. Subrahmanian K. K., 1994, 'Some Facets of Manufacturing Industry in Kerala', *Kerala's Economy - Performance, Problems, Prospects,* (ed) Prakash B.A., Sage Publications, New Delhi, p. 237.

3. The data based on Annual Survey of Industries (ASI) and the data from Directorate of Industries and Commerce, Government of Kerala, Tamil Nadu and Karanataka show that while Kerala registered 3% average annual increase in the units registered in the Census Sector, Tamil Nadu, Karnataka and all India registered annual increases of 15%, 12% and 10% respectively during 1970-'94. In the case of the Sample Sector, while all India showed an annual rate of growth of 14%, along with 15% in Tamil Nadu and 18% in Karnataka, Kerala showed only 11% during the same period.

4. Based on the data from the Directorate of Industries and Commerce, Government of Kerala, Trivandrum, the employment generated by the large and medium scale industrial units (formal sector) in 1994-'95 was 196,590 while the employment created by the small scale units was 267,019.

5. As per the data from Kerala State Industrial Development Corporation (KSIDC) and Reserve Bank of India, in Kerala during 1995-'96 investment in large and medium scale industries was to the tune of Rs300 crores and on small scale industries it was to the tune of Rs250 crores. But the corresponding figures showing investment in Karanataka was Rs2005 crores and Rs1070 crores, in Tamil Nadu was Rs3100 crores and Rs1080 crores, and for all India Rs27000 crores and Rs19000 crores (average figures: 1350 and 950).

6. *Census Data,* 1981 and 1991.

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10. Goldar Bishwanath and Vijaya Seth, 1989, 'Spatial variations in the Rate of Industrial Growth in India', *Economic and Political Weekly,* vol. XXIV, No. 122, June, 3.

11. The study of V. Nanda Mohan on 'Trends in Industrial Growth in Kerala' has located two kinks; one in 1973–'74 and the other in 1983–'84. The high incidence of industrial disputes and trade union activities noted in Kerala during mid seventies has been located as the reason for the first kink. The erratic trend in the electricity generation and transmission during 80's explains the significant kink in 1983–'84. See Nanda Mohan V., 1994, 'Recent Trends in the Industrial Growth of Kerala', *Kerala's Economy: Performance, Problems, Prospects,* (ed) Prakash B. A., op cit.

CHAPTER III

GROWTH AND STRUCTURE OF TRADE UNIONISM IN KERALA

III.1 Introduction

In this chapter, it is proposed to examine the growth and pattern of trade unionism in Kerala. The exercise falls in two sections. The first section gives a historical account of the trade union movement in the state. The next section discusses the various dimensions of trade unionism in Kerala. This discussion is carried out, firstly by a quantitative analysis of unionisation in the state with special emphasis to the growth in number and membership of trade unions. Secondly, we discuss the political involvement in trade union activities. Lastly, an attempt is made to put forth a regression model for explaining the growth of trade unionism in Kerala.

A. A historical account of Trade Unionism in Kerala

III.2 Growth of Trade Unionism - Pre-independence period

The trade union movement in Kerala has a fairly long history of growth and struggle. However there is still some obscurity regarding the origin of the trade union movement in Kerala. According to one version, attempts at organising labour in the coir mats and mattings industry in Alleppey began as early as 1920.[1] The organisation was known as the Travancore Labour Association (TLA). The post war prosperity of the industry came practically to end by the mushroom growth of uneconomic units and decline in the market for coir goods. Some of these units were constrained to close down and wages paid to labour were deliberately reduced. There were also wide spread unemployment. It was

under these circumstances that the TLA was formed. Soon after it organisation, TLA gathered strength and its became the first to get registration under the Travancore Trade Union Act of 1937. On registration, TLA was renamed as the Travancore Coir Factory Workers Union (T. C. F. W. U).[2]

It was this union which launched the first ever general strike in the coir mats and mattings manufacturing industry. The demands of the TCFWU included, among other things, a wage hike of 25 percent, standardisation of wage rates, improvement in the working conditions, a guaranteed minimum earnings, abolition of contract labour and prohibition of unauthorised deductions from wages by Moopans[3] and labour contractors, recognition of the union and also labour representation in the legislature. The Dewan of Travancore had taken a personal interest in the settlement of this strike and the government appointed a Board of Conciliation. This greatly stimulated the union movement in the state.

After the general strike of 1938, the TCFWU was revitalised. Factory committees were set up for each unit and operated virtually on the lines of the present day Works Committees. It also acted as a machinery of grievance settlement and promoted the spirit of collective bargaining at the level of the factory and joint consultations at the level of industry. The TCFWU instilled in its member strong consciousness of their rights and privileges so that a contractor or a jobber (Moopan) was no longer able to abuse his powers.[4]

The trade union movement that originated at Alleppey soon spread to the other parts of the state particularly to Quilon, the next biggest industrial centre in the state. The first trade union to emerge at Quilon was the Quilon

Labour Union (QLU).[5] In contrast to the active unionism which was practised in Alleppey, Quilon offered a good model of "Sunday Unionism". Its early leaders were drawn from the class of legal practitioners known as Vakils inspired with the spirit of selfless social service. The office of the QLU provided a common meeting ground for active social and political workers, particularly from the Travancore State Congress which was spear-heading the movement against the Dewan and the Maharaja. The chief activity of the QLU was to hear the grievances of workers and help them to submit memoranda to the employers.[6]

The QLU was registered as the Quilon Factory Workers Union (QFWU) in 1936 incorporating the workers from the cashew industry, cotton mills, saw mills, tile factories and engineering work shops in the Quilon area. For long, the workers had been demanding the prohibition of the then prevailing contract labour system. They were quite fed up with the miserable working conditions in the factories and the very long working hours which stretched from 6 a.m to 6.30 p.m. with a half an hour lunch break. At the intervention of the union, the demands of the workers were met. The pitiable condition of workers in the Chavara Minerals attracted the attention of the QFWU. QFWU organised a one day hartal to express its solidarity with the Alleppey Workers who went on General Strike in 1937.

The work force in the cashew industry was mainly consisting of women. It was difficult to persuade these women workers to join unions or take part in their activities; they were scared by the prospect of dismissal by the employers.

But when the organisation of workers gathered momentum, women workers too came forward and actively participated in various struggles. This trend was viewed with suspicion and disapproval by the employers. They also resorted to every means to terrorise and check the activities of the unions. Leaders of the QFWU were harassed in their factories, beaten up by goondas and were subjected to extreme forms of humiliation.[7]

Gradually for each centre of the cashew industry in Quilon district individual trade unions were started and they were federated into the All Travancore Cashewnut Worker's Union. Later it was named as the All Kerala Cashewnut Factory Workers Federation (AKCFWF). There was a general strike in 1945 for achieving the workers' rights, namely basic minimum living wages, adequate D. A, bonus, etc. During the period 1940–'45, individual strike activity was largely confined to the Punalur, Quilon and Chavara regions. To counter the QFWU's efforts in organising cashew workers, T. K. Musliar, one of the biggest cashew processors, took initiative to form a union for his workers under the name All Travancore Cashew Workers Union (ATCWU). But it was a short-lived one and was later captured by the workers through elections.

Along with the Travancore area, Cochin and Malabar areas were also having their own share in trade union activities.[8] The Toddy Tappers Union of Anthikad, established in 1936 and the Tata Oil Mill Worker's Union, registered in 1939, were the two stronger unions in the Cochin area. In the 1940's, industrial strike activity in Cochin was largely confined to the Tata Oil Mill and a

few bricks and tile factories in and around Alwaye. The strike of Tata Oil Mill Worker's Union in 1940 brought to the workers the conviction that their legitimate demands could be satisfied without resort to violent strike activity and intimidation. Since then, contrary to the established characteristics of infant unionism, this union cooperated with the management in building up a strong, constructive and mutually beneficial system of collective bargaining.[9]

Trade unions emerged strongly in Trichur particularly in a few plantations, bricks and tile factories around 1945. Two strong unions in the area were the Vellanikkara Thattil Estate Union (VTEU) and the Sitaram Labour Congress (SLC). The VTEU has some creditable achievements in the fight for the rights of plantation workers. In 1946, the union demanded that the plantations should be declared as an industry so that it could be brought under the Trade Disputes Act. Subsequently, it launched a strike lasting 36 days. At last, an ordinance was issued declaring plantations as an industry.

The earliest unions in Malabar regions were the Cheruvanoor Cotton Mill Worker's Union, Cannanore Aaron Mills Worker's Union and those in the Feroke Tile Factory, Common Wealth Tile Factory and the Beedi and Cigar Industries in Calicut. In organising some of these unions, the founding members of the communists movement played a very significant role; union struggle became part of the freedom struggle.[10]

III.3 The communist influence

The development of the trade union movement and the emergence of the communist wing in it must be considered as part of the main stream of freedom struggle and the subsequent growth of political democracy. A number of Malabar leaders of the communist party started a Youth League and carried its message to Travancore. Meanwhile, a division known as the Progressive Group, emerged in the State Congress in Travancore. It particularly emphasised the need for mobilising workers for the freedom struggle and openly alleged that the State Congress was toying the line of Gandhism and non-violence and that it was not agitational enough. Subsequently, the rift in the State Congress between Left and Right came to limelight.

The formation of the Progressive group and its activities came to the knowledge of the Dewan of Travancore and he put the leaders in jail. Later, the Dewan released the leaders but he was determined to break the movement. The police and black legs were let loose on workers in Alleppey and the TCFWU office was raided. As a part of this development, there emerged the 'Radical Congress'. The young blood in the Youth League and State Congress considerably enhanced the strength and popularity of the new Radical Congress. It really marked the emergence of Communist party in the state. At Quilon session of the State Congress, the communists decided to chalk out a separate path.

These developments influenced the Trade Union Movement also. The All Travancore Trade Union Congress (ATTUC) provided a platform for all left

wing unions in the state. Following the stand taken by the communists in the Quit India Agitation, the union movement split into two; one led by the radical left and the other by left socialists. The operations of the communists concentrated on the working class and the student community. They widely spread the message of class struggle, violent agitations, sabotage and even mass armed revolt. Alleppey was the chief centre of communists.

The Punnapra-Vayalar revolt of 1946 is considered as important landmark in the history of trade unionism in Kerala. The workers in Alleppey declared a general strike in September 1946. The police and the workers clashed and the police got the worst of it. On October 24, 1946 the bloodiest of armed conflicts, a battle between organised group of workers and the police took place. Though started as a trade union agitation, the Punnapra-Vayalar revolt was part of a political struggle for achieving freedom and responsible government.[11]

The Dewan's attitude to trade unionism and industrial relations was ambivalent. Personally, he had a soft corner for the working class. He used to encourage the growth of unionism, by influencing employers to give recognition to major unions. He strongly held the view that industrial disputes should be settled through joint consultations. He took initiative in setting up a tripartite system and formed a labour department as well as Industrial Relations Committees (IRCs). But Dewan was strongly opposed to the mixing up of unionism with politics. Therefore, he held that Punnapra-Vayalar Revolt was a political struggle against the established government. Considering the many aspects of trade

union involvement in politics, at last, Dewan had ordered the imposition of a ban on the communist party and pro-communist trade unions in the State.

III.4 Trade Unionism-Post-independence period

The objective basis for the trade union movement and the struggle by the working class of Kerala was provided by the extreme economic hardships and the poor and inhuman conditions of work particularly during the pre-independence period. But with independence of the country, the cause of the struggles reverted again to economic demands.

In 1948, the ban on 29 out of 35 unions that was imposed by Dewan was lifted. Industrial unrest was revived. Unionism began to spread to new areas like plantations, agriculture and even to service sectors. The AITUC and INTUC made its roads into plantations. The United Trade Union Congress (UTUC) also emerged on the scene. The Hind Mazdur Sabha (HMS) was another late entrant into the trade union scene. The States of Travancore and Cochin were integrated in July 1949 and preparation for the first general election was being made when the industrial relations scene was turning turbulent.[12]

The emergence of an independent unionism in Alwaye, a fast growing industrial town in 1940's is considered as a significant turning point in the history of trade unionism in Kerala. Modern industries and security of employment brought a refreshing influence on the union movement at Alwaye. The new movement stood for two principles; (a) non-affiliation to political parties and (b)

one industry - one union. This new movement has checked the growth of pro-communist unions. But very soon, it was realised that the independent unionism could no longer survive in the highly complex state politics and politically conscious working class.

The first popular ministry came to power in 1948. But it was short-lived. Later, coalition politics became the order of the day. Industrial unrest followed. The need for trade union unity was felt by all. In this context, the principle of one union in one undertaking and the use of secret ballot to select representatives were suggested by experts. But this happened to be a failure and it led the way for inter-union rivalries, especially among the left oriented unions. Industrial unrest appeared all over the state.

The first Communist Ministry which came into power in 1957 introduced three controversial legislative bills; the Agrarian Relations Bill, the Education Bill and the Industrial Relations Bill. But this resulted in anti-communist unrest all over the state in the form of the ('Vimochana Samara').[13] The President of India dismissed the ministry. But political instability and industrial unrest continued.

Generally, a new era of trade unionism has emerged in Kerala. Following the split of the communist party in 1964, the AITUC led unions began to split all over the state. The trade union arena in Kerala has become completely politicised. Each political party formed and nourished its own trade union wing. This resulted in unhealthy inter union rivalries and each union was concentrating on

capturing membership. Thus, trade unionism in Kerala has been entering into a new phase of growth which continues till now.

B. Dimensions of Trade Unionism in Kerala

III.5 Intensity of Unionisation - Present Scenario

The trade unionism in Kerala saw a phenomenal growth since the formation of the State in 1956. Increasing industrialisation, expanding labour force, increasing cost of living, growing trade union consciousness, increasing rate of literacy among the workers are some of the causes that led to a tremendous growth in trade unionism in Kerala. The trade unions have increased enormously both in number and membership during the period 1951 to 1993. Today, there are as many as 8730 registered trade unions in the state representing about 19% of the total 47213 trade unions in India [Table 3.1]. Looking at the index number, we will be able to see that the trade union number was increasing throughout the period. A very speedy growth in the number of unions occurred from the end of sixties till the middle of seventies. Though the growth in trade unions stagnated in the beginning of 80's, it again gathered momentum by 1985. with regard to union membership also, one can see an increasing trend in Kerala, except for the year 1967. The year 1966–'67 is noted as an unusual year for the entire country. For the nation as a whole, the number of registered unions has also been rising during 1951–'93 period. But the speed of increase was less than that in Kerala. Coming to union membership, it appeared to be increasing till the end of 70's.

But from the beginning of 80's onwards, it has been showing a downward trend except for the year 1987.

Table 3.1
Trade Union Growth and Membership

Year	Kerala				India			
	No. Regd Unions	Index No. (Base-1951)	Union Membership	Index No. (Base-1951)	No. Regd Unions	Index No. (Base-1951)	Union Membership	Index No. (Base-1951)
1951	555	100	55	100	4623	100	1996	100
1957	1213	218	355	645	8554	185	2377	119
1961	1650	297	321	583	11614	251	3977	199
1967	1864	335	109	198	14686	317	3392	169
1971	2792	503	123	223	26788	579	6580	329
1977	4446	801	179	325	30810	666	6034	302
1981	6857	1235	183	332	36506	789	3727	186
1987	7962	1434	294	534	45095	975	6368	319
1991	8680	1564	300	545	46889	1014	5170	259
1993	8730	1572	330	600	47213	1021	4910	245

Source: Indian Labour Statistics, Simla, Labour Bureau, Government of India, Indian Labour Year Book and office of the Labour Commissioner, Government of Kerala.

It is seen that, during the period of four and a half decades, the trade union registration in Kerala has multiplied 15 times, while it has increased only by 10 times at the national level. The rate of growth in union membership in Kerala has been much higher than that in the country as a whole.

When we analyse the growth in trade union number and membership in Kerala further, we find that during the four periods; 1957–'59, 1967–'77, 1980–'82 and 1987–'89, when the communist ministries were in power, Kerala had experienced a remarkable growth both in trade union number and membership. The trade union movement in Kerala has got sufficient nourishment and motivation

during the communist rule.

The magnitude and intensity of trade unionism in Kerala may be better gauged from Table 3.2. The table presents the trade union membership as a percentage of employment in the state. Here we have made the calculations on the basis of the factory sector alone. The trade union membership in the factory sector of Kerala also has shown a rising trend throughout the period, 1951 to 1993, except for 1965–'66 (which may be considered as an unusual year for the whole country) A sudden jump in union membership can be noted during the second half of the fifties. This may be because of the reorganisation of the Kerala state in 1956 and due to the encouragement given by the first communist ministry in the state. Since 1970, Kerala's industrial sector has been experiencing a steady increase in trade union membership. From 1990 onwards, more than half of the industrial workers are effective members of different trade unions in Kerala.

Table 3.2
Trends in the degree of Unionisation in Kerala

Year	Trade union membership as a percentage of employment
1951	21.03
1955	23.15
1960	44.86
1965	20.85
1970	30.02
1975	45.72
1980	48.09
1985	49.72
1990	53.89
1993	55.14

Source: Calculation based on data from Administrative Reports, Government of Kerala and Office of the Labour commissioner, Government of Krala, Trivandrum.

III.6 Inter-Industry and Inter-District variation in unionism

This section attempts to analyse the inter-industry and inter-district variations in unionisation in Kerala. Table 3.3 shows that industry groups like Wood and Wood products, Machinery and Metal, FoodProducts, Textiles and Garments account for 14.9%, 13.7%, 11.6% and 10.7% of the total number of unions respectively.

