BANK FINANCING AND INDUSTRIAL PERFORMANCE OF KERALA

Thesis submitted to the University of Calicut
for the award of the degree of

Doctor of Philosophy in Economics

By

SINDHU P K

Under the supervision of

Dr. K. RAJAN

Associate Professor (Retd)

P.G. Department of Economics

M.D. College, Pazhanji

DEPARTMENT OF ECONOMICS

UNIVERSITY OF CALICUT

Dr JOHN MATTHAI CENTRE

ARANATTUAKARA, THRISSUR

SEPTEMBER 2020

Department of Economics
University of Calicut
Dr.John Matthai Centre
Aranattukara, Thrissur

Dr. K. RAJAN
Associate Professor (Retd)
P.G. Department of
Economics
M.D. College, Pazhanji.

CERTIFICATE

This is to certify that the revisions are made in the thesis as per the suggestions made by the adjudicators of the thesis.

Place : Thrissur
Date : September 2020

Dr. K. RAJAN
Associate Professor (Retd) &
Supervising Teacher

CERTIFICATE

This is to certify that this thesis entitled **'BANK FINANCING AND INDUSTRIAL PERFORMANCE OF KERALA'** submitted by **SINDHU P.K.** for the award of the Degree of Doctor of Philosophy to the Department of Economics, University of Calicut, Dr. John Matthai Centre, Aranattukara, is a record of bonafide research work carried out by her under our guidance and supervision. The contents of this thesis in full or in part have not been submitted to any other institute or university for the award of any degree, diploma, fellowship or other similar title or recognition before. Plagiarism is checked and found within the permitted limit.

Supervising Teacher
Dr. K. RAJAN
Associate Professor (Retd)
P.G. Department of Economics
M.D. College ,Pazhanji.

Co-Guide
Dr. SHYJAN D
Associate Professor (H.O.D.)
Department of Economics
University of Calicut
Dr. John Matthai Centre
Aranattukara, Thrissur.

Place : Thrissur
Date : September 2020

DECLARATION

I, **SINDHU P.K.** do hereby affirm that the thesis entitled **'BANK FINANCING AND INDUSTRIAL PERFORMANCE OF KERALA'** submitted to the University of Calicut for the award of the Degree of Doctor of Philosophy in Economics is a bona fide record of research work done by me under the guidance and supervision of **Dr.K. RAJAN**, Associate Professor, Department of Economics, M.D. College, Pazhanji and **Dr. Shyjan D,** Associate Professor, Department of Economics, Dr. John Matthai Centre, University of Calicut. I declare that the thesis had not been submitted by me earlier for the award of any degree, diploma, fellowship or any other similar title or recognition of any University/Institution before.

Place: Thrissur **SINDHU P.K.**

Date: September 2020

ACKNOWLEDGEMENT

I place on record my immense gratitude to all those who have contributed directly or indirectly to complete my endeavour. At the outset, I wish to express my profound and sincere gratitude to my supervising teacher, Dr. K.Rajan, Associate Professor (Retd), Department of Economics, M.D.College,Pazhanji, Thrissur, for his scholarly guidance, meticulous supervision and untiring efforts taken for guiding the study. I am extremely indebted to my supervising teacher for the support he has extended to me in every stage of this research work, which fortified me with confidence and enthusiasm to carry out this study to completion.

I place on record my sincere gratitude to my co-guide Dr. D.Shyjan, Head of the Department of Economics, University of Calicut, Dr. John Matthai Centre, Thrissur, for the valuable suggestions and advice extended throughout the study. I am thankful to Dr. K.X. Joseph, and Dr. Retnaraj, Former Head of the Department for their valuable suggestions and moral support. I am also thankful to faculty members of this department Dr. K.V. Ramachandran and Dr. Zabeena Hameed for initiating fruitful discussions and valuable suggestions during the review seminar conducted in the department.

I express my heartfelt thanks to Dr.K.P.Mani, Former Head of the Department of Economics, Dr.JohnMatthaiCentre ,Thrissur for all sorts of encouragement and moral support rendered to me for the completion of research work. I extend my heartfelt thanks to Mr.Abdul Rajib P.V .,Deputy Director, District Office of Economics and Statistics and Mr.Simon Zacharias ,General Manager (Retd),District Industries Centre for giving data related to sector wise performance of MSME units in the state which was not available in any published document, and for their wholehearted support during the primary survey.

I make use of this occasion to express my deep gratitude to the Chief Statistical Officer of District Industries Centres of Thrissur, Kozhikkode, and Ernakulam districts for giving me proper details regarding small scale industries. I also express my heartfelt thanks to the entrepreneurs of the selected units for giving me required details and I extend my sincere thanks to the other respondents for their whole-hearted co-operation extended to me during the period of primary survey.

I express my sincere thanks to Mr.Sujathan, Assistant Professor, Victoria College, Palakkad , for giving proper guidance and moral support at every stage of the research . I am thankful to Mr. Mohammed Kasim C, Assistant Professor, Department of Economics, Farook College, Kozhikode for educating me during the time of analysis. I am also thankful to , Mrs.Sreeja, the Librarian , Dr. John Matthai Centre and other non-teaching staff in the Department of Economics, especially Bala Subramanian sir, Jayaprakash sir, Stanly chettan, Ayishechi, Sanitha and Dhanesh, for their sincere assistance given to me during the entire period.

I am fortunate to have a group of friends who showered immense love and affection for me in all stages of my research work. I will always remember the support of Shiji, Deepa, Neha, Babitha, Vidya, Ajitha, Shima, Daisy, Aneesha, Glady, Smitha, Vini, Prasobha, Ranjish, Sithara miss and use this opportunity to thank them for their unconditional love, support and encouragement. I am also thankful to Athira, Neeraja and Vidya for their unconditional help at all stages of work. I express my heartfelt thanks to Sherin, Ajith, and Sreenij for their timely support during data collection. I am thankful to all of my colleagues and friends who have helped me in various ways for the preparation and completion of the work.

I express my sincere thanks to Mr. Dinops Jose, for service rendered and also the neat execution of the DTP work and support.

No words could ever express my sense of love and gratitude to my dear Parents for their unconditional love, caring, mental support and sacrifice. I am extremely indebted to my husband (Ajith) ,Brother(Gireesh), my son (Unni) and daughter (Ammu)for their unconditional support, sacrifices, and understanding of difficulties during the period of research work. Finally, I also show my gratitude to all those who have contributed in some way or other to the final form of this research work. Above all, I am grateful to the Lord Almighty for the benevolence and mercifulness which has made this work see the light of day, without the Lord's invisible hand, It would have been impossible for me to complete my research work.

Thank you all

SINDHU P.K.

CONTENT

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The importance of industrialization in the development process of an economy is well accepted. Indian economy also planned her development strategy based on industrialization. In the case of Kerala, the development process has been more leaned towards service sector, agricultural and industrial sector failing to mark its impact. The poor performance of industrial sector mainly the manufacturing sector could be considered as a setback to the different policy measures undertaken by the government. The state with a golden period of industrialization before its formation , had to face a dismal status in the case of performance of industries, when compared to other states and All India level. This led to cross verification of the industrial policy measures and plan objectives to find the factors that adversely affected the industrial climate in the state.

The performance of manufacturing industries under factory sector and small scale sector in terms of units ,investment, employment and output also showed an unsteady and unstable situation .The study found that food processing industries, basic metal industries, wearing apparel industries Rubber and plastic products, Nonmetallic mineral products, Fabricated metal products except machinery and equipment, Computer, electronic and optical products, Motor vehicles ,trailers and semitrailers Furniture, manufacturing has been performing well during the study period. The subsectors performance could not show a steady performance. As small scale sector or micro and small enterprises dominates the manufacturing sector in the state, the study focused on its performance .Before the implementation of Micro Small and Medium Enterprises Act 2006, the small scale industries in the state could not survive the tough competition as a result of opening up of economy on the basis of economic reforms of 1991.Though these enterprises could perform better in terms of investment, units and output, it could be inferred that these enterprises failed to solve the unemployment problem of the state with a negative growth rate. The attitude of the people, mismatch between the skills of the work force and the requirements of the industry may be attributed to this. The contradiction of employment opportunities for migrant labourers in the state and growing unemployment for native workforce raises concern over the growth process of the state. Meanwhile, the significance of variables selected for the

study is proved with the help of multiple regression analysis and investment is selected as the dominant variable with the help of stepwise regression analysis among the variables selected for studying the performance. The state government has been initiating measures in every possible way to create a favourable investment climate in the state amidst the problems like labour disputes, insufficient land , high cost of land, power shortage and others.

A major factor that accelerates investment is the availability of finance. The Indian financial system is mainly a bank based system and the state of Kerala has a strong banking history and so infrastructure also. Reserve Bank of India has been taking numerous measures to meet the financial requirements of these enterprises, as lack of working capital was stated to be a major issue that affected their performance. Commercial banks being major source of working capital in the country, the important measures included fixing a minimum target for lending to these enterprises, cluster based lending and including them in priority sector. The commercial banks were increasingly attacked for their hesitancy in lending to these industries in the wake of a higher deposit mobilization. Lower level of credit –deposit ratio was also shown to be a major factor in this aspect .Subsequently, there has been gradual increase in the credit deposit ratio and this prompts a discussion on the pattern of bank finance. The pattern clearly indicated the dominance of personal loan segment among all others. On the contrary, the credit flow to small scale industries under priority sector lending has been increasing steadily.

From the side of the small scale units, it could be seen that the manufacturing sector in the state is dominated by micro units and mostly owned by single entrepreneurs. They depended upon commercial banks for their financial requirements. All the entrepreneurs selected for the study had good banking habits and they found these banks to be approachable. They found the complicated procedures, formalities and high rate of interest adversely affecting their credit availability. Though there are so many schemes to support these enterprises, it was found that many of the entrepreneurs were not aware of this .This calls for better awareness programmes among these entrepreneurs. The liquidity position of these units were also not that strong to withstand any credit inadequacy. Thus, the long run relationship between the bank

finance and performance of small scale industries have been tested to prove its significance and it was found that more than positive changes, negative changes affected the performance of industries in the long run with the help of Non Linear Autoregressive Distributed Lag Model. In the above said background, the study proves the long run relationship between bank finance and industrial performance in Kerala.

Key word: Bank Finance, Small scale industries, Micro, Small and Medium Enterprises, Industrial Performance

LIST OF ABBREVIATIONS

Abbreviation	Description
GDP	GROSS DOMESTIC PRODUCT
GSDP	GROSS STATE DOMESTIC PRODUCT
SSI	SMALL SCALE INDUSTRIES
MSME	MICRO SMALL AND MEDIUM ENTERPRISES
RBI	RESERVE BANK OF INDIA
ASI	ANNUAL SURVEY OF INDUSTRIES
IIP	INDEX OF INDUSTRIAL PRODUCTION
MSMED	MICRO SMALL AND MEDIUM ENTERPRISES DEVELOPMENT
NIC	NATIONAL INDUSTRIES CLASSIFICATION
SME	SMALL AND MICRO ENTERPRISES
DFI	DEVELOPMENT FINANCIAL INSTITUTIONS
KFC	KERALA FINANCIAL CORPORATION
KSIDC	KERALA STATE INDUSTRIAL DEVELOPMENT CORPORATION
CDR	CREDIT DEPOSIT RATIO
NPA	NON PERFORMING ASSETS
DIC	DISTRICT INDUSTRIES CENTRE
SCB	SCHEDULED COMMERCIAL BANKS
SLBC	STATE LEVEL BANKERS' COMMITTEE

CHAPTER I

INTRODUCTION

1.1: Background

The positive nexus between industrialization and economic development have been the thriving force of developing economies to aim at rapid industrialization. The notion of rapid development based on industrialization started since 18th century with the Great Britain, other European countries and later USA, Japan, other East Asian tigers underwent a structural transformation from traditional economies to modern economies based on highly productive manufacturing activities. Their successful industrialization and subsequent economic prosperity set an example for developing economies around the world. The impact of industrialization on modernization through higher level of employment, equitable distribution of income and better standard of living sought to create a magical spell on the development objective of developing countries. "Industrial development of under-developed countries has become one of the great world crusades of our time, it is an effort in which the underdeveloped countries place a major hope of finding a solution to their problem of poverty, insecurity and over-population and ending new realized backwardness in a modern world"(Bryce, 1960).

The close association of India with Britain, the homeland of industrial revolution, gave her closer view of the benefits of industrialization and this prompted the policy makers to adopt a strategy for early industrialization of the country to overcome the problems of unemployment, poverty, inequality and the like. It was understood that industrialization not only utilized human and natural resources for better employment and income generation, but also could bring in a balanced development of the country by increasing the demand for agricultural products and service utilities. This prompted the then government to follow a definite strategy for speedy industrialisation of the country through framing of industrial policies based on basic industries. The Government armed with input-output tables from industrialized countries, and given the assumptions about technology, were assigned the role of allocating resources accordingly and leapfrog into the modern industrial era (Schapiro, 2007). The industrial policies of India had basically concentrated on basic and key industries and other major manufacturing industries, might be because of its ability in

diffusing technological progress and linkage effects to other sectors. Equally important was the small scale industries, their role in regional development and employment creation. After continuous years of careful planning and a protected regime, the declining trend of the industrial sector in the country was a matter of concern for the authorities concerned. The liberalization policy started off in 1980's was a positive move from the part of the government expecting a better performance of the industries under a competitive regime. The New Industrial Policy Reforms of 1991 brought in a new wave of change to the industries in India, trying to bring out the best performance of all sectors. Though the industrial policies are framed as a part of national policies, regional factors have a binding impact on the success of the policy measures undertaken. As such, all state government framed their own policies in tune with the capacity of the available indigenous resources. These industrial policies gave importance for small scale industries which once formed the base of rural economy. The small scale industries in the country had specific features and so found special mention in the industrial policies. While discussing about the small scale industries in the country, the states have been ranked based on the performance of these industries. In spite of having a strong historical background of small scale industries, the state of Kerala found its place in the lowest order in the ranking and this being a setback to the efforts of the state in its industrialization process.

The development experience of the state of Kerala has been in discussions for various reasons. The excellent performance of the state in the case of health, education, labour laws, local governance were even compared to the developed countries. At the same time, the dominance of service sector and declining trend shown by agriculture and industrial sector were equally discussed and debated. The state government had been framing industrial policies considering the regional factors and the specific social and industrial atmosphere existing in the state. In spite of all these efforts, the industrial sector in the state could not attain the target. The increasing concern over the stagnation felt in the industrial sector resulted in economists and politicians equally trying to find out the reasons and the solutions. High wage cost, shortage of power supply, unavailability of land, labour militancy, lopsided manufacturing sector, lack of entrepreneurship were found to be hindering the industrialization process in the state. (K.K. Subramanian, M.M. Thampy, B.A. Prakash).

The state government took genuine interest in reviving the industrial sector of the state, which had a strong industrial period during the 1930's. The industrial policy framed from time to time since 1990's on a regular basis tried to address the issues concerning the sector, taking into account the industrial culture of the state. If we check the history, Kerala had a strong base of Small scale industries which formed an integral part of the economy. It is rather surprising that, the presence of large number of small scale industries was considered as a stumbling block in the speedy industrialization of the state (Economic Review, 1960). It was during the time of Sir C.P. Ramaswamy Aiyar, then Diwan of the state, major large scale industries like chemical, aluminium, glass industries formed a part of the industrial sector of the state. This effort was carried over by the government after the formation of the state by taking the lead role in starting new industries. Inspite of continuous efforts of the government through various policy measures, the large scale industries in the state could not contribute to the much required industrial growth of the state. The industrial climate of the state due to various reasons was not conducive for the efficient functioning of these industries. The industries were suffering due to lack of raw materials, labour problems, power shortage, availability of land, while the small scale industries were mainly affected by lack of technological innovation, poor infrastructure, lack of financial availability etc. (Economic review, 2002-03).

The reorganization of small scale sector to include micro small and medium enterprises under the legal framework of MSMED Act 2006 has gone a long way to address technological, infrastructural and marketing issues faced by these units. Development agencies are closely monitoring the functioning of these enterprises. Even though they are playing a major role in the industrial development of the state by including different sections of the state like women, SC/ST, physically handicapped, they also suffer from setbacks seriously affecting their very existence. The major factors were reported to be lack of funds, technological backwardness, lack of marketing facilities etc.(economic review,2014) Here, we shall have a brief overview of the major studies that tried to study about the industrial position of the country and the state.

1.2 REVIEW OF LITERATURE

The economic theory has its strong roots as the study of human behaviour related to scarcity of resources, and optimum utilization and allocation of these scarce resources. This has been stated as the major cause of all economic problems and it can be widely applied to all sectors of an economy. Any economy striving towards economic growth has to balance the alround development comprising primary, secondary and tertiary sectors. In the development theory, the structural changes were associated with shift of resources from primary sector to the industrial sector especially the manufacturing sector. Kuznets (1966) had argued that industrialization –or increases in the share of manufacturing to GDP are a key feature of modern economic growth and Kaldor (1967) characterized manufacturing sector as engine of economic growth. All developing countries have been thriving to achieve a higher rate of economic development based on industrialization. Since industrial revolution in the 18^{th}century, the manufacturing activity has been considered as a major driver of economic growth. Many empirical studies conducted to examine the role of manufacturing in the growth process has validated this hypothesis.(Szirmai and Verspagen (2010),Emilia Herman (2016), Su and Yao(2017)).Here we have a brief overview of major studies that tried to analyse the importance of industrial development in the case of India and Kerala in Particular.

a) Studies related to Industrial development in India

Alagh (1971) critically examined the "stakhanovite' or 'ambitious' and 'heavy industries first 'approach put forward by Bhagavathi and Desai. The author questioned the validity of cost-benefit analysis, the existence of an international price, effectiveness of single unit analysis. Rather, the paper suggested the use of a range of international prices, clustering analysis to measure effectively the possibility of external economies and agglomeration effects and the economic expertise and administrative coordination as better and effective technique. In a further analysis the author (1987) discussed the structural change that happened in Indian economy particularly in favour of industrialization due to proper planning process. While analyzing the data of industrial growth in terms of value of output, value added and index of industrial

production from 1970-1983, the author pointed out the stagnation or de-acceleration felt in the industrial sector during the period. Thus, the need for an industrial policy aiming at a regionally balanced economy, higher levels of technological dynamism and provision for productive employment had been highlighted.

Alagh et.al (1971) tried to examine the industrial structure and the changes in the inter regional diversification of industries of 15 states in India based on tools like location quotient and specialization coefficients for the time period 1956-1965.It was observed that in the initial phase of industrial development of a region, level of industrialization and diversification would be mainly based on resource based industries. With the advancement of industrialisaton, demand based industries and capital based industries emerged. The relationship between industrialization and diversification was found to be true with help of rank correlation and therefore, the objective of a diversified industrial structure was primarily dependent on the rate of industrial growth. The study also highlighted the importance of regional factors while planning for balanced regional development.

Bagchi (1975) provided an overview of the Indian industrial structure and its weaknesses. The author pointed out the limitations of market and inadequate control by the capitalists class over the forces of production as reasons for depressing long term rate of industrial growth in India. The policy of protection followed by the Government was explained as helping landlords and capitalists rather than peasants and workers. The absence of technical innovation in the more sophisticated range of goods also was considered to be major setback to India's industrial growth.

Raj (1976) attempted to analyse the trends in industrial output in the context of emergence of large quantity of unutilized manufacturing capacity and a sharp decline in the rate of growth of output since the middle 1960's. For the purpose, the author tried to analyse the factors governing the demand for manufactured products mainly within the country. The article mainly highlighted the linkages between the industrial development and agricultural development and, the importance of growth of small scale enterprises in the overall industrial development of the country.

Nayyar (1978) tried to analyse the factors responsible for the sluggishness in the industrial growth of India which transformed the rapid industrialization (1951-65) to a stage of persistent quasi stagnation. Frequent wars, successive droughts, supply constraints and oil crisis were found to be the factors leading to industrial stagnation and the study suggested an equitable distribution of income in favour of poor and subsequent generation of broad based demand for industrial goods to overcome the situation of industrial stagnation.

Shetty (1982)provided a brief review of the structural change and growth in the factory sector in India during 1970's.The survey results of Annual survey of Industries revealed that part of profit and interest payments in the value added of organized sector improved while that of wages fell sharply. The author noted that there was considerable increase in small sized firms mainly in the category of proprietorship and partnership and these firms had relatively large fixed and productive capital. An industry wise analysis showed that the electricity sector dominated with higher capital-output ratio in 1978-79, better fixed capital and value added but lower employment rate. In the state wise analysis, Tamilnadu and Gujarat bagged highest positions, while the position of West Bengal and Maharashtra deteriorated during the time period.

Chandrasekhar (1988) reviewed the economic policies of India directed towards industrialization on the basis of the World Bank document titled "India: Industrial Regulatory Policy Study" (1986). The report focused on aspects like the system of industrial licensing, the foreign Exchange Regulation Act (FERA), policies for the growth of small scale sector and Monopolies Restrictive Trade Practices Act (MRTP) and measures to prevent industrial sickness. Though the policies aimed at structural and behavioural changes, resulted in an 'inefficient and high cost industrial sector' seriously affecting the technological and industrial growth of the country. These economic policies were mentioned as a replica of policies pushed through imperialism in Latin American and Asian countries with disastrous consequences, but hoped to produce a positive impact on the Indian monopoly to co-operate with transnational Corporations hastening the process of growing dependence on foreign finance capital. The major recommendations included liberalization of industrial and trade policy, devaluation of

the country's currency, a squeeze on net credit to government sector ; an increase in administered prices and cut in subsidies on items of mass consumption such as food.

Maiti and Rao (1995) explored the extent of demand side factor as a constraint to India's industrial growth under a dual economy framework (agriculture and non agriculture) during the period 1960-61 to 1989-90. The study concluded by pointing out the role of policy variables like government consumption and investment expenditure and growth of agricultural output as highly influential in the growth of industrial production in India during the time period.

Mani (1995) analysed the policy clauses of industrial sector mainly manufacturing sector under the New Industrial Policy Reforms of 1991. Accordingly, it was found that level of concentration for the sample taken (120 industries) more or less remained constant from 1978-79 to 1990-91. With regard to the control of monopoly power, the author raised his doubt about its potential to increase the degree of domestic competition in Indian manufacturing sector. The privatization policy was limited to particular sectors like education health, banking etc and subsidies to these sectors had been cut short earlier itself. Adding to this, the process of privatization and the reforms like disinvestment would result in the retrenchment of workers and a lack of effective safety social net would add to the tragedy. In the case of foreign investment, the author questioned the desirability of obtaining large amounts of portfolio investment and their capability to produce fresh domestic investment.

Majumdar (1996) empirically evaluated the impact of policy measures on the efficiency of the industrial sector for the period 1950-51to 1988-89. The study was conducted on the basis of x-efficiency factors like managerial and worker utilization. The result did not show a progressive trend in the industrial growth for which the industrial policy regime was blamed, at the same time expected a higher growth under the 1991 reforms.

Neogi and Ghosh (1998) analysed the impact of liberalization policies on the performance of industries in India from 1989-1994. The major variables of the study were value added, capital intensity, labour productivity and total factor productivity.

The study concluded that productivity growth and efficiency during the period of study was not substantial.

Thomas J.J.(2002) tried to analyse the performance of manufacturing sector in India after the liberalisation process. The study period was 1979-80 to 1997-98. This period was considered as a revival period for the manufacturing industry in India. Data were collected about manufacturing industries as available in Annual Survey of Industries on variables like indices of capital intensity, labour productivity and emoluments received per employee. The analysis indicated the higher growth rate of manufacturing sector in 1990's, which slowed down in 1995-96.The sector wise analysis showed faster growth of manufacture of transport equipment and basic metals and alloys in terms of investment but lesser growth in terms of employment. At the sametime, textile and related industries, major employment generating industries, decelerated in terms of investment. The author raised doubts about the sustainability of growth rates of these industries.

Sanjaya (2004) reviewed the nature of globalization and case for change in industrial policies for the developing world in the context of globalization. Citing the strategies adopted by Asian Tigers and their success in building industrial competitiveness, this paper uphold the need for reconsidering the rules governing industrial policies and importance of designing and implementing appropriate policies.

Lal and Clement (2005) had highlighted the importance of developing entrepreneurship among the youth to accelerate the economic growth of India. They had explained their model within the conceptual framework 'GEM' developed by Reynold et.al. They emphasized the importance of (1) education, (2) finance and (3) networking in bringing the best out of existing and budding entrepreneurs.

Dasgupta and Singh (2006) in their analysis examined the role of manufacturing and services in the economic development of developing country like India using Kaldorian framework. They were of the view that along with the manufacturing sector, sectors like ICT related services also could be considered as additional engines of growth.

Mazumdar S(2008) attributed the instability in manufacturing and industrial growth in the post liberalization period in India to investment – growth asymmetry arising from service intensive growth pattern and a manufacturing intensive investment pattern. The rising importance of the service sector could not utilize the capital accumulation potential of the economy and this added to the growth trajectory of the country. The study pointed towards an industrial growth which is highly prone to instability and stressed the importance of active role of state and public investment in b ringing forth growth and stability.

Nagaraj (2011) reviewed the performance of industrial sector by explaining the output growth rate of two digit industry groups from 1991to 2008 and the study highlighted the pros and cons of industrial policies adopted by the government from time to time. The fall in the employment and output during the period had been explained with labour market rigidity hypothesis, infrastructure bottlenecks and decline of agricultural sector and the study pointed towards rectifying these trajectories.

Kathuria and Raj (2009) analysed the importance of manufacturing sector in India using the methodology given by Cornwall and later modified by Fagerberg and Versapagen. While testing forward and backward linkages and spillover effects of various sectors of the economy, it was proved that manufacturing sector dominated in all these aspects. Despite the declining share of manufacturing to GDP during the study period, the sector had continued to be the engine of growth in the Indian economy.

Mallick (2012) stressed the importance of private investment in the economic growth of the country at large and the states, and estimated private investment of the manufacturing sector of 20 major states of India from 1993-94 to 2007-08.It was noted that the structural transformation had taken place across the state during the study period and private investment had remained high enough to attain a balanced economic growth across the states. The study had identified physical infrastructure, market size, availability of finance, the structure of the economy, labour cost, labour productivity, and gross fiscal deficit as the major determinants of private investment in the manufacturing sector and were found to be statistically significant in the study.

Yadav and Sinha (2013) in their article studied about wood and rubber industries in Uttar Pradesh and suggested policy of easy credit, marketing, tax free period, improvement in various dimensions of technologies to develop small scale industries to face global competition.

Kathuria and Natarajan (2013) tested whether manufacturing has acted as an engine of growth for the Indian states in the post 1990 period by regressing GDPgrowth rate on growth rate of manufacturing. Their analysis proved that factor accumulation and not productivity that was driving growth in India.

Bhat (2014) highlighted the structural changes in the manufacturing industries in India that had been taking place since 1980. The contribution of the manufacturing sector to GDP had been varying drastically and had been declining since 2007.The various stages of the development of manufacturing industries, their impact on employment and exports were also explained in detail in the light of all key policy measures like liberalization policies begun from 1980's. Inspite of all these, the study clearly identified the weaknesses of this sector as lack of investment, lack of demand, high interest rates, and its increased capital intensity and suggested better acquisition of land, forward linkages with service and agricultural sector, shift to high value addition industries, ensuring larger inflow of FDI in the absence of domestic savings and an environment friendly policy.

Sharma (2014) conducted a comparative study of the performance of Indian industries in the pre reform period (1981-1991) and post reform period (1991-2010). After a detailed discussion on the major policy reforms of the time period, he came to the conclusion that the performance of industries in the post reform period had been far from satisfaction in spite of all the liberal reforms.

Mehta and Rajan (2017) studied about the development of manufacturing sector in India in the era of new laws on land and labour and improvement in infrastructure .Quoting the new policy changes as positive, the study oversaw better performance for the manufacturing sector in India.

Nagaraj (1985) tried to analyse the rate, pattern and characteristics of small scale industries based on two All India Sample Surveys. The author noticed the dominance of modern industries like engineering, chemicals, plastics over the traditional industries like handloom. Profitability and capital efficiency was found to be inversely related to the size of the firms. They used cost –plus principle for pricing and majority of industries focused on limited range of items. Subcontracting nature of work also existed especially in Engineering industries.

Das Kesabh (2006) conducted a critical analysis of the functioning of Micro and Small enterprises in India in which the performance of these enterprises were not conducive for the industrial development of the country especially in the case of exports. The author questioned the success in the implementation of policy measures like reservation measures and industrial cluster system and suggested a strong need for reorienting policy measures related to infrastructural facilities and labour force.

Morris and Basant (2006) examined the role of small firmsin the development of Indian economy. The study suggested correction in monetary conservatism, pricing policy and tariff measures to create a positive impact on small firms.

Bargal et.al.(2009) found that the average growth rate of small scale industries had declined in the period of 1990's compared to the pre-reform period. The productivity per employee and employment had declined and the study also proved that there is no causal relationship between exports, small scale production and the GDP of Indian economy.

Kumar(2014) conducted a comparative study of the performance of MSME between pre-liberalisation (1973-1991) and post liberalization period (1991-2012). The performance of the sector have been analysed based on policy guidelines and available resources and the study pointed the weaknesses of the industrial policies which mainly focused on the investment ceiling and neglected other important issues like infrastructure, adequate credit facility, proper training etc. The policy guidelines during the post liberalization period has also created problems like lack of demand, market problems, lack of finance etc which adversely affected its performance. Thus the author

raised his concern over the effectiveness of the policies and need for the modifications in policy initiatives.

While these studies focused on the industrial picture of the country as a whole, the contribution of the states of India has been varying drastically in the matter of industrial development, the state of Kerala being one of the industrially backward areas. The state is known for its high standards in physical quality of life index, local governance, labour laws and the dominance of service sector. The stagnation felt in the industrial sector has been discussed and studied by many and mentioning the major studies here will provide us with a background of industrial position of the state.

b)Studies related to Industrial development in Kerala

Nair Ramachandran (1973) tried to study the extent of labour militancy in Kerala on the basis of industrial relation existing in Kerala. The management sought to settle disputes by conciliation and direct negotiation and dealt with all unions collectively. The study points out this as a symbol of strong system of collective bargaining and a matured labour management relation existing in the state. The strike activity conducted by the labour unions were justified by figuring out it as fundamental right of workers to fight for their benefits .Thus after analyzing the system of industrial relation in Kerala, the study had concluded by rejecting the hypothesis of labour militancy and its negative impact on industrial scenario of the state. The conclusion definitely stood for the scope of considerable improvement in industrial relation.

Oommen M.A. (1981)had tried to identify the factors affecting the location of industries especially small scale industries and their inter regional migration. The study conducted on 124 Kerala units working outside the state – 63 in Tamilnadu and 61 in Karnataka, found that advantage of cheap and sustained power supply, availability of finance, access to market and availability of raw materials influenced the location decision of firms. It was also stated that labour cost defined not only in terms of wage and welfare cost but inclusive of loss and inconvenience due to strikes and disputes appeared to be a major reason that prompted these entrepreneurs to shift to neighbouring states.

Subramanian and Pillai (1986) As the process of industrialization gains momentum, one expects the industrial base of the region to get diversified and the share of agro based industries to fall. In this context, the trend in Kerala's industrial structure is not very encouraging. The overall industrial base of the state is still characterized by concentration (mainly a set of inter related agro based industries and non metallic mineral based industries and universal intermediates) rather than diversification.

Albin Alice (1990) revealed lack of connection in the growth pattern of Kerala to that India by conducting a comparative study of industrial performance of Kerala with other southern states and India the This prompted the author to conduct a detailed disaggregated analysis of the growth of value added and employment in the factory sector and structure of manufacturing in terms of employment, which rather showed a declining trend. The study highlighted the strong influence of regional factors in the state nullifying the effect of structural factors which could have brought in a drastic improvement in the industrial scenario of Kerala.

Subramanian (1990) contradicted poor performance of manufacturing sector in the state of Kerala with potential investible resources, higher human resource endowment and a higher per capita consumption expenditure .The earlier hypothesis of militant labour and higher wage cost as a cause for industrial backwardness were not proved empirically. Instead the study suggested that the state should have stayed away from the conventional way of industrialization and should concentrate on sunrise industries providing skill intensive, technology based and value added items. The importance of a public policy for creating a climate for building confidence among entrepreneurs and an environment conducive for private investment was also highlighted.

Thampy (1990) tested the wage cost hypothesis and the psychic cost hypothesis in the case of small scale sectors. The militancy of labour strongly supported by the trade union had succeeded in pushing up wages without any considerable increase in the productivity aspect (wage –cost hypothesis) and this had resulted in forming a psychophobia among entrepreneurs,turning against the industrialization of the state. The intensity of unionization and the peculiarity of trade union culture, its behavioural

pattern in the state had seriously affected the investment climate, thus affecting the prospects of industrialization in Kerala.

Subramanian and Pillai (1994) analysed the growth performance of small firms in terms of employment, value of output and value added and compared it with neighbouring state. It was noticed that the firms were too tiny and exerted a depressing impact on technological progress and productivity growth in Kerala. The study proposed the government to play a market friendly role facilitating competition and cooperation among the firms to uplift them as modern small scale industries.

Arun's (1993) study titled Growth and structural change in the manufacturing industries in Kerala. The study analysed the relationship between growth and structural change of Kerala in comparison with the southern states like Tamilnadu, Karnatakaand Andhra Pradesh as well as All India pattern. The industrial growth was analysed using value added as an index and showed comparatively lower growth rate for Kerala . The indices of factor use efficiency and technological dynamism were measured using total factor productivity growth, apart from a few similarities, showed variation among states and from all India. The region's industrial structure was studied using techniques like location quotient, specialization co-officients and shift share analysis. The study concluded by saying that though role of regional factors were relevant in the case of other states, both regional and structural factors played a significant role in the industrial deceleration of Kerala. The study thus highlighted the importance of considering factors like inter- industry demand and agglomeration economies for the successful implementation of programmes for Kerala's industrial development.

Nandamohan (1994) After having a comprehensive examination of large, medium, small scale and traditional industries in Kerala, he had identified factors like inappropriate size of capital investment, labor unrest, inter-union rivalry, low productivity of traditional industries, acute power shortage, lack of professionalism and accountability of public enterprises, lack of modernization ha d serious implications on the industrial growth of the state. He questioned the significance of high growth rate of tertiary sector as a major growth indicator of the state, in the absence of supporting industrial sector.

Prakash (1994) had done a detailed study on overall economic performance of Kerala by examining the growth performance of Kerala in terms of employment, poverty, physical quality of life, industrial growth and the like. After reviewing all the previous hypotheses on industrial growth of the state, he had tried to put alternative hypotheses on the deterioration in the productive sectors . The major factors put forth in the hypothesis were uneconomic and small size of production units, lack of availability of adequate capital, higher cost of production due to higher labour and input cost, lower profitability, technological backwardness of manufacturing sector, power shortage, unsound development policies and unfavourable social, political and labour factors. A detailed assessment of all these factors had ended up in proving the hypothesis.

Subrahmanian (1994) examined the importance of manufacturing sector in the industrial scene of the state has been examined using ASI data related to 2-digit classification and explained the relative position of the state among the southern states of India. The lopsided industrial structure of the state was identified using location quotient .High cost of production and declining productivity trend were noted to be standing in the way of development of manufacturing industries in Kerala. In this context, the study suggested the importance of a strong public policy of both central and state government giving importance for sunrise industries, but not ignoring the role of traditional industries on the employment side.

Pillai Mohanan(1994) studied about the role of the state sector enterprises in leading the industrialization process of the state. The mismanagement of these enterprises especially in the financial aspect has spread to all aspects including marketing, technology and this quoted as the main reason behind the failure of these enterprises in Kerala. The study was conducted in two major public sector companies and also examined various measures taken to improve the situation though these measures could not be carried out successfully. Healthy interaction between government and enterprise was suggested as the foremost solution to problems faced by the state sector enterprises in Kerala which largely depended on the political and social environment of the region.

Subrahmanian and Pillai (1994) had examined the growth performance of Small scale industry in the backdrop of increasing strategies being adopted for industrialization of the state. Various indicators like number of units, output, value added and employment were used, based on Census of Small Scale Industries data 1972-73 and 1988. The contribution of this sector in terms of income, employment or in terms of number of units, factor productivity showed nothing promising for the industrial growth of the state that the need for an entirely new industrial strategy was highlighted in the study. The industrial structure of the state had been examined using methods like location co-efficient and specialization co-officient and it was found that resource based industries like wood and wood products, food products, rubber products and non-metallic mineral products dominated the scene .While Per unit employment and wage share showed a better picture, the lower capacity utilisation, capital and labour productivity in these industries had raised serious concern over the relevance of a reservation policy for promoting small industry and thereby questioned the success of earlier policies. Hence, the study concluded by suggesting a new growth strategy based on inter-firm, inter-scale and inter-product dependence and development of clusters of small scale industries.

Mani (1996) suggested a few potential investment opportunities to overcome the industrial stagnation of Kerala in the areas of computer and electronics software, rubber based industries and tourism related services. In the meanwhile he had identified the reasons for the industrial stagnation of the state as psychological fear created by militant unions, high cost land acquisition and worsening power situation.

Thampi (1999) had tried to study the industrial development in Kerala in the light of liberalization policies of 1991. Apparently, along with the central policies at large, the study reviewed the policies based on the regional requirements. The case of Kerala was no different, the state government had undertaken various policy measures to attract investment to the state. The share in value added in the factory sector of Kerala showed that the state could not improve its situation even after continuous efforts to attract investments to the state. The reasons for this situation were highlighted as comparative cost disadvantage, psychological fear of entrepreneurs, escalating land cost and power shortage. The comparative cost disadvantage has been explained in

respect of higher share of emoluments and welfare payments to employees, depreciation and interest in the total cost. The highly organized labour unions/ trade unions with strong political backing has definitely created a negative perception about the investment climate in the state and this continue to be present as a serious obstacle in the state. This was tested by analyzing the attimari practices existing in the state .land being a major factor for industrial activities, non availability of land at affordable prices affected the industrial scenario of Kerala to a great extent. The expenditure pattern of emigrant households mainly on construction, purchase and improvement of landed property has aggravated the problem. Once referred to as energy surplus state, the state had gradually changed to the problem to power shortage was a major concern for the entire state. The study proposed the state government to undertake concrete policy measures to overcome these challenges for industrial development of the state.

Rammohan (2000) had reviewed all available and leading literature regarding the assessment of Kerala Model. The article clearly traveled through the development of Kerala from the age of colonialism into the age of neoliberalism quoting opinions and criticisms of leading economists about the Kerala model of development and came to the conclusion that in the new millennium the possible way of development for the Kerala economy is transforming wild and lazy people into highly productive uses.

Subramanian and Azeez (2000) analysed the trends in industrial growth in Kerala in comparison with that of Karnataka, Tamilnadu, and All-India. The study considered the poor performance of manufacturing industries in the state compared to other states as a riddle inspite of the reform process that helped other sectors positively. The authors blamed the government for its lack of clarity in approach and underlined the need for a new vision and strategy and placed greater emphasis in developing knowledge based and service industries in the state.

Jeromi (2003) in an elaborate study of Kerala Economy and its features, Jeromi has tried to study the features of industrial sector also. In this section, he had identified the dominance of small scale units in the industrial scene of the state Instead of focusing on increasing the production of industrial units, earlier policies had focused on the employment creation capacity of these units. Units were started purely on the

support of Government packages and this only helped to increase the number of units registered without any substantial increase in output. Also the entrepreneurs chose only tiniest projects considering the inherent problems in the state. The government has always tried to take the initiative in the industrial development of the state and has continued its effort by way of supporting SLPSUs. This also failed to improve the situation and Failure to attract investment was the major setback to industrial scene, still haunted by negative image it has. The study had proposed the potential areas of development as IT, tourism, advanced health care services and scientific research and training institutions. The state should take measures to attract investment including FDI in selected areas.

Thomas (2005) had linked industrial backwardness of Kerala to the concept of Path dependence. Availability of Cheap hydro electricity was a blessing for Kerala in 1930's and this prompted Travancore administration to attract large scale chemicals – based industries to the state .This decision had a long lasting impact on the industrial structure of Kerala and the successive governments in Kerala continued investments in these industries even in the situation of acute power shortage. Factors like marketing constraints, lack of downstream or related industries, protests against air and water pollution limited further expansion of these industries. Policy measures to break away from this industrial structure and bringing the state into an appropriate path utilizing the large supply of skilled labour force henceforth requires political will power and sound policies.

Sthanumurthy (2006)also tried to examine the Kerala's sector wise contribution to GSDP and found declining contribution of agricultural and industrial sector and the dominance of service sector here. This made him go through all the factors adversely affecting the industrial production in the state. He has tried to discuss all the factors like poor resource endowment, political factors, militant trade unionism, bureaucratic hurdles, lack of infrastructural facilities adversely affecting the industrial climate of the state. He had suggested a stable industrial policy, better infrastructural facilities, improvement in industrial relation, timely clearances for investment proposals, strengthening traditional and small- scale industries and exploiting the scope of information technology sector to improve the industrial situation in Kerala.

All these studies tried to examine the industrial performance of the state from various perspectives and suggested curative and preventive measures against ailments affecting the industrial economy of the state. After the reorganization of small scale industries into Micro small and medium enterprises, there has been improvement in the situation. Major factors that affected the full fledged growth of these enterprises had been identified as lack of access to credit, lack of technological development, poor market orientation etc. Finance is a major factor for any industrial activity and its availability is a must for their development .Financial sector and its various instruments have a great role to play in the successful existence of the industries in any state. Here we highlight the importance of financial sector for a strong industrial development of the economy

As we have already seen,the importance of industrialization in achieving higher growth actually started with the advancement of European countries. The widespread technological advancement and specialization initiated by industrialization reinforced the importance of acquiring external source of fund, which in turn depended upon strong financial markets. Hence,the importance of acquiring external source of fund and the existence of a well developed financial market has been projected as a major strength for most of the developed countries in their industrialization process(Bagehot, Hicks, North).

C) Theoretical Review

The development experience of European countries based on the advantages of industrialization have lead or so to speak motivated, all the developing countries to follow the same path. Closely following, the economic literature found wide variety of discussions, keen to find out the factors that favoured the industrialisation process started in Britain and later spread to other European countries. The widespread technological advancement and specialization initiated by industrialists reinforced the importance of acquiring external source of funds which in turn depended upon strong financial markets. Bagehot (1873) highlighted the superiority of financial markets as corner stone of success of England in its development saga. As a matter of fact, finance is considered to be a major factor in running business at any point of time. The

existence of financial intermediaries ensures efficient use of channelized savings into new and productive investment ventures. So this necessitates financial development which involves the establishment and expansion of institutions, instruments, and markets that support investment and growth process. Alexander Hamilton (1781),one of the founding fathers of United States, argued that ‘ Banks were the happiest engines that were ever invented’ for spurring economic growth. Hicks(1969) and North (1981) had also mentioned the importance of formation of financial markets in bringing out the ‘threshold effects 'of so called development process. In order to provide a background to the study, in this section we summaries the pioneering literature on theory and major empirical findings on financial development and growth.

Alexander Gershenkron (1962) an economic historian had examined the development process of many industrialized countries especially European countries and tried to generalize the common features and some stages through which the underdeveloped countries must pass on the way to economic development. Thus according to Gershenkron, ‘ to move from the traditional levels of economic backwardness to a modern industrial economy required a sharp break with the past, or a great spurt of industrialization.’

The three common features that he noticed among the nations on the threshold of industrialization were sufficient supply of resources to base production, a group of population interested in the benefits of industrialization and growing tension between the existing economic institutions and the groups who want new and progressive arrangements. In addition to all these common features observed by him, Gerschenkron pointed out a few preconditions for a greater spurt in industrialization and they were 1) either the old framework in agricultural organization should be abolished or the productivity of agriculture be increased. 2) an influential modern elite 3) provision for material social overhead capital, 4) a value system which favours economic change,5) an effective entrepreneurship. At the same time, he did not insist on any necessary conditions for industrial development. Furthermore, on the basis of the degree of backwardness he categorized countries into advanced, moderately backward and very backward countries. For a ‘great spurt’ in the process of industrialization, he noted that advanced nations start their first stage of development with the factory (private firm) in

the organizational lead; moderately backward nations with banks and extremely backward nations with government. The existence of these preconditions were not considered compulsory, on the other hand, he even predicted chances of creation of new preconditions or substitution of one by another based on the indigenous factors present in each country.

Joseph Schumpeter (1934) while defining the concept of development on the basis of 'spontaneous and discontinuous change' in the circular flow, insisted the importance of credit and financial institutions in bringing about this change. The major change is mainly reflected in the process of production where producers came forward with new combinations. The phenomenon of development mainly emerge in the form of changes in production that is to say in the form of 'new combinations' that appear discontinuously.

These combinations were expected to be conducted a new class of entrepreneurs and for that purpose, they need productive means. " In the contrary case – and this is the rule as it is the fundamentally interesting case – the possessor of wealth, even if it is the greatest combine, must resort to credit if he wishes to carry out a new combination, which cannot like an a established business be financed by returns from previous production."

Thus, the fundamental phenomenon of economic development as explained by joseph Schumpeter consisted of mainly three elements viz, new combination of means of production(innovation), credit and the role of entrepreneurs. In carrying out these new combinations, the role of financing is explained as fundamental. Detaching productive means already employed somewhere from the circular flow and allotting them to new combinations was considered as a problem and the solution to this problem is suggested as credit- which is considered as a means of production for carrying out new combinations. In the absence of accumulated fortunes of previous development, credit created by banks are considered as a major source of obtaining money. "And this is the source from which new combinations are often financed, and from which they would have to be financed always, if results of previous development did not actually exist at any moment."Thus, banker also has a major role connecting

those who wish to form new combinations and the possessors of productive means .Hence, the banker is considered as ‘ephor of exchange 'economy.

Goldsmith ‘s study (1969) was the first of its kind to provide an empirical evidence about the correlation of finance and growth taking a sample of 35 developed, developing and socialist countries over a period of 1860 – 1963. He developed financial interrelation ratio i.e. value of all financial assets over GNP and asserted the positive effect of financial intermediation on growth. He tried to examine mainly three goals- (1) to document how financial structure changes as economies grow,(2) to assess the impact of overall financial development on economic growth,(3) to evaluate whether financial structure influences the pace of economic growth. In achieving the first objective, he was successful in documenting the evaluation of financial intermediaries and showed that banks certainly grow in size and importance and non banking financial intermediaries and stock markets though not certainly also grow as the country develops economically. He was partially successful in assessing the link between the level of financial development and economic growth. Though he documented a positive correlation between financial development and the level of economic activity in thirty five countries, Goldsmith was unwilling to assert that financial development exerts a causal influence on economic growth .His study related to the third objective was affected by data limitations. Though he tried to study the relationship between economic development and the mixture of financial markets and intermediary in an economy, could not be concluded with successful findings, rather kept it open for further research.

Pattrick (1966) postulate stage of development hypothesis that involves a “supply – leading” and a “demand – following” phenomenon. The “supply leading” hypothesis postulates that the development of the financial system will lead to economic growth while the “demand following hypothesis” posits that as real economic growth takes place in the economy, it will spark the demand for financial services. Based on this development hypothesis, researchers assert that a feedback relationship may exist between financial development and economic growth. For demand following hypothesis, it can also be called “growth led finance” hypothesis. It states that the growth of the economy generates additional and new demand for financial services,

which bring about a supply response in the growth of the financial system. This hypothesis suggests a demand following relationship between financial and economic development.

