

# COMMERCE AND BUSINESS RESEARCHER

---

Vol. 9

Issue 3 & 4

July 01 - December 31 2016

---

## A QUARTERLY RESEARCH PUBLICATION

### *Vision Statement*

Impart Quality Business Education that focuses on:  
Empowerment through Learning and  
Enrichment through Research

### *Published by*

#### **RESEARCHERS' FORUM**

Department of Commerce and Management  
University of Kerala, Thiruvananthapuram



# COMMERCE AND BUSINESS RESEARCHER

ISSN No: 0976-4097

Vol. 9

Issue 3 & 4

July 01 - December 31, 2016

*Chief Editor*  
**Prof. (Dr.) Resia Beegam S.**

*Managing Editor*  
**Prof. (Dr.) Gabriel Simon Thattil**

*Associate Editors*  
**Prof. (Dr.) C. Ganesh**  
**Prof. (Dr.) G. Raju**

*Assistant Editors*  
**Mr. Jiyas K**  
**Mr. Riyas E K**  
**Mr. Krishna Moorthy K.N**

Commerce & Business  
Researcher



Edited, Printed and Published by Dr. Resia Beegam S., Professor and Head, Department of Commerce, School of Business Management & Legal Studies, University of Kerala, Thiruvananthapuram on behalf of Researchers' Forum, Department of Commerce and Management, School of Business Management & Legal Studies, University of Kerala printed at Orange Printers Pvt.Ltd., Thiruvananthapuram.

<b>Contents</b>	<b>Page No.</b>
Contemporary issues of Human Resource Practices in Primary Agricultural Credit Societies in Kerala- An Overview	
<b>Riyas. E K &amp; Dr. K.S. Sureshkumar</b>	<b>08</b>
Is Basel Norms an aid to MSME's?	
<b>Vijila.V &amp; Dr.G.Raju</b>	<b>15</b>
Physical and Financial Performance of Prime Minister's Employment Generation Programme (PMEGp)	
<b>Aneesha P. Chellappan &amp; Dr. K.S. Suresh Kumar</b>	<b>24</b>
Role of 'Mudra Bank' in Micro, Small & Medium Enterprises Sector	
<b>Nandu S.S.</b>	<b>32</b>
Financial Performance of Non Banking Finance Companies in India - An Evaluation	
<b>Manu M. &amp; Dr. Gabriel Simon Thattil</b>	<b>36</b>
Problems and Supportive Mechanism for Women Entrepreneurs in Kerala- An Evaluation	
<b>Shifa P Sherif &amp; Dr. B. Balu</b>	<b>43</b>

Views expressed in the articles are those of authors and do not necessarily represent the view of the Researchers' Forum.

<b>Contents</b>	<b>Page No.</b>	<b>Contents</b>	<b>Page No.</b>
Financial Structure and Post		Service Quality and Satisfaction in	
Poke-Yoke performance of Indian		Sabarimala Pilgrimage - An Assessment	
Software Industry- An analysis		<b>Arun Kumar T.T &amp; Dr. B Vijayachandran Pillai</b>	<b>103</b>
<b>Dr. B. Shaji</b>	<b>52</b>	Systematic Investment Plans (SIPs):	
Relationship Between Systematic		Disciplined Approach for Wealth Creation	
Risk with Accounting Conservatism:		<b>Geetha Rani V.</b>	<b>112</b>
Evidence from Bombay Stock Exchange (BSE)		A Study on Consumer Behaviour of	
<b>Dr. Abraham Punnoose &amp;</b>		Refrigerators in Kerala	
<b>Mohammadreza Khattidizabadi</b>	<b>57</b>	<b>Sabu R.L &amp; Dr. K. Gopalakrishnan Nair</b>	<b>121</b>
Education and Entrepreneurial		A Study of Effect of Accounting	
Intention: An Empirical Study		Information System in Assurance of	
<b>Sanitha K K</b>	<b>61</b>	Financial Information in Automotive	
Service Co-Operatives and India's		Industry in India	
Socio- Economic Development		<b>Naser Atabaki</b>	<b>134</b>
<b>Siji.O.K</b>	<b>66</b>	Institutional Credit and its Impact on	
A Study on Rupee Volatility and Recent		Socio-Economic Changes of Scheduled	
Measures of Reserve Bank of India to		Caste and Scheduled Tribe Households	
Stabilize Rupee		in Kerala	
<b>Ambili Jayachandran &amp; Dr. C. Ganesh</b>	<b>70</b>	<b>Sumalatha. S</b>	<b>141</b>
Impact of Stress on the Worklife Imbalance of		A Study on the Relationship Between	
Women Gynaecologists		Size of the Firm and Management	
<b>Susha D, Dr. Anitha S &amp; Dr. P.N.Harikumar</b>	<b>81</b>	Accounting Practices in Steel	
Trends of NPAs in Priority and Non- Priority		Industry in India	
Sectors of Banking Industry		<b>Mahdi Sheikhi</b>	<b>149</b>
<b>Haritha Simon</b>	<b>87</b>	A Study on Consumers' Dilemma Towards Celebrity	
Indian Stock Market After Economic		Endorsed Ads and Non-Celebrity Endorsed Ads	
Reforms - A Study With Special		<b>Divya V.P.</b>	<b>154</b>
Reference to B S E		Estimation of Employment Generation in Kerala's	
<b>Aravind C. G. &amp; Prof. Dr. G. Raju</b>	<b>94</b>	Tourism Sector: An Evaluative Study	
		<b>Dr. A. Basheer &amp; Aneesh. B</b>	<b>162</b>

## **Editorial Advisory Board**

**Prof. (Dr.) M.B. Shukla**

Dean, Director and Head  
Faculty of Commerce and  
Management Studies  
Mahatma Gandhi Kashividyapith  
Varanasi- 221002

**Prof. (Dr.) T.N. Mathur**

Professor  
Department of Economic Administration  
and Financial Management  
University of Rajasthan  
Jaipur 302004

**Mr. V. Kurian**

IA & AS  
Director General  
National Academy of Audit & Accounts.  
Shimla.

**Prof. (Dr.) Thenmozhi M.**

Professor  
Department of Management Studies  
IIT, Chennai

**Prof. (Dr.) M. Saeed**

Minot State University, Minot  
North Pakota- 58707, USA

**Prof. (Dr.) S. Sumesh Nair**

Faculty,  
Department of Marketing  
Monash University, Clayton, Australia

**Prof. (Dr.) J.V. Prabhakar Rao**

Faculty of Commerce and  
Management Studies  
Andhra University  
Visakhapattanam- 530003

**Mr. B.V. Subrahmaniam**

FICWA,  
Senior Practicing Cost Accountant.

**Prof. (Dr.) T. Paranjothi**

Professor,  
Vaikunta Metha National Institute of  
Co-operative Management, Pune.

**CS (Dr.) Baiju Ramachandran**

Director, Indian Chamber of Commerce & Industry,  
Thiruvananthapuram.

**Dr. Jay S. Matadeen**

Professor & Dean  
Faculty, Law & Management  
University of Mauritius, Mauritius.

**Prof. (Dr.) Shudalimuthu**

Former Vice Chancellor  
Alagappa University, Karaikudi

**Prof. (Dr.) K.P. Muraleedharan**

Professor & Dean  
Department of Commerce &  
Management, University of Calicut.

## Editorial

The Indian economy is consistently attempting to grow at an accelerating pace catching up with the developed nations . Our movements to become a cashless economy with high levels of digitization in the use of money for financial and non financial transactions was dramatically set to motion by none other than our Honorable Prime Minister Shri. Narendra Modi on the fag end of November 8th 2016. The Objectives of it being without prior notice was to prevent redeployment and conversion of Black money and to strike at the roots of corruption and terrorism. Demonetization has a huge and diverse impact on the economy ranging from short term liquidity crisis to long term cash less dealings that would promote accountability, transparency and healthy distribution of wealth . Banks are going to be centre of huge liquidity where parking avenues and RBI policies for Liquidity management are going to be crucial.

Markets would be driven by Mobile payment modes and Plastic money with swipe machines and smart phone acting as the key agents in money transfer process . For a country like India , there are key challenges to be addressed in the transformation process, which include:

- Dealing with a huge unorganized sector
- Levels of illiteracy and poverty
- Digital penetration
- Physical infra structure like power
- Access to formal financial services like banking

Researchers and policy makers are continuously debating over pros and cons of demonetization in terms of our preparedness and the long term gains it can deliver. Academicians are eagerly watching the Business environment and market trends that is unfolding. We have the past in mind and the promises for the future. Lessons of corruption and black money and ambitious aspirations of a developed nation where Money is wisely used with justice and equity is the future dream. Let us all put our minds and energy together to make India a White and green nation that can act as model for the Universe.

I thank all the well wishers, subscribers and academic community at large for the interest they have shown in our research publication and do hope that meaningful research outcomes would find its way through the Commerce and Business Researcher.

Your valuable suggestion in improving the journal and research articles that need ventilation are solicited .Sincere thanks and best wishes for all your research endeavors.

**Prof. Resia Beegam. S**

Chief Editor

Statement about Ownership and Other Particulars about  
**COMMERCE AND BUSINESS RESEARCHER**  
A Quarterly Research Publication

**FORM IV**

1. Place of Publication : Department of Commerce, School of Business Management & Legal Studies, University of Kerala.
2. Periodicity of Publication : Quarterly
3. Printers Name : Dr. Resia Beegam S.
- Nationality : Indian
- Address : Head, Department of Commerce, School of Business Management & Legal Studies, University of Kerala
4. Publishers Name : Dr. Resia Beegam S.
- Nationality : Indian
- Address : Head, Department of Commerce, School of Business Management & Legal Studies, University of Kerala
5. Editors Name : Dr. Resia Beegam S.
- Nationality : Indian
- Address : Head, Department of Commerce, School of Business Management & Legal Studies, University of Kerala
6. Name and Address of the Individual who owns the periodical : Dr. Resia Beegam S.
- Nationality : Indian
- Address : Head, Department of Commerce, School of Business Management & Legal Studies, University of Kerala.

I, Dr. Resia Beegam S. hereby declare that the particulars given above are true to the best of my knowledge and belief.

Date:

Signature

# CONTEMPORARY ISSUES OF HUMAN RESOURCE PRACTICES IN PRIMARY AGRICULTURAL CREDIT SOCIETIES IN KERALA- AN OVERVIEW

Riyas. E K\* & Dr. K.S.Sureshkumar\*\*

## Abstract

Human resource management plays a central role in the accomplishment of strategic management in cooperatives. The existing organizational framework of most of the Primary Agricultural Cooperative Societies (PACS) does not comply with the rules to the basic ideology of human resources management practices followed in a sound economic organization. In fact, human resources in PACS are considered as a cost rather than an asset because Primary Agricultural credit societies are headed by a committee of elected members, who are not necessarily professionals. This will cause the poor performance of HR practice in PACS. For the sustainable growth of PACS in Kerala, there should be needed to apply a well defined human resource management practices. Human resources are not a machine used for the day to day functioning of the PACS; it is the real worth of the organization. The reason for the present prosperity of this institution is the sincere and hard work of the employees. However, their skill and mind are not utilized in its fullest. This study tried to exhibit the various issues related to human resource management practices, in recruitment, selection, training and development, promotion and industrial relation in PACs and also depicts a picture to solve the issues.

**Key Words:** Human resource management, PACS, HR policies, recruitment, selection, training and development, appraisal, compensation management, industrial relation.

## Introduction

Human resource is an inevitable element for economic and social development of country and it is momentous demeanor on the profitability and the efficiency of the organization. Capital alone cannot show the way to the success of organization without bearing in mind the human resource. The availability of skilled human resources is a haughtiness of each country and it increases the competency of firms with others. Peoples are investing themselves in the firm and they are considered as the most valuable investment in an organization. Effective and efficient utilization of all physical resource in its entirety depends on competent human factor in any organization. The sustainable growth of any organization depends on how the management manages the human resource in the organization. Cooperative sector play a significant role in the overall development of rural economy of a country. For the last century, co operative banks act as the predominant position in the rural credit distribution structure of Indian economy. When compared to commercial banks that are equipped with a lot of technological advancement, ATM, Credit and Debit Card, internet banking facility, mobile banking, NEFT and RTGS, co operative banked focused on relationship marketing concept. For the execution of this concept, human resources are the inevitable element used by the cooperative sector. The management practices on human resources applied in cooperative sector are comparatively not viewed well.

## Scope and Significance

Kerala is one of the major states which have successfully implemented cooperative credit system. Kerala can claim to have a sophisticated and efficient rural credit system administered through primary Cooperatives, Central Cooperative Banks and Apex Cooperative Banks. There are 1628 Primary Agricultural Credit Societies under the control of Registrar of cooperative societies in Kerala. As compared to other states in India, Kerala enjoys abundant supply of skilled and competent work force.

\*Research Scholar, Department of Commerce, University of Kerala.

\*\*Assistant Professor, School of Distance Education, University of Kerala

Cooperative is an effective economic and social tool to serve the deprived section of the society and uplifts the socio-economic conditions of members and it is also considered as a vital part of the Indian financial system. In the three tier cooperative credit structure prevailing in the state, , Primary Agricultural credit Societies account a major position in terms of banking services, deposit mobilization and loan distribution at grass root level. The weight of Cooperative is infinite & if we required reviving the Cooperative movement in fruitfully, we should provide rigid & integrated efforts for the Human Resources management in Cooperatives. B.S. Shekawat said that more than financial resources, it was human resource that posed challenges to the cooperatives in the State. This would cover manpower planning, training, career development, recruitment, promotion and appraisal. He said a positive sign was that in recent years the demand for training facilities from cooperative institutions was on the rise. Therefore, this study is an attempt to make out the challenges of human resource management and look into some medicines for the better utilization.

After the globalization, the most of banking services is technology driven. It is the era of “technological knowhow”. As compared to commercial banks and RRBs,utilization of the emerging innovations like ATM, Net Banking, Mobile Banking, RTGS, and NEFT is lower than in PACS and also the professional qualification graph of employees is very low. Hence, training and development programme is the only way to improve themselves and over all development of PACS.This study tried out to understand various training programme conducted by PACS itself and other institutions they provide various development programme which focused on to explore the potential of co operative employees.

Several committees, from the All India Rural Credit Survey Committee to the latest Prakassh Bakshi (Former Chairman, NABARD)Committee, have stressed the need for major role of cooperatives in providing credit and allied services in the rural sector. because of the illiteracy level of rural area and the strong relationship of employees with members ,who are the beneficiaries of PACS, people still following traditional banking methods and they are more comfortable in traditional banking than electronic banking(e-banking). At the same time as struggling to provide better and efficient service at the counters, the staff is also confronted with various regulatory norms to mitigate risks in operations. This clearly establishes that employees of cooperative banks play a vital role in managing not only the ‘transaction’ of a customer but also future long-term relationship with them. It is only human resources that is capable of deciding and implementing and controlling activities. No computer can substitute human brain; no machines can run without human intervention. As compared to the performance level, membership, deposit, advance, and working capital, of PACS to all India average, we can see that there is huge gap between Kerala levels to all India average. One of the major reasons for the tremendous growth of co operative sector in Kerala is the huge potential human resources in the PACS. Around 40000 employees are working in this sector. Therefore the study related to these employees, how they are hired, trained, compensated, motivated and maintained, are very much significant in the present scenario.

## **Objectives of the study**

The present paper is prepared with the following specific objectives:

1. To understand the existing human resource management practices of PACS in Kerala in terms of specific components such as recruitment and selection, training and development, erformance appraisal and compensation management.
2. To offer suitable suggestions for improving HR practices in PACS in Kerala.

## **Methodology**

In pursuance of the above mentioned objectives, required secondary data were obtained from published records of PACS and Government, books, journals, study reports, electronic sources etc. The main aspects of the study have been discussed with experts, employees and other eminent personalities of PACS.

## Primary Agricultural Credit Societies (PACS)

In the co operative credit structure, there are two parallel wings are come into existence and developed, one for purveying short term and medium term, functioning in three tier structure, ie, apex society at state level, central bank at district level and PACS at grass root level, and other one for long term credit distribution, functioning in two tier structure, to agricultural and allied activities. In short, The Primary Agricultural Cooperative Societies (PACS) are the bottom-tier of three- tier Cooperative credit structure operating in the country. These are Short Term Cooperative Credit Structure functioning at the grassroots (village/panchayat) level.

## Human Resource Policies

Human Resource policies are a predetermined course of action established to guide the performance of work towards objectives. It should enable the organization to have adequate, competent and trained personnel at all level. A rigid and appropriate set of policies make available a support to the PACS to attain the business objectives and provide necessary guidance to the employees in their performance. Unfortunately, PACS in Kerala failed to constitute concrete policies in related to human resource practices in the society. Even though a sound policy followed by PACS with regards to the salary, allowance and bonus of employees, decided by the Registrar, co operative society, the other remnant and relevant factor of human resource management like recruitment and selection, training and development, performance appraisal, promotion, compensation and industrial relation are silent in the co operative societies Act and in the Bye law of the society. Any single activity that is needed to perform in the PACS, that is required by Legal protection either come under Kerala Co operative Societies Act or Bye-law documented by itself.

The primary objective of the PACS is the overall improvement of members who voluntarily constituted this institution for their upliftment. Therefore, they ignore policies related to the betterment of employees. There is no specific HRD policy of staff based on merit and their qualification. Political interference in the recruitment, they have some vested in the appointment, and educational qualification of the existing employees is the major barrier which adversely affects the growth of human resource of PACS in Kerala. Employees act as a frog in the river. They cannot improve themselves without executing a good HRD policy in the PACS. Though the cooperative banks come under the financial obedience of the RBI, NABARD and they take pleasure in autonomy in human resources matters. A pre determined man made policy is required for the effective utilization of the human resources in PACS. The major human resource policies are framed on the following core area. It comprises of recruitment and selection, training and development, performance appraisal, promotion and compensation.

## Recruitment and Selection

Recruitment is a positive process of searching for prospective employees and stimulating them to apply for jobs in the organization (Edwin B Flippo). It is a key task for the human resource managers as it helps in deciding the exact candidate for a meticulous job. Selection is the process of choosing most suitable person for the vacant post. In short, Recruitment is the process of inviting application and selection involves picking a group of worker from a total group of workers who were applied for job. In the PACS, there is lack of Scientific and transparent system in the recruitment and selection process.

There are three sources of recruitment in the Primary Agricultural Co-operative Credit Societies, namely.

- By direct recruitment
- By taking persons on deputation from co operative department or other co operative institutions.
- By promotion

In the direct recruitment, there are two body authorised to invite application from the applicant. Up to the last grade post, Board of Directors call for employees and conduct an examination under the supervision of reputed person and select the person who scored highest mark in the exam. From the junior clerk and above, the right to conduct an exam held by Kerala co operative examination board and after publishing the score obtained the written exam, Board of Directors conduct an interview of person who attend the exam and after clubbing these results, Board of Directors give an appointment letter to some persons who scored highest mark in the these two test. The major limitation of this procedure is that the final authority to give an appointment is held by the Board of Directors. This caused to loos transparency in this procedure. Political influence and other monetary and nonmonetary elements comes forward in the selection procedure, it may be caused to eliminate the right person in the right post.

The second source is considered to appoint to the key post of PACS, ie, secretary/chief executive. The constraint of this selection is that the tenure of this job only for one year, they cannot get sufficient time to formulate policies in the organization. To conquer these two limitations, PACS will give authority to public service commission in Kerala to conduct examination and any other quality than merit should not consider in the selection procedure.

### **Training and Development.**

Training of an employee is essential in PACS because human resources are more valuable asset in the organization. Training is to bridge the gap between job requirements and present competence of an employee. Due to the technological advancement in the banking sector, employee cannot survive without imparting knowledge related to the advancement. In Kerala, the majority persons in the Co-operative banking sector believe that one way or another if one can get a job he can robotically manage the dealings of the bank. This feature of employee is dangerously harmful for the development of human resources in the PACS. Scientific training is needed not only for the new comer but also required to the existing experienced employees to improve their knowledge and skill to perform their job faultlessly. Realizing the worth of training, the cooperative training institutions established at different levels to provide training to the employees of cooperative banks

## **ORGANIZATIONS FOR COOPERATIVE EDUCATION AND TRAINING**

### National Level Institutions

National Council for Cooperative Training (NCCT).

National Center for Cooperative Education (NCCE).

Bankers Institute of Rural Development (BIRD) Lucknow.

Regional Training Colleges (RTC) Bolpur in West Bengal and Mangalore in Karnataka.

College of Agricultural Banking (CAB) Pune.

Indian Institute of Bank Management (IIBM) Guwahati.

National Institute of Rural Banking (NIRB) Bangalore

### State Level Institutions

Agricultural Cooperative Staff Training Institutes (ACSTIs).

Integrated Training Institutes (ITIs).

Regional Institute of Cooperative Management (RICM).

Institute of Cooperative Management (ICM).

Junior Cooperative Training Centres (JCTC).

In the last three years, there is a positive growth with regard to the number of employees who attend the training programmes conducted by national or state agency because registrar made a circular by mentioning that minimum three day training certificate of any national or state level agency is compulsory for getting promotion to an employee. However, most of the training programmes organized by these institutions are a failure because they impart only theoretical knowledge of the subject and they did not focused on the practical

aspects. Cooperative banks are localized institutions with poor funds and some of the technical courses offered by the national training institutions are high cost oriented. Educational qualification is another problem. National or state level institutions offer their training programme in common language i.e. English and majority of the cooperative bank employees are not able to pursue and make out the concept. By interviewing different employees in the various PACS, I understand that majority of the PACS do not provide any training and development programme within the organization to employees in general, experienced employees in particular.

## **Performance Appraisal**

Performance appraisal is a process of evaluating an employee's performance of job in terms of its requirements (Scot, Clothier and Spreigal). It is a widely used technique to evaluate the people. In the absence of structured system of appraisal, there is little chance of ensuring that the judgements made will be lawful, fair and accurate. In Primary Agricultural Co-operative Credit Societies, there is no structured system to appraise the employees, especially permanent employees. Due to so many reasons, not a profit making organization, no competition among employees, lack of separate human resource department, be short of monetary or non monetary benefit to employees who perform very well, absence of motivation system, no provision to maintain fund for appraisal etc, there is no organized system followed, right now. On the basis of the financial performance, the Primary Agricultural Co-operative Credit Societies are classified into four categories, i.e., A, B, C and D and wage structure is fixed by considering these Grade A, B, C or D. Therefore, there is no need for systematic evaluation of the performance of an employee. This is the major reason for poor performance of employees in Primary Agricultural Co-operative Credit Societies.

## **Promotion**

A promotion involves a change from one job to another that is better in terms of status and responsibilities (Edwin B Flippo). The employees will work hard if they know that they will get promotion. It is an inspiration as well as a motivation factor to all employees to work sincerely. In the PACS, seniority and educational qualification are the two criteria for providing promotion to employees. If an employee is educationally qualified and he does not complete the required period of service, he will not be considered for the promotion though he has sufficient competency in his work. The significant qualities of employees, skills, knowledge, abilities, characteristics and personalities, are only the secondary subject in making a decision related to promotion. Competency of employees is the driving force of the capabilities of an organization. Therefore, this unscientific method will harmfully affect the morale of employees towards the Bank. By interviewing employees in PACS, they revealed that some vested interest of board directors played a crucial role in the promotion of an employee and another hindrance to get promotion of an employee is that their educational qualification is failed to fulfil the legal requirement which is required for the post. To overcome this negative impact among employees, competency based promotion scheme should be applied in the PACS.

## **Compensation Management**

Compensation management is a general policy, implemented in conjunction with specialized jobs designed to help an organization maximize the returns on available talent. The ultimate goal is to reward the right people to the greatest extent for the most relevant reasons. Compensation management tries to optimize salary, bonus, stock option, and benefits to yield the maximum profit per employee. A major challenge for all cooperatives is attracting and keeping productive people. Cooperatives must offer employees compensation commensurate with their experience and skills if they are to meet this challenge. It is important to provide a proper mix of direct and indirect compensations to attract and keep competent employees. Competent employees can enhance margins and membership savings for cooperatives. However, PACS in Kerala have not taken care in developing a fair remuneration package for its employees.

## Industrial Relation

Industrial relation is very essential for rapid growth of PACS in the globalised era. It helps to avoid dispute between employer and employees and maintain a good relation among employer, employee and the government. Industrial relation is the complex of interrelations among workers, managers and government (Dunlop). A pleasant-sounding employer-employee relationship is indispensable for the effectual performance of the Primary Agricultural Co operative Credit Societies. PACS cannot survive long life without taking into account the human relation among workers and employers because the essence of PACS is the co operation among persons those who are providing an effort for the improvement of PACS. Co-operative administration cannot fulfill its obligations if it is not supported whole heartedly by the employee at all levels. A well developed and properly administered grievance system is helpful to maintain harmonic relation among employees in the PACS. Egoism, political ideology of employees, gender inequality, lack of recognition, opposition towards the technological advancement, absence of prompt communication system, non existence of professionalism among the employers, be short of leadership quality, non appearance of compensation and grievance system etc. are the major issues affected to maintain good relation among employees.

Cooperation is a government sponsored ideology in Kerala. Therefore, government had a major role in the present condition of PACS. The government always encourages the employees to bring out their fullest talent for the success of the institution. Government constituted separate department for handling the issues related to co operative societies. If any employee feels any partiality in the decision of board of directors, he can appeal to the registrar, government employee, for getting justice with regard to his employment. The conflict between employer and employee is unavoidable in any organization. Healthy conflict may cause an opportunity for personal growth. Management should promote healthy competition among employees for generating new ideas and should give reasonable recognition to them. It is may help to inspire the employee and thereby uphold a hearty relation among employees. Most of the job in PACS is highly depend on the human resource. As we compare the monetary befits of employees of PACS to commercial banks, is very near to the ground. Therefore, management provides good working condition and healthy relation among employer and employees to sustain the skilled employee in the organization.

### Suggestions.

1. Role of Kerala Co operative Examination Board should be popularized to make the recruitment procedure transparent and formulate an Interview Board, including experts from outside, to evaluate the qualities of applicant.
2. Educational qualification should be tailored in line with the status of job.
3. Each PACS should appoint a professionally qualified person according to the nature of operation in the key post of Secretary or Chief executive.
4. Off the job training facility should be provided not only for the new comer but also the experienced person to enrich their qualities. Adequate fund should be allocated in the annual budget for the training and development of the society. For escalating the technological knowhow of the people, practical training should be given to the employees.
5. To manage the managers, minimum two seats in the Board of Directors should be reserved for retired professionals/experts.
6. HR policy should be stated in definite form. It should be written in understandable language. While formulating HR policies, provide an opportunity to all level of workers for making their contribution. It should be formulated with due regard with the interest of all concerned parties.
7. Salary and other allowances should be modified in accordance with the standard of living in the society. Most of the employee talked about inadequacy of bonus scheme, maximum limit is Rs: 8500/-, should be modified in proportion of profit earned by the PACS. Proper rewarding system helps to improve the morale of employees.

8. To maintain good industrial relations, trade unions must act their role without any partiality. Proper communication system and good grievance handling system are also helpful to create healthy relation among employees.
9. One of the major limitations of PACS in HR practice is the absence of scientific appraisal system. To prevail over this situation, structured appraisal system should be implemented and thereby PACS can modify the salary structure on the basis of this appraisal.
10. Along with seniority based promotion system, competency based system should also consider at the time decision regard to promotion of employee.
11. The Board of Directors formulates a Committee for examining the HR policies or practices with representation from workmen for improving the related activities. This committee can conduct hearings from the employees and conduct visits to the work spot, for better understanding and solving problems and reviewing the suggestions provide by the committee.
12. Idea Bank concept, collect ideas from workers and members share and filter the ideas by reviewing comment of the workers towards the idea should be helpful to generate and execute innovative ideas in the PACS. This thought offer equal opportunity to all, both employees and members, to contribute ideas in the policies of the PACS. Selected ideas should be rewarded to those people who contribute the idea and it is an inspiration to employees and others.

## Conclusion

Successful organization depends on having the right system of HR policies and practices in place to recruit, select, develop, appraise, compensate and motivate its employees. When compared to other management functions, human resource management in PACS is more essential in the current economic environment. But unfortunately, PACS considered human resource as a simple debit item in the profit and loss account than the actual worth. It is the significant reason for the poor performance of PACS. Apart from this, inappropriate staffing pattern, technological backwardness, lack of professionalization and attitude of workers and non professional management body are some of the challenges of PACS in relation to the management of its human asset. After the globalization, banking sector made dramatic changes with technological emerging. To compete against these forces, PACS should give more importance to the human resources.

## References

- Sunkara Sree Jyothi. (1986) Human resource management in cooperative sector: a study of selected units in Visakhapatnam District. Inter-India Publications.
- SHIVAMAGGI H. B. (1996)., "Future Strategy for Development of Co-operatives", Economic and Political Weekly, Vol. 31, No 20, (May 18), p. 1187-1188, accessed from [www.jstor.org/stable/4404141](http://www.jstor.org/stable/4404141).
- NABARD (2001). Expert Committee on Rural Credit, Mumbai, accessed from [www.nabard.org/fileupload/ - DataBank/ Newsletters/August2001.pdf](http://www.nabard.org/fileupload/-DataBank/Newsletters/August2001.pdf) on 26-06-2012.
- Dr K Ramesha (2004)., "Economic Reforms and the Performance of the Co-operative Sector in India – Lessons for Future" \*Paper presented at International Conference on Mending the Global Economy: Role for Economic Participation, IAFEP 12th Biannual Conference, St Mary's University, Halifax, Canada, July 8-10, 2004
- Venugopalan K and Abdul asees Koroth (2005) Book on Human Resource Management Peter Davis, (2006) "Beyond human resource management in co-operatives", Cross Cultural Management: An International Journal, Vol. 13(I), pp.69 – 95.
- Charles R Greer (2006) "Strategic Human Resource Management" second edition.
- Ramu N (2008) Human Resource Management in Co operative Banks in India: Issues and Challenges. CAB calling July-September, 2008.
- Aswathappa K. (2011) "Human Resource Management" sixth edition.
- Anil Kumar Soni & Harjinder Pal Singh Saluja (2013) "A STUDY ON HUMAN RESOURCE DEVELOPMENT IN COOPERATIVES" International Journal of Human Resource management and Research (IJHRMR) ISSN 2249-6874 Vol. 3, Issue 1, Mar 2013, 63-72
- Dr.R.Madhesh(2014). "Human Resource Management Practices in Primary Agriculture Co-operative Credit Societies (PACCS) in Tamil Nadu: Issues and Challenges" Indian Journal of applied Research volume no:4 issue:3 march 2014.