Table 3.3
Industry-wise and District-wise distribution of Trade Unions. 1992-93 [Kerala]

Districts	Industry												
	Food & Food prod.	Textiles & Garments	Chemical Products	Rubber & Plastics	Wood & Products	Paper & Printing	Engg. & Constr.	Machinery & Metal	Transport	Agriculture & Plantation	Miscell-anious	Total	% to total
Kasargod	6	7	3	-	6	3	-	-	-	-	3	28	0.3
Cannanore	40	360	43	30	285	61	72	51	13	18	252	1225	14.0
Wynad	9	6	7	5	8	-	-	3	1	2	7	48	0.5
Calicut	12	36	25	24	42	39	25	18	19	24	31	295	3.5
Malappuram	29	20	22	17	98	34	2	26	-	-	63	311	3.6
Palghat	210	41	32	21	62	37	28	122	-	1	126	680	7.8
Trichur	42	68	90	38	149	78	-	125	-	16	267	873	10.0
Ernakulam	186	137	69	237	182	92	28	298	21	2	298	1550	17.6
Idukki	21	14	16	14	10	10	-	13	1	1	12	112	1.3
Kottayam	68	42	47	271	118	69	2	78	12	9	63	779	9.0
Alleppey	49	52	107	22	67	42	4	64	8	25	83	523	6.0
Pathanamthitta	6	-	2	3	3	4	-	2	-	4	18	42	0.5
Quilon	263	61	24	40	125	67	38	177	4	27	335	1161	13.3
Trivandrum	68	93	79	52	148	110	53	218	15	8	259	1103	12.6
Total	1109	937	566	774	1303	646	252	1195	94	137	1817	8730	100
% to total	11.6	10.7	6.5	8.9	14.9	7.4	2.9	13.7	1.1	1.6	20.8	100	

Source: Compiled from the official records of the office of Labour Commissioner. Government of Kerala Trivandrum.

As for the performance of individual districts of the state, Ernakulam emerges as having the highest number of unions. It accounts for more than 17% of the total registered unions in 1992–'93; Cannanore, Quilon and Trivandrum follows. Kottayam and Alleppey are also having notable share in union numbers. But the least unionised district is found to be Kasargod. An interesting finding of this analysis is that Alleppey which was the magnet of trade union activities during the sixties and seventies has lost its significance and its role now has been taken over by Ernakulam and Cannanore. This is because of the remarkably low rate of industrialisation now found in Alleppey.

III.7 Nature of political involvement of trade unions

Trade unions in India are different from those in the west[14] in that they have close links with political parties.[15] Trade union leaders see trade unions in a political context. They realise that their work as trade unionists is affected by political factors. Thus political activity can be seen as an extension of trade union activity and trade union activity is an extension of political activity.[16] It is a notable characteristic of Kerala's trade union leadership that many of the trade union leaders are political leaders too. They successfully, carry on by simultaneously holding the two positions. On the basis of who is at the top of the trade union and tracing his political affiliation, one can easily identify the nature of political involvement. The trade union leaders not only belong to political parties, but also are deeply involved in the conventional political game. It is hardly possible to draw a line between union and political activities.

One can also notice a two-way inter relationship between political parties and the trade union movement. In Kerala, the union movement has greatly nourished the growth of the communists party and the Revolutionary Socialist party and in turn these parties have championed the cause of the working class. In many cases, union struggles have been used as political tool. The party in opposition mobilises its followers in the union movement to stage demonstrations against the party in power.

Most of the well organised trade unions in Kerala are affiliates of major political parties in the country and as such can be called 'labour-wings' of political parties. It is generally recognised that the Federations, namely, Indian National Trade Union Congress (INTUC), All Indian Trade Union Congress (AITUC), United Trade Union Congress (UTUC), Hind Mazdoor Sabha (HMS), Centre of Indian Trade Unions (CITU) and Bharatiya Mazdoor Sangh (BMS) have close affiliation with the Congress, CPI (Communist Party of India), RSP (Revolutionary Socialist Party), Socialist Party, CPM (Marxist Communist Party) and the BJP (Bharatiya Janata Party). Almost all political parties have attempted to bring under their influence as many workers and unions as possible. The policy pursued by the political parties is reflected in the policy followed by the unions that are sponsored by them. The unions and their members usually support the political agitations of their parent party.

Table 3.4 gives the distribution of trade unions in Kerala according to their affiliation to the national federations in 1993. As shown in the table, the three

unions INTUC, AITUC and CITU are the leading trade unions in the state. More than 70 percent of the unions and members are under these organisations. Among the three, INTUC, which is affiliated to Congress I was holding the top position in both number and membership till 1986. But its position has been taken over by CITU, an affiliate of CPM, since 1990. It is also obvious from the data that the trade union operations in Kerala now are dominated by the two communist factions namely CPI and CPI(M).

Table 3.4
Affiliated Trade Unions and Membership in Kerala

Organisation	1979			1986			1993		
	No.	Members	Percentage to total	No.	Members	Percentage to total	No.	Members	Percentage to total
INTUC	1850	50765	28.0	1878	71230	27.0	1750	69680	21.0
AITUC	690	24415	13.5	935	41765	16.0	1120	52784	16.0
CITU	983	42632	23.7	1669	68630	26.0	1995	108930	33.0
HMS	425	13430	7.5	415	18670	7.5	542	22747	7.0
BMS	640	12261	6.8	590	19368	7.5	765	26630	8.0
UTUC	820	15642	8.7	835	21472	8.5	942	38473	11.6
Non-affiliated	1392	20855	11.8	1578	18865	7.5	1616	10756	3.4
Total	6800	180000	100	7900	260000	100	8730	330000	100

Source: Office of the Labour Commissioner, Government of Kerala, Trivandrum.

The percentage share of membership of affiliated unions to total membership in the state shows the growth trend of various unions in the state over the last four decades. It is seen that the membership with INTUC was at the top till 1986, but has started declining afterwards. AITUC, on the other hand, was increasing its membership till 1986. But since then, it has been showing a stagnating tendency in its membership. CITU has an ever increasing record and it is now the most powerful single trade union in Kerala. Among the other unions, the growth of BMS, the trade union of BJP, in Kerala is remarkable compared to the growth of UTUC and HMS in recent years.

The entire analysis on the nature of political involvement of trade unions in Kerala leads to the conclusion that the trade unions in the State are nourishing a particular culture which permits increasing political involvement in union activities. Since the union leaders are the party leaders also, the union activities may be easily brought in line with the intentions and actions of the party.

III.8 Regression model explaining the causes for trade union growth in Kerala

There are two discernible schools that seek to explain the growth of unions; the first relates union expansion to the business cycle and the second relies on the pluralistic view of trade union, linking its growth to a multiplicity of causes.[17] The exponents of business cycle school believe that union membership depends directly upon business activity.[18]

In this section, we propose to seek an economic explanation for the growth in trade union membership by linking it with the components of business activities, namely industrial output, employment, income and cost of living for the period 1963–'93. It is also necessary to relate industrial relations with the trade union growth prevailing in the state during the period. Hence the mandays lost due to work stoppages is taken as the indicator of industrial relations prevailing in Kerala.

The model for explaining the causes for the growth of trade unionism in Kerala during the period 1963–'93 is specified as follows.

$$TU = f(IG, N, C, W, U)$$

where TU = Trade Union membership
IG = Industrial output
N = Employment
C = Cost of living
W = Money wage index
U = Industrial unrest or Mandays lost due to work stoppage

In estimating the coefficient of the above model, the method of ordinary least square multiple regression technique is used. Various combinations of variables were tried and various forms of the functions such as linear and logarithmic forms were tried. On the basis of economic theory and statistical inference the following model is selected.

$$\log TU = \underset{(-0.71)}{-13.45} + \underset{(0.59)}{0.76 \log IG} + \underset{(2.13)^{**}}{1.35 \log N} + \underset{(3.51)^{*}}{2.11 \log C} - \underset{(-1.96)^{**}}{0.7 \log W} + \underset{(1.67)^{**}}{0.08 \log U}$$

R^2=0.91, $\bar{R}^2$=0.86, F= 24.08, DW= 2.02

* - Significant at 1% level of Significance

** - Significant at 5% level of Significance

*** - Significant at 10% level of Significance

[Figures in parenthesis represent t-values of the variables].

From the above model, it can be seen that the business cycle approach to the growth of trade union membership is valid in the context of Kerala. Kerala's experience in the past three decades shows that cost of living and average daily employment are the causal variables explaining the variations in the growth of trade union membership. Among them, cost of living appears to be the most significant variable (with 1% level of significance). It is, however, interesting to note that growth is industrial output does not cause variations in trade union membership. With regard to money wage and mandays lost, while negative relationship has been noted in the case of money wage and trade union growth, a positive relationship is noted between mandays lost and trade union growth with a 5% level of significance. Hence, we may conclude the analysis that cost of living and employment are the most influential factors responsible for a steady growth in trade union membership in Kerala.

III.9 Conclusion

We have tried to spell out the various trends in the growth pattern of trade unions in Kerala. The very type of growth and the mode of action followed by Kerala's

trade unions assume greater significance as far as Kerala's general growth and in particular industrial development is concerned. It is seen that Kerala's labour is highly unioned. In the regression analysis, we have found cost of living and employment as the significant factors responsible for the growth of trade union membership in the state during the past three decades.

Notes and References

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2. Ramachandran Nair K., 1973, *Industrial Relations in Kerala,* Sterling Publishers Pvt. Ltd, New Delhi.
3. The leaders of the groups of workers who worked in the Coir Industries of Kerala in the early periods were known as 'Moopans'. They were very influential among the workers and were usually negotiating with the employers regarding the wage and other issues. They usually make some deductions from the wage of the workers as a reward for their services rendered.
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8. The present State of Kerala came in to existence in 1957. Before its inception, Kerala was consisting of two princely states namely, Travancore and Cochin and Malabar, part of Madras Presidency.

9. Ramachandran Nair K., Op cit.

10. Ramachandran Nair K., Ibid.

11. Ramachandran Nair K., Ibid.

12. Ramachandran Nair K., Ibid.

13. 'Vimochana Samara' refers to the anti-communist 'liberation movement' that took place in Kerala in 1959. This movement was initiated by the anti-communist political and social groups of the state to show the protest against the actions of the first elected Communist Government of Kerala. The struggle ultimately came to an end with the dismissal of the communist ministry in Kerala.

14. In USA, the trade union movement functions as a pressure group concerning itself with industrial relations and other legislation. There is no formal communication between trade unions and any political party. In U. K. and Australia, it is the political party which is dependent on the unions. But in India, the trade unions are highly dependent on political parties because they are weak and they require political support for their union activities- Harold Cronch, 1966, *Trade unions and politics in India,* Manaktak P. C. and sons, Pvt Ltd, Bombay.

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CHAPTER IV

INDUSTRIAL DISPUTES IN KERALA – A PERIOD WISE ANALYSIS

IV.1 Introduction

The focus of this chapter is on the trend in industrial disputes in Kerala from the sixties. A period wise analysis helps us to discern certain broad phases in the movement of industrial disputes in the state. An analysis of inter state differences in the intensity and nature of disputes during these phases is also attempted in this chapter.

The first section explains the theoretical base and the methodology followed in this chapter. In the second section, the trends in industrial disputes in Kerala over a period of thirty years from 1963 to 1993 is taken up. A state-wise comparison of various indices of industrial disputes is also attempted to find out the comparative intensity and the nature of disputes in Kerala and to locate its position in the industrial dispute map of India. In the third section, we have analysed the industry-wise distribution of mandays lost ratio in Kerala's factory sector in the past four decades. We conclude the chapter with a model to explain the trends in industrial disputes in Kerala.

IV.2 Theoretical base and methodology

One major approach towards industrial disputes relates the pattern and trends in industrial disputes to the broad phases of industrial development in an area. It has been held that the nature of labour protest undergoes drastic changes in the course of industrialisation and that it is possible to distinguish the character of workers' protest in the early and later stages of industrialisation.[1] Another

important approach to strike activity is the organisational political model which says that though the breaking up of traditional culture creates discontent among workers, the collective organisation of labour is a vital factor in labour protest.[2] There are other studies that have examined the cyclical fluctuations in the dispute pattern and they have shown that there exists a direct association between strikes and economic fluctuations.[3] In the section that follows, we shall be making tentative attempts to relate the industrial disputes in Kerala to certain important economic variables such as changes in industrial production and the rate of inflation.

Because of the non-availability of data regarding strikes and lockout in Kerala seperately for the period 1963–'93, we had to take for our analysis the aggregate data for strikes and lockouts. The three indicators of industrial disputes, namely number of disputes, workers involved, and mandays lost represent three dimensions of industrial disputes. These three indicators in their absolute form can be misleading. Hence, the different indicators of industrial disputes in a given year are standardised by average number of workers daily employed in the year.

The number of mandays lost from disputes have been standardised as percentage of total mandays scheduled to work. The total mandays scheduled to work is obtained by multiplying the average number of workers daily employed with 300 (300 is assumed to be the normal available days of work in a year). The indicator thus obtained is called 'Days lost Ratio'.[4] As a second indicator,

'Disputes frequency Ratio' has been calculated by dividing number of disputes by the total number of workers. The third indicator is the 'Workers' Involvement Ratio". This is the percentage of total number of workers involved in dispute to total number of workers employed. 'Mean Size of disputes' is the fourth indicator and it represents the number of workers involved per dispute. Finally, we shall also be examining the average duration of disputes. Here the average duration is defined as the number of days lost per worker involved in strikes.

IV.3 Trends in industrial disputes between 1963-'93 – A state-wise comparison

An examination of inter regional variation in industrial disputes assumes special significance in the light of the contemporary debates on the inter-relationship between industrial growth and incidence of labour disputes. The industrial backwardness of Kerala and industrial decline of West Bengal have often been attributed to the deterioration of the industrial relations in these states.

Our analysis of the trends of industrial disputes starts with a look at the difference in the percentage share in mandays lost in various states due to labour disputes during the last three decades. Table 4.1 shows that on an average the three states, West Bengal, Kerala and Maharashtra account for nearly 75 per cent of the total mandays lost in India now. The percentage share of mandays' lost by itself is not meaningful unless it is related to mandays of employment in each of the state. It is seen from the table that West Bengal has a much higher share of mandays lost than its share in employment. But its share of mandays

lost has been registering a continuous fall between the three time points of our analysis. Maharashtra also accounted for a higher share of days lost but its share of employment has found to be increasing. Kerala presented a contrasting picture. In Kerala, the ratio of mandays lost to employment has been increasing throughout the period of analysis except eighties. Here it is worth while to note that its share of days lost has been increasing while its share of employment has been decreasing during the period 1963 to 1993.

Table 4.1
Percentage share in Employment and Mandays lost by States

States	Employment			Days lost		
	63-72	73-82	83-93	63-72	73-82	83-93
Maharastra	13.02	14.72	16.98	8.85	17.48	21.72
West Bengal	12.14	11.40	10.92	47.93	42.29	37.89
Uttar Pradesh	9.98	10.68	10.91	4.12	3.92	3.05
Tamil Nadu	7.29	8.78	8.86	6.85	7.97	5.76
Bihar	6.12	7.35	7.12	5.28	3.62	3.81
Andhra Pradesh	5.27	6.86	7.53	3.05	2.94	3.21
Gujarat	4.98	6.20	7.39	2.26	2.75	4.09
Madhya Pradesh	4.61	6.78	7.04	2.89	1.98	1.26
Karnataka	4.23	5.92	6.85	2.38	3.29	2.69
Kerala	4.91	4.50	4.13	10.59	12.21	13.55
Rajasthan	2.81	3.48	3.65	1.12	0.69	1.32
Punjab	2.28	3.85	4.28	1.34	0.92	0.81
Orissa	2.01	2.91	3.23	0.61	0.72	2.25
Hariyana	1.24	2.32	2.79	1.72	0.65	0.56

Source: Indian Labour Year Book - Relevant issues,
Indian Employment Rivew - Relevant issues

The ratio of workers involved in disputes to total employment in the leading states of India unfolds a clearer picture of the intensity of industrial disputes

existing in the different areas of the country. The data presented in Table 4.2 show that about 60 per cent of the proportion of workers in disputes to total employment in India is with the three states namely West Bengal, Kerala and Maharashtra. Among the states, Kerala and West Bengal were occupying the top positions during the period 1960 to 1993. It is seen that the high ratio of Kerala till the beginning of seventies seems to be repeated in nineties.

Table 4.2
Proportion of Workers in Disputes to total Employment in States

State	1960	1965	1970	1973	1975	1980	1985	1990	1993	1960-93 Average (all the year)
West Bengal	9.1	6.7	12.5	25.8	16.7	14.3	24.5	21.8	20.52	16.88
Kerala	39.9	25.2	11.4	20.7	3.1	8.1	22.1	13.6	18.41	18.05
Maharastra	18.5	17.3	14.5	18.8	5.3	8.3	7.2	9.4	14.91	12.68
Tamil Nadu	14.7	-	10.5	9.7	8.4	13.9	8.9	9.8	8.32	9.35
Karnataka	5.5	9.3	6.5	5.7	2.7	5.9	4.8	6.2	5.90	5.83
Uttar Pradesh	2.7	2.8	5.6	4.9	2.5	6.4	3.7	3.1	2.8	3.84
Gujarat	.6	.9	2.5	4.5	1.4	4.9	4.9	5.3	4.82	3.24
Bihar	.4	.3	.5	1.1	.4	1.25	1.11	1.13	1.25	0.82
Andhra Pradesh	.7	.4	.7	1.6	.5	1.71	1.81	1.72	1.98	1.23
Madhya Pradesh	.8	.9	1.1	1.3	.3	1.02	1.12	1.05	1.35	0.99
Rajasthan	1.2	.8	.9	1.2	.7	1.85	1.94	1.81	1.41	1.31
Punjab	.35	.41	.6	.8	.4	1.21	1.12	1.03	.89	0.75
Orissa	.29	.21	.3	.2	.1	.89	1.22	1.13	1.72	0.67
Hariyana	.12	.1	.2	.1	.1	.62	.89	.48	.35	0.32
All	8.00	6.4	10.5	13.5	5.8	7.4	7.6	6.4	6.1	7.96

Source: Based on data from ILYB and Employment Review

The aggregate trend in the ratio of days lost to total mandays scheduled to work in Kerala for the period 1963 to 1993 is presented in Table 4.3. It can be seen from the Table that the ratio has been higher during 1963 and reached the

maximum (1.86 per cent) in 1973. But the ratio declined dramatically during the emergency year. After the withdrawal of emergency in 1977, the ratio once again went up. The trend was disrupted in the late seventies and early eighties when there had been a deceleration in the indicator. This phase of stagnation came to a halt by 1983 when the ratio began moving up further steeply. These three phases in the mandays lost ratio is presented in Graph 4.1.