Cameron (1967) in his theory on Finance and Growth analysed the role played by financial sector in the successful industrialization process in England, Scotland, France, Belgium, Germany, Russia, Japan in the 19th century. In his study, he highlighted the importance of financial intermediaries especially, banks as (1) financial intermediation serves as a vehicle for channeling small funds from risk averse savers to less risk averse people with entrepreneurial skill which results in increased availability of funds, (2) Financial intermediation provides incentives to investors. Investments depend upon the cost of borrowing, since lower cost will encourage larger investments. Thus, an expanding financial sector should reduce the interest rate among users, regions and over periods of seasonal fluctuations.(3)These financial institutions can facilitate efficient allocation of unproductive stock of initial wealth especially in the early stages of industrialization (4) His study also stressed the role of banks in accelerating technological progress. The case studies were explained with the background description of political system, economic conditions and financial structure. Moreover, the study detailed out the initial interactions among financial intermediaries, financial markets, government policies and the financing of industrialization

McKinnon and Shaw (1973) analysed the policy of Financial Repression practiced in developing countries, which included controlled interest rates, high reserve ratios and Government directed credit programmes. They pointed out that the artificial ceiling on interest rate curbed savings, reduced capital accumulation and lead to inefficient allocation of resources. Additionally, McKinnon pointed out that Financial Repression can lead to dualism in which firms that have access to subsidized funding will tend to choose relatively capital-intensive technologies; whereas those not favoured by policy will only be able to implement high-yield projects with short maturity. (Gemech and Struthers,(2003))Hence, They advocated financial liberalization, in which control on real interest rate is lifted which will stimulate saving, leading to higher level of investment and growth. Even though McKinnon and Shaw essentially came to the same conclusion, their theoretical approaches were different.

Mc Kinnon's model considered important divisibilities in investment and assumed that all economic units are limited to self-finance. In Shaw's model, investors are not confined to self-finance. Financial intermediaries sustain deposit accumulation by raising real returns to savers and thus expand their lending potential. This cannot be considered as a contradictory view, but relates to the fact that investment may be financed through internal and external sources. Mc Kinnon explained the theory in the context of developing countries and Shaw's hypothesis related to more advanced economies with sophisticated financial system.

d) Empirical Studies based on finance-growth linkage

Carlin and Mayer (1998) evaluated the relation between industrial activity and the structure of financial systems, corporate sectors and legal arrangements in 20 OECD countries between 1970 and 1995, using variables based on financial structure, industry characteristics and their activity levels . Country structural features included size of securities market, size of banking system, concentration of ownership; industry characteristics included market sources of financing, bank financing and investment in skills; activity levels were measured using growth rate of output, fixed capital formation and research and development expenditure. It was noticed that relations of industrial growth to financial and corporate systems varied with every stage of development. Hence, it was suggested that development policies should be directed towards ensuring efficient banking systems and control of ownership in the early stages of development and market liberalization and effective forms of corporate control should be aimed in the later stages.

Beck and Levine (2002) examined the impact of financial structure on industrial expansion, creation of new establishments and the efficiency of capital allocation d using panel estimation techniques and cross country regression for over 36 manufacturing industries across 42 countries .The study could not find evidence in favour of either market based or bank based system and effect of state ownership on industry performance. At the same time, the cross country regressions indicated efficient allocation of capital in countries with well developed financial structure and

more efficient legal systems. So legal reforms that promoted the development of financial intermediaries and markets should be the focus of development policies.

Agarwal and Elston (2000) investigated the impact of bank influence on financing policies and performance of the firm using debt to equity ratios for the debt variables. Bank influenced firms did enjoy better access to capital in the form of bank debt, but it did not ensure profitability of these firms. Higher interest payment to debt ratio for bank influenced firms indicated that German universal banks engaged in rent seeking activities and there existed a conflicting interest between creditors and shareholders.

Beck et.al (2000) used Cross sectional instrumental variable estimator to examine the relation between financial intermediary development and the sources of growth taking the case of over 63 countries over the period 1960-1995.The study was based on the Schumpeterian view that the level of financial intermediary development augments the rate of economic growth by better productivity and technological change .They used variables like productivity growth, capital accumulation and saving ratio and came to the conclusion that better developed financial intermediaries facilitate better resource allocation, accelerate total factor productivity having a positive impact on long run economic growth. The authors in a revised paper used generalised method of moments, dynamic panel estimators and cross sectional instrumental variable estimator over a panel dataset of over 74 countries to evaluate the influence of financial intermediary development on economic growth and impact of differences in legal and accounting system in the level of financial development. The result proved a positive association between these two hypotheses. The study concluded with a suggestion that legal and accounting reforms may have a positive impact on financial development and economic growth by strengthening creditor rights, contract enforcement and better accounting practices.

King and Levine (1993) empirically analysed the relationship between four financial indicators like liquid liabilities over GDP, bank credit divided by the sum of bank and central bank credit, credit issued to non financial private firms divided by total credit and credit issued to non financial private firms divided by GDP and four

growth indicators like real GDP percapita growth, capital accumulation growth, ratio of domestic investment to GDP and one measure of the efficiency of physical capital allocation. They conducted a study in 80 countries and proved the hypothesis put forward by J. Schumpeter that there exist a strong link between financial development and long run growth. This analysis indicated a strong association of higher levels of financial development with future rates of capital accumulation and improvement in the efficiency with countries employ capital and suggested the possibility of predicting long run growth of the countries based on a predetermined component of financial development.

Rajan and Zingales (1998) examined the finance –growth relationship by mainly focusing on whether financial development reduces the cost of external finance to firms. Their study proved that industrial sectors which are more dependent on external finance grew faster in countries with highly developed financial markets. Their study was based on industries in American economy. Schumpeter

Rajan and Zingales (2001) tried to find whether banking system or 'arm's length 'market based system favoured the growth of industries in the economy. In the context, they argued that improvements in the accounting, legal and supervisory infrastructure sustain banking or market system and tend to diminish risk. They also threw light on the dominance of market based system in the times of industrial change and dominance of bank based system in an economy with highly underdeveloped institutions.

Fisman (2002) examined the role of financial system in channeling the resources to the most productive endeavors especially industries of 42 countries by correlating real growth in value added to total domestic credit and stock market capitalization in 37 industries. A high correlation between the variables implied and strongly supported the importance of a strong financial system which easily and effectively catered to the growth opportunities in the country. It was also noted that private financial institutions especially banking institutions were better in this aspect.

Fisman and Love (2002) identified the finance and growth hypothesis based on commonalities and differences in growth opportunities across countries. Their study

suggested that private financial institutions respond better to growth opportunities especially the private sector banking institutions. The industries in countries with well functioning financial system can effectively respond to common shocks to their growth opportunities, which reinforces the role of financial development in channelizing the resources to their most productive uses.

Beck et.al. (2006) in their study highlighted the importance of a competitive business environment conducive for the entry of new and innovative entrepreneurs resulting in the Schumpeterian process of ‘creative destruction'. A large SME sector which can neither grow nor exit is considered as a byproduct of poor business environment. Small firms face larger growth constraints and had less access to formal sources of external finance, potentially explained the lack of SME’s contribution to growth. Thus study indicated that access to finance played an important role in the overall business environment,potentially constraining both firm entry and growth.

Cetorelli and Gambera(2001) analysed the role of banking market structure in shaping the cross- industry size distribution in a country over 36 manufacturing industries across 41 countries .Average compounded growth rate of real value added for each industrial sector in each country for the time period 1980-1990 proved that bank concentration plays a significant role for growth as they facilitated credit access for younger firms .Moreover, as the younger firms introduce innovating technologies, the banking market structure indirectly accelerated the technological progress.

Cameron et.al (1972) provided detailed case studies of three categories of countries i.e, those did not achieve a significant level of industrialization before 1914 (Serbia, Spain), countries with an incomplete and delayed industrialization (Austria, Italy) and finally countries with rapid pace of economic development (U S A, Japan).When the industrialization process of USA and Japan were striking examples for the growth inducing role of financial sector, wrong policies and financial instability hampered growth in Austria, Italy and Spain. Thus he could prove the prominent role played by financial sector in accelerating the pace of industrialization in certain group of countries. At the same time, his study showed how inappropriate financial sector

policies inhibited the process of industrialization in various countries but also that finance cannot compensate bottlenecks in other sectors.

Corbett and Jenkinson (1996) analysed the financing patterns on physical investment of countries like USA, UK, Germany and Japan for a 20 years' time period i.e.1970-1989. The industries in USA,UK and Germany preferred internal financing and depended less on market sources of finance which was declining and rather negative in certain cases. Whereas, the industries in Japan resorted to external financing mainly bank financing. The study could not find a link between investment performance and the external sources of finance.

Many empirical cross country studies have strengthened the theory by supporting the causality between indicators of financial development and rate of industrial growth.

Hoshi et.al.(1991) tried to test the importance of liquidity in investment decisions of firms when there were information problems in the capital market and also the role of banks and other financial intermediaries in channelising productive investments. The study was conducted on two sets of firms - Japanese firms included in industrial groups having strong ties with large banks and firms belonging to non industrial group having weaker bank ties. The group banks succeeded in placing their representatives in key positions in these firms for the easy flow of information and this helped them to channelize productive investment . Hence, it was proved in the study that information and incentive problems in the capital market had strong influence on corporate investment.

Peterson and Rajan(1994) conducted a study on 3404 firms in U.S.A. and focused on the distinction between competitive and concentrated credit markets. The compatibility between competition and long term relationships was examined and found that young firms in concentrated markets receive more fund than those in the competitive markets. On the basis of this study, the authors suggested that neither adding an element of competition to relationship based economies nor bringing in firm creditor or firm worker relationship in competitive markets brought in expected results. (Diamond)

Biggs et.al (2002) analysed role of ethnicity, information flows and contract enforcement in determining access to credit of two ethnically distinct groups of businesses i.e., those owned by entrepreneurs of Asian origin and others owned by Kenyan – Africans. It was observed that firm size, collateral and checking account history has significant role in access to overdraft whereas ethnicity of borrower has negligible role.

Beck et.al (2008)analysed the importance of firm size in determining their financing pattern using regression among 3000 firms in 48 countries. Though small firms used less external finance, they got better protection of property rights in terms of accessing formal sources especially bank finance. They did not depend upon leasing and supplier finance to fill their financing gap. On the other hand, larger and medium firms utilized finance from development banks and other government sources to a great extent. Thus the study proved the positive relationship between firm size and financing pattern and suggested better institutional reforms to bring in small firms into the system.

Akinlo,Egbetunde (2010) proved the long run causal relationship between financial development and economic growth using vector error correction model, multivariate cointegration analysis and error correction modeling. The study identified the gap in the financial sector reforms which failed to mobilise savings appropriately. Among the countries selected, financial development granger caused economic growth in central African republic, congo republic gabon and Nigeria whereas economic growth granger caused financial development in Zambia. Poor administration of the region as a whole and financial sector in particular was quoted to be the reason for lack of development in other states.

Bernini (2011) How financial development affects the sectoral composition of economies through microeconomic channels were investigated to prove financial – industrial structure nexus. It highlighted the influence of financial development and size of each industry on industry specific financial constraints to firms' entry. It was also specified that those sectors which are less dependent on external finance were negatively affected by financial development.

Odo et.al (2016) tested the applicability of stage of financial development hypothesis developed by Hugh Partrick in Nigeria and South Africa using Granger causality, co-integration and Vector error correction modeling. The study indicated a unidirectional causality between financial sector and economic growth in Nigeria and bidirectional causality in South Africa and thus validated the supply leading hypothesis of financial development given by Hugh Partrick. Financial sector development in these regions could ensure effective flow of finance to private sector, thereby increasing the rate of investment and nations productivity. For achieving this, implementation of good monetary policy instruments was suggested.

Venancio(2013) conducted study in 17 developed countries and tried to investigate relationship between financial development and economic growth using OLS, fixed and random effects estimations . Inorder to facilitate financial development, banking system should ensure better asset quality, lower credit risk, and efficient allocation of resources which in turn would lead to economic growth. Thus the findings implied that focus should be on the quality and the performance of the banking system rather than their volume.

Chen et al. (2016) The study conducted among 57 domestic commercial banks for the time period 1999-2013 revealed that high degree of bank competition negatively impacts industry performance, especially in the case of industries which had high liability -to- asset ratio. It was evident in the study area that the industries which relied more on external finance performed well and this was accelerated by higher degree of bank competition.

Schwart (2016) had tried to find out the way of matching of firms and banks, and the influence of this matching on the provision of credit. It was explained that the bank dependent firms mainly borrow from well capitalized firms, while firms that depend on public debt markets borrow from lesscapitalisedfirms.The study had found that borrowers' informational frictions and access to outside funding are the major factors influencing this matching.

Rin and Hellmann (2001) discussed the role of banks in the modern emerging markets in promoting new industries on the basis of experiences of countries like

Belgium, Germany and Italy. It was found that the condition required for banks to promote coordinated investments implied an inefficient oligopolistic market structure and this resulted in industrial concentration. In short, the study highlighted the importance of banking concentration in the early stages of indusrialisation, but this may lead to industrial concentration as well which may retard growth.

Beck et.al.(2006) identified the determinants of financing obstacles of firms and usefulness of apriori classifications to distinguish between financially constrained and unconstrained firms and for the purpose, 10,000 firms across 80 countries constituted the sample . The study confirmed the usefulness of the apriori classification of firms and proved that older, larger and foreign firms are comparatively free from financing obstacles. Institutional development was suggested as a measure to reduce the financing obstacles of the firms.

Beck et.al (2004)assessed the influence of banking market structure on the access to bank finance by firms and observed that banking concentration created obstacles only if economic and institutional development was lesser in the country. Data were collected from 10,000 firms across 80 countries and regressed to find that the effect of market competitiveness should be assessed properly only after controlling the economic, institutional and regulatory environment. It was also noticed that the concentration ratios which was generally influenced by historical factors, couldnotbe controlled completely. It was possible only to influence the ownership structure of the banking system, its regulatory framework and the overall institutional environment.

Ebi et.al.(2014) The study tried to investigate the influence of bank credit flow to industrial subsectors like manufacturing, mining and quarrying, electricity and construction. The analysis was conducted for the time period1972 – 2012 using Econometric Error Correction Model. The study indicated that there was a positive and significant influence of bank credit on industrial sub sectors in specific and industrial output at large. On the other hand, interest rate and exchange rate did not show a significant impact on the industrial output. Hence, the study pointed out that increasing bank credit to the industrial sector in Nigeria would be indispensable to spur industrial growth in Nigeria.

Tawose (2012)analyzed the effects of bank credit on the industrial performance of Nigeria using cointegration and error correction technique for a time period 1975-2009.On the basis of the empirical findings, the study came to the conclusion that commercial banks loans and advances to industrial sector, aggregate saving, interest rate and inflation rate were the major factors significantly affecting the industrial performance in Nigeria in the long run as expressed by the level of GDP in the economy.

Wurgler (2000) examined the role of financial markets in the allocation of capital. He conducted his studying 28 industries across 65 countries and found that the efficiency of capital allocation is negatively correlated with the extent of state ownership in the economy and positively correlated with the amount of firm-specific information in domestic stock returns and legal protection of minority investors.

Craigwell et al (2012) tried to analyse Patrick's hypothesis in Barabados that financial development and economic growth changes as the economy develops. At the early stages of development, supply leading impetus is evident, but at later stages of development it will spark demand for financial services. They found that there is unidirectional causality that run from economic growth to financial development in the short run and bidirectional in the long run. At the same time, the test on subsamples could not provide support for this hypothesis.(Patrick)

Arestis and Luintel (2005)found significant effects of financial structure on real percapita output and significant cross-country heterogeneity in the dynamics of financial structure and economic growth. Their study also threw light on the cross cross country heterogeneity that exists in financial structure and growth dynamics and the invalidity of the pooled data used for the study.

Arestis and demetriades (1996)in their study claimed that institutional considerations and policy differences has huge impending result on the causality between finance and growth. Their study moreover shed more light on whether Schumpeter was right in a wider sense.

Lenka (2015) tried to study the cointegration relationship between financial sector development and economic growth in India. Econometric techniques of Autoregressive Distributed Lag bound testing approach and Error Correction Model were used for the purpose for a period from 1980 -2011.The study found that financial development augments economic growth in India and would be considered as a long run determinant of economic growth. It was also suggested to further financial sector reforms to improve the efficiency of domestic financial sector, which is essential for growth.

Biswas (2014) examined the relationship between financial sector development and economic growth in India from 1960-2007 using time series analysis and innovation accounting. The study pointed out the complementarity existing in the subsectors of the Indian financial system and the influence of stock market liquidity in the economic growth of the country. The bidirectional causality between financial development and economic growth existed in the country policy measures were suggested accordingly.

Chakraborthy (2010) examined the impact of development of financial sector on economic goods in India in the post reform period on the basis of the model of Mankiw et.al. (1992).Econometric techniques like cointegration and vector error correction were used for a quarterly data for the period from 1993 to 2005 in India. The study reveals that capital-output ratio, rate of growth of human capital, increase in money market rate of interest has positive impact on economic growth and turnover, real wealth, debt burden, real effective exchange rate, and rate of growth of labour have negative effects on economic growth. The study could not support the importance of stock market development in promoting the economic growth in India. On the contrary, reform measures on market rate of interest undertaken in the Indian banking system were found to be highly significant in the economic growth of India.

e) Studies related to industrial finance in India

Spencer (1958) broadly examined the specialized financial institutions set up in India as a part of planned economic development . The article provided a detailed discussion on the fund structure and lending pattern of Development Financial

Institutions like Industrial Finance Corporation of India (1948), State Finance Corporation (1955),National Small Industries Corporation (1955), National Industrial Development Corporation (1954),Industrial Credit and Investment Corporation of India (1955), to ensure long term capital to industries in India. The functioning of these institutions were reviewed periodically by various committees and their problems of conservatism, favouritism and nepotism were dealt with necessary measures. The author considered the formation of these institutions as a part of integrated and articulated program and were directed towards mobilizing scarce capital accelerating industrial investment and reallocate resources towards less established enterprise.

Rosen (1962) as reviewed by V.V. Bhatt analysed the role of banks, specialized financial institutions and life insurance companies in the financing of industries in India since the beginning of planning era (1950-51). The study pointed out that there was no positive relationship between an industry's use of bank credit and its gross profitability and or rate of growth, which met with much criticism due to lack of proper data. The author was also skeptical about the cautious and unenterprisiing attitude of these institutions in judging the credit worthiness of the firm which was mainly based on personal and physical security rather than on the economic and financial soundness of the project it had to undertake. In short, the author suggested a reformation and reorientation in the attitude and policies of the financial institutions which would enable them to play a positive role in the industrialization and development of the Indian economy.

Shah (1980)highlighted the importance of working capital financing by commercial banks and using secondary data proved that short term funds were diverted to noncurrent assets. The policy measures undertaken by Reserve Bank of India along with reforms suggested by Credit Authorisation Scheme, Dahejia Committee and Tandon Committee provided the background of the study. The study suggested measures like building up of required standard of staff skills, a progressively graduated scale of finance, effective linking of credit availability to cash credit to improve asset management and proper utilization of resources.

Dhall (1981) attempted to study the industrial financing by the institutions assigned for the development of industries in India. Industrial Development Bank of India (IDBI) as the apex body coordinated the working of institutions like IFCI, ICICI, IRCI and SFCs in India along with commercial banks. The term instutions provided long term finance to industries whereas commercial banks concentrated mainly on short term finance. The paper suggested to establish well established norms for the selection and financing of projects to reduce the risk of ill conceived and unviable projects. Industries with high importance for national economy and its potential in matters like employment, export promotion, import substitution and use of indigenous technology were to be given priority.

Bhole (1982)analysed the bank borrowings of selected industries in the country in the light of recommendations of Tandon committee. The author found that the importance of cash credit system had not declined . Moreover the norms set by the committee were well implemented in the case of finished goods, inventories and partially implemented in the case of raw materials inventories and receivables. The author also noted the tendency of bank finance for working capital requirement exceeding the maximum permissible bank borrowing .

Sonalkar &Kaveri (1985) tried to examine various stages and aspects of credit sanctioning and it was found that it was cumbersome and the small scale units found it difficultin the delays caused by the difficult procedures to be followed. The study was conducted in the industrial complex at Bombay suburbs. The study stood to suggest following measures to improve the credit flow to SSI: reducing the sanctioning time, discretionary powers to bank managers, simplifying evaluation and sanctioning procedures, educating the entrepreneurs about the policies and schemes available to them.

Kaveri (1985) had analysed the financing especially working capital by commercial banks of selected industries in the time period 1975-1983 in the light of norms set by Tendon Committee (1974) and Chore Committee (1979). It was concluded that Indian industry had failed to widen the base of long term funds to the desired extent and thereby short term funds were used to meet this deficit. Time

analysis and industry wise analysis were used to review the working capital of firms based on balance sheet data.

Mishra (1985) had tried to examine the sources of finance and the pattern of fiancé of current assets by selecting 80 small scale units in Delhi from 1969-70 to 1975-76 . Among the suppliers of short term funds, commercial banks played a major role compared to trade credit and accruals. The study revealed a sharp rise in the working capital financing of small scale industries by banks during the study period.

Khanna (1999) tried to explore the link between industrial sector and financial sector in the wake of the liberalization policies and reforms implemented in both these sectors. These policies were meant to impart efficiency to the financial sector,thereby effectively channelizing fund to the industrial sector. The major policies like reduction of SLR, shifting of Government borrowing to open market at competitive rates, restructuring of and DFIs, integration of Indian money market with foreign exchange market as part of financial liberalization had failed to achieve the targets. Moreover, the tightening of liquidity and interest rates as a part of monetary policy had disastrous impact on the industrial sector. In short, deregulating these policies instead of having positive effect, affected the confidence of Indian firms and prepared an easy ground for the domination of multinational firms over Indian firms.

Ramasasthri and Unnikrishnan (2006) tried to examine the role of banks and bank credit in the growth phase of Indian economy. Though bank credit to agriculture, housing, real estate and others had been increasing during 2005-06 time period, the trend of flow of credit to corporate sector especially small sector declined. This sector mainly depended on internal sources particularly retained earnings rather than external sources as their main source of fund. This behavior of firms was explained with the help of Pecking Order theory of Myer (1984). It was also found that the firms had a preference for debt over capital issues. The importance of banking sector for the industries could be retained only if the banking sector derive new strategies to identify and finance good projects within their risk parameters. For the purpose, the paper suggested creation fo new products like ‘junk bonds’ to finance more risky projects,

use of innovative technology like smart cards and more importantly focus on markets in rural areas.

Roy(2006) had examined the changes in the lending pattern of the commercial banks in the wake of policy changes in India. These changes had been attributed to the occurrence of financial deepening, cyclical growth in lending accompanied by an asset price bubble. Other than agriculture, and industrial sector,retail sector especially housing sector had been dominating in bagging larger portion of banking advances. Priority sector lending policy was planned to ensure the inclusion of hitherto neglected sectors like small scale industries, agriculture in the balanced development of the country.

Mahakud, Bhole (2006) found the trend in the flow of finance from commercial banks to private limited companies, public limited companies, and foreign companies in India for a period of 1966-67 to 2001-02. The findings of the study indicated that firms with more sales had a high proportion of bank debt, while firms which had internal profit had a tendency to reduce dependence on bank debt. The firms with low return on assets preferably depended upon bank credit. The study found that size of the firm, return on assets, growth opportunity of the company, probability of bankruptcy, growth opportunity, leverage ratio, and tangibility as the major factors determining bank debt in the Indian corporate sector.

Sinha (2008) examined the priority sector lending policy of commercial banks in India which was introduced in mid 70's to meet the financial requirements of sectors like agriculture, small scale enterprises and schemes of self employment using indicators like technical efficiency, scale efficiency and malinquest total factor productivity index. Banking sector reforms like Prudential asset classification, income recognition, provisioning and capital adequacy norms had a negative impact on the priority lending of banks in India, thus, reducing the proportion of lending to these sectors. The study evoked the importance of proper implementation and close monitoring for the success of this policy.

Das subhamoy(2015) examined the history of commercial banks in India and linked its dominance in providing finance for the industrial development of India to its

European influence, despite the existence of other sources of finance like development institutions and securities market. Though prior to nationalization and finance sector reforms, commercial banking system was highly incapable to meet the financial requirements of industries, aftermath they had successfully widened their horizon and thus became an integral part of the industrial finance system in India.

Das santhosh (2015)tried to explore the linkages between industrial and financial sector in the context of lack of financial resources being mentioned as a major setback to the industrial development of India. The linkages between the sectors had been explored by examining three broad indicators like access to finance, availability of finance and cost of capital. By analyzing access to finance in terms of distribution of bank branches, priority sector lending of banks and distribution of credit per size, the study pointed out the growing unevenness in the case of financial liberalization. The availability of finance in terms of bank credit, stock market and bond market had not been sufficient for meeting industrial requirements. The cost of capital which was expected to be low under the policies of financial liberalization remained high against the interest of small scale industries. Thus the paper questioned the success of financial liberalization policies in India. And strongly suggested the coexistence of a well developed corporate bond market and development financial institutions to meet the varying needs of the Industrial sector in terms of size, origin, location and nature of activities.

Ray (2015) had studied the industrial finance situation in India. The study found that the initiation of financial sector reforms and the demise of development banking in India had affected the flow of credit to industrial sector . Though corporate bond market was expected to fill the gap, it was highly tilted towards big corporates. The author opined that the paucity of bank finance and mainly term finance due to the demise of development banks turned to be very costly for the industrial sector and its growth. So the author suggested to adopt Brazilian model of BNDES as a better option useful for India to overcome the problem of credit crunch.

Singh (2016) attempted to study the growth and expansion of commercial banks in India especially public sector banks, with a brief description of emergence of banks

in India. The study highlighted the importance of a well developed financial market and its financial intermediation in accelerating the development process and in India, commercial banks were expected to carry out growth oriented objectives. This resulted in the nationalization of banks and hence, the author tried to study the importance of public sector banks in terms of branch expansion, credit disbursal and priority sector lending.

f) Studies related to industrial finance in Kerala

Finance being the driving force of any economic activity, the financial aspect of these enterprises needs special attention. Considering the financial constraints of these enterprises, Reserve Bank Of India had given guidelines to the banks in meeting their requirements .Commercial banks in Kerala has a long history and a few commercial banks have their base in the state itself. They have been very successful in mobilising the savings of the people in Kerala leading to higher deposit mobilisation. The way they channelise these deposit to the industrial sector has always been criticised. Many theoretical and empirical studies have proved that financial development leads to industrial growth and later to economic development. So Kerala where financial sector is developed and financial literacy is high among people, the industrial sector has not been performing well is a matter of concern. A brief review of these studies will provide the background for the study. The studies related to industrial finance in Kerala mainly focused on credit deposit ratio as an indicator to understand the extent of credit flow from commercial banks to industries. The low credit deposit ratio was considered as a reason for the industrial backwardness of Kerala.

Oommen (1973) gave a brief overview of rise and growth of banking in Kerala which he considered as highly developed even compared to the banking institutions at all India level. The smooth functioning of ‘chits and kuries’ paved the way for the growth of banking in the state and it was mainly community oriented. The banks which developed as a successor of these financial intermediaries started as unit banks initially and later shifted to branch banking practices .They provided financial assistance to small traders, farmers, middle class parents for education of their kids. Thus the author points out that the banks in Kerala especially Travancore and Kochi region evolved due

to a variety of socio-economic factors and remains as an integral part of the Kerala economy.

Mani and Jose (2001) analysed the performance of commercial banks in terms of deposit mobilization, banks advances and credit –deposit ratio for the period 1988-96. The study revealed that the banks in Kerala were highly successful in deposit mobilization during the period, while the credit deployment side was very weak. This raises doubt about the profitability of banks without effective and efficient deployment of credit. In the context of banks being highly skeptic about the viability of the project on one side and the beneficiaries blame about the negative attitude of the banks, the authors suggested to develop an entrepreneurial culture duly supported by a positive attitude of banks in the state.

Narayana (2003) attempted to examine the problem of low credit –deposit ratio in Kerala for which commercial banks in the state were seriously criticized. The basic question raised was the banks which were successful in mobilizing deposits could not channelize them into productive sectors especially industrial sector. The paper suggested that credit deposit ratio was not a good measure of the lending behavior of banks. With regard to the credit to the small scale sector, the author pointed towards the very small size of the units in terms of investment and employment and its declining trend. This resulted in high cost of servicing accounts.

Jeromi (2004) attempted to review the progress of commercial banking in Kerala and analysed the trends in Credit deposit ratio, low level of credit deployment in the state and its reasons.With regard to the lower credit deployment and credit deposit ratio, the author points towards the lack of responsiveness of credit to the requirements of the economy as the banks were more focused on deposit mobilization than credit expansion. The reasons for low credit deposit ratio were stated to be the lack of credit absorption capacity in the weak productive sectors and lack of suitable credit policies from the part of the banks.

1.3 RESEARCH GAP

The importance of industrial sector in the economic development of the state has been a thrust area that could be understood from the measures taken by the state government by framing industrial policies from time to time. Small scale industries being an integral part of the Kerala economy, its development has been given due importance. Inspite of these measures, these industries could not perform well compared to other states and All India level. This led to a critical analysis of the policy framework and the factors were identified which hindered the growth of industries in the state. The review of literature revealed that major studies that focused on the manufacturing industries of the state indicated wage cost, labour cost, labour militancy, industrial concentration, power shortage, small size of the firms as major factors hindering industrial growth in the state. However, lack of working capital, cost of credit has also been mentioned as major factors affecting the smooth functioning of small scale industries all over. The importance of finance for industrial development has its empirical and theoretical backing. Commercial banks being a major financial intermediary in the state, its role in the industrial performance of the state with respect to the credit flow to these industries needs special mention. The review of literature shows that though low credit deposit ratio has been studied as a factor in this regard, the linkage between banking sector and industrial sector especially manufacturing sector has not been considered seriously. Thus this study tries to bring out the linkage between banking sector and small scale industries in the state in the context of lack of working capital being stated as a major reason affecting the performance of these industries.

1.4 STATEMENT OF THE PROBLEM

It is obvious that the developing countries like India have been trying to achieve economic development through industrial development. The direct impact of manufacturing industries on primary and service sectors through linkages and spillover effects highlights its importance as 'engine of economic growth'. Liberalisation policies of 1990's have been instrumental in spreading of the small scale units in the state. In the state's manufacturing sector, small scale industries play an important role

as large industrial units are not feasible here (Kerala Development Report, 2008). Meanwhile, the industrial history of Kerala also shows the domination of small scale industries. About 67.10percent of the enterprises were engaged in registered manufacturing, but these enterprises are affected by many factors like lack of technological innovation, lack of credit, marketing facilities etc. (Annual report,2014-15). A strong financial infrastructure and smooth flow of funds to various productive sectors of the economy promotes the development of the economy .The role of financial intermediaries especially banks in channelizing fund and augmenting the investment level, thus bringing forth industrial development has its theoretical backing (Schumpeter, Gerschenkron, Cameron).In fact, the well developed banking sector in the state is well known for its higher deposit mobilization compared to other states . In the context of increasing role of commercial banks and their higher deposit mobilization on one side, and lower industrial development in an otherwise developed economy like Kerala on other side, this study focus on the linkage between bank finance to industries and performance of industries in Kerala.

1.5 OBJECTIVES

1. To examine the industrial performance of Kerala in the post liberalisation period.
2. To assess the trend and pattern of bank financing to industries in Kerala.
3. To examine the financial accessibility of small scale industries and problems of bank financing in Kerala.
4. To study the long run relationship between bank finance and industrial performance of Kerala.

1.6 HYPOTHESIS

Bank finance significantly influences the industrial performance of Kerala

1.7 DATA SOURCE AND METHODS

The main data source for registered manufacturing industries in India is from Annual Survey of Industries. So data related to factory sector used in this study are based on the Principle Characteristics of the Factory Sector of Annual Survey Of Industries (ASI) published by Central Statistics Office (CSO) under the Ministry of Statistics and Programme Implementation of the Union Government of India. Our

study deals with the performance of industries at two digit National Industrial Classification (NIC) pertaining to liberalization period. i.e. from 1991-2017.Industrial performance have been studied on the basis of annual growth rate of variables like number of units,investment, value of output and employment for the same period. In the case of small scale industries, data related to the same variables have been obtained from Directorate of Industries and Commerce, Thiruvananthapuram. Multiple Regression Analysis has been conducted to find out the significance of variables selected for studying the performance of industries and stepwise regression method help us to understand the most significant variable to influence the performance of these industries.

Banking development in the state of Kerala have been studied based on the growth of bank branches, credit and deposit mobilization of scheduled commercial banks and credit –deposit ratio. The data for the same have been obtained from Banking Statistical Returns of India and Quarterly statistics on deposit and credit published by Reserve Bank of India. The data related to bank credit to MSE in Kerala was collected from the record of State level Bankers' Committee, Thiruvananthapuram. Annual growth rate and trend analysis have been used to indicate the trend of bank credit to manufacturing sector in the state.

In order to understand the nature of small scale units in the state and their financial accessibility, primary survey was conducted among the entrepreneurs of sample industrial units . Three categories of industries like food processing industry, wearing apparel and engineering industry from three districts viz, Kozhikode, Thrissur and Ernakulam, were selected on the basis of their domination in the value of output in the year 2016 as per the data given by Directorate of Industries and Commerce, Thiruvananthapuram. Financial performance of these industrial units have been analysed using financial ratios like quick ratioand turnover ratios inorder to understand the liquidity position of these units.

The long run relationship between performance of small scale industries and bank credit to these industries have analysed using Non linear Auto Regressive Distributed lag model (NARDL) developed by Shin et .al.(2013) .We employ annual

data from 1985 to 2016. The performance of small scale industries have been studied in terms of value of output and bank finance is represented by flow of bank credit to small scale industries. In the literature, industrial growth and bank finance relation has been studied by means of standard time series techniques like cointegration, error correction modeling and granger causality. Though these techniques examine the short run and long run interaction, it is based on the assumption of symmetric relation. However, they does not incorporate the potential asymmetries in the industrial output which is mainly affected by changes in policy reforms and different ups and downs faced by the economy. Hence, we adopt Non Linear Auto Regressive Distributed Lag cointegration approach developed by Shin et.al.(2013) as an asymmetric extension to the well known ARDL model of Pesaran and Shin(1999) and Pesaran et.al(2001) in order to incorporate long run and short run asymmetries.

1.8 LIMITATIONS OF THE STUDY

One of the important limitations of the study is that the finance and industrial growth linkage is restricted to bank finance and small scale industries .This is due to the domination of manufacturing sector in the small scale industry and commercial banks in the financial sector. Another important limitation of the study is related to the data availability. The subsector wise analysis of the period before the implementation of the Micro, Small and Medium Enterprises in 2006 was not possible due to the unavailability of the data during the period.

1.9 CHAPTER SCHEME

The study is divided into six chapters. The first chapter deals with the introduction to the study. The second chapter provides the historical background and policy framework of the industries in Kerala. The third chapter examines the industrial performance of Kerala. The fourth chapter analyses the trend and pattern of bank finance to the industrial sector in Kerala. The fifth chapter deals with nature of MSE units, their financial accessibility and problems of bank finance faced by the industrial units in Kerala. The sixth chapter analyses the long run relationship between industrial performance and bank finance in Kerala. The seventh chapter provides the conclusion of the study.

CHAPTER-II

INDUSTRIAL BACKGROUND OF KERALA AND THE POLICY FRAMEWORK

2.1 Introduction

Industrialisation has a major role to play in the economic development of the underdeveloped countries. Economic development is known to be synonymous with industrial development, particularly the development of modern manufacturing sector. It is believed that economic development is possible only through industrial development. So much so, often the developed countries are alternatively referred to as 'industrialised countries'. The importance of industries sector and its growth in an economy is obvious from this(P.P.Pillai, 1994). The gap in the per capita income between the developed and underdeveloped countries is largely reflected in the disparity in the structure of their economies; the former are largely industrial economies, while in the latter, production is confined predominantly to agriculture. Undoubtedly, some countries have achieved relatively high per capita income by virtue of their fortunate natural resource endowments. But these countries are rather a special case. So most of the underdeveloped countries focused on higher industrial development as a path to economic development and the case of India is no different.

The industrial picture of the country was not that strong during the independence period, but it would be rather surprising to note that India had a splendid industrial background based on division of labour in the earlier period. India was very much advanced in the production of silk and cotton goods under the patronage of the royal kingdom, especially during the Mughal period. Saltpeter and spices from India also found its own place in the international market. In the 17th century, India was the hub of world commerce and magnet of world precious metals (Kuchal, 1978). The artistic skills of Indian craftsmen gave birth to handicrafts of high aesthetic value which was mainly promoted by then rulers. It was this richness and quality of Indian products that attracted traders from worldwide to the Indian market.

The industrial system in India could be classified into rural and urban industry. Rural industry was mainly dominated by cottage industries which catered to the local demands of earthen wares, coarse cloth, baskets and so. The much developed urban industry was highly organized in the guild system and mainly specialized in the production of silk and woolen fabrics, calicoes, gold and silver wares which found high

demand in international market. The Indian products dominated the European market to such an extent that the British government had to restrict it in the interest of their domestic industries and also to stop the economic drain to India to save the European economy. The Industrial revolution that took place during the second half of the 18th century came as a big blow to the industries of India as the Indian products could not compete with their cheaper and better quality products.

The advantages of mechanization, benefits of large scale production and cheaper transportation facilities enabled the British to establish their supremacy over India. Unlike all other foreign rulers who had earlier conquered India, the Europeans laid the foundation of their supremacy by destroying old Indian economic system and introducing new economic reforms. This rang the death knell of old artisans and handicraft industries. The exploitation and oppression of Indian weavers under the company agents threw them into a sad state of distress and deprivation. The predatory and plundering character of English capitalism ceased by about the middle of the 19th century and from that time the competitive forces could be relied upon for capturing the Indian market which had been reduced to the status of a 'colonial agrarian appendage' of Britain(S.Kuchal,1978). In the later years of 19th century factors like development of small towns, a new category of educated Indians, flow of foreign capital and enterprise, better transportation facilities especially railways, political developments in India and abroad created a strong and favourable ground for the development of industries in India.

A major breakthrough in the industrial front of the country was seen during the Second World War period which laid the foundation of alloy industries, metal industries, mechanical industries, food processing industries and chemical industries. At the same time, the intensified war efforts caused heavy wear and tear, inflationary conditions, scarcities, unhealthy trends in company formation and management, profiteering and hoarding and continued its negative spell even in the post war period. The disorder and dislocation of industries due to the partition of the country that followed the independence time period further aggravated the problem of industrial crisis. The worst hit were the renowned cotton and jute industries due to the loss of source of good quality raw materials after partition. With this brief discussion on the

industrial background of the country, we may move on to discuss the industrial background of the state .

2.2 Industrial background of Kerala

If we check the history of Kerala, it is evident that the region was advanced and it had its own heritage in every sector. Traditional industries like mat weaving, handloom, bamboo products were an integral part of the economy century's back. The state of Kerala was formed on 1st November 1956 by unifying three political units of the period, i.e. Travancore, Cochin and Malabar. So it would be appropriate to brief the industrial background of the state separately for the three regions as such. Among the three political units, Travancore was much ahead in the sphere of industrialization due to efficiency and farsightedness of the administrative set up.

Factory industries and cottage industries contributed to the industrial development of the region. Though the development of factory industries were gradual, cottage industries were flourishing .Factories were mainly established in the manufacturing sector like tea and cardamom, tiles, coir yarn, rubber, paper, matches etc. Handloom weaving and cotton weaving were prominent cottage industries and others which needs mention here were manufacture of silver and gold threads, bell-metal industries, lace and embroidery, preparing coconut jaggery, screw-pine, mat-weaving, iron industries, , wool-seasoning palm leaf umbrella making, etc.

One of the first industries in the state of Travancore was a textile mill established in 1881.A few other factories established during the period were the coir factory at Quilon, an indigo factory at Kulachal, match factory at Thenmala, and salt manufacturing industries in Trivandrum, Karunagapally and Karthikapally. Quilon spinning mill established by European management in 1884 ceased to exist by the outbreak of First World War. Punalur paper mill started in 1887 used water power to run the paper plant instead of electricity and thus needs special mention.

The importance of industrial development was taken as a major responsibility of the government and many steps were initiated during the beginning of the 20th century. As an attempt to organize industries, a separate Department of Industries was even

started under S. Backer. An Economic Development Board was constituted for the purpose of establishing newer industries and expanding older ones. These measures did bring in the necessary boost for the development of industries in the state. The efforts for the industrialization of the princely state of Travancore was started as early as the middle of 19thcentury.This resulted in the flow of private foreign capital into coffee, tea, rubber, coir etc. It would be unfair to discuss the industrialization of Travancore without mentioning the contributions of the Diwan of Travancore, sir. C.P. Ramaswamy Aiyer. His farsightedness and sincere efforts culminated in the development of industries here even with the support of foreign investment.

Travancore region

While there was lack of metallic minerals required for strong industrialization of the state, he focused on the possibilities of making hydroelectric power at a cheaper cost, a major strength of Kerala. The enormous resource of china clay in the districts of Trivandrum, Kollam and Kannur were also utilised for the factories of the state. Sir C.P. understood the lack of entrepreneurship and modern technology as a major setback to the industries of Kerala. So he took initiative in attracting entrepreneurs as well as adopting technology from various parts of the world. Classic examples of this could be bringing Ogale , a leading glass manufacturer of Maharashtra to start Ogale glass manufacturing company in Kerala, Sasoon textile mill by Sasoon group. Later it was renamed as chakolamills. Aluminium manufacturing was very rare in India at that time. Indian aluminium company was established in Aluva in collaboration with one of the leading aluminium manufacturers of the world – Alcon. He understood the importance of electricity and took all efforts to improve the situation in Kerala. Many factories were set up in and around Aluva due to the availability of transportation facilities. Likewise, availability of good quality clay made Kandara a popular place for factories. Thus these places became the centres of industrial development in Kerala. The farsightedness of sir. C.P. had resulted in establishing an industrial base for the Kerala economy.

Kochi region

Many industries like Weaving, coir, coconut oil, wood, tile, bell metal etc were performing well in Kochi during 19th century. In 1911, around 50,000 people i.e.1/10th of the total population engaged themselves in various types of industries, as per the data available in Kochi state manual of C. Achutha Menon. Textile industry was the major industry here and Pushpagiri weaving factory started in 1908 in Thrissur was the major textile unit then.

Coir products, mats and coconut oil were exported to other countries like England and Germany in the beginning of 20th century. This sector gave employment to 28,000 people in 1908, this showed the dominance of the sector. Another important sector was that of mat weaving and coconut oil. In 1896-97, coconut oil worth Rs. 44. 4lakhs were exported and 1908-09, it increased to Rs. 101.4 lakhs. There were 10 oil mills in Kochi. Teakwood factory established by a European industrialists exported it to other places especially London. Tramway existed in Chalakkudy forest for transporting wood to the mill. 14 tile factories in Thrissur, and 2 factories in Chittoor existed. Another industry that flourished in Kochi were the copper and bronze vessels.

A survey was conducted in 1909 by the Kochi government. As per the suggestions of this survey, many training schools were established in private and public sector. In 1919, Industries Department was started and these training schools were working under the supervision of this department. Industrial Advisory Board was formed in 1920. It was later merged with Economic Development Committee formed in 1925.

Malabar region

Malabar was a richer part of the state as per the census of 1901. This belonged to Madras Presidency.54 percent of the population were employed in industries. Coconut based industries were the major industries in Malabar region. Coir products, oils, mat weaving, sugar manufacturing were the major areas of specialization. The export earnings from coconut products itself could meet the import needs of the area. Soap manufacturing industry was in its flourishing stage in the Malabar area. Soap

institute at Kozhikode attracted people from Burma which made a profit of Rs. 8 lakhs. Kallayi, Kozhikode specialized in furniture making industry. The industry in Malabar region was very popular and it was run by Basel mission in Kozhikode, Ponnani, and Olavakkode and Henke and co.in Feroke. Manglore tiles manufactured in these factories were exported to Burma, Ceylon, Singapore, Australia. In 1931, around 9 textile factory existed in Kozhikode, 4 in Kannur. Commonwealth Trust, M.N. Nair and company, Standard Cotton and Silk weaving company were the major textile manufacturing industry. Malabar spinning and weaving mill had a specialisation in the production of good quality threads. Industries related Fishing, fish oil,sugar manufacturing , mat weaving, vessel manufacturing, beedi, match factory also added to the industrial strength of the region.

The industrial activities of Basel Mission had contributed much to the industrial development of Malabar. They introduced machinery and provided a modern factory outlook to the traditional industries like cloth weaving and tiles making. The invention of dye of Khadi from the bark of semicarpus tree and the introduction of mechanized knitting gave a big boost to the textile industry here .The dye house at Quilandy was established by the Mission.

Hence it is clear that the state of Kerala had a well developed industrial culture rooted in its tradition and culture, which formed a wonderful base for the development of the state in the earlier centuries. Meanwhile while discussing the industrial background of the state, it is rather incomplete if we do not include the role played by the traditional industries in the industrialization process of Kerala. In fact, after the formation of the state, the respective governments had to take genuine interest in reviving the industrial culture and catch up with industrial strive happening in the country.

Traditional Industries

Traditional industries play a vital role in the industrial economy of Kerala. The dominating industries in the traditional sector of Kerala are Coir industry, cashew industry, handloom, handicraft industry. Coir industry remains to be a major traditional industry in the state in terms of employment generation and foreign exchange earnings.

This sector gives employment to around 3.75 lakh person, of which 80 percent are women(Economic Review,2018). This industry is mainly concentrated in the coastal belts of the state .Availability of coconut husk, natural retting facilities in the lakes, backwaters and lagoons and, the expertise of the people accounts for the domination of the industry in the state. Meanwhile, this sector is facing stiff competition from other Indian states. Immediate attention towards modernization and social security protection for its workers is due for the survival of the industry. Among the traditional industries of Kerala, Handloom sector stands second to the coir sector in terms of employment.96 percent of the total looms are under the cooperative sector and only four percent remains under industrial entrepreneurs. They are mainly concentrated in Thiruvananthapuram, Kannur district and parts of Kozhikode, Palakkad, Thrissur, Ernakulam, Kollam and Kasargod districts. Cashew industry also has remained as a major contributor to the Kerala economy especially in terms of employment generation. This industry provided employment to around 1.5 lakh workers, 90 percent of them being women workers. Recently, there has been considerable reduction in the area under cultivation leading to scarcity of raw materials, absence of modernization, imposition of import duty, low price for processed kernel has affected the growth and sustenance of this industry.

Khadi and village industries also constitute a major part of the industrial sector of the state by providing employment to around 1.06 lakh person and with annual sales of Rs. 52138 crores in 2016-17. Beedi and tile industry also formed an important part of the industrial sector in the Kerala economy. The traditional industries which were the strength of the state had to face many problems leading to their gradual decline. Availability of cheaper and better substitutes has affected the very existence of tiles and handloom textiles. Increase in income and social status of the keraliites has changed their taste and preferences and their consumption pattern. Labour unrest and disputes that existed in the state,which has been curbed to a large extent later years, also affected the performance especially coir, cashew, and tile manufacturing industries.

In this changing scenario, these units which were small in size could not adapt to changing market conditions. Poor technological capabilities refrained them from developing new products at a lower cost to meet the changing needs of the market.