# Is Basel Norms an Aid to MSME's?

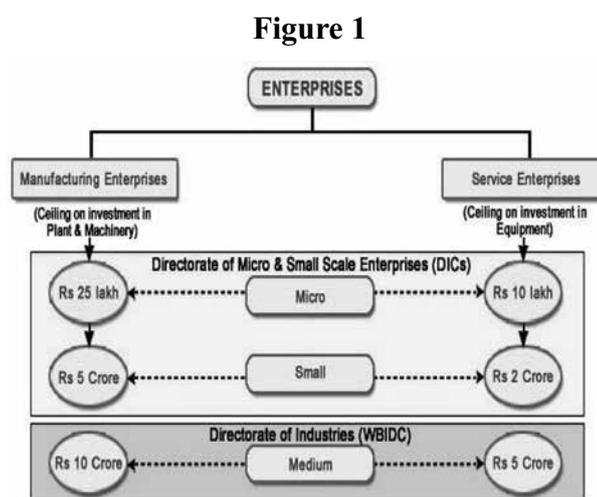
\*Vijila.V & \*\*Dr. G. Raju

## INTRODUCTION

The MSMEs are the important pillars of Indian economy as it contributes greatly to the growth of Indian economy. Nowadays the Small Scale Industries (SSI) has been known as Micro, Small and Medium Enterprises (MSMEs) with the introduction of Micro, Small and Medium Enterprises Development Act 2006 (MSMED Act). Micro, small and Medium Enterprises (MSMEs) are the most vibrant and sensitive sectors in Indian economy. MSMEs in India face a number of problems – the absence of adequate and timely banking finance, nonavailability of suitable technology, ineffective marketing due to limited resources and non availability of skilled manpower. Though Globalization has increased competitiveness on MSMEs to a certain extent, still the MSMEs are not adequately prepared to compete with the global players. There has been a change in the attitude on the part of Government for protecting and promoting the MSMEs. The Government has already taken several policy initiatives and needed to ensure proper co-ordination and implementation of such initiatives. The MSMEs must convert the threats of globalization into opportunities through increased productivity, product diversification, supply chain management, Research and Development activities. MSME sector helps to realize the target of proposed National Manufacturing Policy of raising the share of manufacturing sector in GDP from 16% at present to 25% by the end of 2022.<sup>1</sup>

Without an adequate and timely flow of credit, sickness among MSMEs and thereby NPAs for the banks will also be increased. The major reasons identified by the Economic Survey of India 2014-15 behind the increasing sickness among Indian MSMEs are the lack of market demand and lack of working capital<sup>2</sup>. The survey for All India Census of MSMEs identified 48% units among the sick units are suffering from the lacking of working capital. The major reason suggested by the experts in the field of MSME development for lower access to credit among MSMEs is: high - risk perception among the banks about this sector and high transaction cost for loans appraisal that restricts access to MSMEs to institutional credit mechanism.

Micro Small and Medium enterprises development Act, 2006



Source: website of DIC

1. Dr. Sanjeeb Kumar Dey , MSMEs IN INDIA: IT'S GROWTH AND PROSPECTS, Abhinav National Monthly Refereed Journal of Research in Commerce & Management, PP26-33
2. Mukesh Gulati and Gaurav Paliwal, MSME financing: Need for innovation, Souvenir, COSIDICI, PP53-56

\* Assistant Professor, Govt. College, Attingal, Thiruvananthapuram

\*\* Professor, Department of Commerce, School of Business Management and Legal Studies, University of Kerala, Kariavattom Campus, TVPM

Figure 1 represents the enterprises divided into two broad categories manufacturing and service enterprises and their limit of investment in Plant and machinery under MSMED act, 2006.

Revision of the definition of MSMEs: Ministry has proposed to enhance the limit of investment in plant and machinery by way of **an amendment to MSMED Act, 2006**.<sup>3</sup> The proposed definition of MSME by raising the capital limits in plant and machinery as follows: - Sector Investment limit in plant and machinery Present Proposed Manufacturing Micro Rs.25 lakh Rs. 50 lakh Small Rs. 5 crore Rs. 10 crore Medium Rs. 10 crore Rs. 30 crore Services Micro Rs. 10 lakh Rs. 20 lakh Small Rs. 2 crore Rs. 5 crore Medium Rs. 5 crore Rs. 15 crore Micro Small & Medium Enterprises Development (Amendment) Bill, 2015 was introduced in Lok Sabha on 20.4.2015 and the motion for consideration was moved in Lok Sabha on 13.5.2015. The Bill was subsequently referred to Department related Parliamentary Standing committee on Industry on 21.5 2015 for examination. The Bill was laid on the table of the Lok Sabha on 5th August 2015 by Rajya Sabha Secretariat<sup>4</sup>.

**Table 1**  
**Classification of Enterprises**

Nature of Enterprises	Manufacturing or production of goods	Providing or rendering service
<b>Micro</b>	Investment in plant and machinery up to Rs. 25.0 lakhs.	Investment in equipment up to Rs. 10.0 lakhs.
<b>Small</b>	Investment in plant & machinery above Rs. 25.0 lakhs but not exceeding Rs.5.0 crores.	Investment in equipment above Rs. 10.0 lakhs but not exceeding Rs.2.0 crores.
<b>Medium</b>	Investment in plant & machinery above Rs. 5.0 crores but not exceeding Rs.10.0 crores.	Investment in equipment above Rs. 2.0 crores but not exceeding Rs. 5.0 crores.

**Source:** First Schedule of IDR Act, 1951

### **Importance of MSME Development Act, 2006**

With the introduction of new MSME Act 2006, the Government has tried to resolve some major issues related to the MSMEs like complicated bureaucratic registration procedures, lack of finance, lack of managerial skills etc. The most important thing that the Act has done is to increase the significance of the MSME sector and to offer a clear definition of MSMEs<sup>4</sup>. The MSME Act 2006 has framed a strict rule regarding the payment of dues by increasing penalties substantially for the delay in payment. For example, the Act mandates that all payments be made within 45 days failing which the creditor must pay compound Interest which is higher than the bank rate notified by the RBI. And as a result, proper maintenance of records becomes extremely difficult. The new MSME Development Act 2006 has made the registration procedure much simple and less time taking.

3. Annual Report on MSME, Government of India 2015

4. Rajib Lahiri, Problems And Prospects Of Micro, Small And Medium Enterprises (MSMEs) In India In The Era of Globalization,pp4

**Table 2**  
**Benefits of MSME registration**

MSME Registration is a most dominant media to avail many numbers of benefits under MSMED act:<sup>5</sup>

- 1% exemption on an interest rate on OD.
- Collateral Free loans from banks with 2% concession on an interest rate.
- Reimbursement of ISO certificate Expenses.
- Preference in Procuring Government Tenders.
- Very easy to get Licenses, approvals and registrations on any field for the business.
- Exempted in stamp duty payment.
- Electricity duty exemption for 15 years.
- 50% subsidy for patent registration.
- Eligible for the capital subsidy .
- Special consideration on international trade fairs or exhibitions.

**Source:** Annual Report on MSME, Government of India 2015

### **MSME's role in the economic development in India**

The MSME sector is an important pillar of Indian economy as it contributes greatly to the growth of Indian economy with a vast network of around 30 million units, creating employment of about 70 million, manufacturing more than 6000 products, contributing about 45% to manufacturing output and about 40% of exports, directly and indirectly<sup>6</sup>. This sector even assumes greater importance now as the country moves towards a faster and inclusive growth agenda. Moreover, it is the MSME sector which can help to realize the target of proposed National Manufacturing Policy of raising the share of manufacturing sector in GDP from 16% at present to 25% by the end of 2022.

The lots of potentials are available in the field of MSME's. They are:

1. Employment generation- There is numerous possibilities in the field of manufacturing and service rendering of MSME's. In recent years, the MSMEs are generating a different and ample amount of employment in the field of the retail and manufacturing sector. The rate of employment generation extended more by promoting the MSME's.
2. Customer satisfaction oriented- The MSME's produce goods according to the needs or expectations of the customers.<sup>7</sup> primarily, the MSME's manufacture goods considering the taste and preferences, liking and disliking of the local consumer.
3. Minimization of regional imbalance-The MSME's can be a good vehicle to minimize or remove the regional imbalances. The rural areas of the nation can equally be developed through the running of MSME units in such areas. The MSME's will utilize the workforce of rural areas and lead to the removal of regional imbalance.

<sup>5</sup> MSME Development Act 2006, Ministry of the District Industry Centers (DIC) MSME, Government of India

<sup>6</sup> Dixit, A. and Pandey, A.K. (2011), 'SMEs and Economic Growth in India: Cointegration Analysis', The IUPJournal of Financial Economics, Vol. IX, No. 2, PP. 41-59.

<sup>7</sup> Singh, R., Verma, O.P., and Anjum, B. (2012), 'Small Scale Industry: An Engine of Growth', Zenith International Journal of Business Economics & Management Research, Vol.2 Issue

4. Enhancement of export- The MSME's can be mean to enhance the export of India. There will be a great demand for Indian product at an international level of the market. The Indian items like –wooden items and another hand- made souvenir articles demanded in the world.
5. Attraction to the foreign investment –Though, the Indian MSME's are the booming field and the growth rate and return on investment is satisfactory. This sector is more responsive than other sectors of the economy. Therefore, this sector might be a source to attract foreign investment in India.

### **Problems of MSMEs**

A major bottleneck to the growth of the vital Micro small and medium enterprises (MSME) sector is its lack of adequate access to finance. The problems are:

1. Lack of credit from banks-The MSME'S are presently facing the problems of credit from the banks. The banks are not providing the adequate amount of loan to the MSME`s.<sup>8</sup>
2. Competition from multinational companies- In the present era of globalization, the MSME`s are facing the great from the international manufacturing companies who are proving quality goods at the cheapest price. Therefore, it is very difficult to compete with the multinational companies.
3. Poor infrastructure-Though, MSME`s are developing so rapidly but their infrastructure is very poor. With poor infrastructure, their production capacity is very low while production cost is very high.
4. Unavailability of raw material and other inputs- MSME's required raw material, skilled workforce and other inputs, which are not available in the market.<sup>9</sup> Due to unavailability of these essentials; it is very difficult to produce the products at affordable prices.
5. Lack of advanced technology-The owners of MSME`s is not aware of advanced technologies of production. Their methodology of production is outdated. The owners are using an older method in the field of fabricated metal and textile.
6. Lack of distribution of marketing channels-The MSME`s is not adopting the innovative channels of marketing. Their advertisement and sales promotion are comparatively weaker than the multinational companies are. The ineffective advertisement and poor marketing channels lead to a very poor selling.
7. Lack of training and skill development program- The training and development programs in respect of MSME`S development concern is very low .So, skilled manpower is not being available to MSME`S. The owners are aware of the innovative methods of production. The skill developmental schemes conducted by the government are not sufficient.
8. Complex labor laws and red-tape-All the laws related to all aspects of manufacturing and service concern are very complex and compliance with these laws are practically difficult. The various decisions of factory' are depend on the factory commissioner and inspector, so there are so many chances of red tape in the operation of MSME`S.

### **Bank lending to the SME sector**

The Basel capital standard allows MSME lending to be placed under the retail portfolio with a risk weight of 75% while the risk weight for BBB corporate loans is 100%. The MSME sector is becoming more efficient in terms of production as well as persons employed. According to the recent report by the Ministry of Micro, Small and Medium Enterprises (MSMS), the production during 2008–2009 went up by 11.4% whilst the

---

<sup>8</sup> Bhavani, T.A. (2011), “ Dynamic Business Environments: What These Mean for Indian Small Enterprises” in “ Micro and Small Enterprises in India: Era of Reforms: Keshab Das (Ed)” pp. 27-45.

<sup>9</sup> Morris, S.; R. Basant; K. Das; K. Ramachandran; and A. Koshy (2001) *The Growth and Transformation of Small Firms in India*. New Delhi: Oxford University Press.

number of persons employed rose by 5.2%.<sup>10</sup> In the same fiscal year, 12.37 lakh (1.237 million) new enterprises were added to this sector. This speaks of better utilisation of capacity and effective practices being followed by this sector. Against this backdrop, the reduction in risk weights for the retail portfolio will help to improve the additional approvals of loans. It is therefore an opportunity for bankers to enhance loans to MSMEs. In financing to large corporates the risk would be more concentrated among comparatively fewer activities, whereas the same amount of loans to the MSME sector will be spread over a larger number of units and a larger cross section of activities and disciplines, and consequently the risk will also be spread over a larger number of MSMEs.<sup>11</sup>

There is no transparency regarding the financial conditions of MSMEs and therefore, banks hesitate to give loans to small scale units. Improving the quality of financial information is an important requirement for enhancing the flow of funds to the MSME sector, as the quality of information also influences decisions on loan finance (Das, 2007).<sup>12</sup> Capital standards require banks to keep a minimum capital against their assets in order to protect the interests of the depositors and to ensure that there is adequate capital to absorb potential losses. Under Basel II capital standard, the risk weights for different classes of assets depend on the risk of the assets. Basel II capital standards allows banks to categorise the MSME lending as 'retail portfolio' which would require a lower risk weight of 75% compared to 100% risk weight for a BBB rated loan (Bank for International Settlements, 2006).<sup>13</sup>

The lower risk weight for retail portfolios should reduce the bank's cost of lending to the MSME sector, the actual credit losses from the MSME sector may not be significantly different from lending to the larger firms. One of the prominent measures used to ensure adequate flow of funds to the MSME sector is through regulation requiring banks to provide at least 40% of loans to targeted areas which include the micro, small and medium enterprises. One of the significant issues in lending to MSMEs is the use of both 'hard' data such as financial information, as well as 'soft' data such as feedback from vendors and other family members, which become important inputs towards understanding the credit risk of the business.

The challenge for banks is to bridge the information asymmetry so as to take the appropriate lending decision so that the good firms are not financially constrained, and at the same time, cut down on exposures to bad credit risks. Measures such as credit scoring for MSMEs should improve the quality of financial information and enable greater funding for the sector. The SARFAESI Act and the strengthening of legal provisions to take possession of assets used as security has improved the legal environment for lending in India, thus lowering the cost of lending and enforcement of contracts.

**Table 3**  
**Basel I, II and III Norms- An overview**

### **Basel I Norms**

In 1988, BCBS introduced capital measurement system called Basel capital accord, also called as Basel 1. It focused almost entirely on credit risk. It defined capital and structure of risk weights for banks. The minimum capital requirement was fixed at 8% of risk - weighted assets (RWA). RWA means assets with different risk profiles. For example, an asset backed by collateral would carry lesser risks as compared to personal loans, which have no collateral. India adopted Basel 1 guidelines in 1999.

<sup>10</sup>. Report of Ministry of MSMEs 2014

<sup>11</sup>. Venkatesh, S. and Muthiah, K. (2012), 'SMEs in India: Importance and Contribution', Asian Journal of Management Research, Vol. 2, No. 2.

<sup>12</sup>. Bala Subrahmanya, M. H. (2004), 'Small Industry and Globalization: Implications, Performance and Prospects', Economic and Political Weekly, Volume XXXIX, No.18, pp 1826-1834.

<sup>13</sup>. Annual Report 2010-11, Govt. of India, Ministry of Micro, Small and Medium Enterprises

## Basel II

In 2004, Basel II guidelines were published by BCBS, which were considered to be the refined and reformed versions of Basel I accord. The guidelines were based on three parameters. Banks should maintain a minimum capital adequacy requirement of 8% of risk assets, banks were needed to develop and use better risk management techniques in monitoring and managing all the three types of risks that are credit and increased disclosure requirements. Banks need to mandatorily disclose their risk exposure, etc to the central bank. Basel II norms in India and overseas are yet to be fully implemented.

## Basel III

In 2010, Basel III guidelines were released. These guidelines were introduced in response to the financial crisis of 2008. A need was felt to further strengthen the system as banks in the developed economies were under-capitalized, over-leveraged and had a greater reliance on short-term funding. Also, the quantity and quality of capital under Basel II were deemed insufficient to contain any further risk. Basel III norms aim at making most banking activities such as their trading book activities more capital-intensive. The guidelines aim to promote a more resilient banking system by focusing on four vital banking parameters viz. capital, leverage, funding, and liquidity.

**Source:** BCBS report 2012

## MSME lending under Basel I Norms

In India, banks are the dominant channel for providing funds to industry. However their importance in funding smaller firms is even more pronounced since most Micro, small and medium enterprises (MSMEs) are not able to access the capital markets for funds.<sup>14</sup> In recent years, governments and policymakers have been giving considerable attention to facilitate the development of the MSME sector, as a strong and vibrant MSME sector provides a good foundation for entrepreneurship and innovation in the economy. In order to get a sense of international comparison, the Basel Committee on Banking Supervision defines an MSME as a legal entity.<sup>15</sup>

### Bank lending to MSME under Basel I norms:

The MSME'S are presently facing the problems of credit from the banks. The banks are not providing the adequate amount of loan to the MSME`s. The loan providing the process of the banks is very long and formalistic. The owners of the MSME`s has to produce different types of documents to prove their worthiness. The banks are providing on an average 50% total capital employed in fixed assets. The cost of credit is also high.

Basel-I norms focused funding of firms by banks must be linked to ratings by independent agencies, banks can justifiably claim to have a rule of thumb for initial filtering of SME loan-seekers. Many bankers can even insist that those small enterprises that do not necessarily come under the purview of Basel-I must also get their ratings. Considering the fact that credit accessibility is the sore point of the MSME sector, the impact of compulsory rating on credit deserves careful scrutiny.<sup>16</sup> For MSMEs, mostly operating under hard budget constraints, credit rating imposes additional costs and hence must bring tangible benefits to the firms. The more risk-sensitive pricing introduced by the new rules through the internal ratings-based approaches will entail a certain variation in capital adequacy, which is ultimately related to the individual quality of the borrowers.

<sup>14</sup> Bank for International Settlements, 2006, paragraph 273.

<sup>15</sup> Venkatesh, S., and Muthiah, K. (2012), 'SMEs in India: Importance and Contribution', Asian Journal of Management Research, Vol. 2, No. 2.

<sup>16</sup> Economic times, Can Basel-II make SMEs smile?By , Oct 15, 2009

A poor-quality borrower will force its lender to hold more regulatory capital compared with a better-quality borrower, but this does not reduce loan financing. Enhanced transparency, structured dialogue, openness and communication are the cornerstones of an effective cooperation between banks and MSMEs. These principles will ensure a successful financing relationship.

### **Bank lending to MSME under Basel II norms:**

In July 2002, the Basel Committee agreed to grant loans to MSMEs under a special and more favourable treatment framework.<sup>17</sup> According to the Basel II proposal SME funding by the banks using either the standardised or internal ratings-based (IRB) approach will in general be given a lower capital requirement than loans to larger firms.

The capital savings, which may be as high as 20%, result from the application of a reduction mechanism (discount factor) that corrects the asset risk weights on the basis of the borrower's size. Basel II is a framework providing harmonized rules for the calculation of regulatory capital measures. The purpose of Basel II, which was initially published in June 2004, was to create an international standard determining a number of capital banks should put aside to guard against the types of financial and operational risks they face. Capital requirements ensure that financial institutions have sufficient capital to sustain operating losses while still honoring withdrawals, and thus help protect the international financial system from the types of problems that might arise should a major bank or a series of banks collapse.<sup>18</sup> During the consultation period on Basel II, some empirical studies supported claims that the more risk - sensitive nature of Basel II would reduce the availability and increase the cost of finance for MSMEs, in particular, unrated MSMEs, as banks would be required to hold relatively more capital for MSME exposures.

In response, the Basel Committee made some specific changes to the final version in order to accommodate SME Finance. These changes include:<sup>19</sup>

- (i) at a given probability of default, exposures to MSMEs were to require relatively less capital than larger firms in risk - weighting calculations;
- (ii) MSME exposures classified as retail were to have a specific risk weight curve;
- (iii) The risk weight for non-mortgage retail exposures was reduced under the standardized approach; and
- (iv) Credit risk mitigates such as collateral and guarantees were better recognized.

### **Bank lending to MSME under Basel III norms:**

Under Basel III Small businesses will fear in suffering high lending rates and decreased credit availability. Because MSMEs will have high risk weights—requiring greater amounts of capital—banks will be forced to cut down on the amount of lending they extend to these recipients.

This decreased SME lending is problematic for a variety of reasons:<sup>20</sup>

- o First, there is a fairness consideration: SMEs were not the cause of the recent financial crisis; however, SMEs were the businesses hit the hardest. Decreased credit availability will impose greater burdens on small businesses that are already struggling financially.

<sup>17</sup>. G-20 SME Finance Policy Guide October 2011

<sup>18</sup>. The New Basel Capital Accord And SME Financing, SMEs and The New Rating Culture, Rym Ayadi, November 2005

<sup>19</sup>. Annual Report 2010-11, Govt. of India, Ministry of Micro, Small and Medium Enterprises

<sup>20</sup>. The New Basel Capital Accord And Sme Financing, Smes And The New Rating Culture, Rym Ayadi, November 2005

- o A second consideration involves the role of SMEs in terms of the overall economy. If many of these SMEs are unable to secure financing because of the new regulations, the result will be diminished output and employment globally.
- o Finally, while some concessions in terms of small business growth may be defensible to yield greater market stability, the capital requirements are not sufficiently narrowly tailored to further this goal.

Rather than raising additional capital, many banks have chosen to maintain capital close to pre-Base III levels, instead of reducing RWAs. Banks have cut back on “riskier” lending, such as loans to small businesses. Some lenders intend to comply with the new regulations by shedding all business loans other than loans to their core business customers.

While MSME lending has declined because of the risk weight system, the risk rating ascribed to these assets under Basel III’s framework may be a poor reflection of actual risks associated with the loans. Hence, regulatory compliance will be at the detriment of many MSMEs and will not necessarily be a benefit in terms of risk mitigation and market stability. Another significant problem will be increased competition among MSMEs and startup businesses for lending as a result of decreased credit availability.<sup>21</sup> Small local businesses will be assigned the same risk weights as high-potential startups. The result may be that local “mom and pops,” who can expect only modest financial returns, will be squeezed out by startups with high profit potential.

The impact of Basel III demonstrates that in addition to decreased small business lending, the transactional costs of the new regulations will also be pushed on to small businesses and other enterprises with relatively higher risk weights. Rather than bear the cost of the regulations themselves, banks will impose additional costs on borrowers. Business consumers will face higher interest rates on loans in addition to more fees.

## Conclusion

Though Basel-II can potentially assist the banks to increase their financial and operational risks-mitigating ability by providing better information on the MSME, there is also a real danger that it may end up reducing credit flow to MSMEs. What to Expect for MSME Lending and Credit Conditions after the Implementation of Basel III In an economic upturn, the dependence on bank loans has not been as significant of an issue for MSMEs and entrepreneurs. However, due to struggles with recovering to pre-crisis economic growth levels and debt consolidation, the volumes are not expected to bounce back to pre-crisis levels in the near future. The implementation of Basel III will not be complete until 2019. Hence, conditions and surroundings will change until then. In addition, the framework is under continuous evaluation and opens for adjustments. Regardless, to secure a stable, robust economy without compromising possibilities of innovation, regulatory authorities have to balance financial stability and inclusion with comprehensive risk assessments against unexpected events.

## References

1. Dr. Sanjeeb Kumar Dey , MSMEs IN INDIA: IT’S GROWTH AND PROSPECTS ,Abhinav National Monthly Refereed Journal of Research in Commerce & Management,PP26-33
2. Mukesh Gulati and Gaurav Paliwal, MSME financing:Need for innovation, Souvenir, COSIDICI, PP53-56
3. Annual Report on MSME, Government of India 2015
4. Rajib Lahiri ,Problems And Prospects Of Micro, Small And Medium Enterprises (MSMEs) In India In The Era Of Globalization,pp4
5. MSME Development Act 2006, Ministry of the District Industry Centers (DIC) MSME, Government of India
6. Dixit, A. and Pandey, A.K. (2011), ‘SMEs and Economic Growth in India: Cointegration Analysis’, The IUPJournal of Financial Economics, Vol. IX, No. 2, PP. 41-59.

---

<sup>21</sup> MSME Development Act 2006, Ministry of the District Industry Centers (DIC) MSME, Government of India.

7. Singh, R., Verma, O.P., and Anjum, B. (2012), 'Small Scale Industry: An Engine of Growth', *Zenith International Journal of Business Economics & Management Research*, Vol.2 Issue
8. Bhavani, T.A. (2011), " Dynamic Business Environments: What These Mean for Indian Small Enterprises" in " Micro and Small Enterprises in India: Era of Reforms: Keshab Das (Ed)" pp. 27-45.
9. Morris, S.; R. Basant; K. Das; K. Ramachandran; and A. Koshy (2001) *The Growth and Transformation of Small Firms in India*. New Delhi: Oxford University Press.
10. Report of Ministry of MSMEs 2014
11. Venkatesh, S. and Muthiah, K. (2012), 'SMEs in India: Importance and Contribution', *Asian Journal of Management Research*, Vol. 2, No. 2.
12. Bala Subrahmanya, M. H. (2004), 'Small Industry and Globalization: Implications, Performance and Prospects', *Economic and Political Weekly*, Volume XXXIX, No.18, pp 1826-1834.
13. Annual Report 2010-11, Govt. of India, Ministry of Micro, Small and Medium Enterprises
14. Bank for International Settlements, 2006, paragraph 273.
15. Venkatesh, S., and Muthiah, K. (2012), 'SMEs in India: Importance and Contribution', *Asian Journal of Management Research*, Vol. 2, No. 2.
16. Economic times, Can Basel-II make SMEs smile?By , Oct 15, 2009
17. G-20 SME Finance Policy Guide October 2011
18. The New Basel Capital Accord And Sme Financing, Smes And The New Rating Culture, Rym Ayadi, November 2005
19. Annual Report 2010-11, Govt. of India, Ministry of Micro, Small and Medium Enterprises
20. The New Basel Capital Accord And Sme Financing, Smes And The New Rating Culture, Rym Ayadi, November 2005
21. MSME Development Act 2006, Ministry of the District Industry Centers (DIC) MSME, Government of India

# PHYSICAL AND FINANCIAL PERFORMANCE OF PRIME MINISTER'S EMPLOYMENT GENERATION PROGRAMME (PMEGP)

Aneesha P. Chellappan\* & Dr. K. S. Suresh Kumar\*\*

## Abstract

Economic growth and development are the results of optimum utilization of the resources including human resources. Economists, planners, and governments all over the world are increasingly recognizing this phenomenon and shaping their policies conducive to entrepreneurship development that translates into economic growth. India is one of the few countries which face educated unemployed in large numbers. In order to resolve the problem of unemployment and creating self-employment opportunities the government of India introduced a centrally sponsored employment generation programme called Prime Minister's Employment Generation Programme (PMEGP) under the Ministry of Micro, Small and Medium Enterprises (MSME). Financial performance of PMEGP in Kerala shows a positive trend except in the year 2015-16 in terms of margin money when compared to the targets set for the corresponding periods. However, the amount of margin money released and number of projects started under the scheme has been showing a declining trend during the period under study. Due to lack of funds, applications worth 1509.28 lakhs were pending for subsidy release as on 31-05-2014. Category wise analysis also reveals that the performance of the scheme is not encouraging in Kerala.

## Introduction

Industrial entrepreneurship is a vital force in initiating and sustaining the economic development of any part of the world. Entrepreneurship is one of the important determinants of industrial growth and sustainable development of any economy. Economic growth and development are the result of proper and optimum utilization of the resources including human resources. Economists, planners, and governments all over the world are increasingly recognizing this phenomenon and shaping their policies conducive to entrepreneurship development that translates into economic growth. The unemployment of youth is the major problem faced by every nation across the world. India is one of the few countries which has educated unemployed in large numbers. Creating employment opportunities is generally perceived as the responsibility of the government. In order to solve the problem of unemployment and creating self-employment opportunities the government of India introduced a centrally sponsored employment generation programme called Prime Minister's Employment Generation Programme (PMEGP) under the Ministry of Micro, Small and Medium Enterprises (MSME). This scheme is mainly aimed at uplifting unemployed youth in rural and urban areas and traditional artisans in the country in terms of generating employment through the provision of financial assistance for the establishment of micro enterprises.

According to the latest survey of National Sample Survey Organisation (NSSO), in the category of big states in India, Kerala is having the highest unemployment rate of 7.4 per cent. It puts Kerala's unemployment rate at three times higher than the national average of 2.3 per cent. This shows the gravity of this issue in the state and the significance of employment generation programme especially those initiated by the state.