Graph 4.1 Days Lost Ratio 1963-93

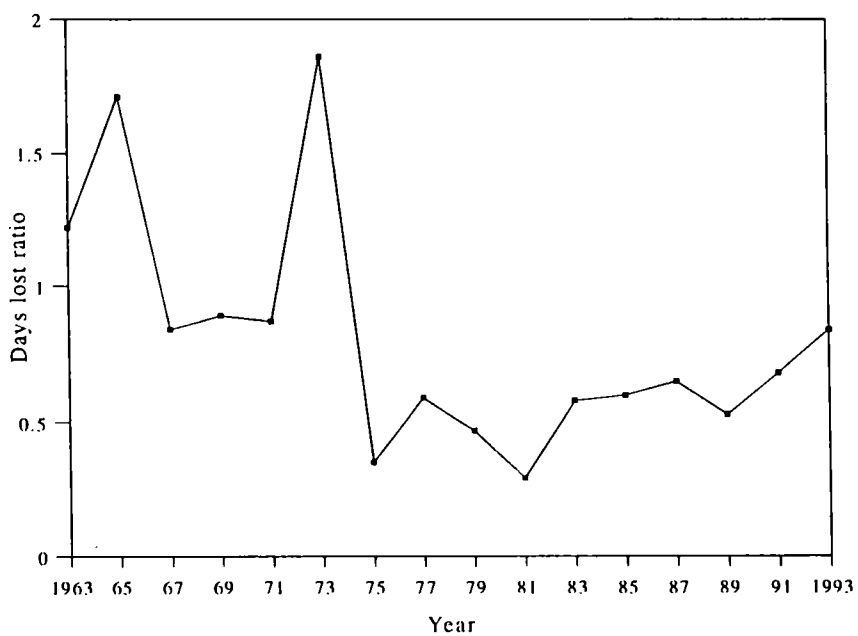


Table 4.3
Different Measures of disputes - Kerala

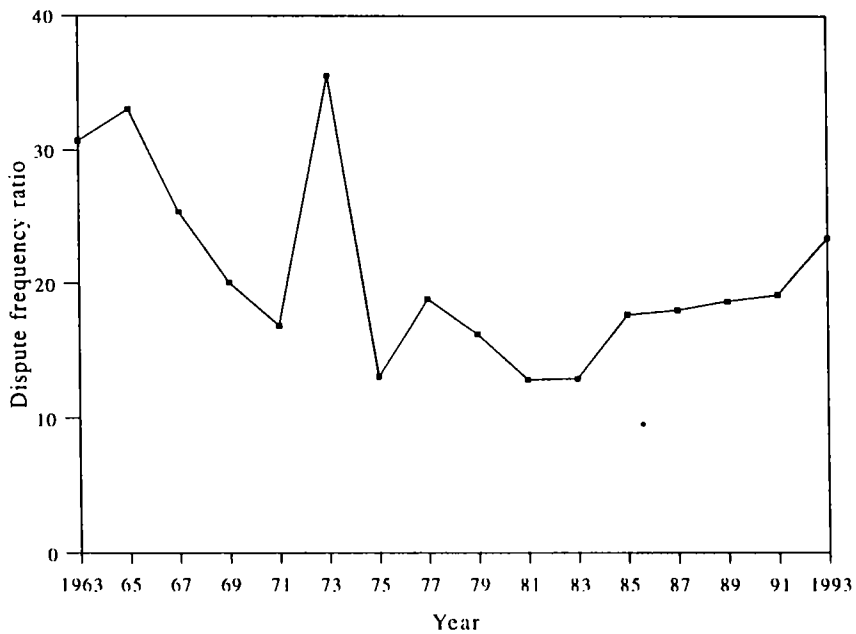
Year	Days lost Ratio	Frequency of Disputes	Workers Involvement	Mean Size	Average Duration
1963	1.22	30.72	20.21	805	28
1965	1.71	33.05	18.59	820	23
1967	.84	25.42	19.08	789	24
1969	.89	20.10	16.53	831	18
1971	.87	16.93	14.81	740	17
1973	1.86	35.57	24.56	893	31
1975	.35	13.05	14.07	676	17
1977	.59	18.88	16.31	718	21
1979	.47	16.29	18.19	768	21
1981	.29	12.84	12.65	773	21.5
1983	.58	12.91	19.09	580	22
1985	.60	17.74	17.66	667	22.9
1987	.65	18.07	14.02	781	23
1989	.53	18.73	18.22	726	23.8
1991	.68	19.19	20.37	730	24
1993	.84	23.43	21.89	796	26

Source Indian Labour Statistics - relevant issues and
Labour Department; Government of Kerala, Trivandrum

A similar trend may be found in the case of other variables viz., dispute frequency, workers involvement ratio, mean size and the average duration of disputes also. The ratio of dispute frequency is given in col: 3 of Table 3. After the initial rise in 1965, the indicator increased from 16.93 in 1971 to 35.57 in 1973. This rising phase was followed by a relatively brief phase from 1975 to 1983 when it tended to stagnate. The ratio has been rising especially from 1985 on wards (Graph 4.2). Column 4 of the table shows the trend in the percentage of workers involved in industrial disputes to total workers. The ratio increased

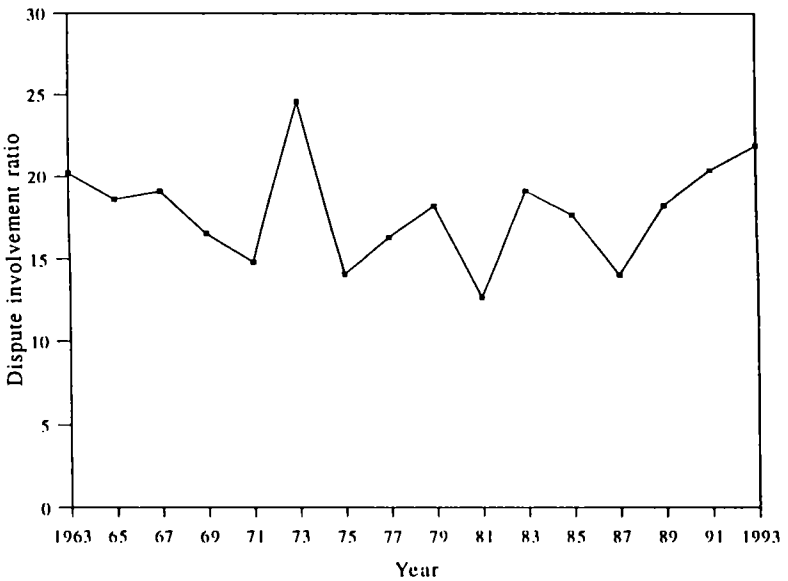
from 20% to 24.5% during 1963 to 1973. However, during the period 1975 to 1983, no specific trend could be discerned in the indicator.

Graph 4.2 Dispute Frequency Ratio 1963-93

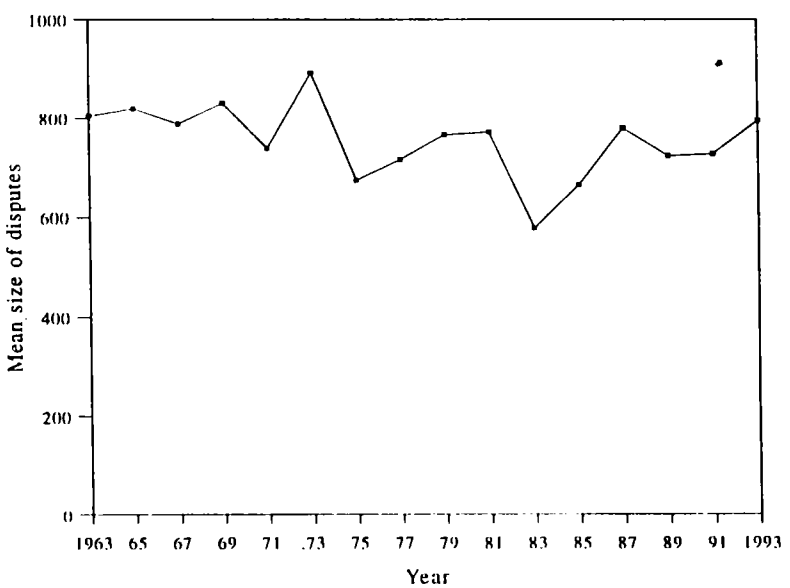


After a decline during 1984 to 1987, its started rising (See Graph 4.3). Now, with regard to Mean size and average duration also, more or less similar trends may be observed (Graphs 4.4). It can be seen that both the indicators were rising during the phase 1963–'73 and have peaked in the year 1973. But unlike the other indicators, the average duration of disputes has followed a gradual increase from 1977 till 1993 (Graph 4.5).

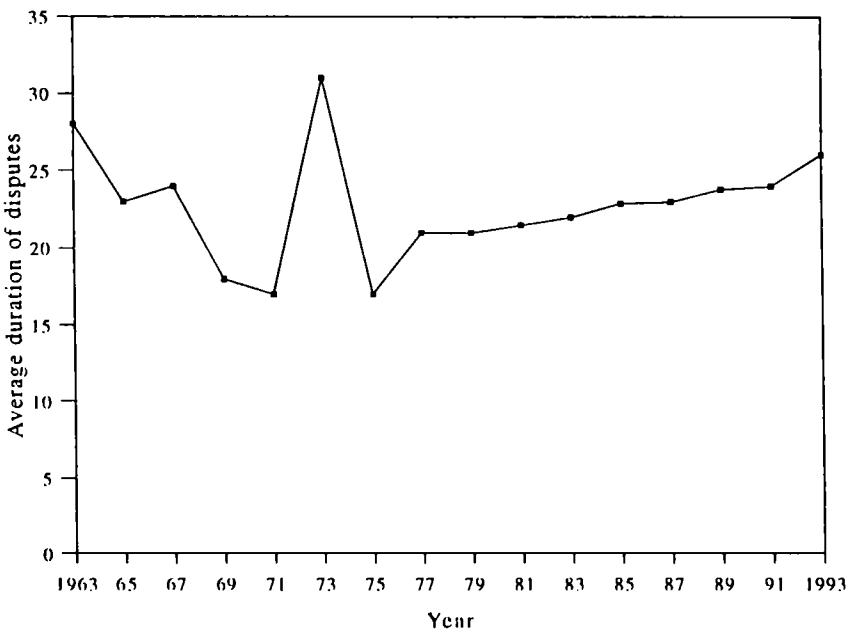
Graph 4.3 Workers Involvement Ratio 1963-93



Graph 4.4 Mean Size of Disputes Ratio 1963-93



Graph 4.5 Average Duration of Disputes Ratio 1963-93



The foregoing analysis of the various indices of industrial disputes shows that there existed three distinct phases in the growth of industrial disputes in Kerala during the period 1963–'93. The first phase was an upward one during 1963 to 1973 and the second one was a downward phase from 1975 to 1985. But during the period 1985 to 1993, the incidence of industrial disputes again increased. All the measures of disputes moved in close sympathy with one another. The year 1973 is noted as the peak year representing the maximum of all the five ratios of industrial disputes analysed.

IV.4 Distribution of Industrial Disputes across industries in Kerala

An industry-wise distribution of disputes in Kerala will enable us to arrive at a clearer understanding of the nature and magnitude of the labour problems in various industries in the state. An analysis of the mandays lost ratio in the factory sector of Kerala covering the major industries (two digit) over a period of 30 years from 1963 to 1993 is made in Table 4.4. The data show that the majority of industries like Food products, Textile Products, Wood and wood products, paper products, rubber and plastics, Basic Metal and alloy were keeping high average mandays lost ratio during 1963–'1993. Among these, Rubber and plastics was keeping the top position.

Table 4.4
Mandays lost ratio in Kerala (Factory sector)

Industry Code		1963-69	1970-77	1978-84	1985-93	1963-93
20-21	Food products	1.21	1.68	1.04	1.32	1.32
22	Beverages	.35	.62	.11	.06	.08
23	Cotton textiles manufacturing	.84	1.31	.70	.93	1.01
26	Textile products	1.01	1.43	.84	.98	.85
27	Wood & wood products	.98	1.22	.91	1.45	1.50
28	Paper & paper products	.53	2.62	.61	.80	1.68
29-30	Rubber, plastic and coal products	5.71	6.29	2.78	3.35	5.02
31	Chemical and clinical products	.42	1.45	.54	.74	.95
32	Non-metalic mineral products	.85	1.49	.36	.74	.92
33	Basic metal & alloy products	.25	2.09	.62	1.02	1.28
34	Metal products	.58	.79	.28	1.19	.56
35	Machinery & tools	.98	.68	.30	.17	.39
36	Electrical machinery	1.10	1.82	.33	1.02	.98
37	Transport equipments	.68	1.29	.52	.32	.87
38	Other manufactures	1.18	1.79	1.35	1.35	1.49
42	Water & supply	.48	.69	.32	.32	.38
97	Repairs	.52	.71	.29	.29	.40

Source: Indian Labour Year Book, The Labour Department of Kerala, Trivandrum.

Breaking the period of analysis into four, it may be seen that during 1970–'77, almost all industries were showing very high incidence of disputes. But the period 1978–'84 is noted for low ratio with all industries. Again from 1985 onwards, the ratio has gathered momentum in the case of majority of industries. Among the different industries, Beverages, Machine Tools, Water supply and Repairs were witnessing very low disputes throughout the period of analysis.

Here it may be observed that Kerala's factory sector witnessed very high intensity of industrial disputes during the first half of the seventies. This may

be identified as the reason for the first kink[5] (explained in Chapter II) noted in the case of the industrial production of Kerala. After a break in its momentum during 1978–'84, the mandays lost ratio with regard to majority of industries has again started increasing from 1985 onwards.

An analysis of industry-wise distribution of mandays lost in Kerala's sample sector helps us to understand the incidence of disputes in the small scale sector of Kerala during the past few decades [Table 4.5]. Among the various industries, the small scale manufacturing units bear the brunt of the total mandays lost in Kerala. It varies from 35% in 1965 to 49% in 1993. The high incidence of disputes during the mid seventies in Kerala is also reflected in the data regarding mandays lost in small industries (62% in 1974). A special feature of the industrial disputes in Kerala during the past decades is the high intensity of disputes with the head load workers. The percentage of mandays lost with head load workers has increased form 5.9 in 1965 to 36 in 1993. The other industries like Plantations, Road Transport, Shops and Hotels have experienced only moderate increases in mandays lost. On the whole, it may be seen that with regard to the sample sector, small scale manufacturing units and head load workers were highly prone to disputes in Kerala during the past four decades.

Table 4.5
Industry-wise list of mandays lost in Kerala (Sample sector)

(percentages)

	1965	1970	1974	1980	1985	1990	1993
Manufacturing Industry	34.9	43.8	61.7	40.9	41.2	41.5	48.7
Plantations	28.7	-	.9	.4	2.6	1.1	.3
Road Transport	6.4	12.6	11.1	10	6.98	18.5	10.7
Shops & Hotels	12.7	8.6	3.5	12.5	16	4.2	2.3
Head load workers	5.9	18.3	20.6	28.9	28.7	30.7	35.6
Miscellaneous	11.4	16.7	2.2	7.3	4.43	4	2.4
Total	100	100	100	100	100	100	100

Source: Labour Department - Government of Kerala, Trivandrum.

Table 4.6 gives a comparative picture of reasons for work stoppages in Kerala and All India in selected years. At the national level, the importance of wages and allowances is coming down while that of Bonus is rising over time. Indiscipline and violence as a reason of work stoppage is generally losing its significance at all India level. No marked change in other reasons such as personnel and retrenchment can be observed. Kerala, on the other hand, presents a different picture with a gradual increase in many reasons responsible for work stoppages during the period 1960 to 1993. Reasons like wages and allowance and indiscipline are noted as the main causes of work stoppages in Kerala. Indiscipline, violence and others as the chief reason for work stoppage have been acquiring special significance through out the period. It reached the peak level in 1973–'74, showed a slight fall in the beginning of eighties and then started again to increase with the beginning of nineties.

Table 4.6
Reasons for work stoppages - All India & Kerala

(percentages)

		1960	1965	1970	1974	1980	1985	1990	1993
Wages and Allowances	K	23.5	30.8	39.9	32.54	46.6	31.35	30.4	32.8
	I	37.2	33.5	37.1	32	26.9	26.6	28.5	30.7
Bonus	K	31.6	26.5	15.9	9.21	7.76	19.10	11.5	12.6
	I	10.5	9.9	10.6	8	6.9	17.7	18.2	20
Personnel	K	4.8	3.1	-	3.52	19.12	26.2	28.6	22.3
	I	22	24.1	20.9	22	19.6	23.2	28.5	20.7
Retrenchment	K	-	1.8	.4	3.85	3.88	-	4.2	3.6
	I	2.6	3.2	4.7	7.8	3.4	2.6	2.8	7.9
Indiscipline,	K	40.1	37.8	43.8	50.88	22.64	23.35	25.3	26.7
violence, others	I	28.1	29.3	28.7	30.2	43.10	29.9	22.0	20.7
Total	K	100	100	100	100	100	100	100	100
	I	100	100	100	100	100	100	100	100

K - Kerala I- India

Source: Indian Labour Year Book, Statistics for Planning, Government of Kerala, Director of Economics & Statistics, Kerala.

IV.5 Explanatory model showing the trends in industrial disputes in Kerala

Statistical studies indicate that institutional and economic variables influence industrial conflicts. Past researchers on the subject developed formal statistical models to explain the trends in and determinants of industrial conflicts.[6] In the Indian context too, such analysis of the data have been attempted.[7] However, no systematic efforts have been made to bring together the information on industrial conflicts and their explanatory power in the context of Kerala, especially in a

long term perspective. Hence, in this section, an attempt is made in identifying the economic and non-economic variables explaining the trends in industrial disputes in Kerala covering the period from 1963 to 1993.