Recently, government measures have helped these industries to adapt new technology, better investment, developing new products, and better marketing of traditional products. In the present world, there is a growing interest among the people towards natural products due to growing health and environment issues. If properly planned and implemented, the traditional industries have huge prospects in gaining strength and adding to the industrial growth of the state. Inorder to complement the contribution of traditional industries and small scale industries and to bring in new waves of modernization to the industrial sector of the state, Central and state government also played its part in investing in various enterprises.

Public sector Enterprises

In the Industrial Policy Resolution of 1948 itself the importance of public sector was reiterated in the case of heavy and basic industries. We have already seen that the efforts for the industrialization of the state started even before its formation by the then Diwans and Maharajas. As the industrial sector of the state was dominated by the small scale and cottage industries, the efforts were mainly directed towards the starting of large scale industries in the state. After the formation of the state, the initiative was continued by the government and thus public sector enterprises sought to play a major role in the industrialization. The major problems of Kerala economy were lower per capita income, rapid growth of population, acute unemployment and under employment, over dependence on agriculture, low productive industrial sector and these stressed for a rapid industrialization of the state. The greater share of low productive small scale industries and lower share of large scale industries in state called for a serious interference from the part of the government and this accounted for the establishment of large scale public sector enterprises especially in the manufacturing sector. The government in the early years after the formation of the state concentrated on the modernization and expansion of existing industries.

The public sector enterprises are categorized into three, namely, companies fully owned by the state government, companies in which the state government have majority shares and companies owned by the central government. The central government also has a due role to play in the industrialization of the states. The share of

central government in the industrial investment of the state is shown in the table given below.

Table-2.1
Central sector investment in Kerala (in crores)

Year	Kerala	India	Percentage share
1970	116	3885	2.99
1975	202	6242	3.24
1980	423	18161	2.33
1985	831	47323	1.76
1990	1701	113431	1.5
1995	2906	227349	1.28
2000	6828	381365	1.79
2005	16872	649159	2.6
2010	26602	1129942	2.36
2011	28455	1263665	2.25
2012	29026	1408046	2.06
2013	31460	1555575	2.02
2014	33867	1757450	1.93
2015	38017	1906926	2
2016	40317	1665175	2.4
2017	45016	1808372	2.5

Source – Economic Review (various years)

Absence of metallic minerals and fossil fuels in the state was a stumbling block to the industrialization process, but at the same time well developed transport system, availability of power and labour, natural resources like mineral sand, forest and fish wealth added to the strength of the state. There were about 130 public sector enterprises in Kerala, out of which 115 are working enterprises in 2017. Forty enterprises are fully owned by the Government of Kerala.(Economic Review,2018). These enterprises are meant to bring in the much required impetus for the industrialization process in the state.

We have had a brief overview of industries in Kerala and its current status. The historical background of the state definitely shows a strong background of industries in the state which was later affected by certain factors that was not favourable for its existence. Low industrial contribution to per capita income , state revenue and the development sources ,its inability to raise the standard of living of people and resolve

the increasing unemployment problem in the state were regarded as a stage of industrial stagnation(Kerala Development Report,2008).The major constraints that stood against the industrial growth of the state were the social attitude of the people against the growth of private enterprises as a symbol of labour exploitation. A number of units were either closed or affected due to labour problems. Industrial disputes resulted in work stoppages. The globalization process and WTO regime adversely affected the small scale and traditional industries in an open competition scenario. The entry of multinationals in Indian domestic and export market had reduced the confidence of the industrialists in the state. Reduction of tariffs, sanitary and phyto-sanitary measures, anti-dumping and countervailing measures under WTO provisions was said to have created a negative interest among the entrepreneurs, though there was a liberal provision for importing raw materials for production at a lower price. The successive governments that took earnest effort for preparing a favourable investment climate conducive for growth of industries has ended up in promoting industries to considerable extent. So here we shall discuss the major policy measures under five year plan and industrial policy reforms for converting the state into an attractive investment destination.

2.3 Policy Support Under Five Year Plan

We have already discussed the stupendous effort undertaken by the different regions of Kerala which laid the foundation of the industrialization of the state and the better performance of these industries before the formation of the state.The outstanding development that happened in the industrial field before the formation of the state could not be maintained after and so it could be seen that the state of Kerala formed in 1956 lagged behind.The government at the centre, Indian government adopted policy measures to develop various sectors of the economy through five year plans. Plan wise expenditure for industry and minerals could be discussed below.

Table-2.2

Plan expenditure on Industry and Minerals

Plan period	Plan expenditure (crores)	Percentage share
First plan	0.5	1.93
Second plan	6.0	7.48
Third plan	14.4	7.90
Annual plans	13.3	9.21
Fourth plan	26.0	7.52
Fifth plan	54.8	10.99
Annual plans	67.1	15.26
Sixth plan	166.7	9.24
Seventh plan	272.6	10.87
Annual plans	151	10.60
Eighth plan	869.4	11.79
Ninth plan	971.8	11.15
Tenth plan	1274.1	5.3
Eleventh plan	1411.3	4.5

Source – (1) Kerala Development Report (2008),(2) Economic Review

The first five year plan which was implemented even before the formation of the state, mainly included survey of small scale industries, installations of an electric tunner kiln in the Ceramic Factory at Kundara and improvements to the Kerala Polytechnique at Kozhikode and traditional small scale industries like coir, co-operative schemes.

The major steps taken during second five year plan were the expansion of production in Kundara Ceramic Factory and the Kerala Cycles Private Ltd., establishment of a spinning mill in Thiruvananthapuram and the organization of coir and handloom cooperatives. The central sector investment during this period was negligible. A programme for the organization of industrial co-operatives and industrial estates were also adopted during this period. Unlike the first two plans ,industries especially medium and large scale industries got some attention in the third five year

plan though major chunk of the plan outlay went towards small and cottage industries. During the plan period,18 industrial estates had been set up in the state. Kerala State Small Industries Development and Employment Corporation Ltd. was formed and Rural Industries Programme was implemented formed .The annual plans that succeeded the third plan gave definite direction to the industrial policy of the state towards its planned industrialization. The unhealthy performance of the public sector undertakings in the state was also mentioned. This augmented serious efforts from the state government for the development of industries in the state .The fourth plan gave importance for functional and ancilliary industrial estates. It was also ensured that credit facilities were available for industries from commercial banks and KFC. The measures undertaken during fifth and sixth plan aimed at creation of infrastructure, assistance to SSI and development of an investment climate in the state. During this period, the number of factories increased at an annual growth rate of 19.56 percent and employment at a rate of 3.3 percent which was higher compared to the previous period. Efforts to indusrialise the state continued in the subsequent plan period also which is clear from the table. The seventh plan period mainly focused on infrastructural development and the reorganization of industrial promotional agencies. As a result , there were 64675 registered small scale units, employing 3.82 lakh persons with an investment of Rs.854 crore and producing goods and services worth Rs. 1745 crores(Economic Review,1990). There was a steep growth of small scale industries in Kerala during the seventh Plan. The eighth plan period witnessed the implementation of Industrial Policy Reforms of 1991 which brought in a structural change.

The New Industrial Policy Reforms of 1991 were meant to intensify the industrialization process in the country and brought in new light for the upcoming entrepreneurs. The table clearly shows that there has been considerable increase in the plan outlay on industry and minerals. The ninth plan included a comprehensive programme with respect to infrastructure ,marketing, investment subsidies and modernization, provision of credit facilities etc. for SSI, traditional industries and public sector enterprises.The tenth plan mainly focused on providing marketing support to SSI, cluster development concept, establishment of incubation centres.

2.4 Industrial Policies of Kerala

It is universally recognized that in order to overcome the rigidities in the underdeveloped countries, the state has a positive role to play. "Breaking social chasms and creating a psychological, ideological, social and political situation propitious to economic development becomes the paramount duty of the state in such countries."(Myrdal,1977) Hence the actions of the state must cover different spheres and one among them is definitely industrial development. .

From the previous section it is clear that before the rise of modern industrial system, Indian manufactures had a worldwide market. Indian exports consisted chiefly of manufactures like cotton and silk fabrics, calicoes, artistic ware, silk and woolen cloth. The Indian handicrafts could not compete with the machine-made goods from Britain which was the result of the Industrial Revolution. The industrial pattern in India after independence was marked by low capital intensity, less development of medium sized factory enterprises and imbalance between consumer goods and capital goods industries. In order to overcome these problems, it was the duty of the state to formulate and implement a judicious industrial policy with due consideration for traditional, small, medium and large scale industries. Industrialisation in India was planned in such a way as to create capacity to absorb excess labour power, cater for diversification of market and at the same time ensuring the balanced expansion of all appropriate sectors of the economy.

Looking forward to making a strong industrial foundation for India, the Industrial Policy Resolution 1948, meant to give a clear cut direction for the industries in India .The government took the major responsibility of providing a strong industrial base by reserving basic and heavy industries and industries of strategic importance for itself. At the same time, due importance was given for private sector by allowing them to continue their contribution in the reserved areas and also other areas open to them. The role of cottage and small scale industries in the industrial front was given due importance. A suitable tariff policy, taxation policy and a policy for sound industrial relation was also recognized as important for the industrialization of the country. The need for the security and participation of foreign capital for enhancing the pace of

industrialization was well recognized. The policy resolution contemplated a mixed economy which included both the public sector as well as private sector in the industrial front. A new Industrial policy was framed in 1956 in the wake of a series of economic and political changes in the country. This policy reclassified the industries to include them in three schedules. Industries in Schedule A remained under the state monopoly, Schedule B consisted of industries in both public and private sector and schedule C recognized the initiative of private sector. All other priorities put forth in the industrial policy of 1948 was continued along with the measures for removal of regional disparities in the industrial development of the states.

Industrial production had increased at an average annual growth rate over eight percent during the period 1956-1964(economic survey,1965). Though a few capital and intermediate goods did well, many other industries suffered due to shortage of inputs and lack of capacity creation. Technological self-reliance for both large and small scale industries were emphasized and measures were initiated accordingly in the Industrial Policy Statement, 1977. It redefined the areas of large scale and small scale industries. Establishment of District Industries Centre and revamping the Khadi and Village Industries Commission could be considered as major steps taken in this policy. Industrial Policy, 1980favoured a more capital intensive path for development and paved the way for the expansion of large and big industrial houses. Moreover, the small scale industries were defined in terms of the limit of investment. The policy sought to promote the concept of economic federalism and nucleus plants in the process of industrialization. Drought and unsatisfactory performance of infrastructure in 1980-81period affected the industrial sector, growing only by 1.2 percent.

The Industries Development and Regulation Act enacted in 1951 had broadly defined the restrictive measures (registration, licensing and cancellation) and reformative measures (direct regulation and control by the government) on the industries in India. It was later modified in 1970 which clearly classified industries as core sector, heavy investment sector, middle sector, unlicensed sector on the basis of the limit of investment as per the recommendations of Dutt committee. The industrial licensing policy in 1973 redefined large industrial houses as per the MRTP Act which was considered to be a move to increase the number and contribution of large industrial

houses. Contrary to this, the net coverage of industrial houses shrunk and this led to further liberalization policies in 1978, 1985, and 1988-89.

The historical Industrial Policy implemented in 1991, radically liberalized and deregulated the industrial sector substantially. The New Industrial Policy eliminated a large number of government induced entry restrictions, licensing requirements and controls on corporate behavior. This Policy abolished the system of industrial licensing and repealed MRTP Act. The Public Sector Policy also was restructured and all restrictions on foreign investment and foreign technology agreements were removed. The policy of 'Liberalisation, Privatisation and Globalisation' was meant to take the country far ahead to the goal of economic development via industrial development. The process of industrial deregulation and structural reforms has been carried over further in the later industrial policies as well. Disinvestment policy was continued in the later years giving priority for private sector. Introduction of CENVAT, permission to raise FII equity limit to 40 percent through a special resolution by shareholders, variation in export and import duty were the major highlights of the industrial policy 2000-01.Schemes like make in India, Invest India, Skill India launched in 2015 aims at encouraging small and large entrepreneurs to come forward with their projects and providing a suitable investment climate in the country.

The growth rate of industrial sector during the period 1992-93 to1999-00 was 6 percent compared to a higher growth rate of 7.8percent in the time period 1980-81 to 1991-92.The use based classification shows that growth performance of basic goods, capital goods and consumer non-durables has a decreasing trend while, intermediate goods, consumer durables showed a better performance .However, growth rate of GDP from manufacturing sector showed a higher growth rate of 7.4percent during the period 1992-93 to 1999-00 which can be highlighted as a positive impact of policy measures initiated in 1991. The credit for the growth trajectory of Indian economy during post 2000 period could be assigned to the recovery of industrial sector with growth rate increased to 11.6 percent in 2006-07 from 5.7percent in 2000-01.The manufacturing sector recorded a growth rate of 12.5percent in 2006-07.The deepening of global financial crisis , persistent rise of crude, and global commodity shock badly affected the companies in India leading to 3.4 percent growth rate in the manufacturing sector and

0.5 percent growth in the industrial production in 2007-08. By the end of 2009-10, the industrial sector revived with the consistently increasing growth in consumer durables and intermediate goods. In the period 2013-14, the index of industrial production reached a level of 172 percent with a better performance of manufacturing sector.

Thus the industrial performance of the country has been varying throughout these years depending upon internal and external factors. The economic performance of the states of India also has been varying drastically especially in the industrial front. Though the country has a common objective and common policy initiatives at large, the states have been framing their own policies depending upon the regional factors. This difference can be seen in the industrial development of the states as well. The Department of Policy and Promotion, Ministry of commerce and Industry in partnership with World Bank has assessed the states on the basis of implementation of business reforms. As per their results, Andhra Pradesh and Telengana found top position while Kerala lowered its position from 18 in 2015 to 20 in 2016. Due to the presence of a few unfavourable factors, the state of Kerala had to frame policies to overcome these and provide an investment climate conducive for industrial development. The state government has been taking earnest efforts to frame industrial policies considering all the requirements of the state along with the needs of the time.

The state government of Kerala followed the industrial policies of Indian Government immediately after its formation. The importance of regional industrial policy based on the existing structural and regional factors of the state was appreciated and this resulted in the first industrial policy of Kerala in 1960. After reviewing the economic and social status of the society, the policy was framed in such a way as to provide fillip for the industrialization, utilizing the resources available in the State. National Council of Applied Economic Research was entrusted to conduct an economic survey to bring about details of the resources available in the state. The industrial activities in the state broadly be classified under traditional industries, small scale industries, khadi and village industries, large and medium private and public sector units. This policy initiative by the government tried to address issues like availability of land, power, finance, marketing facilities and technical support required for the development of industries in the state.

Though measures were intended to improve the industrial situation in the state, it was seen that the percentage share of industrial income to state income decreased from 16.17 percent in 1950-61 to 14.47 percent in 1965-66(Economic Review, 1966). About 8.47 lakhs of people ,that is 83.1 percent of total workforce under industries, were employed in small enterprises reflected the dominance of small scale industries in Kerala .The capital employed per worker in these industries was only Rs.1500 whereas it was Rs.5600 at all India level. This highlighted the low capital intensity of small enterprises (Economic review, 1962). In this background, the industrial policy statement in 1967 urged central government for following preferential licensing procedure for establishing large scale industries in the state , allowance of foreign currency to purchase modern machinery for the industries and central investment in the state as to promote related industries also .Kerala State Industrial Development Corporation, Kerala State Small Industries Development Corporation and Kerala State Financial Corporation were given the responsibility to provide financial support to large, medium and small scale industries respectively. Industrial relation in the state had a stigma attached to it adversely affecting the investment climate. A Conciliation and Arbritation Board was formed to look into the issue and promote a better investment climate.

The concerted efforts of the successive Governments and successful implementation of policy measures had brought about noticeable increase in the number of large, medium and small scale industries in the state. There was a marginal increase in the central investment also. The index of industrial production marked an annual growth rate of 3.90 percent in the time period 1970-71 to 1975-76 and 9.1 percent growth rate in 1975-76 to 1980-81.As on 31/3/1982, there were 108 mini industrial estates and 9 development plots in the state. Though this showed a better picture, a major setback to the industrial scenario of the state was the increasing number of industrial units growing sick(Economic Review,1982).The major concerns that the industrial policy of 1983 addressed was the rehabilitation of sick units especially in the public sector. State Public Enterprises Bureau was set up for the purpose. A common Policy of Prices and Wages were framed emphasizing the importance of production and the productivity of labourers. Kerala Industrial Development Council was established to monitor the implementation of policy

measures framed through industrial Policy. Along with these specific measures, this policy continued to support large, medium, small and traditional industries.

There was considerable improvement in the industrial climate of the state in 1980's bringing down the industrial disputes to 67 in 1988and then to 38 in 1990.Mandays lost due to industrial disputes came down from 23.11 lakh in 1986 to 15.38lakh in 1988 ad further to 3.90lakh in 1990. Annual index of industrial production had reached 200.6 in 1985-86, but declined to 175.19 in 1987-88. A major problem that had serious setback on Kerala economy was acute power shortage which mainly affected the industrial sector of Kerala (Economic review, 1991). The New Industrial Policy of Central Government of India was implemented in the state also in 1991.There had been increase in the number of small scale industries, joint stock companies in 1991-92 and the index of industrial production increased from 190.45 in 1990-91 to 284.05 in 1996-97. After the implementation of liberalization policy, the state government had taken special care in modifying the objectives of the industrial policy according to the needs of the state. The industrial policy implemented in1998 gave importance for three major issues ailing the industrial sector of Kerala. All tiny, small, medium or large units in sectors like information technology, agro based industries, readymade garments, ayurvedic medicines, mining, marine products, light engineering, biotechnology and rubber based industries were given the status of thrust sector industries. Specialised industrial parks were designed to meet the increasing needs of modern industries, especially in the industrially backward districts of Wayanad and Idukki. Schemes like Investment subsidy, margin money loan scheme, tax and duty concessions for all new industrial units were expected to bring in a new era of industrialization in the state. Extensive marketing network, export promotion, participation in international fairs were given due importance in the new policy. A new scheme called koottukudumbhasamrambham was introduced to ensure the participation of women entrepreneurs. A Policy Progress Evaluation and Review Team was formed to review the implementation of the policy and to provide necessary feedback to the government so that appropriate interventions can be made by the government.

In the backdrop of achievements of Kerala in physical quality of life and social infrastructure, particularly in health and education system, a new industrial policy was

framed in 2001 to bring forth a revolutionary change in the industrial front also. All the previous industrial policies had addressed the issues ailing the industrial sector of Kerala, so this policy meant to bring in a fresh approach altogether. This policy aimed at intensive programmes based on digital technology. Special emphasis was given for development of infrastructure including new industrial estates, industrial corridors, industrial parks, and special economic zones were created within these areas. Industrial Development Zones were planned at Thiruvananthapuram, Kozhikode and Kochi. Unlike previous industrial policies, service sector industries like education, tourism, health care especially ayurvedic and other traditional forms of treatment were given due consideration. Single window clearance act was implemented for all new industrial projects. It was planned to conduct Global Investors Meet 2002 to attract national and international businessmen to invest in Kerala. The Global Investors Meet attracted an investment offer of Rs.26000crores, despite economic slowdown. Memorandum Of Understanding were entered into for 96 projects, totaling an investment of Rs.11159.65 crores(Economic Review,2003).Kerala could attract an amount of Rs.1217 crores in 184 projects for the time period 1999-2005, which constituted only 1.26 percent of total FDI approved in India. While our neighbouring states of Tamilnadu and Karnataka fetched third and fourth position in the FDI list, Kerala could get only twelfth rank. The average industrial growth rate for the period from 1999-2000 to 2006-07 was 2.9 percent at constant prices.

The industrial policy of 2007 gave special thrust on rapid industrialization of the state without compromising the ecological and environmental issues. The Micro Small and Medium Enterprises Act enacted in 2006 had broadly classified industries on the basis of limit of investment and changed the concept of industries to enterprises. District Industries Centres were entrusted with responsibility of developing and supporting Micro, Small and Medium enterprises. Under cluster development programme, industrial clusters were designed to enable small entrepreneurs the economies of production. Orientation programmes and quality improvement programmes were meant to bring in confidence among the entrepreneurs in the state. According to the statistics published by the Department of Economics and Statistics, the growth rate for the period from 2005-06 to 2010-11 averaged 7.9percent at constant prices and this could be viewed as a positive impact of all the policy measures planned

and implemented over the years. Hence, Industrial Policy of 2011 continued all the major steps taken in the previous policy and a specific strategy of investment promotion towards the Rest of India, Middle East, South East Asia and Srilanka were planned. Moreover, Transforming Kerala from a wage earning society to an entrepreneurial society was taken up as a major target and challenge as well.

The previous industrial policies of the state had taken extra efforts to bring the state to the forefront in the case of industrial growth. The importance given for MSME enterprises especially in the service sector culminated in a growth rate of 8.24 percent in 2012-13 and this is supposed to be the highest among southern states and much above the national average of 5 percent.

Since infrastructural development provides the base for industrial development, the state government gave utmost importance for its development in the industrial policy of 2015 also. The important measures were:

Government proposed to facilitate development of Industrial Development Zones (IDZ) ,establish a knowledge City in the Techno city, Thiruvananthapuram, encourage setting up industrial units in dedicated industrial parks .This policy statement also facilitate industrial clusters with common infrastructure like common Effluent Treatment Plants for relocating relatively polluting industries and providing financial assistance to the extent of 25% of capital investment in Effluent Treatment Plants, subject to a maximum of Rs.1 Crore. Promoting eco friendly enterprises was the main objective and introduced a ‘‘Green Financing scheme’ in the State, with a cost of Rs.100 Crore.

As a part of encouraging entrepreneurship among the youth, September 12th is declared as State Entrepreneurship day. All universities in Kerala were to give 5% grace marks and 20% attendance to student startups which have at least one women as a cofounder. The Entrepreneurship Development Clubs already started in select colleges, is extended to all higher education institutions in the state. In addition, Kerala Academy for Skill Excellence (KASE) and Additional Skills Acquisition Program (ASAP) has been initiated for the enhancement of skills.

The importance of MSME in the industrial growth of the state has been well recognized . MSME Equity participation fund for encouraging startups were created in Kerala State Industrial Development Corporation and Kerala Financial Corporation. Exemption for payment of EMD and security deposit and price preference and 30% investment subsidy for women entrepreneurs.

Among the existing industrial sectors ,Government identified Rubber based Industries, Agro based business including food processing, Readymade Garments, Ayurvedic medicines, Marine products, Light Engineering, Bio and Nano Technology Furniture manufacturing, Electrical and Electronic products and 100% Export Oriented Units as thrust sectors with a higher rate of investment subsidy .

Furniture industry has been growing steadily in the State during the last two decades and complete mechanisation was encouraged to overcome the deficiencies of skilled manpower and to produce larger volumes to reap the economies of scale in this sector.

2.5 Conclusion

The importance of industrialisation for a balanced development of the state has been the objective of the government as well reflected in the policy measures taken in five year plans and industrial policy statement. Policy measures have been framed in order to promote and also to revive industries in the state according to need of the time. Some policy changes like that of industrial policy reforms of 1991 were significant in bringing about structural changes in the industrial sector. The industrial base has been widened substantially and so is the range of industrial products. Aspects like fostering entrepreneurship, development of technological capabilities and skills, digitalisation, maintaining ecological balance are also streamlined as conducive for rapid industrialisation.

The leading role to industrialise the state was taken by the government itself and it was claimed that the state had the highest number of public sector undertaking. This actually helped to widen the industrial base of the state. With the initiation of the reforms of 1991, private sector also gained much importance. This was supposed to

exploit the potential to the maximum. The industrial climate of the state was later disturbed due to factors like political interference, trade unionism and high wage rate. These negative factors that affected the industrial climate had to be addressed first to create a favourable climate for industrialisation. Though the importance of regional industrial policy was understood and framed before 1991, its regularity was ensured only after 1991. Industrial history indicates that small scale industries have been flourishing in the state even before its formation. The industrial policy reforms initially aimed at addrressing issues like availability of land, power, finance, marketing facilities and technical support required for the development of the industries in the state.

The index of industrial production an indicator of industrial performance marked a growth rate of 3.9percent in the time period 1970-71 to 1975-76 and it had increased to 9.1 percent growth rate in 1975-76 to 1980-81. Unfortunately, the increasing number of units falling sick especially public sector units was a major setback to the state. The industrial policy reforms before 1991 envisaged a policy of industrial licensing, price control and protection and mainly aimed at increasing production and productivity, generating employment opportunities and regional balanced industrial development. These measures which were meant to promote industrial development led to lack of competition, lack of technological innovation and resultant technological gap adversely affected the industrial development of the state. This led to reviewing of the policy measures and saga of liberalization.

In short, Entry barriers in the economy has been reduced since 1991 through de-licensing, deregulation, reduction in the role of public enterprises , privatization , liberal FDI norms and reduction in trade barriers . Over the years after the implementation of policy measures suitable for the economy, the industrial sector has been growing though not consistently. Indian economy has emerged as one of the fastest growing economies with a growth rate of 6.6 percent in 2017, industrial sector recording a growth rate of 5.9 percent. India has also improved her position from 142nd in 2015 to 77 in 2019 in the World Bank Report of Ease of Doing Business Report .In the case of Kerala, it falls in the category of ‘Jump start needed’ with a rank of 21 among the states in 2019 as per the assessment of Department of Policy and Promotion. This surely evokes the need for an appraisal of the ongoing and earlier industrial

policies. Though these policies have been successful in reducing the impact of unfavourable factors curbing the industrial development of the state, it is imperative that reformative measures should be in compliance with the standard set by institutions existing for improving the industrial development of the economies. In the light of all these policy measures, we shall proceed to examine the performance of industries in Kerala in the post liberalization reformative period.

CHAPTER III

INDUSTRIAL PERFORMANCE OF KERALA

3.1 Introduction

Economic literature has provided us with empirical studies that tried to understand and generalize the common features of the process of economic development. A few prominent studies that tried to explain the process of development in terms of the structural transformation of the economy were Clark (1957),Chenery (1960), Kuznets (1966), Syrquin (1998).The structural transformation had been explained in different ways by economists on the basis of the trend shown in their studies as dominance being shifted from primary sector to secondary sector and then to tertiary sector. 'One of the most pervasive is the transformation of the structure of production, in which the industrial sectors typically grow more rapidly than agriculture.' (Chenery,1982) The performance of primary, secondary and tertiary sectors indicates the overall economic performance of the country and GDP as an indicator to measure the economic performance of the countries has been adopted generally by most countries and institutions like world bank. The contribution of various sectors to GDP ought to reveal the real picture of the country and many Economists have tried to analyse the relative importance of contribution of these sectors to GDP. In the case of Kerala, the sectoral contribution to GDP reveals a shift from primary sector to tertiary sector over the years.

Table -3. 1
Percentage distribution of Sectoral contribution to GSDP, Kerala

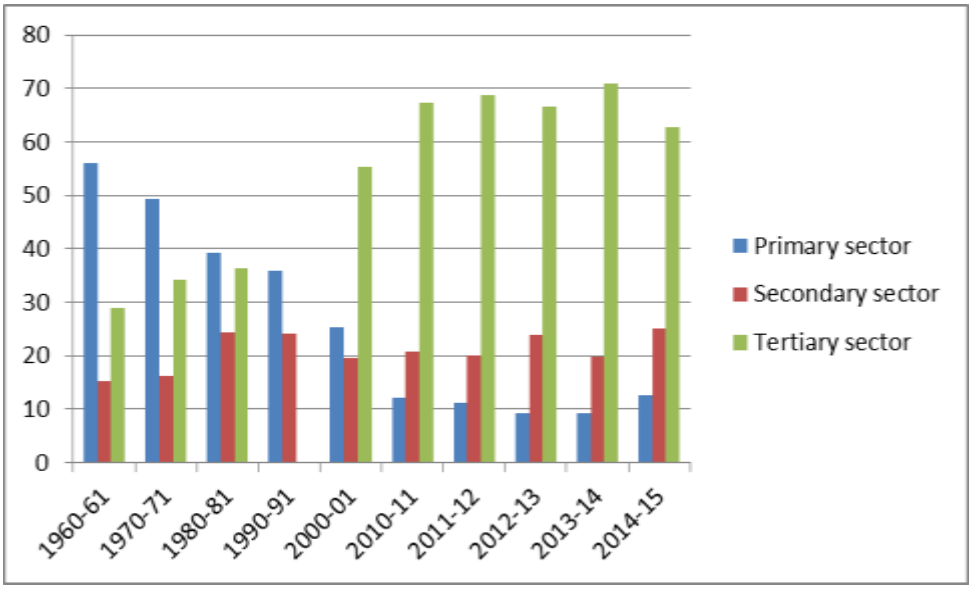
Sectors	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11	2014-15	2015-16	2016-17
Primary sector	56.0	49.4	39.23	35.94	25.3	12.0	13.35	11.31	11.3
Secondary sector	15.2	16.3	24.37	24.02	19.5	20.7	25.89	26.25	25.6
Tertiary sector	28.8	34.2	36.4	40..04	55.2	67.3	60.76	62.44	63.1
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source – Economic Review (various years)

The sectoral contribution over the years reveals that the importance of primary sector has been declining drastically and the relative importance of service sector has been growing steadily. The secondary sector does not indicate a steady trend and the contribution has not been substantial to contribute to the development of the state.

Secondary sector being the basis for the growth of primary and tertiary sector , its development is of utmost importance for the well being of these sectors and the economy as a whole.

Figure -3.1
Percentage distribution of Sectoral contribution to GSDP, Kerala



The figure clearly shows the shift of contribution to GDP from the primary sector to tertiary sector and that of secondary sector remain between 15 percent and 25 percent in all these years . The major subsector in the secondary sector being industrial sector, the lesser contribution of the secondary sector indicates the poor performance of the industrial sector too. The development process in India and the states have been based on industrialization and the necessary policy measures initiated through planning also aimed at speedy industrialization.Inspite of continuous efforts ,the lower share of industrial sector questioned the success of these policy measures and raised concern among the authorities and experts equally.This prompts a discussion on the performance of industrial sector in the state.

3.2 Industrial sector

The industrial sector consists of three broad sub sectors viz, manufacturing, mining and quarrying and electricity. The industrial picture of the state could be understood from the index of industrial production computed from time to time. Index of industrial production helps us to undersand industrial performance in geneal and

industrial production in particular.It is considered to be an important indicator of short term economic analysis as it reveals the economic fluctuations. The table reveals that the general performance of the industrial sector has not been stable .Though the general index showed a better performance in total,by increasing from 83.6 in 2005-06 to 131.5 in 2014-15,the sector wise picture doesnot show a stable trend.

Table -3.2

Index of Industrial Production

Year	Manufacturing	Mining & quarrying	Electricity	General index
2005-06	67.3	122.6	117.1	83.6
2006-07	86.7	118.5	122.1	98.0
2007-08	103	129.6	141.8	115.1
2008-09	121.3	132.4	116.2	120.1
2009-10	94	146.1	124.2	104.4
2010-11	103.3	136.6	118.8	108.9
2011-12	122.6	138.5	139.3	127.9
2012-13	107.5	104.2	109.2	107.9
2013-14	112.4	139.3	125.2	116.9
2014-15	128.4	139.5	137.7	131.5

Source - Department of Economics and Statistics

Among the broad sectors of industrial sector, manufacturing sector has been accorded due importance for economic development. Since the industrial revolution in the 18th century , manufacturing sector has emerged as major contributor to industrial development and economic development, especially for the developing countries.This has been proved through many empirical studies. Kuznets (1966) described long-term development patterns of countries and argued that industrialization—or increases in the share of manufacturing in GDP—is a key feature of modern economic growth, which is markedly different from the much lower growth rates observed in the world before the onset of the industrial revolution. Kaldor(1967) examined the relationship between industrial development and economic growth, and characterized the

manufacturing sector as "the main engine of fast growth." The benefits of manufacturing sector provides scope for capital accumulation, embodied and disembodied technological progress and many forward linkages (Cornwall , 1977). The importance of manufacturing sector for the developing economies lies in the fact that this sector provide employment opportunities to innumerable youth in the country, have a direct impact on the country's inflation and employment pattern and a significant role in reducing the inequalities of distribution of wealth .As Kaldor puts it 'it is the rate of growth of manufacturing production which is likely to exert a dominant influence on the over all 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 indirectly raise the rate of productivity growth in other sectors.'Thus among the various sector comprising industrial sector, manufacturing has proved to have larger influence on the overall growth of the economy and this study also focuses on the growth of manufacturing sector in Kerala.

Table -3.3
Percentage contribution of manufacturing to GDP at constant Prices (base year -2004-05)

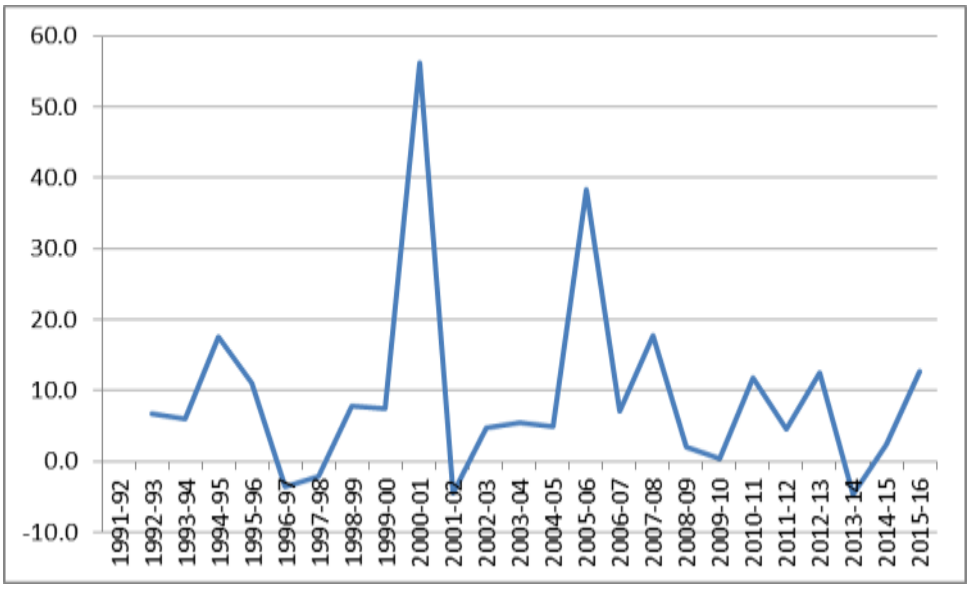
YEAR	KERALA		INDIA	
	REGD	UNREGD	REGD	UNREGD
2004-05	3.84	4.73	9.84	5.41
2005-06	3.47	4.48	10.07	5.27
2006-07	3.19	4.70	10.64	5.36
2007-08	3.60	4.94	10.72	5.43
2008-09	3.69	4.57	10.63	5.15
2009-10	3.30	4.3	11.22	4.95
2010-11	3.65	4.29	11.29	4.88
2011-12	3.53	4.15	11.58	4.70
2012-13	3.46	4.28	11.21	4.55

Source – Department of Economics and Statistics

It is clear from the table that in the case of India, the percentage contribution of registered manufacturing is higher compared to unregistered sector and in the case of Kerala, the percentage contribution of registered manufacturing is lesser compared to unregistered manufacturing.A major factor to be noted here is the domination of

unregistered manufacturing in the industrial economy of the state and lesser contribution of manufacturing sector to GSDP.A major factor to be noted here is while registered manufacturing sector dominated with around 11 percent contribution at the country level, the unregistered manufacturing sector with around four percent dominated the manufacturing sector at the state level.This also highlights the domination of small scale units in the state.The importance of manufacturing sector in the development process of the developing economies could be explained in terms of correlation between the degree of industrialization and per capita income,higher productivity,opportunities for capital accumulation,economies of scale, embodied and disembodied technological progress (Cornwall, 1977), linkage and spillover effects. (Szirmai,2012)

Figure 3.2 Contribution of manufacturing to GSDP(base year-2011-12)



The contribution of manufacturing sector to State GDP reveals that it has been highly unstable and fluctuating. It implies that the manufacturing sector could not contribute steadily to GDP and it even reached negative contribution indicating the importance of strong government policies to support the sector.As this reveals only a general picture, we may examine the performance of the manufacturing sector in the state in detail.

3.3 INDUSTRIAL PERFORMANCE IN KERALA

In order to examine the performance of industries in Kerala ,we mainly focus on the manufacturing sector in Kerala.The manufacturing sector comprises registered and unregistered units. The registered manufacturing segment covers all manufacturing factories registered under sections 2m(i) and 2m(ii) of the Indian Factories Act, 1948 which respectively refer to the factories employing 10 or more workers and using power or those employing 20 or more workers but not using power on any day of the preceding 12 months and bidi and cigar establishments registered under Bidi and Cigar Workers (Condition of Employment) Act, 1966 and employing 10 or more workers using power or 20 or more workers and not using power. The unregistered manufacturing segment covers all the manufacturing, processing, repair & maintenance services units employing less than 10 workers and using power or less than 20 workers and not using power(ASI). It, by implication, also covers own account enterprises (OAE) engaged in the manufacturing activities.Under this category comes most of the small scale units and repair shops. (Singh,1994).Hence, our study of industrial performance consists of manufacturing units in Factory sector and small scale sector.

3.3.1. Factory sector

In order to analyse the industrial performance in Kerala, we study the manufacturing sector under two heads , viz, the factory sector and the Small scale sector /MSME sector. The manufacturing sector classified under 2- digit classification as per NIC code for the time period 1991-2017 is examined to understand the performance of industries in Kerala. The intensive industrialization programme of the state government has aimed at increasing the number of units ,by which unemployment problem in the state would be addressed. The state government has taken several initiatives to attract investment to industrial sector.The productivity of the manufacturing sector positively depends on the rate of growth of output.(Kaldor-Verdoorn).Hence,industrial performance has been analysed using variables like number of units , employment , investment and value of output based on the data compiled from Annual Survey of Industries . For the study, the entire time period is divided into four- 1991 -1998,1999-2004,2004-2009 and 2009-2014 to make comparison possible

,as the subsectors has been reclassified as per National Industrial Classification from time to time.

Industrial Performance of Kerala 1991-1998

The data related to variables like number of units, investment, employment and value of output has been taken from Principle Characteristics of the Factory sector published by Annual Survey of Industries. The performance of the industrial sector is examined on the basis of annual average growth rate of the subsectors classified as per NIC 1987.

Table 3.4
Annual average growth rate of selected variables from 1991 – 1998 (in percent)

NIC CODE	factory units	Investment	Employment	Value of output
20-21	5.7	24	6.1	20.6
22	4.2	17.2	1	22.3
23	4.5	28	6.4	22.1
25	18.8	51.4	18.8	47.7
26	6.8	36.2	8	18.9
27	3	21.9	7.1	17.4
28	5.4	34.7	11.7	31.6
30	4.7	14.1	5.1	21.1
31	12.4	36.3	14.1	51.6
32	11.1	27.9	4.7	23.4
33	17	21.5	26.5	39.3
34	1.1	13.7	2.9	19.3
35-36	5.1	21.7	4.8	21.3
37	-4.1	19.4	-3.5	19.2
38	5.4	1.4	-3.3	33.8
39	8.5	29.4	12.6	47.5

Source –Principle Characteristics of factory sector,Annual Survey of Industries, calculated by author.

The industrial Policy reforms of 1991 has been considered as a milestone in the array of policy reforms initiated since independence.The policy reforms intended to encourage the industrial climate favourable for a stronger industrial sector has produced results as could be read from the table. It is found that all the sectors showed positive growth rate in the variables mentioned except in the case of transport equipments and parts (37) and other manufacturing industries (38) and these industries

registered a negative growth rate in the case of employment..The data indicates that jute and other vegetable fibre textiles (25), Rubber, plastic, petroleum and coal products (31),Non metallic mineral products (32) and basic metal and alloys industries (33) showed higher growth rate in all the four variables.However, paper and paper products & printing , publishing and allied products (28) and repair of capital goods (39) also registered a higher growth rate in terms of investment and value of output.

Table -3.5
Average Annual Growth rate of industries from 1999-2004(in percent)

Nic code	Industry group	No. Of units	Investment	Employment	Value of output
10-11	Food products and Beverages	2.7	3	4.4	5.6
12	Tobacco Products	230.8	41.2	97.3	44
13	Textiles	2.6	3.9	-2	4.2
14	Wearing apparel	1.3	2.6	8.2	16.9
15	Leather and related products	0.7	0.7	0.1	-0.3
16	Wood and wood products except furniture	-3.9	12.1	-1.1	9.3
17	Paper and paper products	6.4	-1.1	-7.2	-0.6
18	printing and reproduction of recorded media	1	3.8	7.2	5.9
19	Coke and refined petroleum products	2.4	10.3	25.4	22.4
20	Chemical and chemical products	-1.8	-4.6	-5.7	-2
22	Rubber and plastic products	2.5	2.6	-1.2	14.7
23	Non metallic mineral products	-0.5	4	-4.8	0.9
24	Basic metals	-1.4	11.3	0.5	10.3
25	Fabricated metal products except machinery and equipment	1	6.6	-3.5	12.9
26	Computer, electronic and optical products	-1.6	11.4	-1.8	3
27	Electrical equipments	-2.2	24.9	-3.7	-4.9
28	Machinery and Equipment n.e.c	-1.4	5	-3.2	1.5
29	Motor vehicles ,trailers and semi trailers	138	501.5	112.7	222.2
30	other transport equipments	-5.1	39.3	-0.8	0.3
31	Furniture, manufacturing	-4.3	40.3	3.6	6.4

Source - Principle Characteristics of factory sector,Annual Survey of Industries, calculated by author.

The country in general was affected by recessionary trend during the time period and there was a general decline in the growth of the country due to high inflation, increasing fiscal deficit , deceleration in exports due to financial crisis in East Asia(Economic Review,2001).This had affected the growth of industries in terms of units and employment.

This was reflected in every sector of the country in general and of the state in particular. This is clearly visible in the declining growth rate of majority of manufacturing industries except food products and beverages (10-11) ,tobacco products (12), textiles (13), wearing apparel(14), leather and related products(15), paper and paper products(17). Rubber and plastic products(22), reproduction and printing media (18), refined petroleum and coke(19), fabricated metal products (25)and trailers and semi trailers(29). This could be attributed to the timely changes and reforms initiated by the state government by framing industrial policies. Inorder to rejuvenate the industrial sector, the state government came out with a new industrial policy in 1998 which designed specialised industrial parks. A lot of schemes like investment subsidy , margin money loan scheme ,tax and duty concessions were also given to attract new industrial units in the state. As a continuation of the policy measures , another industrial policy was framed in 2001 also , which brought in a fresh approach altogether. The policy gave importance for digital technology and new industrial parks, industrial estates, industrial corridors and special economic zones.Global Investors Meet was conducted in 2003 despite a general recessionary trend in the economyin the previous years. The effect of all these measures can be evaluated from the growth rate of the sectors in the time period 2004-2009.

Table – 3.6

Annual Average growth rate of industries from 2004-2009(in percent)

Nic code	Industry group	No. Of units	Investment	Employment	Value of output
10-11	Food products and Beverages	3.9	11.6	2	12.4
12	Tobacco Products	0	81.4	9.5	12.2
13	Textiles	-4.3	21.2	.-1.8	1.5
14	Wearing apparel	10.2	61.2	17.4	35.3
15	Leather and related products	8.6	23.8	54.5	17.1
16	Wood and wood products except furniture	-2.9	8.3	8.2	32
17	Paper and paper products	6.2	35.6	14.3	36.2
18	printing and reproduction of recorded media	-2.6	-1.9	-9.6	-0.3
19	Coke and refined petroleum products	11.2	14.8	8.8	20.3
20	Chemical and chemical products	-2.2	2.3	-4.8	11.8
22	Rubber and plastic products	1.1	10.3	6.9	18.8
23	Non metallic mineral products	-0.5	9.4	3.2	22.4
24	Basic metals	7.5	34.8	22	48.3
25	Fabricated metal products except machinery and equipment	2.5	22.9	9.4	19.4
26	Computer, electronic and optical products	-6.3	6.3	-3.9	6.1
27	Electrical equipments	-2.4	28.2	-0.2	25.7
28	Machinery and Equipment n.e.c	-3.6	36	14.5	28
29	Motor vehicles ,trailers and semi trailers	9.4	8.7	15.3	36
30	other transport equipments	13.6	33	6.4	41.9
31	Furniture, manufacturing	6.1	14.2	8.1	31.6

Source -computed from Principle Characteristics of factory sector,Annual Survey of Industries.

The state economy exhibited a high growth rate of 9.2 percent in the year 2004-05 and industrial growth rate was 5.77 percent (economic review , 2005) and the table indicates that there was huge increase in the investment in almost all sectors and so is the case of total output. The policy measures taken by the government had contributed to the general increase in the growth of all sectors .The decline in the growth of the number of units was mainly due to rising ecological and environmental issues ,stated a s a negative impact of development and this resulted in the framing of National Environment Policy in 2006 and the issue was well addressed in the industrial policy

of 2007of the state government.A seperate department of Environment statrted functioning in February 2006 in the state.

Table -3.7

Annual Average growth rate of industries from 2009-2013(in percent)

Nic code	Industry group	No. Of units	Investment	Employment	Value of output
10-11	Food products and Beverages	3.7	16.1	-1.1	15.2
12	Tobacco Products	1.7	46.5	-16	0.1
13	Textiles	5	2.9	1	28.4
14	Wearing apparel	12.7	11.8	2.1	25.5
15	Leather and related products	13.9	92	40.6	109.9
16	Wood and wood products except furniture	7.9	16	-3.1	15.7
17	Paper and paper products	2.6	0.7	-3.2	1
18	printing and reproduction of recorded media	5.3	53.3	15.9	37.7
19	Coke and refined petroleum products	9.4	28.2	11.2	18.2
20	Chemical and chemical products	0.7	7.7	1.2	7.4
22	Rubber and plastic products	5.3	13.9	-1.5	12.1
23	Non metallic mineral products	4	23.7	3.9	17.5
24	Basic metals	2.6	1.2	-9.6	3
25	Fabricated metal products except machinery and equipment	4.6	40.1	9.1	38.3
26	Computer, electronic and optical products	10.1	13.4	18.8	15
27	Electrical equipments	2.4	13.8	10.6	6.9
28	Machinery and Equipment n.e.c	8.4	4.4	0.1	1.3
29	Motor vehicles ,trailers and semi trailers	-5.9	17.8	-1.5	20.9
30	other transport equipments	14.9	6.7	-0.7	3.6
31	Furniture, manufacturing	2	37	0	39.2

Source - computed from Principle Characteristics of factory sector,Annual Survey of Industries.

After the hard hit effects of world recession of 2008, the economy showed signs of revival during 2009-10 time period. Industrial development was considered as a positve measure to accomodate the returning migrants and the resultant unemployment problem in the state. Hence , the industrial policy reforms of 2011 aimed at comprehensive policy measures to promote investment and transform the state from a wage earning society to an entrepreneurial society. As a result of all these measures,

the manufacturing sectors in the state showed positive growth rate in terms of investment and output during the time period.