## Objectives of the Study

1. To understand the financial performance and physical achievement of PMEGP in Kerala.
2. To examine the category wise implementation of PMEGP in Kerala

\*Research Scholar, Department of Commerce, University of Kerala, Trivandrum, e-mail: aneeshasherin@gmail.com

\*\*Assistant Professor, School of Distance Education, University of Kerala, Trivandrum, e-mail: surukuttyatl@gmail.com

## **Methodology**

The present study is descriptive in nature based on secondary data. Required data were obtained from Directorate of Industries & Commerce, District Industries Centre, Thiruvananthapuram, and records and web sites of Kerala state planning board and Kerala state Khadi and Village Industries Commission (KVIC). The scope of the study is limited to the physical and financial performance of PMEGP in Kerala.

## **PMEGP**

PMEGP is a credit linked subsidy programme for generating employment opportunities through establishment of micro enterprises in rural as well as urban areas. This scheme has been announced in 15th August 2008 and launched by merging the two schemes like Prime Minister's Rojgar Yojana (PMRY) and Rural Employment Generation Programme (REGP) which were in operation till 31st March 2008. It is a centrally sponsored scheme launched by the Ministry of Micro, Small and Medium Enterprises (MSME). PMEGP is administered by the Ministry of MSME. In the national level the scheme is implemented by Khadi and Village Industries Commission (KVIC) under the Ministry of MSME. At the state level, the scheme is implemented through State KVIC Directorates, State Khadi and Village Industries Boards (KVIBs), District Industries Centers (DICs) and identified Banks. Distribution of the government subsidies to the entrepreneurs/ beneficiaries under the scheme will be routed by KVIC through the identified banks.

## **Objectives of PMEGP**

The primary objective of the scheme is to generate employment opportunities in rural as well as urban areas of the country through setting up of new self-employment ventures/projects /micro enterprises. The scheme also aims at:

- To bring together widely dispersed traditional artisans.
- To provide self-employment opportunities to rural and urban unemployed youth.
- To provide continuous and sustainable employment to a large segment of traditional and prospective artisans and rural and urban unemployed youth in the country through setting up of micro enterprises
- To increase the wage earning capacity of artisans and contribute to increase in the growth rate of rural and urban employment.
- To facilitate participation of financial institutions for higher credit flow to micro sector.

## **Salient Features of PMEGP**

- No income ceiling for setting up of new projects
- Assistance under the scheme is available only to new units/projects
- Existing units and units already availed any subsidy under the state or central government schemes are not eligible for assistance under this scheme.
- Per capita investment should not exceed Rs. 1.00 lakhs in plain areas and Rs.1.50 lakhs in hilly areas.
- Maximum project cost of Rs.25.00 lakhs in manufacturing sector and Rs. 10.00 lakhs in service sector.
- There is a negative list and this list includes the list of those industries not eligible for getting assistance under this programme.
- The programme is implemented through KVIC and State/ UT Khadi & Village Industries Boards in Rural areas and through DICs in Urban areas in the ratio of 30:30:40 between KVIC/KVIB/DIC respectively.

## Appraisal of the scheme

The scheme aimed at generating an estimated 37.38 lakh additional employment opportunities by setting up of micro-enterprises in the non-farm sector in both rural and urban areas. Since inception in 2008-09 to 2013-14, 2.48 lakh units have been assisted with margin money subsidy of 4745.15 crore and provided employment to 22.29 lakh persons in the country. During 2015, `860.51 crore has been released by the Ministry as margin money under PMEGP out of which `528.32 crore has already been disbursed by the banks and 24126 new enterprises providing employment to 170983 persons have been started under the Scheme. There is more than 50 per cent increase over the previous year in terms of funds disbursed by the banks, number of projects with funds disbursed and the employment generated. In the case of southern states in India, utilization of the benefits under PMEGP in 2013-14 Karnataka had a remarkable progress when compared to other states in India. Kerala is at the stumpy level in using benefits of this programme among the southern states.

In Kerala, State KVIC Directorate, State Khadi and Village Industries Board (KVIB), District Industries Centres (DICs) and bankers are the agencies for implementation of the scheme. A target of 730 units was allocated to DICs. As on 31.05.2014, applications in tune with 1509.28 lakh were pending for subsidy release for want of funds. As per directions of 20th SLMC, DIC had not recommended any applications in 2014-15 except SC/ ST applications to meet sub category target. The banks sanctioned 707 applications and provided margin money amounting to 1052.18 lakh rupees. Though financing banks sanctioned 707 applications in 2014- 15, margin money has been released for 678 applications.

**Table 1**  
**Margin Money Subsidy Stipulations**

Categories of beneficiaries under PMEGP	Beneficiary's own contribution (of project cost)	Rate of Subsidy	
		Urban	Rural
General Category	10 per cent	15 per cent	25 per cent
Special (including SC/ST/OBC / Minorities/ Women, Ex-Servicemen, Physically handicapped, NER, Hill and Border areas etc)	05 per cent	25 per cent	35 per cent

Source: [www.kviconline.gov.in](http://www.kviconline.gov.in)

Quantum of Margin Money Subsidy refers to the levels of funding under this scheme. Since this scheme is a credit linked subsidy programme, it also needs contribution of beneficiaries. In general category, the beneficiaries own contribution of project cost is 10% and the rate of subsidy is 15% and 25% in urban and rural areas respectively. With regard to the special category/ weaker section beneficiaries, own contribution is 5% and the rate of subsidy is 25% and 35% in urban and rural areas respectively.

## Physical achievement of PMEGP

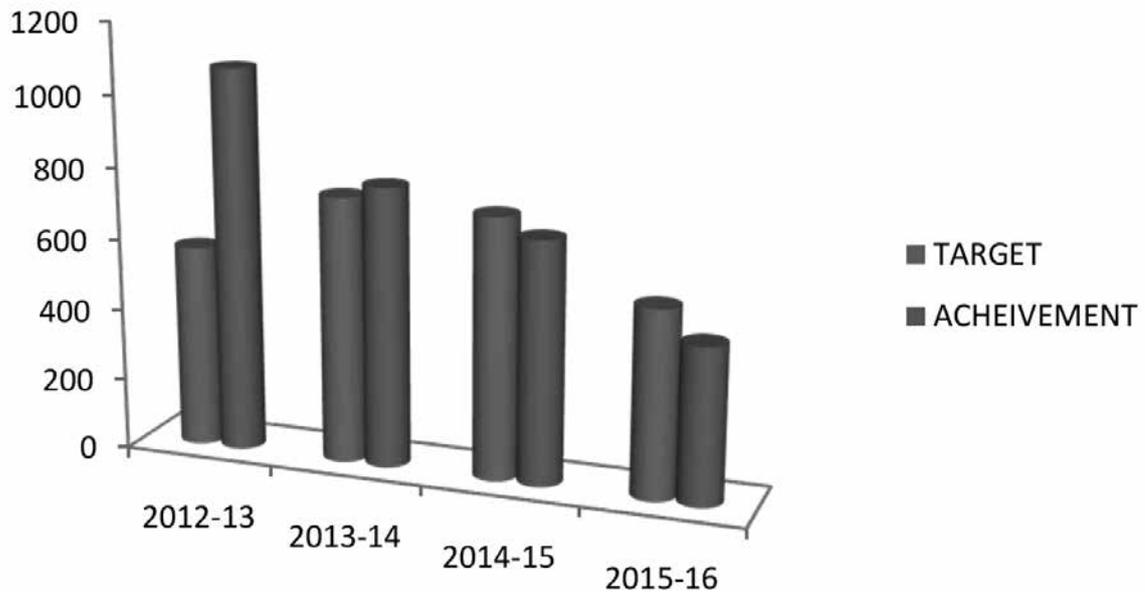
Physical achievement can be measured in terms of number of projects assisted through the scheme and number of persons employed through it. The table 2 shows the number of projects assisted and employment generated through PMEGP in Kerala.

**Table 2**  
**Performance of Directorate of Industries and Commerce in PMEGP Implementation**

Year	No of projects (Target)	No of projects (Achievement)	Employment generated (nos.)
2012-13	568	1076	6515
2013-14	746	783	4420
2014-15	730	678	3942
2015-16 (upto January 2016)	524	435	3056

**Source:** Directorate of Industries and Commerce

**Figure 1**  
**Physical Achievement of PMEGP**



**Source:** Directorate of Industries and Commerce

As per the report of Directorate of Industries and Commerce on the performance of PMEGP in Kerala physical achievement is highly encouraging during the year 2012-2013 as the number of projects created was three times higher than target. But from 2014-15 onwards the target in terms of number of projects has not been achieved. Further, number of employment generated under the scheme is also showing a declining trend from the very inception.

### **Financial Performance of PMEGP**

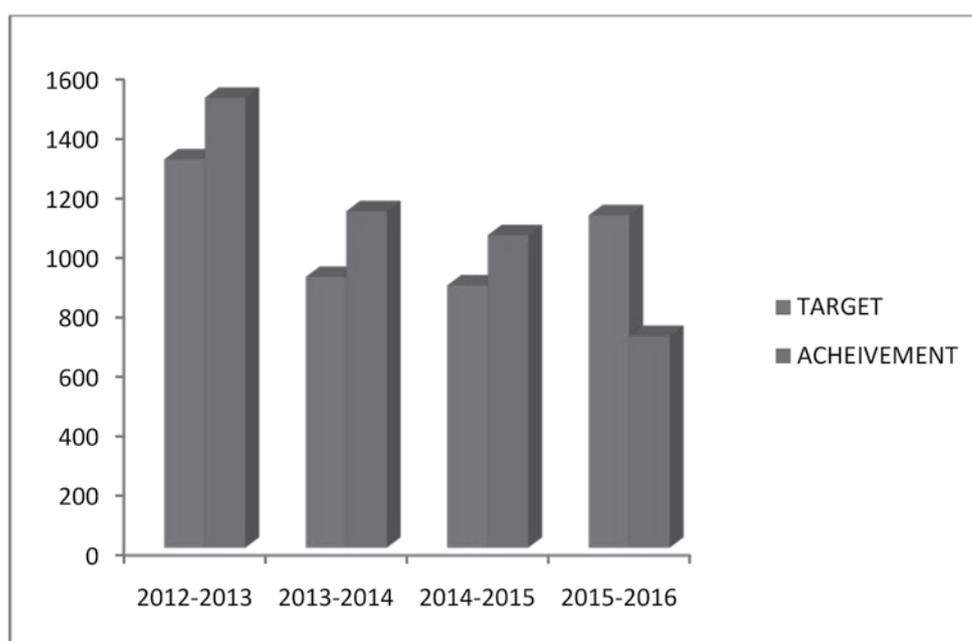
Financial performance can be judged from the amount of margin money subsidy released and utilized by the beneficiaries through this scheme. Table 3 shows the year wise margin money subsidy released under PMEGP in Kerala for the last five years.

**Table 3**  
**Financial Performance of PMEGP in Kerala**

Year	Margin Money Targeted (Rs. In lakhs)	Margin Money Achieved (Rs. In lakhs)
2012-13	1306.24	1513.5
2013-14	911.34	1132.93
2014-15	882.6	1052.11
2015-16*	1119.35	711.8

**Source:** Directorate of Industries and Commerce. \*Details upto January 2016

**Figure 2**  
**Financial performance (in terms of margin money)**



**Source:** Directorate of Industries and Commerce.

Financial performance of PMEGP through directorate of industries and commerce in Kerala shows a positive trend except in the year 2015-16 in terms of margin money when compared to the targets set for the corresponding periods. However, the amount of margin money released under the scheme has been showing a declining trend during the period under study.

### Category wise Performance

As per the directions of State Level Monitoring Committee (SLMC), KVIC, KVIB and DIC need to meet category target also. Under the scheme, attention is given to three special category of beneficiaries viz. scheduled caste, scheduled tribe and women.

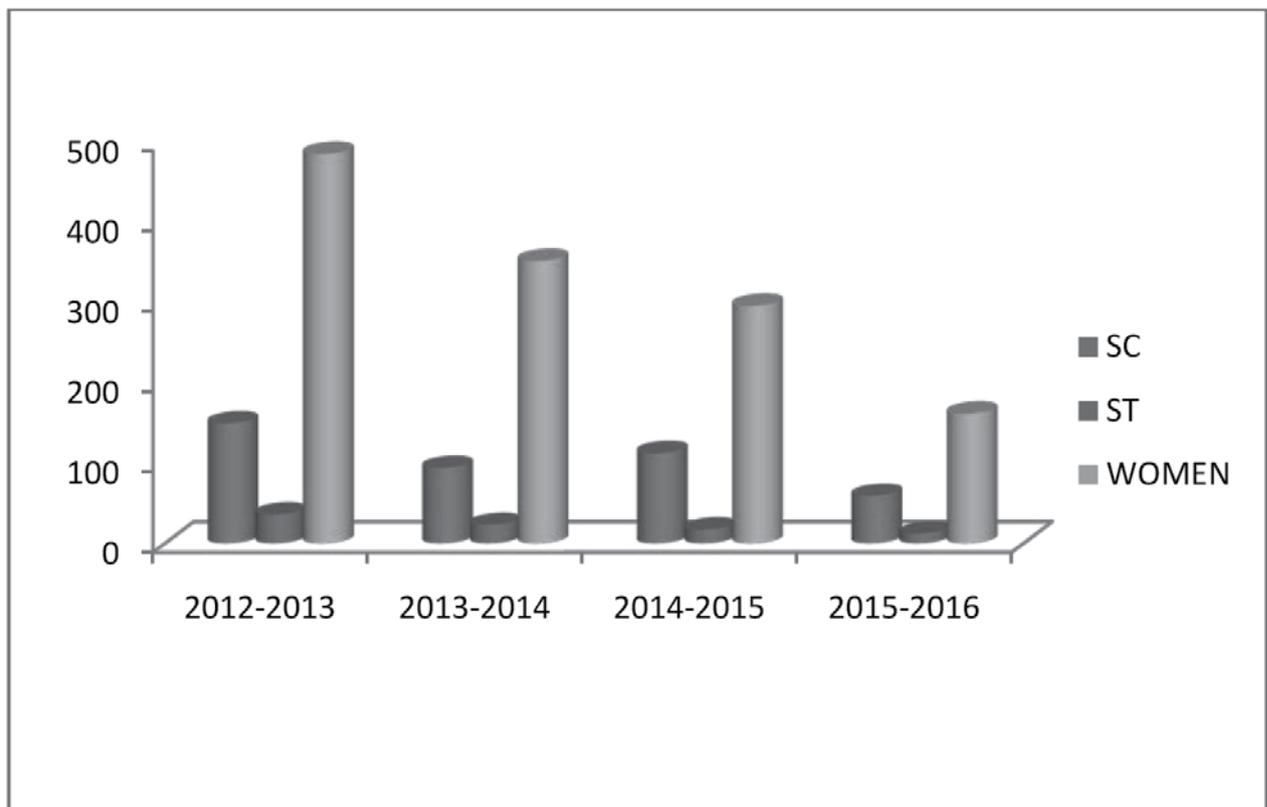
**Table 4**  
**Category wise performance in PMEGP implementation**

Year	SC		ST		WOMEN	
	No of projects	Margin money released (Rs. In lakhs)	No of projects	Margin money released (Rs. In lakhs)	No of projects	Margin money released (Rs. In lakhs)
2012-13	149	153.1	36	16.01	485	559.63
2013-14	94	87.35	23	9.3	352	412.28
2014-15	112	115.2	17	14.77	296	364.2
2015-16*	59	61.52	12	11.36	161	183.47

**Source:** Directorate of Industries and Commerce

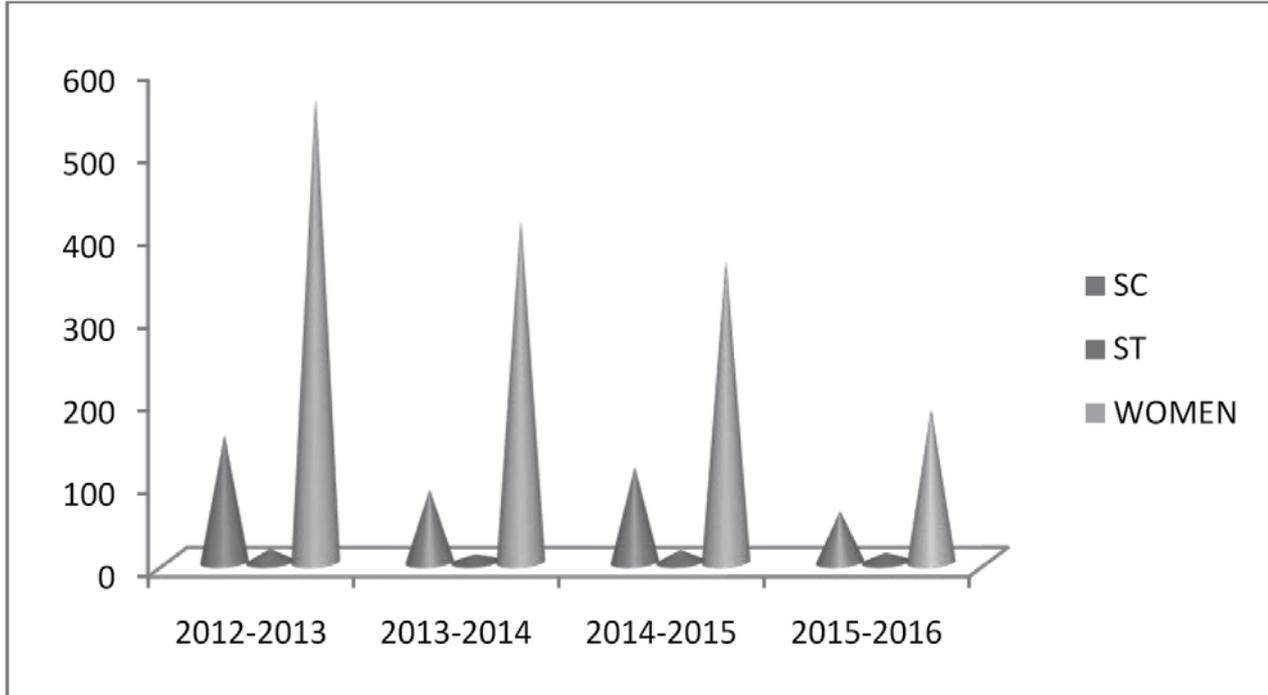
\*Details upto 31-12-2015

**Figure 3**  
**Category wise Physical Achievement**



**Source:** Directorate of Industries and Commerce.

**Figure 4**  
**Category wise Financial Performance**



**Source:** Directorate of Industries and Commerce.

Category wise analysis on the financial and physical performance of the scheme shows that from a bright beginning in 2012-13 the scheme experienced a pitfall with a substantial decline in terms of number of projects and margin money released. This is more or less the same with all categories of beneficiaries. A slight increase found in the number of projects margin money among the scheduled caste beneficiaries during 2014-15 has not been continued in the next year.

## Conclusion

Financial and physical performance of PEGP in Kerala is not satisfactory. Paucity of fund is one of the major factors which led to the poor performance of the scheme in the state. Targets set under the scheme have been falling due to inadequate allocation of finance for the implementation of the scheme. Amount of margin money released, number of projects started and employment generated under the scheme have been showing a declining trend during the period under study. Category wise analysis also reveals that the performance of the scheme is not encouraging in the state.

## References

- Desai Vasant, Entrepreneurial Development, Himalaya Publishing House, New Delhi, 1991.
- Keshari Mohanty Sangram, Fundamentals of Entrepreneurship, PHI Learning Private Limited, New Delhi, 2009
- Report of the Performance of Directorate of Industries and Commerce in PEGP Implementation 2015-2016, Directorate of Industries and Commerce, Vikas bhavan, Thiruvananthapuram
- Economic Review, 2015, Kerala state planning Board, Thiruvananthapuram
- [www.kviconline.gov.in](http://www.kviconline.gov.in)

# ROLE OF 'MUDRA BANK' IN MICRO, SMALL & MEDIUM ENTERPRISES SECTOR

---

Nandu S.S.

---

## Abstract

The MSME segment plays a significant role in the emergence of the Indian economy. MSME's are the backbone of the Indian economy and hold vast potential waiting to be tapped. Indian MSME sectors actuality by launching a dedicated bank for MSME sector is known as 'MUDRA Bank' will stimulate the growth of Indian MSME sector and help them to increase their contribution to Gross Domestic Product. The new apex bank would channelize funds from formal sources and provide it to the needy units or individuals in a timely manner with rational cost of borrowing. This bank will greatly increases the confidence level of young, educated or skilled workers who would now be able to desire to become a first generation entrepreneurs and existing small business will be able to expand their activities. The responsibilities of MUDRA bank includes laying down policy guidelines for micro-small enterprise finance business, registration and regulation of MFI entities, provide access to Institutional Finance for SBU, give priority to SC/ST enterprises in lending etc.

The paper highlights the importance and role of MUDRA bank towards the MSME sector. The study also covers objectives of MUDRA bank, the various schemes or products offered by the bank, and also the challenges faced by Indian MSME sector.

**Key Words:** Gross domestic product, institutional finance, enterprise, bank.

## INTRODCTION

Indian Micro Small and Medium Enterprises (MSMEs) contribution is highly remarkable in the overall industrial economy of the country. MSMEs contribute around 8 per cent to GDP. More than 80 per cent of the MEME sector comprises micro enterprises/small business units. Indian market, MSMEs rapid growth could be seen Indian entrepreneurs are making remarkable development in various Industries like Manufacturing, Precision Engineering Design, Food Processing, Pharmaceutical, Textile & Garments, Retail, IT and ITES, Agro and Service Sector. MSMEs complement large industries as subsidiary units and contribute enormously to the socio-economic development of the country.

Over the years, MSMEs particularly the small businesses, have managed to successfully transform the face of the country. Apart from providing employment to millions the sector has brought about a gigantic change in industrializing village economies and striking migration of the rural youth to cities. Besides, thousands of entrepreneurs across the country in their own unique ways with limited capital and financial assistance, knowledge and infrastructure have proved their innovativeness and entrepreneurship capabilities and are already working towards being globally competitive.

## REVIEW OF LITERATURE

- Dr. J Venkatesh and Ms. R Lavanya kumari (2015) reviewed that the small scale industries which form the foundation of the economic strata need to be strengthened and supported. Through the introduction of MUDRA Bank scheme, the overall growth and development of Micro, Small and Medium Enterprise sector will increases and such initiatives have been launched which focus solely on entrepreneurs.

- Dr. Neeru Garg (2014), under her study “ Micro, Small and Medium Enterprise in India; Current scenario and challenges”, highlight the growth of the MSME sector and analyze various problems and challenges faced by MSME sector in India in general.
- Nishanth P, Dr. Zakkariya K A (2014) viewed that Micro, Small and Medium Enterprise sector in Kerala faces problems in accessing finance from banks and other financial institutions. The problem of availability of finance may differ in various regions according to the economic conditions. Non-availability of finance from banks and other financial institutions, MSME sector identifies other various informal sources.

## **SIGNIFICANT OF THE STUDY**

MSME sector in India plays a significant role in the development of Indian economy. But now a day the sector faces much more challenges from different parts of the economy. In this position researcher is attempt to study the role of MUDRA Bank in Micro, Small and Medium Enterprise in India

## **OBJECTIVES OF THE STUDY**

- ❁ To identify the challenges faced by Indian MSMEs
- ❁ To realize major products or schemes offered by MUDRA bank
- ❁ To study the role or performance of MUDRA bank towards MSMEs.

## **AN OVERVIEW OF MSME**

India is one amongst very few countries which has a legal framework for the MSME sector in the form of MSMED Act 2006 which has established provisions under which issues like public procurement and belated payments. The sector is largely unorganized but employs a sizeable labour force, second only to agriculture. The Micro Small and Medium Enterprise (MSME) sector in India is diverse in terms of its size, levels of technology employed and range of products and services produced starting from grass root village industries, the products from the sector spans to auto components, micro processors, electronic components and electro-medical devices. The significance of MSMEs is attributable to their caliber for employment generation, low capital and technology requirement, promotion of industrial development in rural areas, use of traditional or inherited skills, use of local resources, mobilization of resources and exportability of products. The sector not only serves for urban market but also helps in industrialization of rural and backward areas, reducing regional imbalances and assuring more equitable distribution of national income and wealth. MSMEs have shown constant growth rate of over 10 per cent in recent years much ahead of the large-scale corporate sector. This sector contributes 45 per cent of the manufactured output and 40 per cent of its exports. In order to enhance the capabilities of MSMEs, Ministry of MSME has been implementing a number of programs and schemes in the areas of finance, infrastructure, technology, marketing and skill development to address the problems confronting the sector.

## **CHALLENGES FACED BY INDIAN MSMES**

The most important challenges faced by the Indian MSMEs are as follows:

### **❖ Lack of easy finance and credit instruments**

A major hindrance in the expansion of MSMEs is the unavailability of adequate and timely funds to finance their growth plans. The lack of easy credit, stagnating growth of MSMEs and it may affects national growth in terms of GDP, import, export and employment.

❖ **Inflexible regulatory policies**

Indian MSMEs are weighed down by inflexible and complicated regulatory policies which make starting and running business difficult. Absence of common regulator, lack of mandatory book keeping regulations, no special schemes for start ups and complicated legal procedures are various consequences of limiting regulatory policies.

❖ **Unavailability of modern technology**

MSME sectors in India have problem related with lack funds to support modernization, lack of knowledge about upcoming technologies, absence of ecosystem for technology transfer etc. If these challenges are not overcome the sector will become zero.

❖ **Unavailability of affordable skilled labor**

Unavailability of skilled and efficient labors is a critical problem that MSME sectors faces. It involves low productivity of laborers, common minimum wage policies for PAN India etc.

❖ **Lack of infrastructure facilities**

Absence of infrastructural facilities leads to lack of reliable electricity resources, insufficient methods of industrial waste management, increase in price of coal and gas etc.

❖ **Absence of marketing platforms and distribution networks**

It includes lack of marketing network which leads to loss of business to competitors, not enough trade fairs and buyers-sellers meet, limited expertise in new age marketing etc.

## **AN OVERVIEW OF MUDRA BANK**

The Micro Units Development and Refinance Agency Bank or also known as MUDRA Banks is one of the most recent yojana launched by the Prime Minister Mr.Narendra Modi. The new scheme launched on 8 April, 2015 according to which the latest scheme is to look forward to the development of small entrepreneurs. MUDRA Bank is for 'funding' the 'unfunded'. The scheme is launched keeping in mind the areas where the normal banks are unable to reach. There are isolated places in the country where people are unable to use the regular bank services like loans and credit cards. The committee was suggested in the annual budget of India and was officially founded in the month of April. It will be targeting over five crore users who are unable to receive the correct financing in order to grow their business. The committee will be financing the users using the last mile agents.

## **OBJECTIVES OF MUDRA BANK**

The principal objectives of the MUDRA Bank are:

- ❖ Regulate the lender and the borrower of microfinance and bring stability to the microfinance system through regulation and inclusive participation.
- ❖ Enlarge finance and credit support to Microfinance Institutions (MFI) and agencies that lend money to small businesses, retailers, self help groups and individuals.
- ❖ Register all MFIs and launch a system of performance rating and accreditation. This will help the borrowers of finance to evaluate and approach the MFI that meets their requirement best. This will also introduce an element of competitiveness among the MFIs. The ultimate beneficiary will be the borrower.
- ❖ Provide structured guidelines for the borrowers to avoid failure of business or take corrective steps in time. MUDRA will help in laying down guidelines or acceptable procedures for lenders to recover money in cases of default.

- ❖ Develop the standardized covenants that will form the backbone of the last mile business in future.
- ❖ Offer a Credit Guarantee scheme for providing guarantees to loans being offered to micro businesses.
- ❖ Introduce appropriate technologies to assist in the process of efficient lending, borrowing and monitoring of distributed capital.
- ❖ Build a suitable framework under the Pradhan Mantri MUDRA Yojana for developing an efficient last mile credit delivery system to small and micro businesses.

## ROLE AND RESPONSIBILITIES OF MUDRA BANK

The significant role and responsibilities of MUDRA Bank are:

- MUDRA Bank will provides credit of up to Rs.10 lakhs to small entrepreneurs, like shop keepers, fruits and vegetable sellers, beauty parlours etc. in rural and urban areas.
- MUDRA Bank will act as a regulator for micro finance institutions and be responsible for providing low cost loans to MFIs in the business of lending to small entities. It will partner with state and regional level coordinators to provide finance to last mile financiers of small and micro business enterprises.
- MUDRA Bank will also formulate lending norms of micro-finance institutions so that small businesses do not face hardships over indebtedness, while getting a fair environment for repayment.
- Registration, supervision, accreditation and rating of MFIs.
- Laying down responsible financing practices to ward off over indebtness and ensure proper client protection principles and methods of recovery.
- Development of standard set of covenants governing lending to micro units.
- Supporting development and promotional activities in the sector.
- Formulating and running a credit guarantee scheme for providing guarantees to the loans or portfolios which are being extended to micro enterprises.

## MUDRA PRODUCTS AND OFFERINGS

The most important products under MUDRA yojana have been named as 'Shishu', 'Kishor', and 'Tarun' to signify the stage or development and funding needs of the beneficiaries.

- ❖ **Shishu (child) category:** Shishu scheme is mainly focuses for beginners. The maximum amount of loans is up to Rs.50,000
- ❖ **Kishor category:** This scheme is mainly concentrated for the mid-level organization and institutions. Under this scheme the range of loan between Rs.50,000 and up to Rs.5 lakhs.
- ❖ **Tarun category:** This is the scheme for the next level organization or top level organization helping them to develop their business and it cover loans above Rs.5 lakhs and up to Rs.10 lakhs.