The attempted model emphasises the role of both economic and institutional variables which influence the industrial conflict. The economic variables include growth in economic activity, wage rates, and rates of inflation. The institutional variables consist of the number of trade unions registered and union membership. All the three indicators of industrial disputes namely, number of disputes, workers involved, and mandays lost have been used separately in the model. The data on conflicts, covering the entire factory sector of Kerala, have been taken from Indian Labour Statistics and state Labour Department. The data relating to the other economic variables are provided by Annual Survey of Industries. We have worked out the model separately for three time points viz; 1963–'93, 1963–'75, and 1976–'93.

The model is given as

$$S = \alpha + \beta_1 CPI - \beta_2 W - \beta_3 V + \beta_4 E + \beta_5 T + \beta_6 H.$$

where, S = Number of disputes, workers involved, and mandays lost
CPI = Cost of living index (consumer price index)
W = Average Wages (Industry)
V = Average Value added (industry)
E = Industrial Employment
T = Trade Unions registered
H = Trade Union membership,
α = Constant, and
β = regression coefficient

In the proposed model, it is expected that some of the variables will have positive impact on industrial conflict while others should exert negative influence. For instance, the CPI is expected to have a positive impact since rising prices erode real wages and tend to increase conflict. The money wages are expected to have negative relationship. Similarly the increase in number of trade unions registered and union membership may have positive influence.

The regression results are presented below:

1963-1975

1. Disputes

$$\begin{aligned} D = -2.75 &+ 1.11CPI^{**} - 0.11W^{**} + 0.33V \\ &\quad (2.77) \quad (-2.57) \quad (1.97) \\ &+ .0051E + .051T + 1.08H^{*} \\ &\quad (1.75) \quad (1.04) \quad (3.93) \\ &R^2 = 0.92, \quad F = 2.08, \quad DW = 2.05 \end{aligned}$$

2. Workers Involved

$$\begin{aligned} W = 1.36 &+ 0.018CPI^{**} - 0.005W^{**} + .0003V \\ &\quad (2.55) \quad (-2.91) \quad (0.79) \\ &+ .2796E + .0015T + .004H^{**} \\ &\quad (0.62) \quad (0.95) \quad (2.94) \\ &R^2 = 0.83, \quad F = 14.60, \quad DW = 2.11 \end{aligned}$$

3. Mandays lost

$$\begin{aligned} ML = 13.36 &+ 0.049CPI^{**} - .008W^{**} + .005V^{***} \\ &\quad (2.65) \quad (-2.82) \quad (1.95) \\ &+ .00001E + .0012T^{***} + .039H^{*} \\ &\quad (.19) \quad (2.15) \quad (3.87) \\ &R^2 = 0.77, \quad F = 8.45, \quad DW = 2.09 \end{aligned}$$

1976-1993

4. Disputes

$$D = 14.85 + 0.821CPI^{**} - 0.201W^{***} + 0.003V + 0.0075E + 0.035T + 0.049H^{**}$$
$$(2.71) \quad (-1.97) \quad (1.23) \quad (1.01) \quad (1.30) \quad (2.53)$$
$$R^2 = 0.43, \quad F = 9.81, \quad DW = 1.98$$

5. Workers involved

$$W = -8.42 + 0.043CPI^{***} + 0.740W + 0.045V + 0.009E + .0071T + .0081H^{***}$$
$$(1.89) \quad (.09) \quad (1.06) \quad (0.94) \quad (1.90) \quad (1.98)$$
$$R^2 = 0.36, \quad F = 6.09, \quad DW = 2.01$$

6. Mandays lost

$$ML = 29.53 + .941CPI^{**} - .029W^{***} + .021V + .0041E^{***} + .055T + .053H^{**}$$
$$(2.49) \quad (-1.99) \quad (.081) \quad (2.06) \quad (0.81) \quad (2.46)$$
$$R^2 = 0.29, \quad F = 8.88, \quad DW = 2.14$$

1963-93

7. Disputes

$$D = 125.66 + 0.42CPI^{**} - 0.05W^{**} + .02V + .0003E + 0.06T + 1.03H^{**}$$
$$(2.36) \quad (-2.13) \quad (.27) \quad (1.17) \quad (1.51) \quad (2.96)$$
$$R^2 = 0.72, \quad F = 17.92, \quad DW = 1.97$$

8. Workers involved

$$w = 1.58 + .0051CPI^{**} - .0041W + .0002V + .0017E^{***} - .215T + .91H^{**}$$
$$(2.61) \quad (.47) \quad (.19) \quad (1.02) \quad (-1.48) \quad (2.17)$$
$$R^2 = 0.57, \quad F = 11.55, \quad DW = 2.17$$

9. Mandays lost

$$
\begin{aligned}
ML = 4.18 &+ .091CPI^{*} - .005W^{***} + .003V \\
&\quad (2.93) \quad (-2.27) \quad (1.54) \\
&+ .0001E^{***} - .0005T + .1005H^{**} \\
&\quad (.04) \quad (.36) \quad (2.25) \\
&R^2 = 0.67, \quad F = 28.9, \quad DW = 2.24
\end{aligned}
$$

(t - values in parenthesis)

Significance: *at 1%, ** at 5%, *** at 10%

The regression results for the period 1963–'93 suggest that the only variables which influenced industrial conflicts in Kerala were consumer price index, wages and trade union membership. The importance of the latter two variables differred during the three time periods. They also varied depending on how the dependent variable is measured.

IV.6 Conclusion

In this chapter, we have made an attempt to portray the trend in industrial disputes in Kerala during the past four decades. Analysing the period 1963–'93, it is seen that Kerala occupies a top position along with West Bengal in the industrial disputes map of India. It is observed that Kerala has been showing high intensity of disputes throughout the period of analysis except for early eighties. All the indices of industrial disputes like mandays lost ratio, dispute frequency ratio, workers involvement ratio, mean size and the average duration show that Kerala's industrial sector has been highly prone to conflicts with the exception of the 1980–'85 period.

In the explanatory model, the significant determining factors of industrial disputes in Kerala are found to be industrial wages and trade union movement.

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CHAPTER V

LABOUR COST HYPOTHESIS–AN EMPIRICAL ANALYSIS

V.1 Introduction

For long, economists have been debating the effects of unionisation of workmen and collective bargaining, on the efficiency of business enterprises.[1] Since labour is the most important productive factor and trade union activity is the most powerful influence on labour, their roles in deciding the shape of industrialisation cannot be over emphasised. However to specify the relationship between industrial growth and the nature of trade union activities is not an easy task. In this chapter we propose to make an empirical testing of the 'labour cost hypothesis'[2] to understand, if region specific factors, like high wages and the nature of trade union activities can serve as a framework for explaining the low industrial development of Kerala.

For operational convenience, we split up the 'labour cost hypothesis' into two; 'wage-cost hypothesis' and 'psychic-cost hypothesis'. The wage cost hypothesis can be examined by comparing the trend in industrial wages and its relationship with labour productivity in Kerala, relative to all India. An analysis of the share of wages in the value added is considered to be very relevant here because wage is believed to be the prime issue around which struggles develop and relative wages is one of the major considerations before employers make decisions on location of industrial units.

In the succeeding sections of this chapter, we will be analysing the available evidences relating to trade union activities and industrial growth of the state; first, with the help of industry level data of small scale industries and second,

by using firm level data. As mentioned earlier, the data for the macro analysis is computed from the Annual Survey of Industries, (ASI) data for Factory and Census Sectors. The analysis falls into two sections. The first analysis consists of a comparative picture of wages and wage share in the value added in the small scale industrial sector of Kerala with that of all India. The next section shows the impact of trade union activities through their effect on industrial wages.

V.2 Industry–wise Analysis

V.2.0.1 Wages and Labour Productivity

We begin this section with the basic assumption that if militancy of labour is a specific feature of trade unionism in Kerala, the wage rate and wage share would be pushed up to a level unmatched with productivity increases and hence divergent to the national pattern. Then, the region would be unfavourable to industrial location. An examination of the wage-productivity relationship in Kerala's industrial sector relative to all India and some industrially advanced states is attempted below. In Table 5.1, the data on wages and labour productivity are presented for the years 1970–'71 to 1985–'86. It is seen that the average wage in Kerala has been ahead of the all India average through out the period. In 1985–'86, the average annual wage in the SSI sector in Kerala stood at Rs.5482 where as it was only Rs.4772 at the national level. Coming to value added per worker, the trend is just the opposite. Though during the early seventies, value added per worker in Kerala was ahead of the all India position, from 1973–'74

onwards, it was lagging behind the all India average. Thus it is arguable that Kerala's small scale sector is characterised by lower labour productivity with higher wages as compared to all India. This trend may be understood more clearly by observing the share of wages in the value added in the small scale sector (Table 5.2). The share of wages in the value added in Kerala has been above the national average except in 1970–'71.

Table 5.1
Trends in wages and labour productivity in Kerala's SSI sector (in Rs.)

Year	Kerala		India	
	Wages per worker	Value added per worker	Wages per worker	Value added per worker
1970-71	1315	6213	1313	4783
71-72	1492	5735	1365	5348
73-74	1763	5679	1670	5977
74-75	1905	5525	1809	6266
75-76	2217	5842	2021	6649
76-77	2147	7624	2123	8254
77-78	2474	8017	2192	9045
78-79	2805	8463	2588	9756
79-80	3354	9824	2954	10479
80-81	3684	10079	3291	11403
81-82	4202	10609	3534	11542
82-83	4528	12034	3990	14069
83-84	4839	12797	4370	15486
84-85	5195	13292	4640	16385
85-86	5482	14141	4772	17609

Source: Based on ASI data for factory sector and census sector

3.69

2.5

Table 5.2
Share of wages in the value added in SSI sector (in %)

Year	Kerala	India
1970-71	21.16	27.46
71-72	26.01	25.52
73-74	37.67	27.94
74-75	39.47	28.87
75-76	39.94	30.39
76-77	28.16	25.72
77-78	30.85	24.23
78-79	33.14	26.52
79-80	34.14	26.52
80-81	36.55	28.86
81-82	39.60	30.61
82-83	37.62	28.36
83-84	37.90	28.21
84-85	38.08	28.32
85-86	39.76	27.09

Source: opcit.

In order to project the deviation in Kerala's position with regard to wages and value added per worker from the all India position, the relative change in both are calculated by keeping 1970–'71 as the base year. It may be noted from Table 5.3 that when compared to all India, the deviations in wages, especially during the second half of the seventies and the first half of eighties were substantial. The wages increased at a higher rate in Kerala, than in India as a whole. With regard to value added per worker, Kerala always lagged behind all India.

Table 5.3
Relative change in wages and value added per worker (SSI sector)
(Base - 1970-71 = 100)

Year	Wages		Value added per worker	
	Kerala	India	Kerala	India
1970-71	100.00	100.00	100.00	100.00
71-72	113.46	103.96	92.30	111.80
73-74	134.06	127.18	75.30	124.96
74-75	164.86	137.77	88.92	131.00
75-76	188.59	153.92	94.02	139.01
76-77	163.26	161.69	122.70	172.56
77-78	188.13	166.94	129.01	189.10
78-79	213.30	197.10	136.21	203.97
79-80	255.05	244.98	158.12	219.08
80-81	280.15	250.64	162.22	238.40
81-82	319.54	269.15	170.75	241.31
82-83	344.33	303.88	193.69	294.14
83-84	367.98	332.82	205.48	323.77
84-85	395.05	353.38	213.93	342.56
85-86	416.88	363.44	227.60	368.15

Source: Computed from ASI data

In this context, we may compare the position of Kerala, with that of other leading states of India (see Table 5.4). The average wage ranged between Rs.991 in Bihar and Rs.1953 in Punjab in 1970–'71. Over time, wages went up in all States. But the rate of increase was higher in Maharashtra, Punjab, Haryana, West Bengal and in Kerala till 1974–'75. The rising trend in wages continued in the case of all States. During 1985–'86, Maharashtra held the first position in keeping the highest average wage followed by Punjab and Kerala. But comparing the percentage increase of wages over years, it is seen that Kerala is next

to Maharashtra. Coming to value added per worker, all the states except A. P, Kerala, Orissa and M. P., noted steady increases. Here also Maharashtra ranked first. In Kerala, both wages and value added were rising. But wage has shown a speedier rise. Looking at the percentage increase in wages and value added, while Kerala showed 316 per cent increase in wages, it had witnessed only 127 per cent increase in value added in the small scale sector during 1970–'71 to 1985–'86.

Table 5.4
State-wise changes in wages per worker and value-added per worker in small scale sector

States	1970-71		1974-75		1980-81		1983-84		1984-85		1985-86		% in 1985-86 over 1970-71	
	W/W	V/W	W/W	V/W	W/W	V/W	W/W	V/W	W/W	V/W	W/W	V/W	W/W	V/W
Andhra Pradesh	1031	3536	1101	5760	2322	4107	2789	4723	2968	4975	3030	5302	194	50
Assam	1051	3078	1389	7012	2308	11307	2996	17818	3272	18198	3342	19536	218	534
Bihar	991	1778	1553	5112	2926	10175	3820	22527	4073	23079	4434	27705	347	1458
Gujarat	1306	5720	1892	6505	3304	12707	4292	21764	4491	21978	4515	22763	245	297
Haryana	1486	8412	2492	8891	3943	16897	4656	18594	4837	19430	4952	21890	233	160
Karnataka	1230	4287	1665	5721	2943	16282	4312	14825	4672	15876	5029	16569	308	286
Kerala	1315	6213	1905	5525	3684	10079	4839	12767	5195	13292	5482	14141	316	127
Madhya Pradesh	1131	5086	1252	4502	2882	8077	3256	11735	3390	12043	3393	13012	200	155
Maharastra	1510	6557	2375	8259	4480	16482	6403	27055	6890	30090	7115	31687	371	383
Orissa	1115	10781	1414	5258	2705	10843	3498	13066	3570	13962	3650	15472	227	44
Punjab	1953	4282	2521	6992	4180	14318	5556	16604	5743	17203	5879	19491	201	355
Rajasthan	1181	3564	1721	6539	3510	11500	4511	13425	4673	14078	4740	14529	301	307
Tamil Nadu	1194	2711	1692	5521	2912	10875	4298	11913	4578	12975	4654	13445	289	396
Uttar Pradesh	1296	2549	1683	5075	2801	9726	3742	12987	3976	13796	3993	15365	208	502
West Bengal	1300	4934	2492	7213	3852	12377	4775	15529	5089	16472	5241	18548	303	276
All India	1313	4783	1809	6266	3291	11403	4370	15486	4640	16385	4772	17609	263	268

Source: Based on ASI data on Factory and Census Sectors
w/w - wages per worker v/w - value added per worker

V.2.0.2 Some technical coefficients across states

An analysis of some technical coefficients of all industries taken together in the small scale sector across states reveals certain interesting features. [Table 5.5]. In terms of value added per employee, Kerala is way behind many other states. Its rank is only 12. Among the major States, however, Kerala ranks high in terms of wages per employee as also wages per value added. Capital productivity is also lower in Kerala.

Table 5.5
Some technical coefficients in major states (SSI sector) - 1985 - '86

Stages	Fixed Capital per employee		Net value added per employee		Emoluments per employee		F.C/V.added		Emoluments / V. added	
	Rs.	Rank	Rs.	Rank	Rs.	Rank	Ratio	Rank	Ratio	Rank
Andhra Pradesh	5509	15	4743	15	6173	4	0.16	4	1.30	1
Assam	11512	9	15937	6	4621	11	0.72	9	0.29	12
Assam	12155	8	22913	1	5240	8	0.53	15	0.22	15
Gujarat	15133	4	19636	3	5099	10	0.77	6	0.25	14
Haryana	14565	6	19013	4	5379	6	0.76	7	0.28	13
Karnataka	14262	7	14765	8	5241	7	0.96	5	0.35	6
Kerala	9074	12	12041	12	6477	3	0.75	8	0.53	2
Madhya Pradesh	6128	14	11411	13	3534	15	0.53	14	0.30	10
Maharastra	14614	5	23182	2	7964	1	0.63	11	0.34	8
Orissa	8074	13	12796	10	3832	14	0.63	12	0.29	11
Punjab	10783	10	17656	5	6098	5	0.61	13	0.34	9
Rajasthan	19958	1	12149	11	4539	13	1.64	1	0.37	5
Tamil Nadu	18305	2	9995	14	5105	9	1.39	2	0.51	3
Uttar Pradesh	16028	3	13032	9	4613	12	1.22	3	0.35	7
West Bengal	9915	12	15102	7	6507	2	0.65	10	0.43	4
All India	11939	-	14598	-	5841	-	0.81	-	0.40	-

Source: Based on ASI data for factory and census sectors in 1985-86

Generally, we find a positive correspondence between wages and labour pro-

ductivity in an industrially developed region. Maharashtra appears to be satisfying this condition. Among the industrially advanced states, only West Bengal presents a complex situation of high wages coexisting with lower labour productivity.

V.2.0.3 The Share of Labour Cost

Table 5.6 presents an analysis of inter-state variations of cost structure in the small scale sector. The table indicates that Kerala is a region which accounts for very high labour cost. In the year 1985–'86, Kerala ranked top next only to Andhra Pradesh in the share of labour cost. The supplementary emoluments too had been high in Kerala. This accounts for the lower than national average share of profits of small scale units in Kerala. The profitability of capital in Kerala too had been low. The cost figures also show that the share of material costs was 64.75% of the total cost.