Table -3.8

Annual Average growth rate of industries from 2013-17(in percent)

Nic code	Industry group	No. Of units	Investment	Employment	Value of output
10-11	Food products and Beverages	8.7	9	-20.08	12.4
12	Tobacco Products	-4.5	47.64	-12.9	-7.3
13	Textiles	-1.3	2.67	12.1	12.5
14	Wearing apparel	-0.09	1	3.8	13.5
15	Leather and related products	11.6	-12	0.23	-14.5
16	Wood and wood products except furniture	5.5	27.2	5.5	28.7
17	Paper and paper products	6.8	-3.9	-9.5	-3.6
18	printing and reproduction of recorded media	1.3	11.6	1.07	7.73
19	Coke and refined petroleum products	5.7	39.23	35.1	17.8
20	Chemical and chemical products	-8.7	9.32	-0.12	104.6
22	Rubber and plastic products	1.4	10.5	1.06	26.1
23	Non metallic mineral products	0.1	22.12	0.71	57.5
24	Basic metals	-0.9	-1.82	-2.9	17.3
25	Fabricated metal products except machinery and equipment	1.4	18.8	19.4	19.1
26	Computer, electronic and optical products	5.8	2.05	28.8	34.1
27	Electrical equipments	4.3	-1.9	0.8	26.3
28	Machinery and Equipment n.e.c	3.2	3.2	-7.3	305.8
29	Motor vehicles ,trailers and semi trailers	49.6	46.7	8.9	17.03
30	other transport equipments	1.9	-1.03	-1.08	6.8
31	Furniture, manufacturing	8.1	26.8	18.5	58.7

Source - computed from Principle Characteristics of factory sector,Annual Survey of Industries

Textiles(13),Wearing apparel(14),Wood and wood products except furniture(16), printing and reproduction of recorded media(18),Coke and refined petroleum products(19),Rubber and plastic products(22),Non metallic mineral products

(23), Fabricated metal products except machinery and equipment(25),Computer, electronic and optical products(26),Motor vehicles ,trailers and semi trailers(29) Furniture, manufacturing(31) showed a consistent growth rate despite the negative tendencies existing in the economy.The policy measures like demonetization and implementation of GST had affected the performance of small scale industries in the state. It is clear from the table that many of the sectors suffered negative growth in all the parametres selected.Thus , in general, it could be understood that the industrial sector is highly sensitive to all the policy measures and economic crisis that may happen occasionally.

In short, the performance of factory sector in the state in terms of units has showed a positive growth rate in general during the study period. The subsectors like wood and wood products,chemical and chemical products,non-metallic mineral products,computer,electronic and optical products and transport equipments had suffered during 1999-2009.The support programme initiated by the state government through its industrial policies has helped to increase the number of units in these subsectors. Another important point to be noted here is that the investment level in many of these sectors was very low from 1999-2004.The several initiatives of the government to attract investment to the state like Global Investors' meet has succeeded to improve the investment level in these subsectors from 2004 onwards.The growing level of investment in the state could be considered as a major success of the measures of the government to curb militant labour,labour disputes that had once affected the industrial climaete of the state. The development of industrial estates, development plots and special economic zones also could be considered as a positive impetus for the entrepreneurs to come forward to invest in various projects.At the same time, the negative growth rate in the employment in majority of subsectors raises concern over the broader objective of employment creation in the state.The growth of industrial sector in the state has been considered as a solution for the growing unemployment problem faced by the state.This could be due to the extent of educated unemployment existing in the state.The opportunities provided by the industrial sector may not be sufficient to meet the requirements of the educated youth.This is a major flawof the development process and it could be suggested that either the youth should be trained to meet the requirements of the industrial sector or the industrialization process should

be planned in such a way to provide job opportunities to the educated youth available in the state.

Absence of availability of land, high population density, sensitivity of the population to the development of industries which are pollutant, investment climate adversely affected by the history of labour disputes ,shortage of power supply etc. have adversely affected the industrialization process of the state. These problems to large extent have reduced the confidence of entrepreneurs and they preferred to shift to other states. Thus industrial projects with huge investment seems to be not conducive for the industrial culture of the state. Henceforth,rubber,electronics,engineering ,biotechnology, pharmaceutical (except ayurvedic), basic metals,chemical industry couldnot perform well in the state. From the discussions above, it could be observed that the industrial climate existing in the state is more favourable for the development of small scale industries rather than large scale and medium scale industries.

3.3.2. SMALL SCALE INDUSTRIES

We have seen the performance of industries which comes under the factory sector as compiled in Annual Survey of Industries. Inorder to get a broader and clearpicture of the manufacturing industries in the state , we shall also examine the manufacturing industries registered under District Industries Centres of the state which comes under the category of small scale industries.The manufacturing sector in Kerala is dominated by small scale industries which was restructured in 2006 as Micro,small and medium enterprises. In Kerala , 93 percent of manufacturing units are micro units and about 67 percent of the units are engaged in manufacturing. (census,2006-07) The recnt data on the MSME units also show the domination of manufacturing industries (70 percent) among these units.As per the udyog Aadhar number ,out of 34,158 units in 2017, 24,166 units belonged to manufacturing sector.So here we focus on the performance of small scale units during the same time period. In fact, analysis of industrial performance of Kerala without these units would rather be incomplete.

Small scale industries are an integral part of any economy due to its far reaching influence on social, regional, industrial and economic development of the country. The existence of these industries in an economy facilitates subsidiary or

alternate occupation, utilising local labour and raw materials. It also ensures effective mobilisation of capital and labour and also the growth of entrepreneurship. Moreover, small scale industries help to create employment opportunities especially in rural areas, raising income levels , thereby the standard of living of people. All these factors necessitates proper development of these industries, and in turn the development of the country.

Policy framework

"Small scale industries provide immediate large scale employment, offer a method of ensuring a more equitable distribution of National Income and facilitate an effective mobilisation of resources of capital and skill which might otherwise remain unutilised."(Second Five year Plan)

Small scale units being an integral part of the economic development , has been given due importance by policy makers since independence. This was reflected in the fiveyear plans which started in 1950-51 and all the necessary initiatives were taken to bring them to the forefront.Small scale industries have been considered as a thrust area due to its importance in the utilisation of local resources and for the achievement of self sufficiency in many of the essential commodities.The Small Scale Industries Board was established in 1954 brought in useful schemes like supply of machineries on hire purchase basis, liberal grants under state and price preferences in government purchase.The committee appointed by the planning commission under the chairmanship of prof. D.G.Karve (1955)gave special emphasis on the decentralisation of SSIs, gradual mechanisation and introduction of co-operative system and promotional support.The Industrial Policy of 1956 aimed at improving the competitive strength of small scale producers. The introduction of District Industries Centres , reservation of 807 items for small scale industries, special emphasis for tiny sector, marketing facilities for their products were the important measures taken in support of small scale industries in the Industrial Policy of 1970.While Industrial Policy Statement of 1980 laid emphasis on ancilliary units, the industrial policy of 1985 made incremental changes in the investment limit of these units .The revolutionary changes that were brought in by the industrial policy of 1991 did focus on the small scale

industries also. It stood for huge modifications in the existing statement, regulations and procedures. The thrust area mentioned in the policy were promotion of tiny and small industries , adequate flow of credit, acces to capital market, schemes for infrastructural development, technological upgradation and modernisation, importance for women enterprises, entrepreneurship development programmes etc.

The importance of this sector is well reflected in its role in uplifting the weaker sections of the society and thereby ensuring regional development of the country.The acute unemployment problem existing in the state also has been well addressed to by the development of small scale industries .The sector accounts for 40 percent of the industrial production, 33 percent of total exports and employs about 192 lakh persons in the country.It also has nurtured the entrepreneurial talent in the country(Annual Report of MSME,2016-17). Thus it has emerged as the most vibrant sector in the economy .Thus the multiple role played by this sector attracts focus on its performance over the years. Small scale industry have been defined on the basis of their investment limit in plant and machinery and it has been modified from time to time.

Table 3.9
Evolution of investment limits of Small Scale Industries

Year	Investment limits	Additional condition
1950	Upto Rs.5 lakhs in fixed assets	Less than 50/100 persons with or without power
1960	Upto Rs. 7.5 lakhs in Plant and Machinery	No condition
1966	Upto Rs. 10 lakhs in Plant and Machinery	No condition
1975	Upto Rs.20 lakhs in Plant and Machinery	No condition
1980	Upto Rs.35 lakhs in Plant and Machinery	No condition
1985	Upto Rs.60 lakhs in Plant and Machinery	No condition
1991	Upto Rs. 7.5 lakhs in Plant and Machinery	No condition

Source – Hussain Abid committee report, 1997

Kerala is the traditional home of several small-scale industries in India.The

promotion of small scale industries has attracted much attention from the part of the government due to its vast employment capacity.The acute unemployment problem faced by the state has always been a major concern for the government and the development of small scale industries was suggested as a solution.The mushrooming of wide network of small scale units around large units shall tackle effectively the joblessness in Kerala and raise the income level of the middle and lower strata of the society (Raj,1976).

3.3.2Development of Small Scale Industries under Five year plans

The First fivre Year Plan set the foundation of protection to the SSI sector through instruments like reservation and state procurement policies. Under the second five year plan,industrial co-operatives and industrial estates were introduced in kerala, while, Development plots were started during fourth five yearplan.It was during the period of fifth plan period that Mini industrial estates programme and the concept of district industries centre was launched . The importance of technological upgradation and competitiveness of small scale industries were stressed in the sixth and seventh plan.The perod from 1989 to 1991 was a period of political instability and economic reforms were revived during 1991, which became a turning point in the history of economic reforms in India. Intensive industrialization programme connected with the new industrial policy of 1991 could help in developing the sector with the increase in the number of entrepreneurs who came forward in taking this as an opportunity.The provision of capital subsidy, seedcapital loan,industrialareas and plots, sick unit rehabilitation, assistance to industrial co-operatives werethe major schemes under ninth five year plan.The cluster approach that was introduced during the ninth five year plan has been successful in Kerala.The major change that was brought in during the tenth plan was the enactment of MSMED Act in 2006.The eleventh plan emphasised the importance of labour intensive growth process based on the expansion of skill development capabilities. Thus along with the measures taken to promote industries by way of industrial policy statements , their promotion was also equally taken care of in the five year plans as well. The small scale industrial sector has playing a prominent place in the industrial economy of the state in terms of number of units, employment, investment and output.

3.3.3 Growth of Small-Scale Industry in Kerala

For examining the performance of small scale industries in Kerala in the post liberalisation period, we divide the time period into two- 1991- 2007 (before the enactment of MSME act 2006) and 2007-2015 (after the enactment of MSME act 2006).We have already seen the importance of small scale industries in the industrial picture of the state and all the policy measures including industrial policies had given special emphasis for promoting SSI/MSME here.

Table -3.10

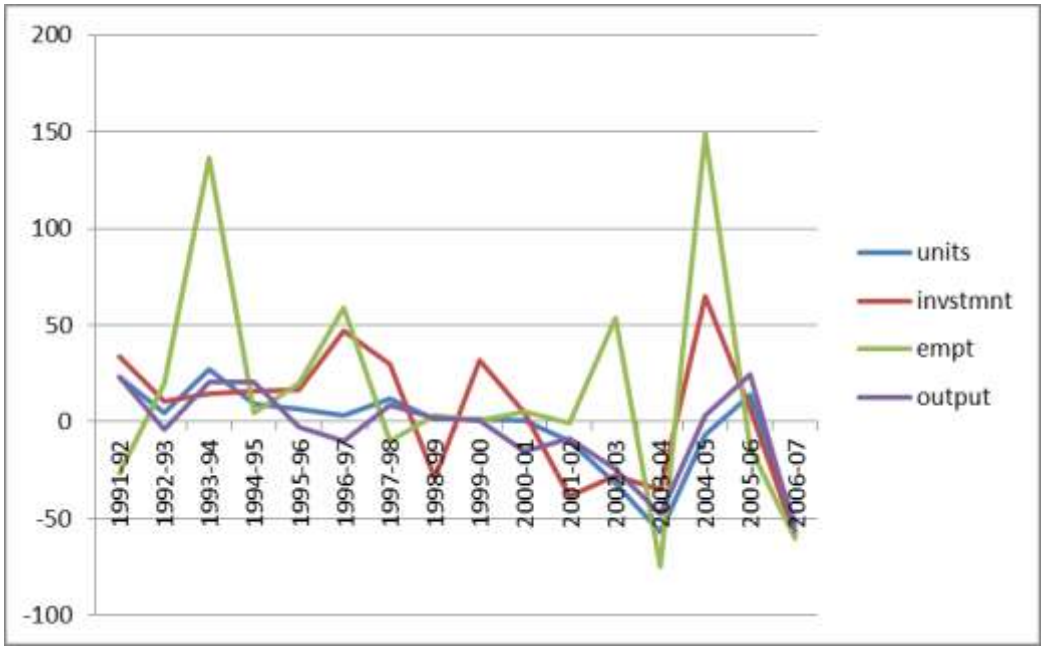
Annual Growth of Small Scale Industrial Units in Kerala from 1990-91 to 2006-07

YEAR	no. of units	AGR (%)	Investment (in lakhs)	AGR (%)	value of output (in Lakhs)	AGR (%)	Employ ment	AGR (%)
1990-91	8847	-	9802.45	--	29891.05	-	42881	-
1991-92	10918	23.4	13106.3	33.7	21957.23	-26.5	52797	23.1
1992-93	11411	4.5	14502.23	10.7	26331.21	19.9	50606	-4.1
1993-94	14533	27.4	16627.75	14.7	62206.1	136.2	60945	20.4
1994-95	15836	9.0	19217.92	15.6	65232.56	4.9	73618	20.8
1995-96	16903	6.7	22453.68	16.8	78183.78	19.9	71775	-2.5
1996-97	17421	3.1	33081.21	47.3	124142.82	58.8	64660	-9.9
1997-98	19547	12.2	42864.59	29.6	111829.27	-9.9	70263	8.7
1998-99	19736	1.0	30209.96	-29.5	115602	3.4	71632	1.9
1999-00	20006	1.4	39753	31.6	116622	0.9	72042	0.6
2000-01	20073	0.3	41664.75	4.8	122759.61	5.3	60957	-15.4
2001-02	18114	-9.8	25581.9	-38.6	121612.32	-0.9	55587	-8.8
2002-03	12334	-31.9	18475.15	-27.8	186935.1	53.7	42058	-24.3
2003-04	5305	-57.0	12021.19	-34.9	46670.85	-75.0	21890	-48.0
2004-05	4935	-7.0	19863.41	65.2	116366.03	149.3	22585	3.2
2005-06	5626	14.0	21170	6.6	100768	-13.4	28128	24.5
2006-07	2659	-52.7	8815	-58.4	39871	-60.4	12352	-56.1

Source – Economic Review (various years)

Figure-3.3

Annual Growth of Small Scale Industrial Units in Kerala from 1990-91 to 2006-07



The performance of small scale industries in terms of number units, investment, employment and total output as indicated in the table doesnot reveal a stable growth rate.Higher growth rate was recorded mainly during 1993-94, 1997-98 and 2004-05.The impact of the New Industrial Policy of 1991 culminated in a higher growth rate of the small scale industries. Along with the general policies , the policy initiated measures for modernisation and technology upgradation of small scale industries, strenghthening marketing facilities and adequate flow of credit to these industries.The implementation of these measures resulted in a better performance of these industries in 1993-94 time period. At the sametime, this could not be sustained in the later years .In addition to this, a comprehensive policy package for small scale industries was announced in March 1994 and June 1998 based on the recommendations of S.P.Gupta Committee.The economic recession had slowed down the growth rate and ended up in negative growth from 2000 to 2003.The industrial policy of 2001 framed by the state government did try to revive the industrial sector through digitalisation and infratructural development like industrial parks, industrial corridors and Special Economic Zones. The Global Investors Meet conducted in 2003 helped to attract investment worth Rs. 26000 crores and this helped to boost the industrial sector of the state in 2004-05.Apparently, this could not be continued in the next years and this

unstable and inconsistent performance of these units in spite of consistent efforts has been a matter of concern for the policy makers.

INDUSTRIAL SICKNESS

The term 'industrial sickness' was coined during late sixties and early seventies when a large number of industrial concerns were closed in West Bengal.(Dixit V, 1985).Since then,Industrial sickness have been modified and redefined many times. Here, we will try to bring out a few important definitions of industrial sickness, its presence in the state and the important measures taken to overcome this problem.

National Council Applied Economic Research(NCAER) considers three criteria- profitability,liquidity and solvency – to define sickness.If one of them is negative,the unit can be regarded as tending towards sickness, if two of these are negative, it would be a case of 'incipient sickness' and when all the three parametres are negative,the unit is considered to be sick(Sharma,1985).

Varshney Committee(1975) defined a sick unit as " one which fails to generate an internal surplus on a continuing basis and depends for its survival upon frequent infusions of external funds."

The sick Industrial Companies (Special provision) Act, 1985 defines, "An industrial unit (not registered for less than seven years) as sick if it has incurred cash losses for the current and preceding year equal to or exceeding its net worth".

RBI defined a sick unit as " one which incurs cash losses for one year and which in judgement of the bank ,is likely to continue to incur cash losses for the current year as well asthe following year , and which has an imbalance in its financial structure , such as current ratio of less than 1:1 and a worsening debt-equity ratio (total outside liabalities to net worth)."

In the third and fourth Census of SSI/MSME units, sick units were identified using three yard sticks. They are (1) delay in payment of loan over one year. (2) decline in net worth by 50 percent (3) decline in output in last three years. Using these yard sticks , Kerala ranked among the major five states having maximum number of sick

units according to the Report of Third and Fourth Census of MSME units in India. The major reasons identified to be affecting these units were (1) lack of demand, (2) shortage of working capital (3) power shortage (4) labour problems (5) marketing problems (6) equipment problems (7) management problems.

Table -3.11
Proportion of reasons of sickness among small scale industries in India (in Percent)

Reasons for sickness	Third census	Fourth census
Lack of demand	58	42
Shortage of working capital	57	20.49
Non-availability of raw material	12	5.11
Power shortage	17	5.71
Labour problems	6	5.64
Marketing problems	37	11.48
Equipment problems	9	3.17
Management problems	5	6.46

Source – Census Reports

In spite of the policy measures undertaken by the government to promote small scale industries in the state , increasing number of sick units raised concern among the authorities. Many Committees were appointed to look into this issue and suggest measures.The Committees and their major reccommendations are dealt in the section below.

Committee to examine the adequacy of institutional credit to SSI sector appointed under the chairmanship of Shri P.R.Nayak in 1991 recommended change in the working capital credit limits, opening of specialised bank branches for SSIs, nursing programmes for sick units and preparation of annual credit budget by banks. Goswami Committee (1993) had covered wide range of issues related to industrial sickness and had linked the problem to wider issues of industrial and financial sector reforms which were to restructured for solving the issue.

Expert Committee on Small Enterprises headed by Shri Abid Hussain (1995) reviewed and restructured the entire legal and economic framework framed for supporting and nurturing the the small scale units in the country. The report pointed out the exclusive reservation given for this sector as unnecessary and irrelevant during the period of study and suggested some modifications accordingly. The report rather stood

for provision of financial, technological and market based support. The effectiveness of cluster based system was also highlighted in the report.

A Study group on Development of Small Scale Enterprises under the chaimanship of Dr. S.P.Gupta in 1999 recommended to have three tier definition for tiny , small and medium units, stressed the need for a comprehensive law for the sector, to enhance the database for the sector,setting up of LaghuUdhyog Nirman Nidhi for equity support for the small scale units, extension of Credit Guarantee Fund Scheme with a corpus of Rs. 2500 crores of rupees under the effective monitoring of RBI.

A working group on flow of credit to SSI sector appointed in 2003 under the chairmanship Dr. A.S.Ganguly recommended for a cluster based approach for financing MSME sector , sponsoring specific projects and promotion of rural industries.

The major problem of SSI sector that bothered the government and other policy makers were the increasing incidence of sickness reported among the units. Many Committees were appointed to suggest measures for the development of SSIs and to deal with the issue of sickness among these units in India. The structural and periodical changes made in the Small scale industries in India has been based on the recommendations of various Committees appointed by the Government.

In fact, majority of the recommendations of these have been implemented and these changes have added to strength of this sector and has been effective in accelerating the growth of SSI sector in India. Moreover, these committee reports emphasised the importance of a comprehensive framework which will relieve this sector of multiple rules and regulations. This became fruitful with the enactment of MSME Act 2006. ‘ In a fast growing economy like ours , the natural mobility of small enterprises to medium ones has to be facilitated through appropriate policy interventions and legal framework. With these objectives in view, the Government came with an exclusive legislation for Micro, Small and Medium Enterprise known as the Micro, small, Medium Enterprises Development Act 2006.’ (MSMED Act, 2006)

India is one amongst very few countries which came forward with a specific

legal framework for MSME sector which has clearly defined the sector in terms of investment limits.It is defined as follows;

Table-3.12

Definition of Micro ,Small and Medium Enterprises as per MSMED Act,2006

Manufacturing Sector	
Enterprises	**Investment in plant & machinery**
Micro Enterprises	Does not exceed twenty five lakh rupees
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees
Service Sector	
Enterprises	**Investment in equipments**
Micro Enterprises	Does not exceed ten lakh rupees:
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees
Medium Enterprises	More than two crore rupees but does not exceed five crore rupees

The Micro ,Small and Medium enterprises has played a major role in the industrialisation of Kerala and has contributed much to the socio- economic development of the state. It has helped in the industrialisation of rural and backward areas with the active participation of youth and socially disadvantaged group such as SC/ST, women, and physically challenged persons.The total number of working SSI/MSME registered in Kerala in 2015 are 2,57,466.Out of this, 3.84 percent were promoted by SC entrepreneurs, 0.72 percent by STs and 24.97 percent by women entrepreneurs. (Economic Review , 2016) Keeping in view the potential of the sector to emerge as strong, vibrant and globally competitive sector in the state economy, the state government has been taking special efforts in the form of policies like price preference policies , packages for large investments, development of industrial corridors and development plots etc to promote this sector.Cluster based system has been very successful in the state.

In the light of all these policies and reforms , we would analyse the performance of various manufacturing sector under MSME in terms of growth of units, investment, employment and value of output.

Table -3.13

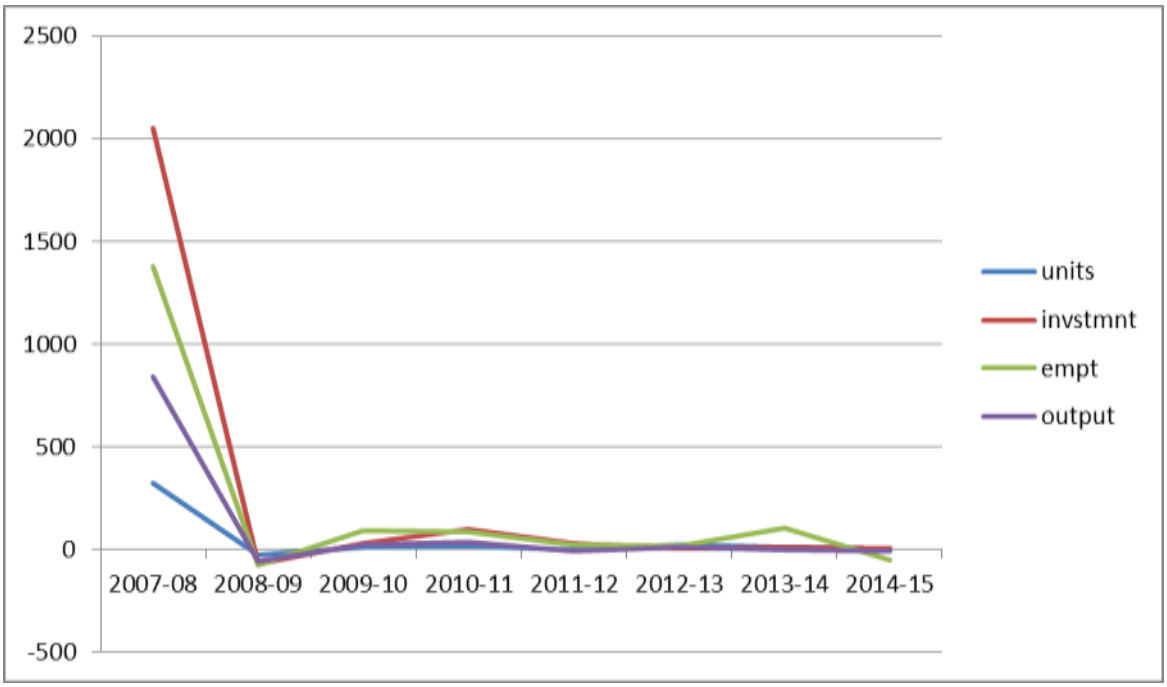
Annual growth rate of MSME units in Kerala 2007 - 2015

YEAR	no. of units	AGR (%)	Investment (in lakhs)	AGR(%)	value of output (in Lakhs)	AGR (%)	Employment	AGR (%)
2007-08	11186	320.7	189760.3	2052.7	588100.1	1375	116189	840.6
2008-09	8421	-24.7	56595	-70.2	132155.4	-77.5	48111	-58.6
2009-10	9322	10.7	73046.34	29.1	255894.6	93.6	60876	26.5
2010-11	10882	16.7	145365.5	99	478669.8	87.1	84878	39.4
2011-12	11079	1.8	190642.8	31.1	584985.4	22.2	79181	-6.7
2012-13	13551	22.3	197912	3.8	700712.1	19.8	86431	9.2
2013-14	14997	10.7	222412.3	12.4	1425141	103.4	87789	1.6
2014-15	15455	3.1	238794.8	7.4	711975.4	-50	83500	-4.9

Source –computed from Economic Review (various years)

Figure-3.4

Annual growth rate of MSME units in Kerala 2007 - 2015



The huge growth rate in the year 2007-08 accounts for the restructuring of industrial units to include micro, small and medium enterprises.The period from 2008 to 2015 indicates mixed performnance of the units. Here we bring in a detailed analysis of the manufacturing industries under MSME as per NIC classification 2008. Here, we examine the performance of industries in terms of growth rate of number of units,

investment, employment and total output.

Table -3.14

Annual growth rate of number of units from 2008-2015 (in percent)

NIC code	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
15	71.2	13.6	2.2	-15	17.4	6.3	1.7
17	44.4	218.6	122.4	-82.1	13.3	-13.1	-11.5
18	-4.2	12.4	-23.5	41.7	13.7	4.3	-100
19	42	66.3	3.7	-40.2	54.5	31.4	-17.6
20	-24.7	41	-20.8	-51.4	-34.1	56.9	-25.5
21	33.8	8.9	-13	-8.9	4.9	54.7	19.5
22	39.9	18.5	10.9	-16.9	18.8	-8.9	-1.6
23	11.1	-15	0	-29.4	25	26.7	-63.2
24	27	35.1	-9.3	-27.4	31	3	-0.7
25	-2.7	-6.3	-5.1	-7.6	1	3	-17.8
26	56	12.9	8	1.1	0.4	0.9	-16.4
27	-45.8	54.8	-45.3	-26.1	32.3	7	-13
28	68.9	12.5	16	-3.4	22.6	6.6	-7.3
29	23	35.3	-1.8	-42.7	5.6	34.4	-7.1
30	168.2	-18.6	8.3	-9.6	-31.9	25	-12.5
31	23.7	53.7	-28.1	-21.8	13.6	30.8	-8.7
32	21.5	13.5	-14.7	-12.9	-18.5	83.3	-6.6
33	98.5	45	-49.5	-37.5	38.3	-15.7	30
34	87.5	-7.6	14.4	-5.4	15.2	-19	14.3
35	179.3	-8.6	1.4	-41.3	-27.3	106.3	-31.8
36	150.4	-12.9	-8.6	-20.7	34.5	40.3	17

Source – Directorate of Industries and commerce, calculated by author

The restructuring and the policy measures initiated for the developmentof MSME units helped majority of industries from 2007-08 to 2010-11 period and there had been considerable increase in the number of units in almost all sectors. This couldnot be sustained and we can infer from the table that onlymanufacture of food

products and beverages(15) , paper products(17), basic metals(24), radio, television and communication equipment and apparatus (32) and motor vehicles , trailers and semi trailers (34)had a positive growth rate in 2014-15. The industrial policy of 2011 and 2015 took measures to address the issues of the MSME sector , attracting investment from Rest of India, Middle East , South East Asia and Srilanka and also promoting eco friendly enterprises.

Table -3.15

Annual growth rate of employment from 2008-2015(in percent)

NIC code	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
15	26.3	72.5	-29.6	-11.2	-0.2	-0.8	5.5
17	45.6	126.0	110.5	-72.1	-9.1	-28.2	-6.0
18	127.7	-6.5	18.8	-29.0	34.1	4.2	-0.9
19	11.6	102.4	9.3	-27.9	30.9	21.7	-15.6
20	-41.8	31.9	-10.6	-48.3	-47.9	47.8	-24.6
21	-1.7	3.5	3.4	-31.5	2.7	33.5	7.2
22	5.3	25.4	11.9	-14.8	14.1	-18.4	-7.8
23	-44.6	-45.8	86.9	-31.2	-18.5	119.3	-62.7
24	-48.7	13.0	-6.5	-37.2	32.2	-12.3	-17.8
25	-35.2	7.9	-20.7	-0.1	-19.7	14.4	-33.1
26	39.2	20.8	-0.7	-1.9	-2.0	-3.3	-18.5
27	-70.1	84.2	-48.8	-38.9	41.6	-15.2	33.8
28	40.9	22.8	32.0	-16.1	9.2	3.0	-14.4
29	-14.7	61.0	-10.8	-53.3	21.3	57.9	-14.0
30	120.8	13.5	-15.5	18.4	-32.7	45.3	-39.4
31	-27.0	132.4	-33.6	-29.3	-1.0	50.6	-33.9
32	-51.3	127.6	-44.7	-30.4	-26.0	99.0	3.7
33	-13.8	82.4	-50.9	-26.2	115.3	-52.8	-1.9
34	23.1	-1.7	20.9	-9.9	15.5	-28.5	22.0
35	93.0	-23.7	26.0	-34.3	-45.5	97.6	-29.0
36	110.1	-14.6	-6.0	-20.7	32.1	33.9	-2.3

Source – Directorate of Industries and commerce, calculated by author

Unemployment has been one of the major problems faced by the state. Employment arises out of the entrepreneurs and government generating new businesses and activities. Sustained job creation depend s on the ability of the economy to innovate and generate new activities charecterised by higher value addition and productivity growth (economic review 2015).One of the major driving forces to encourage MSME units in Kerala was the employment opportunities it will provide for the unemployed in the state. The table shows that the growth rate of employment has not been that encouraging in spite of the deliberate efforts of the Government .Manufacturing industries like Food productsand beverages (15), paper products(17), basic metals(24), radio, television and communication equipment and apparatus(32) and motor vehicles , trailers and semi trailers (34) registered a positive growth rate and succeeded in providing better employment in the state in 2014-15.

The unemployment problem in the state was a burning issue since 1970's with increasing number of educated women coming to employment marketand increasing supply of labour was not met by demand.In fact,,the unemployment problem in Kerala is not only educated unemployment of the genral category but is also unemployment of skilled, professional,semi-skilled and unskilled workers.Another important feature of labour force in the state is their preference for white collar jobs and the educational skills doesnot match the requirements in the industry. This could be attributed to the flaws of development process in the state. Large number technically qualified people are employed in the service sector without any importance for their skills they have acquired.Reorientation of educational and training system toward improving the quality and capability in the labour force suitable for the long run development fo the state is called for.There has been marginal increase in the employment since 2006 ,due to technological development,upgradation and changes in the organization of work. MSME sector was encouraged in the state as a solution to this grave problem of unemployment. It is rather surprising that inspite of these opportunities, these enterprises depend upon migrant labour amidst this problem of employment.

Table -3.16

Annual growth rate in Investment in Kerala 2008-2015

NIC code	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
15	-10.0	13.2	21.4	-0.2	10.3	-7.9	45.9
17	-39.0	31.5	113.6	47.8	-37.4	-10.5	-31.2
18	82.5	-10.4	20.6	-6.8	44.3	8.3	17.4
19	37.3	2.8	-17.5	-10.3	12.5	75.0	-39.8
20	-47.2	38.3	-11.8	-33.0	-59.4	88.7	-0.8
21	19.4	93.5	-64.9	35.4	-2.2	89.4	-25.0
22	-34.2	71.6	-8.1	23.2	-4.9	0.5	-0.6
23	-24.7	-40.0	127.8	43.6	-44.9	622.0	-89.9
24	-8.5	2.9	-19.4	-12.5	24.4	3.5	-12.6
25	-52.9	31.8	-26.9	37.7	-24.3	38.4	-33.0
26	57.3	8.7	-18.3	38.6	2.1	11.3	-18.1
27	-62.0	78.6	-22.1	-62.9	146.6	55.5	-23.1
28	-6.0	46.7	4.7	6.7	17.3	10.7	-15.6
29	-36.3	111.2	-54.1	25.4	59.4	13.0	-22.0
30	70.5	-23.2	-40.8	42.9	34.5	-21.7	-37.2
31	-49.5	203.6	-69.9	-2.8	173.6	29.2	-57.5
32	-82.5	282.1	-77.1	82.3	-24.8	46.4	39.7
33	37.3	60.7	-13.8	-34.8	-4.4	25.8	-7.0
34	80.2	13.2	-8.2	15.9	100.2	-50.6	62.0
35	23.0	17.1	41.7	-36.4	-25.2	104.0	-0.3
36	49.9	7.6	3.1	4.5	-0.6	100.0	-13.3

Source – Directorate of Industries and commerce, calculated by author

The state government has been trying toattract investment to the state through various initiatives like Global Investors Meet (2003),Emerging Kerala (2012) and Young Entrepreneurship Summit (2014) and had brought out attractive packages as mentioned earlier to accelerate investment in business ventures. Though private capital and entrepreneurs including Non Resident Keralites are interested in investing in Kerala, they are confronted with issues like non availability of land for industrial purposes ,high land prices, lack of adequate infrastructure like road and power,bureaucratic delays in getting government clearance on projects.Objection from environmental activists and uncertainity felt in industrial relations also has reduced the confidence of entrepreneurs interested in investing in Kerala. Actually, the large inflow of remittances,high density of banking and lending institutions in the state can be converted as a good stimulant for self employment in Kerala.Investment rate was better

in the year 2013-14 compared to previous years. Inspite of the policy measures initiated by the state government ,the data indicates a negative trend in terms of investment in almost all sectors except Food products and beverages(15),wearing apparel(18), Radio , Television, and Communication equipment (32) and Motor vehicles , trailers and semi trailers (34) in 2014-15.This could be seen as a major flaw and needs specific attention.Factors like weak external demand, tight monetary policy and high cost of borrowing had spread an aura of pessimism among the investors in the state.

Table -3.17

Annual growth rate of total output in Kerala from 2008-2015 (in percent)

NIC code	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
15	-12.0	46.7	-7.1	-3.4	-23.6	-10.5	71.4
17	-18.5	161.0	37.8	-23.7	-54.9	-14.3	-23.7
18	3.4	-38.3	28.3	-22.6	89.5	141.5	-57.0
19	-44.1	172.2	88.8	-98.4	8.0	38.7	-23.5
20	-38.1	-48.6	-8.0	28.9	-79.1	56.6	4.9
21	-2.0	30.8	-43.0	-30.0	-16.4	21.4	-95.4
22	80.2	-56.5	-11.4	13.7	15.4	4.6	-32.1
23	5.5	-64.3	158.9	9.4	191.0	41.4	-50.3
24	-37.5	211.0	-66.6	-15.6	192.6	-60.1	32.8
25	-65.0	40.0	-33.7	169.4	-53.8	-10.9	-31.0
26	34.2	-35.4	-5.3	5.6	20.7	-21.3	1.8
27	-51.4	31.5	12.7	-21.7	239.8	-45.0	0.6
28	-45.8	-35.4	44.2	-98.0	288.4	-73.6	55.9
29	-55.6	32.3	-40.7	-32.5	34.2	141.2	-98.5
30	194.1	88.9	-19.0	50.9	-60.5	291.7	-52.4
31	-41.2	103.1	-55.2	32.5	17.2	20.2	-57.6
32	-48.3	-38.5	179.7	-87.5	7.0	73.5	61.0
33	-9.5	-17.5	-54.7	-9.7	55.1	368.6	-79.3
34	-13.9	-37.8	118.5	-18.1	37.2	-52.7	67.9
35	58.9	-78.8	41.1	42.9	-19.6	105.8	-61.5
36	830.6	-91.6	45.0	56.0	15.4	276.7	-67.5

Source – Directorate of Industries and commerce, calculated by author

We can infer from the table that total output of these manufacturing industries has not been growing steadilyand regularly. The measures taken to accelerate industrial development by various types measures and strategies had only been partly successful.Meanwhile, the promotion and development policies of the government

include development plots, industrial parks, investment subsidy,seed capital for setting up of new units,financial assistance,markeing and technical support, modernization,subsidy in powerand generating sets,interest subsidy etc. In short, we can conclude from the above analysis that inspite of the continuous efforts in terms of policy measures implemented by the Government at various levels, the micro, small medium units doesnot have regular growing trend in the state.The bove analysis clearly indicates the better performance food products and beverages (15), wearing apparel(18),Basic metals (27) Radio , Television, and Communication equipment (32) and Motor vehicles , trailers and semi trailers (34) in terms of number of units, employment, investment and value of output.Liberalisation process in India has exposed the micro and small enterprises to open competition with industrially advanced countries.In order to enjoy the benefits of global market , removal of constraints that limit the competitive strength of these enterprises is necessary.The government also should take initiative in giving training to entrepreneurs about the possibilities and challenges in the competitive market so that they are in position to survive positively.

3.3.5 Multiple Regression Analysis

After analyzing the performance of industries in terms of number of units, investment, employment and value of output in the case of small-scale sector, it could be inferred that the policy measures undertaken by the government has been effective to a great extent. The growth performance of all the subsectors could not be viewed in the same manner as many of these subsectors were affected by internal factors and external factors. Here, we shall try to bring out the statistical significance of all the variables selected for the study with the help of multiple regression analysis.

The descriptive statistics of the data helps us to understand the pattern and deviation of the data. The descriptive statistics of the variables selected shows that standard deviation of units and employment is less than mean value and that both are negatively skewed. In the case of investment and output, standard deviation is greater than mean value and are positively skewed. Especially, in the case of output level, it is highly skewed showing that there is huge variation in the data (Table 3.18).

Table.3.18

Descriptive statistics

Variables	Mean	Std. Deviation	Skewness	Kurtosis
Units	12870.46	5024.194	-.296	-.772
Investment	75430.98	84115.506	1.165	-.315
Output	504990.68	1316499.675	4.649	22.634
Employment	60737.54	23620.216	-.104	.281

Source: calculated from Economic Review (various years)

In order to understand the importance and the relationship between the selected variables, we conduct multiple regression analysis. For the purpose, we take the value of output as a proxy variable for the performance and shall examine the relationship between value of output (dependent variable) and number of units, investment and employment (independent variables).Thus the fitted multiple regression model as follows

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + u \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where,

Y= Output level of small scale industries

β_0 = Constant

$\beta_1, \beta_2, \beta_3$ = Coefficients

X_1 =number of units

X_2 = Investment

X_3 = employment

u = error term

The results (Table 3.19) show that, the R^2 value (0.646) indicates that there is significant relationship between the dependent and independent variables and all the variables are found to be significant. The R^2 value (0.646) implies that 65 percent of the variability in the output is explained by all the variables in the regression model such as units, investment level and employment. F statistics is also shown to be significant with F (3, 22) = 13.36, p-value = .000. The respective sign of regression coefficients

indicates the direction of relationship between the dependent and independent variables; it may be either positive or negative. The regression coefficient of units and investment level is positive. One unit increase in units results in 125 lakh increase in the level of output and one unit increase in the level of investment results 17 lakh increase in the output. This result implies that there is statistically significant relationship between units and investment to the level of output. In the case of employment, there is a negative relation and it shows that one unit increase in employment results in reduction of output. This may be due to the high wage cost existing in the state.The skill developed by the candidates are not suitable for the requiremnts of the industry and as such it has become normal that people without sufficient skill for the job is employed adversely affecting their skilland efficiency. This could be considered as set back to the policy measures undertaken by the government to improve the employment situation in the country. Thus, we have seen that all the variables selected are significantly influencing the output level of industries. Meanwhile, we shall conduct stepwise regression to identify the variable which influences the output level in a better way.

Table. 3.19

Multiple Regression Results

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics
	B	Std. Error	Beta			VIF
(Constant)	460999.162	514479.581		.896	.380	
Units	125.892	44.234	.480	2.846	.009	1.769
Investment	17.117	2.745	1.094	6.235	.000	1.910
Employment	-47.211	11.964	-.847	-3.946	.001	2.861
R =.804, R Square = .646, Adjusted R Square = .597, Durbin-Watson = 1.746						
F (3,22) = 13.36, p-value = .000						

Source: Calculated from Economic Review (various years)

Stepwise Multiple Regression Results

A stepwise multiple regressions is carried out to evaluate whether all predictors are necessary to predict the changes in the regressand. It helps us to understand the variation in the predictability of each independent variable on the dependent variables. Here, we use this model to examine predictability of level of investments, number of units and employment on the level of output. This is shown by the R^2 change (table 3.20). There are three steps in the regression model because of three predictors. At step 1 of the analysis, level of investment entered into the regression equation and it is significantly predict the output level, F(1, 24) = 15.52, p = 0.001. The multiple correlation coefficient R^2 is 0.393, it indicates that the approximately 39 percent of variation in the level of output in small scale industries could be explained by the level of investment alone. The Government of Kerala has been taking many policy measures to improve and attract investment to the state.

Table : 3.20
Model Summary of Stepwise Regression

Model Summary										
Model	R	R Square	Adjusted R Square	Change Statistics					ANOVA	
				R Square Change	F Change	df1	df2	Sig. F Change	F	Sig
1	.627a	0.393	0.367	0.393	15.523	1	24	0.001	15.52	.000
2	.718b	0.515	0.473	0.122	5.809	1	23	0.024	12.22	.000
3	.804c	0.646	0.597	0.13	8.1	1	22	0.009	13.36	.000
Durbin-Watson = 1.746 a. Predictors: (Constant), investment, b. Predictors: (Constant), investment, employment, c. Predictors: (Constant), investment, employment, units, d. Dependent Variable: output										

Source: Calculated from Economic Review (various years)

At step two of the analysis, along with level of investment the new variable employment is entered into the regression equation and it significantly predicts the output level, F(1, 23) = 12.22, p = 0.000. The multiple correlation coefficient R^2 is 0.473, it indicates that the approximately 47 percent of variation in the level of output in the small-scale industries could be explained by the level of investment and employment together. But the influence of the new variable employment alone as seen

from the R2 changes from model one to model two is 0.122. It implies that the 12 percent change in the output are explained by the employment alone.

In step three of the analysis, the third variable 'units' is added in to the third model along with level of investment and employment. It significantly predicts the output level with F(1, 22) = 13.36, p = 0.000. The multiple correlation coefficient R2 is 0.646, it indicates that the approximately 65 percent of variation in the level of output is explained by the level of investment, employment and units together. However, the influence of the new variable 'unit' alone could be seen from the R^2 changes from model two to model three is 0.13. It implies that the number of units alone explains the 13 percent changes in the output. The regression coefficients of the respective models shown in the Table 3.21.

Table 3.21
Regression Coefficients

Model	Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
		B	Std. Error	Beta			VIF
1	(Constant)	-234888.345	278261.426		-.844	.407	
	Investment	9.809	2.490	.627	3.940	.001	1.000
2	(Constant)	952798.553	554366.507		1.719	.099	
	Investment	14.209	2.915	.908	4.875	.000	1.646
	Employment	-25.020	10.381	-.449	-2.410	.024	1.646
3	(Constant)	460999.162	514479.581		.896	.380	
	Investment	17.117	2.745	1.094	6.235	.000	1.910
	Employment	-47.211	11.964	-.847	-3.946	.001	2.861
	Units	125.892	44.234	.480	2.846	.009	1.769

Source : calculated from Economic Review (various years)

Table (3.22) shows the model summary of excluded variables from the step one and step two of the stepwise multiple regression models. In the two steps the t-value of the variables is greater than the five percent significant level, so we do not included these variables in to the regression equation.

Table :3.22

Excluded Variables

Model	Variables	Beta In	t	Sig.
1	Units	.046[b]	.283	.780
	Employment	-.449[b]	-2.410	.024
2	Units	.480[c]	2.846	.009

Source : calculated from Economic Review (various years)

We conclude that the level of investment is the most significant predictor of level of output in small-scale industries. From the literature, we have seen that inadequate finance is one of the reasons affecting the performance of industries ,also leading to sickness. Thus, the government should act appropriately in order to provide a better investment climate along with a strong financial infrastructure ensuring adequate flow of credit for the proper development of these small-scale industries.

3.3.6 Conclusion

The importance of industrialisation has been evolved as a major pre-requisite for the economic development of underdeveloped countries from the experiences of developed countries.As such, majority of the nations were striving to attain development based on rapid industrialisation. Industrialisation is also considered to be a solution for the increasing unemployment problem in the developing countries , development of other sectors,urbanisation, modernisation, social transformation, equality and finally social welfare. Since independence , India has also been trying to overcome the vagaries of underdevelopment through rapid industrialisation.The policy reforms framed from time to time has always tried to incorporate the necessary changes required. Large , medium, small scale and traditional industries were included in these measures separately inorder to give them due consideration.The liberalisation policies implemented since 1991 had definitely brought in the much needed impetus for the industrial development of the country as a whole.

The state of Kerala couldnot sustain the industrial development attained during the post formation period. As a matter of fact , Kerala was considered as one of the industrially backward states in the country ,while being ranked better due to the

achievements in literacy, physical quality, local governance etc.

The analysis of industrial performance of the factory sector shows a better picture , while that of Micro Small and Medium enterprises has been disappointing , considering the policies undertaken by the governement to promote these industries in the state. This sector has been facing many problems which are responsible for their poor performance in the state. Lack of working capital being quoted as a major reason for the increasing sickness among these enterprises. In India, working capital is provided by commercial banks as short term loans and Kerala is known to have a strong and better commercial banking infrastructure from ancient period itself.On the contrary , Kerala is also one of the major states in India having large proportion of sick units.So we shall proceed our analysis to examine the banking infrastructure in the state and flow of bank credit to these industries in the state .

CHAPTER - IV

TREND AND PATTERN OF BANK FINANCE IN KERALA

4.1 Introduction

We have examined the industrial performance of Small Scale Units in terms of units, employment, investment and value of output. Promoting investment in the industrial sector and preparing a favourable investment climate has always been a major objective of the state government which is evident from the industrial policies discussed in the second chapter. One of the important factors that accentuate investment in any sector is the availability of finance at a moderate rate of interest. In India, lack of availability of adequate financial resources has been identified as one of the key factors blocking the path to industrial development. (Bhattacharjee and Chakrabarti 2013, Khanna, 2013)

We have already seen that lack of working capital is one of the major constraints faced by micro and small enterprises in India and for that matter, many committees were appointed to look into this issue. On the basis of the recommendations of various committees appointed by RBI and the government, changes have been made from time to time to support them. As the commercial banks are the major players in the financial market dealing with short term loans to these units, RBI has been always keen to ensure the availability of credit to SME units. The presence of a better banking infrastructure in Kerala compared to other states of India, the flow of bank credit to SME units needs to be studied. Hence, in this chapter we will see the development of banks in the state and in the light of important measures taken by RBI, the trend and pattern of bank finance to these units.