Apart from these products, the other products are initially being launched as sector/activity specific schemes like business activities in land transport, community, social & personal services and food product and textile product sectors. Schemes would similarly be added for other sectors / activities which are as follows:

- Business Loan for Traders & Shopkeepers
- Equipment Finance for Micro Units
- Mahila Uddyami Scheme
- Micro Credit Scheme (MCS)

- Missing Middle Credit Scheme
- Refinance Scheme for Regional Rural Banks (RRBs).

## PERFORMANCE OF MUDRA BANK IN MICRO SMALL AND MEDIUM ENTERPRISES

The MSME sector has hailed the establishment of Micro Units Development Refinance Agency (MUDRA) Bank with an allocation of Rs.20, 000 crore for micro and small units. It has also granted of Rs.3, 000 crore afresh for sanctioning loan to the MSME sector without collateral security or third party guarantee with a cap of Rs.1 crore. The Credit Guarantee Fund Trust for Micro & Small Enterprises (CGFTMSE) had been granted over Rs.5, 000 crore in the previous budgets. The MSME sector representatives feel that if implemented properly, the initiatives of the NDA Government will help achieve double- digit GDP growth, surpassing China.

Micro, Small and Medium Enterprises (MSME) sector employs a large number of people. Nearly 120 million people are employed with 57.5 million entrepreneurs and entities in the MSME sector. Micro Unit Development and Refinance Agency, or MUDRA to fund and promote Micro Finance Institutions (MFIs), which would in turn provide loans to small and vulnerable sections of the businesses which will have an initial corpus of Rs 20,000 crore and a credit guarantee corpus of Rs 3,000 crore. The initial corpus would be provided by banks from their priority sector lending shortfall. Small businesses can avail loan up to Rs 50,000, businesses that are a little bigger could avail loan of up to Rs 5 lakhs, and the highest bracket of loans available to the MSME sector would be up to Rs 10 lakhs.

For further financing, the MSME sector affiliated entrepreneurs would be given a ‘MUDRA Card’, which could provide further credit of up to Rs 20,000. MUDRA would also partner with state, regional level co-ordinators to provide finance to the last-mile financiers of small and micro business enterprises. MUDRA Yojana, will provide much-needed financial access to MSMEs, promote growth of small businesses, help boost the country’s GDP and create jobs. The average debt of Small business enterprises in India is around Rs 17,000. If lending is increased to Rs 5 or 10 Lakhs, the sector would benefit enormously and may generate lot of self-employment opportunities. Small business units generally face lot of challenges to get loans from banks; with the introduction of MUDRA Bank the small business units might prevent high-cost loans from financiers or money lenders.

## CONCLUSION

This Paper mainly focused on the role of MUDRA bank in MSME sector in India. MSME sector faces lot problems like lack of finance and credit, rigid regulatory policies, unavailability of modern technologies and skilled labor, lack of infrastructure facilities, absence of marketing platforms and distribution networks etc. These problems restrict the growth of Indian MEME sector. Indian small entrepreneurs were facing exploitation from money lenders, but MUDRA would inspire new confidence to entrepreneurs. MUDRA given proper access to funding and a chance to expand, which will create more job opportunities and regular income, that may contributing to India’s domestic consumption and growth. The various products like Shishu, Kishor and Tarun of MUDRA scheme will contribute to the well-being of the individuals engaged in micro, small and medium scale industries which will positively affect the progress of the economy as a whole.

## REFERENCES

- ❖ Dr.J.Venkatesh, Ms.R.Lavanya Kumari “Performance of MUDRA Bank- A study on financial assistance to MSME sector” IJRESS International Journal of Research in Economics and Social Science Vol. 5, Issue 7( July 2015).
- ❖ Nishanth P, Dr. Zakkariya K A, “Barriers faced by MSME in raising finance”, Journal of Research in Commerce and Management, Vol. 3 Issue 5 (May 2014).
- ❖ Dr. Neeru Garg, “Micro Small and Medium Enterprise in India; Current Scenario and Challenges”, Indian Journal of Research, Vol. 3, Issue; 9(Sept. 2014).
- ❖ <http://jandhanyojana.net/mudra-bank/>
- ❖ [http://www.business-standard.com/article/economy-policy/mudra-bank-to-revitalise-msme-sector-says-kalraj-mishra-115092500754\\_1.html](http://www.business-standard.com/article/economy-policy/mudra-bank-to-revitalise-msme-sector-says-kalraj-mishra-115092500754_1.html).
- ❖ <http://www.15.august.in/2015/04/benefits-of-mudra-bank-how-to-take-loan.html>.
- ❖ <http://www.mapsofindia.com/my-india/government/mudra-bank-weighing-the-possible-benefits>.

# FINANCIAL PERFORMANCE OF NON BANKING FINANCE COMPANIES IN INDIA - AN EVALUATION

\*Manu M. & \*\* Dr. Gabriel Simon Thattil

## Abstract

Non banking financial companies have an important role to fulfill in the Indian financial sector. The NBFC sector is a heterogeneous group of companies catering to individuals, small businesses and corporate clients. NBFCs have been playing a complementary role to the other financial institution including banks in meeting the funding needs of the economy. They help to fill the gaps in the availability of financial services that otherwise occur in a bank dominated financial system. The gaps are in regards to the product as well as customer and geographical segments. NBFCs over the years have been playing a significant role catering to the financial needs and creating livelihood sources to the unbanked masses in the rural and semi urban areas. Through strong linkage at the grass root level they have created their own market segment and continue to grow along with commercial banks.

**Key Words:** NBFCs, growth, financial performance

## INTRODUCTION

Non Banking Financial Companies have made great progress in the last ten years and are assisting in meeting the diverse financial needs of the economy. In doing so NBFCs have influenced the direction of savings and investment of the customers and the resultant capital formation has become essential for India's economic growth and development. NBFCs have traditionally complemented the commercial banks and prevented the concentration of credit risk in banks. They have also catered to a class of borrowers who are often considered unbankable these set of customers do not usually fall in the high income or middle income brackets. Moreover these clients may not be able to pass the banks test of creditworthiness in terms of an adequate credit scores. Commercial banks have used their presence in rural and semi urban areas predominantly for deposit raising and meeting for priority sector targets set by the RBI. However due to business and viability compulsions, banks did not pursue credit off take in rural and semi urban areas with equal intensity. NBFCs are increasingly filling these gaps left by banks in rural or semi urban markets and even in some urban centres. NBFCs have also created a major impact in developing small and micro businesses through their local presence and strong customer relationships.

NBFCs have often led financial product innovations, especially in terms of meeting financial needs of the underserved segments of society, small enterprises and rural households. They have taken lead in offering small ticket personal loans, financing of two wheelers or three wheelers, farm equipment financing, and loans for purchasing used commercial vehicles/machinery. The speed of credit delivery of NBFCs is typically much faster than that of banks. In addition NBFCs help in expanding the reach of credit delivery to the far corners of the country, especially to the underserved market.

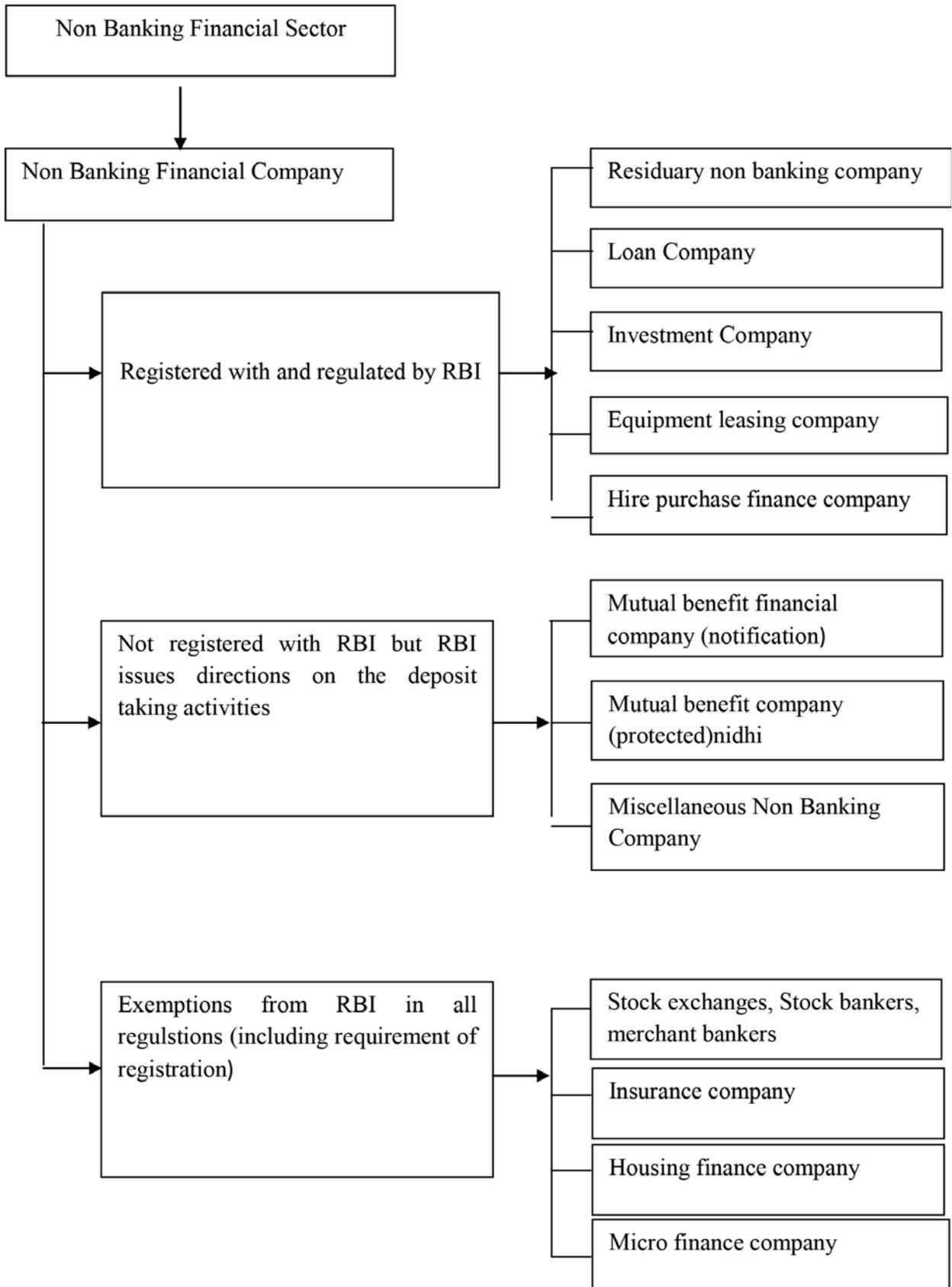
**DEFINITION :** A Non Banking Financial Company is a company registered under the companies Act, 1956 engaged in the business of loan and advances, acquisition of shares/stocks/bonds/debentures/ securities issued by government or local authority or other marketable securities of a like nature, leasing, hire purchase, insurance business, chit business but does not include any institution whose principal business is that of agriculture activity, industrial activity, purchase or sale of any goods or providing any services and sales/purchase/construction of immovable property.

---

\*Research Scholar, Department of Commerce, University of Kerala, Kariavattom

\*\* Professor, Department of Commerce, University of Kerala, Kariavattom

STRUCTURE OF NBFCS IN INDIA



Source: RBI

## PROFILE OF NBFCs IN INDIA

**Table 1**  
**NUMBER OF NBFCs REGISTERED WITH RBI**

Year	No of NBFCs registered	No of NBFC-D registered
2005	13261	507
2006	13014	428
2007	12968	401
2008	12809	364
2009	12740	336
2010	12630	308
2011	12409	297
2012	12385	271
2013	12225	254
2014	12029	241
2015	11842	220

**Source:** Report on Trend and Progress of Banking in India relevant years

The total number of NBFCs registered with RBI declined marginally to 11842 as at end march 2015 from 13261 as at end March 2005. the number of NBFC-D reduced to 220 as at end march 2015 from 507 as at end march 2005 largely owing to consolidation in the industry and cancellation of Certificate of Registration (CoR). The number of NBFC-ND stood at 11622 as at end march 2015. out of which NBFC-ND-SI stood at 200. The two existing RNBCs are in the process of winding up their business (T&P of Banking in India 2014-2015). Though the number of NBFCs in business declined their total assets, public deposits and net owned fund increased marginally.

**Table 2**  
**NBFCs Total Assets and NOF**

Year	Total no of NBFCs	Total assets	Net Owned Fund
2009-10	12630	112131	16424
2010-11	12409	116897	17975
2011-12	12385	129800	24900
2012-13	12225	132200	25000
2013-14	12029	1247200	*
2014-15	11842	1456500	*

**Source:** Report on Trend and Progress of Banking in India relevant years

**Note:** Amount expressed in crores, \*Figures not available

Total assets of NBFCs increased from Rs. 112131Cr at the end of March 2010 to Rs 1247200 Cr at the end of march 2014, further to 1456500cr in march 2015. public deposit mobilized by them also increased.

**Table 3**  
**Public Deposits of NBFCs and RNBCs**

Year	NBFCs		RNBCs		Total Public Deposits
	No of reporting companies	Public deposits	No of reporting companies	Public deposits	
2010	308	28.31	2	145.21	173.52
2011	297	40.98	2	79.02	120
2012	271	57.35	2	42.65	100
2013	254	70.85	2	38.17	109
2014	240	108.08	2	35.82	143.90
2015	220	275.04	2	31.83	306.87

**Source:** Report on Trend and Progress of Banking in India relevant years

**Note:** Amount expressed in crores

The number of NBFC-D found a decline trend over the years. The number of reporting NBFC-D in India reduced to 220 as at end march 2015 from 308 as at end march 2010. But the public deposits raised by the company showed an increasing trend. It increased to 306.87 Cr during the fy 2015 from 173.52 during the FY 2010. At end-March 2015, there were two RNBCs, located in eastern and northern regions. Given regulatory stipulations, RNBCs are in the process of migrating to other business models and these companies will have to reduce their aggregate liabilities to the depositors (ALDs) to “nil” by end- June 2015(T&P of Banking in India 2013). Accordingly, public deposits held by the two RNBCs continued to decline over the years.

#### FINANCIAL PERFORMANCE OF NBFCs IN INDIA

**Table 4**  
**Consolidated Balance sheet of NBFC-D (as on 31st March)**

Items	2014	2015	Percentage of variations
Share capital	33	32	-0.7
Reserve and surplus	274	276	0.9
Public deposit	260	275	5.8
Debentures	417	408	-2.1
Bank borrowings	520	551	5.8
Borrowings from FIs	16	16	2.6
Inter corporate borrowings	1	2	32.7
Commercial paper	93	78	-16.6
Borrowing from government	38	38	-1.0
Subordinated debts	79	78	-2.2
Other borrowings	153	170	11.1
<b>TOTAL LIABILITIES /ASSETS</b>	<b>1885</b>	<b>1925</b>	<b>2.1</b>
Loans and advances	1585	1601	1.0
Hire purchase and lease assets	46	39	-14.8
Investment	58	77	32.8
Other assets	195	205	5.1

**Source:** Report on Trend and Progress of Banking in India 2014-2015

**Note:** Amount expressed in billion

During the financial year 2014-15 the consolidated balance sheet of NBFC-D expanded by 2.1 percent. As compared to the previous year asset side had shown a marginal increase in investment activities of NBFC-D. Hire purchase and leased assets declined 14.8 percent compared to the previous year. Funding source of NBFCs comprises debentures, borrowings from banks and financial institutions, public deposits, commercial papers and inter corporate loans etc. During the FY-2015 borrowings from banks and financial institutions followed by debentures, public deposits constituted an important source of funds for NBFC-D. Borrowings from banks and financial institutions accounted for 35.8 per cent and debentures accounted for 25.24 per cent of the total borrowings of NBFC-D in financial year 2015. borrowings through public deposits witnessed a marginal increase of 5.8 per cent from FY-2014. mobilisation of funds through debentures and commercial papers declined sharply during the period. The expansion of liability side was mainly due to increase in public deposits and bank borrowings.

**Table 5**  
**Financial Performance of NBFC-D Position as on 31st March**

Parameters	2014	2015	Percentage of variation
Income	217	246	13.36
Interest payment	17	24	41.17
Operating expenditure	43	50	16.28
Other expenses	15	19	26.7
Tax provisions	15	17	13.3
Profit before tax	59	45	-23.7
Profit after tax	43	28	-34.88

**Source:** Report on Trend and Progress of Banking in India 2014-2015

**Note:** Amount expressed in billion

The financial performance of NBFC-D witnessed moderate deterioration as reflected in the decline in their operating profits during 2014-2015. This decline mainly on account of a higher growth in expenditure especially interest payments. As compared to the previous year 41.17 percent increase in interest payments and followed by non operating expenditures, 26.7 per cent are reported. During the year interest payments constituted a larger share of the total cost. During the FY- 2015 witnessed 13.36 percent growth rate in their total income but due to increase in interest payments and operating expenditures, the profit before tax and after tax decreased.

**Table 6**  
**Gross NPA and net NPA of NBFC-D**

Item	2013-14			2014-2015		
	AFC	LC	All NBFC s	AFC	LC	All NBFCs
Gross NPA	3.6	1.5	3.1	4.1	1.7	3.5
Net NPA	1.1	0.7	1.0	1.3	0.7	1.1

**Source:** Report on Trend and Progress of Banking in India 2014-2015

**Note:** Gross NPA & Net NPA ratio (%)

There was a decline in the asset quality of NBFC-D deteriorated in the FY- 2015. Both gross and net NPAs increased during the FY- 2015 in continuation with the trend observed in the previous years. Gross NPA of AFC and LC increased to 4.1 percent and 1.7 percent from 3.6 percent and 1.5 percent respectively. It further increased the gross NPA of the sector from 3.1 percent to 3.5 percent. Net NPA of AFC during the FY- 2015 showed a marginal increase while the loan companies NPA witnessed no change during the period. The RBI issued separate guidelines for both banks and NBFCs with an objective of mitigating the stress due to

their NPAs. NBFCs were advised to identify incipient stress in their account by creating a sub asset category namely Special Mention Accounts (SMA) which was further divided in to three sub categories(namely SMA-0,SMA-1,SMA-2) based on the extend of principal or interest payments over due as also the weakness of their accounts. They were also directed to report relevant credit information to the Central Reporting of Information on Large Credits (CRILC) (t&p2014)

**Table 7**  
**Consolidated Balance sheet of NBFC-ND-SI position (as on 31st March)**

Item	2014	2015	Percentage of variation
Share capital	638	685	7.4
Reserves and surplus	2311	2613	13.1
Total borrowings	8669	10177	17.4
Current liabilities and provisions	608	691	13.6
Total liabilities /total assets	12226	14166	15.9
Loans and advances	8273	9555	15.5
Hire purchase assets	895	985	10.1
Investments	1888	2267	20.1
Other assets	1170	1359	16.2

**Source:** Report on Trend and Progress of Banking in India 2014-2015

**Amount:** Amount in billion

During the financial year 2014-15 the consolidated Balance sheet of NBFC-ND-SI expanded by 15.1 percent,due to the growth in disbursement of loans and advances on the assets side and rise in borrowings on the assets side. As compared to the previous year asset side had shown a marginal increase in investment activities of NBFC-ND-SI at 20.1percent. Hire purchase and leased assets raised 10.1 percent compared to the previous year. Loans and advances extended by NBFC-ND-SI witnessed a significant growth at 15.5 per cent as on end march 2015. In contrast to the slowdown in commercial banks non food credit during the same period .strong growth in credit extended by the NBFC infrastructure finance companies. micro finance and loan companies contributed to sturdy growth in the loan portfolio of NBFC-ND-SI( t&p2015).during the FY-2014-15 NBFC-ND-SI raised funds mainly through debentures and commercial papers, as their borrowings increased 17.4 percent. A notable feature is the rising exposure of mutual funds to the financial instruments floated mainly by the infrastructure companies, loan companies and micro finance institutions.

**Table 8**  
**Financial Performance of NBFC-ND-SI**

Items	2014	2015
Total income	1386	1601
Total expenditure	1028	1187
Net profit	256	297

**Source:** Report on Trend and Progress of Banking in India 2014-2015

**Note:** Amount in billion

The financial performance of NBFC-ND-SI sector improved marginally as reflected in the increase in net profit during 2014-15 over the previous year. The net profit of the sector increased to Rs. 297 Cr during the year 2015 from Rs.256 Cr on previous year. The change in total income of the period increased marginally than the change in total expenditure.

**Table 9**  
**NPA ratios of NBFC-ND-SI position as on march31**

Items	2014	2015
Gross NPA to gross advances	4.3	4.3
Gross NPA to net advances	2.5	2.6
Gross NPA to total assets	3.0	3.1
Net NPA to total assets	1.7	1.8

**Source:** Report on Trend and Progress of Banking in India 2014-2015

**Note:** Figures in percentage

Compared to the previous year the asset quality of NBFC-ND-SI continued to deteriorate because NPA ratio rose marginally compared to the previous year. Gross NPA to gross advances showed no change during the period but gross NPA to net advances increased from 2.5 percent to 2.6 percent during the period. Gross NPA to total advances and net NPA to total asset witnessed a marginal increase from the previous year 2014. Amongst the NBFCs-ND-SI, LCs accounted for the major chunk of NPAs followed by NBFC-IFCs and AFCs as at end-March 2015. The asset quality of the NBFC-MFIs witnessed some improvement albeit it still remained at an elevated level (T&P of banking in India 2015).

## CONCLUSION

Non Banking Financial Institutions which offer numerous financial products and services with an attempt to meet the credit needs of the country. The number of NBFCs registered in India showed a reduction over the years. Though the number of NBFCs in business declined their total assets, public deposits and net owned fund increased marginally. The financial performance of NBFC-D and NBFC-ND-SI showed an improvement as reflected in the increase in their operating profit. The consolidated balance sheet of NBFC-D and NBFC-ND-SI expanded marginally during the period. But the asset quality deteriorated the companies during the period. However the NBFCs witnessed a growth in its business in India over the years so that this sector plays very important role in the Indian economy.

## REFERENCES

1. Kantawala, Amita S. (1997). Financial Performance of Non Banking Finance Companies in India. The Indian Economic Journal, Vol. 49, No.1, 86-92.
2. Arunkumar, B. (2014). Non Banking Financial Companies (NBFCs): A Review. Indian Journal of Research, Volume: 3, Issue: 10, 87-88.
3. Kaur, Harsimram and Tanghi, Bhavdeep Singh (2013). Non Banking Financial Companies, Role & Future Prospects. International Journal of Global Research Analysis, Volume: 2, Issue: 8, 125-126.
4. Khalil Ahmed and Group (2011). Financial Performance of Non Banking Finance Companies in Pakistan, Interdisciplinary Journal of Contemporary Research in Business, Volume: 2, Number: 12, Page: 732-742.
5. Khan Nafees A. and Ms. Fozia (2013). Growth and Development in Indian Banking Sector Introduction. International journal of Advanced Research in Management and Social Sciences, Vol: 2, No. 2, p 197-211.
6. Mohan, Brij (2014). Non Banking Financial Companies in India: Types, Needs, Challenges, and Importance in Financial Inclusion. International Journal of in Multidisciplinary and Academic Research, Vol: 3, No. 6, 1-11.
7. Report on Trend and Progress of Banking in India 2005-2016
8. Non Banking Finance Company in Kerala (2015) , Report of planning board in Kerala  
<https://www.rbi.org.in/>

# PROBLEMS AND SUPPORTIVE MECHANISM FOR WOMEN ENTREPRENEURS IN KERALA- AN EVALUATION

\*Shifa P. Sherif & \*\*Dr. B. Balu

## Abstract

Entrepreneurs are important in each and every dimension of life be it family business, government, social groups or enterprise, they, play a significant role in multi dimensions and multi facets development of the state and nation. They help the state, and country to reduce unemployment. It also reduces the dependence of the people from the government. The central and state governments have introduced a number of schemes and projects to promote entrepreneurship in various fields of development. Thus entrepreneurship is considered to be one of the significant dimensions of development. The government is putting in a lot of money and efforts to develop entrepreneurs, especially women entrepreneurs, so that they in return can contribute to social, economic, psychological, political and environmental development.

**Key Words:** women entrepreneurs, problems, supportive mechanisms

## BACKGROUND OF THE STUDY

Entrepreneurship can be viewed as a creative and innovative response to the environment and an ability to recognize, initiate and exploit an economic opportunity. An entrepreneur is an innovator who introduces something new in an economy. Entrepreneurship is doing things that are generally not done in the ordinary course of business. Innovation may take the forms of introducing a new manufacturing process that has not yet been tested and commercially exploited, introduction of a new product with which the customers are not familiar or introducing a new quality in an existing product, locating a new source of raw material or semi finished product that was not exploited earlier, opening a new market, hitherto unexploited, where the company products were not sold earlier, developing a new combination of production. Innovation involves problem solving and an entrepreneur is a problem solver. An entrepreneur does things in a new and a better way. A traditional businessman working in a routine manner is not entrepreneurial. Innovation leads to the dynamics that governs the interaction between science, industry, and society. Innovative organization wants must have to prepare for renewing the offerings and its delivery process to its stakeholders to survive in today's globalised world.

## SIGNIFICANCE OF THE STUDY

In order to maintain the ever increasing demand for products, right entrepreneurship skills and innovation are the vital need of any economy. Without new business ideas and technology to support it, no consumer demand will be fulfilled completely. The concept of innovation refers to putting into application the fruits of creativity. Entrepreneurship has gained greater significance at global level under the changing economic scenario. The innovation process has several phases. The first stage is getting ideas, the second stage is turning ideas in to reality and the third stage is getting the product to the market and making a huge success which includes activities like distribution, pricing, marketing and public relation etc. Entrepreneurship involves risk management and if organization is committed to innovation, they need to have a very high tolerance for risk and failure. Entrepreneurs play a crucial role in propelling the knowledge economy by driving innovations, nurturing, new skills and capabilities, opening new markets and spurring growth in new industries. Kerala is a state with more than 50 per cent of its population being women. Women empowerment is possible through economic and social empowerment for which entrepreneurship place a crucial role. There are a number of agencies extending financial and non financial assistance to women entrepreneurs in order to ensure active involvement of women folk in taking part in industrial activities. Thus the present study has much contemporary relevance.

---

\* Research Scholar, Department of Commerce, University of Kerala.

\*\*Assistant Professor, School of Distance Education, University of Kerala.

## STATEMENT OF THE PROBLEM

An entrepreneur is a person who develops a new business idea and takes the risk of setting up an enterprise to produce a product or service which satisfies customer needs with some specific economic objectives. All entrepreneurs are business persons, but not all business persons are entrepreneurs. Generally Entrepreneur is the concerned authority of the business, without their permission, not single changes or decisions are made. Innovation differs from invention or renovation. Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service. It is capable of being learned, capable of being practiced. Entrepreneurs, as innovators, are people who create new combinations of these factors and then present to the market for assessment by consumers. Women entrepreneurs are few in numbers as compared to male entrepreneurs. They need special care and initiative to promote creativity leading to new products, services and enterprises. Even though Kerala is well known for its high literacy rate among women folk, majority of them are job seekers than job providers. The central and state government provide a large number of schemes and programmes to promote entrepreneurship among women. But still only a small portion of the female population has taken up entrepreneurship as a carrier when compared to men population. In this context the proposed study is undertaken.

## OBJECTIVES OF THE STUDY

1. To identify the issues and challenges faced by women entrepreneurs.
2. To evaluate various support measures initiated by the Government.

## METHODOLOGY

The population of the study is the women entrepreneurs registered with the District Industries Centre in Thiruvananthapuram district as on December 2014. Sampling frame of the study is identified as the women entrepreneurs who are registered with DIC in Thiruvananthapuram district in Kerala. The three major sectors viz, manufacturing/processing, textiles/fancy and retailing are selected on a judgement basis as the highest concentration women entrepreneurs is seen in these segments in the district. A sample of 60 respondents are chosen comprising of 20 from manufacturing/processing units, 20 from textiles/fancy units and 20 from retailing units using simple random sampling. The data thus collected have been analyzed using appropriate statistical techniques keeping the objectives of the study in view. Simple mathematical and statistical techniques like percentage, ranking technique, have been used to test the statistical validity of the findings.

## SUPPORTIVE MECHANISM FOR WOMEN ENTREPRENEURS-AN EVALUATION

The present study entitled ‘Supportive Mechanism for the Promotion of Innovative Business Ideas of Women Entrepreneurs in Kerala- An Evaluation’ is based on a survey of entrepreneurs from Thiruvananthapuram district. Variables identified for the study include reasons for women opting for entrepreneurship, obstacles for women entrepreneurship, attitudes towards training programme, skills and qualities developed through the training programme, agencies providing different support services to the women entrepreneurs, attitude of women entrepreneurs towards support organizations, social recognition before and after starting ventures. Primary data were obtained from a sample of 60 respondents. Out of these, 20 entrepreneurs were chosen from manufacturing/processing units, 20 from textiles/fancy units and 20 from retail units.

## PROFILE OF SAMPLE RESPONDENTS

The profile of the sample respondents are examined in terms of their age, monthly income, marital status and educational qualification.