Table 5.6
Industrial cost* structure in SSI sector of major states - 1985-86

Stages	Fuel	Materials consumed	Other inputs	Emoluments	Supple: emoluments	Rent	Interest	Depreciation	Profit
	1	2	3	4	5	6	7	8	9
Andhra Pradesh	2.95	66.64	8.10	14.75	.25	.40	2.72	1.30	2.89
Assam	4.10	61.43	14.10	5.39	.29	.19	2.69	1.92	9.89
Assam	2.95	66.29	18.75	6.75	.20	.18	1.51	1.81	7.56
Gujarat	4.25	68.33	14.21	5.56	.39	.30	3.10	1.68	2.18
Haryana	4.15	69.15	13.55	6.75	.47	.27	3.21	1.35	1.10
Karnataka	3.99	61.41	16.85	6.95	.57	.59	3.51	2.18	3.95
Kerala	2.95	64.75	14.62	9.55	.92	.31	2.89	1.71	2.30
Madhya Pradesh	3.28	57.86	22.05	6.79	.71	.49	3.06	1.65	4.11
Maharastra	4.45	53.95	22.85	7.92	.87	.57	2.99	1.42	4.98
Orissa	2.75	71.17	16.22	5.65	.31	.27	2.41	1.22	-8.2
Punjab	4.11	60.55	21.78	4.95	.22	.29	2.36	1.89	3.85
Rajasthan	4.72	74.57	9.97	4.12	.33	.22	2.95	2.20	2.92
Tamil Nadu	4.02	60.68	19.06	6.92	.67	.46	3.19	2.16	2.84
Uttar Pradesh	5.18	64.21	16.15	6.78	.39	.29	3.65	1.28	2.07
West Bengal	5.10	65.97	13.92	7.15	.81	.59	2.53	1.95	1.98
All India	3.92	65.15	15.70	6.18	.49	.39	2.95	1.68	2.87

Source: Based on ASI data for factory and census sectors
(* Cost is calculated as % of value of output)

V.2.0.4 Industry–wise Structural Ratios

The discussion on wage cost hypothesis will not be complete without looking at the problem industry-wise. Table 5.7, gives some structural ratios of industries (2 digit NIC) in the small scale sector for Kerala and all India. The capital-labour (fixed capital per employee) ratio shows that industrial system in Kerala

is dominated by less capital intensive industries compared to all India and this accounts partly for the low labour productivity of Kerala. It may also be seen that all the industries in Kerala's small scale sector except chemical, repairs and other manufactures are noted for higher wages than similar industries at national level. Similarly, the ratio of emoluments to net value added in all the industries groups in Kerala except chemical, water supply, repairs and other manufactures is found to be higher.

Table 5.7
Structural ratios in industries for small scale sector
Kerala and India (1985-86)

Industry code			F.C/ Employee	N.V added Employee	Emoluments/ Employee	F.C/N.V added ratio	Emoluments / N.V added ratio
1			2	3	4	5	6
20-21	Food products	K	12249	14780	4960	.82	.33
		I	10236	10539	4592	.97	.30
22	Beverages and tobacco products	K	1227	6586	6706	.18	1.01
		I	1668	6982	5774	.23	.82
23	Manufacturing of cotton textiles	K	3196	10909	4398	.29	.40
		I	8587	10076	4140	.85	.32
26	Textile products	K	7286	14573	7511	.50	.51
		I	9554	23383	6550	.40	.28
27	Wood & wood products	K	8274	8705	5014	.95	.57
		I	7697	19205	4571	.40	.23
28	Paper and paper products	K	13508	9677	7822	1.39	.80
		I	20444	19173	5441	1.06	.28
29-30	Rubber, plastic & coal products	K	25209	23497	6703	1.07	.28
		I	14712	15090	4854	.97	.22
31	Chemical & chemical products	K	15322	23452	5253	.65	.22
		I	26717	25456	7628	1.04	.29
32	Non-metalic mineral products	K	6818	10844	7792	.62	.71
		I	7351	7447	4469	.98	.60
33	Basic metal & alloy	K	19923	7407	10217	1.84	1.37
		I	20334	20427	6114	.99	.29
34	Metal products	K	13083	8416	6324	1.53	.74
		I	13423	17169	4754	.78	.27
35	Machinery & tools	K	18565	13597	11619	1.37	.87
		I	15952	18541	7019	.86	.37
36	Electrial machinery	K	42088	14082	9810	2.98	.69
		I	19897	21411	6553	.92	.30
37	Transport equipments & parts	K	9392	19889	9574	.47	.83
		I	17125	18709	7829	.91	.41
38	Other manufactures	K	5397	36507	6507	.14	.45
		I	16471	27665	9565	.59	.54
42	Water supply	K	40238	23571	12142	1.70	.51
		I	58502	21625	13083	2.70	.78
97	Repails	K	9829	5826	8634	.66	.64
		I	12118	26871	11542	.45	.75
	All Industries	K	9074	12041	6477	.75	.53
		I	11909	14598	5841	.81	.40

K - Kerala I - India

Source: Calculation based on ASI factory sector and ASI census sector

A summary of Table 5.7 is given in Table 5.8. The wage-productivity rela-

tionship in small scale sector in Kerala is categorised into four. Higher wages and higher labour productivity are present in industries like food products, cotton textiles, Rubber and plastics, etc. But a majority of industries, especially industries like Engineering, Wood and Wood products, etc., belong to the category of higher wage and lower productivity.

Table 5.8
Wage - productivity relationship in small scale sector in Kerala

Wage - productivity Relationship	NIC groups
1. Higher wages rates and higher labour productivity	(20-21) Food products
	(23) Cotton Textiles
	(29-30) Rubber, plastic & petroleum
	(32) Non-metalic mineral products
	(37) Transport equipments & parts
2. Higher wage rates and lower labour productivity	(22) Beverage & tobacco
	(26) Textile products
	(27) Wood & wood products
	(28) Paper & paper products
	(33) Basic metal & alloy industries
	(34) Metal products & parts
	(35) Machinery & tools
	(36) Electrical machinery
3. Lower wage rates and low labour productivity	(31) Chemical & chemical products
	(97) Repairs
4. Low wages rates and high labour productivity	(38) Other manufactures
	(42) Water supply

Source: Calculation based on ASI factory sector and ASI census sector

The above analysis relating to wages and wage share in value added shows that Kerala's industrial sector (SSI) is characterised by lower labour productivity with higher wages as compared to all India. Therefore, the available evidence

based on the macro level data stands to prove the high wage cost hypothesis in the small scale industry in Kerala.

V.2.1 Impact Analysis

The next issue is whether the trade unions in Kerala are in any way responsible for the high wages existing in the small scale industrial sector of the state. Hence we go in for an analysis of the empirical relationship between the trade union activities and industrial wages.

Every one knows that unions raise wages. The questions are how much, under what conditions and with what effects on the overall performance of the economy.[3] Generally the motive of trade unions, inter alia, is to bargain with employers and try to improve the economic condition of their members. A high degree of unionism would normally mean that workers are in a better position to bargain and hence increase the wages.[4] Unions exert pressures and raise money wages if not real wages.[5]

Unions are shown to have a persistent effect, averaging 10 to 15 per cent, on increase in wages of their workers over the non-unionised in the USA.[6] In Britain a differential ranging from 10 to 25 per cent was estimated.[7] In India, a few studies have empirically tested the impact of unions on wages.[8] The pioneering work was undertaken by Fonsecca (1964). Fonsecca tested the hypothesis that unions are a factor in raising money wages and analysed Indian data for th period 1939–'56. His results showed that the impact of unionisation is

positive but not significant. We are also following a similar methodology in this section.

The analysis attempted here, tries to study the relationship between trade union activities and money wages. We have run two regressions; one, on all industries (time series) covering the period 1970–'71 till 1985–'86, and the other, on industry (cross section) at two time points, 1975–'76 and 1985–'86. In the regression analysis, money wages paid to the workers (WI) has been taken as dependent variable. Independent variables are Productivity at current prices (PI) Consumer Price Index (CPI), Trade Union Index (TUI) and Fixed Capital per Worker (FCW).

The basic source of data for productivity, number of production workers, and capital is ASI for Sample Sector. The data on trade unionism are from the publications of Labour bureau. The productivity is taken as the gross value added per worker at current prices. Similarly, fixed capital per worker has been taken as another variable. For measuring the degree of trade unionism (trade union index) the ratio of man days lost in industrial disputes to workers has been used as a proxy for union activities instead of traditional measure of the ratio of unionised workers to total unionisable workers. This decision has been taken because the data of union membership suffer from many limitations. It is not obligatory on the part of trade unions to get themselves registered under the Trade Union Act 1926. A sizable number of trade unions fail to submit statutory annual returns, etc. Again, authors like Robert. W. Swidinsky,[9] (1972)

has strongly advocated the use of "time loss per employee" as a measure of trade union activity instead of the index of fraction of labour unionised.

The results for the whole Small Scale Sector in Kerala (Table 5.9) show that the coefficients of TUI and CPI are highly significant for almost all the industry groups. R^2 is very high in all the equations. Labour productivity appears to be totally insignificant except in the case of Basic metal and Machinery. While the money wages in industries like Food products, Textile products, Wood products, Paper products, Rubber and plastics, Chemical, Metal products and Machinery show significant positive relationship at 1% level, that in Non-Metallic products, Basic Metals, Electrical Machinery, and other Manufactures are showing significant relationship at 5% level with trade union index. Again, 10 industries out of 17 are showing significant relationship at 1% level between money wage and consumer price index.

Table 5.9
Results of regressin analysis of wages of all Industries of small scale sector in Kerala (Time series)

Industry code	Determinants				
	Constant	Labour productivity (PI)	Trade union Index (TUI)	Consumer price Index (CPI)	Fixed capital per worker (FCW)
20-21 Food products	-11.08	0.13	17.01*	9.86**	-0.11
	(-2.34)	(2.37)	(2.94)	(2.11)	(-1.21)
	$R^2 = 0.89$	$\bar{R}^2 = 0.88$	F = 20.18	DW = 2.13	
22 Beverages & tobacco products	1.37	-0.17	-24.2	0.013*	0.36**
	(1.13)	(-.80)	(-0.25)	(4.99)	(1.94)
	$R^2 = 0.98$	$\bar{R}^2 = 0.97$	F = 22.25	DW = 2.45	
23 Manufacturing of cotton textiles	1.76	-0.15	11.73*	0.02*	0.06**
	(2.02)	(-2.9)	(2.81)	(7.13)	(2.19)

		$R^2 = 0.99$	$\bar{R}^2 = 0.98$	F = 247.5	DW = 2.85	
26	Textile products	-5.25	-0.04	19.78*	0.08**	0.29
		(-.29)	(-.20)	(2.98)	(2.30)	(0.67)
		$R^2 = 0.95$	$\bar{R}^2 = 0.93$	F = 47.5	DW = 3.01	
22	Wood & wood products	-5.25	0.34	48.75*	0.011*	-.24
		(-2.2)	(1.08)	(3.94)	(3.04)	(-1.2)
		$R^2 = 0.99$	$\bar{R}^2 = 0.98$	F = 232.5	DW = 2.27	
23	Paper & paper products	57.39	-5.47	34.81*	0.22*	4.40**
		(0.84)	(-1.6)	(3.01)	(2.97)	(1.88)
		$R^2 = 0.79$	$\bar{R}^2 = 0.70$	F = 9.88	DW = 3.03	
29-30	Rubber, plastic products	6.67	-7.53	93.14*	8.62**	-0.023
		(0.49)	(-0.18)	(2.85)	(2.27)	(-0.91)
		$R^2 = 0.91$	$\bar{R}^2 = 0.84$	F = 25.27	DW = 2.01	
31	Chemical products	-23.46	-0.10	67.6*	0.05**	2.86**
		(-0.51	(-0.49)	(3.62)	(1.97)	(2.10)
		$R^2 = 0.48$	$\bar{R}^2 = 0.27$	F = 2.30	DW = 3.04	
32	Non-metalic products	4.51	-5.30	69.12**	0.012	-0.05
		(0.56)	(-0.12)	(2.42)	(1.20)	(-0.45)
		$R^2 = 0.97$	$\bar{R}^2 = 0.95$	F = 80.83	DW = 2.53	
33	Basic metal & alloy	-14.4	0.146*	129.98***	0.09*	0.088*
		(-2.61)	(11.12)	(1.80)	(4.6)	(7.2)
		$R^2 = 0.99$	$\bar{R}^2 = 0.98$	F = 247.9	DW = 3.001	
34	Metal products & parts	3.18	-0.05	16.72*	8.51*	0.02
		(0.70)	(-0.66)	(3.002)	(4.95)	(1.3)
		$R^2 = 0.89$	$\bar{R}^2 = 0.85$	F = 22.5	DW = 1.95	
35	Machinery & tools	5.50	0.34**	16.01*	0.02*	0.101**
		(2.70)	(2.72)	(2.95)	(2.88)	(1.90)
		$R^2 = 0.70$	$\bar{R}^2 = 0.58$	F = 5.83	DW = 2.23	
36	Electrical machinery appliances	20.47	-3.96	20.25**	0.29*	0.75**
		(0.18)	(-1.31)	(1.91)	(3.05)	(1.99)
		$R^2 = 0.61$	$\bar{R}^2 = 0.45$	F = 3.91	DW = 1.79	
37	Transport equipments & parts	9.37	-0.22	26.64**	0.01**	-0.66
		(2.01)	(-1.25)	(2.24)	(1.99)	(-1.6)
		$R^2 = 0.88$	$\bar{R}^2 = 0.83$	F = 18.33	DW = 2.13	
38	Other manufactures	-2.39	-0.23	8.95**	0.04*	-0.72
		(-0.91	(-6.72)	(2.36)	(3.45)	(-4.2)
		$R^2 = 0.99$	$\bar{R}^2 = 0.98$	F = 241.33	DW = 2.91	

42 Water supply	58.1	0.29	-49.56	0.056*	9.28
	(3.47)	(3.33)	(-3.46)	(1.81)	(1.31)
	$R^2 = 0.98$	$\overline{R}^2 = 0.97$	F = 122.5	DW = 1.50	
97 Repairs	7.95	0.55	41.43	1.006***	-1.085
	(0.93)	(1.67)	(0.24)	(1.77)	(-.81)
	$R^2 = 0.72$	$\overline{R}^2 = 0.60$	F = 6.42	DW = 2.01	

* - Significant at 1% level [t values in parentheses]

** - Significant at 5% level

*** - Significant at 10% level

Study variable: Money wage rate (WI)

We have also tried a second set of regression taking money wage as study variable and, PI, TUI, and FCW as determinants for all industries (cross section) at two time points 1975–'76 and 1985–'86. This is done with a particular intention to locate the relationship between the variables at two time points; one with very high intensity of unionism (1975–'76) and the other with low intensity of unionism in Kerala (1985–'86). The results given in Table 5.10 show that trade union index is the only variable among the three, which is significantly related to money wages in the context of Kerala's small scale industries. In 1975–'76, there is a very high positive relationship between money wage and trade unionism with t-value significant at 1% level. However, in 1985–'86 there was only a lower significance (at 10% level). Here it may be inferred that Kerala's industrial sector (SSI) experienced very high degrees of trade unionism during mid seventies and comparatively low intensity during mid eighties. This is in conformity with what we have seen in chapters three and four.

Table 5.10
Results of regressin analysis of wages – all Industries –
(cross section) small scale sector in Kerala

Year	Study variable	Constant	Determinants		
			PI	TUI	FCW
1975-76	Money wage (WI)	10.27	0.06	21.83*	0.61
		(1.92)	(1.17)	(2.71)	(1.63)
		$R^2 = 0.91$	$\bar{R}^2 = 0.87$	F = 22.52	DW = 2.05
1985-86	Money wage (WI)	5.04	0.11	7.01***	0.85
		(3.17)	(0.83)	(1.78)	(0.34)
		$R^2 = 0.47$	$\bar{R}^2 = 0.39$	F = 19.00	DW = 1.99

* - Significant at 1% level [t values in parentheses]
** - Significant at 5% level
*** - Significant at 10% level
Study variable: Money wage rate (WI)

The above analysis, throws light on the fact that Kerala's industrial sector (SSI) has been experiencing a positive impact of trade unions on its wage rates. This clearly shows that the trade union in Kerala, along with the influence of general inflation existing in the State, are mainly responsible for the high wages prevailing in the small scale sector of the State which makes the sector unattractive to the investors.

V.3 A Firm–Wise Empirical Analysis

In this section, an attempt is made to locate an empirical relationship between trade unionism and industrial growth of Kerala with the help of firm-wise data generated by our sample survey. The survey, as mentioned already, covers 251 registered small scale units of modern type of which 201 are working in Kerala

and 50 in Tamil Nadu.[10] Most of the units have come up during the last 15 years. The survey was conducted during the year 1990–'91, using structured questionnaires.The units were selected at random.

The analysis is done in two sections. The first section is mainly concerned with the examination of evidences in support of the wage cost hypothesis in a comparative study of small scale firms in Kerala and Tamil Nadu. The second, the impact analysis, on the other hand, attempts to sketch the association between trade unionism, money wage and industrial investment in the small scale industrial units of Kerala and Tamil Nadu.

V.3.0.1 Nature, Distribution and Performance of the Business Organisation

Table 5.11 shows the industry wise distribution of sample units taken for the study from Kerala and Tamil Nadu. For the survey, we have selected ten categories of small scale industrial units.[11] In Kerala, the three districts selected are Trivandrum, Ernakulam and Palghat representing 60, 100 and 42 units respectively. Among the different industries, Wood and Wood products and Metal products are having the maximum representation. The least representation is for Electronics. In Coimbatore in Tamil Nadu, we have covered 50 units in total in which garments and Metal products number the maximum.

Table 5.11
Industry-wise samples taken from each district of kerala and Coimbatore

Industry	Trivandrum	Ernakulam	Palakkad	Total	Total Coimbatore (T.N.)
1. Electronics	1	2	-	3	3
2. Chemical	8	9	3	20	4
3. Food	6	11	10	27	4
4. Garments	7	5	3	15	12
5. Metal	8	19	8	35	8
6. Machinery	1	5	1	7	3
7. Rubber & plastics	4	17	3	24	2
8. Paper	10	10	3	23	4
9. Engineering	2	3	1	6	5
10. Wood & plywood	13	19	9	41	5
Total	60	100	42	201	50

Source: Based on survey results

The size-wise distribution of units in Kerala and Tamil Nadu reckoned in terms of investment in fixed assets and number and pattern of workers employed are given in Tables 5.12 and 5.13. More than 56% of the units under investigation in Kerala and 45% in Tamil Nadu had investment below Rs.5 lakhs. Tiny type of units are only below 8% in Kerala and below 10% in Tamil Nadu. So majority of the units surveyed belong to typical middle category of small scale units. In terms of size of employment, about 98% of the units in Kerala and 94% in Tamil Nadu employed less than 50 workers.