4.2 Industrial Finance

Industrial development is affected by many factors. They can be generally classified into internal and external factors. Internal factors include technical, financial, managerial and administrative capacity of the entrepreneurs and they are considered to be under the control of the management. External factors include infrastructural facilities, factors affecting demand for the product, government policies, economic-political stability, impact of international factors, availability and sources of finance etc. In fact, all these factors are interrelated. Among these factors, availability of finance is

considered to be significant as it facilitates the procurement of all other factors, which in turn, will spur industrial development. Industries require finance at all stages of its development, be it the fixed asset requirements in the initial stage, working capital requirements in the operating stage and for further development and expansion requirements of the industries. These requirements are generally met through internal and external sources. Internal finance being the primary source, external sources often makes available the necessary fund required for all stages. Moreover, finance acts as a catalytic agent that will accentuate the process and the extent of industrialization in a developing country like India.

4.2.1 Importance of Finance for Industries

Finance is the key input of production, distribution and development and is a prerequisite for accelerating the process of industrial development. It has become prominent when the state Government has targeted rapid industrialization via small scale sector as a path to socio-economic development of the state. Financing depend largely on the financial structure which caters to the need for fund for various industrial ventures. In a scattered location of enterprise where entrepreneurs have limited access to finance, the financial institutions can abridge them for sustained economic growth (Berger and Frame, 2005).In the context of increasing importance of MSME units in the industrial development in terms of employment, output, exports and fostering entrepreneurship, it becomes imperative to ensure adequate and timely availability of finance to this sector.

An enterprise can raise finance by two methods viz, internal source and external source. The financing ability of an enterprise is largely affected by their form of organization. AS per Fourth MSME Census 2006-07, 90.8 percent of the enterprises were proprietary concerns with little or no provision for credit in the organized financial market. The non corporate structure and small size of majority of SMEs in India makes the venture capitalists and other risk capital providers reluctant to invest due to higher transaction cost and difficulties. The following table shows the ownership structure of SMEs in India as indicated by the All India Census Report on Small Scale Industries/ MSME in India.

Table4.1

Ownership pattern of small and medium enterprises in India

Ownership structure	First All India Census of SSIs (1972-73)	Second All India Census of SSIs (1987-88)	Third All India Census of SSIs (2001-02)	Fourth All India MSME Census (2006-07)
Proprietorship	61.0	80.5	95.8	90.8
Partnership	35.0	16.8	1.9	4.01
Co-operative	0.7	0.3	0.1	0.30
Limited companies	3.0	2.1	0.7	3.32
Others	0.3	0.3	1.4	2.30
Not reported	Nil	Nil	0.1	Nil
Total	100	100	100	100

Source- Various Census Reports

According to Fourth MSME Census Report (2006-07) 91 percent units are proprietary in nature. It is inherent that the capital structure of these concerns are not strong enough to depend capital market for raising fund, moreover these concerns mainly depend on commercial banks for their financial requirements.

4.2.2Financial Accessibility of MSME as identified in the fourth census

The accessibility of MSMEs to any kind of finance as given by the fourth All India Census Report of MSME (2006-07)brings out the real picture of these units in the way they utilize their sources of finance. These figures show that very few of the registered MSMEs get any sort of finance and the picture is even worse for unregistered units.

Table 4.2
Sources of finance as given by the census report

Sources of finance	Registered	Unregistered	Total
No finance/self finance	13.63 (87.77)	228.51(93.08)	242.13(92.77)
Institutional sources	1.74(11.21)	11.7(4.80)	13.51(5.18)
Non institutional finance	0.61 (1.02)	5.20(2.12)	5.36(2.05)
Total	15.35 (5.94)	245.48(94.06)	261.01(100)

Source – Fourth All India Census of MSME

The above table exhibits that only 5.18 percent of the units had availed of finance through institutional sources, while 2.05 percent of them had finance from non-institutional sources and the majority of units (92.77 percent) had no accessibility to finance or rather they depended on self finance. Thus it is inherent that there is gross financial exclusion in the SME sector. Financial exclusion may be involuntary which occurs because the prices, terms and conditions of formal financial services are unfavorable to small borrowers and voluntary financial exclusion arises because small firms exclude themselves from formal banking services due to cultural or religious reasons or because they do not have any need (Demirguc- Kunt et al , 2008). The small firms may voluntarily exclude themselves from formal banking services due to their own financial illiteracy. These borrowers may be unaware of the benefits associated with obtaining external finance because of their educational problems and marketing strategy failures on the part of banks. The process of industrialization In India has always been planned considering the inevitable role played by MSEs and the problems faced by these units have been duly considered in all the policy measures. After independence, a number of financial institutions have been set up at all India level and regional level for accelerating the growth of industries by providing financial and other assistance required. The prime objectives of these institutions have been to expedite the pace of industrial development in accordance with the national development plan and aspirations of people.

4.3 Finance for industrial growth-Theoretical Perspective

Finance is an important element for fuelling economic growth. The positive influence of the financial development of a country on its economic growth has its empirical and theoretical backing as indicated in the review of literature. Schumpeter (1911) considered financial sector as a major catalysts for economic growth. While some economists doubted the direction of causality between financial sector and economic growth. Joan Robinson (1952) made her view clear by stating "where enterprise leads, finance follows". Lucas (1988) criticized economists for over stressing the role of financial sector in economic growth. On the contrary, predetermined components of financial development were also considered as a good predictor of growth over the next 10 to 30 years (King and Levine, 1993a). Cross country experiences suggest that economies that have mature financial systems to allocate funds efficiently among competing needs tend to grow faster (Mohan 2004).

From the discussion on the banking development of Kerala, it could be inferred that the demand following hypothesis would hold true as the financial service background developed in Kerala as response to the increasing commercialization of agriculture and trade. The money lenders and indigenous bankers formed an integral part of Kerala economy in the eighteenth century which prepared a firm ground for the development of banking system. The people of Kerala who were already used to these financial services could easily adapt to the modern banking system developed later. As a result of a series of reform measures and strategic changes that were brought in the financial sector by the government, the financial sector especially banking sector in the state has become dominant .This can be compared to the supply leading hypothesis. Anyway this needs to be proven statistically.

Though there is difference of opinion among economists, we proceed to find the importance of financial system in the growth process of any country through industrialization. In arising to ameliorate transaction and information cost, financial systems serve one primary function, they facilitate the allocation of resources, across space and time, in an uncertain environment (Merton and Bodie ,1995) . Levine (1997) had identified basic functions of a financial system as (1) facilitate the trading, hedging,

diversifying and pooling of risk,(2) allocate resources (3) monitor ,manage and exert corporate control,(4) mobilise savings and (5) facilitate the exchange of goods and services while connecting finance to economic growth.

Financial sector plays a crucial role by channelizing savings to entrepreneurs in the form of investment in the real economy (Khanna, 1998). Savings being the major source of investment, higher mobilization of savings is possible only at higher interest rate. In a state led development strategy, state controlled financial sector only hampers savings mobilization. State intervention in the form of high reserve requirements, interest rate controls and directed credit programmes which is known as financial repression results in inefficient allocation of resources. (Mc Kinnon and Shaw, 1973). This accounts for the policy of financial liberalization to increase the saving and investment rate and considerable reduction in the cost of capital.

4.4 Financial System in India

The financial system in any country depends upon the type of need of finance from the part of the industries and is mainly grouped into market based system and bank based system. Banks are generally considered as a source of working capital as their resource base and the short term nature of the funds available with them. Capital market deals with medium term and long term corporate finance. At the risk of broad generalizations, bank based system tend to be stronger in countries where government have taken a direct role in industrial development, such as Germany in the 19^{th} century and Japan, East Asia, South East Asia, China and India in the 20^{th} century (Mohan 2004).

The state led planning development strategy heavily focused on the industrialization based on heavy industries.(Mahalanobis model) and comprised (i)a wide network of commercial banks as a source of working capital (ii) Development finance institutions as a source of medium and long term funds for corporate sector (iii) resource mobilization from the capital market. The planning process which endorsed "socially productive" pattern of resource allocation favoured an elaborate banking network to implement directed credit programmes and priority sector lending policies. Thus the Indian industrial financing strategy was more leaned towards the bank based

system which coexisted with Development Finance institutions (DFI) and capital market. The establishment of DFIs facilitated long term financial requirements of the industrial sector. The existence of an underdeveloped capital market provided the scope for DFIs to meet the long term financial requirements of the firms.

The Indian financial system was shaped based on the financial sector reforms mainly Narasimham committee reports of 1990's and prepared the background for financial development in an open competitive world conducive for economic growth. Financial liberalization process started in 1991 included decontrolling of interest rates, reduction of reserve requirements, and deregulation of directed credit provision and reduced government control on banking operations while establishing a market regulatory framework. (Lawrence and Longjam,2003). The era of financial liberalization along with recommendations of Narasimham Committee (1998) and Khan Committee (1999) brought in strategic changes in the functioning of development financial institutions in India.

These financial sector reforms of early 1990's have led to the transformation of the environment in which financial institutions, banks and non banking financial intermediaries function. It was successful in infusing greater competition to the financial sector and enabled these institutions to function in a deregulated environment. These reforms brought in changes in the banking sector providing greater operational flexibility and functional autonomy strengthening prudential norms and greater degree of competition and have tried to bring in financial stability to the system. On the other side, there is increasing concern over the increasing operating cost, higher interest rate , though there is signs of improvement s in profitability and efficiency of banks.

In the case of Development Financial Institutions also, changes and challenges have brought in radical changes in their functioning also. With the stoppage of concessional sources of funds from government and commercial banks offering both short term and long term financing, these development institutions had to operate under a situation of tough competition. High cost long term liabilities and poor asset quality affected the lending policy of these institutions significantly. As these institutions had limited number of branches, their operating cost is much lower compared to

commercial banks. These development institutions are facing challenges with regard to the maintenance of commercial viability in view of increasing nonperforming assets and competition from the side of new private sector banks. Increasing share of nonperforming loans and the recommendations of committees prompted Reserve Bank of India to convert DFIs into Universal Banking Institutions as suggested by these committees (Ray, 2015).

The Indian Capital market has undergone strategic changes since reforms of 1990's.These reforms prepared a favorable ground for the full-fledged flourishing of Indian capital market instruments by the corporate companies. Thus Indian capital market had developed enough to be compared to the capital market in the developed countries. The boom that was experienced in the initial years of 1990's could not be sustained and saw a downturn in the later half of 1990's due to economic slowdown of the economy. The shocks and turns in the Indian capital market in this time period, affected the confidence of investors and they slowly turned to much safer bank deposits, retirement schemes and insurance policies.

4.4.1Industrial Finance in India

The Industrial Commission (1916-18) reported lack of finance as a major bottleneck to industrial development in India. Finance Commission (1953) pointed out that the dominance and the mismanagement of Managing Agency which controlled the establishment, promotion, financing and management of industrial concerns during the pre-independence period, resulted in a weak, uneven and unbalanced industrial base. At the same time, in the absence of a developed capital market, these managing agencies played a vital role in promoting and meeting the capital requirements of the Indian industries{(Mulky(1947),Nigam(1957),Basu(1958),NCAER(1959)}.Amidst tough criticisms against the dominance of these managing agencies, it was decided to regulate them and as a part of it, Indian Companies Act was amended in 1936 and 1951.Finally the system was abolished in 1970. (Kucchal, 1966) Many studies that tried to study the industrial position of the country highlighted the lack of availability of capital as a major constraint for Indian industries(Pillai, Gupta(1969). In order to resolve the problems of industrial finance in India, it was suggested to improve general banking

facilities, establishment of specialized banks, and a special mechanism for underwriting and company promotion business {Matthai(1944), Basu (1939), Lokanathan (1935)}. Industrial Commission (1916-18) and Indian Central Banking Enquiry Committee (1931) had also suggested the establishment of industrial banks to provide term lending finance to industries. Thus immediately after independence, Government of India gave prime importance for the establishment of financial institutions to achieve speedy industrialization.

4.4.2 Sources of Industrial Finance

Basic structure of industrial finance is based on two sources mainly internal source and external source. Internal source include essentially retained profit and external sources include equity capital and debt instruments. Equity capital is mainly raised from firm's promoters or the capital market whereas debt instruments include corporate bonds and borrowings from banks and non-banking financial intermediaries.

Apparently, Government of India has been very keen in establishing financial institutions as a part of industrialization process. A wide network of such institutions were established to meet the financial requirements especially, term finance of industries in India. Their main objective was to meet the medium and long term requirements of the industries in accordance to the plans and priorities of the government. With the setting up of Industrial Financial Corporation of India in 1948, the structure of financial assistance has been modified along with new institutions and their flexible structures and scope of operation. We shall briefly discuss the major financial institutions at the national level below;

Industrial Financial Corporation of India (IFCI) – IFCI was established in 1948 as a shareholders' corporation to cater to the financial requirement of industries and to make medium and long term credits readily available to industrial concerns, more particularly in circumstances when the normal banking accommodations are inappropriate, or recourse to the capital issue channels is impracticable (IFCI, 1949). Their main role was that of a gap filler and it came to be known as 'Macmillan gap'as mentioned by L.C.Gupta (1969). With effect from 1993, the IFCI was converted into a public limited company , Industrial Financial Corporation of India Ltd. **National Industrial**

Development corporation (NIDC) was established in 1954 as a wholly owned Government company and mainly aimed at promoting industries for a better industrial structure.**Industrial Credit and Investment Corporation of India (ICICI)** established in1955sponsored by U.S. government as per the suggestions of the World Bank for a specialized institution, extended assistance in the creation, expansion and modernization of industrial enterprises especially private sector.N**ational Small Industries Corporation (NSIC)**set up in 1955,aimed at assisting small scale industries in promotional, marketing, financing and other support activities. **Refinance Corporation for industry Ltd (RCI)** was established to extend refinance facilities to banks that provided medium term loans to industry. RCI was taken over by IDBI in 1964.**Industrial Development Bank of India (IDBI)** established in 1964 as a subsidiary of RBI, was entrusted with the twin objectives of mobilizing financial resources to all kinds of industries as well as controlling and coordinating the functions of other financial institutions. **Industrial Reconstruction Corporation of India (IRCI)** was established in1971 to provide assistance for rehabilitation and reconstruction of sick and closed industrial units. **Small Industries Development Bank of India (SIDBI)** started its operation in 1980 for the promotion, financing, and development of small scale, tiny, and cottage industries and also coordinating the functions of other similar institutions. **State Financial Corporations (SFC)** established under the State Financial Corporation Act 1951, provide term finance to small and medium enterprises in their respective regions as per their plan priorities. **State Industrial Development Corporation (SIDC)** established under the Companies Act, 1956, plan, formulate and execute industrial undertakings or projects or enterprises as a part of accelerating the pace of industrialization in backward areas in the state.

CAPITAL MARKET

The Indian capital market has undergone strategic changes since reforms of 1990's. The reforms of 1990 have prepared a favourable ground for the full fledged flourishing of Indian capital market instruments by corporate. Thus Indian capital market has developed enough to be compared to the capital market in developed countries. The boom that was experienced in the initial years of 1990's could not be sustained and saw a downturn in the later half of 1990's due to economic slowdown of

the economy. The shocks and turns in the Indian capital market in this time period affected the confidence of investors and they slowly turned to much safer bank deposits, retirement schemes and insurance policies.

4.5 Industrial Finance in Kerala

Kerala State Industrial Development Corporation (KSIDC) established in 1961remains to be the premier agency of the Government of Kerala for promoting industrial investments in the state. **Kerala Financial Corporation (KFC)** established in 1953 for providing financial assistance to MSME in manufacturing and service sectors.

Commercial banks

The strategic role played by commercial banks in meeting the saving and credit needs of the people was strengthened by the nationalization of 14 banks in 1969 and six banks in 1980.The nationalization of commercial banks could be seen as a major initiative to bring forth necessary changes to cater to the financial requirement of various sectors at large. It was mainly intended to achieve the credit requirements of rural and semi-urban areas and also the priority sector. These Banks have been continuously evolving special schemes and approaches to suit the rapidly growing and changing needs of the sector .The availability of bank credit for industrial financing became significant when RBI initiated credit control measures to divert an increasing percentage of bank advances in favour of industrial bank, subject to tight control and supervision by the RBI.

Though commercial banks deal with all types of loans, practically their lending pattern mainly exhibits the following factors: (a) the commercial banks confine their lending and investment activities as far as possible, to the supply of short-term working capital, (b) greater emphasis was put on the supply of funds to the priority sector since nationalization of the major commercial banks in 1969, (c) emergence of development banks and other institutional investors as the principal suppliers of long-term funds, and (d) under Statutory Liquidity Ratio (SLR) requirements, commercial banks were

required to make some investments in government bonds and securities which also meant that the banks were not left with sufficient funds(Das, 2015) .

We have seen that amongst all the financial institutions set up to meet the financial requirements of the industrial units, commercial banks remains to be a major player in India, or rather in India we follow a bank based system. The banking sector also accounts for half of the assets of the financial sector, which strengthens their dominance in the country (Economic Review, 2009). It is also clear from the above discussion that small scale units in the country are not developed enough to depend on capital market for their financial requirements. At the same time, many of the Development Financial Institutions specifically set up for the purpose has not been completely successful in reaching out to meet the requirements of the small scale firms. On the contrary, commercial banks have remained a major player in the financial market, though there have been limitations. Reserve Bank of India has been very keen to rectify and resolve issues related to the availability of finance and the small scale units . In this study, we mainly focus on the bank finance that is provided to these units to meet their financial requirements at different stages of production.

4.6 Bank Finance

Bank finance includes all types of fund provided by commercial banks for various purposes at different period of time. In the context of industrial finance, commercial banks extend loans to firms in the form of cash credit, overdraft, term loans etc. Cash credit is an important source of working capital finance which is advanced against security of stock, raw materials, and inventory. The credit limit is based on the value of security and is advanced for a period of 12 months. Overdraft facility allows to withdraw more fund from an account than the balance would normally permit for which an extra fee is charged. This facility operates like an approved loan, which could be withdrawn as and when required for which interest is paid only on the borrowed amount and time. A term loan is a loan from the bank for specific amount that has a specified repayment schedule and either a fixed or floating interest rate. A short term loan is for a period of one year, medium term loan for a period of less than three years and long term loan is for a period of less than 25 years.

The traditional role of commercial banks financing the working capital requirements of industries been widened due to the decline in operations of DFIs and sluggishness in the capital market. The capacity of commercial banks to meet the long term financial requirements depends upon their asset –liability position. Since the deposit liabilities of banks are of short term maturity, long term liabilities may result in large asset liability mismatches and may affect the profitability of these banks.

In this study, we attempt to bring out the importance of commercial banks in providing assistance to MSEs with regard to the strong financial and banking structure existing in the State. As lack of credit mainly working capital was identified as one of the reasons responsible for the sickness of small scale units, and commercial banks being the major provider of short term loans, RBI has been keen in resolving this issue. Here, we shall discuss the measures taken by RBI as suggested by Committees and sub-committees formed to look into this issue.

Committee Reports

Dahejia Committee appointed in 1969 observed the heterogeneity in bank credit to industry and its output, The Tandon Committee (1974) recommended to follow healthy norms of financing which was almost revolutionary in the case of evolution of scientific rationing of bank credit to industry. Varshney committee (1975) appointed by SBI identified lack of surplus funds and dependence on external funds as a major reason for the sickness of industrial units. The Reserve Bank of India created a Sick Industrial Cell in 1976 to monitor the performance of commercial banks in identifying the sick units and launch proper remedial measures whenever necessary. The Chore Committee (1979) had reviewed the cash credit system of lending and implementation of Tandon committee recommendations. As per the recommendation of Tiwari committee (1981). The Sick Industrial Companies Act (SICA) was enacted to detect sickness of industrial units at early stages and suggest remedial measures. Board for Industrial and Financial Reconstruction (BIFR) was set up in 1987 as a part of provisions explained by SICA. Hasib Committee (1987) also issued detailed guidelines for rehabilitation of sick small scale units, which was later modified. The Narasimham Committee (1991) had recommended radical restructuring of the banking sector. The

panel had recommended for phasing out the concessional interest rates and direct credit programmes and redefining priority sector. The recommendations of prof. Omkar Goswami Committee(1993) included the conversion of BIFR as a fast tract facilitator, formation of five self-financing tribunals, addressal of basic issues, removal of all hurdles identified, redefinition of sickness etc. S.L.Kapoor Committee (1997) had suggested measures for further improving the delivery system and simplification of procedures for credit to the SSI sector. A working Group on Rehabilitation of sick SSIs (2000) under the chairmanship of Shri. S.S.Kohli had mainly recommended for a change in the criteria for identification and classification of sick units in the SSI sector.

In short, RBI directly and indirectly controls credit and finance issues relating to MSME. Its priority sector lending policy and guidelines with regard to rehabilitation of sick industries, viability norms, and definition of sick industries has a direct bearing on the operation of MSME. The credit related problems of MSME sector is closely monitored by the Standing Advisory Committee of RBI on MSME sector. Having said the role of commercial banks as a facilitator for the credit requirements of small scale sector in general, it would be meaningful to explain the evolution of banking infrastructure in Kerala, its spread throughout the state. Banking infrastructure in Kerala was closely related to the industrial activities existed in the state and its brief mention is required to bring close association of people to their banking activities.

Banking Development in Kerala

The importance of financial intermediation for promoting productive activities of the economy is well recognized and it existed in various forms prior to the establishment of commercial banking system in India. Hence, money lenders and indigenous bankers are considered to be the institutional antecedents of banking institution in India. In the state of Kerala, the presence of these intermediaries can be traced from the history. The historical financial background of the state proves that the successful existence of chitties and kuries had set a firm background for the financial activities in the state and paved the way for easy transition to the modern form of banking. The financial activities of these institutions more or less were similar to that of the banking system.

The banking tradition of Kerala dates back to early years and this may be attributed to the early commercialization of agriculture and growth of trade. When we refer to the history of Kerala, it is inherent that developments related to the three princely states which later combined to form the state of Kerala. A well organized financial intermediary system in the form of money lenders and indigenous bankers existed in the economy since the second half of eighteenth century (Goldsmith, 1983).They were the institutional antecedents of the modern banking system in India. The money lenders, mainly landlords and peasants and chit funds formed the core of financial intermediaries in the state. There were about 6228 chitties working in 1935 (Velu Pillai, 1940).Later these chits and kuries transformed themselves as joint stock banks. 'Most of the banks in Travancore- cochin have grown out of the womb of chits and kuri funds that have been operating in the state since ancient times. The subscription paid by the members of these funds is analogous to the deposits that are kept with the banks and the prize ancocents distributed resemble the advances made by the commercial banking institutions. From such an institution, the transition to modern form of banking was an easy step as the later conferred certain advantages on the person, that is, the foreman who conducted the business of chitty' (GOI, 1956).

The Travancore Bank started in 1893 was the earliest organized commercial bank in Kerala and Thayyil Bank and Thiruvalla Bank were the banks that existed in Kerala in the early years of 20th century which could not operate successfully for longer years(Oommen, 1976).There were about 40 joint stock banks registered in Travancore – Kochi region in 1919-20, which increased to around 396 banks in 1936-37 (Oommen, 1976). The banking Regulation Act 1938 in Travancore and Royal Proclamation 1937 of the Cochin state along with the successive bank failure put an end to the mushrooming of banks in the region. The Nedungandi Bank founded at Calicut in 1899 was the earliest bank to be established in the Malabar region and later Chalappuram Bank ltd was registered in 1906 and Calicut Bank ltd in 1908.There was a steady growth in the number of banking companies in the later years of 20^{th} century. It increased from five(1916) to 275(1932-33) in Travancore region, and five to 175 (1932-33) in Kochi region. There was a sharp decline in the number of banks due to variety of reasons like the depression of 1930's , bank failures, banking regulation Act, 1938 in Travancore and the Royal Proclamation , 1937 of Kochi state. All these factors

together put a restriction on the further mushrooming of banks in the state. Apparently, it is interesting to note that there was an increase in the spread of bank branches of the surviving banks in the state. The Travancore Banking Enquiry Committe Report (1930) stated that the number of bank offices in the Travancore region accounted for one-fifth of the total number of banks in the erstwhile British India and Travancore together. Moreover, the range of area and population served by an office of a commercial bank was also the highest in this region as it was 18square miles for the population of 16000 in the region whereas it was 222 square miles and for a population of 65000 for the country respectively(GOI, 1953).Trichur, a small town in the cochin region stood second in the number of registered offices (19), first being Calcutta (21).Hence it is clear that commercial banks had evolved as a strong financial intermediary in the state.

Spread of commercial banks in Kerala before the state formation

Table 4.3
Number of commercial bank offices: region-wise, 1916-1952

Year	Travancore	Cochin	Malabar	All India
1916	2	2	4	292
1921	5	7	6	526
1926	9	9	5	646
1931	23	14	9	748
1936	96	32	45	1233
1941	55	51	55	2296
1946	250	124	89	5373
1947	279	141	87	4404
1948	301	162	87	4287
1949	300	161	82	4082
1950	335	176	80	3969
1951	363	180	81	3808
1952	353	184	79	3699

Source – Reserve Bank of India , 1954

The table reveals that there has been continuous increase in the number of bank offices in Travancore, kochi and Malabar region in Kerala, as also was the case with India too. Among the three regions of the state, Travancore region had the largest number of bank branches, followed by Cochin and Malabar region. After the formation of the state in 1956 also, due to successful implementation of reforms by Reserve Bank of India prepared a favourable climate for the further growth of banks in the state. In

the next section, we would try to examine the growth of banks in Kerala. The banking development in the state is examined with reference to number of bank branches, deposit, credit and credit –deposit ratio.

4.6.1BRANCH EXPANSION

In order to bring out the importance of commercial banks in meeting the credit requirements of the industrial sector in the state, we will bring out the spread of banks in the state. The Government of India focused on extensive branch banking strategy as utmost important to reach out to the different sections of the population especially after the bank nationalization in 1969 and 1980.

Table 4.4
Expansion of Bank branches in Kerala 1990-2017

YEAR	KERALA (no.)	Growth rate (%)	Percentage share (%)	India (no.)
1991	2912	0.2	4.7	61724
1993	2966	1.4	4.7	62774
1995	3133	3.0	4.9	64234
1997	3198	0.9	4.9	65111
1999	3293	1.2	4.9	67041
2001	3382	1.8	5.0	67821
2003	3463	1.3	5.1	68078
2005	3609	2.5	5.2	69969
2007	3812	3.4	5.2	73199
2009	4170	4.1	5.1	81802
2011	4690	6.8	5.1	92117
2013	5430	8.5	5.0	109279
2015	6190	5.7	4.7	130482
2017	6452	2.4	4.6	140216

Source - Basic Statistical Returns, RBI (various years)

The table clearly indicates that there has been a steady growth in the branch expansion of commercial banks in Kerala in the time period so that the financial requirements of the people got easily addressed in the state. The number of bank branches in the state was 2906 in 1990 and it has steadily increased to 6452 in 2017 with an average growth rate of 2.4 percent. The percentage share of total number of

bank branches in the small state of Kerala to India stood at 4.6 percent which rightly highlights the significance of commercial banks as a financial institution here.

Table 4.5

Branch banking Statistics in Kerala as on March 2017

Bank group	Rural	Semi urban	Urban	Total
State bank group	77	967	326	1370
Nationalised banks	101	1545	609	2255
RRB (Kerala Gramin bank)	51	525	39	615
Total Public sector banks	229	3037	974	4240
Private Sector banks	148	1469	475	2092
Commercial banks	377	4506	1449	6332
Co-operative banks	135	26	819	980
Total banking sector	512	4532	2268	7312

Source – State Level Bankers' Committee, Kerala

The banking sector in Kerala includes Public sector banks, private sector banks and co-operative banks. As is clearly noted, the banking network in the state is dominated by public sector banks (4240) compared to private sector banks (2092).This definitely should help in achieving the targets set by the government and RBI.

4.6.2 STRUCTURE OF BANK DEPOSITS

One of the major functions of commercial banks is deposit mobilization .Under 20-point programme (1975) the Government of India had directed the banks to make all possible efforts to mobilise savings of the people in the form of deposits. Bank nationalization and expansion of bank branches have contributed greatly to the development of banking habits among the people leading to deposit mobilization by banks. Kerala banks have one of the highest positions in deposit mobilization in the country. This may be due to the presence of Non Resident deposits in the state.

Deposit mobilisation is one of the crucial functions of a conventional financial institutions or banks to satisfy one of the requirements of a "banking business", i.e.

sourcing of funds or borrowing money from customers. Continuous and adequate deposit mobilisation would ensure the bank to sustain its business of lending and investing, thus ensuring profit for future growth. Nevertheless, different types of deposits have different and distinct characteristics and features which in consequence impose different risks and costs to the banks. In the case of Kerala it could be seen that the presence of Non Resident deposits has great significance in the total deposit mobilisation of the state.

Table 4.6

Composition of bank deposits in Kerala

Year	Total Deposit		Domestic Deposit		NRE Deposit	
	Amount	Annual Growth%	Amount	Annual Growth%	Amount	Annual Growth%
2001	44850	16.1	23419(52)	17.7	21431	14.5
2003	59399	15	30703(51)	13.3	28696	17
2005	69396	5.21	40276(58)	12.3	29121	-3.25
2007	94510	21.07	58393(61)	24.22	33304	8.58
2009	130350	23.57	93331(71)	23.46	37019	23.85
2011	161562	12.66	123872(76)	16.29	37690	2.18
2013	229148	15.99	162958(71)	9.32	66190	36.6
2015	319890	14.39	210287(66)	13.19	109603	16.7
2017	410492	13.5	256240(62)	14.23	154252	12.3

Source- SLBC, Kerala. (Figures in bracket shows percentage of domestic deposit to total deposits)

One of the important features of commercial banks in Kerala was the domination of NRE deposits out of total deposits. It could be read from the table that in early 2000's, 50 percent of the total deposits were constituted by NRE deposits mainly due to the remittances from gulf countries. The Recession that affected the world in 2008, localization policy adopted by majority of the Gulf countries have widely brought down NRE deposits in the commercial banks in Kerala. Domestic deposits which constituted only 51 percent of the total deposits had increased to 75 percent in 2012 and then slowly coming down to 62 percent in 2017.

Table 4.7

Deposit mobilization by banks in India and Kerala (in billion)

Year	Kerala	AGR	India	percentage share
1991	77862.2	18.8	2005684	3.9
1993	120834.1	25.8	2758505	4.4
1995	196749.7	33.2	3758640	5.2
1997	231564.8	17.0	5005564	4.6
1999	331594.1	19.9	6981691	4.7
2001	441781.4	13.1	9494333	4.7
2003	595216.5	15.2	12761957	4.7
2005	690584.5	1.4	17468140	4.0
2007	956566.8	18.9	25970445	3.7
2009	1351192	22.9	39219808	3.4
2011	1709363	12.4	53895513	3.2
2013	2366984	18.0	70126204	3.4
2015	3283994	16.6	89221112	3.7
2017	412503	13.4	10751439	3.8

Source –Statistical Tables relating to Banks in India , RBI

The deposit mobilization of commercial banks in the state had achieved a high rate of 6.8 percent in 2007, but reduced to one percent in 2008 due to after effects of global Recession in 2008. The lower rate continued in the subsequent years and then started to recover to increase at a rate of five percent in 2014 and then slowly falling to four percent in 2017. Apparently, when we compare the deposit mobilization of commercial banks in Kerala to that of all India level, it is understood that around 3.8 percent of total deposits mobilized by the commercial banks in India is by those in the state. This could be even compared to that of larger states of Rajasthan, Punjab and Bihar (Economic Review, 2015). The commercial banks have been successful in mobilizing deposit at a higher rate of around 16 to 20 percent every year.

4.6.3CREDIT DEPOSIT RATIO

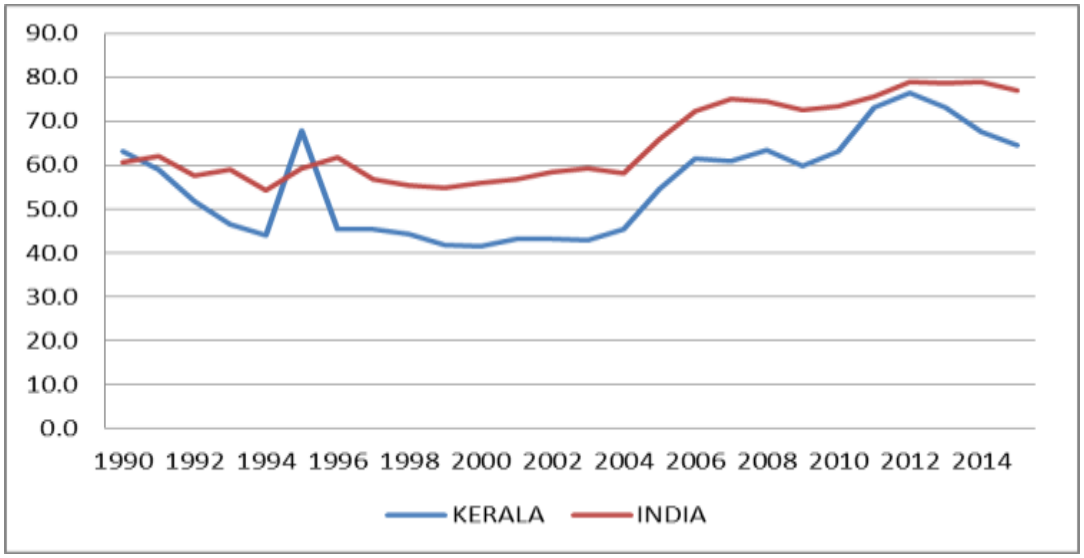
Credit deposit ratio which measures the performance of commercial banks brings the real picture of banking activity in the country. Credit deposit ratio was one of the lowest in Kerala and it was taken as one of the reasons for industrial backwardness. It was contradictory in the sense that with such a higher deposit mobilization, it was less used for industrial activities of the state and was alarming. The consistent efforts taken by RBI by implementing Lead Bank Scheme and priority sector lending policy has improved the situation of Credit – Deposit Ratio in the state. At the same time, it has always remained low compared to that of All India level. Credit –Deposit Ratio was 59 percent in 2005 and it had increased to 62.4 percent in 2017.

Table 4.8
Credit – Deposit Ratio of Scheduled Commercial Banks in Kerala and India

Year	Deposit	Credit	CDR -K	CDR-I
1991	77862.2	46002.7	59.1	61.9
1993	120834.1	56231.3	46.5	58.9
1995	196749.7	133300.4	67.8	59.2
1997	231564.8	105239.3	45.4	56.8
1999	331594.1	138306.1	41.7	54.8
2001	441781.4	191083.3	43.3	56.7
2003	595216.5	254634	42.8	59.2
2005	690584.5	377365	54.6	66.0
2007	956566.8	582507.7	60.9	75.0
2009	1351192	807138.3	59.7	72.6
2011	1709363	1250041	73.1	75.6
2013	2366984	1730887	73.1	78.8
2015	3283994	2121608	64.6	77.1
2017	410492	256075	62.4	73.7

Source – Banking Statistical Returns of scheduled Commercial Banks , RBI (various years)

Figure -4.1Credit – Deposit Ratio of Scheduled Commercial Banks in Kerala and India



The Credit Deposit ratio of Kerala has always remained below all India level. This definitely attracted maximum criticism on the lending behaviour of commercial banks in Kerala in the context of higher deposit mobilization compared to other states in India. This was explained as the 'negative attitude' of the commercial banks affecting industrial sector in Kerala. This led to a detailed examination of this aspect and majority stood to reject this, instead pointed out the 'smallness' of the industrial projects ,labour problems, poor investment climate ,shortage of professional skills and risk aversion and so leading to low credit absorption capacity in the state. (Narayana (2003),Jeromi,(2003),Mani and Jose (2001)

4.7 PATTERN OF BANK FINANCE

The Banking infrastructure in Kerala is equal or well ahead of other states in terms of bank branches available and also deposit mobilization. However, another important role played by commercial bank is its deployment of credit to various sectors and sections of the economy. It is this capacity of commercial banks that is crucial for the all round development of the state. Another important function of the commercial banks is to ensure flow of credit to various sectors of the economy for its balanced development. Adequate supply of finance is a major determinant in deciding the growth of productive sectors of the economy and commercial banks have remained a major

provider of finance to these sectors. How far the banks in Kerala are successful in this aspect is dealt in this section.

The population wise distribution of bank advances in the state reveals that major proportion of bank credit is shared among semi-urban and urban areas.

Gadgil Committee (1969) had recommended 'area approach' to the functions of commercial banks with due consideration for the differences existing in each region. Nariman Committee (1969) also supported the idea of 'area approach' and highlighted the importance of entrusting public sector banks a lead role in districts in discharging their social responsibilities. Thus Lead Bank Scheme was introduced in India in 1969.The lead bank has to coordinate all credit institutions in the district in discharging their functions, especially expansion of banking facilities and meeting the credit requirements of the rural people. Formulation of District Credit Plan was considered more effective in lending to priority sector and also the overall development of the district. It is generally grouped into three sectors – primary, secondary and tertiary sector. Every year a target is set according to the set norms for each sector and at the end of year it is evaluated and reformulated.

Table 4.9

Annual Credit Plan of Scheduled Commercial Banks in Kerala

YEAR	Primary sector			Secondary sector			Tertiary sector		
	Target	Achivemnt	%	Target	Achvmnt	%	Target	Achvmnt	%
2008	42469625	70686704	169.3	29535423	14998802	53	49195366	51460337	105.2
2009	64690726	93620761	163.3	19205463	15487159	84.5	71641307	60759585	92.5
2010	75620878	134873236	165.7	17845741	11394808	63.8	75894431	77802319	102.6
2011	84706708	149130107	189.5	21699433	14621324	68.4	84566665	79144494	84
2012	108308752	166211362	150.1	21155813	13368617	62.8	98362104	80908686	81.3
2013	128404857	180717792	136.7	25040774	18115191	80.6	114003265	93143875	81.8
2014	141817031	195203400	134.6	42887474	33877425	81.2	136472113	98748838	72.2
2015	167281502	210352932	122.7	83120920	67706881	82	123158888	85049870	68.7

Source – SLBC , Kerala

There has been steady increase in the deployment of bank credit to the three sectors as indicated in the table .The table reveals that in the case of primary sector , banks have been achieving the target , whereas in the case of secondary and tertiary sector it was not successful in achieving the target or rather only 82 percent was achieved in the case of secondary sector and 69 percent in the case of tertiary sector in 2015.Priority sectors like small scale industries comes under secondary sector and credit achievement has not matched with the target invites a detailed discussion on credit deployment to the sector.

Table 4.10

Occupational Distribution Of Bank Credit (percentage share)

YEAR	AGRI	IND	TO	P&O	PL	TRADE	FINANCE	OTHERS
2001	13.3	25.2	1.8	4.7	24.3	18.9	1.2	10.6
2002	11.9	22.3	1.7	4.9	24.2	20.4	0.7	13.9
2003	11.8	22.0	1.6	5.3	27.2	19.7	0.7	11.8
2004	13.4	20.2	1.1	5.9	33.8	14.9	1.1	9.6
2005	11.3	21.1	1.0	6.3	37.6	14.6	1.3	6.8
2006	11.2	17.7	1.3	5.5	37.4	13.5	1.2	12.2
2007	13.9	16.4	1.3	6.0	38.9	14.2	1.9	7.4
2008	16.5	15.9	1.2	5.6	38.6	14.0	2.2	6.1
2009	14.7	14.6	1.2	6.2	41.4	13.3	4.2	4.3
2010	17.3	13.9	1.4	6.1	40.0	12.9	5.4	2.9
2011	18.4	13.1	1.5	7.3	35.4	10.2	10.0	4.1
2012	19.1	12.1	1.2	6.0	33.1	11.6	12.1	4.9
2013	20.2	13.9	1.7	6.0	35.0	11.5	10.4	1.3
2014	21.4	15.0	1.9	5.7	34.7	11.5	8.1	1.7
2015	25.3	14.4	1.7	5.6	31.5	11.2	8.5	1.8
2016	22.3	14.5	2.3	5.9	33.7	11.3	8.3	1.7
2017	21	14.1	1.9	5.8	36.2	10.3	8.9	1.8

Source – Statistical Tables relating to SCBs in India, RBI (calculated by author)

Note-AGRI-Agriculture, IND-industry, TO-Transport Operators, PO-Professional and Other Services,

The distribution of bank credit to various sectors indicates that an increasing proportion of the total bank credit is under the personal loan segment. It is also found that the share of industrial sector out of the total credit has been continuously declining.

It is also worth noting that major proportion of the bank credit (25.2percent) was advanced to the industrial sector in 2001, and it has come down to 14.1 percent in 2017. On the other hand, the personal loan sector has been getting a major share of the total credit that is 36.2 percent in 2017. Thus this factor could be responsible for the increasing credit –deposit ratio in the state. A better credit deposit ratio but lesser share to industrial sector evokes concern about the lending behavior of scheduled commercial banks in Kerala. Consequently, access to adequate and timely credit at a reasonable cost has become one of the critical problems faced by this sector. The major reason for this has been the high risk perception among the banks about this sector and high transaction cost for loan appraisal (Prime Minister's Task Force on MSME , 2010)

Table 4.11

Percentage Share of Manufacturing and industrial sector in Total Bank Credit

YEAR	MANU	% SHARE	INDUSTRY	% SHARE	TOTAL CREDIT
1991	157292	96.0	163773	35.3	464070
1993	182518.8	95.7	190669	33.5	569122
1995	231892	95.3	243262	31.2	779774
1997	288899	93.7	308254	29.1	1058654
1999	358355	92.6	387021	27.9	1385018
2001	417455	88.6	470917	25.2	1869706
2003	449526	78.6	572002	22.0	2594167
2005	618796	74.0	836184	21.1	3971471
2007	722306	72.0	1002912	16.4	6106658
2009	754404	61.8	1220773	14.6	8335615
2011	1204406.2	72.8	1653376.7	13.1	1262303.53
2013	1686371	69.3	2434715	13.9	1751293.7
2015	2008859.9	65.0	3091563.66	14.4	2147498.971
2017	2319027.3	66	3519436.2	9.2	2516999.7

Source – Banking Statistical Returns of SCBs in India, RBI (Figures in lakhs of rupees)

We have already seen that out of the total bank credit, there has been continuous fall in the share of industrial credit. Immediately after the New Industrial Policy reforms of 1991, about 35 percent of the total credit was lend to the industrial sector and out of this 96 percent was lend to the manufacturing industries. In the subsequent years, the table reveals that there is a gradual decline in industrial credit and credit to the manufacturing industries by commercial banks in Kerala. In 2017,

out of the total bank credit ,only 9.2 percent was deployed to the industrial sector and apparently, manufacturing sector received only 66 percent as its share. Increasing Non Performing Assets (NPA) of commercial banks and the capital Adequacy Norms set by RBI might be adversely affecting the policy measures initiated by the government and RBI in order to smoothen the credit flow to the industrial sector. However, it is the small scale industries/MSE sector that has been increasingly hit by the inadequacy of credit and for the reason , they are included under the priority sector.

Priority sector lending

The term priority sector was first used in LokSabha in 1967 by then Finance Minister Sri. Morarji Desai while he shared his concern over the meager share of bank credit to sectors such as agriculture, small scale industries and export. Hence, priority sector lending policy was implemented in India in 1967-68 in order to ensure flow of credit to important but neglected sectors of the economy. The term 'priority sector' indicates those activities that have national importance and have been assigned priority for development. Initially the priority sector was defined to include agriculture, small-scale industries and exports. The report of National Credit Council set up in 1969 highlighted the issues related to lack of bank credit to these sectors .Gadgil Committee and Nariman Committee (1969) reiterated the need for finance to activities in rural areas. Later differential rate of interest was launched in 1972 as recommended by Hazari Committee.(1970) Though no specific targets was fixed, the priority sector lending was set as not less than 1/3rd of their outstanding in 1979. Later in 1980 as per the recommendations of the working group under Dr. K.S. Krishnaswamy the priority sector lending was fixed as 40 percent of the total advances of commercial banks and the small scale industrial advances granted to units with credit limits not exceeding Rs. 25000 were to be considered as weaker sections and 12.5 percent of SSI credit were to be lend to these units.

Furthermore, the credit limit to small scale industries had been revised from time to time, based on the guidelines given by various committees formed to review the lending behaviour of commercial banks to these sectors Here we will try to bring in major changes that were brought in the lending behaviour of commercial banks to

Small scale industries specifically. The direction to issue collateral free loans to tiny units up to Rs.5lakhs and opening of specialized branches in every district and in centres having SSI units in 2001 could be seen as a part of initiative to smoothen the credit flow to SSI units.

The High Level Committee on credit to SSI under S.L.Kapur (1998) recommended enhancing the limit of composite loans from Rs2 lakhs to Rs 5 lakhs with single documentation, security and charging creation process. Special efforts were initiated to promote micro units with the enactment of MSMED Act 2007 by lending 40 percent to their total advances to micro units having investment in plant and machinery up to Rs 5lakhs and 20 percent to micro units having investment up to 25 lakhs. The High Level Task Force constituted by Government of India under Sri T K A Nair (2010) advised commercial banks to advance a share of 60 percent in Micro and Small enterprises lending in three stages with an annual growth of 10 percent in number of accounts and 20 percent in amount. Under the Credit Guarantee Scheme of Credit Guarantee Trust or Micro and Small Enterprises (CGTMSE), collateral free loans were up to Rs 10 lakhs were made available to micro and small enterprises in 2010. Presently, Priority Sector includes (i) Agriculture (ii) Micro, Small and Medium Enterprises, (iii) Export Credit, (iv) Education, (v) Housing, (vi) Social Infrastructure,(vii) Renewable Energy and (viii) Others. Here, we have a brief outlook of the trend of priority sector lending of commercial banks in Kerala

Table 4.12
Priority sector lending of SCBs in Kerala

Year	Total deposits	Total advances	Agriculture	Growth rate[%]	Industry [SME]	Growth rate[%]	Total priority
2003	59399	27007	3507(13)	16	2562(9.5)	0.86	11867
2005	69396	42534	6462(15)	44	3128(7.4)	24.67	22489
2007	91697	64273	11377(18)	38	4391(6.8)	18.41	35683
2009	130350	82819	15959(19)	-0.2	6957(8.4)	4.2	48387
2011	161562	121981	27439(23)	26	21742(17.8)	27.33	71145
2013	229148	175087	45055(26))	24	29863(17)	20.09	99318
2015	319890	212161	55224(26)	23	31761(15)	-17	114040
2017	410492	256075	61971(24)	12	39901(16)	2.26	131992

Source – Computed from SLBC data, Kerala

Out of the total deposits, the share of advances of commercial banks to industry was very less and also unstable. Table reveals a declining trend and it even reached a negative growth in 2004.After strong recommendations from RBI to increase industrial advance, it picked up and reached a higher growth rate of 51 percent in 2008.Up to 2010, industrial sector as per SLBC data consisted of only small and medium scale enterprises, village and cottage industries. In 2010, industrial sector was restructured to include MSME sector, retail trade (RT), personal self employment (P&SE) business enterprises (BE) Road transport(RT) which were under other priority sector before. This has resulted in a big leap of 142 percent growth rate in the advance to industrial sector in 2010. Presently, it is shown as non- farm sector or MSE sector. Understanding the importance of MSME units in terms of employment and growth potential for the state, special efforts have been taken for the development of the sector especially after the MSME Act of 2006.As a result, there is an increase in the number of MSME units in Kerala. Within the MSME sector, there is a significant increase of micro enterprises both in terms of working enterprises and employment. There are over 6000 various MSME products ranging from traditional to high-tech items which are manufactured in this sector. They play a crucial role in innovation and have ability to experiment with new technologies on small scale. However, they often suffer from funds.(Economic Review, 2013) In this context, we will try to examine the credit flow to micro and small enterprises in Kerala from commercial banks.