### AGE

Age of the sample respondents varied from 20 to 65 years. According to their age the total number of

respondents was divided into four categories viz, less than 25, between 25-45 and between 46-65. Distribution of respondents according to their age is given in table 1

**Table No 1**  
**Distribution by Age of Respondents**

Age (Years)	Manufacturing/ Processing	Textiles/ Fancy	Retail units	Total
Less than 25	-	3 (15)	-	3 (5)
25-45	8 (40)	8 (40)	13 (65)	29 (48.33)
46-65	12 (60)	9 (45)	7 (35)	28 (46.67)
Total	20 (100)	20 (100)	20 (100)	60 (100)

**Source:** Primary Data

**Note:** Figures in bracket represents percentage to total

The study revealed that five per cent of the respondents belonged to the age group of less than 25 years and 48 per cent belonged to 25-45years category. Among the manufacturing/processing units forty per cent belonged to 25-45 years, sixty per cent belonged to age group of 46-65. Among the textiles/fancy units forty per cent belonged to 25 -45 years, fifteen per cent belonged to the age group of less than twenty five and forty five per cent belonged to 46-65 years. In the case of textiles units sixty five per cent belonged to the age group of 25-45 years category and thirty five per cent belonged to 46-65 years category.

## MARITAL STATUS

The respondents are classified in to three categories such as married, unmarried and widowed category on the basis of their marital status. The details are presented in table 2

**Table No 2**  
**Distribution by Marital Status of Respondents**

Marital status	Manufacturing/ Processing	Textiles/ Fancy	Retail units	Total
Married	12 (60)	14 (70)	10 (50)	36 (60)
Unmarried	-	-	1 (5)	1 (1.67)
Widowed/Divorced	8 (40)	6 (30)	9 (45)	23 (38.33)
Total	20 (100)	20 (100)	20 (100)	60 (100)

**Source:** Primary Data

**Note:** Figures in bracket represents percentage to total

Out of the 60 respondents 60 per cent are married, 38.33 per cent are widowed and only 1.67 per cent is unmarried. Among the entrepreneurs running manufacturing /processing units 60 per cent are married and 40 per cent are widowed. In the case of entrepreneurs from the textiles/fancy units are concerned 70 per cent are married and 30 per cent are widow. In the case of the retail units 50 per cent are married, 5 per cent are unmarried and 45 per cent are widowed

## MONTHLY INCOME

Monthly income of respondents is classified into three groups viz below Rs.20, 000, Rs. 20,001 - 50,000 and above Rs. 50,000. Data on monthly income are given in table 3

**Table No 3**  
**Distribution by Income of Respondents**

Income Rs.	Manufacturing/ processing	Textiles/ fancy	Retail units	Total
Below 20000	13 (65)	16 (80)	17 (85)	46 (76.67)
20001 - 50000	6 (30)	3 (15)	3 (15)	12 (20)
Above 50000	1 (5)	1 (5)		2 (3.33)
Total	20 (100)	20 (100)	20 (100)	60 (100)

**Source:** Primary Data

**Note:** Figures in bracket represents percentage to total

Out of 60 respondents 77 per cent have a monthly income below Rs. 20,000, followed by 20 per cent with an income between 20001 – 50000 and only 3 per cent belonged to the category of above Rs 50000. In the middle of the manufacturing/processing units 65 per cent belonged to monthly income of below 20,000, 30 per cent belonged to Rs 20,001-50,000 and 5 per cent belonged to above Rs. 50,000 categories. In the case of textiles/fancy units 80 per cent belonged to monthly income below Rs.20, 000 and 15 per cent belonged to Rs 20,001-50,000 category and 5 per cent belonged to above Rs. 50,000 category. Among the retail units 85 per cent belonged to below Rs 20,000 category, 15 per cent belonged to Rs. 20, 001-50,000 categories,

## EDUCATIONAL QUALIFICATION

Based on educational qualification respondents are classified into three groups viz, under graduates, graduates and post graduates. The details are presented in table 4

**Table No 4**  
**Distribution by Educational Qualification of Respondents**

Educational qualification	Manufacturing/ Processing	Textiles/ Fancy	Retail units	Total
Under Graduate	7 (35)	16 (80)	15 (75)	38 (63.33)
Graduate	11 (55)	3 (15)	5 (25)	19 (31.67)

Post Graduate	2 (10)	1 (5)	-	3 (5)
Total	20 (100)	20 (100)	20 (100)	60 (100)

**Source:** Primary Data

**Note:** Figures in bracket represents percentage to total

Out of the 60 respondents, 63 per cent are under graduates and 5 per cent are to post graduate category. Among the manufacturing/processing units 55 per cent belongs to graduate category, 35 per cent belonged to under graduate category and 10 per cent belongs to post graduate category. In the case of entrepreneurs from the textiles/fancy units are concerned 80 per cent belongs to graduate category, 15 per cent belonged to under graduate category and 5 per cent belongs to post graduate category. Among the retailing a unit 75 per cent belongs to under graduate category, 25 per cent belonged to graduate category.

## PERIOD OF OPERATION

Period of operation of an enterprise is an important indicator which will have an influence on its performance and sustenance in a competitive environment. Enterprises go on configuring and reconfiguring its resource structure throughout its life time to combat with the conditions prevailing over different periods of time and thereby maintaining its competitive vigor. For the purpose of analysis the enterprises selected for the study are categorized in to four categories on the basis of period of its operation. Distribution of sample units on the basis of their period of operation in shown in table 5

**Table No 5**  
**Distribution of Units by Period of Operation**

Sl.no	Years of experience	Manufacturing/processing	Textiles/fancy	Retail units	Total
1	>2yrs	2(10)	5 (25)	6 (30)	13 (21.67)
2	2-6yrs	14 (70)	13 (65)	10 (50)	37 (61.67)
3	6-10yrs	4 (20)	2 (10)	4 (20)	10 (16.66)
	Total	20 (100)	20 (100)	20 (100)	60 (100)

**Source:** Primary Data

**Note:** Figures in bracket represents percentage to total

It is inferred that out of the 60 respondents, 62 per cent of the units under study have belonged to 2-6 years of experience category, 22 per cent belongs to less than two years of experience category and seventeen per cent belonged to 6-10 years of experience. Among the manufacturing/processing units 70 per cent respondents as 2-6 years of experience, 20 per cent belonged to 6-10 years of experience and 10 per cent as less than 2years of experience.

In the case of entrepreneurs from the textiles/fancy units 65 per cent respondents as 2-6 years of experience, 10 per cent belonged to 6-10 years of experience and 25 per cent as less than 2years of experience. In the case of the retailing units 70 per cent respondents as 2-6 years of experience, 20 per cent belonged to 6-10 years of experience and 30 per cent as less than 2years of experience.

## OPERATIONAL PROBLEMS

The Study reveals that from the very point of starting a business unit women are found to face more barriers than men. They face a number of difficulties in establishing and operating business enterprises.

### NATURE OF OPERATIONAL PROBLEMS

The respondents were asked to list down the major problems and constraints faced by them in the course of starting and managing their business. The problems identified have been categorized, as depicted in table, into six main heads, i.e. Problems pertaining to finance, marketing, socio- personal, production, labor, and technical problems. Details of operational problems are shown in table 6

**Table No 6**  
**Problems Faced While Running Enterprises**

Problems	Number of respondents	Per cent
Financial problems	52	86.67
Marketing problems	48	80
Labor problems	8	13.33
Socio Personal problems	48	80
Training problems	32	53.33
Manufacturing problems	43	71.67

**Source:** Primary data

Out of the 60 respondents 52 of them had received some kind of financial assistance. Typically, women entrepreneurs of small scale enterprises start well but somewhere down the line in the day- to- day operations, they miss the route to success. In more than half such cases the reasons identified can be attributed to financial mismanagement. Finance is a most important aspect of any business. Access to finance is a key issue for women. Only 86.87 per cent of the respondent faces financial problems. Financial support as well as financial viability, therefore, is the most important consideration of any business proposition. Out of the 60 respondents 80 per cent of the respondents face marketing problems

Stiff competition in the market and lack of mobility of women make the dependence of women entrepreneurs on middlemen indispensable. Many business women find it difficult to capture the market and make their products popular. They are not fully aware of the changing market conditions and hence depend on the services of the media and the internet. 80 per cent of the entrepreneurs were suffering because of personal problems. Out of the sixty respondents 71.67 per cent of the respondent face manufacturing problems Production in a manufacturing enterprise involves co - ordination of a number of activities while some of these activities are in the control of entrepreneur, there are others over which she has little control. Improper coordination or unintended delay in execution of any activity is going to cause production problems in the industry. About 53.33 per cent of the entrepreneurs face problems relating to training and 13.33 per cent of the respondent faces labour problems.

## SUPPORT SERVICES FROM GOVERNMENT AGENCIES

The beneficiary respondents were asked to list the support agencies from whom they have availed of specific services. The study found that majority of the beneficiaries had got benefits from District Industries Centers (DICs) of their respective districts in terms of availing provisional /permanent registration, subsidy under scheme of modernization, training and stipend under PMEGP. The table 7 shows the various government

agencies approached by the women entrepreneurs for the running of their enterprises. Details are presented in table 7

**Table No 7**  
**Government Agencies Approached By the Respondents**

Agencies	Manufacturing/ processing	Textiles/fancy	Retail units	Total
DIC	11 (55)	14 (70)	12 (60)	37 (61.67)
MSME	6 (30)	3 (15)	8 (40)	17 (28.33)
SIDCO	1 (5)	-	-	1 (1.67)
IOB	2 (10)	3 (15)	-	5 (8.33)
Total	20 (100)	20 (100)	20 (100)	60 (100)

**Source:** primary data

The table 7 reveals that all the women had approached DIC because the list of sample women entrepreneurs for the study were taken from the records of DIC, 60 of them had approached DIC for registration purposes as it is a pre – condition for availing the subsidies and other incentives . 28.33 per cent of the respondents have availed services from MSME. The Services of MSME, Kerala, are mainly focused on helping the existing entrepreneurs to increase their productivity and prospective entrepreneurs to set up new units. 1.67 per cent of the respondents have availed services from SIDCO and 8.33 per cent of the respondents have availed services from other agencies that extend support services to women entrepreneurs.

### ASSISTANCE FROM GOVERNMENT AGENCIES

The following table 8 reveals the major developments made by the sample respondents with the help of government agencies.

**Table No 8**  
**Developments Made With the Help of Government Agencies**

Developments made	Number of respondents	Per cent
Modernization	46	76.67
Increased production	59	98.33
Reduction in cost	31	51.67
Diversification	47	78.33
Better public contact	40	66.67
Efficient management	45	75
Others (specify)	10	16.67

**Source:** Primary data

The table reveals that only a small percentage of the respondents had utilized the all types of assistance provided by the Governmental promotional agencies. The major developments made with the help of support institutions are increased production (98.33), diversification (78.33), and modernization (76.67). Efficient management (75), reduction in cost (7), increased sales (51.67), and reduction in wastage (16.67). In regard

to the facilities provided by the Government, loan and subsidy are the two facilities mostly used by the entrepreneurs. Many of the respondents pointed out that the procedures for getting infrastructural facilities were very cumbersome and after moving pillar to post they depend on their own resources.

## **FINDINGS, CONCLUSIONS AND SUGGESTION**

### **FINDINGS**

Entrepreneurs have a crucial role in determining the future prosperity of any economy. The entrepreneur is someone who drives forward several forces that together stimulate economic growth, such as encouraging innovative technology, offering opportunities for young people, alleviating poverty, and making a positive impact on society. While entrepreneurship is a private sector phenomenon, the government can play a crucial role in promoting an entrepreneurial ecosystem that is conducive to growth. This in turn requires promotion of an entrepreneurship culture by increasing the visibility and emphasizing the role of entrepreneurship in creating new jobs, sparking innovations, and reducing poverty; promoting the perception of entrepreneurship as a career option right from primary school onwards; mainstreaming entrepreneurship in university education; providing specialized training assistance; exploring credit guarantees and banking support; strengthening venture capital and angel investors; offering a direct support scheme; designing impactful, stable and multi-model incentives for entrepreneurs; providing single- window services; simplifying taxes and regulations; and providing professional support through incubators.

An assessment of institutional assistance to small scale industries, carried out in this study, is primarily based on the results of the field survey of sample women entrepreneurs. Primary data from these enterprises that are located in Thiruvananthapuram district in Kerala have been collected by employing a structured interview schedule, especially designed for the requirements of the study. Discussions were also held with officials of various institutions who participate in assisting small enterprises. Extensive secondary data were collected from the offices of DIC and Departments of Industries as well as from the published materials from Governmental and promotional agencies. Development of small enterprises requires a variety of services such as identification of project ideas, selection and training of entrepreneurs, preparation of feasibility studies, formulation of detailed project reports, provision of working capital, technical advice on selection of technical inputs, Infrastructural facilities required and assistance in the implementation of projects.

In order to gather sufficient data the supportive mechanism for the promotion of innovative business ideas of women entrepreneurs in Kerala interviews were conducted with the officials of DIC and the entrepreneurs from different areas such as manufacturing/processing, textiles/fancy and retailing units. Analysis of the data reveals the followings major findings:

1. Women entrepreneurs face different start up problems such as access to capital, access to information, registration requirements, legal formalities, preparation of the proposed project requirements, the effort to balance work and family and marketing problems relating to raw material procurement, problem regarding skilled labors, price and quality of materials.
2. Regarding the awareness about various government agencies providing development and support services to women entrepreneurs, majority of the respondents are partially aware of these services.

With regard to the agencies approached by the entrepreneurs for development and support services, majority of the respondents prefer District Industries Centre and MSME. Only a small number of the respondents approached IOB and SIDCO for support services.

### **CONCLUSION**

There is an urgent need for improving the access of women to national resource and for ensuring their rightful place in the mainstream of economic development. Towards this objective, the Government set up a

number of developmental programmes and schemes for improving the role of women in the national economy. Entrepreneurship is the key element in any development process. The factors that contribute to economic development are labor, technology, natural resources, capital and entrepreneurship. Unless the driving force of entrepreneurship is available, other factors remain mere factors without producing anything. In Kerala we have strong administrative machinery in the form of different institutions to promote women entrepreneurship and to bring their enterprises on sound footing. However the utilization of support services extended by these organizations is not up to the mark. But it is a positive side that involvement of women in entrepreneurial activities is gradually improving in Kerala.

## **BIBLIOGRAPHY**

### **BOOKS**

1. Arora Renu and Sood,K.(2004).Entrepreneurial Development and Management, Noida, Kalyani Publishers.
2. Batra, G .S. and Dangwal, R.C.( 1999). Entrepreneurship and Small Scale Industries New Potentials, New Delhi,Deep & Deep Publications (P) Ltd.
3. Drucker Peter.F. (1985). Innovation and Entrepreneurshi, New York, Harper Business.
4. Awasthi, D. (1989). Impact Study of Entrepreneurship Development Programmes Conducted by EDI-I: Methodological Issues and Summary Results, (Research Report), Ahmedabad,Entrepreneurship Development Institute of India.
5. Awasthi, D. and J. Sebastian (1996), Evaluation of Entrepreneurship Development Programmes,New Delhi,Sage Publications.
6. Boban Kollannur.(2003).Pampum Konium: Oru Vyavasaayiyude Kurippukal (Snake and Ladder: Notes of an Industrialist), Thrissur,Green Books.
7. Bolton, W.K. and J.L. Thomson. (2000).Entrepreneurs: Talent, Temperament, Technique, Butterworth-Heinemann, Oxford.
8. Cole and Arthur, H. (1959). Business Enterprise in its Social Setting, Cambridge, Harvard University Press.
9. Collins, O.F. and D.G. Moore. (1970). The Organisation Makers: A Behavioural Study of Independent Entrepreneurs, New York, Appleton-Century-Croft Inc.

### **JOURNALS**

1. Arasrathan, S. 'Indian Merchants and Their Trading Methods', The Indian Economic and Social History Review,1966, Vol. III no.1.
2. Balu, V. 'Lessons in Funds Management in Small-Scale Units'. Southern Economist, Dec.1998, Vol. 37, No: 16.
3. Albin, A. (1990). 'Manufacturing Sector in Kerala: Comparative Study of its Growth and Structure', Economic and Political Weekly, Vol.25, No.37, pp.2059- 70.
4. Albin, A. (1995). 'Wage Rates, Labour Militancy and Retarded Industrial Growth in Kerala', Journal of Indian School of Political Economy, Vol.7, No.1, pp.69-82

# Financial Structure and Post Poke-Yoke Performance of Indian Software Industry- An Analysis

Dr. B. Shaji

---

## Abstract

Poke-Yoke means mistake-proofing came into limelight due to rapid increase in a mistake prone production environment. In the present research an attempt has been made to study the impact of Poke-Yoke on the financial structure of Indian software Industry. No major studies on this topic are reported from India. This study includes companies which have adopted Poke-Yoke during the period 1st April 2012-31st March 2015. There are about 127 Poke-Yoke adopted software companies in India during above period and we have selected five top Indian software companies from NASSCOM list (2015) for the study to examine pre and post Poke-Yoke performance. The results of the study showed that size, external financing, profitability and income gearing are found to be the most important factors explaining the variations in the financial structure of Indian software industry during the study period.

**Key Words:** Poke-Yoke, Financial Structure, Indian Software Industry

## Introduction

Poka-yoke is a quality assurance technique developed by Japanese manufacturing engineer (Shigeo Shingo, 1961). Dr. Shigeo Shingo, incorporated his knowledge of quality control to develop the 'Defects=0' concept which is popularly known as Poka-yoke or mistake proofing. This concept was successfully applied to various plants and set records of over two years of totally defect free production in some operations. His basic idea was to implement mistake-proofing devices in the assembly line to eliminate the possibility of defective operations. In addition, his emphasis was on targeting the root cause of defect whenever a defect occurs and thereby virtually eliminating the need for statistical process control. Although Dr. Shigeo realized that statistical quality control could aid in elimination of defects, he argued that by using sound manufacturing and process engineering practices, defects could be removed from processes without the use of many statistical tools used in most quality control techniques. The sole aim of Poka-yoke is to eliminate defects in a product by preventing or correcting mistakes as early as possible. It is akin to natural reactions in our human body during coughing and tearing to prevent the entry of foreign bodies. Application of hundreds and thousands of "fail- safing" mechanisms brought the quality miracle to Japan.(Kogyo Shimbun, 1989). Some of the everyday life examples which had embraced Poke-yoke are: Micro-wave oven does not work until the door is shut, elevator doors have a sensor that causes them to open when there is an obstruction, designing of mobile phones in such a way that when they fall, the cover separates so as to minimize the shock that would damage them, color-coding of electrical wires to prevent short circuiting that can occur if they are not matched properly and so on. Being mainly a manufacturing technique, Poke-yoke has only rarely been mentioned in connection with software development, but the philosophy behind Poke-yoke has never been far from the heart of software quality. Its usage is widely prevalent in software as a prevention and detection device. From a Poka-yoke perspective, the development of computer languages could be viewed as a prevention device, since one of the objective of these languages is to prevent creating code that can be error-prone. High level languages prevent self-modifying code. Unit testing and "smoke testing" as a detection device come closer to the notion of Poke-yoke, in that they are located close to the source of the potential mistakes and the quick feedback they provide can keep mistakes from moving further along in the process.

## Review of literature

In order to obtain a better understanding of poke- yoke and its application domains, an elaborate literature review was performed. It was conducted mainly to identify those areas of IT sector which researchers and practitioners have pointed out as factors that have direct impact on eliminating mistakes and the potential solutions to counter it. There have been a few number of research studies reported on this topic.

The first sources of literature were articles which depicts the companies where poke- yoke applied successfully. Majority of these articles deal with the problems encountered by the firms before the intervention of poke- yoke and how they could create positive results after poke- yoke initiative brought into force. These articles use empirical data to draw conclusions as to the benefits of poke- yoke adoption. These articles taken on an individual company basis do not provide a clear picture of the spectrum under study. However, they provide a clear picture of the topics which have been studied by researchers. The second source of literature was articles written by various authors detailing their experiences and the productivity mileage obtained out of poke- yoke(e.g.MontakarnChaikumarn, 2005; Roger C.Jensen, 2007;ShivPratap Singh, 2009). The majority of articles in this group describes the author's experiences with poke- yoke intervention in a particular industry and consists of a summary of their generalized observations from the study.

## Need of the study

Poke Yoke refers to techniques that make it impossible to make mistakes. These techniques can drive defects out of products and processes and substantially improve quality and reliability. The use of simple Poke –yoke ideas and methods in product and process design can eliminate both human and mechanical errors. It is a technique that can be applied to any type of process be it in manufacturing or the service industry. It does not need to be costly.No major studies on this topic are reported from India. Hence a need is felt for more studies in order to make an organisation to reach a level of zero error.

## Statement of the problem

The growth and development of the Indian software industry has gained worldwide attention and Indian IT industry has achieved an iconic status in the Indian economy. Today software development in the country is a nearly \$118 billion strong industry, with a domestic market of \$31 billion, contributing around 6.4 % of the GDP and employing over 3 million people. NASSCOMreport (2015) reveals that TCS, Infosys, Wipro, HCL and Tech Mahindra are the top five Indian software companies both in terms of revenue and number of employees. Poke-yoke attempts to improvise processes which in turn would result in better financial operation. If such betterment is not achieved the efficacy of Poke –yoke needs to be examined.

## Objectives of the study

The study has been done with the following objectives.

- To analyse the impact of Poke –yoke on Indian software companies during 1st April 2012-31st March 2015
- To analyse post Poke -yoke performance of Indian software companies based on the variations in the financial structure.

## Hypothesis

To meet the above objective, following null hypothesis has been formulated.

HO:There is no significant difference between pre and post Poke-yoke financial structure of Indian software firms during the study period.

## Sample selection

There are about 127 poke-yoke adopted software companies in India during the period of study. Out of which the sample consists of top five Indian software firms from the NASSCOM (2015) list.

## Sources of Data

The financial data used in the study has been mainly drawn from "PROWESS" database which is the most reliable on the empowered corporate data base of Centre for Monitoring Indian Economy (CMIE). Besides "PROWESS" database, relevant secondary data have also been collected from NASSCOM.

## Period of the study

The study includes companies which adopted Poke-Yoke during the period 1st April 2012-31st March 2015

## Tools used for the study

In order to analyze data of pre and post poke-yoke period, a statistical tool is useful and provides better understanding. Specific factors which have a bearing on the financial structure of a firm are Payout Ratio (PR), Operating Leverage (OL), Size (S), Profitability (PROFIT), External Financing (EF) and Income Gearing (IG). These factors have been taken as the independent variables and Financial Leverage (FL) as the dependent variable.

Multiple regressions have been applied to measure the effects of the independent variables on the dependent variable.

The model to be estimated is as follows:

### Pre-Poke Yoke Model

$$FL = b_0 + b_1 PR + b_2 OL + b_3 S + b_4 PROFIT + b_5 EF + b_6 IG$$

### Post-Poke Yoke Model

$$FL = b_0 + b_1 PR + b_2 OL + b_3 S + b_4 PROFIT + b_5 EF + b_6 IG$$

## Hypothesis Testing

**H<sub>0</sub>(Null Hypothesis):** There is no significant difference between pre and post Poke-yoke financial structure of Indian software firms during the study period.

**H<sub>1</sub>(Alternate Hypothesis):** There is significant difference between pre and post Poke-yoke financial structure of Indian software firms during the study period.

To test the hypothesis, regression analysis has been used. In regression we make a prediction about the variable. The variable whose value is predicted called dependent variable while the variable whose value used for prediction is called independent variable. In pre-poke yoke regression analysis results shows that the value of R<sup>2</sup> is 0.94 and F-ratio is significant, which implies that the independent variable collectively explain 94% of the total variations in the dependent variable. The analysis during the period shows that variables like payout ratio, size, profitability, external financing and income gearing are found to be statistically significant in explaining financial structure of Indian software industry. However operating leverage is found to be statistically insignificant. The overall model is significant with adjusted R<sup>2</sup> value of 0.87. So it can be concluded that the model is applicable to Indian software Industry.

Analysis of regression result of post-poke yoke period reveals that size is the stronger determinant of financial structure followed by income gearing, profitability, external financing and payout ratio. We also find that size and external financing are positively related to financial leverage and also significant at 1% level during post Poke- yoke period. Empirical evidence from Table 1 shows that income gearing, which is a measure of corporate vulnerability to fluctuations in general economic conditions, has a statistically significant relationship with firm's financial structure in this period. The value of R2 and adjusted R2 value are 0.98 and 0.96 which is significant at 1% level. So the model is fit for the study.

## Findings

Analysis based on the pre poke-yoke and post poke-yoke shows that variables like payout ratio, size, profitability, external financing and income gearing are found to be statistically significant in explaining financial structure of Indian software industry. However operating leverage is found to be statistically insignificant.

## Suggestions

Financial structure can be improved considering external financing and profitability yardsticks and it can be further corrected through poke-yoke. These parameters which add to the strength must be identified and given proper emphasis.

## Limitations

The findings are confined to the limited number of companies selected for the study and are restricted to the specific variables alone viz, payout ratio, operating leverage, size, profitability, external financing and income gearing. These are not the exhaustive variables for the study of this kind.

## Conclusion

This study investigates the adoption of Poke-yoke in software firms. It covers a sample size of top five Indian software companies from NSAACOM (2015) list. On juxtaposing pre and post Poke-yoke periods, it is inferred that greater degree of variability in financial structure is exhibited during the study period. The study further shows that out of the six variables considered, size, external financing, profitability and income gearing were found to be significant and had a positive coefficient. Model used for the study is justified since the value of R2 is 98% and adjustment explanation is around 96%. So a researcher can conclude that the variables included are relevant and could explain the variations in the financial structure of Indian software firms during the study period.

## References

1. Boehm, B. W. 1987. Improving Software Productivity, IEEE Computer Society, Washington, D.C., United States
2. Kogyo Shimbun. (1989). Poka-Yoke: Improving Product Quality by Preventing Defects, Productivity Press, Portland, USA:
3. MontakarnChaikumarn, 2005. New technologies and changes in dental care. International Journal Occupational Safety Ergonomics. 11(4), 441-9.
4. Roger C. Jensen, 2007. Disabling back injuries among nursing personnel: Research needs justification. Research in Nursing & Health, 10 (1), 29 – 38
5. Sawyer.S. (1998). Software Development processes and performance, IBM Systems Journal, USA.
6. Shigeo Shingo. (1985). A Revolution in Manufacturing: The Smed System, Productivity Press Portland, USA:
7. Shiv Pratap Singh (2009). Physiological Workload of Women Workers in the Operation of Manual Rice Transplanters, Gender, Technology and Development, 13(2), 271-284
8. Websites of selected companies

**Table 1**  
**Result of Regression Analysis**

Sl.No.	Independent Variables	Dependent Variables Pre-Poke Yoke	Post-Poke Yoke
1	Payout Ratio (PR)	0.005(3.12)*	-0.04(2.82) **
2	<b>Operating Leverage (OL)</b>	0.001(1.05)	-0.003(0.87)
3	Size (S)	0.09(4.14) *	0.40(5.04) *
4	Profitability (PROFIT)	0.02(2.22) ***	0.01(3.27) *
5	External Financing (EF)	- 0.009(5.06) *	.005(4.63) *
6	Income Gearing (IG)	- 0.08(1.89) ***	0.10(2.88) **
7	R2	0.94	0.98
8	Adj. R2	0.87	0.96
9	F	14.90*	53.69*

**Source:** Author's calculation from the data compiled from CMIE Prowess (<https://prowess.cmie.com>)

**Note:** 1. t-statistics are given in parenthesis

2. \*, \*\*, \*\*\* significant at 1%, 5% and 10% level of confidence respectively.

# Relationship Between Systematic Risk with Accounting Conservatism: Evidence from Bombay Stock Exchange (BSE)

Dr. Abraham Punnoose & Mohammadreza Khattidizabadi

## Abstract

This study empirically tests the relation between accounting conservatism and systematic risk. The main idea is that in firms with higher systematic risk, managers have higher incentives to delay the recognition of unfavourable in the hope of future favorable. The statistical sample contained 132 companies operating in different parts of Bombay Stock Exchange. The test procedure which was analyzed using E views software is correlation analysis, using panel data the relationship between dependent and independent variable is estimated. In this study, for measuring systematic risk and accounting conservatism, we used Beta from CAPM model and Basu model. Consistent with the hypothesis, we find a significant and negative association between systematic risk and accounting conservatism. Moreover, examining the unfavorable and favorable samples separately discloses that the effect of systematic risk on conservatism is likely to originate from delaying the recognition of unfavorable rather than accelerating the recognition of favorable. The finding shows the significant role that systematic risk may play in shaping managers' reporting behaviour.

**Key Words:** Free Cash Flow, Agency Problems, Ohlson Price model's, Earning and Book Value per Share, Information Content

## Introduction

In this study, we find out the relationship between systematic risk and accounting conservatism. Conservatism refers to the asymmetrical verification requirements for the recognition of economic losses vs profits. One of the oldest and most significant principles of accounting is accounting conservatism. In another word, conservatism is an approach that accountants, when encountering uncertainties in economic transactions, choose to report the values of assets and revenues in lower estimates, but for the values of liabilities and expenses in higher estimates.

Conservatism in accounting ensures that expenses are not understated in the accounts and revenues are not overstated. Conservatism is closely related to the concept of realisation since conservatism implies that a profit should not be recognised before it is realized.

## Literature Review

Khan and Watts (2009) estimated a firm-year measure of accounting conservatism, tested its empirical properties as a metric, and illustrated applications by examining new hypotheses that shed further light on the nature and impacts of conservatism. The results were consistent with the measure, capturing variation in conservatism and forecasting asymmetric earnings timeliness at horizons of up to 3 years ahead. They also reported that firms with longer investment cycles, higher idiosyncratic uncertainty and higher information asymmetry had higher accounting conservatism. Event studies implied increased conservatism was a response to increase in information asymmetry and idiosyncratic uncertainty.