Table 5.12
Distribution of industrial units according to capital investments (SSI sector, Kerala and Tamil Nadu)

Industry	Below 50000		50000 - 100000		100000 - 200000		200000 - 500000		500000 above		Total	
	K	T	K	T	K	T	K	T	K	T	K	T
1. Electronics	1	-	1	-	-	1	1	-	-	2	3 (1.5)	3 (6)
2. Chemical	1	1	3	-	5	-	2	1	9	2	20 (10)	4 (8)
3. Food	6	-	2	1	3	-	6	2	10	1	27 (13.4)	4 (8)
4. Garments	2	1	2	-	3	2	2	1	6	8	15 (7.5)	12 (24)
5. Metal	3	1	4	-	6	-	5	2	17	5	35 (17.4)	8 (16)
6. Machinery	-	-	-	-	-	-	6	-	1	3	7 (3.5)	3 (6)
7. Rubber & plastics	1	-	1	-	2	-	6	1	14	1	24 (11.9)	2 (4)
8. Paper	2	1	1	-	4	1	8	-	8	2	23 (11.4)	4 (8)
9. Engineering	-	-	-	1	1	-	3	1	2	3	6 (3)	5 (10)
10. Wood & plywood	-	1	4	-	3	1	14	1	20	2	41 (20.4)	5 (10)
Total	16 (7.9)	5 (10)	18 (8.9)	2 (4)	27 13.43)	5 (10)	53 (26.36)	9 (18)	87 (43.28)	29 (58)	201 (100)	50 (100)

Source: Based on survey results
Note: The bracketed figures are percenrages
K - Kerala, T - Tamil Nadu

Table 5.13
Distribution of units by workers (skilled and unskilled) in different industries (Kerala and Tamil Nadu)

Industry	Less than 10				10 - 20				20 - 50				50 and above				Total	
	K		T		K		T		K		T		K		T		K	T
	Sk	Unsk	Sk	Unsk	Sk	Unsk	Sk	Unsk	Sk	Unsk	Sk	Unsk	Sk	Unsk	Sk	Unsk		
1. Electronics	1	3	2	2	1	-	1	1	1	-	-	-	-	-	-	-	3 (1.5)	3 (6)
2. Chemical	5	15	-	1	12	3	2	-	2	1	1	3	1	1	1	-	20 (10)	4 (8)
3. Food	20	5	2	1	5	22	1	1	2	-	1	2	-	-	-	-	27 (13.4)	4 (8)
4. Garments	8	3	3	3	6	11	6	3	1	1	2	5	-	-	1	1	15 (7.5)	12 (24)
5. Metal	24	9	3	2	8	25	4	3	2	1	1	3	1	-	-	-	35 (17.4)	8 (10)
6. Machinery	4	3	-	1	2	4	2	-	1	-	1	2	-	-	-	-	7 (31.5)	3 (6)
7. Rubber & plastics	10	8	1	1	8	16	1	-	5	-	-	1	1	-	-	-	24 (11.9)	2 (4)
8. Paper	13	8	2	1	10	15	1	1	0	-	1	2	-	-	-	-	23 (11.4)	4 (8)
9. Engineering	2	6	1	1	4	-	2	2	-	-	2	2	-	-	-	-	6 (3)	5 (10)
10. Wood & plywood	31	10	2	1	9	30	2	-	1	1	1	4	-	-	-	-	41 (20.4)	5 (10)
Total	118 (58.7)	70 (35)	16 (32)	14 (28)	65 (32.3)	126 (62.5)	22 (44)	11 (22)	15 (7.5)	4 (2)	10 (20)	24 (48)	3 (1.5)	1 (.5)	2 (4)	1 (2)	201 (100)	50 (100)

Source: Based on survey results
K - Kerala, T - Tamil Nadu

V.3.0.2 Capacity Utilisation

The general performance of the small scale units investigated are studied by comparing their capacity utilisation during three years, 1989, 1990 and 1991. Table 5.14 shows that the capacity utilisation in Kerala's industries is much below that of industrial units in Tamil Nadu in all the three years studied. It is surprising to see that majority of units in Kerala find it difficult, to utilize at least 50% of their capacity. Among the various industries in Kerala, Electronics is the only industry showing commendable performance and all other industries especially, food, garments, metal, rubber and plastic paper and wood are showing very poor performance in terms of capacity utilisation.

Table 5.14
Capacity utilisation in SSI - Kerala and Tamil Nadu

Industry	Capacity utilisation (in %)					
	1989		1990		1991	
	K	T	K	T	K	T
1. Electronics	52	60	68	71	89	79
2. Chemical	48	53	47	66	52	72
3. Food	35	58	31	69	45	80
4. Garments	51	62	42	70	54	85
5. Metal	41	70	37	74	47	91
6. Machinery	37	65	48	78	58	83
7. Rubber & plastics	42	55	34	62	45	75
8. Paper	39	49	36	67	44	77
9. Engineering	50	65	55	85	60	95
10. Wood & plywood	45	57	39	64	46	72

Source: Based on survey results
K - Kerala, T - Tamil Nadu

V.3.0.3 Wage and Wage share in value added

An analysis of wage and wage share in the value added in the small scale industrial sector of Kerala in comparison with Tamil Nadu will enable us to test empirically the wage cost hypothesis. The cost structure prepared on the basis of survey data (Table 5.15) gives a vivid picture of the comparative production costs incurred by the small scale firms in Kerala and Tamil Nadu. It may be noted from the table that the share of wage cost in total production cost is much higher in Kerala than in Tamil Nadu. A break-up of industries again shows that not even a single industry is having lower wage cost in Kerala and in some industries like wood, paper and engineering it is more than 100% that in Tamil Nadu.

Table 5.15
Cost* structure in SSI sector (Kerala and Tamil Nadu) 1990-'91

Industry	Materials used		Fuel and power		Emoluments		Rent		Interest		Depreciation		Other expenses		Total
	K	T	K	T	K	T	K	T	K	T	K	T	K	T	
1. Electronics	70.27	73.06	3.18	4.05	14.30	11.20	1.75	2.01	3.10	3.91	1.81	2.72	5.60	3.05	100
2. Chemical	61.18	64.83	4.09	5.11	20.20	14.95	1.58	2.62	3.40	4.15	2.75	3.17	6.80	5.17	100
3. Food	58.67	64.69	3.31	4.34	25.10	18.82	2.05	2.93	3.18	3.79	1.90	2.16	5.79	3.27	100
4. Garments	59.30	66.35	2.90	3.95	26.20	16.50	2.12	3.01	3.18	4.05	1.45	2.05	4.85	4.09	100
5. Metal	51.39	60.67	4.12	5.09	30.90	20.87	1.32	2.80	3.49	4.17	2.08	3.09	6.70	3.31	100
6. Machinery	68.18	70.28	3.62	4.89	14.80	10.91	1.45	2.72	2.98	4.30	2.94	2.78	6.03	4.12	100
7. Rubber & plastics	55.86	61.72	3.07	3.81	29.70	20.73	1.19	3.71	3.09	3.92	1.89	2.42	5.20	3.69	100
8. Paper	51.03	64.30	3.75	3.97	32.60	19.03	0.99	2.99	3.75	4.11	1.98	2.10	5.90	3.50	100
9. Engineering	65.34	71.51	3.81	4.42	17.40	9.29	1.73	2.64	3.05	4.47	2.86	3.95	5.81	3.72	100
10. Wood & plywood	53.50	61.39	5.75	5.17	30.50	19.50	1.25	3.85	2.50	4.20	2.10	2.22	4.40	3.67	100

Source: Based on survey results
K - Kerala, T - Tamil Nadu (*Cost as % of value of output)

An industry wise mark-up[12] calculated for the small scale industries in Kerala and Tamil Nadu also unveils a similar picture (Table 5.16). The mark-up calculation generally gives an idea of share of wages in profit and through that one can also view the performance efficiency of the business. The table shows that the mark up percentages calculated for the various industries in Kerala give a very poor comparative picture. While majority of Kerala industries are keeping very low mark-up, their counterparts in Tamil Nadu are showing considerably higher mark-up. In Kerala, the highest mark up may be noted with Electronics industry and the lowest with metal industry.

Table 5.16
Industry - wise markup of SSI (Kerala and Tamil Nadu) - 1990-'91

Industry	Markup (percentages)	
	Kerala	Tamil Nadu
1. Electronics	68.1	70.5
2. Chemical	37.0	67.81
3. Food	23.5	50.50
4. Garments	22.3	58.72
5. Metal	20.0	60.29
6. Machinery	54.7	61.67
7. Rubber & plastics	30.7	49.02
8. Paper	20.3	51.34
9. Engineering	39.9	69.73
10. Wood & plywood	21.8	50.29

Source: Based on survey results

The structural ratios shown in Table 5.17 give us further understanding on the wage and wage share in value added in Kerala compared to Tamil Nadu. It may be noted that the emoluments per employee in industries in Kerala are

higher than those in Tamil Nadu. The net value added gives the opposite picture. The majority of industries in Kerala are showing low value added compared to industries in Tamil Nadu. This means that while the small scale industries in Kerala are showing high wages and low productivity, their counterparts in Tamil Nadu are 'keeping low wages and high productivity'. This becomes clearer when we look at the emoluments to net value added ratio. Higher ratios may be observed in the case of all the industry groups in Kerala, whereas the industries in Tamil Nadu are showing only very low emoluments to value added ratios.

Table 5.17
Structural ratios in SSI - Kerala, Tamil Nadu (1991)

Industry	F.C per employee (Rs.)		Net value added employee (Rs.)		Emoluments per employee (Rs.)		F.C/NVA ratio		Emol./NVA ratio	
	K	T	K	T	K	T	K	T	K	T
1. Electronics	15830	16735	16936	17420	3901	2860	.93	.96	.23	.16
2. Chemical	18672	20640	20871	21302	3934	3741	.89	.95	.18	.17
3. Food	12308	15872	9179	16205	4275	3965	1.34	.97	.46	.24
4. Garments	11671	16635	8670	18960	4374	3872	1.35	.87	.50	.20
5. Metal	12722	13645	7469	14755	6326	4232	1.70	.92	.84	.28
6. Machinery	10899	12878	12683	11472	4098	2975	.85	1.12	.32	.25
7. Rubber & plastics	28630	21394	17530	20010	5091	3789	1.63	1.06	.29	.18
8. Paper	13731	16476	8013	17632	7890	4019	1.71	.93	.98	.22
9. Engineering	9876	14890	9232	16972	3850	2870	1.06	.88	.41	.16
10. Wood & plywood	10376	12681	7930	13480	5118	3431	1.30	.94	.64	.25

Source: Based on survey results
K - Kerala, T - Tamil Nadu

As to the question to what extent the wages in Kerala (SSI Sector) are higher than wages in Tamil Nadu, Table 5.18 presents the distribution of units according to their perception. Among the units surveyed, 75% of the respondents are

of opinion that compared to the industrial wages in Tamil Nadu, small scale units of Kerala are paying wages higher to the extent of 40–50 per cent. About 94% of the respondents are holding the view that Kerala's industrial wages are higher than that in Tamil Nadu by 30 per cent and above. Therefore, based on the survey data, it may be observed that Kerala's small scale industrial units are perceived to be incurring wage costs higher by more than 30% of what is paid by similar type of units in the neighbouring states.

Table 5.18
Number of industrial units according to relative change in wage in Kerala compared to Tamil Nadu

Nature of changes in wages	Extent of wage change as percentage				Total
	10 - 20%	20 - 30%	30 - 40%	40 - 50%	
High	5	8	38	150	201
Low	-	-	-	-	-
Total	5	8	38	150	201
	(2)	(4)	(19)	(75)	(100)

Source: Based on sample survey

V.3.0.4 Reasons for high wages and low productivity

What are the reasons responsible for the persisting high wages and low labour productivity in the small scale sector of Kerala? The reasons given by the units in Kerala are analysed in the following two tables.

The obviate the problems of presenting answers to objective type questions, which we have asked in our survey, we have followed a different method of presenting data by means of quartiles. Firstly, the questions got answered through

the survey and then ranked according to the preferences shown by the respondents. Next, we have calculated the three quartiles and then the quartile deviation *i.e.,* 'Semi-inter quartile range', have been estimated by taking half of the difference between third quartiles and first quartiles $\left(\frac{Q_3 - Q_1}{2}\right)$. Among these measures, we consider the median value (value of the response to second quartile, Q_2) as the answer having statistical consensus. Suppose the answers for a question are noted as 1 to 5 and Q_2 when calculated is 1 for the answer 2 and 2 for answer 5, it means that the answer 2 bears the maximum consensus and the answer 5 bears the second maximum consensus and so on. For analytical convenience, we also consider the existence of consensus if the Quartile Deviation (QD) is less than or equal to 1.[13]

Table 5.19 gives five reasons responsible for high wages in Kerala for which the preferences (ranks) are sought from the respondent firms in Kerala. Among the reasons, we find consensus among the respondents with regard to Trade Union Pressure, High Cost of Living, High Productivity and Industry specific reasons. Now to see the significance among these, we have to refer to the median. So the most important two reasons are found to be trade union pressure and High Cost of Living (Q_2 values as 1 and 2 and Q.D as .5]. Thus as per the survey results, the trade union pressure and high cost of living are the most relevant reasons causing high wages in the small scale industrial sector of Kerala. This finding is in conformity with what we have concluded in the preceding section based on industry-wise analysis.

Table 5.19
Reasons for high wage in Kerala

Reasons	Q_1	Q_2	Q_3	QD
1. High cost of living	2	2	3	.5
2. Trade union pressure	1	1	2	.5
3. Sympathetic government	2	3	4	1
4. High productivity	4	5	5	.5
5. Industry specific reasons	3	4	4	.5

Source: Based on survey results
Q_2 = Medium QD = Quartile Deviation

Table 5.20 presents the various reasons cited for low labour productivity in Kerala's SSI sector. Among the four reasons suggested, the respondents find no consensus with the reason 'lack of sincerity and commitment on the part of the workers'. With all other three reasons, there is consensus among the firms. It may be noted here that 'Restrictive Labour Practices' is having very strong consensus among the respondents (Q_2=1, $Q\Delta$=0) followed closely by is 'work to rule under the protection of trade union'. The above analysis shows that it is the restrictive labour practices and work to rule under the strong protection of trade unions which according to the perception of the entrepreneurs, are mainly responsible for the low labour productivity in the small scale sector of Kerala.

Table 5.20
Reasons for low labour productivity in Kerala's SSI sector

Reasons	Q_1	Q_2	Q_3	QD
1. Workers are lazy	3	3	4	.5
2. Only work to rule under protection of Trade unions	1	2	3	.5
3. Lack of sincerity and commitment on the part of workers	2	3	4	1
4. Restrictive labour practices	1	1	1	0

Source: Based on survey results
Q_2 = Medium QD = Quartile Deviation

V.3.0.5 Intensity of Trade Unionism and Involvement of 'Atti-mari' activities

A firm wise analysis of the intensity of trade unionism in the small scale sector of Kerala along with the involvement of atti-mari workers in the units will help in getting a clearer picture of the trade union activities in the State. The percentage loss of man days to total working days due to industrial disputes (strike) in the small scale industrial units of Kerala, calculated from the survey data during the year 1990–'91 is presented in Table 5.21. The percentage varies from 30 to 2 over the various industries studied. Among the different industries, the highest and the lowest man days lost percentages have been noted with paper and printing and electronics industries respectively. Many of the other industries were also showing considerable loss in man days during the analysis period. This is

in sharp contrast to the situation obtaining in Tamil Nadu where only 5 percentage of registered factories surveyed by us have unionised labour as against 70 percentage in Kerala. Thus the analysis here substantiates the general conclusion which we have made earlier (in chapters 3 and 4).

Table 5.21
Industrial disputes resulting in work stoppages in SSI sector Kerala (1990-91)

Industry	Mandays lost to total working days(%)
Electronics	–
Chemical	2.06
Food	10.90
Garments	12.04
Metal	18.10
Machinery	8.40
Rubber & plastics	19.80
Paper	30.60
Engineering	4.30
Wood & plywood	23.70

Source: Based on survey results

One of the notable features of Kerala's trade unionism is the prevalence of a typical practice that exists among the loading and unloading workers known as "atti-mari practice".[14] Irrespective of party affiliations, it is widely practised by the trade unions in all fields of transportation and trading all over Kerala. In the context of small firms and their operations, the problem is more severe because the small enterprises have only less influence and money power compared to big firms. Our Survey results show that many of the entrepreneurs of the small scale

firms in Kerala are very much scared of the 'Atti-mari' workers. According to the survey data, it is understood that the normal functioning of the majority of small scale units in Kerala are more affected by trade union activities outside the plant than strikes and other disputes inside. About 95% of the respondents are holding the view that atti-mari practices and general strikes, bandhs, hartals, etc., are the main external trade union activities which affect the normal working of their units seriously. Some of the units are even facing closure mainly due to the atti-mari problem and other humiliating actions of the trade unions.

Table 5.22 gives a unit wise involvement of atti-mari workers. The atti-mari involvement[15] is calculated as atti-mari man days per month. It is clear from the table that almost all the units surveyed have the involvement of atti-mari workers in their units. Nearly half of the total units (50%) are found to be experiencing atti-mari activities between 20 to 40 man days in a month. The maximum involvement is in the wood and wood products industry and the least is in electronics.

Table 5.22
Unit - wise involvement of Atti-mari workers

Industry	Atti-mari involment in mandays per month					
	Below 10	10 - 20	20 - 40	40 - 50	> 50	Total
Electronics	3	-	-	-	-	3
Chemical	2	1	10	5	2	20
Food	2	10	15	-	-	27
Garments	1	8	4	2	-	15
Metal	4	12	17	2	-	35
Machinery	2	5	-	-	-	7
Rubber & plastics	2	8	13	1	-	24
Paper	2	6	12	2	1	23
Engineering	1	3	1	1	-	6
Wood & plywood	4	11	20	4	2	41
Total	23	64	92	17	5	201

Source: Based on sample survey

Now the related questions are how and to what extent the firms are affected by the operation of atti-mari workers? As we have already mentioned, the atti-mari workers are not the regular or casual workers employed in the firm but are the head load workers outside the firm. They are engaged in the loading and unloading activities. Usually they come to the unit at the time of loading and unloading of materials.