Table 4.13
Advances Outstanding To Micro And Small Enterprises In Kerala (in crores)

YEAR	MICRO ENTERPRISES	SMALL ENTERPRISES	TOTAL SME
2008	3540(53)	3135(47)	6675
2009	4038 (50)	4057(50)	8095
2010	5572(48)	6186 (52)	11758
2011	6822 (50)	7654(50)	14467
2012	7273(45)	8646 (55)	15919
2013	9611(48)	10229 (52)	19840
2014	12498 (45)	15078 (55)	27576
2015	11638 (39)	18013 (61)	29651
2016	17276(47)	19014 (53)	36290

Source – Computed from SLBC data, Kerala (figures in bracket shows percentage share)

It is clear from the table that share of micro enterprises which stood at 53 percent in 2005 has declined to 47 percent in 2015. Whereas, the share of small enterprises which stood at 47 percent in 2005 has increased to 53 percent in 2015. In short, there has been increasing credit flow to small enterprises rather than micro enterprises.

4.8 Trend of bank Finance to Small Scale Industries in Kerala.

In order to analyse the trend of bank finance to small scale units in the state from 1991 to 2015, we divide the time period in to two. The first period refers to flow of bank credit to small scale units from 1991 to 2008 and the second period refers to 2008 to 2015 i.e. after the implementation of MSME Act 2006.

Table 4.14

Proportion of Credit to SSI /MSE

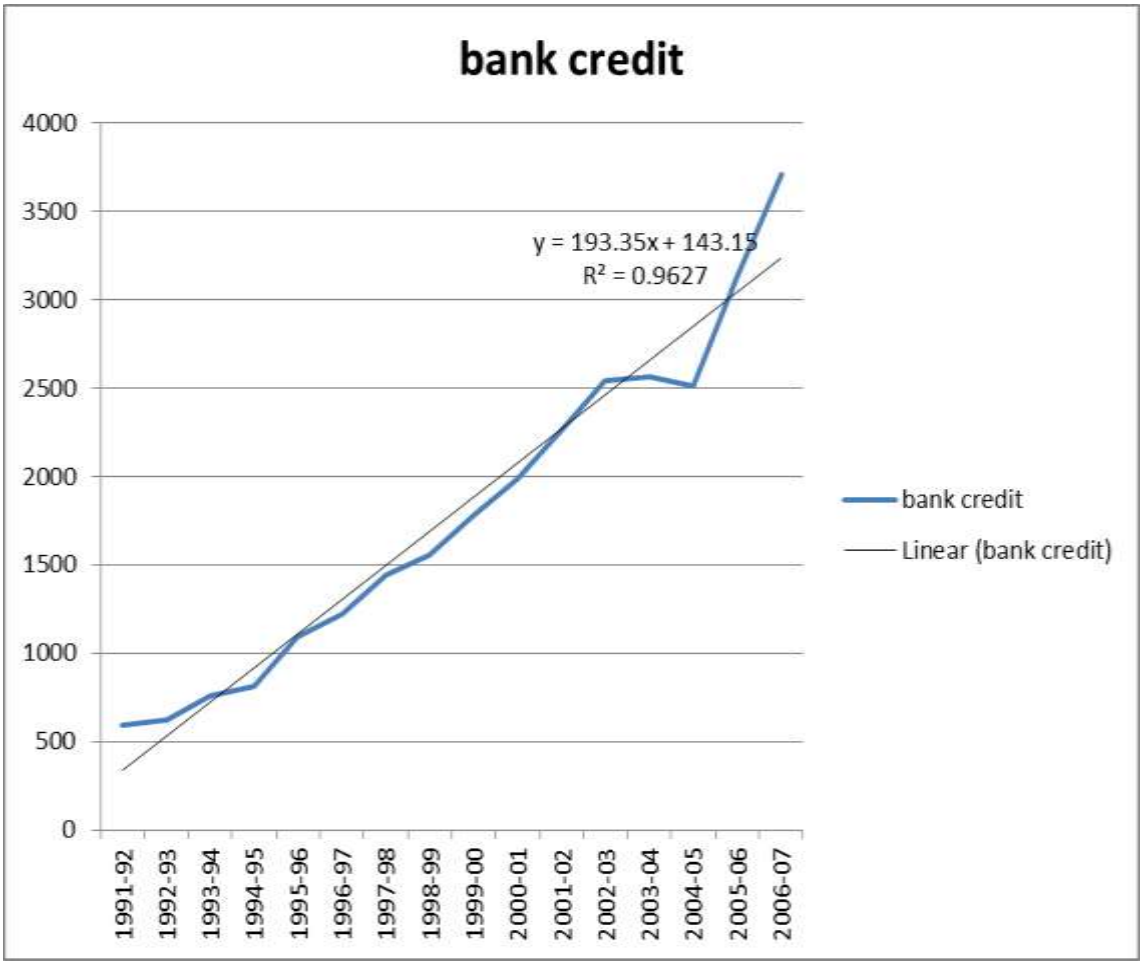
Years	Total credit (in lakhs)	Growth Rate (%)	credit to SSI (in lakhs)	Growth Rate (%)	Share of SSI to total credit (%)
1991	4638	-	595	-	12.83
1992	4995	7.7	625	5.04	12.51
1993	5818	16.48	757	21.12	13.02
1994	6442	10.73	811	7.13	12.59
1995	7797	21.03	1090	34.4	13.98
1996	8961	14.93	1222	12.11	13.65
1997	10482	16.97	1445	18.25	13.79
1998	12364	17.95	1558	7.82	12.6
1999	13577	9.81	1783	14.44	13.13
2000	15940	17.4	1991	11.67	12.5
2001	19180	20.33	2262	13.61	11.79
2002	21287	10.99	2454	8.49	11.53
2003	27007	26.9	2562	4.4	9.5
2004	31867	18.0	2509	-2.1	7.9
2005	42534	33.5	3128	24.7	7.4
2006	51919	22.1	3708	18.5	7.1

Source – Computed from SLBC data, Kerala

We have already seen the important policy measures taken by the state government and RBI to ensure flow of credit to the small scale sector and it could be understood from

the table that there has been increasing at a positive rate except in the year 2004 and also around 13 percentage of total credit has been advanced to the small scale sector upto 2002. The data shows that after 2002, the share of total credit has been falling continuously and reached a lower rate of 7.1 percent in 2006.

Figure 4.2 Proportion of Credit to SSI /MSE



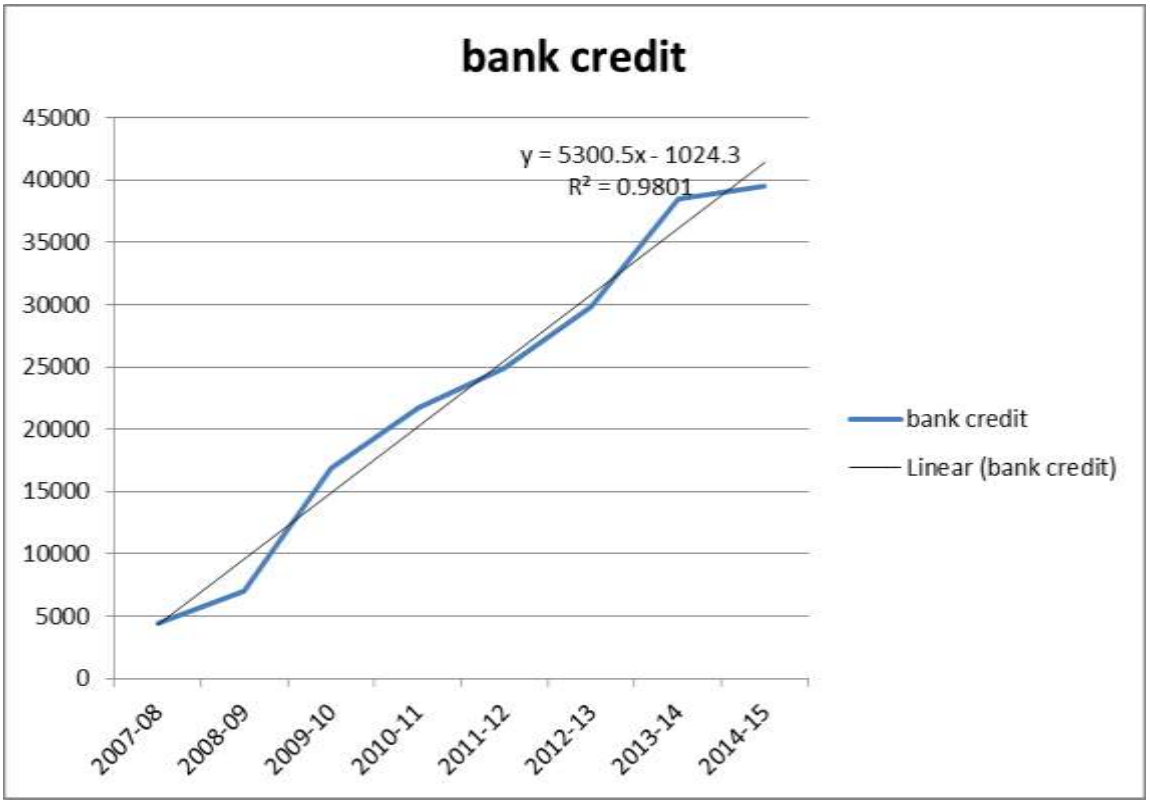
The trend line indicates a linear trend in the flow of bank credit to small scale industries and also an increasing trend.

Table 4.15
Proportion of bank credit to MSE

Year	Total credit (in Lakhs)	Growth rate (%)	Credit to MSE	Growth rate	Percentage share
2007	64273	23.8	4391	18.4	6.8
2008	75305	17.2	6674	52.0	8.9
2009	82819	10.0	6957	4.2	8.4
2010	96987	17.1	16862	142.4	17.4
2011	121981	25.8	21742	28.9	17.8
2012	149293	22.4	24867	14.4	16.7
2013	175087	17.3	29863	20.1	17.1
2014	192010	9.7	38479	28.9	20.0
2015	218706	13.9	39463	2.6	18.04

Source – Computed from SLBC data, Kerala.(calculated by author)

Figure 4.3 Proportion of bank credit to MSE



The flow of bank credit to the small scale units have been increasing steadily due to the efforts taken by RBI and the state government. After the implementation of MSME ACT 2006 and the special efforts taken by RBI to MSME sector has been fruitful and has increased continuously throughout the period of study. During this time period also, bank credit has grown steadily at a positive rate and around 18 percent of the total credit has been advanced to the MSE sector.

CONCLUSION

Commercial banks play a very significant role in the economic development of any country. The commercial banks have emerged as a purveyor of credit requirement especially of small borrowers and also a major financial institution in channelizing savings of people. Understanding the increasing role of commercial banks, the measures taken for its expansion has resulted in developing a strong banking base for the economy. Thus commercial banks stand to serve the economy efficiently by meeting the banking needs of the various sectors of the economy. In India, commercial banks have been entrusted with the major role of dealing with all sectors of the economy, with special policy measures initiated keeping in view all-round development of the country. This could be seen from the importance accorded for the priority sector lending and annual credit plan framed every year. The state of Kerala is no different. With the development of agriculture and later agro based industries lead to an increasing need for credit in the state, paved the way for the development of financial institutions especially commercial banks in Kerala.

The credit needs of the SSI/MSME have been well taken care of in each policy measure taken by the government and Reserve Bank of India. Moreover, RBI has been instructing and closely monitoring the flow of bank credit to cater to the requirements of the industrial sector especially SME sector. This is well understood from the measures like priority sector lending policy of commercial banks. At the same time, how far the targets set under priority sector norms may be limited by the viability and feasibility of the industrial projects in the wake of mounting Non Performing Assets and Capital Adequacy norms affecting the liquidity and profitability of these banks. It is also to be noted that as per the Report of National Commission (2007), SME sector

has been getting inadequate credit facilities from institutional sources due to the reasons like the weak financial base of SME sector as the main source of finance is family savings and friends basically in the starting stage, lesser investment from capital markets in the form of equity capital, improper maintenance of book of accounts, inability to provide collateral security, lack of appreciation of financial information required by banks and financial institutions, delay in payments, the administrative cost of lending to small borrowers being relatively high thereby resulting in disincentive to lend to SMEs, high rate of sickness among SMEs and the concessional rate of interest works as disincentive to motivate the financial institutions basically to lend to SME sector. These factors also affect the credit worthiness of small scale units and should be properly addressed. Thus it is implied that the financial viability and performance of small scale industries have a direct bearing on the allocation and utilization of bank finance by these industries. Even though the credit flow to these industries have grown over the years based on various policy measures of RBI, it is also necessary to know the dependence of small scale industries on bank finance for their financial requirements in the state.

CHAPTER -V

FINANCIAL ACCESSIBILTY AND PROBLEMS OF BANK FINANCING OF MICRO AND SMALL ENTERPRISES IN KERALA

5.1 Introduction

Among the problems constraining the growth of MSME in India the major one has been identified as related to credit facilities like lack of availability of adequate and timely credit, high cost of credit , collateral requirements etc. (Prime Minister's Task Force on MSME, 2010). Finance is a major factor in production purpose, but in the case of small scale industries it is also said to be a major factor constraining its operations. Since small businesses rarely obtain long term debt or equity in traditional financial markets, they must rely on trade credit and bank credit as major source of debt and they obtain much of their external capital from entrepreneurs' own funds and informal investors who are family members or acquaintances of the entrepreneur(Walker, 1989).Small scale industries are found to be more opaque as compared to large scale industries as far as disclosure of information is concerned . Hence they are financially more constrained and more dependent on bank loans (Torre et.al.2010).In the case of small scale industries in Kerala, we have already seen that commercial banks remains to be a major source of finance and that there is an increasing trend in the flow of credit to industries especially Micro and small scale enterprises as a part of priority sector advances. It was also pointed out that lack of collateral security, delay in payments, increasing incidence of sickness among sick units have affected the lending policy of banks. Hence, it is also necessary to find out the financial position of the small scale units in Kerala and the problems they face in availing bank finance. In this chapter, we will try to examine the financial accessibility of small scale units and the major factors that constrain the financial accessibility by conducting a sample study.

Table -5.1

Performance of MSME sector in Kerala as on March 2016

Sl. No.	District	Total investments (in lakh)	Value of output (in lakh)	Employment generated (Numbers)	Number of SSI/MSME Units
1	**Ernakulam**	**28244.16**	**107104.73**	**10105**	**1417**
2	Thiruvananthapuram	17024.08	24892.98	7842	1198
3	**Thrissur**	**14552.12**	**59660.07**	**4245**	**774**
4	Palakkad	8649.98	24278.75	3505	759
5	Malappuram	5850.76	16716.04	2925	585
6	**Kozhikkode**	**8050.39**	**25526.3**	**3262**	**513**
7	Kollam	7550.55	14194.39	3809	501
8	Pathanamthitta	19874.4	23227.82	2153	458
9	Kannur	3458.82	7049.67	1668	329
10	Kottayam	4635.93	12071.29	1630	327
11	Kasaragod	3589.99	4618.84	1055	239
12	Alappuzha	4737.17	13450.09	1555	234
13	Idukki	2227.56	4220.52	876	187
14	Wayanad	911.04	989.87	777	184
15	**Total**	**129356.95**	**338001.36**	**45407**	**7705**

Source - Directorate of Industries, Thiruvananthapuram

The district wise performance of micro, small and medium enterprises in Kerala indicates the position of each district in terms of number of units, investment, employment and the value of output. It is clear that Ernakulam district has the highest rank in terms of all the three variables and Wayanad district has the lowest rank with the lesser contribution compared to other districts. On the basis of better performance in terms of value of output , we have selected three districts – Ernakulam, Thrissur and Kozhikode for our sample study.

Figure: 5.1 Performance of MSME sector in Kerala as on March 2016

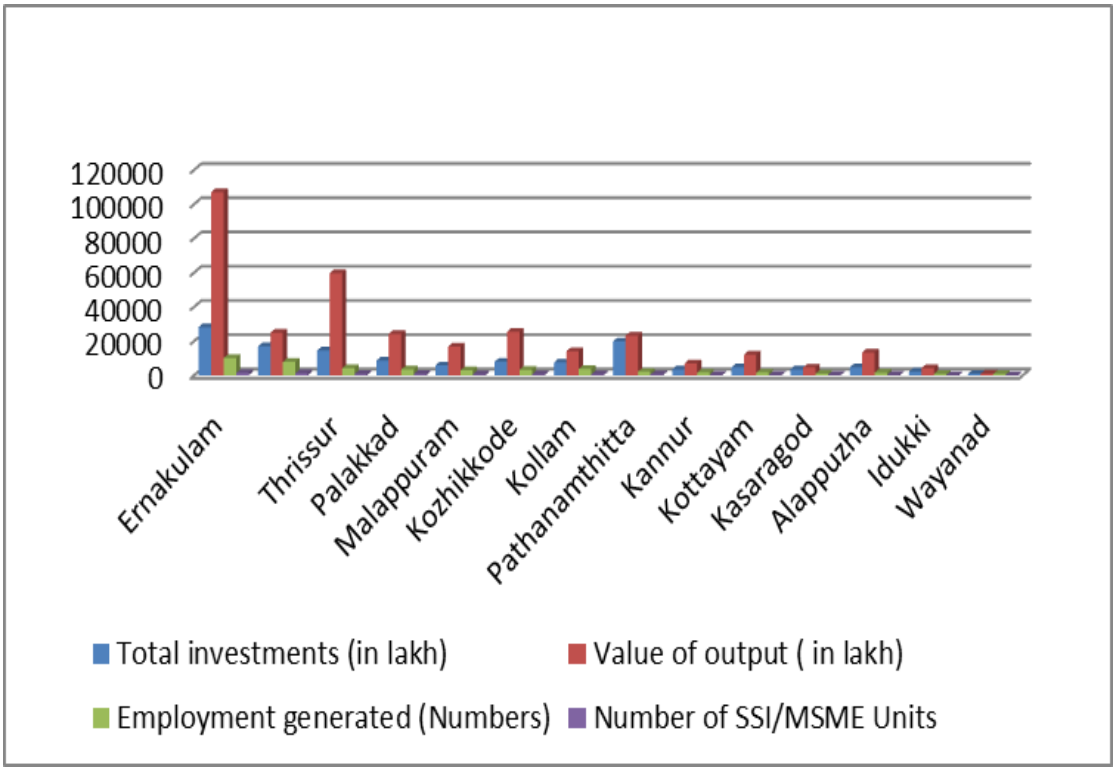


Table -5.2

Industrial profile of the selected districts 2016

1	**Ernakulam**	**Kozhikode**	**Thrissur**
Registred Industrial unit	21004	8560	32654
Total industrial units	34863	18623	32654
Registered medium unit	89	9	11
Estimated average number of daily worker employed in small scale industries	24.6	23.21	NA
Employment in medium industries	4355	1009	NA
Number of industrial area	6	3	6

Source – District Industries Centre

Three districts - Ernakulam, Thrissur and Kozhikode- have been selected for the study based on the performance mainly value of output. Ernakulam district is the highest revenue yielding district in the state and called as commercial capital of Kerala. There are mainly six industrial areas in the district which includes Development areas and development plots. There are about 77 large scale units and 90 medium scale units

in the districts. Among the 34863 small scale units, only 60 percent are registered units. Six clusters are also functioning in the manufacturing sector of the district. In the case of the Kozhikode district, there are 18623 small scale units out of which only45 percent is registered. There are about five large scale industries and one cluster is adding to the industrial activities of the district. Thrissur district is known as the cultural capital of the state with its rich history, cultural heritage and archeological wealth. Almost all small scale units in the district are registered units and four manufacturing clusters facilitate the industrial activities in the district. There are also 12 large scale industries and eleven medium scale industrial units in the districts. Thus, the industrial profile of these districts clearly indicates the dominance of small scale units. The industrial profile of these districts show that almost all industrial units in Thrissur district and only 45 percent in Kozhikkode district and 60 percent in Ernakulam district are registered units.

5.2 Banking Network in the selected districts

There may also be a 'regional effect' so that financial access differentials in different firm locations can arise from differentials in bank density across regions which themselves may reflect differentials in income and levels of economic activity(Kumar and Francisco,2005). So it is necessary to provide a brief outlook of the banking facility available in these three districts.

Table -5.3
Branch banking statistics of selected districts as on march 2016

	Rural	Semi urban	Urban	Total
Ernakulam	19	533	486	1038 (16)
Thrissur	142	426	174	742 (12)
Kozhikode	4	252	210	466 (0.07)
Kerala	319	4498	1616	6433

Source – Database on Indian Economy, RBI (figures in bracket shows percentage share)

5.3 SAMPLING DESIGN

A total number of 270 industrial units were visited for the collection of primary data. The study follows a multistage random sampling technique. In the first stage , three districts, viz, Ernakulam, Kozhikode and Thrissur were selected based on the performance of Msme units, mainly value of output. In the second stage, three different manufacturing industries like Food processing industries, Fabricated metal industries and wearing apparel industry has been selected on the basis of domination among the different types of industries. In the third stage, 125 food processing units, 70 wearing apparel industries, and 75 fabricated metal industries were randomly selected for the study.

Table -5.4
Distribution of sampling units

Industry	Ernakulam	Kozhikode	Thrissur	Total
Food Manufacturing industry	50	30	45	125
Wearing Apparel Industry	39	11	20	70
Fabricated metal industry	47	14	14	75
Total	136	55	79	270

An important factor that could affect firms' access to finance has been suggested as an 'industry effect'. Banks may favour firms of specific industries as clients, lending more to growth industries (Rajan and Zingales, 1998). Industry effect is also explained as some industries are more likely to depend on external financing than others, depending upon initial project scale, cash flows and requirement for continuing investment(Rajan and Zingales,1998, Bigsten 2002).

The industry group selected for the study are food manufacturing industry, wearing apparel industry and fabricated metal industry. Food processing industry is a significant part of the industrial sector in Kerala and constitutes 19 percent of the registered sector (Economic Review,2016).The main units selected for the study consist

of manufacturing of pickles, chips, sauces and jams, coconut oil and coconut powder factory, packed rice batter.

Metal fabrication is the creation of metal structures by cutting, bending and assembling processes. It is a value added process involving creation of machines, parts and structures from various raw materials. This industry is entered as engineering industries in the records of District Industries Centres.

The economic performance of the apparel industry in developing countries have large impact on employment opportunities especially for women, the development of small and medium sized enterprises and spillover into the formal sector in nature. (Indrakumar, 2013). It includes manufacturing of all types of garments especially ladies and kids items, night garments and boutiques and clothing accessories. It is entered as garment making industry .Thus the three categories of industries are significant in its own way and are the dominant industry groups in the Kerala economy.

A primary survey was conducted in the 125 units of food processing industries, 70 units of garment making industries and 75 units of engineering units. The units were selected on the basis of data collected from District Industries Centres of the respective districts and the major limitation of the study may be stated as larger proportion of the units were dormant.

5.4 Nature of Micro and Small Enterprises in Kerala

The size of the firm and its ownership pattern has direct binding on the financial pattern and the constraints faced by these firms. (Bernini (2011),Beck et al (2008)).So it is worthwhile to examine the nature of the sample industries before understanding the financial accessibility of these firms and the related constraints. The nature of these sample units are studied in terms of the type of the sector, pattern of ownership and the location of these firms.

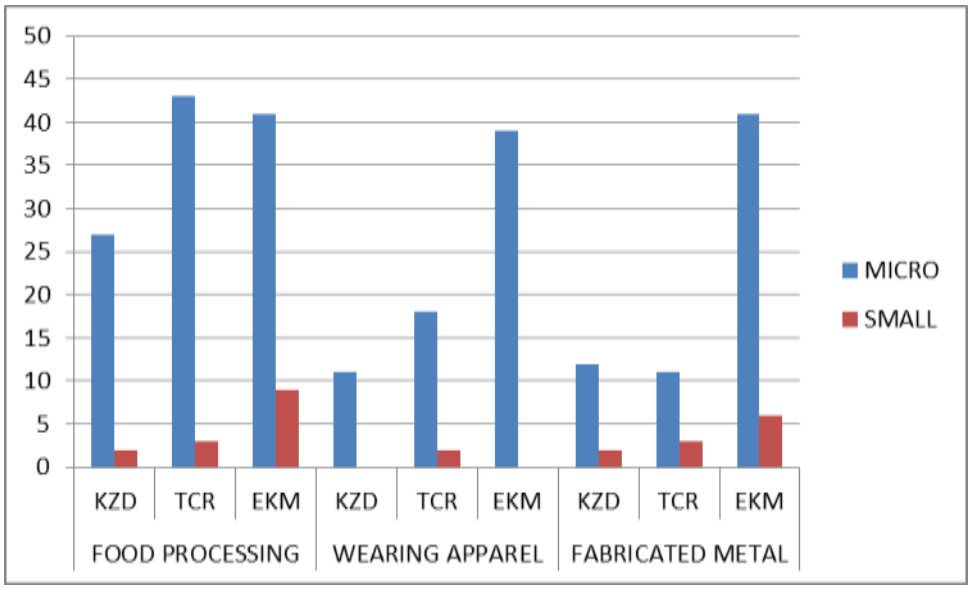
Table -5.5

Percentage distribution of selected units by sector

CATEGORY	FOOD PROCESSING			WEARING APPAREL			FABRICATED METAL		
DISTRICTS	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
MICRO	27 (93)	43 (93)	41 (82)	11 (100)	18 (90)	39 (100)	12 (85.7)	11 (78.6)	41 (87.2)
SMALL	2 (7)	3 (7)	9 (18)	0 (0)	2 (10)	0 (0)	2 (14.3)	3 (21.4)	6 (12.8)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source - Primary Survey

Figure: 5.2 Percentage distribution of selected units by sector



Smaller firms are less likely to obtain a loan than large firms (Bigsten,2003).It is found from the table that majority of the units are micro units in the case of food processing, wearing apparel and fabricated metal products in the selected districts and this clearly indicates that the investment in all these industries are less than 25 lakhs . There are very less number of small scale units in the selected districts .An industry wise analysis shows that there are more number of small scale units in the case of fabricated metal industry compared to food processing industry in all the districts. This points out the better investment pattern in this industry. Very small number of small scale units in the case of wearing apparel industry raises concern. At the same time , it

is evident from the table that Ernakulam district has a better proportion of small scale unit when the total number of units are taken together. There are larger number of small scale units in Thrissur district compared to Kozhikode district. In fact, these micro units may not be in a position to enjoy the economies of scale that the larger firms have.

5.4.1Percentage distribution of selected units by type of ownership

The firms are generally classified into proprietorship, partnership, joint stock company and co-operative concerns. The size and the ownership pattern of the firms have a large bearing on its performance, its risk bearing capacity and economies of scale. Constrained firms are smaller, younger and more likely to be owned by their founders (Levenson and Williard, 2000) and this reveals the importance of the type of the ownership of the firms.

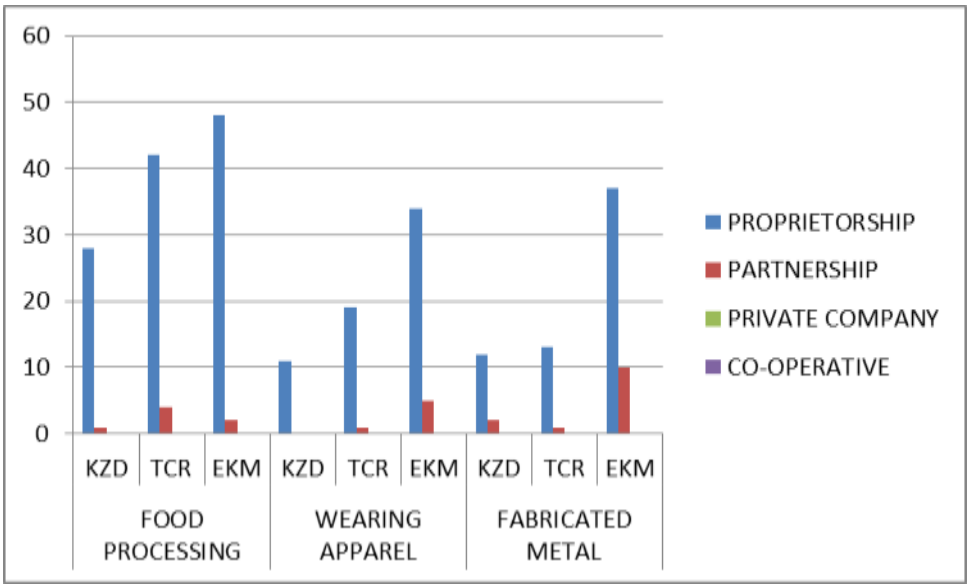
Table 5.6

Percentage distribution of selected units by type of ownership

	FOOD PROCESSING			**WEARING APPAREL**			**FABRICATED METAL**		
TYPE	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
PROPRIETORSHIP	28 (96.5)	42 (91.3)	48 (96)	11 (100)	19 (95)	34 (87.2)	12 (85.7)	13 (92.8)	37 (78.7)
PARTNERSHIP	1 (3.5)	4 (8.7)	2 (4)	0 (0)	1 (5)	5 (12.8)	2 (14.3)	1 (7.2)	10 (21.3)
PRIVATE COMPANY	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
CO-OPERATIVE	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source- Primary Survey

Figure:5.3 Percentage distribution of selected units by type of ownership



It is found from the table that majority of the units in all the districts are proprietorship firms and the entire risk involved in running the industry will be on the shoulders of the single owner. There is a better proportion of partnership firms in the case of fabricated metal industries and among the districts, Ernakulam district has the credit of having comparatively more number of partnership units. There is no cooperative units and companies among the selected units and this throws light on the small size and ownership pattern of the industrial units in the state of Kerala. Thus there is huge provision for expansion of these firms in terms of size and ownership in the state, if they are properly supported.

5.4.2Percentage distribution of the selected units by location

Location of industries is important in the case of densely populated state like Kerala where availability of land is scarce especially for industrial purposes. Industrial activities in the residential areas is a disturbance for people and environment, and attracts protests from all walks of life. Hence, inorder to promote industrial activities in the state , industrial areas in the form of development plots and industrial estates under District industries Centres provides land and other infrastructural facilities for industrial units. Since we are dealing with three different types of industries, we have included specifically development plots, industrial estates, and residential areas and commercial space is included as others.

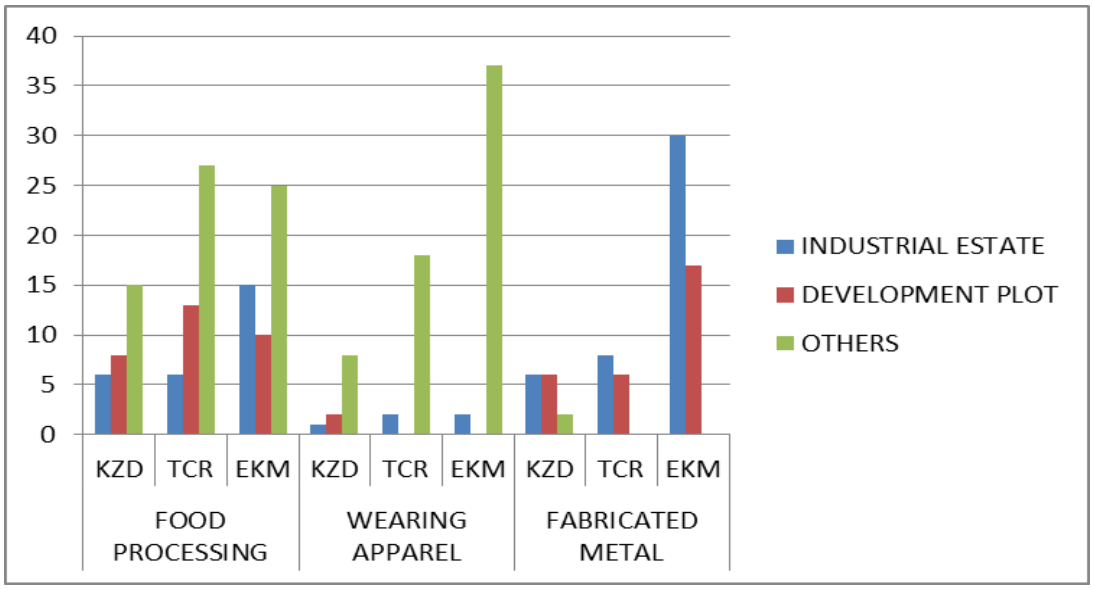
Table 5.7

Percentage distribution of the selected units by location

	FOOD PROCESSING			WEARING APPAREL			FABRICATED METAL		
LOCATION	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
INDUSTRIAL ESTATE	6 (20.7)	6 (13)	15 (30)	1 (9.1)	2 (10)	2 (5)	6 (43)	8 (57)	30 (64)
DEVELOPMENT PLOT	8 (27.6)	13 (28.3)	10 (20)	2 (18.2)	0 (0)	0 (0)	6 (43)	6 (43)	17 (36)
OTHERS	15 (51.7)	27 (58.7)	25 (50)	8 (72.7)	18 (90)	37 (95)	2 (14)	0 (0)	0 (0)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source - Primary Survey

Figure: 5.4 Percentage distribution of the selected units by location



In the case of location of these industries, majority of the industries in the category of fabricated metal products existed in the industrial estates under the District Industries Centres and very few could be seen in the commercial space or near any residential area. The reason for this is stated as the noise generated during the working hours of these industries are a disturbance for the people. Another favourable factor in the industrial area is the availability of the power . Even if there is any kind of interruption, they will be informed well ahead. Due to these reasons , those units existing in the other area is trying to shift to the industrial area. At the same time, food

processing industries found in the industrial area are mainly mechanized and a few of the units are attached to their house and they are mainly labour intensive. In the case of wearing apparel industries, majority of the units exist in the residential and commercial space and very less could be seen in the industrial estates in all the three districts. Many of the units are attached to their houses and depend upon the locally available labour resource.

5.4.3Percentage distribution of selected units based on ownership by gender

Lenders might engage in statistical discrimination by using personal characteristics like gender (Arrow, 1973) and hence, ownership based on gender is also relevant. Gender influences business performance as a result of its close association with decision making , business management, strategy formulation and the functional areas emphasized.(Cartel et.al.(1997), Mukthar (2002),Fielden et.al. (2003))

Table5.8 Percentage distribution of selected units based on ownership by gender

GENDER	FOOD PROCESSING			WEARING APPAREL			FABRICAT ED METAL		
	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
MALE	23 (79.3)	29 (63)	30 (60)	5 (45.5)	9 (45)	17 (43.6)	10 (71.4)	12 (85.7)	42 (89.4)
FEMALE	6 (20.7)	17 (37)	20 (40)	6 (54.5)	11 (55)	22 (56.4)	4 (28.6)	2 (14.3)	5 (10.6)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

The data reveals that there is male and female participation in the food processing industry, engineering industries and wearing apparel industries. In the case of Food processing industries, there is comparatively lesser number of female entrepreneurs than male entrepreneurs. At same time, more number of female entrepreneurs could be seen in Ernakulam district compared to Kozhikode and Thrissur district. In the case of fabricated metal industry, there are very less number of female entrepreneurs and in that case, Kozhikode district dominated in this aspect. Apparently, the female entrepreneurs in these industries played a passive role and the units are actually run by male entrepreneurs. Wearing apparel industry is generally a female oriented industry in the state. It is clear from the table that more than 50 percent of the units are owned by female entrepreneurs. And though there is male ownership, most of

the units are run by female entrepreneurs themselves. This could be seen as a positive aspect which highlights the empowerment and independence among women.

Figure: 5.5 Percentage distribution of selected units based on ownership by gender

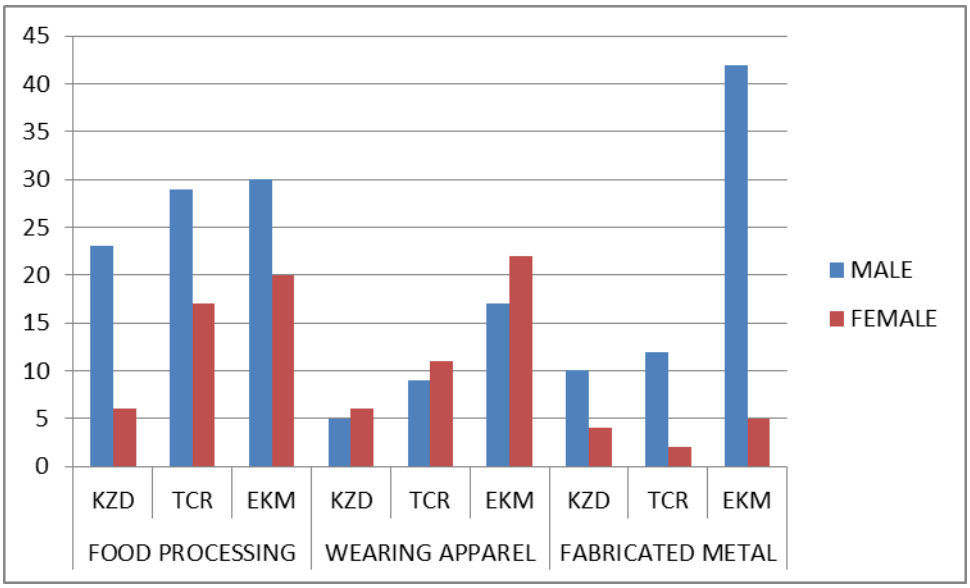


Table 5.9
Percentage distribution of sample units by social category

	FOOD PROCESSING			WEARING APPAREL			FABRICATED METAL		
SOCIAL CATEGORY	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
GENERAL	6 (20.7)	11 (24)	5 (10)	6 (54.5)	6 (30)	10 (26)	6 (43)	2 (14.3)	11 (23.4)
OBC	14 (48.3)	33 (71.7)	33 (66)	5 (45.5)	11 (55)	27 (69)	5 (36)	9 (64.3)	34 (72.3)
SC	9 (31)	2 (4.3)	12 (24)	0 (0)	3 (15)	2 (5)	3 (21)	3 (21.4)	2 (4.3)
ST	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source - Primary Survey

The social category of the entrepreneurs shows that they mainly belong to Other Backward caste (OBC) except in the case of wearing apparel industries in Kozhikode district followed by general category. Though there are policy measures to include and promote SC/ST in the industrial activities of the state, the table reveals that ST population does not participate in the industrial activities of the state ,while the presence of very few SC entrepreneurs could be seen .This should be considered as a

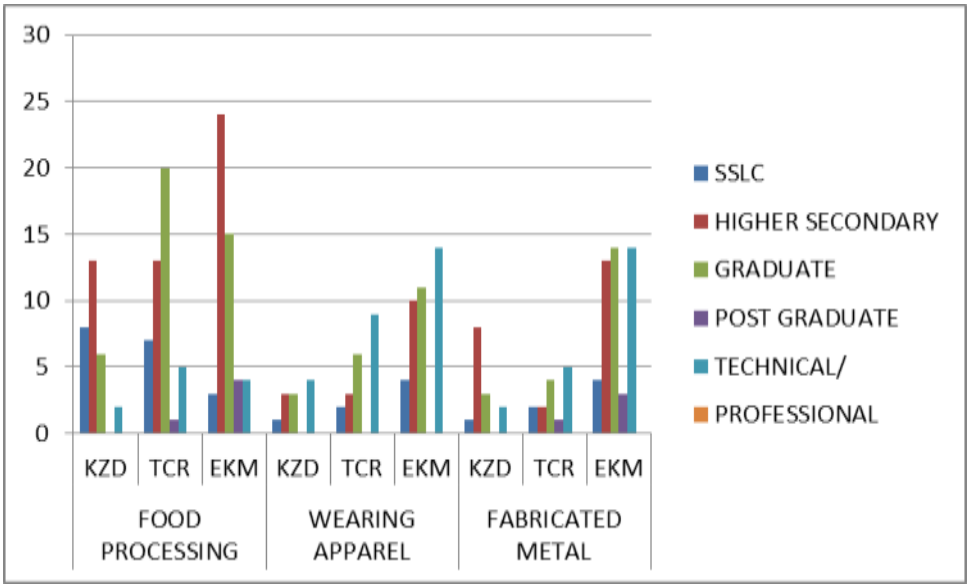
serious setback to the policy initiatives and absence of ST category from the mainstream industrial activities should be taken seriously. There is complete absence of SC population in the case of wearing apparel industry in Kozhikode district compared to other districts.

Table 5.10
Percentage distribution of educational qualification of entrepreneurs

	FOOD PROCESSING			WEARING APPAREL			FABRICATED METAL		
EDUCATION	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**
SSLC	8 (27.6)	7 (15.2)	3 (6)	1 (9.)	2 (10)	4 (10)	1 (7.1)	2 (14)	3 (6.4)
HIGHER SECONDARY	13 (44.8)	13 (28.2)	24 (48)	3 (27.3)	3 (15)	10 (26	8 (57.1)	2 (14)	13 (28)
GRADUATE	6 (20.7)	20 (43.5)	15 (30)	3 (27.3)	6 (30)	11 (28)	3 (21.4)	4 (29)	14 (30)
POST GRADUATE	0 (0)	1 (2)	4 (8)	0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	3 (6.4)
TECHNICAL/ PROFESSIONAL	2 (6.9)	5 (11)	4 (8)	4 (36.4)	9 (45)	14 (36)	2 (14.3)	5 (36)	14 (30)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source - Primary Survey

Figure:5.6 Percentage distribution of educational qualification of entrepreneurs



With respect to the educational qualification of the entrepreneurs, it could be well read from the table that most of the entrepreneurs in the food processing industry are graduates in Thrissur and Ernakulam districts and more number of entrepreneurs are

undergraduates in Kozhikode district. The presence of professionally qualified entrepreneurs especially engineering graduates and diploma holders reveals the success of the policies taken to promote educated youth in starting their own ventures. This is mainly visible in the case of fabricated metal products. In the case of wearing apparel industry, there is a general dominance of women entrepreneurs. This could be seen as a positive aspect which highlights the empowerment and independence among women. This sector is highly competitive and needs to be updated frequently. Many of them have completed courses in fashion designing and other related diploma courses in stitching and are surviving due to their basic skill and experience.

In a district wise analysis, there is complete absence of post graduates in the industrial activities of the Kozhikode district. Ernakulam district dominates in the case of educational qualification of entrepreneurs and all types of qualified people are present in the industrial activities of the district. More number of graduates and technically and professionally qualified entrepreneurs are present in all types of industrial units in the case of Thrissur district.

5.4.4 Percentage distribution of employment in the selected units

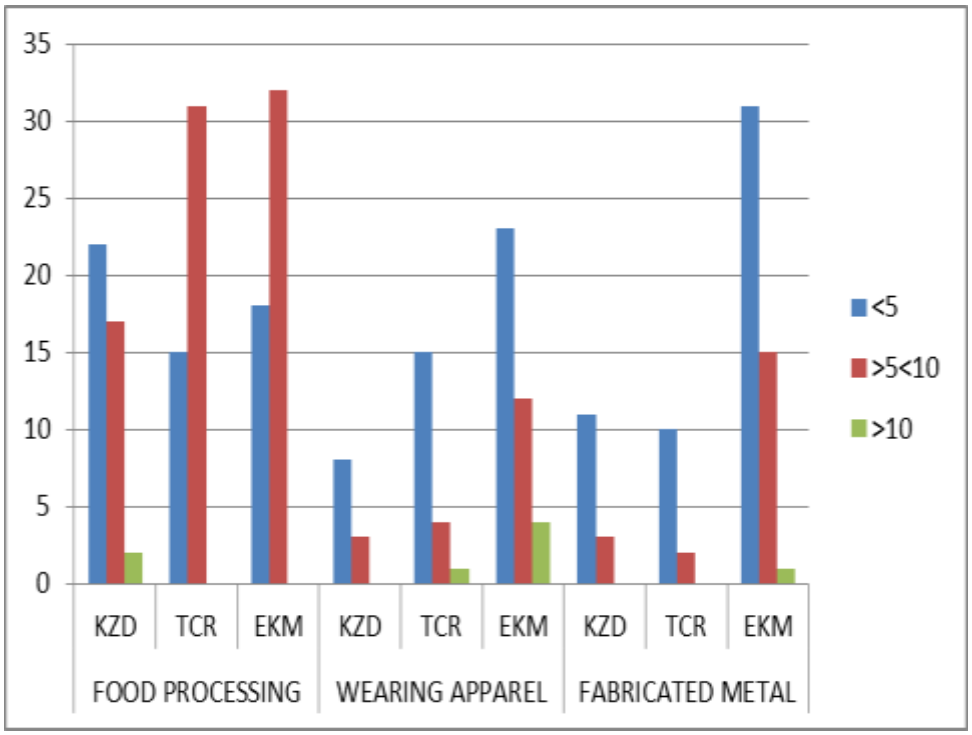
One of the main objectives to promote MSME activities in the country is to reduce the unemployment in the state. In the state of Kerala, Unemployment is the highest, especially educated unemployment. We have already seen that size of the firm is very less and this constrains the employment opportunities provided by these firms.

Table 5.11
Percentage distribution of employment in the selected units

No. of workers	FOOD PROCESSING			WEARING APPAREL			FABRICATED METAL		
	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
<5	22 (76)	15 (32)	18 (36)	8 (73)	15 (75)	23 (59)	11 (79)	10 (71.4)	31 (66)
5-10	5 (17)	31 (6)	32 (64)	3 (27)	4 (20)	12 (31)	3 (21)	2 (21.4)	15 (32)
>10	2 (7)	0 (0)	0 (0)	0 (0)	1 (5)	4 (10)	0 (0)	1 (7.2)	1 (2)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source - Primary Survey

Figure: 5.7 Percentage distribution of employment in the selected units



Majority of the units in all the three category of industries employed less than five labour and there is generally a paucity of skilled labour at a reasonable wage rate. This is actually affecting the employment in the sector. In the case of wearing apparel industry, there is the domination of female workers. Higher wage cost is affecting the profitability of these industries as they are facing tough competition from cheaper products manufactured in other states. However, most of the food processing industries are having more than five workers and thus remains to be a major industrial group in the state. In the case of employment also, Ernakulam district is partially successful in absorbing more number of people into industrial activities followed by Thrissur and Kozhikode district.

Table 5.12
Problems Faced by the Selected Units

	FOOD PROCESSING			WEARING APPAREL			FABRICATED METAL		
	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
SHORTAGE OF DEMAND	4 (13.8)	18 (39)	27 (54)	3 (27.3)	13 (65)	23(59)	4 (28.6)	9 (64.3)	27 (57.4)
LACK OF WORKING CAPITAL	25 (86)	40 (87)	45 (90)	11 (100)	20 (100)	35 (90)	7 (14)	9 (64)	40 (85)
POWER SHORTAGE	3 (10.3)	4 (0.09)	5 (10)	3 (27.3)	1 (5)	15 (38.5)	3 (21.4)	1 (7.1)	5 (10.6)
COST OF CREDIT	26 (90)	46 (100)	40 (80)	11 (100)	15 (75)	31 (80)	11 (78.6)	13 (93)	40 (85.1)
SHORTAGE OF LABOUR	11 (38)	30 (65)	40 (80)	11 (100)	9 (45)	38 (97)	11 (78.6)	9 (64.3)	44 (93.6)
LABOUR DISPUTES	1 (7.1)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5.1)	1 (7.1)	0 (0)	0 (0)
HIGH WAGE COST	24 (83)	42 (91)	38 (76)	8 (73)	18 (90)	28 (71.8)	4 (28.6)	8 (57.1)	38 (81)
MANAGEMENT PROBLEMS	1 (0.03)	0 (0)	0 (0)	1 (9)	3 (15)	0 (0)	1 (7.1)	3 (21.4)	0 (0)
GOVERNMENT POLICY	14 100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)
SEASONAL FACTORS	18 (62)	40 (87)	40 (80)	1 (9)	0 (0)	1 (2.6)	1 (7.1)	0 (0)	1 (2.1)
MARKET FLUCTUATIONS	8 (26)	6 (13)	25 (50)	8 (72.7)	16 (80)	25 (64)	8 (57.1)	6 (42.9)	25 (53.2)

Source - Primary Data

The major factors that affected the food processing industry were stated to be shortage of demand, shortage of labour, (shortage of domestic labour), high wage cost, cost of credit and Government policies like demonetization. Though these units are trying hard to provide good quality products within their capacity, they sometimes find it hard to increase sales in the market. There is shortage of domestic labourers and thus they demand high wage cost. The units are depending upon migrant labourers for their work and the efficiency and skill is comparatively lesser. Most of the entrepreneurs are used to banking habits and they rely on commercial banks for their finance requirements. Thy are mostly bothered about the cost of credit and this is considered to be a major discouraging factor. Another important factor mentioned by every entrepreneur was negative effects of government policies like demonetization and that has affected the working of these units badly.