Li (2010) investigated the contracting advantages of accounting conservatism on international debt and equity markets and reported that firms domiciled in countries with more conservative financial reporting systems had substantially lower cost of debt and equity, after controlling for differences in legal institutions and securities regulations

Ahmed and Duellman (2012) studied on managerial overconfidence and accounting conservatism. The objective of study was to test whether external monitoring helps to mitigate this effect. Using measures of both conditional and unconditional conservatism, the study found robust evidence of a negative relation between CEO overconfidence and accounting conservatism.

Jarboui (2013) reported on Does corporate governance affect accounting conservatism? Empirical evidence in the French context. The purpose of the study investigated the relationship between corporate governance (Boards of directors, Ownership) and accounting conservatism. The paper examined model of the study in the context of French firms over the period 2007-2011. The study predicted that an effective set of corporate governance mechanisms is positively related to a higher level of accounting conservatism. Empirical tests showed that accounting conservatism depends mainly on the effectiveness of the board, the management shareholding, and the audit quality.

## Research Methodology

This study analyzes the relationship between systematic risk and accounting conservatism. The study uses Basu model. this study, based on its objectives, is a practical analysis and its results could be used by managers, investors and generally all users. Methodologically speaking, this is a correlation analysis that examines the relationship between systematic risk and accounting conservatism in companies which were accepted in Bombay stock exchange. We have selected 132 companies which listed in the BES as the sample and collect required data from database of Bombay Stock Exchange. Then we analyze these data by SPSS and Eviews software. The main aim of the study is to examine the relationship between the variables, it uses a correlation methodology to check the assumptions of multivariable regression, which in line with assumptions the following models are going to be presented and tested.

## Research Hypotheses:

- H<sub>1</sub>: Accounting conservatism is negatively related to systematic risk.
- H<sub>2</sub>: The timeliness of favorable recognition is negatively related to systematic risk.
- H<sub>3</sub>: The timeliness of unfavourablerecognition is negatively related to systematic risk.

## Research Variables and their Measurement

In this study, we have used (Basu, 1997) model to study the relationship between systematic risk and accounting conservatism.

$$EARN = a_0 + a_1RET + a_2D + a_3RET * D + e$$

EARN: accounting return (earning before unexpected items divided by owners' equity value at the end of the year) that is considered as the dependent variable in this model.

RET: return on equity per year in firm i during the year t. D is the Dummy variable that would be equal to 1 if the return is negative, otherwise, it would be 0.

In this research we have used market model to measure systematic risk (Beta coefficient) as follows:

$$\beta_i = \frac{COV (R_i, R_m)}{(Var (R_m))}$$

Where, R<sub>i</sub> is the average return of the company, R<sub>m</sub> is the average return of the market, and R<sub>m</sub> is the return variance of the market. Cov (R<sub>i</sub>, R<sub>m</sub>): it is the covariance between firm stock return and the return of total bonds in the market. Var (R<sub>m</sub>): variance of return of total market bonds and β<sub>i</sub> is the systematic risk index. Model used

to test the hypothesis are explained below:

$$\text{EARN} = a_{0+a_1}(\text{RET}) + a_2D + a_3(\text{RET} * D) + a_4(\text{BETA}) + a_5(\text{BETA} * \text{RET}) + a_6(\text{BETA} * D) + a_7(\text{BETA} * \text{RET} * D) + e$$

If  $a_5$  coefficient is negative and significant, the first hypothesis is confirmed.

If  $a_7$  coefficient is negative and significant, the second hypothesis is confirmed.

If  $(a_5+a_7)$  coefficient is negative and significant, the third hypothesis is confirmed.

### Descriptive Statistics

The basic descriptive statistics are shown in Table 1.

**Table 1: Description Statistics of variables**

	EARN	RET	BETA
Mean	0.1359	0.2776	0.4526
Median	0.1624	0.1135	0.3211
Std. Deviation	0.2655	0.7387	1.8172
Minimum	-3.46	-0.7	-1.239
Maximum	0.97	8.38	3.689

### Hypotheses Test Results

In this study data have analyzed by panel data regression model under Panel Least Squares Method with Fixed Effect. The coefficient of determination R-square ( $R^2$ ) indicates that 42.25% behavior of dependent variable can be explained by the independent variables.

Overall, F-statistic 123.368 with p-value 0.00 indicates that the regression model is feasible. The result of financial ratios indicates that RET and RET\*D are statistically significant and have a positive influence on the EARN, whereas RET\*BETA, BETA\*D, and BETA\*RET\*D has significant but negative influence to EARN. See Table 2 for complete results.

**Table 2:  
Results from the  $H_1$  and  $H_2$  Test**

	F-stat	P-value	Coefficient	T-test	P-value	$R^2$	Adj- $R^2$
Constant coefficient ( $a_0$ )	123.368	0.000	0.1394	14.708	0.0000	0.4229	0.4195
RET ( $a_1$ )			0.0597	4.7037	0.0000		
D ( $a_2$ )			-0.0199	-1.2773	0.2017		
RET*D ( $a_3$ )			0.0886	4.7446	0.0000		
BETA ( $a_4$ )			-0.0786	-17.7744	0.0000		
BETA*RET ( $a_5$ )			-0.3066	-8.07476	0.0000		
BETA*D ( $a_6$ )			-0.1132	-153706	0.0000		
BETA*RET*D ( $a_7$ )			-0.0292	-7.0589	0.0000		
Durbin-Watson	1.886						

The first hypothesis testing: To investigate the relationship between systematic risk and accounting conservatism, as the p-value  $< 0.05$ , According to Fisher's F Test the regression model is significant. Also, test variables regression model coefficients (T-student) is that the coefficients are significant (exception of D). The result of panel data regression model as presented in Table 2 indicates that systematic risk has a negative correlation with accounting conservatism, as the coefficient of  $BETA * RET * D$  (-0.1142) with p-value (0.000). Thus, Hypothesis 1 is accepted.

The second hypothesis testing: To investigate the relationship between favorable recognition and systematic risk, the result of panel data regression model as presented in Table 2 indicates that favorable recognition a negative correlation with systematic risk, as the coefficient of  $BETA * RET$  (-0.3055) with p-value (0.000). Thus, Hypothesis 2 is accepted.

The third hypothesis testing: To investigate the relationship between unfavorable recognition and systematic risk, the result of panel data regression model as presented in Table 2 indicates that unfavorable recognition a negative correlation with systematic risk because total coefficients of  $(BETA * RET + BETA * RET * D)$  or  $(5 + 7) - 0.3055$  with p-value (0.000). Thus, Hypothesis 3 is accepted.

## Conclusion

The result of the study showed that the relationship between systematic risk and accounting conservatism is negative and significant. By reducing the systematic risk of the company, and accounting conservatism increases. Hence, by increasing the company current ratio can be reduced and accounting conservatism. Also, there is relationship negative and significant between favorable recognition and unfavorable recognition with systematic risk.

Consistent with the hypothesis, we find a significant and negative association between systematic risk and accounting conservatism. However, examining the unfavorable and favorable samples separately reveals that the effect of systematic risk on conservatism is likely to originate from delaying the recognition of unfavorable rather than accelerating the recognition of favorable. Finding of the study shows the important role that systematic risk may play in shaping managers' reporting behaviour. The results suggest to use other variables such as systematic risk to assess the amount of conservatism applied in financial reporting by managers.

## References

- Yunos, (2011) studied on the effect of ownership concentration, board of directors, audit committee and ethnicity on conservative accounting: malaysian evidence. Pp1-215.
- Khan, M., and R. L. Watts. 2009. Estimation and validation of a firm-year measure of conservatism. Working paper, Sloan School, MIT, Cambridge.
- Li, X., (2010), Accounting conservatism and the cost of capital: international analysis, London Business School, January 6.
- Ahmed and Duellman (2012) managerial overconfidence and accounting conservatism. Pp1-51
- Jarboui (2013) reported on Does corporate governance affect accounting conservatism? Empirical evidence in the French context. International Journal of Accounting and Economics Studies, Pp1-21.
- Jarboui (2013) reported on Does corporate governance affect accounting conservatism? Empirical evidence in the French context. International Journal of Accounting and Economics Studies, Pp1-21.

# Education and Entrepreneurial Intention: An Empirical Study

Sanitha K.K.\*

---

## Abstract

Entrepreneurship is much admired as an important source of employment and economic growth of a nation. Today's young talented promising students are tomorrow's successful entrepreneurs. So it is important to create entrepreneurial awareness and promotion among students. As such, many studies have conducted on Entrepreneurial Intention of students based on different factors such as social-psychological characteristics, economic and personal background, convictions, general attitude, external environment etc. This study examines the relation of student's Entrepreneurial intention and educational factors such as Course Syllabus and Teaching Pedagogy based on their opinion. Also it explores the relationship between demographic variables and Entrepreneurial Intention of students. Course Syllabus and Teaching Pedagogy are considered as the independent variables and Entrepreneurial Intention is considered as the dependent variable. Multi-stage stratified simple random sampling method was used as sampling technique and a well structured questionnaire were used for data collection. This study conducted among final year MBA students, studying in the colleges under the direct control of Kerala University, Trivandrum District.

**Key Words:** Entrepreneurship, Students, Entrepreneurial Intention, Education

## Introduction

Entrepreneurship, Entrepreneurship, Entrepreneurship.  
It drives everything: Job creation, Poverty Alleviation, Innovation.

- Elliott Bisnow<sup>1</sup>

Entrepreneurs are the Prophet of employment. The Global Entrepreneurship Monitor (GEM)<sup>2</sup> provides reports and highlights on the current importance of entrepreneurship. According to GEM, entrepreneurship activities in any country boost economic development, jobs, investments, and growth through knowledge, venture dynamics and innovation. It is necessary to increase entrepreneurship both qualitatively and quantitatively in the country since the creation of self employment opportunities and reduction of unemployment situations are concerned. Entrepreneurial education at tertiary level has become an important component of many curriculums in private and public higher learning institutions. In many countries, entrepreneurship education has been used as one of the most effective ways to promote the transition of graduates into the world of entrepreneurship. Due to the importance of the entrepreneurial sector, it has become one of the national agendas in many countries. Empirical research into the field of entrepreneurship has grown enormously in the last two decades.

## Literature review

The literature survey shows that entrepreneurial intentions play a very relevant role in the decision to start a new firm. Katz and Gartner (1988)<sup>3</sup> define entrepreneurial intention as the search for information that can be used to help fulfill the goal of venture creation. Pillis and Reardon (2007)<sup>4</sup>, define entrepreneurial intention "the intention to start a new business." Shapero (1975)<sup>5</sup> indicates that intentions are function of perceptions of feasibility, desirability and the propensity to act on opportunities. Davidsson (1995)<sup>6</sup> proposed an economic psychological model that combined aspects of previously used models and argued that the concept of conviction is the primary determinant of intention. Education in entrepreneurship is also believed to influence intention.

---

\*Research Scholar, Institute of Management in Kerala (IMK), University of Kerala, Karyavattom

Education in entrepreneurship is also believed to influence intention. Based on the survey, Turker and Selcuk (2009)<sup>7</sup> propagate that educational and structural support factors affect the entrepreneurial intention of students. In a study by Opoku-Antwi et al. (2012)<sup>8</sup>, they established that majority (91%) of the respondents are of the opinion that entrepreneurship could be developed through education and that they (65.3%) are taught entrepreneurship in their schools. Gender was found in their study not to affect significantly entrepreneurial intentions and that males are not more willing to do their own job than females.

Kolvereid (1996)<sup>9</sup> examined the employment status choice intentions of Norwegian business students and revealed that approximately forty three percent preferred to be self-employed, however, only seven percent of all respondents estimated the chance to become entrepreneurs to be seventy five percent or higher. Olufunso (2010)<sup>10</sup> study on graduate entrepreneurial intention in South Africa indicate that the entrepreneurial intention of the graduates is very weak, and most of the respondents prefer to work for private companies or public establishments. In a study by Akpomi (2008)<sup>11</sup> on entrepreneurship among graduates to be of business/management faculties and economic development revealed that only 12.4% of graduates to be aspire to own businesses upon graduation. The study of Mohammed and Aparna (2011)<sup>12</sup> unveils that even now, fostering innovation and new product development through Entrepreneurship has not been regarded as a crucial task of universities.

### Objectives of the Study

1. To assess the Entrepreneurial Intention of the students
2. To examine the relationship between student's Entrepreneurial Intention and the educational factors such as Course Syllabus and Teaching Pedagogy
3. To explore the Entrepreneurial Intention based on demographic variables

### Methodology

The methodology adopted for this study is mainly empirical and descriptive in nature. Sample size was 114. Multi-stage stratified simple random sampling method was used as sampling technique and a well structured questionnaire were used for data collection. The questionnaire comprises of two sections. Section A solicits general information from the respondents namely Gender, Work Experience, Educational background, Native location and Parent's Occupation. Section B consists of statements which are used to solicit the information pertaining to Student's Entrepreneurial Intention, Course Syllabus and Teaching Pedagogy. . Likert Scale with 5 point rating is used in which the respondent is asked how strongly he or she agrees or disagrees with the statements in questionnaire. The study conducted among final year MBA students, studying in the colleges under the direct control of Kerala University, Trivandrum District.

### Discussion and Interpretation

Table No.1

	N	Minimum	Maximum	Mean	Std. Deviation
Level of Entrepreneurial Intention	114	1.00	3.00	2.0263	.81426
Valid N	114				

Table No.1 Portraits the Entrepreneurial Intention of the students is at average. But the mean score (2.0263) shows that it is on the brim of average and can be considered as Poor.

**Table No.2**

		Entrepreneurial Intention	Opinion on Course syllabus	Opinion on Teaching pedagogy
Entrepreneurial Intention	Intention	1	.298**	.432**
	Pearson Correlation	114	.001	.000
	Sig. (2-tailed)		114	114
	N			
Opinion on Course syllabus	Pearson Correlation	.298**	1	.508**
	Sig. (2-tailed)	.001	114	.000
	N	114		114
Opinion on Teaching Pedagogy	Pearson Correlation	.432**	.508**	1
	Sig. (2-tailed)	.000	.000	114
	N	114	114	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table No. 2 unveils that the correlation coefficient between student's Entrepreneurial Intention and their opinion on Course Syllabus is 0.298 which indicate 29.8% positive relationship between entrepreneurial intention and course syllabus. Similarly, the correlation between student's Entrepreneurial Intention and their opinion on Teaching Pedagogy is 0.432 which indicate 43.2% positive relationship between entrepreneurial intention and Teaching Pedagogy. This analysis also reveals that Teaching Pedagogy is more contributing towards Entrepreneurial Intention than Course Syllabus. The content of the Course Syllabus consist Entrepreneurship but teachers are not taking effort create a sense of Entrepreneurial Intention among students.

**Table No. 3**

Variables	Category	Entrepreneurial Intention		
		$\mu$	N	SD
Gender	Male	1.8889	54	.8165
	Female	2.1500	60	.7988
Work Experience	Nil	2.0312	96	.7739
	Below 1 Year	1.6667	9	1.0000
	1 to 2 Years	2.3333	9	1.0000
Educational Background	B.Com	2.0000	36	.8280
	BBA	2.2500	24	.8469
	B.Tech	2.0000	18	.8401
	BA	3.0000	6	.0000
	B.Sc	1.6667	27	.6793
	Others	2.0000	3	.0000

Native Location	Urban	2.0667	45	.7804
	Semi-Urban	2.2000	30	.0886
	Rural	1.8462	39	.7792
Parent's Occupation	Agriculture	2.2000	15	.7746
	Labour	2.0000	21	.9486
	Govt. Service	2.1500	39	.7792
	Pvt. Service	1.7143	21	.9023
	Business/Self Employed	2.0000	12	.7385
	Others	2.0000	6	.0000

The demographic variables were analysed in relation with Entrepreneurial Intention of students such as Gender, Work Experience, Educational Background, Native Location and Parent's Occupation put in Table No. 3. From the table it may be observed that males are not more willing to do their own job than females and students with one to two years of experience have receptiveness towards starting own business. But fresh graduates and graduates with less than one year experience have no intention towards Entrepreneurship. Students with only BA educational background have relatively high Entrepreneurial Intention. But students with B.Com, BBA, B.Tech etc., background have very weak Entrepreneurial Intention. Similarly, students from Semi-Urban area have relatively high Entrepreneurial Intention and it may be noted that students with parent's occupation is agriculture having some leaning towards starting own business.

## Conclusion

In parity with literature review, the result of the study exhibits Entrepreneurial Intention of the students is very low. Course Syllabus and the Teaching Pedagogy have immense role to improve it. Entrepreneurial Orientation classes, visit entrepreneurs' organization, opportunity to have a close interaction with successful small scale business entrepreneurs etc can create a motivation among the students towards Entrepreneurial Intention.

Entrepreneurial education is imperative to develop Entrepreneurial Intention. Hence, it must be indulge entrepreneurial awareness and education among students. This will help equip graduates with creativity, innovation, risk-taking and ability to interpret successful entrepreneurial role models and identification of business opportunities. This may help reduce the rising unemployment situation in the country. The notion that only government can provide jobs should be reduced through awareness campaign by all stakeholders. Graduates must be encouraged to take entrepreneurship as a career rather than depending on government and the private sector for employment.

Even though India is having a pool of institutional mechanism to boost an individual's preliminary entrepreneurial intention of starting a new business, the rate of exploring this mechanism by youth is very low. By 2020, more than 50% of India's population will be at the age of below 25. It shows employment will be a problem. So creating Entrepreneurial Intention among young graduates is imperative so as to the development and improvement of entrepreneurial inspiration, awareness, knowledge and skills that are much needed to successfully establish and run an entrepreneurial venture and create employment opportunities for the betterment of our nation.

## References

1. [http://www.brainyquote.com/quotes/quotes/e/elliottbis542875.html?src=t\\_entrepreneurship](http://www.brainyquote.com/quotes/quotes/e/elliottbis542875.html?src=t_entrepreneurship)
2. <http://www.gemconsortium.org/>
3. Katz, J. A., & Gartner, W. B. (1988). Properties of Emerging Organisation, *Academy of Management Review*, Vol.13, Issue.3 ; doi:10.5465/AMR.1988.4306967

4. Pillis, E., & Reardon, K. K. (2007). The influence of personality traits and persuasive messages on entrepreneurial intention: a cross-cultural comparison. *Career Development International*, Vol. 12, Issue.4
5. Shapero, A. (1975). The displaced, uncomfortable entrepreneur. *Psychology Today*, Vol.9, pp. 83-88.
6. Davidsson, P. (1995). Determinants of entrepreneurial intentions. Paper presented at the RENT IX Workshop. November 23-24, Piacenza, Italy.
7. Turker, D & Selcuk, S.S (2009). Which factors affect entrepreneurial intention of university students?, *Journal of European Industrial Training*, Volume No. 33 Issue: 2, pp.142 – 159
8. Opoku-Antwi, G.L., Amofah, K., Nyamaah-Koffuor, K., Yakubu, A. (2012). Entrepreneurial Intention Among Senior High School Students in the Sunyani Municipality. *International Review of Management and Marketing*, Vol.2, Issue.4, pp. 210-219.
9. Kolvereid, L. (1996). Organizational employment versus self employment : reasons for career choice intentions, *Entrepreneurship Theory and Practice*, Vol.20, Issue.3, pp.23-31
10. Olufunso, F.O. (2010). Graduate Entrepreneurial Intentions in South Africa: Motivations and Obstacles. *International Journal of Business and Management*, vol.5, Issue.9, pp. 87-98.
11. Akpommi, E.M. (2008). Entrepreneurship Among Graduates-to-be of Business/Management Faculties and Economic Development in Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, Vol.14, pp. 52-60.
12. Mohammed, M. & Aparna, M. P (2011). Entrepreneurial Intentions of MBA students – A Study in Hyderabad, *Entrepreneurial Practice Review*, Volume No. 1, Issue No. 4

# SERVICE CO-OPERATIVES AND INDIA'S SOCIO- ECONOMIC DEVELOPMENT

Siji O.K.\*

## Abstract

It is unequivocally proved that service co-operatives play a great role in accelerating the economic development of a nation. By concentrating varied sectors like food, industry, employment, health education, housing, banking or finance and insurance the cooperatives ensure a balanced growth and it is considered as an indicator for increased growth. An attempt is made here to describe the extent to which service cooperatives function as an effective mechanism for socio-economic transformation of India, particularly in the era of global economic meltdown and its aftermath.

**Key Words:** Economic meltdown, Employment generation, Service cooperatives, Socio-economic development

## 1. Introduction

The economy of India is the seventh largest economy in the world by nominal GDP growth rate. Our country is now treated as newly industrialised country. Followed by economic reform 1991 India became one of the fast growing major economy. The long term growth perspective of Indian economy is moderately positive due to its young population, corresponding low dependency ratio, healthy savings and investment rates and increasing integration in to global economy. The economy of India keep an average growth rates of approximately 7 per cent for the last two decades. The Indian economy has the potential to become the world's 3rd largest economy in the next decade. Above all, India has the one of the fastest growing service sector in the world with an annual growth rate of 9 per cent.

Service sector plays a great role for the speedy acceleration toward socio-economic development in the fast moving globalised economy. Developed economy simply means to ensure balanced growth in all essential sector like food, industry, employment, health education, housing, banking or finance and insurance sector. All the financial and economic policies are now emphasising balanced growth which ensure elimination or avoidance of concentration of economic power or earning to a particular point or centre. For a stabilised economic growth we have to ensure growth in weaker section as well as rural economy. Accordingly all economic policies focusing on the economic development of our nation should concentrate on rural development . One of the important crisis haunting village people is lack of funding agencies for establishing and maintaining developmental activities or operation.

After so many years of independence , a heart breaking picture of Indian economy is revealed from Report of World Bank and National Council of Economic Research that majority people of the villages did not get access to enter in to the door of the formal financial system. For establishing socio-economic growth, Government at the Centre and State have introduced various programme and taken various steps through bank and other financial institution. But the focus has always been on commercial banks to achieve the possible level of inclusive growth. Owing to the reluctant approach from the part of commercial bank and other financial institution towards the rural community leads to expand a wide network of Cooperative credit institution. Here an attempt is made to discuss the role of Service Cooperative Bank for attaining inclusive growth and socio economic development of rural people

---

\*Research Scholar , Department of Commerce, University of Kerala, Kariavattom Campus.

The cooperative movement in India is now more than hundreds of years old. Service cooperative banks play a pivotal role in the economic growth especially socio-economic aspect of the rural economy. Service cooperative bank had a remarkable growth in the beginning and could extend its operation in the greater width by adapting changes according to the realities. They escalate their root by expansion of their deposit and credit activities and diversification of non-banking operation. Service cooperative bank play a significant role in the economic growth especially socio-economic aspects of rural economy. This institution act as a first and last resort to village people. ‘ In the village itself no form of credit organisation will be suitable except the cooperative societies, cooperation failed but cooperation must succeed ’; it has rightly observed on All India Rural Credit Survey .

A Service Cooperative Society as an organization of the villagers for mutual help and cooperation meet their common economic requirements and to increase their agricultural production. It provides all possible economic services to the rural people. More specifically, the major services rendered by Service Cooperative societies are :

1. Provides Short-term, Medium-term and Long term loans to the farmers for productive purposes
2. Arrange the supply of farm requirements like improved seeds, fertilizers, pesticides, agricultural implements, etc.
3. Maintain and supply on hire the tractors, power tillers, and other agricultural machineries
4. Provide storage and marketing facilities
5. Distribute the consumer and household articles
6. Promote thrift, savings and mutual-help among the members

The share of co-operative credit is now much lower than that of commercial banks but the reach of cooperative societies is much wider. Cooperative credit societies have more than twice the number of rural outlet and four time more accounts than those of scheduled commercial bank and RRBs put together .

## **2. Service Cooperatives and socio-Economic Development**

As a financial institution Service Cooperative Bank put maximum effort for the uplifting socio- economic status of members and local communities. They focus on poverty reduction, employment generation, social integration and standard of living. Cooperative banks have made a commendable progress in extending its geographical spread and functional reach, yet huge decline in productivity and efficiency, erosion of profitability, unrealizable debts and increase in unviable branches. Today, the cooperative credit institutions are facing a tough challenge to deliver on high expectations in a fiercely competitive credit environment, concerning scepticism are expressed on their credit worthiness and viability. Considering these facts, probing into the financial and operational aspects of these institutions becomes significant.

Major weakness in the economy is that the growth is not perceived as being sufficiently inclusive for many groups. Even gender equality remain a pervasive problem and some of the structural changes taking place have an adverse effect. Cooperative act as the main channels for providing equitable access to goods and services to consumer in rural area and at reasonable prices. With the help of Service Cooperative Bank lot of marketing outlets are functioning nearer to bank. The Major services currently done by Service Cooperative Banks are illustrated here:

### **(i) Source of Finance for MSMEs**

Cooperatives take initiation for developing a saving and investing habits through providing different investment and saving schemes with attractive interest rate. Saving periods are starting from 15 days to up to a maximum of 2 years or more. Service cooperative bank provide loan to small, marginal farmers, rural artisans and socially backward people in rural area. Cooperative bank play very important role with

meeting the increased demand of loan for agriculture and allied purposes at villages in the regime of economic liberalisation. The network of short term credit Cooperatives spread throughout the length and breadth of the country with their outlets at village level. Short term cooperative credits deliver the financial services to doorstep of rural people.

### **(ii) Source of Finance for Small and Marginal Farmers**

Service cooperatives' primary aim is to lend money for agricultural operation. All other financial institutions are reluctant to provide loans and assistance to agriculturist for their operation. Service cooperative is last resort of farmers. At present 3 types of agriculture loans are given to farmers with a maximum amount of rupees 3 lakhs with a repayment period 1 to 5 years.

Farm credit package: Government of India in its Farm Credit Package announced in June 2004, advised banks to double credit to agriculture sector in three years, i.e., by 2006-07. In the subsequent annual budgets, Government of India announced targets for credit to agriculture to ensure adequate credit flow to the sector. Agriculture credit flow has increased from Rs.86981 crore in 2003-04 to Rs. 468291 crore in 2010-11. The target for the 2011-12 was fixed at Rs.475000 crore and achievement as on 31.03.2012 was Rs. 511029 crore) forming more than 107 per cent of the target. The target of credit flow for the year 2012-13 has been fixed at Rs. 575000 crore and achievement as on October, 2012 was Rs. 308025 crore.

### **(iii) Educational Finance for Rural Mass**

Service cooperative bank take a significant role for improving the level of education and professional qualification of the rural people. Bank provide financial assistance to those who wishes for higher education and professional courses. For higher studies, maximum of rupees 25000 with a repayment period of 2 years and in the case of professional courses maximum amount up to rupees 10,00,000 with repayment period up to 10 years are given by service bank. Different schemes are available to protect during their course period to avoid interest or less interest schemes. Lot of educational institutions, professional colleges and training centres are working under the guidance and supervision of cooperative sector itself. These cooperative institutes are linked with cooperative banks in that area through which students can avail financial assistance for their courses.

### **(iv) Create Employment Opportunities**

Globally cooperatives employ more than 100 million people. The short term cooperative Credits would be an ideal instrument for promoting socio-economic development through SHGs Service Cooperative bank and Self-help groups are one of the largest source of rural employment. Successful cooperative have an increase in their membership and generate significant employment opportunities. With the help of cooperative bank number of SHGs are functioning which not only create employment opportunities but also they ensure better standard of living of the members. Promotion of SHGs could indeed become a major component of the business development plan of cooperative organisation. For generating self employment, maximum amount of rupees 5 lakhs with a repayment period of 5 years is given by service cooperatives. Cooperative also provide financial assistance to those who wish to go abroad for job purposes. For business purpose rupees 5 lakhs to 10 lakhs were given by service cooperatives.

### **(v) Conservation of the Environment**

Promoting rural economy has a positive impact on environment conservation which include migration to urban area. Cooperative and Self Help groups promote the sustainable economy and have strong participation in the sectors like organic farming, organic or natural handlooms, irrigation and water conservation, utilities and energy conservation etc. Cooperatives play a key role in promoting sustainable and environment friendly practices for production.

### **(vi) Schemes for Rural Housing and Infrastructure Development**

Lack of housing and sheltering is one of the haunting problem of rural economy. Service cooperatives tries to solve this problem to certain extent by giving different form of loans and advances to rural economy for building their own homes and modification of existing houses. service cooperative bank in olden days onwards provide housing loan schemes those who need to construct houses. They provide not only for housing but also land procuring too. The amount ranging from rupees 25 lakhs to 50 lakhs.

### **(vii) Promoting Rural Health**

Service cooperative bank are also take initiate step to improve the health status of the rural economy. Under its assistance, number of rural people get medical treatment from the rural hospital with less or zero interest schemes. They provide a financial assistance up to a maximum of rupees 1.5 lakhs. As a part of healthy environment they provide financial assistance for maintaining hygienic sanitary facility in their homes.

### **Conclusion**

To conclude, the service cooperatives play a pivotal role in the socio- economic development of rural regions. Service. It is evident that with the help of service cooperatives we can channelize the unproductive resources in to productive one, especially channelization of fund to productive agricultural sector. With the help of Adequate agricultural Credit, Agricultural Production has improved, employment opportunities has increased, Income and saving of the people too had increased tremendously, especially with launching of SHGs and its financing by Cooperatives. Additional employment opportunities, consumable products at cheaper rate, increased income and savings and reduced cost of living are the major benefits of Cooperatives that were made possible through SHGs.