The extent to which the small scale firms in Kerala are affected by the atti-mari handling is presented by making a comparison between the loading and unloading charges paid to own workers (if it were) and atti-mari workers (Table 5.23). We can note a very sharp contrast in the rates given by the firms to own

workers and atti-mari labourers for handling goods. The handling cost for loading and unloading of 100 kg by the atti-mari workers is more than 2 times than that by own workers.[16] Almost all the industries studied are invariably bearing high charges for loading/unloading activities. In the case of Engineering and Rubber and Plastics, while the own workers are given Rs.1.45 and Rs.1.75 per 100 kg, the atti-mari workers are paid Rs.3.66 and Rs.4.35 respectively, bringing in a percentage difference of almost 150. It may be noted here that since the atti-mari workers do not allow the own workers to engage in loading-unloading activities, in the premises of the firms, the entrepreneurs are having no other way but to pay these high rates.[17]

Table 5.23
Cost of loading & unloading

Industry	Loading & unloading charge (inRs.) for 100kg.			
	Own workers	Atti-mari wokers	Difference	Percentage
Electronics	1.60	3.35	1.75	110
Chemical	1.80	4.00	2.20	122
Food	1.50	3.50	2.00	133
Garments	1.55	3.35	1.80	116
Metal	2.00	4.10	2.10	105
Machinery	1.65	3.85	2.20	133
Rubber & plastics	1.75	4.35	2.60	148
Paper	2.05	4.50	2.45	119
Engineering	1.45	3.66	2.21	152
Wood & plywood	1.85	4.10	2.25	121

* Percenrage difference interms of the rates of own workers
Source: Based on sample survey

Among the various reasons showing the draw backs of todays trade unions

Tamil Nadu, based on the Survey data. Table 5.25, examines the reasons for reluctance in investment in Kerala. The most important reasons reported were labour trouble and hostile industrial relations climate (Q_2=1, Q_D=0.5 (85% of the firms surveyed keeps the same opinion). The next one noted was high wages. So the two relevant reasons having maximum consensus among the respondents were hostile industrial relations climate and high wages. All other reasons were considered not very significant. Thus, according to the perception of the entrepreneures, two important factors responsible for shyness in investment in Kerala's Small scale sector are the unfavourable industrial relations climate and high wages existing in the State.

Table 5.25
Reasons for reluctance (shyness) in investing in the state

Reasons	Q_1	Q_2	Q_3	QD
1. High cost and scarcity of raw materials	4	5	6	1
2. High wages	2	2	3	.5
3. Lack of government incentives	2	4	5	1.5
4. Labour trouble and hostile industrial relation climate	1	1	2	.5
5. Corrupt bureaucracy	2	3	4	1
6. High taxes	4	5	6	1

Source: Based on survey results
Q_2 = Medium QD = Quartile Deviation

Now, we have to cross check this finding with the reasons for shifting the industrial units from Kerala to Tamil Nadu.[19] Table 5.26 explains the reasons

for the shifting of small scale industrial units from Kerala to Tamil Nadu., High wages and unpeaceful industrial relations in Kerala are again reported as the major reasons that have prompted most entrepreneurs of small firms to shift their units from Kerala to Tamil Nadu. Corrupt bureaucracy is another reason having consensus among the entrepreneurs (Q_D=.5). Less incentives, reasons related to raw materials have consensus but only less compared to the other three (Q_D=1).

Table 5.26
Reasons for shifting the industrial units from Kerala to Tamil Nadu

Reasons	Q_1	Q_2	Q_3	QD
1. High wages in Kerala	1	1	2	.5
2. Corrupt bureaucracy	3	3	4	.5
3. Less incentives	3	5	5	1
4. Unpeaceful industrial relations	1	2	2	.5
5. Reasons related to raw materials	2	4	4	1

Source: Based on survey results
Q_2 = Medium QD = Quartile Deviation

Thus in the above section, we have attempted in explaining the evidences collected from the sample survey of small scale firms in Kerala and Tamil Nadu to support the wage cost hypothesis. Based on the survey data, it is found that Kerala's small scale sector is characterised by high wages and low productivity compared to Tamil Nadu. It is also noted that the high wages and hostile industrial relations climate of Kerala are the prominent reasons for the reluctance of entrepreneurs in making new investments and this ultimately leads to deceleration in the industrial growth of the State.

V.3.1 Impact Analysis

In this section, an attempt is made to explain the relationship between trade union activities, money wages and industrial investment in the small scale industries of Kerala. The analysis is made with the help of multiple regression analysis using industry cross-section data (1991) for Kerala and Tamil Nadu.

In the regression analysis, money wages and investments are taken as study variables and labour productivity, index of unionisation, fixed capital, working capital, phobia, and profit are used as determinants.[20] The data used are from the sample survey.

The regression results [Table 5.27] show that in the small scale industries of Kerala, money wage has significant relationship with index of unionisation and phobia (at 5% level of significance). The other determinants exhibit significance only at 10% level. Now, we relate industrial investment with the above determinants. And we note that index of unionisation and phobia are negatively related to investment with high levels of significance (5% and 1% respectively). This means that trade unionism and phobia have very strong impact on the investment in the small scale industrial sector of Kerala.

Table 5.27
Results of regresion analysis of wages and investment - All industries of small scale sector in Kerala - (cross-section 1990-91)

Study vairable	Constant	Determinants					
		Labour productivity	Index of unionisation	Fixed capital	Working capital	Phobia	Profit
Money wage	31.01 (2.37)	0.09 (0.58) $R^2 = 0.31$	2.79 (1.93)** $\overline{R}^2 = 0.29$	0.17 (1.39)*** F = 14.39	0.03 (1.68)*** DW = 1.85	0.0006 (1.87)**	0.02 (0.69)
Investment	177.49 (35.15)	0.007 (0.46) $R^2 = 0.62$	-0.064 (-1.84)** $\overline{R}^2 = 0.34$	11.05 (1.94) F = 9.16	7.59 (1.48)*** DW = 2.23	-2.005 (-2.34)*	0.09 (1.17)

* - Significant at 1% level [t values in parentheses]
** - Significant at 5% level
*** - Significant at 10% level

Now the same regressions are tried in the context of Tamil Nadu. The results [Table 5.28] show that index of unionisation and phobia have no significant relationship with money wage. Labour productivity, fixed capital and profit, have significant relationship (at 5% level of significance) with investment. Unionisation, on the other hand, makes no impact on investment.

Table 5.28
Results of regresion analysis of wages and investment - All industries of small scale sector in Tamil Nadu (cross-section 1990-91)

Study vairable	Constant	Determinants					
		Labour productivity	Index of unionisation	Fixed capital	Working capital	Phobia	Profit
Money wage	24.19	0.77	0.69	27.01	0.74	0.0004	0.0007
	(1.147)	(1.479)***	(1.85)	(2.94)*	(1.81)**	(0.25)	(1.91)
		$R^2 = 0.28$	$\bar{R}^2 = 0.26$	F = 12.61	DW = 2.14		
Investment	413.07	1.35	0.007	69.57	16.02	0.001	16.73
	(7.012)	(0.90)**	(0.35)	(2.10)**	(0.73)	(0.47)	(2.39)**
		$R^2 = 0.34$	$\bar{R}^2 = 0.31$	F =16.66	DW = 1.77		

* - Significant at 1% level [t values in parentheses]
** - Significant at 5% level
*** - Significant at 10% level

V.4 Conclusion

What we have done in this chapter is an attempt to find an empirical relationship between trade unionism and industrial investment in Kerala with the help of industry and firm-wise data on the small scale industries in Kerala. In the industry wise analysis, we have tried to examine the wage cost hypothesis in Kerala's small scale sector by comparing the wage rates and wage share in the value added with that of all India. It is found that Kerala's industrial sector (SSI) is characterised by lower labour productivity with higher wages as compared to all India. We have also noticed an empirical relationship between trade unionism and wage rate. It is seen that trade unionism and consumer price index are having highly significant positive relationship with money wages.

We have also tried to test the wage cost hypothesis by using our survey data. This has substantiated once again that Kerala's industrial sector (SSI) is characterised by higher wages with low productivity. On comparison with Tamil Nadu, Kerala's industrial wage rate is higher by 50%. The average industry wise mark up in Tamil Nadu is higher by 35% than that in Kerala. Reasons for high wages in Kerala are the high cost of living and trade union pressures. Among the reasons for low labour productivity in Kerala, restrictive labour practices and work to rule under the protection of trade unions are cited by the maximum number of units studied. Atti-mari problem has been noted as an important problem faced by the entrepreneurs of Kerala. The main reasons for shifting the industrial units from Kerala to neighbouring states are found to be the high wages and the lack of peaceful industrial relations in Kerala.

Notes and References

1. Dunlop. J. T. 1972. 'Political System and Industrial Relations', *International Institute of Labour Studies Bulletin,* No 9, New york.
2. 'Labour cost hypothesis' aims at covering the entire 'Labour cost'. Here 'labour cost' is defined not only in terms of wage and welfare cost but also loss and inconveniences due to strikes and disputes. Hence for operational convenience labour cost hypothesis is split into two; 'wage cost hypothesis' and 'psychic cost hypothesis'. The latter one is discussed in the next chapter.

3. Freeman, R. B. and Medoff, J. L. 1984. *What Do Unions Do?,* Basic Books, New York, P. 43.

4. Ramjas, 1989. 'Trade Unions and Wages- A study of selected manufacturing industries in India' - *Indian Journal of Industrial Relations,* Vol. 24, No. 3, January, P. 269.

5. Some labour economists view wages as a function of demand and supply only and not as a function of unionisation. They view wage determination to be essentially an economic problem and unions have minimal impact on wages - Dunlop J. T., 1957 'The Task of Contemporary Wage Theory', in *New Concepts in Wage Determination,* (ed) George W. Taylor and Frank, C. Pearson, McGraw Hill, and Clark, K. B. 'Labour's Income Share and Labour Management'- Source above. p- 295-296.

   It is possible, however, that trade unions can play a positive role in raising money wages rather than real wages, because real wages are largely determined by the cost of living over which trade unions have no direct control. Hence the actual battle is always fought by trade unions, among others, on the issue of raising money earnings and not on establishing or raising real wages. This theory has been tested by Freeman. R. B. and Medoff. J. L., 1984, op cit, Lewis. H. G., 1963, *Unionisation and Relative wages in the United States: An Empirical Enquiry,* The University of Chicago Press, Chacago and in India by Fonsecca. A. J., 1964, *Wages Determination and Organised Labour in India,* Oxford University Press, London and by Johri

C. K., 1967, *Unionism in Developing Economy,* Asia Publishing House, Bombay. This argument is also supported by Keynesian 'Money Illusion'. Hence we take money wages instead of real wages for our impact analysis.

6. Lewis. H. G., 1963, op cit.

7. Pencaval. J., 1974, 'Relative wages and trade unions in the UK'- *Economica,* 40, (162), Mulvey. C., 1976, 'Collective Agreement and Relative Earnings in UK Manufacture in 1973' *Economica,* 43, (172), Blanchflower David, 1986, 'What effect do Unions have on Relative Wages in Great Britain', *British Journal of Industrial Relations,* vol. 24, No. 2, July.

8. Fonsecca. A. J., 1964, op cit, Johri. C. K., 1967 op cit, Suri. G. K., 1970, *Productivity, Wages and Industrial Relations,* Affiliated East-West Press, New Delhi, Subrahmanian. K. N., 1979, *Wages in India,* McGraw Hill, New Delhi, Ramjas 1989 op cit.

9. Swidinsky R. W., 1972, 'Trade Unions and Rate of Change of Money Wages in Canada, 1953-1970', *Industrial and Labour Relations Review,* vol. 25.

10. We have selected 50 small scale units in Tamil Nadu (Coimbatore) which are run by both Malayalee (30) and non-Malayalee (20) entrepreneurs. This helped us a lot in getting the general view of the entrepreneurs. Moreover, it is noted by the previous studies (Kannan, K. P., 1981 op cit, Oommen, M. A., 1981, op cit) that many of the small scale units of traditional and modern type in Kerala have been migrating to neighbouring states of

Tamil Nadu and Karnataka in recent years. Hence it is essential for us to include the units outside Kerala also in our study.

11. We have selected ten categories of SSI units. The selection of these ten industries was based on the two digit classification of ASI (NIC code) and the classification made by the state Directorate of Industries and Commerce, Trivandrum for registered SSI units in Kerala.

12. The terminology, namely 'mark-up' was coined by Mrs. Joan Robinson and it is the proportion of profit to output.

    Mark up= $\frac{P/L}{O/L} = \frac{P}{OorY} = \frac{profit}{w+i+r+p}$

    As wages is a major component of income, which comes in the denominator of the mark up, in a high wage - developing economy the mark up will be low. It is true that profit in a concern is influenced by so many factors and wage is only one among them. But according to Mrs. Robinson, wage is considered as the prime factor in shaping the profit element in a business activity. Hence the increase in labour strength reflected in high wages gives only a decrease in mark up and vice versa. See Robinson Joan and Eatwell John, 1973, *An Introduction to Modern Economics,* McGrow Hill, U.K.

13. Hanushek, Eric A. and Jackson, John E., 1977, *Statistical Methods for Social Scientists,* Academic Press, New York.

14. Atti-mari refers to the union influenced handling practice of goods (loading and unloading) which is now very common in Kerala. The Atti-mari, as defined by trade unions, show two stages in handling things which bear

different rates. The atti-mari workers are not the workers belonging to the firm but usually head load workers outside the firm. They belong to different unions, controlled by the leading political parties. Since atti-mari problem is not familiar to the firms of Tamil Nadu, the analysis is confined to Kerala firms.

15. Atti-mari involvement in a firm is standardised as 'atti-mari' man days work' in a month. This is calculated as

$$\frac{\text{No. of hours of atti-mari work} \times \text{No. of Workers}}{8 \text{ hours}}$$

16. Loading and unloading charges by atti-mari workers at the firm level are comparatively lesser. But in the context of domestic transportation of house holds articles by the house holds (for shifting residence, etc.) the head load workers are charging exorbitant rates compared to the existing normal rates in different areas. This varies between 10 to 15 times or more from place to place.

17. It may be remembered that as per the Labour Laws by the Government, atti-mari workers are not allowed to enter the premise of the firm by force and engage in loading–unloading activities. But, in effect, in Kerala, neither the trade unions controlling the head load workers nor the government itself exercise any effective control over this group of workers. Hence the firms, especially small firms are in a helpless position and have to accept and obey them if they want to continue their business.

18. Zachaira George, 1990m *Profile of Industrial Workers in Kerala,* Ph.D. Thesis, Cochin University of Science and Technology, Cochin, page. 183.

19. Among the 50 units taken from Tamil Nadu, (30 Malayalee entrepreneurs and 20 non-Malayalee entrepreneurs) we have noted that 25 out of 30 Malayalee entrepreneurs had first started their units in Kerala and then gradually shifted them to Coimbatore.

20. In the regression analysis, the study variables and determinants are from the sample survey. Labour productivity is calculated as value added per worker. The mandays lost per worker is taken as the index of unionisation. Phobia (explained in detail in the forthcoming chapter) deals with the extreme fear of entrepreneurs to make investments mainly due to labour unrest and trade union activities. It is measured by using the phobia index constructed with the help of the scalogram analysis.

CHAPTER VI

THE PSYCHIC COST ANALYSIS

We have already explained in chapter V that the empirical testing of the 'Labour cost Hypothesis' requires the testing of both the 'Wage cost Hypothesis' and 'Psychic cost Hypothesis'. As we have already covered the first one, we shall now go in for the empirical testing of the psychic cost. The exercise is done through an analysis of the phobia of the entrepreneurs. As seen earlier, the psychic cost seems to be an important issue in any discussion on Keralas' industrialisation[1]. The perception that the labour force in the region is militant and trouble making has created a phobia resulting in high psychic cost[2] among the entrepreneurs so that they are detracted from making new investments in the state.[3]

Acording to 'International Encyclopedia of Psychology', Phobias are defined as a type of anxiety disorder characterised by a persistent, exaggerated, irrational fear of certain objects or situations and by efforts to avoid the object or situation.[4] Here, operationaly we define phobia as the extreme fear of industralists to make investments due to their perception of labour unrest and the troubled atmosphere created by the labour unions.

As phobia relates to the psychological and mental state of the entrepreneurs, no direct measurement will be pragmatic. So we make use of proxy measures; first by using trade union data and second by using a 'Scalogram Technique'. The available data regarding the intensity and dimension of trade unionism and industrial disputes in Kerala have been examined in Chapters III and IV respectively. We have reached the finding that Kerala's labour is highly unionised

and that Kerala has earned in the past a reputation for a militant labour movement. It is also found that Kerala has been showing high intensity of industrial disputes since 1960's except for early eighties. These might have lent support to the generalisation that Kerala's manufacturing sector experienced excessive labour unrest and this might have created a feeling of fear among the investing classes so that they are reluctant either to increase their investment or to make new investments.

Next question is whether this phobia exists now or not. For finding the answer, the scalogram Analysis is used.

The Scalogram analysis[5] is based on the data collected by our Survey among the sample of small scale entrepreneurs during the Year 1990–'91. [251 small scale units in total consisting of 201 units in Kerala and 50 units in Coimbatore, Tamil Nadu]. For the analysis, we have framed six questions relating to trade unions and industrial development of the State on a seven point scale- 6, 5, 4, 3, 2, 1 and 0. and they are as follows

1. Trade Unionism is the important causative factor for industrial stagnation in Kerala.

   Strongly Agree - 6. Agree - 5. Partially agree - 4. Undecided - 3. Partially disagree - 2. Disagree - 1. Strongly disagree - 0.