The major factors that affected the wearing apparel industry are shortage of labour, market fluctuations, government policy, high wage cost, lack of working

capital, and shortage of demand. This industry is facing tough competition with the domestic players as well as cheaper products from other states. The fashion trend keeps on changing especially in the case of ladies wear and this affected the demand for their products. More people are attracted to this sector especially women, as this sector requires less initial investment compared to other manufacturing sectors. At the same time, labourers are available only at a higher wage rate and this is restricting the expansion of the existing facility. Meanwhile, the units from other states are successful in providing their products at a cheaper rate as they are able to produce at a lower cost. The raw materials required for production are purchased from other states and the cost of labour is also high. This results in a hike in cost of production which is reflected in price also. This increases the need for finance and though credit facilities are available, higher interest rate, rigid formalities and procedures are seriously affecting the profitability of these units.

The major problems that affected the fabricated metal industries are shortage of labour, high wage cost, market fluctuations and shortage of demand. The owners of these units prefer to operate in industrial area under District Industries Centres due to availability of power, less disturbance for local people due to noise generated from their operation. As already explained, these industries need skilled labour and shortage of skilled labour and higher wage cost is stated to be affecting their cost of production. Though credit facilities are available for these units, the entrepreneurs stated cost of credit and their procedures and formalities to be complicated. In short, units falling in the three categories of industries selected are facing problems like shortage of labour, shortage of demand, government policies like demonetization, market fluctuations and cost of credit. As our study focus on the financial availability to these industries , we proceed to examine the financial accessibility and problems of bank finance of these industrial units.

5.5 FINANCIAL ACCESSIBILITY

5.5.1 Access to finance

Access to finance through various financial institutions has got great significance not only during the establishment of the firm but also during the working span of an industry .Typically, a firm at the time of its inception requires access to long

term finance and during the course of its lifespan may require working capital for its expansion and growth (Das, 2015). Thus, accessibility to finance is a major factor for running an industry. Moreover, the purpose of finance and its sources may vary at different stages. Here, in this section we examine the purpose of finance and sources of finance of selected units.

5.5.1 Purpose of Finance

An industrial unit need finance at each and every stage of its operation starting from its inception. Finance is required for the purchase of plant and machinery, furniture and other fixed assets, for day-to-day expenses like purchase of raw materials, expansion of the units and also for marketing purposes. Based on the purpose of the financial requirements, types of finance and its source may differ. Generally, on the basis of source of generation, there are internal sources and external sources. Internal sources include retained earnings and external source include specialized financial institutions , commercial banks and capital market.

Table 5.13
Purpose of finance of selected units

	FOOD PROCESSING			**WEARING APPAREL**			**FABRICATED METAL**		
PURPOSE	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**
WORKING CAPITAL	25 (86)	44 (96)	40 (80)	10 (91)	17 (85)	35 (90)	11 (79)	10 (71.4)	36 (76.6)
FIXED CAPITAL	3 (24)	6 (13)	5 (10)	1 (9)	0 (0)	4 (10.3)	1 (7.1)	0 (0)	4 (8.5)
EXPANSION	9 (31)	14 (30.4)	2 (4)	3 (27.3)	8 (40)	13 (33)	5 (35.7)	4 (28.6)	7 (14.9)
MARKETING	0 (0)	5 (10.9)	12 (24)	0 (0)	2	5	0 (0)	0 (0)	0 (0)
OTHER	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
TYPE	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**
INTERNAL ONLY	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
EXTERNAL ONLY	8 (27.6)	4 (8.7)	0 (0)	2 (18.1)	6 (30)	6 (15.4)	2 (14.3)	0 (0)	6 (12.8)
BOTH	21 (72.4)	42 (91.3)	50 (100)	9 (81)	14 (82)	33 (84.6)	12 (85.7)	14 (100)	41 (87.2)

Source - Primary Survey

In the case of food processing industry, purpose of finance included working capital, fixed capital , expansion and marketing purposes in all the districts and for the same ,they used both internal and external sources. In the case of wearing apparel industry and fabricated metal industry, financial requirements were mainly for working capital and expansion purposes. An important issue raised by the entrepreneurs in general related to lack of availability of credit facility for emerging and new entrepreneurs as the financial institutions were reluctant to lend to them .So they had to raise fund for initial and fixed capital purposes on their own retained earnings and sale of assets. In spite of policy measures and directions from RBI, this can be considered as a major discouraging factor for all upcoming entrepreneurs.

5.5.2Sources of finance

As is evident from the previous table, the sample units mainly used external sources for meeting working capital requirements, expansion and marketing purposes. The major sources of finance for these requirements are specialized financial institutions, commercial banks and capital market. In the previous chapter , we have already seen the lack of accessibility of small scale units to capital market and the dominance of commercial banks as their main source of finance . Based on the purpose, the time period of the finance also may differ. The major sources of external finance in the state are commercial banks, Kerala State Industrial Development Corporation, Kerala Financial Corporation.

Table 5.14
percentage distribution of sources of finance of selected units

SOURCE	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
COMM BANKS	28 (96.5)	44 (95.7)	50 (100)	11 (100)	18 (90)	37 (94.9)	12 (85.7)	14 (100)	45 (95.7)
KFC	1 (3.4)	2 (4.3)	0 (0)	0 (0)	2 (10)	2 (5.1)	2 (14.3)	0 (0)	2 (4.3)
KSIDC	4 (13.8)	8 (17.4)	15 (30)	0 (0)	0 (0)	2(5.1)	1 (7.1)	2 (14.3)	10 (21.3)
OTHERS	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source - Primary Survey

It is evident from the table that almost all the units depended on commercial banks for their financial requirements. The selected industries in all the districts depended commercial banks for short term financial requirements and financial institutions like KSIDC and KFC for long term financial requirements. It could be well read from the table that food processing industries and fabricated metal industries depended on these institutions in all the three districts. Most of the entrepreneurs have regular banking habits and maintain good relationship with their banks. All the industrial units have depended on commercial banks for their financial purposes. The main reason for the importance of commercial banks can be attributed to their wide branch network spread over rural and urban areas in the state. Specialised financial institutions like KFC and KSIDC are restricted to major district centres in the state.

It is clear from the table that industrial units in Ernakulam district have easier access to specialized financial institutions where as it is lower in Kozhikode and Thrissur districts. A few food processing industries have availed bank finance and also long term finance from these institutions.

5.5.3Bank Finance

Commercial banks in the state is generally classified into (1) public sector banks which includes State Bank of India and other nationalized banks (2) Private sector banks and (3) private foreign banks. Though foreign banks are present in the state, entrepreneurs have mainly depended on public and private sector banks present in the state.

Table 5.15
Percentage distribution of type of banks depended by MSE units

TYPE OF BANKS	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
PUBLIC SECTOR	14 (48.3)	24 (52.2)	29 (58)	7 (63.6)	8 (40)	18 (46.2)	9 (64.3)	5 (35.7)	24 (51)
PRIVATE SECTOR	15 (51.7)	2 2(47.8)	21 (42)	4 (36.4)	12 (60)	21 (53.8)	5 (35.7)	9 (64.3)	23 (49)
FOREIGN	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source - Primary Survey

The table reveals that public sector and private sector banks in India is dominating the industrial financial sector and none of the units depended on foreign banks for credit requirements. In the case of food processing industry, entrepreneurs mainly depended on public sector banks in Thrissur and Ernakulam district whereas private sector banks dominated in Kozhikode district. In the case of wearing apparel industry, most of the units depended on private sector banks in Thrissur and Ernakulam district and public sector banks in Kozhikode district. In the case of Engineering industries , entrepreneurs in Thrissur and Ernakulam district mainly depended on private sector banks and those in Kozhikode district mainly relied on public sector banks. So it is hard to generalize the dominance of any type of banks , but a few entrepreneurs definitely preferred public sector banks over private sector banks, as it is government owned. Generally, entrepreneurs mainly depended on banks with which they had already banking relationship.

5.5.3.1Type of bank finance

Banks extend loans to firms in many ways like cash credits, overdrafts and term loans. The type of the credit facility availed by the units depends mainly on the purpose for which it is applied for. Cash credit facility is mainly availed by the industrial units for meeting working capital needs on the security of stock of raw materials ,finished or semi finished goods. Overdraft facility is given for current account holders on the security of fixed assets and is mainly used for working capital requirements. Short Term loans are availed to meet temporary capital needs of industrial units.

Table 5.16
Percentage distribution of types of bank finance availed by selected units

TYPE OF LOAN	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**
OVERDRAFT	13 (44.8)	8 (17.4)	4 (8)	3 (27.3)	4 (20)	10 (25.6)	5 (36)	3 (21)	10 (21.3)
CASH CREDIT	10 (34.5)	2 8(60.9)	31 (62)	7 (64)	15 (75)	25 (64)	4 (29)	5 (36)	21 (45)
SHORT TERM	6 (20.7)	10 (21.7)	15 (30)	1 (9)	1 (5)	4 (10.3)	6 (43)	6 (43)	23 49)
TOTAL	29 (100)	46 (100)	50 (100)	11 (100)	20 (100)	39 (100)	14 (100)	14 (100)	47 (100)

Source - Primary Data

It is clear from the table that in the case of food processing and wearing apparel industries, most of the firms availed overdraft facility and cash credit facility for meeting working capital requirements. In the case of fabricated metal industry , short term loan facility was mainly availed from commercial banks.

5.6Problems of bank finance

Bank finance is made available for the small businesses depending upon the viability and profitability of the projects they present before them. In the context of increasing burden of nonperforming assets on commercial banks , they strictly check the viability of the project before sanctioning of different types of credit facilities. Along with the application form and the security, well prepared cash flow statements, income statements and balance sheet of the firm helps the banks to understand the creditworthiness of the firm. In fact, many of the micro and small industrial units does not maintain these records properly and sometimes it is made up statements. Generally, the terms for availing bank finance relates to the security withdrawal facility and repayment.

Table 5.17
Problems of bank finance related to formalities

FORMALITIES	**FOOD PROCESSING**			**WEARING APPAREL**			**FABRICATED METAL**		
	KZD	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**	**KZD**	**TCR**	**EKM**
RIGID	29 (10.6)	44 (96)	49 (98)	11 (100)	19 (95)	39(100)	13 (92.8)	14 (100)	45 (96)
FLEXIBLE	0 (0)	2 (4)	1 (2)	0 (0)	1 (5)	0(0)	1 (7.2)	0 (0)	2 (4.3)
APPROACHABLE	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
YES	28 (97)	4 (93.5)	40 (80)	10 (91)	16 (80)	37(95)	12 (86)	14 (100)	44 (94)
NO	1(3)	3 (6.5)	10 (20)	1 (9.1)	4 (20)	2(5.1)	2 (14.3)	0 (0)	3 (6)
TERMS	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
FAVOURABLE	12 (41.4)	21 (45.7)	30 (60)	8 (73)	15 (75)	35(90)	11 (78.6)	12 (85.7)	44 (94)
UNFAVOURABLE	17 (58.6)	25 (54.3)	20 (40)	4 (27)	5 (25)	4 (10)	3 (21.4)	2 (14.3)	3 (6)

Source - Primary Survey

Almost all the entrepreneurs maintained good banking habits and more than 80 percent of them in the food processing industries, wearing apparel industry and engineering industries accepted the approachability of these banks in all the districts. The major hindering factor for availing credit facility were the formalities required for the same. Many of these units did not maintain a proper financial statement and fail to convince the bank with a viable project proposal. The new entrepreneurs considered this as a major discouraging factor for availing bank loan.

5.6.1Cost of credit and Timely credit

An important factor that affected the functioning of small and micro units are stated to be cost of credit and timely availability of credit. The interest rate for industrial activities depends on the nature of production, annual turnover and the time period. Generally , the interest rate charged for any type of banks finance are stated to be greater than 12 percent and this is a major setback to the efforts to attract more people with innovative projects into the industrial activities.

Table 5.18
problems of bank finance related to rate of interest and sanctioning time

	FOOD PROCESSING			WEARING APPAREL			FABRICATED METAL		
INTEREST RATE	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
HIGH	12 (41)	33 (72)	40 (80)	4 (36.4)	8 (40)	29 (74.4)	6 (42.9)	8 (57.1)	33 (70.2)
MODERATE	17 (59)	13 (28)	10 (20)	7(63.6)	12 (60)	10 (25.6)	8 (57.1)	6 (42.9)	14 (30)
LOW	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
TIME TAKEN	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
< 1 MONTH	3 (10.3)	1 (3)	2 (4)	1 (9)	2 (10)	1 (2.6)	2 (14.3)	1 (7.1)	1 (2.1)
1-2 MONTHS	12 (41.4)	23 (50)	30 (60)	3 (27.3)	6 (30)	10	5(35.7)	7(50)	23 (49)
2-3 MONTHS	14 (48.3)	16 (34.8)	11 (22)	6 (54.5)	10 (50)	14 (35.8)	7 (50)	6 (43)	17 (36.1)
3-4 MONTHS	0 (0)	6 (13)	7 (14)	0 (0)	0 (0)	6 (15.4)	0 (0)	0 (0)	6 (12.8)
>4 MONTHS	0 (0)	0 (0)	0 (0)	0 (0)	2 (10)	8 (20.5)	0 (0)	0 (0)	0 (0)

Source - Primary Survey

The interest rate charged by banks are considered to be high especially for young and budding entrepreneurs and they suggested interest rate around 9 percent as reasonable. The sanctioning time sometimes is too long and the major problem found is that branch manager does not have discretionary and decision making power in this matter. Most often, the sanctioning authority or higher authority does not have local contacts and this end up in time consuming and cumbersome procedures.

Table 5.19
Limitations of bank finance

AWARENESS PROGRAMME	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
YES	4 (14)	8 (17)	7 (9)	4 (36)	2 (10)	6 (15)	4 (29)	2 (14)	7 (15)
NO	25 (86)	38 (83)	43 (91)	7 (64)	18 (90)	33 (85)	10 (71)	12 (86)	40 (85)
REPAYMENT PROCEDURE	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
RIGID	27 (93)	46 (100)	47 (94)	11 (100)	18 (90)	38 (97.4)	13 (92.9)	12 (86)	43 (91)
FLEXIBLE	2 (7.1)	0 (0))	3 (6)	0 (0)	2 (10)	1 (2.6)	1 (7.1)	2 (14)	4 (9)
PROPER MONITORING	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
YES	8 (35.7)	24 (52)	16 (32)	5 (46)	3 (15)	10 (25.6)	5 (35.7)	4 (28.6)	13 (27.7)
NO	21 (64.3)	22 (48)	34 (68)	6 (54)	17 (85)	29 (74.4)	9 (64.3)	10 (71.4)	34 (72.3)

Source - Primary Survey

Inorder to encourage and attract new entrepreneurial skill in the state, many schemes have been initiated by government and Reserve bank of India. As is visible from the table , majority of these entrepreneurs are unaware about the schemes available for them and they generally used overdraft facility and cash credit facility for their financial requirements. In the absence of proper monitoring from the part of the banks , the owners of these units especially those who are not qualified and are new in this field find it really a discouraging factor. The growing Non Performing Assets of the banks can be reduced if this is well taken care of. Moreover, it is already said that creditworthiness of the project and the repayment capacity are an important factor that decides the flow of credit to these units. Hence, it is important to look into the liquidity

position of these units and for the purpose, we try to bring out the short term liquidity position of the selected units using tools like current and quick ratio.

5.7 FINANCIAL PERFORMANCE

In order to analyse the performance of these units , especially the liquidity position and resource utilization of the units, the tools like current ratio and quick ratio has been used. These ratios help us to understand the short term liquidity position of the units. The ability of the firm to meet the short term obligations actually shows the financial stability and proper utilization of the resources.

Current ratio

The short term financial stability of a firm is ensured if it can meet its short term liabilities successfully. Current ratio measures the liquidity of the company in the short term.

$$Current\ ratio = \frac{Current\ assets\ \&\ loans\ and\ advances}{Current\ liabilities\ and\ provision}$$

Current assets are the assets which can be converted into cash within one year. Current liabilities and provisions are those liabilities that are repayable within a year. Generally, a high current ratio is considered to be a sign of financial strength. Bankers have used a norm of 1.33 in working capital financing (Prassanna Chandra).

Quick ratio

The quick ratio is used a measure of the firm's ability to meet current obligations . This measure tries to analyse short term liquidity by considering the efficiency of current assets less inventories to meet current liabilities.

$$Current\ ratio = \frac{Current\ assets\ and\ loans\ and\ advances\ less\ inventories}{current\ liabilities\ less\ bank\ credit}$$

Turnover ratios

Turnover ratios measure the efficiency of the firm in its resource utilization. In the present study, working capital and fixed asset turnover ratio is used .

Working capital turnover ratio

In manufacturing industries, a large amount is invested as working capital. The key feature of working capital is its ability to be converted into cash quickly, generally one year. Working capital is defined as the excess of current assets over current liabilities. The speed of conversion of working capital determines the firm's ability to generate sales because the firm needs working capital to create additional sales. A slow rate of conversion of working capital will adversely affect the additional sales generating capacity, leading to lower levels of capacity utilization by the firm. Working capital turnover ratio is an indicator of the firms' ability to utilize working capital to generate additional sales. The ratio is expressed as

Working capital turnover ratio = Sales / working capital

Fixed Assets Turnover Ratio

Fixed assets turnover ratio determines the utilization of funds invested in fixed assets.

Fixed assets turnover ratio = sales/Average Fixed assets

Table: 5.20
Industry Wise Analysis of Financial Performance Of MSE

	FOOD PROCESSING			WEARING APPAREL			FABRICATED METAL		
	KZD	TCR	EKM	KZD	TCR	EKM	KZD	TCR	EKM
Current ratio	2.56	2.1	3	2.5	2.3	3.22	1.5	1.6	2.1
Quick ratio	0.94	0.81	0.8	0.84	0.32	0.91	0.75	0.42	0.85
Working capital turnover ratio	3.5	3.2	4	3.8	3.7	4.5	3.2	3.4	3.8
Fixed asset turnover ratio	2.8	2.3	4.2	2.6	2.8	4.1	2.5	2.3	2.8

Source - Primary Survey

It is evident from the table that the average current ratio of industries selected is varying among the districts. The table reveals that current ratio is lower among the fabricated metal industries compared to other industrial units, whereas current ratio of food processing units and wearing apparel units is almost similar. It could be inferred from the table that these units maintain a better liquidity level based on a better stock of inventory or receivables or cash balance. Quick ratio which serves as a supplement to current ratio will bring out a correct picture of short term liquidity position of the units selected. The ideal quick ratio is 1:1 and as clear from the table it is below the ideal level in all the units selected. It is necessary that sufficient level of inventories help to secure bank loans, at the same time other current assets also should be sufficient to meet current liabilities. The lower levels of quick ratio depicts the inability of these units to meet the current obligations on time and also a higher current ratio is attributable to higher levels of inventory buildup in the selected units.

CONCLUSION

The small scale industries in Kerala has a crucial role to play in the industrial development of the state from time immemorial. Later in 1930's, the importance was shifted from small scale to large scale and basic industries and this did affect the smooth functioning of these industries. This trend continued even after Independence under the planning regime. The planning process emphasized the role of public sector in preparing a strong industrial base at the national and state level. The importance of small scale industries were revived in 1970's bringing new hopes and better prospects for the sector. The implementation of MSMED Act in 2006 could be considered as a step forward in this direction. The micro, small and medium enterprises under the guidance of District Industries Centre are playing a major role in the industrial development of the state. The primary survey reveals that in the selected districts, majority of the units are micro units employing less than five workers and having an investment less than 25 lakhs. This throws light on the small size of the firms and their inability to enjoy the economies of scale of production. Majority of the units are run by male entrepreneurs from general and OBC category and this is a setback to policy measures to include women and SC/ST category to the mainstream. This should be taken seriously by the authorities. Apparently, it is noteworthy that many educated

especially technically qualified (engineering graduates) are coming forward in all the industries .This will reduce the educated unemployment existing in the state.

As regards to the problems faced by the firms, the major ones to be quoted are shortage of demand, labour shortage and consequent higher wage cost, cost of credit , government policies like demonetization and market fluctuations. There is tough competition among firms demanding better quality products at a reasonable rate. Shortage of labour and consequent higher wage cost and higher cost credit together is affecting the profitability of these firms. As a result, it could be observed that large number of units have either turned sick or shut down. This is a serious issue and attracts attention of the policy makers. Cost of credit and procedural difficulties mainly for new entrepreneurs hinder the smooth functioning of these enterprises as most of them relied on commercial banks other than internal sources for their financial needs.

In fact, the above study brings out the real position of the small scale units in the districts with regard to size, ownership pattern, location of industries, and employment pattern. Along with the nature of the units in the selected industries, it is also worth noting that the financial position of these units is not that strong which is also related to financial accessibility. At the same time, the study also throws light on the weaknesses existing in the bank finance system in the state, which needs to be brought into the attention of the authorities. Along with the framing of policy measures, there are factors that are to be taken care of at the implementation level. Beyond these limitations on both sides, it is clear that small scale industries depend highly on bank finance for their financial requirement at various stages amongst different financial institutions existing for the purpose.

CHAPTER VI

LONG RUN RELATIONSHIP BETWEEN BANK FINANCE AND INDUSTRIAL PERFORMANCE OF KERALA

6.1Introduction

The importance of small scale industries is made clear from the statement " In the case of Kerala, where the record of industrial growth has been relatively poor, the private investment in the large scale industrial sector has been low and the prospects of attracting national capital in competition with other states is less promising, but the scope for tapping some types of latent resources – skill and material – through the development of small industry is apparently large."(Subramanian and Pillai,1994).As per the report of fourth All India Census of Micro Small and medium enterprises(2006-07),9.6 percent of the total working enterprises in India function in Kerala and has got fourth position among the states. The state accounts for 6.62percent of the total employment generated and 3.25 percent of the total investment in plant and machinery.

In our analysis, we have examined the growth of small scale industries in terms of number of units , investment, employment and level of output. In our study period from 1991-2001, small scale industries recorded an average growth rate of 8.9 percent in the case of number of units,21.2 percent in the case of investment,22.3 percent in the case of value of output and 4.4 percent in the case of employment level. On the contrary, the period from 2001- 2007,these industries recorded a negative growth rate in all these parameters except in the years 2004-05 and 2005-06. Kerala found its place in the top five states having maximum number of sick units and in the matter of incipient sickness in all the Census Reports of small scale industries. Deteriorating fiscal situation, population density, acute scarcity of land, inadequate power supply, labour disputes were stated to create hindrances in the smooth functioning of industrial sector in general. Most of the studies we have discussed in the literature review focused on these issues. Meanwhile, one of the major problems that affected these industries were stated to be lack of working capital. The financial requirements remain to be a prominent factor in the successful running of a manufacturing unit. We have already seen that in India we follow a bank based system. Reserve Bank of India have been very keen to ensure credit flow to these industries at every stage by framing policies from time to time. The policy measures of RBI along with the restructuring of small scale industries into Micro Small and Medium Enterprises in 2006 has helped in

reviving the performance of these units. In this section we would analyse the cointegration of bank finance and the performance of small scale or MSE units in the context of importance of finance.

Industrial finance in India can be explained as efforts in the direction of channelizing financial resources in achieving target of balanced industrial growth in the country. The industrial finance system in India followed the British finance system immediately after independence. Later, understanding the nature and the needs of the industries in the country, industrial policy and plan strategies were framed and accordingly the financial needs also were considered.

In the industrialization process of India, Government has taken numerous measures to ensure flow of finance to industries. Based on the roots of European banking system , commercial banks have been laid with the role of providing short term credit to industries in India. A wide network of Development financial institutions were set up to meet the long term credit of the firms. Due to inadequacy of support from RBI and Government , these institutions failed to meet the expectation. All these factors have been considered as major setback to the planned industrialization of the country and has been criticized widely. Lack of credit faced by these enterprises were considered to be a major flaw in a state where financial development and financial literacy is better compared to many other states.

Kerala has a long history of development of banking and finance as it was evolved in tune with the development of the state as a major trading centre, even before India's Independence(Oommen,1993).Among the provinces and states of the Indian union at independence, Travancore and Cochin topped the list in the range of area and population served by an office of a commercial bank.(Muranjan,1952).The concept of extending financial support to farmers and common people through commercial banks became popular in the country only with the advent of planning process, while this system already existed in the state. All these features of commercial banking in Kerala highlight its importance in the economy. In the light of theoretical and empirical evidence provided above, it is likely to understand the industrial development of the state and the role played by commercial banks in facilitating the same. Commercial

banks being an integral part of the economy, undoubtedly they also remain as the major source of finance for industries. The industrialization process of the state mainly based on the small scale industries has not been smooth and were adversely affected by many factors. It is evident from the history of economic development of developed countries that commercial banks and Government has played a major role. In fact in the country also, Government have been trying to take every possible measure to facilitate the industrialization process by framing industrial policies from time to time. This effort has been strongly supported by Reserve Bank of India by ensuring credit flow to these industries via commercial banks. Various measures have been initiated by RBI in ensuring credit flow to small scale industries and that could be understood when small scale industries were included in priority sector. Hence we shall test the long run and short relationship between the bank finance and the performance of small scale industries in the state.

6.2COINTEGRATION BETWEEN BANK FINANCE AND PERFORMANCE OF SMALL SCALE INDUSTRIES

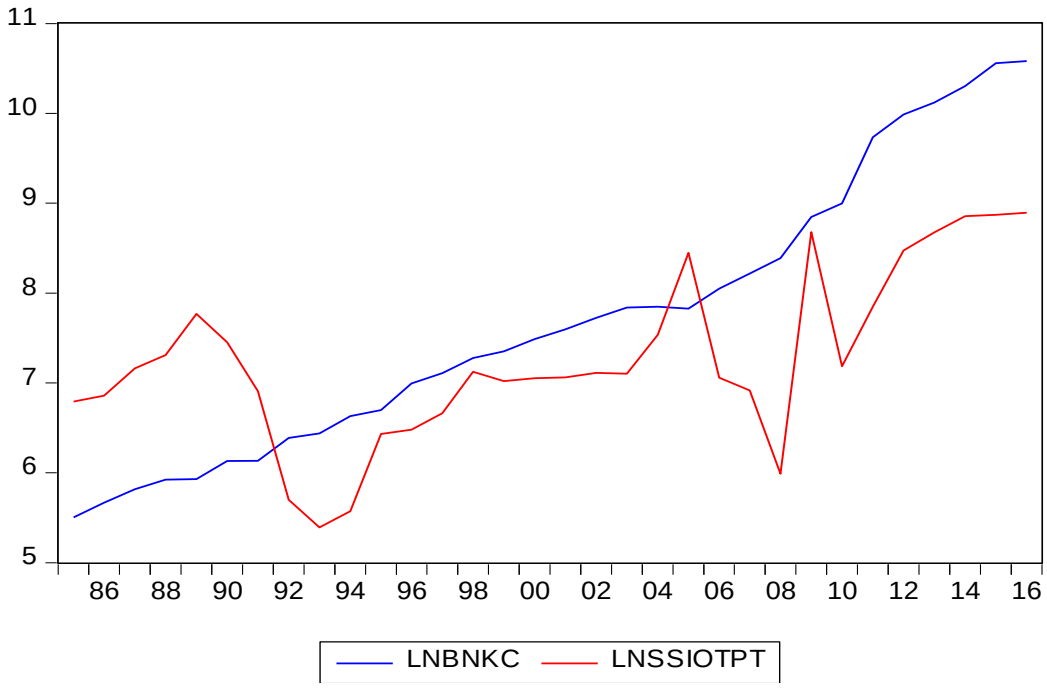
An efficient financial market can promote economic efficiency by creating and expanding liquidity, mobilizing and allocating savings, accelerating investment, diversification and management of risk, enhancing capital accumulation and ultimately promoting competent entrepreneurs in the modern economy (Biswas,2014).There are plethora of studies that has tried to bring out the causality between financial development and economic growth that we have already quoted in the review of literature. Indeed, there are mainly two postulates related to causality – one being the demand leading hypothesis and the other being supply leading hypothesis. The demand leading hypothesis postulates a causal relationship from real economy sector to financial sector(Goldsmith, 1969; Levine, 2005; Demirgüç- Kunt and Levine, 2008). When the real sector of the economy develops, there will be greater demand for financial products and services, thus promoting the creation of modern financial institutions, financial assets and liabilities and related financial services. This also depends upon the growth rate of real output and the commercialization and monetization of different sectors of the economy. Thus with the expansion of various sectors, there will be increasing demand for financial services as they are incapable of

financing out of internal sources or so retained profit. This results in the development of financial markets.

Under the supply leading hypothesis, the causality runs form financial sector development to economic growth. The already developed financial markets can attract and mobilise savings in such a way as to accelerate investment in the different sectors of the economy. This augments economic growth. Moreover, the supply leading financial sector is a necessary condition for accelerating self-sustained economic growth(McKinnon, 1973; King and Levine, 1993; Levine et al. 2000). Even though there is difference of opinion about the role of finance in the development process of an economy, finance underpins indeed all economic transactions in modern economies. We can also see an interaction of supply leading and demand leading phenomena. (Greenwood and Smith, 1997). In fact, in the initial stages of economic growth based on industrialization ,supply leading financial factors may induce investment process, as the country attains a certain stage of growth, supply leading impetus becomes less important and the demand following financial response becomes dominant (Partrick,1966).

While examining the importance of financial market in India, the research has focused mainly on the role of commercial banks, Development Finance Institutions, and the capital market. In the case of Kerala, we have already seen that amongst various financial institutions, commercial banks are playing a lead role. Gerschenkron (1962) put the role of the banking sector into the context of what he called "economic backwardness". We rather discuss the role of commercial banks in the backdrop of ‘industrial backwardness’ of Kerala in terms of credit flow to small scale industries. In our context of small scale industries and their financial requirements, bank finance has remained as a major source of finance. In this chapter, we shall try to bring out the long term relationship between bank finance and the performance of small scale industries.

Figure 6.1 Trend of Bank finance and output level of small scale industries



When we check the growth of bank credit to small scale industries, it clearly indicates a steady and positive growth rate .On the other hand, the value of output has a non linear trend affected by many events in the economy. In order to confirm the non linear characteristics of the output of the small scale industries, we shall detect the major structural changes that has affected the performance of small scale industries. Many events in the economy would directly and indirectly affect major sectors of the economy and it would be appropriate to consider the changes and its impact before setting the model. Hence, we conduct Bai-Perron multiple break point test to find out the major break points in the time period.

The presence of multiple breaks in the trend function of many economic time series has been discussed in the studies of Burdekin (1995), Cooper(1995), Gercia and Perron (1996) and many others. The major issues that may arise in the presence of multiple breaks include the determination of the number of breaks, estimation of the break points given the number, and statistical analysis of the resulting estimators. Bai and Perron(1994) has developed an approach in which these issues are addressed. The major results of Bai and Perron (1994) assume simultaneous estimation, which estimates all of the breaks at the same time. Macroeconomic time series can contain

more than one structural break. To that effect, Bai and Perron (1998) provide a comprehensive analysis of several issues in the context of multiple structural change models and develop some tests which preclude the presence of trending regressors.

Table -6.1
Multiple Break Point test

Break test	F-statistic	Critical value**	Break points
0 vs 1*	12.36849	24.73698	
1 vs 2*	6.933722	13.86744	1992 2006
2 vs 3	2.337797	4.675594	

** Bai and Perron critical value

The test conducted on the performance of industries reveal that there are mainly two break points ,i.e. 1992 and 2006.In India , small scale industries are defined on the basis of their investment limit in plant and machinery. Though it has been modified several times, major changes happened in this front in the year 1991 and 2006 which had a long run impact. This modification along with the industrial policy reforms of 1991 cast its impact in 1992 also. Similarly, the restructuring of small scale industries in 2006 as Micro small and Medium Enterprises also considered as a major change in the history of small scale industries .These major changes resulted in asymmetry in the growth of these industries .

The Indian economy in general witnessed a difficult situation during 1991-92 with low foreign exchange reserves resulting in mounting external payments, increasing budgetary deficit, rising interest burden on internal and external debt and a high rate of inflation. (Economic review,1992). There was also a sharp increase in price of fuels and lubricants(due to gulf war) and primary goods .Consequently, all the sectors of the economy were adversely affected. All major industries recorded a lower growth rate and the index of industrial production was marked at a lower rate of 2.3 percent in the year. In this difficult situation, Kerala had to face problems of high non-plan revenue deficit, negligible returns from investments, low levels of plan

investment, low growth rate in commodity producing sectors, low per capita income, high levels of unemployment especially educated unemployment. Amidst these difficulties, the industrial sector especially small scale sector suffered with low levels of output, investment and employment. As we have taken value of output as our performance variable, it marked a negative growth rate of 26.5 percent in 1991-92 . With the implementation of the Liberalisation, Privatisation and Globalisation policies as a part of Economic Reforms of 1991, there has been significant change in the investment climate and there was 14.7 percent growth in the investment level. The value of output also showed a growth rate of 136.2 percent. Small scale industries, thus could perform well immediately after the implementation of reforms.

Though the general industrial sector gained substantially after the reforms in the country, the industrial sector in the state could not replicate the same here. There was also a decline in the growth rate in the industrial sector .An important aspect of Kerala economy is its 'remittance-inflow-nature'. This had resulted in a boom in the construction sector. This had indirectly affected the growth of small scale industries in the state, with more people getting attracted to the construction sector for better profits. This has adversely affected the growth of small scale industries in the state. In the financial front, with the increasing deposit mobilization and credit deposit ratio being low compared to the national level was also adversely affecting the growth of small scale industries in the state. Reserve Bank of India has been keen to resolve the issue by setting standards to lend to these industries. Hence, there has been a declining trend in the growth of small scale industries in the state. Government along with all policy packages for developing industrial estates and supporting industrial clusters, also tried to attract investment in the state. Global Investors Meet (2003) was one of its kind. In spite of all these efforts, the state could fetch only 1.26 percent of the total FDI approved in India in 184 projects in December 2005(Economic Review, 2006). Kerala was also ranked among the top five states in this matter.

A major structural change that happened in the case of small scale industries, was the implementation of MSMED Act,2006. As we have already seen, the sector was clearly defined on the basis of investment in plant and machinery and were classified into Micro, Small and Medium Enterprises. Preference Policy measures, development

of industrial estates, development plots and promotion of industrial clusters came as positive measures to revive the sector. In short, when we analyse the performance of small scale sector in terms of output level, it has been affected by many factors which led to nonlinear trend. When the data is nonlinear, tests for linear cointegration are misspecified and tend to reject the existence of cointegration (Zhou, 2010).In the presence of nonlinear growth of the output level of small scale industries, we adopt the Non-Linear Autoregressive Distributed Lag model to test the cointegration between bank finance and industrial output.

6.3Non Linear Autoregressive Distributed Lag Model

The importance of finance for industrial growth and their linkage has been studied using various standard time series techniques like cointegration, Error correction method and Granger causality as discussed in the review of literature. These methods have been applied to bring out the long run and short run interactions, under the assumption of symmetric relation between finance and growth. Thus, they could not consider the potential asymmetries arising out of market imperfections, government policy changes etc.. In order to test the presence of asymmetry in the long run relationship between the variables, the Non Linear Autoregressive Distributed Lag Model (NARDL) can be used. This is an asymmetric extension of the linear Autoregressive Distributed Lag Cointegration model explained by Pesaran et.al. (2001).It is possible that negative and positive variations of the explanatory variables have different effect on the dependent variable and this is not considered properly in the ARDL approach. The NARDL approach helps to detect the asymmetric effects of independent variable on dependent variable. It is also possible to test cointegration in a single equation framework. The major advantages of NARDL model are flexibility regarding the order of integration of the variables involved, the possibility of testing for hidden cointegration, avoiding to omit any relationship which is not visible in a conventional linear setting and a better performance in small samples (Rocher, 2017).

6.3.1Method

Following steps are involved in Non Linear Autoregressive Distributed Lag cointegration model approach. As a first step, we have to conduct unit root test for

establishing the variables' order of integration and to confirm the absence of I(2) variable. The computed F-statistic for testing cointegration will be invalid with the presence of I(2) variable. In the second step, we adopt general to specific procedure to arrive at the final specification of the NARDL model by trimming insignificant lags in a standard OLS estimation. In the third step, based on NARDL estimation, Bound testing approach of Pesaran et.al. (2001) and Shin et.al. (2011) is applied for testing the presence of cointegration. This involves the Wald F-test of the null hypothesis c(2)=c(3)=c(4)=0. Finally in the presence of cointegration, long run and short run asymmetries in the relation between value of output of small scale industries and bank credit flow is examined to draw inferences. The asymmetric dynamic multiplier effects of a one percent change in $bnkc^{+}_{t-1}$ and $bnkc^{-}_{t-1}$ is also derived.

We employ the annual data of value of output of small scale industries and flow of bank credit to these industries from 1985-2016. The model has the following form:

$$Ssiotpt_t = C + bnkc_t + U_t$$

Where ssiotpt indicates value of output of small scale industries (dependent variable) and bnkc is the bank credit flow to small scale industries(independent variable).While analyzing the industrial performance of Kerala, we had considered both factory sector and small scale sector. In the case of state of Kerala, there is the dominance of small scale industries in terms of units, employment and output. So in this analysis, we focus on the small scale industries, their financial requirements mainly included working capital needs which is mainly met by commercial banks. Bank credit to micro and small industries are taken in lieu of bank finance. As such, we try to bring out the linkage between the performance of small scale industries and flow of bank credit to these industries under the assumption of non linear relationship. As a first step, we conduct Augmented Dickey Fuller Test to establish variables' order of integration. Though NARDL method can be applied without considering variables' order of integration as I(0) or (1) ,Unit root test is conducted to confirm that there is no I(2) variable is involved. The presence of I(2) variable may affect the computed F-statistic for testing cointegration and thus, renders it invalid. For the purpose, Augmented Dickey Fuller test has been conducted and the variables are found to be non stationary

at level and stationary at their first differences. Table –I shows the result of Augmented Dickey Fuller Test.

Table-6.2
Result of Unit Root Test (ADF)

	Level		First difference	
Variable	t-statistic	p-value	t-statistic	p-value
Lnssiotpt	-3.011482	0.1453	-7.674142	0.0000
Lnbnkc	-1.001798	0.9292	-5.571296	0.0004

The table reveals that the variables are stationary at their first difference and there is absence of I(2).Now we will run the stepwise least squares after including the positive and negative values of the dependent and independent variables and their differences. We will find the unidirectional relationship between these variables at ten percent level.

We estimate the equation using the standard OLS estimation method and final specification of NARDL model is estimated by trimming insignificant lags, general to specific procedure. The variables are expressed in natural logarithm. We proceed to conduct the non linear error correction under NARDL through two step least square method.

$$Ssiotpt = \alpha_0 + \alpha_1\, bnkc_t^{+} + \alpha_2\, bnkc_t^{-} + e_t$$

Where,

Ssiotpt = value of output of small scale industries

$\alpha_0, \alpha_1, \alpha_2$ = cointegrating vector of long run parametres

Bnkc = bank credit to small scale industries

$Bnkc^{+}_t$ = partial sum of positive changes

$Bnkc^{-}_t$ = partial sum of negative changes

e_t = Error

Table -6.3
Result of Non Linear Auto Regressive Distributed Lag model

	Variable	Co-efficient	t-statistic	p-value
Long run	C	2.680139	3.692395	0.0015
	Lnssiotpt(-1)	-0.530660	0.114285	0.0002
	Lnbnkc_p(-1)	0.537546	4.824694	0.0001
	Lnbnkc_n(-1)	41.93428	3.146007	0.0053
Short run	dlnbnkc_n(-4)	-111.9708	-5.344400	0.0000
	dlnssiotpt(-2)	0.225196	2.565156	0.0189
	dlnbnkc_n	-41.19375	-2.223905	0.0385
	Dlnbnkc_p(-3)	0.892319	1.650129	0.1154

R^2 – 0.857426 adjusted R^2 – 0.804899

From the estimated results, the long run and short run equation may be computed. The long coefficients of bank credit are positive and significant at one percent level. The increase in bank credit will definitely result in higher level of output. On the other hand, the most important point to be noted is that a decrease in bank credit will lead to decrease in the level of output of small scale industries. The asymmetric relationship between bank credit and performance of small scale industries in terms of output may be explained in such a way that the positive changes in the bank credit does not have the same impact as that of negative changes. Moreover, it implies that small scale industries' performance varies according to the positive and negative changes in the availability of bank credit. In fact, the credit flow to small scale industries have shown an increasing trend by provision of priority sector advances. Here, we also consider the possible impact of negative changes of bank credit also.

$$\Delta ssiotpt_t = c + pssiot_{t-1} + \theta^{+} bnkc^{+}_{t-1} + \theta^{-} bnkc^{-}_{t-1} + \sum_{t=1}^{p-1} \emptyset i \Delta ssiot_{t-1} + \sum_{t=0}^{q} \pi^{+}_{t-i} + \sum_{t=0}^{q} \pi^{-}_{t-1} \Delta bnkc^{-}_{t-i} + U_t$$

In the long run, a positive change in the bank credit to small scale industries have a positive and significant effect on the level of output. This indicate that credit flow to small scale industries ensures better performance of these industries in terms of level of output. This can be very well understood from the data showing a positive growth rate in the output level. By contrast, a negative change in the bank credit also shows a positive growth rate in the performance of small scale industries . This may be due to short term nature of the bank credit and that these industries may be depending upon other sources like KSIDC , KFC for their long term financial requirements. We have already seen that in India, commercial banks mainly cater to the short term financial requirements mainly working capital requirements of the industrial sector.

This shows that one percent increase in bank credit flow leads to 1.013 percent increase in ssi output (positive relation) and one percent decrease in bank credit leads to 79.02 percent in SSI output(negative relation). So performance of small scale industries respond more to negative change because the coefficient is large. We have already seen in the previous chapter that there has been steady and positive growth rate in the flow of bank credit to small scale industries by including them in priority sector advances. This shows that the small scale industries are well supported by the banking system in the state, amidst all the limitations pointed out in the primary survey with regard to procedural difficulties, formalities, rate of interest and the increasing concern of banks related to increasing nonperforming assets.

In the short run, while positive changes does not seem to be significant, the negative changes are significant with a negative sign. This implies that when there is a reduction in the flow of bank credit to small scale industries, it would rather result in the considerable reduction in the output level of small scale industries. This shows the importance of financial support provided by the commercial banks in the state, if withdrawn may affect the performance of small scale industries considerably.

For testing cointegration under NARDL ,Shin et.al recommended to use joint null hypothesis of level(non-differenced) variables and to compare the critical values of bound testing in Pesran et .al.(2001).If the calculated F-statistics is found to be greater than the upper critical value then, there is evidence of cointegration and if not, then evidence of cointegration is not found.

Table -6.4
Wald test for asymmetric cointegration

t-statistic	Value	p-value
F-statistic	13.11965	0.0001
Chi-square	39.35895	0.0000

The Wald test shows the significance of asymmetry for performance of small scale industries and bank credit which means that non linearity and asymmetry is relevant and important while studying the relationship between the performance of small scale industries and bank credit. Here, k=1, as there is only one independent variable in the long run equation. The calculated F-statistics (13.11percent) is larger than the critical value 7.84 at one percent significance level and hence there is strong evidence of cointegration.

6.4CONCLUSION

In short, the asymmetric relation between value of output and bank finance has been examined in this chapter. The performances of small scale industries are highly significant for the industrial development of the country. In the case of Kerala, small scale industries have been an integral part of the economy and also been considered so especially as a solution to the unemployment problem existing in the state. The discussion on industrial back ground of the state also throws light on the flourishing stage of the small scale and traditional industries in the state. After the formation of the state, the sector could not sustain its growth rate which brought the state into a stage of industrial backwardness and was rated among the top five states in the case of industrial sickness. In this context we tried to analyse the performance of small scale industries in relation to the availability of bank credit in the state. The importance of finance for running an industry is accepted all over .How far the small scale industries

are influenced by bank finance in the state has not been tested before. The flow of bank credit to small scale industries and its inadequacy has been discussed on the basis of lower credit deposit ratio existing in the state compared to other states and all India level, while commercial banks in Kerala are well appreciated for their higher mobilization of deposits. A detailed analysis of the credit structure of the banks have revealed that banks prefer to lend to personal loans as they are safer and less prone to be non performing assets. The case of small scale industries, being included in the priority sector advances and fixing a minimum target in this case ,to a great extent, has ensured better deployment of credit to these industries. Meanwhile, the inability of larger number of entrepreneurs in implementing their project in a profitable way has affected the credibility of the new entrepreneurs or may be new projects adversely.

The influence of financial intermediaries on industrial growth has been discussed in many studies and forums. Here in this chapter, we have tried to understand the influence of bank finance in the performance of small scale industries in Kerala. The analysis proved the existence of long run relationship between the two. As a part of facilitating industrialization process of the country , many measures were taken in the country which included financial sector reforms also. The financial sector reforms became prominent in 1990's with the recommendations of Narasimhan committee .The financial sector liberalisation policies on the grounds of Mc Kinnon and Shaw (1973) succeeded in bringing forth significant changes in the sector. Even though, the extent of success in implementing these reforms cannot be completely analysed from this study, it could be understood that bank finance is an important factor in supporting the performance of these industries. Along with the existing policy measures, government should also take care of the inability of these small entrepreneurs to check the viability of the project they undertake ,to prepare a convincing project proposal so that the risk involved in hiring loan and implementing the project without failure .Increasing number of industrial loans becoming Nonperforming assets is an alarming factor that may result in complicated procedures and hesitant behavior of bank authorities. However, channelising domestic savings to meet the financial requirements for investment purposes through the banking system will continue to be a major factor in the Indian financial system.

CHAPTER-VII

SUMMARY AND CONCLUSION

The industrial revolution of eighteenth century and the subsequent rise of many countries based on this has been the driving force of development policy of the developing countries. The importance of industrialization in the growth process of the countries has been stressed by economists based on their own convictions. Myrdal (1972) stressed the significance of industrialization to achieve higher productivity, higher real per capita income and higher standard of living, when he stated that "industrialization and the growth of that part of the working population that is engaged in industry, is therefore, a means of raising national income per capita. In countries like India and Japan with a high ratio of population to natural resources and in particular to land, manufacturing industry represents virtually the only hope of greatly increasing labour productivity and raising standard of living." The studies of Kuznets, Chenery and Taylor have proved the same. The reason for interest in industrialization also lies in the fact that at all levels of production process, other than the final demand level, industrial investments have more forward and backward linkages with other industries than agriculture (Hirshman,1977).Thus the growth of manufacturing industries are considered as an inevitable feature in explaining growth process of majority of the nations. At the same time there can be country and regional differences.