### **References**

1. [www.google scholar](http://www.google scholar)
2. James Janke and David Trechter (2014). Cooperatives in Economic Development. Survey of Research Centre Report.
3. NABARD Annual Report

# A STUDY ON RUPEE VOLATILITY AND RECENT MEASURES OF RESERVE BANK OF INDIA TO STABILIZE RUPEE

Ambili Jayachandran & Dr. C. Ganesh

## Abstract

Rupee has been experiencing tremendous fluctuations ever since the financial crisis which struck the global economy in 2008. The volatility of Rupee and its unavoidable impact on trade and business has been one of the concerns that Reserve Bank of India has been trying to address. In a recent study by Anand Prakash and published by the Reserve Bank of India, the episodes in which rupee faced heightened volatility during 1993-2013 and the responses of Central Bank to these episodes were analysed. With the adoption of market-determined exchange rate in 1993, the rupee has been facing instances in which it has plunged against the dollar. This excessive volatility of exchange rates imposes real costs on the economy through its effects on international trade and investment and could also complicate the conduct of monetary policy. In view of this, there is a greater interest among the policymakers and academia, particularly the central bank, in responding to episodes of volatility in the foreign exchange markets. In other words timely interventions by the Central Bank to correct and direct the Rupee fluctuations were given sharper focus and the Governors of Reserve Bank of India were considered answerable for the same. Dr. Subbarao was at the helm of RBI when the Global Financial Crisis unfolded. Dr Subbarao is generally credited as having safely stewarded Indian economy through the financial crisis. It was, however, during Dr Subbarao's tenure that the value of Indian Rupee tumbled spectacularly, with the Dollar- Rupee exchange rate for the first time breaching the psychological barrier of 60, and even hitting a new low of 69. Dr. Subbarao was succeeded by Dr. Raghuram Rajan who was formerly chief economic adviser to India's Ministry of Finance during the UPA government and was chief economist at the International Monetary Fund from 2003 to 2007. A slew of reforms initiated by Dr Raghuram Rajan have successfully brought down retail inflation to 3.78% in July 2015 from 9.8% in September 2013 – the lowest since the 1990s and also reduced the rupee volatility. The investigator attempts to conduct a study in same lines of Mr. Anand Prakash. This study seeks to analyse the volatility of Rupee since September 2013 when there has been a change of guard at RBI. The paper also looks at the measures adopted by RBI to stabilize rupee during this period. Volatility of Rupee has been computed using the standard deviations of monthly Forex market returns which has been annualized so as to facilitate comparison with previous year's rupee volatility. The study relies on secondary data and the time period taken for the study is from September 2013 to September 2015.

**Key Words:** Exchange Rate, Rupee Volatility, Measures taken by Central Bank and Outcome of the Measures

## Introduction

India's exchange rate policy has evolved over time. The Indian currency has gone through diverse regimes from the rule of British monarchy to the takeover over of Reserve Bank of India in the post independence period. In the post independence period, India's exchange rate policy has seen a shift from the Bretton Woods exchange rate system to basket-peg exchange rate system and finally to a managed float exchange rate system. With the breakdown of the Bretton Woods System in 1971, the rupee was linked with pound sterling. In order to overcome the weaknesses associated with a single currency peg and to ensure stability of the exchange rate, the rupee, with effect from September 1975, was pegged to a basket of currencies till the early 1990s.

As a part of initiating economic reforms, the Rupee exchange rate was devalued by 9 per cent and 11 per cent between July 1 and 3, 1991. This was to counter the massive draw down in the foreign exchange reserves and in turn instill confidence in the investors and to improve domestic competitiveness. The Liberalised Exchange Rate Management System (LERMS) was put in place in March 1992 and the dual exchange rate system was included in the interim period. Later on in March 1993 unified exchange rate system was brought in to replace the dual exchange rate system. The experience with a market determined exchange rate system in India since 1993 is generally described as 'satisfactory' as orderliness prevailed in the Indian market during

most of the period. As for the episodes of volatility; they were effectively managed through timely monetary and administrative measures.

An important aspect of India's policy in response to the various episodes of volatility has been market intervention combined with monetary and administrative measures to meet issues threatening financial stability. Moving forward, India is progressing towards full capital account convertibility and is being more and more integrated with the rest of the world. In this circumstance, managing periods of volatility is bound to cause greater challenges in tackling and bringing independent monetary policy, open capital account and exchange rate management to triad. Sustaining stability in the market would require more adaptability, flexibility and innovations with regard to the strategy for liquidity management as well as exchange rate management. With the likely turnover in the foreign exchange market rising in future, further development of the foreign exchange market will be crucial to manage the associated risks.

### **Rupee Volatility Till 2013**

An analysis of rupee volatility in the study conducted by Anand Prakash, Assistant Adviser in the Financial Markets Department (FMD), RBI on various phases of exchange rate pressures shows that volatility in rupee-dollar exchange rate has exhibited mixed trends in the past two decades of market determined exchange rate. The paper analysed six major phases of volatility in Indian forex market during the period from 1993 to 2013, caused either by exogenous or endogenous factors, or a combination of both and RBI's response to contain the volatility. The analysis revealed that there has been a significant increase in exchange rate volatility in the aftermath of the global financial crisis.

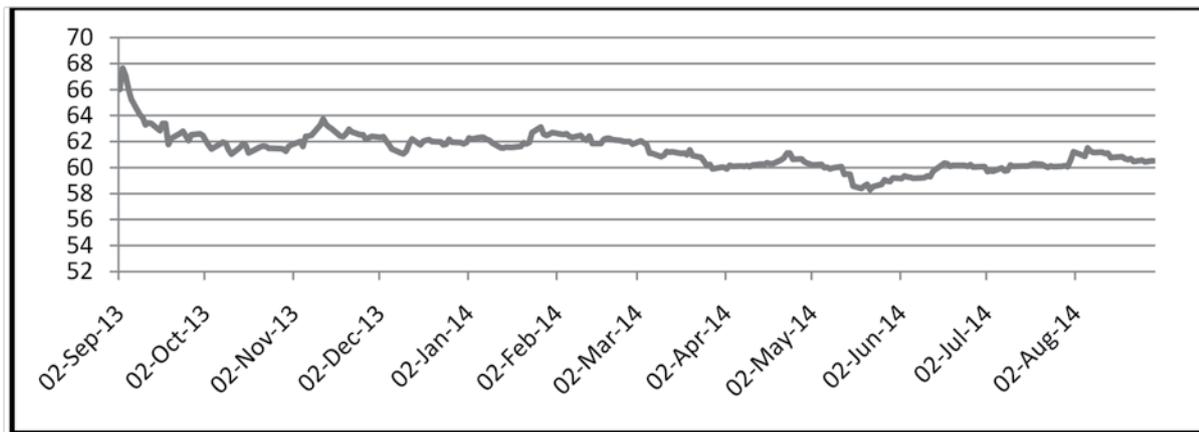
### **Rupee Volatility (2013-2015)**

Volatility in the rupee-dollar exchange rate during the past two years has been computed using standard deviations of daily forex market returns, which have been annualized. The analysis is divided into two sections; Rupee volatility from 2013 to 2014 and Rupee Volatility from 2014 to 2015.

#### **1. Rupee Volatility During September 2013- August 2014:**

The fluctuations in rupee persisted even after Raghuram Rajan's appointment as Governor of RBI. In December the rupee was hit by a strong dollar demand making it fall against the Dollar. This demand for dollar was urged by a state-run bank in order to meet the oil refiner needs of dealers. Although Rupee was able to recover from its lowest trough of 68.85 in August 2013, it was branded the worst performer of the year. Beginning of the year 2014 showed signs of recovery. Though Crude oil prices were on a bullish trend, it started falling rapidly after hitting its yearly high in June 2014. This was due to the rise in production of shale oil. As the US and Canada started exploiting the new found means of extracting oil, demand for shale oil rose while crude oil demand started to fall. Reduced demand for crude oil made OPEC (Organisation of Petroleum Exporting Countries) take the decision to let the prices fall. Crude oil being Russia's main export, the free-fall in oil prices led to the onset of Russian crisis. Ruble lost its value in the market and certain other policies of Russia such as annexation issues on Crimea and military intervention in Ukraine aggravated the crisis. Another factor which added to the falling rupee was the deteriorating trade deficits which was US\$97.0 billion during April-November 2013 and widened to US\$100.6 billion for the period April-November 2014 (i.e. 3.85% higher). The twin factors that have led to widening of trade deficit are the slower growth in exports at 5% and the increasing non-oil imports, particularly gold. All these factors contributed to the outflow of foreign investments. Apart from these climate concerns due to the El Nino clouded the agricultural reaps for the year.

**Figure 1: Daily Exchange Rate Movements of Rupee against Dollar for the Time Period September 2013 to August 2014**



Description: From the above figure it is understood that the RBI was able to considerably bring down the fluctuations in rupee from what was the highest in the month of September 2013 to somewhere in the range of Rs. 60-62 per dollar by the end of August 2014

The RBI under the leadership of its Governor Raghuram Rajan adopted the following policies to counter the volatility in rupee;

- a. Conducted Open Market Operations by purchasing the government securities for an aggregate amount of Rs. 10,000 crore on October 7, 2013 (Monday) through multi-security auction.
- b. Reduced the marginal standing facility (MSF) rate by 25 basis points from 9.0 per cent to 8.75 per cent
- c. Increased the policy repo rate under the Liquidity Adjustment Facility (LAF) by 25 basis points from 7.5 per cent to 7.75 per cent then to 8.0 per cent in January 2014 and remained unchanged till January 2015
- d. The liquidity provided through term repos of 7-day and 14-day tenor was increased from 0.25 per cent of net demand and time liabilities (NDTL) of the banking system to 0.5 per cent in October 2013 and again increased to 0.75 per cent
- e. Decreased the liquidity provided under overnight repos under the LAF from 0.5 per cent of bank-wise NDTL to 0.25 per cent with effect from April 01, 2014
- f. Reserves have been rebuilt since September, and are expected to increase further as oil marketing companies, that have been buying foreign exchange in the market, repay the Reserve Bank when their swaps come due.
- g. The cash reserve ratio (CRR) of scheduled banks was kept unchanged at 4.0 per cent
- h. The reverse repo rate under the LAF remained unchanged at 7.0 per cent and the Marginal Standing Facility (MSF) rate and the Bank Rate at 9.0 per cent.
- i. Reduced the Statutory Liquidity Ratio (SLR) of scheduled commercial banks by 50 basis points from 23.0 per cent to 22.5 per cent of their NDTL with effect from June 14, 2014 and reduced again to 22.0 per cent with effect from August 9, 2014;
- j. Reduced the liquidity provided under the Export Credit Refinance (ECR) facility from 50 per cent of eligible export credit outstanding to 32 per cent with immediate effect;
- k. Introduced a special term repo facility of 0.25 per cent of NDTL to compensate fully for the reduction in access to liquidity under the ECR
- l. Import restrictions on non-oil imports particularly gold were effected to narrow down the trade deficit.

## Outcome of the Policy Reforms:

Since December 2013, the sharper than expected disinflation in vegetable prices has enabled a sizable fall in headline inflation. The RBI was able to calibrate liquidity management to the system's requirements. Liquidity was gradually increased through overnight LAF repos, export credit refinance and 7-day and 14-day term repos. Greater flexibility has been brought in to manage reserve requirements. On the external sector, a perceptible narrowing of the trade deficit coupled with policy interventions brought some calm to the foreign exchange market but the persistent demand for dollar resulted in rupee instability. Domestically, real GDP growth continued to be modest in the third quarter of 2013-14, with some strengthening of activity in services such as trade, hotels, transport and communication, financing, real estate and business services. Despite some positive movement in more recent data, industrial activity continues to be a drag on the economy.

Since the Third Quarter Review of January 2014, global activity has moderated on slower growth in the US, the UK, and Japan. The continued sluggishness in the Euro area and subdued pick-up in emerging and developing economies was due to uncertain external demand environment as well as localised cyclical and structural constraints. For a number of emerging markets, further tightening of external financing conditions and renewed volatility of capital flows were the biggest risks to their outlook. Going forward global growth was expected to strengthen in the coming years with risks tilted to the downside. The merchandise trade deficit was 22 per cent lower in April-February 2013-14 than its level a year ago, due to the large decline in non-oil imports. The steady narrowing of the trade deficit over the year has shrunk the Current Account Deficit (CAD) to 0.9 per cent of GDP in the third quarter of 2013-14. However, export growth slowed, on account of slowdown in demand in partner countries as well as a softening of prices of exports of petroleum products and gems and jewellery (offset by a reduction in the prices of oil and gold imports). In February 2014, there was a turnaround in portfolio flows as investors largely priced in the effects of taper by the US Fed and responded to economic and geo-political developments in emerging markets with re-allocations. With sustained inflows in the form of portfolio flows, foreign direct investment (FDI) and external commercial borrowings, external financing conditions turned comfortable. Inflows, augmented by repayments by public sector oil marketing companies of their foreign currency obligations to the Reserve Bank during March, led to an increase in reserves.

Liquidity conditions remained broadly stable. In order to manage transient liquidity pressures associated with tax outflows and sluggish spending by the Government, the Reserve Bank injected additional liquidity aggregating over 940 billion rupees through nine special term repos of varying maturities during the months of June and July. Since June 2014, global economic activity has been picking up at a modest pace from a sharp slowdown in the first quarter of 2014-15. Investor risk appetite has buoyed financial markets, partly drawing strength from assurances of continuing monetary policy support in industrial countries. Portfolio flows to Emerging Market Economies (EMEs) have risen strongly. This implies, however, that EMEs remain vulnerable to changes in investor risk appetite driven by any reassessment of the future path of US monetary policy or possible escalation of geopolitical tensions.

The year 2013-14 as a whole, India's CAD narrowed sharply to 1.7 per cent of GDP, primarily on account of a decline in gold imports, although other non-oil imports also contracted with the weakening of domestic demand, and there was some pick-up in exports. In April 2014, the trade deficit narrowed sharply due to resumption of export growth after two consecutive months of decline, and the ongoing shrinking of import demand. Robust inflows of portfolio investment, supported by foreign direct investment and external commercial borrowings, kept external financing conditions comfortable and helped add to reserves. This overall condition of the Indian economy was reflected in the rupee. The rupee appreciated from what was the lowest in 2013 i.e. 68.82 per dollar to a monthly average of 60.88 per dollar in August 2014.

## 2. Rupee Volatility from September 2014-August 2015

Since April 2014, global activity has been evolving at different speeds. A broad-based strengthening of growth has been gaining traction in the US and the UK, after a moderation in the first quarter of 2014 due to adverse weather conditions. However, in the euro area, recovery is struggling to gather momentum. The pick-up in sales in Japan in anticipation of the consumption tax hike has been followed by a sharp fall in consumer spending. Rupee witnessed a significant recovery as a result of the slew of measures introduced by the new RBI Governor to control volatility. This curtailed further fall in the rupee. The rupee also got a boost after the BJP-led Government took reigns at the centre in May 2014, which resulted in significant capital inflows to the equity as well as debt markets. This was a time when the rupee transformed itself from being one of the worst to one of the best performing currencies within a span of just 8 to 9 months compared to other emerging market currencies. The rupee held its ground thereafter.

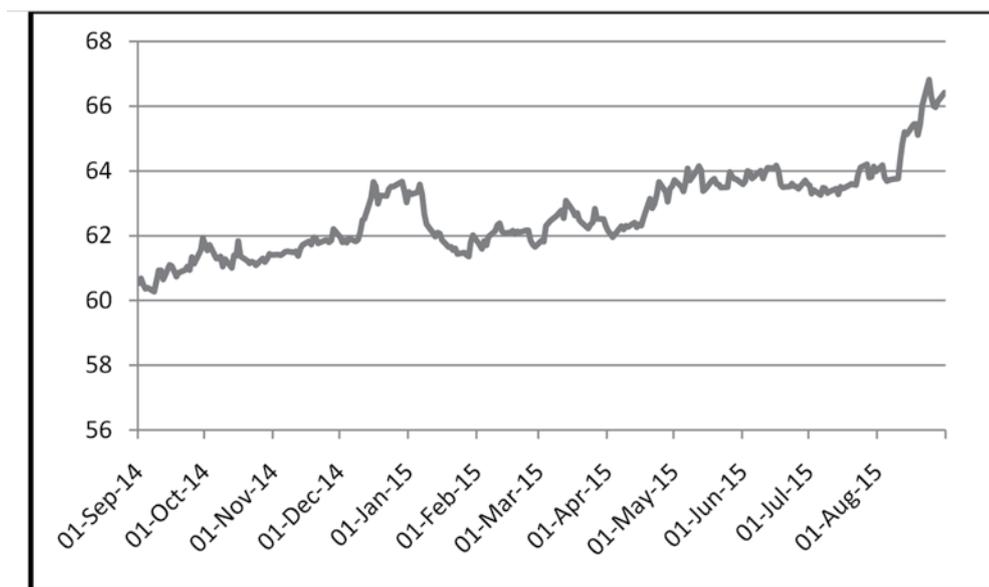
During November-December 2014, the rupee again witnessed a steady depreciation, which set the tone for 2015 calendar year. Around this time, the world witnessed a gigantic fall in Russian rouble due to the cascading effect of fall in crude oil prices as Russian economy in a big way depends on crude oil exports. Lot of factors has contributed to the descending of the rupee to 64.30 a dollar. The major reason was the concerns about an imminent interest rate hike by the U.S. Fed after almost a decade which led the dollar index mounting to a high. The fall in rupee that began in the last week of October gained momentum after the release of US jobs data in the first week of November. Apart from the improving unemployment rate, the rise in employee wages strengthened the case for a Federal Reserve rate hike in December. The growth in average hourly earnings of US employees ranged between 1.9 and 2.3 per cent since 2013. The growth inched up to 2.5 per cent in October 2015. Weak Macroeconomic indicators such as GDP, inflation, six-month low industrial production, contracting growth in manufacturing sector for the third consecutive month and the slowdown in China strengthened the dollar index (100.11). The rising dollar index has put pressure on the otherwise stable rupee. The dollar index hit a 12-year high of 100.39 in March 2015. Anticipated hike in interest rate by the U.S. Federal Reserve in September and October 2015 led the investors to flee from emerging markets' risky assets which consequently proved heavy on the Rupee.

Another factor, which added to the rupee tumble, is the Greece debt crisis which led a flight to safety towards dollar index, thereby hurting the Indian rupee. More recently another add-on to the downward trajectory of the Indian rupee has been the decision by the People's Bank of China earlier this week to change the way it calculates the reference rate of yuan which led to more than four per cent fall in Chinese currency against the dollar. This also raised concerns about a full-fledged currency war and, in order to protect their trade, other emerging market economies devalued their currencies.

In tandem with all these events, the Indian currency breached the level of 64.30 in June 2014 and further depreciated to hit below the psychological '65 a dollar' mark. As of now, there is a strong demand for dollar from banks for their importer-clients, which has resulted in rupee again depreciating to its near two-year lows. The market however, largely, ignored the better-than-expected Index of Industrial Production (IIP) data and recorded a low inflation number.

The overall trend in rupee skewed to the negative side as it breached the key support of 64.30, which was guarding it for over three months (May, June, July 2015). The steep fall witnessed in August 2015 was triggered by Chinese yuan depreciation which triggered capital outflows and in turn resulted in broad strengthening of Dollar. These factors guided rupee to cross the '66 level mark', bringing renewed memories of September 2013 when Rupee fared the lowest. But, as opposed to the fall in rupee in September 2013, the Rupee's descent in August 2015 was in conjunction with healthy foreign exchange reserves, low current account deficit, steady capital inflows, record low inflation and growth gradually inching higher. All these macroeconomic indicators show that Indian economy has been doing well in spite of the fall in rupee which was set off by the dollar instability and Chinese economic downfall.

**Figure 2: Daily Exchange Rate Movements of Rupee against Dollar for the Time Period September 2013 to August 2014**



Description: The rupee endured a steady depreciation from September 2014 to the previous highest level of 66.814 rupees per dollar in August 2015.

The measures undertaken by the RBI during the course of 2014-2015 are listed below:

- a. Kept the policy repo rate under the liquidity adjustment facility (LAF) unchanged at 8.0 per cent till January 2015 after which it was reduced thrice by 25 basis points each, from 8.0 to 7.75 per cent in January 2015, to 7.5 in March 2015 and to 7.25 in June 2015. It was further reduced by 50 basis points to 6.75 per cent in September 2015
- b. Kept the cash reserve ratio (CRR) of scheduled banks unchanged at 4.0 per cent
- c. reduced the liquidity provided under the export credit refinance (ECR) facility from 32 per cent of eligible export credit outstanding to 15 per cent with effect from October 10, 2014;
- d. Continued to provide liquidity under overnight repos at 0.25 per cent of bank-wise NDTL at the LAF repo rate and liquidity under 7-day and 14-day term repos of up to 0.75 per cent of NDTL of the banking system through auctions
- e. Continued with the daily one-day term repos and reverse repos to smooth liquidity.
- f. The reverse repo rate under the LAF remained 6.75 per cent till January 2015 after which it was adjusted to 6.5 in March 2015, to 6.25 in June 2015 and to 5.75 in September 2015
- g. The marginal standing facility (MSF) rate and the Bank Rate were kept at 9.0 per cent after which it was adjusted to 8.75 per cent in January 2015, to 8.5 per cent in March 2015, to 8.25 per cent in June 2015 and to 7.75 per cent in September 2015
- h. Reduced the statutory liquidity ratio (SLR) of scheduled commercial banks by 50 basis points from 22.0 per cent to 21.5 per cent of their NDTL with effect from the fortnight beginning February 7, 2015
- i. Replaced the export credit refinance (ECR) facility with the provision of system level liquidity with effect from February 7, 2015
- j. Conducted Open Market Operation sales worth rupees 401 billion during October to December 2014

## Outcome of the Policy Reforms:

Since August 2014, global activity has been recovering slowly from the setback in the first quarter of 2014, on the back of strengthening consumer spending and gradually improving labour market conditions in advanced economies (AEs) like the United States. Exports cushioned the fall in manufacturing output indicating expansion in export orders. Inflation dipped slightly after December 2014. Agriculture sector has been struggling to recover from the tumultuous effects of unseasonal rains and other climatic conditions. The industrial sector, and in particular, manufacturing regained momentum, with the growth of production in positive terrain for three consecutive months till January. Liquidity conditions eased considerably in the third quarter of 2014-15 due to structural and frictional factors, as well as the fine tuning of the liquidity adjustment framework. With deposit mobilisation outpacing credit growth and currency demands remaining subdued in relation to past trends, banks were flush with funds, leading a number of banks to reduce deposit rates. The current account deficit, placed at 1.7 per cent of GDP for the first quarter of 2014-15 remained contained in the second quarter.

Towards the end of 2014, growth moderated in the United States, with the boost to consumption demand from the fall in crude prices. In the Euro area, economic conditions deteriorated in an environment of deflationary pressures. The announcement of massive quantitative easing by the European Central Bank (ECB) in late January reinvigorated financial risk taking, boosting stock markets across the world. In China, growth slowed down because of a weakening property market and excess capacity in several industries. This prompted targeted measures to ease financial constraints faced by corporations and banks. Policy initiatives in land acquisition, as well as efforts to unlock mining activity and to widen the space for foreign direct investment in defense, insurance and railways created a more conducive setting for industrial revival. Faster clearances were also initiated for resuscitating stalled projects.

With the slump in international crude prices taking its toll on exports of petroleum as well as non-oil products, merchandise exports shrank in the third quarter of 2014-15. Gold imports were moderated after the demand spurt in September-November 2014. On the other hand, non-oil, non-gold import growth remained firm and in positive territory. Although overall imports declined in December, they recorded an expansion in the third quarter, on the back of the earlier rise in gold and non-oil, non-gold items. As a consequence to this, the trade deficit widened, which was comfortably financed by the portfolio inflows and foreign direct investments.

Since February 2015, a moderate and uneven global recovery is emerging, with economies being supported by currency fluctuations and commodity prices. Inflation excluding food and fuel fell successively in the nine months till February due to slump in crude oil prices. Exports of services, particularly, software and travel provided a silver lining and helped to hold down the current account deficit (CAD) which has narrowed in the third quarter. As a result, capital inflows mainly portfolio flows into domestic debt and equity markets and foreign direct investment exceeded the external financing requirement and enabled accretion to the foreign exchange reserves which reached an all-time peak of US\$ 343 billion as on April 3, 2015.

Global financial markets were volatile in April 2015, with risk-on risk-off shifts induced by changing perceptions of monetary policies in the advanced economies. Global currency markets continued to be dominated by the strength of the US dollar. Leading indicators of services sector showed mixed signals. There was substantial pick-up in service tax collections, sales of trucks, railway freight, domestic air passenger and air freight traffic. On the other hand, slowdown was recorded in tourist arrivals, railway traffic and international air passenger and freight traffic affecting the tourism industry adversely. The services PMI declined in April 2015, mainly on account of slowdown in new business orders. Liquidity conditions eased in April after the tightness in the second half of March 2015 on account of advance tax outflows and financial year-end behaviour of banks. During May, however, rapid increases in currency in circulation and a build-up of government balances resulted in liquidity conditions tightening again. Accordingly, fine tuning operations of varying tenors were conducted by the RBI. These injections helped meet the frictional liquidity requirements.

Financial markets experienced high turbulence due to the Greek crisis and Chinese stock market slump. Currency markets continued to be dominated by the rising US dollar, which impacted foreign currency borrowing exposures, increased exchange rate volatility and also produced sizable capital outflows. Headline consumer price index (CPI) inflation rose for the second successive month in June 2015 to a nine-month high. Liquidity conditions were very easy in June and July. A seasonal reduction in demand for currency and increased spending by Government coupled with structural factors such as low credit deployment relative to the volume of deposit mobilisation contributed to surplus conditions in the money markets. Headwinds from weak global demand conditions restrained merchandise exports. The contraction in exports in the first quarter of 2015-16 was the steepest since 2009.

Since August 2015, global growth moderated, especially in emerging market economies (EMEs). In the United States, industrial production slowed as capital spending in the energy sector was curbed and exports shrunk as a result of stronger US dollar. In the Euro area, a fragile recovery strengthened on the back of domestic consumption, less slack in the labour market and improving financial conditions brought about by ultra-accommodative monetary policy. On the other hand, economic activity in Japan had been faltering under the weight of weak private consumption and exports. EMEs are caught in a vortex of slowing global trade volumes, depressed commodity prices, weakening currencies and capital outflows. China's intended rebalancing from investment towards consumption is being hit by the stock market meltdown, slower industrial production and weaker exports. The devaluation of the renminbi on August 11, has unsettled financial markets across the world. Brazil and Russia are grappling with recession and runaway inflation, while South Africa is facing tightening structural constraints which threaten to tip it into a downturn. Since the Chinese devaluation, equity prices, commodities and currencies have fallen sharply. Capital flight from EMEs including India, into mature bond markets has pushed down developed market yields, and risk spreads across asset classes have widened. Although volatility ebbed in early September and capital flows returned cautiously.

## Findings and Conclusion

Over the past two decades Indian foreign exchange market has gone through a process of gradual liberalization. With the adoption of market-determined exchange rate in 1993, the rupee has faced episodes of heightened volatility, the latest being volatility due to fall in Chinese economy and the simultaneous rise in demand for dollar. Excessive exchange rates volatility imposes real costs on the economy through its effects on international trade and investment and could also complicate the conduct of monetary policy. The central bank responses to episodes of volatility in the foreign exchange markets have thus come into sharper focus. Analysis of the study conducted by Anand Prakash reveals that there has been a significant increase in exchange rate volatility in the aftermath of the global financial crisis, signifying the greater influence of volatile capital flows on exchange rate movements.

Through this study it was found that an important aspect of Rupee stabilization in various episodes of volatility has been market intervention combined with monetary and administrative measures taken up by the RBI. From the table given below it can be seen that from the 11.09 per cent in September 2013, the rupee volatility has been considerably restricted to 5.59 per cent in August 2015.

**Table 1: Annualised Daily Volatility in Rs-\$ Exchange Rate during various Periods of Volatility (2013-2015)**

Time Period	Volatility (in Percentage)
September 2013-December 2013	11.09
January 2014- April 2014	5.90
May 2014- August 2014	6.06
Sep-Dec 14	5.81

Jan-April 15	5.76
May-Aug 15	5.59

**Description:** Volatility of Rupee during this period shows a decreasing trend. From the Table No.2 (given above) it can be observed that though the rupee underwent serious fluctuations during the last few months of 2013, which slowed down to 5.90 % during January 2014 to April 2014. The persisting deteriorating conditions of the world economy was reflected on the rupee during the period may 2014- August 2014 but the measures of the Indian central bank were able to limit the volatility of Rupee to 6.06 %.

Although the value of rupee against dollar fell from an average of Rs. 63 per dollar in September 2013 to Rs. 66 per dollar in August 2015, RBI under the governance of Dr. Raghuram Rajan was successful in reducing the frequency with which rupee experienced fluctuations. Moreover the policies of RBI targets not just on reducing inflation but on stabilising liquidity and regulating imports and exports. From these policies it is evident that the central bank has kept a close watch on the developments within the Indian economy as well economies of other major countries. Availability of sufficient tools in the toolkit of a central bank is also a necessary condition to manage crisis.

Rupee was deemed to be the best among Asian currencies (excluding yen) to fare against the dollar in 2015. Another important aspect to be taken into consideration is that, rupee depreciation cannot be solely blamed on the inadequate performance of the Indian economy. It is not the rupee that had been depreciating but the dollar that has been rising which in turn left the rupee devalued. Rupee has been constantly compared against the dollar, while rupee against other currencies of other developed regions such as euro, yen and sterling pound has been doing well. Therefore, it can be concluded that the measures and policies taken by RBI, especially under the reign of Dr. Raghuram Rajan, has not only reduced the volatility in the rupee fluctuations but also gained recognition of India being the strongest economy in Asia.