2. Trade Unions in Kerala have not played a decisive role in raising the industrial wages in Kerala.

   Strongly agree - 0. Agree - 1. Partially agree - 2. Undecided - 3. Partially disagree - 4. Disagree - 5. Strongly disagree - 6.

3. Kerala's labour is highly unionised.

   Strongly agree - 6. Agree - 5. Partially agree - 4. Undecided - 3. Partially disagree - 2. Disagree - 1. Strongly disagree - 0.

4. The wage level in Kerala is low when compared to the neigbouring States.

   Strongly agree - 0. Agree - 1. Partially agree - 2. Undecided - 3. Partially disagree - 4. Disagree - 5. Strongly disagree - 6.

5. Excessive trade unionism in Kerala has created a phobia among industrialists.

   Strongly agree - 6. Agree - 5. Partially agree - 4. Undecided - 3. Partially disagree - 2. disagree - 1. strongly disagree - 0.

6. Harrassment (like atti-mari) by trade unions does not kill the initiative of the industralists.

   Strongly agree - 0. Agree - 1. Partially agree - 2. Undecided - 3. Partially disagree - 4. Disagree - 5. Strongly disagree - 6.

By adding the scale values for the six different questions answered by an individual sample unit, we get the total score of the unit. The score values of different sample units provide the quantified data for the analysis. Table 6.1 shows the median and Quartile Deviation of the industry-wise scale values showing the different degrees of responses among the entrepreneurs towards various questions relating to trade unionism and industrial growth in the small scale sector of Kerala. The median value in each question in the case of almost all industries show the range of 5 and 6 (maximum scores in each question). This means that

the majority of the respondents are either agreeing or strongly agreeing to the various issues raised in the questionnaire. Among the various industries, Metal and Paper have all the values 6 except 1 in each industry, showing maximum unanimity of opinion among the respondents. Immediately following are the industries, Food products, Wood products, Garments, and Engineering. Now, measuring the inter-quartile range (QD), we can locate wood products, Metal, Paper and Garments as the industries having maximum consensus among the entrepreneurs regarding the various issues raised (QD-ranges from .5-0). Hence, the industry-wise analysis of scale values clearly shows the very high phobia existing among the industrialists in the small scale sector of Kerala with regard to the present functioning of trade unions and its influence on the performance of industrial units in the State. This high phobia of industrialists which is present in the industrial sector of Kerala ultimately stands as a causative factor for high psychic cost among the entrepreneurs.

Table 6.1
Scale Values (Industry-wise)

Industry		Questions					
		A1	A2	A3	A4	A5	A6
1. Electronics	Q_2	4	6	5	5	6	6
	QD	1	0	.5	.5	0	0
2. Chemical	Q_2	5	5	6	5	5	6
	QD	1	.5	.5	.5	.5	0
3. Food Products	Q_2	5	6	6	5	6	6
	QD	.5	0	0	0	0	0
4. Garments	Q_2	5	6	6	5	6	5
	QD	0	.5	0	.5	0	0
5. Metal	Q_2	6	6	6	5	6	6
	QD	5	0	0	0	0	0
6. Machinery	Q_2	4	5	6	5	5	6
	Q_D	1	.5	.5	.5	.5	.5
7. Rubber and Plastics	Q_2	4	5	6	4	5	5
	Q_D	1.5	1	1	1	1	.5
8. Paper	Q_2	6	6	6	5	6	6
	QD	.5	0	0	.5	0	0
9. Engineering	Q_2	5	5	6	4	6	5
	QD	1.5	.5	.5	.5	.5	.5
10. Wood products	Q_2	5	6	6	5	6	6
	Q_D	.5	.5	0	.5	0	0

Q_2 - Median, QD - Quartile Deviation
Source: Based on Sample Survey

This argument is again substantiated by the analysis of scale values across industries [Table 6.2]. The table presents the answers to the six different questions asked to the small scale entrepreneurs studied across industries in Kerala. It is evident that all the six questions asked evoke almost unanimous answers by the respondents (Q_2 is 5 or 6). In terms of quartile deviation, all the questions are

shown to be giving statistical consensus among the respondents ($Q_D = 0 - 1$). Answers to the questions 3, 5 and 6 may be specially noted for the very strong consensus by keeping its Q_D as 0. That is, the entrepreneurs hold very strong view that Kerala's labour is highly unionised and the excessive unionism in Kerala has created a phobia among industrialists. They also believe strongly that the harassment like atti-mari practices by trade unions does kill the initiative of the industrialists in Kerala.

Table 6.2
Scale Values (across industries)

Questions	Q_1	Q_2	Q_3	QD
A1	4	5	6	1
A2	5	6	6	.5
A3	6	6	6	0
A4	5	5	6	.5
A5	6	6	6	0
A6	6	6	6	0

Source: Based on Sample Survey
Q_2 = Median QD = Quartile Deviation

Using the scale scores, we have prepared a phobia index for the Small Scale Industrial sector of Kerala [Table 6.3]. The entrepreneurs of the various firms whom we surveyed are experiencing phobia which is mainly caused by the excessive labour unrest and the trade union activities in the State. Among the various industries studied, while wood products, paper, metal and garments show higher scores, the sunrise industries like electronics show lower scores. The mean score values for the wood products and paper products are the high-

est in Kerala (35.5 and 35.3 while the maximum score value is 36). Thus the observation of the phobia index indicates that there has been a very high phobia existing among the entrepreneurs of Kerala.

Table 6.3
Phobia Index (Industry-wise)

Industries	Score value*
Electronics	27.85
Chemical	29.96
Food Products	31.82
Garments	34.02
Metal	34.48
Machinery	31.11
Rubber and Plastics	30.10
Paper	35.29
Engineering	30.78
Wood Products	35.50

* - Mean Score value
Source: Based on Sample Survey

Another way of examining the problem is in terms of wages and its relation with phobia. If labour unrest is a specific feature in a region, the general wage rate would be pushed up unmatched by productivity increase. This will undoubtedly add to phobia among the entrepreneurs in this region. We have tried to test this with the help of a firm-wise (cross section) regression analysis [Table 6.4] run for the year 1990–'91 using survey data. In the analysis, phobia is taken as the study variable and Money Wage and Index of Unionisation[6] as determinants. The regression results show that among the two, the index of unionisation appears to be more significantly (at 1% level) related than money

wage (at 5% level) to phobia.

Table 6.4
Results of Regression Analysis on Phobia
(Firm-wise, Cross-section, 1990–'91)

Study variable	Constant	Determinants	
		Money wage	Index of Trade unionism
Phobia	78.52 (2.91)	2.946** (1.792)	3.817* (2.503)
R^2=0.82	$\bar{R}^2$=0.70	F=21.5	DW = 2.52

* - Significant at 1% level
* - Significant at 5% level
** - Significant at 10% level

Our next attempt is to relate the phobia with industrial investment and to see whether there is any association between the two variables. This has been done with the help of a simple regression relating phobia and rate of change of net industrial investment; the latter being taken as the study variable. The regression, being run for the year 1990–'91, has used the firm wise data from the sample survey.

The model is give as;

$$Y = \alpha + \beta X + U,$$

where Y, being the study variable namely change in net industrial investment, X, the phobia and U, the uncertainty factors.[7] The regression output is given in Table 6.5. It has been found that phobia has a highly significant negative relationship with (at 1% level) the net industrial investment in Kerala.

Table 6.5
Regression Result of Industrial Investment
(Firm-wise - Cross section - 1990–'91)

Study variable	Constant	Determinants
		Phobia
Rate of change	98.812	-3.891*
of net industrial	(1.980)	(-2.451)
R^2=0.72	$\bar{R}^2$= 0.69	F=15.53, DW= 2.13

* Significance at 1% level
* Significance at 5% level
** Significance at 10% level

The empirical analysis attempted here brings out the fact that the high wage rates and the high levels of labour unrest which persisted in Kerala's industrial sector (SSI) during the past few decades have created a phobia among the entrepreneurs resulting in considerable slow down in industrial investment and ultimately causing a deceleration in the manufacturing. The phobia still persists in the industrial sector of Kerala and influences negatively the confidence to invest.

Conclusion

In this chapter, we have made an attempt to locate an empirical explanation to the psychic cost hypothesis in the context of Kerala's small scale industrial sector. This has been done with the help of phobia analysis. From the scalogram analysis, very high phobia has been observed with the entrepreneurs of the majority of small scale industries in Kerala. We have also prepared a phobia

index for the Kerala industries. In the regression analysis of phobia, high wage rate and trade union index are noted as significant determinants. Further by regressing phobia on investment, a significant negative relation has been noted. The emerging inference is that the high phobia, which reflects high psychic cost, discourages the investment in Kerala's small scale industries sector.

Notes and References

1. Mani Sunil, 1996, 'Economic Liberalisation and Kerala's Industrial Sector - An Assessment of Investment Opportunities', *Economic and Political Weekly,* August 24-31.
2. Psychic cost is operationally defined as the psychological cost incurred by the entrepreneurs in investments due to the fear of militancy of trade unions and their way of functioning. Here, phobia is taken as an index of psychic cost. By phobia, we mean the extreme fear of the industrialists to indulge in investment in the manufacturing activities. Due to this fear, the entrepreneurs may be reluctant to make further investments. Phobia is usually caused by a number of factors; labour unrest and troubled atmosphere created by the trade unions, high wages, input scarcity, governmental policies, environmental factor, etc. Phobia can be rational or irrational. It can be based on direct or indirect experience, ie., others' experience. It may again be caused due to past experience and need not be due to present experience only. For instance, the experience of the sixties and seventies about

the trade union activities in Kerala might be still lingering in the minds of the public. The role of the media for creating phobia may also be noted.

3. Some studies have reached similar conclusions; Oommen. M. A, 1981, 'Mobility of Small Scale Entrepreneurs - A Kerala Experience', *Indian Journal of Industrial Relations,* vol, 17, July, Thampy. M. M., 1990, 'Wage cost and Kerala's Industrial Stagnation - Study of Organised Small Scale Sector', *Economic and Political Weekly,* Vol. XXV- No. 37, sept. 15.
4. *International Encyclopedia of Psychology,* 1996, Fitzroy Dearborn Publishers, 11 Rathbone Place, London.
5. The Scalogram Analysis refers to a Scaling technique usually adopted by psychologists and social scientists for quantifying certain psychological variables that may arise in economic and social problems. Guttman H. Louis, 1947, *The Cornell Techniques for Scale and Intensity Analysis,* Educational and Psychological Measurement, vol. VII.
6. Here the index of unionisation refers to the ratio of man days lost to workers, the same as in Chapter V.
7. In the phobia analysis, we have taken the rate of change of net industrial investment as the indicator of industrial development. For showing investment, we have taken Fixed Capital. Data regarding fixed capital have been obtained from the sample survey. We have standardised the rate of change in fixed capital as

$$\frac{\text{Change in F.C}}{\text{F.C}} \text{ or } \frac{\Delta K}{K}$$

The index is calculated for 10 industries in the small scale sector of Kerala (Survey covers only 10 industries) during three years; 1988–'89, 1989–'90, 1990–'91. Finally, the average of the indices for three years has been taken as the rate of change of net industrial investment. For data regarding phobia, we have used the phobia index from the scalogram analysis.

CHAPTER VII

CONCLUSIONS AND POLICY IMPLICATIONS

Kerala has been showing an industrial deceleration since early seventies. It is often alleged that Kerala's trade unionism and its way of functioning has a significant relationship with its slow industrial growth. It was in this context that we attempted this study which seeks to analyse the association between trade union activities and industrial growth of Kerala. The exercise has been done through the testing of wage-cost hypothesis and psychic cost hypothesis in the small scale industries sector in the State. The wage cost hypothesis was tested with the help of both industry-wise and firm wise data. An inter-state comparison of industry wise data relating to small scale industrial units helped us to show that there exists high wages in Kerala's small scale sector. The State wise analysis of wages and their share in the value added showed that Kerala's industrial sector (SSI) is characterised by higher wage cost and lower labour productivity.[1]

In a time series analysis, it was observed that while average wage per worker in the small scale sector is ahead of all India, the value added per worker in Kerala was behind the All India average throughout the period of analysis. An inter-state comparison of wages and value added per worker brought to light that Kerala occupied third place in industrial wages. The wages per worker was increasing at a greater speed than the value added in Kerala. Again, on the basis of inter-state comparison of the cost structure in the small scale sector, we have seen that Kerala is a region which accounts for very high labour cost. The share of labour cost in Kerala's industrial cost structure appears to be very high when compared to all India average and also to many other neighbouring states.

For locating the causative factors responsible for the existing high wages in Kerala, we have made use of a multiple regression model (time series). In the model, it is found that the trade union index and consumer price index are significantly related to money wage rate in the case of majority of small scale industry groups in the State. It seems that the general level of inflation existing, along with the strong trade union activities in the State are mainly causing a hike in money wages in the industrial sector of Kerala.

The firm-wise analysis based on our survey also support the high wage cost hypothesis for the small scale industrial sector of Kerala. The industrial wage in the state is seen to be higher by 50% than that in Tamil Nadu. The reasons for high wages in Kerala are noted to be the high cost of living and trade union pressures.

Among the reasons for low labour productivity in Kerala, restrictive labour practices and work to rule under the protection of trade unions are cited by maximum number of units surveyed. The main reasons for shifting the industrial units from Kerala to Tamil Nadu are found to be the high wages and the lack of peaceful industrial relations in Kerala.[2]

Wage increase is generally considered to be the most important target of every trade union. The labour disputes or struggles develop in an industrial concern mainly when the labour organisations clamour for a higher wage. It is true that disputes may also occur due to other reasons like retrenchment, personnel policy, etc. However, wage is considered as the prime issue around which struggles develop. Hence in the context of Kerala, it will not be wrong in arguing that

the peculiar nature of trade union activities in the State is the most important factor behind the industrial disputes which culminate into a hike in earnings.

We may now relate this argument to the industrial growth of the State. The entrepreneur, who is the king pin of every industrial activity, is usually very shrewd in taking his decisions. He has to take into account many factors like availability of raw materials, infra-structural facilities, availability of funds, etc. But one of the most relevant factors seems to be the availability of cheap and efficient labour. Based on this logic, the high wages present in the small scale industrial sector of Kerala, appear to be retarding the industrial development of the State.

The relationship between trade unionism and industrial development of Kerala is also brought out with the help of the second set of analysis. As we have explained in chapter III, Kerala is considered as a state having a strong trade union tradition. The intensity of unionism and the organisational consciousness of the working class in the state are quite high.Has the increase in number of trade unions and its membership in Kerala brought forth labour agitations? The answer is in the affirmative. The number of disputes and the mandays lost have been quite high in the state especially in the fifties, sixties and the seventies.

It seems that the bitter experience in the past with regard to the industrial disputes and the labour unrest in Kerala have shocked the entrepreneurs so that they exhibit a negative response to new investments. This has ultimately helped in generating a phobia among the entrepreneurs. The quantification of phobia with the help of scalogram analysis has helped us in developing a phobia

index for the industrial sector of Kerala. It is established that this phobia of the entrepreneurs in making investment is still persisting with the industrial sector of the State. This ultimately add to what is called a 'psychic cost' incurred by the entrepreneurs.

The difference in entrepreneur's psychic costs and incomes between regions are in the ultimate analysis dependent on their perception of a given region's secure and steady environment for business. Even if the strict calculus of costs and returns may indicate a given region's prospects for a high return due to cheap labour, availability of power, capital, etc., the entrepreneur's perception of the labour force in the region as militant or trouble makers adds to their psychic cost and hence distorts locational decision.

To sum up, it may be said that the militancy of labour has turned to be a specific feature in state's tradition of trade unionism and has resulted in pushing up of wages unmatched with productivity increase in Kerala. This together with a 'phobia' among entrepreneurs has acted as major causative factor responsible for Kerala's industrial backwardness.

It should be emphasised here that what we have attempted is only a partial explanation for the stagnation in Kerala's industrial sector. There are factors other than trade union pressures pushing up industrial wages in the state. The higher cost of living in the State explained partly by the fact that state depends on imports for meeting its daily necessities tends to push up the general wage level in the state. The industrial wages cannot be insulated from the

general price trend. Secondly, there are factors other than high wage cost and psychological costs that have stood in the way of industrial investment in the State. Some of these factors have been identified by contemporary studies'.[3] But among these, the high wage costs and the psychological fear (psychic cost) among entrepreneurs created by militant trade unions are considered to be the significant ones in retarding industrial investment especially in the small scale sector of the State.

It is true that the labour relations climate in Kerala is showing visible improvements recently. But labour unrest remains as a 'stigma' that makes the private investment shy away from the State. On this premise, it is only proper for the state to reformulate the labour policy that it is congenial to industrial development. Also, the visible improvements in the labour relations should reach the minds of the entrepreneurs inside and outside the State. Hence it is high time, especially in the present liberalisation context, that the government and the media of the State take initiative in publishing the improved state of affairs widely and more effectively.

Notes and References

1. A similar conclusion has been drawn by Subrahmanian K. K. and Mohanan Pillai P., 1994 in *Modern Small Industry's in Kerala - A review of structural change and growth performance,* working paper, Centre for Development Studies, Trivandrum, page - 18.

2. Similar conclusion has been reached by Oommen M. A., 1981, 'Mobility of Small Scale Entrepreneurs- A Kerala Experience', *ndian Journal of Industrial Relations,* vol 17, July.

3. The other main reasons identified by the following contemporary studies as the hurdles of industrial development in Kerala are, the high cost of land acquisition, and the worsening power situation in the State - See Subrahmanian K.K. and Mohanan Pillai P., 1986, 'Kerala's Industrial Backwardness: Exploration of Alternative Hypotheses', *Economic and Political Weekely,* vol 21, No 14, April 5, Nanda Mohan. V., 1994, 'Recent Trends in the Industrial Growth of Kerala', *Kerala's Economy: Performance, Problems, Prospects,* (ed) Prakash B. A., Sage Publications, New Delhi, Mani Sunil, 1996, 'Economic Liberalisation and Kerala's Industrial Sector- An Assessment of Investment Opportunities', *Economic and Political Weekly,* August, 24-31.

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