We have already seen that the Government of India has also initiated the development process of the country based on speedy industrialization. The planning process and the policy framework explained in the third chapter has already indicated the importance of industrialization process in the country. Though large, medium and small scale industries have been given due importance in the planning process, small scale industries which formed the base of the economy from the time immemorial faced many difficulties in spite of the policy measures. Majority of the studies which focused on the small scale industries highlighted the sickness of the units and the factors responsible for it. The Report of Prime Minister's Task force (2010) indicated lack of adequate and timely credit, high cost of credit, lack of collateral requirements, limited access to equity capital, shortage of demand, marketing facilities and lack of skilled manpower as the major difficulties constraining the functioning of small scale industries in the country. In this context, the linkage between the financial flow and the performance of small scale industries in the state forms the focus of the chapter.

The development experience of European countries based on the advantages of industrialization have lead or motivated so to speak, all the developing countries to follow the same path. Closely following, the economic literature found wide variety of discussions, keen to find out the factors that favoured the industrialisation process started in Britain and later spread to other European countries. The widespread technological advancement and specialization initiated by industrialists reinforced the importance of acquiring external source of funds which in turn depended upon strong financial markets. Moreover, the financial system followed by each country differs and this is reflected in major policy issues related to economic growth. It is hardly surprising that the distinction between bank based and market based financial systems and their relative importance to economic growth has been the focus of the relevant theoretical debate for over a century. (Gerschenkron, 1962, Stiglitz 1985, Allen gale 1999, Levine, 2002)

An industrial unit needs finance basically for meeting the expenses of acquisition of land and building, installation of plant and machinery (fixed capital) and for purchase of raw materials and other day to day expenses (working capital).Former needs are met by long term loans and latter are met by short term loans known as working capital loans. Generally, fixed capital requirements arise during the very beginning of the business and includes long period of time. Working capital loan is required to meet the day to day operations of a unit. 'A borrower needs fund for his operation mainly to buy and stock necessary quantities of raw-materials and stores and to stock necessary quantities of finished goods. If it is the market practice to give credit on sales, he would need funds for carrying his receivable too. He may also make advance payments for goods and services. All these constitute his needs for funds, to carry current assets.'(RBI report, 1975)These financial requirements are met by both internal and external sources.

The framework pertaining to fund based support institutions in India relating to industrial sector can be classified into those at national level and those at regional level. The national level institutions include scheduled commercial banks, refinance institutions, SIDBI, NABARD, KVIC, EXIM BANK and state level institutions include RRBs, co-operative banks, SFCs, SDICs. The institutional set up in India is

arranged in such a way that long term loans are provided by specialized institutions and short term loans are provided by commercial banks.

Existence of a developed financial system in India could be traced from Vedas, manusmrithi and Kautilya's Arthasasthra. The method of banking that existed in India in those days consisted of money lending and transfer of monetary claims through Hundis from one place to another(Das, 2015). The banking system which included Sreshtis and sahakars successfully catered to the requirements of industry, agriculture and trade. " From all this, it is obvious that India possessed for all times known to history a system of banking which admirably fulfilled her needs and proved very beneficial to her, although its methods were different from those of modern western banking."(Garg, 1964)

The modern era of trade and commerce which started in India during the time period of East India Company found the indigenous system of banking inconvenient for them and this led to the establishment of British Commercial banking in India.'The English investors normally invested their own resources and ploughed back their earnings….there was little demand for long term credit under such circumstances; the banks maintained their English character as institutions for the supply of short term credit."(Rosen, 1962)In India the major source of borrowed funds are the commercial banks, other financial institutions and debentures. In order to meet the long term requirements of the industries, many development institutions like IFCI, ICICI, IDBI were started. Nationalisation of commercial banks, beginning of priority sector lending to include agriculture, SSIs, and other priority sectors, establishment of development institutions like IFCI, IDBI, ICICI, SIDBI, SFCs could be considered as a major step forward in the industrialization process of the country. The success of these institutions was later questioned. While each of the development banks could have faced a unique set of restrictions, each of them generally faced some sort of finance constraint when finance from the government budget (or from the RBI's long term operations Fund) dried up. (Ray, 2015).Thus the financial requirements of large and medium scale industries are mainly met by banks and securities market, the small scale industries still depend upon commercial banks and their internal sources.

A very important task that the Government of India performed was the constitution of Planning Commission in 1951. As an agency to work out plan strategies, priorities and objectives of industrial development in India, it formulated Industrial Policy resolutions which was later modified according to the changing scenario and demands of the economy. The Industrial Policy resolution of 1948 in a mixed economy gave the Government a pivotal role in bringing forth industrial development. The industrial Policy resolution of 1956 stressed the rapid industrialization of the country based on basic, key industries like capital, heavy and machine building industries. These efforts resulted in the formation of monopoly practices and revisions in the framing of MRTP act and FERA act found its place in the industrial policy resolution of 1973.The importance of small scale industries especially in employment generation and also regional development was stressed in industrial policy resolution of 1977.The Industrial policy Resolution of 1980 slowly lifted the importance of Government sector and gave importance for private sector. The Industrial Policy of 1991 brought in revolutionary changes to free the economy from all bureaucratic controls and modify to meet the needs of global scenario.

The performance of industries did not show a steady growth rate even with the support of policy mechanism and this led to reexamination of policies. One of the major requirement and constraint felt by the industries as quoted in studies and committee reports resulted in the restructuring of the industrial financial structure best suited to meet the needs of the industry. The industrial financial structure consisted of Industrial Financial Corporation of India (1948), Industrial credit and investment corporation of India (1955), Industrial development bank of India (1964), Small industries Development bank of India(1990) at the national level. Along with these institutions, State Financial Corporation and State industrial development Corporation owned by state governments also supported the industries. Reserve bank of India also took the initiative in channelizing funds to the industries through commercial banks. The industrial financial structure aimed at facilitating short, medium and long term financial assistance to all sectors and to bring forth balanced industrial growth. Hence, the performance of finance through this structure was expected to achieve industrial growth and socio economic development.

The industrial finance system was expected to foster industrial growth through supporting projects of expansion, renovation, modernization and diversification of existing units in the wake of technical know-how and technological enhancement. There was an increasing tendency for small scale industries to grow sick, unable to face challenges arising from the growth potential of the economy.

In the case of Kerala, the industrial policies that were framed from 1960 onwards and the successive policies aimed at developing traditional, small scale industries, khadi and village industries, large and medium private and public sector units. The policy reforms focused on issues like availability of land, power, finance, marketing facilities and technical support required for the development of industries in the state. The state government gave special importance for the development of small scale industries as it meant to address the unemployment problem in the country. Formation of industrial estates, special development zones has been successful in their development. The increasing sickness among the units became a growing concern for the authorities and this led to the reformation of policies. Kerala State Industrial Development Corporation and Kerala Financial Corporation along with commercial banks were entrusted to meet the financial requirements of these industries. Understanding their larger role in the regional development and employment generation, they were brought into a new framework i.e. Micro, Small and Medium Enterprises in 2006.

The present study has been an attempt to examine the relationship between the industrial performance and bank finance in Kerala. Initially the industrial performance has been studied to get a clear picture about the industrial position of the state. Industrial performance have been studied based on variables like number of units, employment, investment and output. In order to examine the performance of industries, we include both factory sector and small scale industries /MSME. In the case of factory sector, during 1991-1998, there was a positive growth rate in all the sectors and this could be seen as a positive impact of the New industrial Policy Reforms of 1991.The recessionary trend felt in East Asia affected slightly the performance of industrial sector in the state during 1999-2004.The industrial policy reforms of 1998 and 2001 helped subsectors like food products and beverages (10-11), tobacco products (12), textiles

(13), wearing apparel(14), leather and related products(15), paper and paper products(17). Rubber and plastic products (22), reproduction and printing media (18), refined petroleum and coke(19), fabricated metal products (25)and trailers and semi trailers(29) and the same could survive this difficult situation. In the case of small scale industries, we have examined the performance of the manufacturing industries in terms of the same variables and the time period is divided into two - 1991-2006(before the implementation of MSMED Act, 2006) and 2007-2016 (after the implementation of the Act).In the first time period, the performance of these industries were affected by many factors like labour disputes, shortage of demand, lack of entrepreneurship, lack of credit facilities, power shortage etc. and it showed a dismal picture.

The Economic Reforms of 1991 could revive the sector to a great extent. All the more, the state government had launched an Intensive Industrialisation programme in 1993, setting an objective of 25, 000 small scale units in the state within the next two years. Later, the target was reset as 30, 000 units due to the positive response from the part of the entrepreneurs. In addition, a comprehensive policy package announced for the sector in 1994 and 1998 also helped these industries to overcome their problems to a great extent. The economic recession started off in 2000 resulted in negative growth rate of the sector. The industrial policy of 2001 came forward with measures like digitalization, industrial parks, industrial corridors and special economic zones to revive the sector. The Global Investors Meet conducted by the government of Kerala in 2003 was meant to attract investment mainly foreign investment to the state including the manufacturing industries. Even though all these policy measures were intended to support these industries, the increasing incidence of sickness among the small scale units was a cause of concern for the government.Many committees appointed for the revival of these industries came up with suggestions like withdrawal of support system, technological upgradation, better marketing facilities and restructuring of the entire sector. Thus, this sector was brought under a comprehensive framework with the implementation of Micro, Small and Medium Enterprises Development Act in 2006.This act mainly redefined the enterprises on the basis of investment in plant and machinery. After the implementation of the Act, the performance of industries under the MSME sector has shown a positive growth rate except during the recessionary time period in 2008.

The major factors that affected the small scale/MSME units has been pointed out as shortage of demand, labour problems, management problems, lack of working capital etc. Finance being a major factor influencing the industrial development of any economy, in the next objective we have examined the trend and pattern of bank finance to industries in the state. In order to meet the financial requirements of industrial sector, the financial structure of the state comprises of KSIDC, KFC, SIDBI and commercial banks. Though all these institutions meet the financial requirements at all stages of its operation, commercial banks have been entrusted to meet the short term capital requirements of the units mainly working capital requirements. As regards the development of banking in the state, there were 7312 banking branches in Kerala with 4240 public sector banks and 2092 private sector banks (SLBC, 2017).The major feature of the banking system in the state was the domination of NRE deposits in the total deposits of the state. The higher proportion of the NRE deposits in the total deposits has shown a declining trend since 2000 and it was only 34 percent in 2017.In the case of deposit mobilization, there was 13 percent growth rate and the banks in the state were mobilizing 4 percent of the total deposit mobilization of the entire country.

A major factor that was mentioned as a reason for the industrial backwardness of the state was the low credit deposit ratio in the state. Credit Deposit Ratio compared to other states and the country as a whole was very low and this was why the banks in the state was increasingly criticized for their passive role in ensuring credit flow to the industrial sector. The credit deposit ratio had increased to 79 percent in 2014, while it has come down to 62 percent in 2017.When pattern of bank finance was examined, it was understood that increasing percentage of the bank finance was lend to personal loan segment of the bank finance and only 15 percent was given to the industrial sector. The small and medium enterprises are included in the priority sector advances as per the recommendations of the committees appointed for the purpose. When the structure of the priority sector advances was examined, about 17 percent of the total priority sector advances were given to the SME sector. Out of the total priority sector advances, 51 percent went to small scale sector and 49 percent went to micro enterprises. The trend line inserted to analyse the trend of credit flow to industrial sector showed an upward and increasing trend. Thus the policy measures undertaken by

the Reserve Bank of India has been successful in reaching out to the small scale industries in the state.

Whether the increasing credit flow to the small scale sector by the banking sector in the state is sufficient to meet the financial requirements of the small and micro units was examined in the fifth chapter by conducting a primary survey. Among the manufacturing units, the dominant sectors like food processing industry, fabricated metal industry and Wearing apparel industry was selected for the survey. The survey was conducted in total 270 units in Ernakulam, Kozhikode and Thrissur district. The MSME sector in the state is dominated by large number of micro units owned by single entrepreneurs. There is the domination of male Entrepreneurs in the food processing and fabricated metal industry, whereas the wearing apparel industry is owned by female entrepreneurs. Majority of the entrepreneurs belonged to the OBC category and there was lesser participation of entrepreneurs belonging to SC/ST category. Majority of fabricated metal industry located in industrial estates and development plots, whereas majority of wearing apparel industries were located in the commercial space .Food processing industries were located both in commercial space and industrial estates. Almost all the units were labour intensive small units employing less than five workers. The major problems that affected these industries were shortage of demand, lack of working capital, cost of credit, shortage of domestic labour, high wage cost, government policies and market fluctuations. As our study is focused on the financial aspect of these industries, we tried to find out the purpose and sources of finance of the selected units.

As regards the purpose of the finance, they mainly required finance for fixed assets and working capital. The finance for fixed assets were collected from internal sources and retained earnings and working capital requirements were met by the banking sector. In order to understand the banking industry relationship in detail, the procedural difficulties, formalities, terms of repayment, unawareness of schemes were mentioned as limitations of the bank finance. Besides, the major cause of concern for the units were the rate of interest charged for the loans . The cost of credit and their procedural delays definitely bothered the upcoming entrepreneurs. Many of these entrepreneurs fail to convince the bank with a feasible project proposal. In the context

of increasing nonperforming assets among the banks, they scrutinize the project proposal in a stringent way. However, majority of the selected units had banking habits and depended mainly on their banks for financial requirements more than KSIDC and KFC.

The long run relationship between bank finance and industrial performance was tested in the sixth chapter using Non Linear Autoregressive Distributed Lag Model. The value of output of small scale industries were taken for industrial performance and credit flow to small scale industries were taken as a variable for bank finance. In the fifth chapter, we have already seen that there is an increasing dependence of small scale units on the commercial banks in the state. Though the trend of bank finance to small scale sector showed a positive and increasing trend, the trend line of performance of small scale industries did not show a similar trend. This gives us an impression that the sector is highly sensitive to major macroeconomic events in the country. In order to identify major structural changes that has affected the sector, Bai-Perron test was conducted. Accordingly, major changes including the downturn of the Indian economy and consequent economic reforms of 1991 and the restructuring period after the implementation of MSMED Act 2006 were identified as the major changes that has affected the sector. In the presence of this non linear changes in the sector, long run relationship has been tested using NARDL model. The test confirmed the long run cointegration between the variables selected. The major point the model suggested was more than the positive change, it is the negative change in the bank finance that affected the performance of these industries. This confirms the long run unidirectional relationship between bank finance and industrial performance in Kerala.

CONCLUSION

The importance of industrialisation has been evolved as a major pre-requisite for the economic development of underdeveloped countries from the experiences of developed countries. As such, majority of the nations were striving to attain development based on rapid industrialisation. Industrialisation is also considered to be a solution for the increasing unemployment problem in the developing countries, development of other sectors, urbanisation, modernisation, social transformation,

equality and finally social welfare. Since independence, India has also been trying to overcome the vagaries of underdevelopment through rapid industrialisation. The policy reforms framed from time to time has always tried to incorporate the necessary changes required. Large, medium, small scale and traditional industries were included in these measures separately in order to give them due consideration. The liberalisation policies implemented since 1991 had definitely brought in the much needed impetus for the industrial development of the country as a whole.

Entry barriers in the economy has been reduced since 1991 through de-licensing, deregulation, reduction in the role of public enterprises, privatization, liberal FDI norms and reduction in trade barriers . Over the years after the implementation of policy measures suitable for the economy, the industrial sector has been growing though not consistently. Indian economy has emerged as one of the fastest growing economies with a growth rate of 7 percent in 2014-15and the major contributor has been the industrial sector with a growth rate of 5.9 percent. India has also improved her position from 142nd in 2015 to 130th in 2016 in the World Bank Report of Ease of Doing Business Report .In the case of Kerala, it falls in the category of 'Jump start needed' as per the assessment of Department of Policy and Promotion. This surely evokes the need for an appraisal of the ongoing and earlier industrial policies. Though these policies have been successful in reducing the impact of unfavourable factors curbing the industrial development of the state, it is imperative that reformative measures should be in compliance with the standard set by institutions existing for improving the industrial development of the economies.

Among the factors congenial to industrial development of any country, financial sector has a major role to play. This is a major aspect which has theoretical and empirical backing. More than market based system, India has followed a bank based system. The strong banking infrastructure in Kerala can be positively converted and utilized for the benefit of upcoming entrepreneurs along with the policy measures undertaken by the government for improving and attracting the investment climate in the state. There should be increasing awareness of the schemes introduced to help the entrepreneurs and the new entrepreneurs should be trained to prepare feasible project

proposal in the context of increasing incidence of these small scale loans being graded as nonperforming assets.

FUTURE SCOPE OF THE STUDY

In India, we follow bank based system by tradition and this study focused on the finance-growth nexus based on the bank finance. The presence of Development Finance Institutions is also equally important in meeting the financial requirements of the small scale industries. Hence, the finance –industrial growth nexus can also be analysed including all the financial institutions assigned for industrial finance.

ANNEXURE

NIC CLASSIFICATION 2008

Section –C	MANUFACTURING
Division 10	Manufacture of food products
Division 11	Manufacture of Beverages
Division 12	Manufacture of Tobacco products
Division 13	Manufacturing of Textiles
Division 14	Manufacture of wearing apparel
Division 15	Manufacture of leather and related products
Division 16	Manufacture ofwood and products of wood and cork,except furniture; manufacture of articles of straw and plaiting materials
Division 17	Manufacture ofpaper and paper products
Division 18	Printing and reproduction of recorded media
Division 19	Manufacture ofcoke and refined petroleum products
Division 20	Manufacture ofchemicals and chemical products
Division 21	Manufacture ofpharmaceuticals,medicinal chemical and botanical products
Division 23	Manufacture ofother non-metallic mineral products
Division 24	Manufacture of basic metals
Division 25	Manufacture offabricated metal products,except machinery and equipment
Division 26	Manufacture of computer,electronicand optical products
Division 27	Manufacture of electrical equipment
Division 28	Manufacture of machinery and equipment n.e.c.
Division 29	Manufacture of motor vehicles,trailers and semi-trailers
Division 30	Manufacture of other transport equipment
Division 31	Manufacture of furniture
Division 32	Other Manufacturing
Division 33	Repair and installation of machinery and equipment.

NIC CLASSIFICATION 1987

Section –C	MANUFACTURING
Division 20-21	Manufacture of food products
Division 22	Manufacture of Beverages, tobacco and related products
Division 23	Manufacture of cotton textiless
Division 24	Manufacturing of wool, and man silk and man-made fibre textiles
Division 25	Manufacture of jute and other vegetable fibre textiles (except cotton)
Division 26	Manufacture of textile products (including wearing apparel).
Division 27	Manufacture ofwood and wood products; furniture and fixtures
Division 28	Manufacture of paper and paper products and printing , publishing and allied industries.
Division 29	Manufacture of leather and products of leather, fur and substitutes of leather.
Division 30	Manufacture ofbasic chemicals and chemical products (except products of petroleum and coal)
Division 31	Manufacture ofrubber, plastic, petroelum and coal products; processing of nuclear fuels
Division 32	Manufacture ofnon-metallic products
Division 33	Basic metal and alloy industries
Division 34	Manufacture ofmetal products and parts, except machinery and equipment.
Division 35-36	Manufacture ofmachinery and equipfment other than tranport equipment (manufacture of scientific equipment, photographic/ cinematographic equipment and watches and clocks is classified in Division 38)
Division 37	Manufacture oftransport equipment and parts
Division 37	Manufacture of electrical equipment
Division 38	Other manufacturing industries
Division 39	Repair of capital goods

Table 3.1

	Contribution of manufacturing to GSDP (in crores)	
year	(Base year -2011-12)(in crores)	growth rate(percent)
1991-92	5846	
1992-93	6240	6.7
1993-94	6616	6.0
1994-95	7776	17.5
1995-96	8643	11.1
1996-97	8338	-3.5
1997-98	8159	-2.1
1998-99	8802	7.9
1999-00	9458	7.5
2000-01	14769	56.2
2001-02	14104	-4.5
2002-03	14776	4.8
2003-04	15598	5.6
2004-05	16355	4.9
2005-06	22638	38.4
2006-07	24256	7.1
2007-08	28564	17.8
2008-09	29164	2.1
2009-10	29260	0.3
2010-11	32717	11.8
2011-12	34204	4.5
2012-13	38469	12.5
2013-14	36681	-4.6
2014-15	37581	2.5
2015-16	42334	12.6

Table 6.1

Output level of small industries and flow of bank credit

year	value of output(in crores)	Bank credit(Rs in Crores)
1984-85	950	246
1985-86	1290	289
1986-87	1493	336
1987-88	2365	374
1988-89	1724	376
1989-90	1001	460
1990-91	299	461
1991-92	220	595
1992-93	263	625
1993-94	622	757
1994-95	652	811
1995-96	782	1090
1996-97	1241	1222
1997-98	1118	1445
1998-99	1156	1558
1999-00	1166	1783
2000-01	1228	1991
2001-02	1216	2262
2002-03	1869	2540
2003-04	4667	2562
2004-05	1164	2509
2005-06	1008	3128
2006-07	399	3708
2007-08	5881	4391
2008-09	1322	6957
2009-10	2559	8095
2010-11	4787	16862
2011-12	5850	21742
2012-13	7007	24867
2013-14	7120	29863
2014-15	7283	38479
2015-16	7398	39463

APPENDIX

INTERVIEW SCHEDULE

1. Name of the industry :
2. Type of the industry :
3. Address :
4. Date of establishment :
5. Category of enterprise :

a) micro	b) small	c) medium

6. Organizational pattern :

Proprietorship	Partnership	Private company	public company	co-operative	any other

7. Location of the firm :

Industrial estate	Development plots	Any other

8. Is your unit registered under

(1) DIC	(2) local body (specify)

9.Entrepreneur's details :

1. Name :
2. Age :

Gender : Male	Female

3. Community :

General	OBC	SC/ST

4. Educational Qualification :

SSLC	Plus two	Graduate	Post Graduate	Technical/diploma	Professional course

6. Experience in the business sector : (years)

7. Size of the workforce

Number of skilled workers	
Number of unskilled workers	
Number of managers	
Number of supervisors	
Any other	

8. What type of financing do you resort to ?

i) internal financing	
ii) external financing	
iii) both	

9. Which are your important sources of finance ?

i) commercial banks	
ii) KSIDC	
iii) KFC	
iv) any other	

10. a) if commercial banks, you prefer,

i) nationalized banks	
ii) private sector	
iii) foreign banks	

11. What is the reason for the preference for your bank

i) flexible rate of interest	
ii) approachability	
iii) motivational factors	
iv) special scheme (specify	

12. What are the different loan facility provided by your financial institution?

Details of loan on fixed capital :

Source	year	type of credit	loan amount	interest rate

13. Details of the credit facility

Type	basis of the credit	% of assets sanctioned as loan

14. Details of credit amount availed

Credit requirement (amount)	sanctioned (amount)	Utilized (amount)

15. Details of current liabilities (yearwise)

Overdraft facility :
Short term loans :
Other current liabilities :

16. Sources of working capital loan

Source	loan amount	type of credit	Interest rate

17. Is the formalities for availing loan rigid?

yes	no

18. Is your bank approachable ?

yes	no

19. Is the terms and conditions for availing loan favourable?

Yes	No

20. What do you think about the rate of interest charged on loan?

high	moderate	Low

21. Can you suggest a reasonable rate of interest compatible for both industries and banks?

22. How much time is taken for getting loan sanctioned ?

less than 2weeks	Less than 1 month	Between 1 month and 3 months	More than 3 months

23. Does this sanctioning time affect the functioning of your unit?

Yes	No

If yes , how?

24.Can you suggest an appropriate sanctioning time?

25. .Is the mode of repayment for loan rigid?

Yes	No

If yes, can you suggest a better method.

26. a) Did you expand your firm after its establishment?

Yes	No

b) year of expansion :

c) Were you supported by your bank?

Yes	No

27. a) Is there any special scheme for promoting industries in your bank?

Yes	No

b) details of the scheme.

28). a) Do they conduct any awareness program about the schemes for promoting industries in the area ?

Yes	No

b) details of the programme.

29. For what purpose do you depend on external financing more?

working capital	fixed capital	expansion	marketing	others (specify)	All

30. In your opinion, among these which one is external financing more important?

30 Any specific problem / difficulty encountered in availing the loan facility.

31. Mention the schemes under which the loans are provided to you.
32. Whether your unit was declared sick ?
33. Nature of problems faced by the unit

i. Shortage / fall of demand
ii. Shortage of raw materials
iii. Erraticpower supply / power cuts
iv. Lack of working capital
v. Non availability / high cost of credit
vi. Non recovery of financial dues
vii. Non availability of labour as and when required

viii. Labour disputes and related problems
ix. High wage cost
x. Mismanagement
xi. Government policy (specify)
xii. Seasonal factors
xiii. Market fluctuations

34. Please furnish the data of annual production for the previous years
35. On the basis of your experience what measures do you suggest to improve the industry – banking relationship ?

(1) Concessions for prompt repayment of loans
(2) Interest rate volatility/flexibility
(3) Proper monitoring of loans
(4) Others (specify your suggestions)

BIBLIOGRAPHY

Akinlo, A. E., & Egbetunde, T. (2010). Financial development and economic growth: The experience of 10 sub-Saharan African countries revisited. *The Review of Finance and Banking*, *2*(1).

Alagh, Y. K. (1971). Indian Industrialisation: Fact and Fiction. *Economic and Political Weekly*, 1677-1682.

Alagh, Y. K. (1987). Policy, Growth and Structural Change in Indian Industry. *Economic and Political Weekly*, AN57-AN60.

Alagh, Y. K., Subrahmanian, K. K., &Kashyap, S. P. (1971).Regional industrial diversification in India. *Economic and Political Weekly*, 795-802.

Albin, A. (1990). Manufacturing sector in Kerala: Comparative study of its growth and structure. *Economic and Political Weekly*, 2059-2070.

Allen, F., & Gale, D. (1999).Diversity of opinion and financing of new technologies. *Journal of financial intermediation*, *8*(1-2), 68-89.

Arestis, P., &Demetriades, P. (1997). Financial development and economic growth: assessing the evidence. *The economic journal*, *107*(442), 783-799.

Arestis, P., Luintel, A. D., &Luintel, K. B. (2005).Financial structure and economic growth. *Center of Economic and Public Policy Working Paper No. 06*, *5*.

Arrow, K. J. (1973). The theory of discrimination, discrimination in labor markets. *Achenfelter, A. Ress (eds.), Princeton–New Jersey*. *3*(10), 3-33.

Bagchi, A. K. (1975). Some characteristics of industrial growth in India. *Economic and Political Weekly*, 157-164.

Bagehot, W. (1873). *Lombard Street: A description of the money market*. London: HS King.

Bargal, H., Dashmishra, M., & Sharma, A. (2009).Performance Analysis of Small Scale Industries-A study of pre-liberalization and post-liberalization period. *International Journal of Business and Management Studies*, *1*(2), 17-26.

Basu, S. K. (1958). *The managing agency system in prospect and retrospect*.World Press.

Basu, S. K. (1966). *Theory and practice of development banking: a study in the Asian context*. Asia Publishing House.

Beck, T., &Demirguc-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & finance*, *30*(11), 2931-2943.

Beck, T., Demirguc- Kunt, A. S. L. I., Laeven, L., & Levine, R. (2008).Finance, firm size, and growth. *Journal of Money, Credit and Banking*, *40*(7), 1379-1405.

Beck, T., Demirgüç-Kunt, A., &Maksimovic, V. (2004). Bank competition and access to finance: International evidence. *Journal of Money, Credit and Banking*, 627-648.

Beck, T., Demirgüç-Kunt, A., Laeven, L., &Maksimovic, V. (2006).The determinants of financing obstacles. *Journal of International Money and Finance*, *25*(6), 932-952.

Berger, A. N., Frame, W. S., & Miller, N. H. (2005).Credit scoring and the availability, price, and risk of small business credit. *Journal of money, credit and banking*, 191-222.

Bernini, M. (2011). Financial Development and Industrial Structure in Developing and Emerging Economies: a microeconomic analysis.

Bhat, T. P. (2014). *India, Structural Changes in the Manufacturing Sector and Growth Prospect*. Institute for Studies in Industrial Development.

Bhattacharjee, S., &Chakrabarti, D. (2013).Financial Liberalisation, Financing Constraint and India's Manufacturing Sector. *Economic and Political Weekly*, 61-67.

Bhole, L. M. (1982). *Financial markets and institutions: growth, structure, and innovations*. Tata McGraw Hill.

Bhole, L. M., &Mahakud, J. (2005).Trends and determinants of private corporate sector savings in India. *Economic and Political Weekly*, 4243-4

Biggs, T., Raturi, M., &Srivastava, P. (2002). Ethnic networks and access to credit: evidence from the manufacturing sector in Kenya. *Journal of Economic Behavior & Organization*, *49*(4), 473-486.

BiswasJoydeep (2014) Empirical Evidence of Finance and Growth Relationship in India, Quarterly journal of the National Institute of Banking Management, Vol.XLII, No.1

Bryce, M. D. (1960). *Industrial Development* (p. 106). New York: McGraw-Hill.

Cameron, R. E. (1967). *Banking in the early stages of industrialization: a study in comparative economic history*. New York: Oxford University Press.

Carby, Y., Craigwell, R., Wright, A., & Wood, A. (2012). Finance and growth causality: A test of the Patrick's stage-of-development hypothesis. *International Journal of Business and Social Science*, *3*(21).

Carter, N. M., Williams, M., & Reynolds, P. D. (1997). Discontinuance among new firms in retail: The influence of initial resources, strategy, and gender. *Journal of business venturing*, *12*(2), 125-145.

Central Statistical Organisation,Annual Survey of Industries,Principle Characteristics of Factory Sector(Various issue)

Cetorelli, N., &Gambera, M. (2001).Banking market structure, financial dependence and growth: International evidence from industry data. *The Journal of Finance*, *56*(2), 617-648.

Chandrasekhar, C. P. (1988). Aspects of growth and structural change in Indian industry. *Economic and Political Weekly*, 2359-2370.

Corbett, J., &Jenkinson, T. (1996). The financing of industry, 1970–1989: an international comparison. *Journal of the Japanese and international economies*, *10*(1), 71-96.

Da Rin, M., & Hellmann, T. (2002).Banks as catalysts for industrialization. *Journal of financial Intermediation*, *11*(4), 366-397.

Das, K. (2007). SMEs in India: issues and possibilities in times of globalisation. *Asian SMEs and Globalization, ERIA Research Project Report*, *5*, 69-97.

Das, S. (2014). Commercial banks and industrial finance in India: The pre-liberalisation scenario. *Business Studies*, *2015*, 1-23.

Das, S. K. (2015). INDUSTRIAL FINANCE IN THE ERA OF FINANCIAL LIBERALIZATION IN INDIA: Exploring Some Structural Issues.

Dasgupta, S., & Singh, A. (2006). *Manufacturing, services and premature deindustrialization in developing countries: A Kaldorian analysis* (No. 2006/49). Research Paper, UNU-WIDER, United Nations University (UNU).

DhallVinod (1981) Recent Trends in Industrial Financing , Quarterly journal of the National Institute of Banking Management,Vol.10

Ebi, B. O., & Emmanuel, N. (2014).Commercial bank credits and industrial subsector's growth in Nigeria. *Journal of Economics and Sustainable Development*, *5*(10), 1-11.

Economic Review (various years), Kerala State Planning Board, Government of Kerala

Fielden, S. L., Davidson, M. J., Dawe, A. J., & Makin, P. J. (2003). Factors inhibiting the economic growth of female owned small businesses in North West England. *Journal of Small Business and Enterprise Development*, *10*(2), 152-166.

Fisman, R., & Love, I. (2002). *Patterns of industrial development revisited: The role of finance* (Vol. 2877). World Bank Publications.

GangulyA.S(2003), Working Group on Flow of Credit to Small Scale Industries Sector, Reserve Bank of India.

Garg, K. N. (1964). *Banking in India...* KitabMahal.

Gerschenkron, A. (1962). Economic development in historical perspective. *Cambridge: Belknap*.

Goldsmith, R. W. (1983). *The Financial Development of India, Japan, and the United States: A Trilateral Institutional, Statistical, and Analytic Comparison* (p. 34). New Haven, CT: Yale University Press.

Goswami, O. (1993). Report of the Committee on Industrial Sickness and Corporate Restructuring. *Ministry of Finance, Government of India, New Delhi*.

Government of India (2010),Prime Minister's Task Force on Micro,Small and Medium Enterprises ,Chairman : T.K.A.Nair

Gupta S.P.(1999),Study Group on Development of Small Enterprises,Planning Commission, Government of India

Gupta, L. C. (1969). *The changing structure of industrial finance in India: The impact of institutional finance*. Oxford University Press.

Hamilton, A., Syrett, H. C., & Cooke, J. E. (1961). *The Papers of Alexander Hamilton: 1779-1781* (Vol. 2). Columbia University Press.

Herman, E. (2016). The importance of the manufacturing sector in the Romanian economy. *Procedia Technology*, *22*, 976-983.

Hirschman, A. O. (1977). A generalized linkage approach to development, with special reference to staples. *Economic development and cultural change*, *25*, 67.

Hicks, J. (1969). *A theory of economic history* (Vol. 9). Oxford: Oxford University Press.

Jeromi, P. D. (2003). What ails Kerala's economy: A sectoralexploration. *Economic and political weekly*, 1584-1600.

Kaldor, N. (1967). Problems of industrialization in underdeveloped countries. *Strategic Factors in Economic Development*, 53-72.

Kaldor, N. (1967). Strategic factors in economic development.

Kathuria, V., &Natarajan, R. R. (2013). Is manufacturing an engine of growth in India in the post-nineties?. *Journal of South Asian Development*, *8*(3), 385-408.

Kathuria, V., & Raj, R. S. N. (2009, October). Is manufacturing an engine of growth in India? Analyis in the post nineties.In *Paper for the UNU-WIDER/UNU-MERIT/UNIDO Workshop, Pathways to Industrialisation in the 21st Century. New Challenges and Emerging Paradigms, Maastricht* (pp. 22-23).

Kerala Development Report (2008),planning Commission, Government of India,AcademicFoundation,New Del

Khanna, S. (1999).Financial reforms and industrial sector in India. *Economic and Political Weekly*, 3231-3241.

King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *The quarterly journal of economics*, *108*(3), 717-737.

Kumar, A., & Francisco, M. (2005). *Enterprise size, financing patterns, and credit constraints in Brazil: analysis of data from the investment climate assessment survey*. The World Bank.

Kumar, P. (2014). An Empirical Study on Performance of Indian MSME. *Asia-Pacific Journal of Management Research and Innovation*, *10*(4), 367-375

Kuznets, S. (1966). Modern Economic Growth, Yale University Press, New Haven, CT.

Lal, A. K., & Clement, R. W. (2005).The role of individual enterprise and entrepreneurial spirit. *Asia-Pacific development Journal*, *12*(2), 81-99.

Lawrence, P., &Longjam, I. (2003). Financial Liberalisation in India: measuring relative progress; Keele Economics Research Papers, 2003.

Levenson, A. R., & Willard, K. L. (2000). Do firms get the financing they want? Measuring credit rationing experienced by small businesses in the US. *Small Business Economics*, *14*(2), 83-94.

Levenson, A. R., & Willard, K. L. (2000). Do firms get the financing they want? Measuring credit rationing experienced by small businesses in the US. *Small Business Economics*, *14*(2), 83-94.

Lokanathan, P. S. (1935). *Industrial organization in India*. Allen and Unwin, London.

Maiti, P., &Rao, R. K. (1995). Demand side factors and India's industrial growth. *Economic and political Weekly*, 2070-2073.

Majumdar, S. K. (1996). Fall and rise of productivity in Indian industry: has economic liberalisation had an impact?. *Economic and political weekly*, M46-M53.

Mallick, J. (2012). *Estimation of private investment in manufacturing sector and determinants in Indian states*. Institute for Studies in Industrial Development.

Mani K.P. and Jose P.Chacko (2001),Performance of Commercial Banks in India – An Autopsy,Banking and Financial Sector Reforms in India,Deep and Deep Publications,New Delhi.

Mani, S. (1995). Economic liberalisation and the Industrial sector. *Economic and Political Weekly*, M38-M50.

Mani, S. (1996). Economic liberalisation and Kerala's industrial sector: an assessment of investment opportunities. *Economic and Political Weekly*, 2323-2330.

Matthai, J. (1944). *Tariffs and Industry* (No. 20). Humphrey Milford, Oxford University Press.

Mazumdar, S. (2008). Investment and growth in India under liberalisation: asymmetries and instabilities. *Economic and Political Weekly*, 68-77.

Mehta, Y., &Rajan, A. J. (2017). Manufacturing sectors in India: outlook and challenges. *Procedia engineering*, *174*, 90-104.

Merton, R. C., &Bodie, Z. (1995).A conceptual framework for analyzing the financial system. *The global financial system: A functional perspective*, 3-31.

Ministry of Industry, Department of Small Scale Industries and Agro and Rural Industries(1995),Expert Committee on Small Enterprises ,Chairman:AbidHussain

Mishra G.P.(1985),Financing of Current Assets of Small Scale Units , Quarterly journal of the National Institute of Banking Management, Vol-XIV, No.3

Mohan, R. (2005). Financial sector reforms in India: policies and performance analysis. *Economic and Political Weekly*, 1106-1121.

Morris, S., Basant, R., &Nagaraj, R. (2006).Small-scale industries in the age of liberalization. *INRM Policy Brief*, (11).

Mukhtar, S. M. (2002). Differences in male and female management characteristics: a study of owner-manager businesses. *Small Business Economics*, *18*(4), 289-310.

Mulky, M. A. (1947). *New capital issue market in India*. Popular Book Depot, Bombay.

Muranjan, SK (1952), Modern Banking in India, Kamla Publishing House, Mumbai. 10

Myrdal, G. (1972). *Asian drama; an inquiry into the poverty of nations* (Vol. 1).Pantheon.

Nagaraj, R. (1985). Some aspects of small scale industries in India: Findings based on two all-India sample surveys. *Economic and Political Weekly*, 1790-1796.

Nagaraj, R. (2011). Industrial Performance, 1991-2008: A Review. *India development report*, 419-438.

Nair, K. R. (1973). *Industrial relations in Kerala*.Sterling Publishers.

Narasimham Committee. (1998). Report of the Committee on Banking Sector Reforms. *Narsimham Committee, Mumbai*.

Narasimham, M. (1991). *Report of the Committee on the Financial System*. Hyderabad, Bella Vista.

Narayana, D. (2003). Why is the credit-deposit ratio low in Kerala?.

National Council of Applied Economic Research (NCAER), Report of the Committee to Examine Credit Problems to SSIi, New Delhi, 1978. 79

National Credit Council(1969),A Study Group on,Organisational Framework for the Implementation of Social Objectives, Chairman: D.R.Gadgil

National Credit Council, Report of Study Group on Bank Credit, New Delhi, 1969.

Nayyar, D. (1978). Industrial development in India: some reflections on growth and stagnation. *Economic and Political Weekly*, 1265-1278.

Neogi, C., &Ghosh, B. (1998). Impact of liberalisation on performance of Indian industries: A firm level study. *Economic and Political Weekly*, M16-M24.

Nigam, R. K. (1958). *Managing agencies in India: first round, basic facts*. Research and Statistics Division, Dept. of Company Law Administration, Ministry of Commerce & Industry.

North, D. C. (1981). *Structure and change in economic history*. Norton.

Odo, S. I., Eze, O. R., &Onyeisi, O. S. (2015). Implications Financial Development on Economic Growth in Nigeria: Vector Error Correction Model. *International Research Journal of Finance and Economics*, (104), 96-111.

Oommen, M. A. (1976). Rise and growth of banking in Kerala. *Social Scientist*, 24-46.

Oommen, M. A. (1981). Mobility of Small-Scale Entrepreneurs-A Kerala Experience. *Indian Journal of Industrial Relations*, 65-87.

Patrick, H. T. (1966). Financial development and economic growth in underdeveloped countries. *Economic development and Cultural change*, *14*(2), 174-189.

Petersen, M. A., &Rajan, R. G. (1995).The effect of credit market competition on lending relationships. *The Quarterly Journal of Economics*, *110*(2), 407-443.

Pillai, M. P. (1994). Performance of State Sector Enterprises in Kerala. *1994), Kerala'sEconomy.'Performance, Problems, Prospects, Londres: Sage Publications*, 259-278.

Pillai, P. P. (1994). Kerala Economy. *Institute of Planning and Applied Economic Research, John Matthai Foundation, Thrissur*.

Planning Commission, Government of India (1999),A study Group on Development of Small Scale Enterprises ,Chairman : Dr.S.P.Gupta

Planning Commission, Government of India(1987),Report of the Working Group on Development of capital markets, Chairman:AbidHussain

Prakash, B. A. (1999). *Kerala's economic development: issues and problems*. Sage Publications Pvt. Ltd.

Prakash, B. A. (Ed.). (1994). *Kerala's economy: Performance, problems, prospects*. SAGE Publications Pvt. Limited.

Raj, K. N. (1976).Growth and stagnation in Indian industrial development. *Economic and Political Weekly*, 223-236.

Rajan K.R.(1987) KeralathileVyvasayangal ,(part-I and part-2),Thiruvananthapuram.

Rajan, R. G., &Zingales, L. (1996). *Financial dependence and growth* (No. w5758).National bureau of economic research.

Rajan, R. G., &Zingales, L. (2001).Financial systems, industrial structure, and growth. *Oxford review of economic Policy*, *17*(4), 467-482.

Ramasastri, A. S., &Unnikrishnan, N. K. (2006). Is the role of banks as financial intermediaries decreasing? A helicopter tour. *Economic and Political Weekly*, 1063-1068.

Rammohan, K. T. (1999). *Technological change in Kerala industry: lessons from coir yarn spinning*. Kerala Research Programme on Local Level Development, Centre for Development Studies.

Ray, P. (2015). Rise and fall of industrial finance in India. *Economic and Political Weekly*, *50*(5), 61-68.

Report of the Indian Central Banking Enquiry Committee, 1931.

Reserve Bank of India (1954), Report of the Committee on Finance for Private Sector, Chairman:A. D. Shroff.

Reserve Bank of India (1969)Report of the Study Group on the extent of which credit needs of industry and trade are likely to be inflated .

Reserve Bank of India (1974), Report of the Study Group to Frame Guidelines for Follow upof Bank Credit, Chairman :PrakashTandon.

Reserve Bank of India (1979), Bank credit, and effectiveness of monitoring and follow-up system by Banks.Chairman : K.B. Chore.

Reserve bank of India (1991),Adequacy and Flow of Institutional Credit for Working Capital ,Chairman : P.R.Nayak

Reserve Bank of India (1998), Report of the High level Committee on credit to SSI, Mumbai,

Reserve Bank of India (2000) ,Report on the Rehabilitation of Sick SSI units,ChairmanS.S.Kohli

Reserve Bank of India (2003),A Working Group on Flow of Credit to Small Scale Industries, Chairman : Dr.A.S.Ganguly

Reserve Bank of India ,Statistical Tables Relating to Banks in India(various issues)

Reserve Bank of India(1969),High Level Committee to Review the Lead bank Scheme, Chairman:Nariman

Reserve Bank of India(1975), Report of the Study Group to Frame Guideline for Follow Up of Bank Credit. Chairman :Varshney

Reserve Bank of India, Basic Statistical Returns of Scheduled Commercial Banks in India(various issues)

Reserve Bank of India, Report of the Working Group to Review the Cash Credit System'. Bombay 1979.

Reserve Bank of India, Report on the Committee to Examine Adequacy of Credit to SSI, Mumbai 1992.

Robert, L. (1988). On the mechanics of economic development. *Journal of monetary economics*.

Robinson, J. (1952). rThe Generalization of the General Theory. *The Rate of Interest and Other Essays (MacMillan, London)*.

Rosen, G. (1962). *Some aspects of industrial finance in India*. Free Press.

Roy, M. (2006).A review of bank lending to priority and retail sectors. *Economic and Political Weekly*, 1035-1040.

Sanjaya, L. (2004). *Reinventing industrial strategy: the role of government policy in building industrial competitiveness* (No. 28).United Nations Conference on Trade and Development.

Schumpeter, J. A. (1912). 1934. *The theory of economic development*.

Shah B.G.(1980) Role of Banks in financing Working capital Requirements,Quarterly journal of the National Institute of Banking Management ,Vol-IX ,No.2

Shapiro, H. (2007). *Industrial policy and growth*.UN.

Shetty, S. L. (1982). Industrial Growth and Structure: As seen Through Annual Survey of Industries. *Economic and Political Weekly*, 1610-1618.

Singh Ajith (1997), Financial Libealisation, Stock markets and Economic Development,The economic Journal ,107

Singh, C. (2016). An Essay on Banking and Macroeconomics: Role of Public Sector Banks in India. *IIM Bangalore Research Paper*, (530).

Singh, R. (2014). *Gender Based Financing Preferences of SMEs: Discouraged Borrowers* (Doctoral dissertation, Universitéd'Ottawa/University of Ottawa).

Sinha, R. P. (2008). Priority Sector Lending of Indian Commercial Banks: Some Empirical Results.

SonalkerM.V.andKaveri V.S.(1985) Delays in Credit Sanctions to Small Scale Industry, Quarterly journal of the National Institute of Banking Management,vol XIV,No.1

Spencer, D. L. (1958).New Sources of Industrial Finance in India. *Pacific Affairs*, *31*(3), 261-274.

Stephen IdenyiOdo, BigBen C. Ogbonna , Promise E. Agbi, Charity I. Anoke (2016) , IOSR Journal of Economics and Finance ,Volume 7, Issue 2. , PP 75-81

Stiglitz, J. E. (1985). Credit markets and the control of capital. *Journal of Money, credit and Banking*, *17*(2), 133-152.

Su, D., & Yao, Y. (2017).Manufacturing as the key engine of economic growth for middle-income economies. *Journal of the Asia Pacific Economy*, *22*(1), 47-70.

Subrahmanian, K. K., &Azeez, E. A. (2000). Industrial growth in Kerala: Trends and explanations.

Subramanian, K. K., &Pillai, M. P. (1986). Kerala's Industrial Backwardness: Exploration of Alternative Hypotheses' in Economic and Political Weekly. *Vol XXI*, (14).

Szirmai, A., &Verspagen, B. (2010, August). Is Manufacturing Still an Engine of Growth in Developing Countries?. In *31st General Conference of The International Association for Research in Income and Wealth* (pp. 22-28).

Tawose, J. O. B. (2012). Effects of bank credit on industrial performance in Nigeria. *International Business and Management*, *4*(2), 158-168.

Thampy, M. M. (1990). Wage-cost and Kerala's industrial stagnation: Study of organised small-scale sector. *Economic and Political Weekly*, 2077-2082.

Thomas, J. J. (2002). A review of Indian manufacturing. *India development report*, 84-101.

Thomas, J. J. (2005). Kerala's industrial backwardness: a case of path dependence in industrialization?. *World Development*, *33*(5), 763-783.

Venâncio, S. F. M. (2013). *Does financial development promote economic growth?* (Doctoral dissertation, Instituto Superior de Economia e Gestão).

Walker, D. A. (1989).Financing the small firm. *Small Business Economics*, *1*(4), 285-296.

Wurgler, J. (2000). Financial markets and the allocation of capital. *Journal of financial economics*, *58*(1-2), 187-214.