## References

- Prakash, A. (2012). "Major Episodes Of Volatility In The Indian Foreign Exchange Market in the Last Two Decades", 162–199. Reserve Bank of India Occasional Papers Vol. 33, No. 1 & 2:
- Dua P & R. Ranjan (2010), "Exchange Rate Policy and Modelling in India", RBI DRG Study No. 33, February.
- Government of India (1993), "Report of the High Level Committee on Balance of Payments", April.
- International Monetary Fund (2013), "Global Financial Stability Report", October.
- International Monetary Fund (2013), "Pilot External Sector Report", August.
- Kohli, R. (2001), "Real Exchange Rate Stabilisation and Managed Floating: Exchange Rate Policy in India," 1993-99, ICRIER Working Paper 59, October.
- Patra Michael Debabrata & Sitikantha Pattanaik (1998), "Exchange Rate Management in India : An Empirical Evaluation" Occasional Papers, Reserve Bank of India.
- Pattanaik, S. and S. Sahoo (2001), "The Effectiveness of Intervention in India: An Empirical Assessment", RBI Occasional Papers, Volume 22.
- Rangarajan, C. (1991), "Exchange Rate Adjustment: Causes and Consequences", Reserve Bank of India Bulletin, September.
- Reserve Bank of India (2005), Report of the Internal Technical Group on Forex Markets.
- Reserve Bank of India, Report on Currency and Finance, 2002-03.
- Reserve Bank of India, Report on Currency and Finance, 2005-06.
- Verma R & A. Prakash (2011), "Sensitivity of Capital Flows to Interest Rate Differentials: An Empirical Assessment for India", RBI Working Papers, May.

<https://rbi.org.in/scripts/PublicationsView.aspx?id=12252>

<http://www.yourarticlelibrary.com/essay/foreign-trade-essay/exchange-rate-system-in-india-objectives-and-reforms/40406/>

<http://profit.ndtv.com/news/forex/article-rupee-on-course-to-be-one-of-asia-laggards-in-2013-376246>

<http://profit.ndtv.com/news/market/article-sensex-nifty-choppy-as-rupee-slips-past-60-dollar-516232>

<http://profit.ndtv.com/news/forex/article-rupees-3-month-volatility-surges-most-in-a-month-619115>

<http://profit.ndtv.com/news/forex/article-rbi-governor-says-wants-to-reduce-undue-volatility-in-rupee-672965>

<http://profit.ndtv.com/news/forex/article-rupee-steady-amid-gains-in-asian-currencies-against-dollar-698674>

<http://profit.ndtv.com/news/forex/article-rupee-flat-at-61-69-dollar-japan-slips-into-recession-698843>

<http://profit.ndtv.com/news/forex/article-rupee-slips-to-63-58-on-month-end-dollar-demand-718324>

<http://profit.ndtv.com/news/forex/article-rbi-buys-12-2-billion-from-markets-in-january-745613>

<http://profit.ndtv.com/news/economy/article-rupee-seen-at-66-68-against-dollar-in-12-18-months-deutsche-bank-1253378>

<http://profit.ndtv.com/news/forex/article-additional-60-billion-forex-needed-to-fight-volatilities-hsbc-775580>

<http://profit.ndtv.com/news/forex/article-rbi-snaps-up-49-2-billion-in-april-february-most-in-7-years-756297>

<http://profit.ndtv.com/news/industries/article-global-it-spending-to-fall-3-5-in-2015-as-dollar-rises-gartner-1220940>

<http://in.reuters.com/article/india-forex-rupee-idINKCN0VQ0AC>

<http://www.businesstoday.in/magazine/focus/indian-rupee-2015-outlook-by-care-ratings-ab-group-economists/story/213961.html>

<http://blogs.wsj.com/indiarealtime/2014/12/22/how-the-rupee-fared-in-2014/>

<http://www.thehindu.com/business/markets/rupee-among-best-of-asian-currencies-in-2015/article8055068.ece>

[https://en.wikipedia.org/wiki/Russian\\_financial\\_crisis\\_\(2014%E2%80%93present\)](https://en.wikipedia.org/wiki/Russian_financial_crisis_(2014%E2%80%93present))

<http://www.financialexpress.com/article/industry/banking-finance/2014-15-a-comeback-year-for-the-indian-rupee-despite-us-dollar-surge/60896/>

[https://www.dailyfx.com/forex/fundamental/article/special\\_report/2014/01/24/forex\\_special\\_report\\_indian\\_rupee.html](https://www.dailyfx.com/forex/fundamental/article/special_report/2014/01/24/forex_special_report_indian_rupee.html)

[http://www.nytimes.com/interactive/2016/business/energy-environment/oil-prices.html?\\_r=0](http://www.nytimes.com/interactive/2016/business/energy-environment/oil-prices.html?_r=0)

<http://www.vox.com/2014/12/16/7401705/oil-prices-falling>

[http://www.business-standard.com/article/economy-policy/weakness-in-rupee-seen-continuing-in-2015-114121500876\\_1.html](http://www.business-standard.com/article/economy-policy/weakness-in-rupee-seen-continuing-in-2015-114121500876_1.html)

[http://articles.economicstimes.indiatimes.com/2014-12-17/news/57154856\\_1\\_us-currency-indian-rupee-domestic-currency](http://articles.economicstimes.indiatimes.com/2014-12-17/news/57154856_1_us-currency-indian-rupee-domestic-currency)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=29669](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=29669)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=29858](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=29858)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=30495](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=30495)

[https://www.rbi.org.in/scripts/BS\\_PressReleaseDisplay.aspx?prid=30911](https://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=30911)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=31773](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=31773)

[https://www.rbi.org.in/scripts/BS\\_PressReleaseDisplay.aspx?prid=31329](https://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=31329)

<http://www.thehindubusinessline.com/markets/forex/rupee-turns-jittery-ahead-of-key-events/article7933058.ece>

<http://www.financialexpress.com/article/industry/banking-finance/why-indian-rupee-weakened-against-us-dollar-despite-its-5-fall/68783/>

<http://www.thehindu.com/business/markets/rupee-likely-to-remain-weak-despite-better-economic-indicators/article7544533.ece>

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=32197](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=32197)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=32649](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=32649)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=33012](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=33012)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=33144](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=33144)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=33372](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=33372)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=33628](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=33628)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=34073](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=34073)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=34614](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=34614)

[https://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=35087](https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=35087)

<http://www.forbes.com/sites/timworstall/2015/12/14/its-not-the-indian-rupee-thats-falling-its-the-us-dollar-thats-rising/#2ef8f4e23bd2>

# IMPACT OF STRESS ON THE WORKLIFE IMBALANCE OF WOMEN GYNAECOLOGISTS

\*Susha D., \*\* Dr. Anitha S. & \*\*\* Dr. P.N. Harikumar

## Abstract

Work-life balance is the ability to experience a sense of control and to stay productive and competitive at work while maintaining a happy, healthy home life with sufficient leisure. It's attaining focus and awareness, despite seemingly endless tasks and activities competing for your time and attention. But the work schedule of women Gynaecologists in private and government hospitals creates imbalance in their job and personal life. This paper examines the impact of stress on the worklife imbalance of women Gynaecologists in Kerala.

## 1. Introduction

Stress is a major problem faced by an individual in the work place. Occupational stresses have so many implications on an individual's mental and physical health. In all service sectors, since last few decades, there is a drastic change in the nature of work and work situations. Changes in technology, globalisation, privatisation and liberalisation has made the situation more complicated for the employees. Further, diversification of activities, competition from global market, organisational restructuring etc have also influenced the nature of work and work situations. These changes have imposed increased demands on the part of employees such as technological up gradation, over time work, achievement of targets etc. Employees are expected to perform more than one task at a time. As a part of meeting the competition and targets the employees are asked to work more than the normal working hours. These conditions have the job stress and its related problems.

Stress is a state of mental or emotional strain or tension resulting from adverse or demanding circumstances. Stress is your body's way of responding to any kind of demand. It can be caused by both good and bad experiences. When people feel stressed by something going on around them, their bodies react by releasing chemicals into the blood. Stress hormones can act as sedatives chemical substances which cause us to become calm or fatigued. When such hormone by products occur in large amounts which will happen under conditions of chronic stress, they may contribute to a sustained feeling of low energy or depression. Habitual patterns of thought which influence appraisal and increase the likelihood that a person will experience stress as negative such as low self-efficacy, or a conviction that you are incapable of managing stress) can also increase the likelihood that a person will become depressed.

It is normal to experience a range of moods, both high and low, in everyday life. While some "down in the dumps" feelings are a part of life, sometimes, people fall into depressing feelings that persist and start interfering with their ability to complete daily activities, hold a job, and enjoy successful interpersonal relationships. Chronic and/or severe stress can also negatively affect people with Bipolar Disorder. This illness, also known as manic depression or bipolar affective disorder, involves dramatic shifts in mood, energy level, and behaviour from the highs of mania to the lows of major depression. Bipolar individuals who are in a depressed state often lose interest in things that used to give them pleasure; develop sleep problems; constantly feel tired and fatigued; and have distressed, negative, and unhappy moods, irritability, a short temper, and/or agitation. In addition, anger, guilt, failure and hopeless feelings may be experienced.

People with Bipolar Disorder cycle between manic and depressed mood states over the course of days, weeks, or months. This mood cycling disrupts everyday functioning; affecting energy, activity levels, judgment, and behavior. Stress can trigger either a depressive or manic mood state in someone with a genetic vulnerability to Bipolar Disorder. Stress can also worsen a bipolar mood episode once it has begun, increasing its intensity

\*Part-time research scholar in Management studies, Loyola College of social science, Sreekariyam, Thiruvananthapuram, Kerala

\*\*Research Supervising Teacher in Management studies, Loyola College of social science, Sreekariyam, Thiruvananthapuram, Kerala

\*\*\*Associate Professor & Head, Post-graduate department of Commerce & Tourism, Catholicate College, Pathanamthitta, Kerala.

and/or extending its duration across time. Some people who are stressed may show relatively mild outward signs of anxiety, such as fidgeting, biting their fingernails, tapping their feet, etc. In other people, chronic activation of stress hormones can contribute to severe feelings of anxiety (e.g., racing heartbeat, nausea, sweaty palms, etc.), feelings of helplessness and a sense of impending doom. Thought patterns that lead to stress (and depression, as described above) can also leave people vulnerable to intense anxiety feelings.

The term personality is used to describe the consistent individual patterns of thoughts, emotion, and behaviour that characterize each person across time and situations. Each individual's personality is thought to be influenced by both an inherited "genetic" component (usually called temperament) and by their interactions with the environment. Some people experience personality changes in response to stress hormones, which are part of their internal environment. The changes such as Irritability, Hostility, Frustration, Anger etc in personality are not uncommon to observe in people who are stressed.

Every individual's life has multiple segments such as family, finances, social, self, spiritual, health and hobbies. In each of these life segments, an individual needs to devote certain period of time, energy and effort while major part of daily time, energy and effort is consumed in the work segment. Males and females play professional roles at work place and the difference in roles at workplace is primarily not gender dependent but is rather decided by the qualification, experience and designation of the employee. In contrast, male and female roles have traditionally and socially been gender defined in life segments. Though male participation in household work, especially in dual worker couples is increasing, yet a significant part of the household work (including childcare) is expected to be the domain of the female. This gender biased role differentiation at the family level creates different work-life balance pressures for males and females. But in today's over competitive world, which continuously demands more time for work and career, high level of segmentation of work and family is not easy. In some cases individuals will be able to keep life segmented from work (life not encroaching on work time, energy and effort) or keep work segmented from life (work not encroaching on life time, energy and effort). High integration on the other hand brings out opposite results and might create high levels of work-life conflicts and imbalance. With increasing demands of time for work, integration of high levels between work and life is becoming a necessity. While an individual is balancing between the continuum of segmenting and integrating between work and life, he/she will also attempt to compensate loss in one segment from results in another. An individual who has higher degree of work-life segmentation will have lesser opportunities to compensate for loss in one segment from gains in other segment. Where as a person who has high integration of work and life will have higher opportunities for compensation. While the processes of segmentation, integration and compensation are continuing (at different degrees) work and life will create their own individual outputs, which will be of positive and negative nature. These negative and positive outputs will tend to spill over from segment to another, especially when the work and life have higher degree of integration.

## **2. Objective**

The main objective of the paper is to examine the impact of stress on the worklife imbalance of women Gynaecologists in kerala.

## **3. Methodology**

The study is a descriptive and analytical one. The sample Gynaecologists were selected by applying stratified random sampling method. Here, the Gynaecologists were stratified as those lady doctors working in Private and Government hospitals in the state.

## **4. Sample size.**

Based on the results of the pilot study, the sample size was fixed statistically by using a formula. The modified data after Reliability Analysis, collected from the 60 respondents, were studied in detail to identify the extent of variations in the responses. It may be stated that the sample size was proportional to the level of

variation and the assumed level of the error of the estimate of the population parameter of the study variable. The seventy-five statements relating to the measurement of relevant variables were used to determine the sample size. For an assumed level of 10 per cent error in the estimate of means of these 75 responses using the information on variance from the pilot study, sample size was obtained based on each response. The formula used is  $n = (1.96s/d)^2$ . Where 'n' is the sample size, 's' is the estimate of standard deviation, 'd' is the standard error of the estimation of population parameter and the value 1.96 is the critical value from normal test at 5 per cent level of significance. The sample size of 127 calculated was the maximum among the sample sizes obtained from responses for all the statements. Hence, the sample size was fixed statistically as 150.

## 5. Results and Discussion

**Table 1 Demographic Profile of the Selected Women Gynaecologists**

	Categories	Frequency
Area of Hospital	Rural	60
	Urban	90
Type of hospital	Government	70
	Private	80
Marital Status	Married	120
	Unmarried	30
	Others	0
Education	MBBS only	20
	MBBS with MD	100
	MBBS with dual specialisation	30
	Others	0
Family Structure	Nuclear	130
	Extended	18
	Joint	2
Monthly Income	Up to 100000	100
	100001-200000	30
	2000000-300000	20
	Above 300000	0

**Source:** Field Survey

As per Table 1, it is clear that out of the selected 150 women Gynaecologists 60 doctors are working in rural area and 90 in urban area. 70 selected doctors are working in government hospitals and remaining Gynaecologists are selected from private hospitals. Majority of the selected doctors have PG degree and 20 per cent doctors have dual specialisation. 130 Gynaecologists are living in a nuclear family system.

### **Logistic Regression for Measuring the Impact stress on the worklife Impact of women Gynaecologists**

**Logistic regression** is the appropriate regression analysis to conduct when the dependent variable is dichotomous (binary). Like all regression analyses, the logistic regression is a predictive analysis. Logistic regression is used to describe data and to explain the relationship between one dependent binary variable and one or more metric (interval or ratio scale) independent variables.

The logistic model is specified as:

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \dots + \beta_k$$

$$\text{where } p = \frac{e^{-(\beta_0 + \beta_1 x_1 + \dots + \beta_k)}}{1 + e^{-(\beta_0 + \beta_1 x_1 + \dots + \beta_k)}}$$

This model is used to explain the impact of stress on the worklife imbalance of women Gynaecologists. Therefore, Logistic Regression Model is applied. The results are reported below.

**Table 2 Omnibus Tests of Model Co-efficient**

Omnibus Tests of Model Coefficients				
		Chi-square	Df	Sig.
Step 1	Step	317.762	3	.000**
	Block	317.762	3	.000**
	Model	317.762	3	.000**

Source: Survey data

\*Significant at 5 per cent level of significance

\*\* Significant at 1 per cent level of significance

The Omnibus Test is the starting point and it is seen that the model is statistically significant ( $p=0.000 < 0.01$ )

**Table 3 Logistic Model Summary of GBE**

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	650.580a	.365	.487

Source: Survey data

As per the model summary, Cox and Snell R square and Nagelkerke R square are 0.365 and 0.487 respectively, indicating that the percentage of Worklife imbalance of the women Gynaecologists is accounted for by all included predictor variables such as Occupational anxiety, Work overload, and Job burnout.

**Table 4 Classification Table of Logistic Regression Model**

Classification Table <sup>a</sup>				
	Observed		Predicted	
			Percentage Correct	
Step 1	Worklife imbalance Coded	Low	75.9	
		High	84.9	
	Overall Percentage			80.1

a. The cut value is .500

Source: Survey data

It may be observed from Table 4.77 that correct prediction from the model turns out to be 75.9 and 84.9 per cent respectively for the two levels of Worlife imbalance. This is held statistically valid as seen from the Hosmer and Lemeshow Test (value of the Chi-square 63.242 with  $p=0.000<0.01$ ).

**Table 5 Hosmer and Lemeshow Test**

Hosmer and Lemeshow Test			
Step	Chi-square	Df	Sig.
1	63.242	8	.000**

**Source:** Survey data

\*Significant at 5 per cent level of significance

\*\* Significant at 1 per cent level of significance

Finally, the impact of the predictor variables on worklife imbalance is individually evaluated and presented in the equation.

**Table 6 Variables in the Logistic Regression Equation**

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	OA	.516	.043	145.378	1	.000**	1.676
	WOL	.091	.019	22.439	1	.000**	1.913
	JB	.071	.017	17.610	1	.000**	1.074
	Constant	-11.615	1.047	122.980	1	.000**	.000
a. Variable(s) entered on step 1: GS, GT, GL.							

**Source :** Survey data

\*Significant at 5 per cent level of significance

\*\* Significant at 1 per cent level of significance

All the variables in the equations such as Occupational anxiety (OA), Work overload (WOL) and Job burnout (JB) can better explain the level of worklife imbalance of women Gynaecologists, as the variables are statistically significant and the Exp (B) is greater than 1, it is inferred that the probability of any change in these predictor variables turns out to be made significant changes in worklife imbalance.

## 6. Conclusion

Most Gynaecologists who suffer from work-life imbalance tend to assume the problem is one of time. They often lament, "If only there were more hours in the day!" But while they don't have control over the passage of time, they often do have control over what they do during it. The stress elements affect their worklife badly, so that their duty pressure and occupational burnout will mount up will become uncontrollable. From the output of the analysis of Logistic regression, it can be observed that the three elements of stress such as occupational anxiety, Work overload and Job burnout bring worklife imbalance to the women Gynaecologists.

## 7. BIBLIOGRAPHY

- Ayyadurai, S. (2006). An insight into the constraints faced by women entrepreneurs in a war-torn area: case study of the northeast of Sri Lanka. *Journal of Asia Entrepreneurship and Sustainability*. Retrieved 25 November 2010, from [http://findarticles.com/P/articles/mi\\_qa5499/is\\_200607/ai\\_n21407208/](http://findarticles.com/P/articles/mi_qa5499/is_200607/ai_n21407208/)
- Barnett, R. (1998). Towards a review and reconceptualization of the work/family literature. *Genetic, Social and General Psychology Monographs*, 124, 1–50.
- Blim, M. (2001). Italian women after development employment, entrepreneurship and domestic work in the third Italy. *History of the Family*, 6, 57–270.
- Bohle, P., & Tilley, A. J. (1989). The impact of night work on psychological well-being. *Ergonomics*, 32, 1089–1099.
- Bohle, P., Quinlan, M., Kennedy, D., & Williamson, A. (2004). Working hours, work-life conflict and health in precarious and permanent employment. *Revista De Saúde Pubica*, 38, 19–25.
- Brand, S., Hermann, B., Muheim, F., Beck, J., & Tranchsler, E. H. (2008). Strain among young students in hospitality and tourism. *Industrial Health*, 46, 199–209.
- Dex, S. & Bond, S. (2005). Measuring work-life balance and its covariates, *Work, Employment and Society*, vol.19 (3), pp: 627-637.
- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of workfamily conflict: Testing a model of the work-family interface, *Journal of Applied Psychology*, vol. 77, pp: 65-78.
- George, J.M. (2000). Emotions and leadership: The role of emotional intelligence, *Human Relations*, vol.53 (8), pp: 1027-1055.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles, *Academy of Management Review*, vol. 10, pp: 76-88.
- Gould, S. and Penley, L. (1984). Career strategies and salary progression: a study of their relationships in a municipal bureaucracy, *Organizational Behavior and Human Performance*, vol. 34, pp. 244-65.
- Hepburn, C. G & Barling, J. (1996). Eldercare responsibilities, interrole conflict, and employee absence, A daily study, *Journal of Occupational Health Psychologist*, vol. 1, pp: 311-318.
- Higgins, C.A & Duxbury, L.E (1992). Work-family conflict: A comparison of dual-career and traditional-career men, *Journal of Organizational Behavior*, vol.13, pp: 389-411.

# TRENDS OF NPAs IN PRIORITY AND NON- PRIORITY SECTORS OF BANKING INDUSTRY

Haritha Simon

## Abstract

As with many things in the contemporary world, banking has also undergone significant changes over the years. Banks can be considered as the basis of economic progress of a country because no country can progress industrially, if she has no well-organized banking system. However, the Indian Banking sector has been witnessing a slowdown in the overall growth coupled with deterioration in the asset quality and lower profitability. One of the main reason for such an issue is the challenge of Non-Performing Assets (NPAs). While comparing with Private Sector Banks, the problem of NPA is affecting the Public Sector Banks very badly. It is not the Infrastructure Development Projects (in Priority Sector) which rises the NPAs in Public Sector Banks but the Non-Priority Sector categories which is fully under the discretion of the bank gives rise to NPAs. The statistics are proving the same.

## Introduction

The world is moving faster with a smile in its face. The nature of the smile may vary. It is based on the performance of different sectors and industries in each economy. If the performance is an appreciable one, it takes the economy into prosperity or otherwise. Banking Sector is one of the appreciable sector in the service industry because it caters the needs of all, irrespective of caste, creed or religion and it play a vital role in the day-to day activities of every human being. It is the backbone of all industries, because every transaction where money is involved, the bank is the main character. Without banks the whole economy of a country would come to a standstill. But still Banking Sector has also facing some of the problems in which the management of NPAs is one as it requires a close watch from all the angles. In simple words Non-Performing Assets are the assets where banks are not able to recollect their landed money from their clients in such a condition that they are not in the position to provide the borrowed money to the banks. In other words, an asset becomes Non- performing when it ceases to generate income for a bank. It is also defined as 'credit facility in respect of which the interest and or installment of principal has remained 'past due' for a specified time'. According to RBI, term loans in which interest or installment of principal remain overdue for a period of more than 90 days is considered as Non-Performing Assets. The management of NPAs is therefore an important part of credit management of banks and financial institutions in the country. By looking at NPAs one can monitor the asset quality of the bank as a whole. The primary aim of any business is to make profits. Therefore, any asset created in the course of conduct of the business should generate income for the business. This applies equally to the business of the banks also. Banks, typically offset deposits by gaining higher margins through amounts advanced as loans. Studies have shown that the terms of credit given to borrowers significantly impacts the amount of NPAs at the bank. If for any reasons such assets do not generate any income or become difficult to recover, then the very position of the banks on repaying the deposits on the due date would be at stake and in jeopardy. Banks with such asset portfolio would become weak and naturally such weak banks will lose the faith and confidence of the investors. Thus management of NPA is one of the core functions of every bank.

## Priority and Non- Priority Sectors Lending of Banking Sector

It has been in the periods of 1969 that the Priority Sector Lending (PSL) and social banking concepts have been crystallized and adopted for the purpose of credit deployment. It was introduced to foster Financial Inclusion. Financial Inclusion simply means "Banking to unbanked area". It focuses on bringing the weaker sections of the community into the mainstream of the financial market. **The term 'priority sector' indicates those activities which have national importance and have been assigned priority for development. In other words, Priority sector refers to those sectors of the economy which may not get timely and adequate credit in the absence of this special dispensation.** Typically, these are small value loans to farmers for agriculture and allied activities, micro and small enterprises, poor people for housing, students for education

and other low income groups and weaker sections. Every Commercial Banks are required to deploy 40% of their total credit (i.e. 40% of the ANBC- Adjusted Net Bank Credit or Credit Equivalent Amount of Off Balance Sheet Exposure, whichever is higher) to Priority Sector lending. It is a mandatory target in which every commercial banks need to fulfill as per RBI guidelines. Those banks which are facing deficit in fulfilling the 40% of their total credit to priority sector can avail the option of purchasing **Priority Sector Lending Certificate (PSLC)**. It was introduced in Raghuram Rajan Committee Report on Financial Sector Reforms (2008). PSLC is a certificate issued to those registered MFIs, NBFCs, Co-operatives, registered money lenders and also banks who exceeds the minimum requirements of priority sector lending. It is just like Carbon Credit in Kyoto Protocol. A market is opened up for these certificates where deficit banks can buy certificates from excess banks to compensate the shortfall in priority sector lending. All other types of loans and advances followed by banks which are not come under this sector are called **Non-priority sector lending**. Categories of advances come under non-priority sector will differ in different banks. It depends on the policy frameworks of each bank.

The priority sector advances have undergone several changes, since then, several new areas and sectors has introduced within the purview of this sector. The Reserve Bank of India has recently revised the priority sector categories. New sectors like **Renewable Energy** and **Social Infrastructures** are now classified under priority sector. In addition to that **Medium Enterprises** are also included along with SSI category comes under priority sectors. Earlier, there were sub-limits for direct and indirect lending to agriculture. This distinction was taken away and now the banks need to achieve as in the form of agri-target of 18% of the total loan amount. Bank loans to food and agro processing units are also included under agricultural sector.

### Categories of priority sector advances

- Agriculture
- Micro, Small and Medium Enterprises
- Export Credit
- Education
- Housing
- Social Infrastructure
- Renewable Energy
- Others

**Agriculture:** As per the new guidelines the distinction between direct and indirect agricultural loan has been taken away. Now it includes i) Farm Credit (short term crop loans, medium/long term loans, credit to farmers), ii) Agriculture Infrastructure, iii) Ancillary Activities.

**Micro, Small and Medium Enterprises:** Finance to Micro, Small and Medium Enterprises comes under both manufacturing and service sectors are eligible to be classified under priority sector advances.

**Export Credit:** Export Credit includes pre-shipment and post- shipment finance. 32% of the total credits are eligible under this category

**Education loans:** Education loans include loans and advances granted to individuals for educational purpose, up to Rs. 10 lakhs irrespective of the sanctioned amount.

**Housing loans:** Loans to individuals up to Rs. 28 lakhs in metropolitan centers (with population of ten lakhs and above) and loans up to Rs. 20 lakhs in other centers are eligible under this category (excluding the loans granted by banks to their own employees). The housing loans which are backed by long term bonds are exempted from ANBC, the banks can either include such loans to individuals up to Rs. 28 lakhs in metropolitan centers or Rs. 20 lakhs in other centers under priority sector or can take the benefit of exemption from ANBC, but both are not possible.

**Social Infrastructure:** Loans up to a limit of Rs. 5 crores per borrower for building social infrastructure activities such as schools, health care facilities, drinking water facilities and sanitation facilities in Tier II to Tier VI centers.

**Renewable Energy:** In the renewable energy segment, banks finances up to Rs 15 crore for solar-based power generators, biomass-based power generators, wind mills, micro-hydel plants, etc., and for individual households, the loan limit is up to Rs 10 lakh.

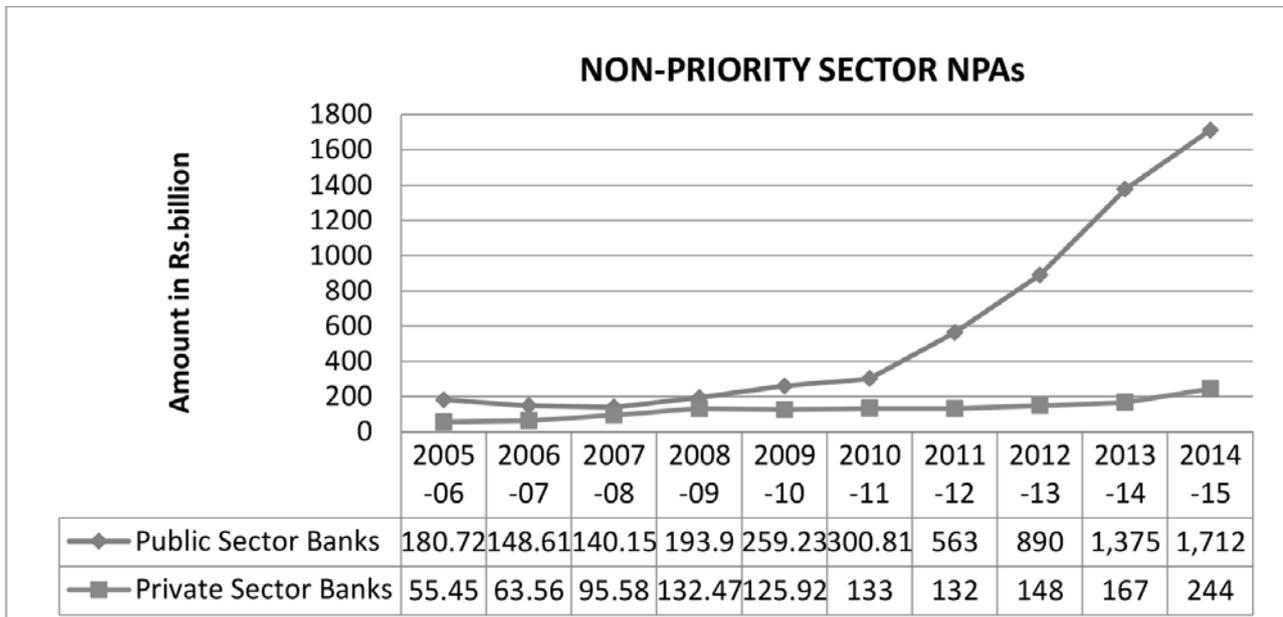
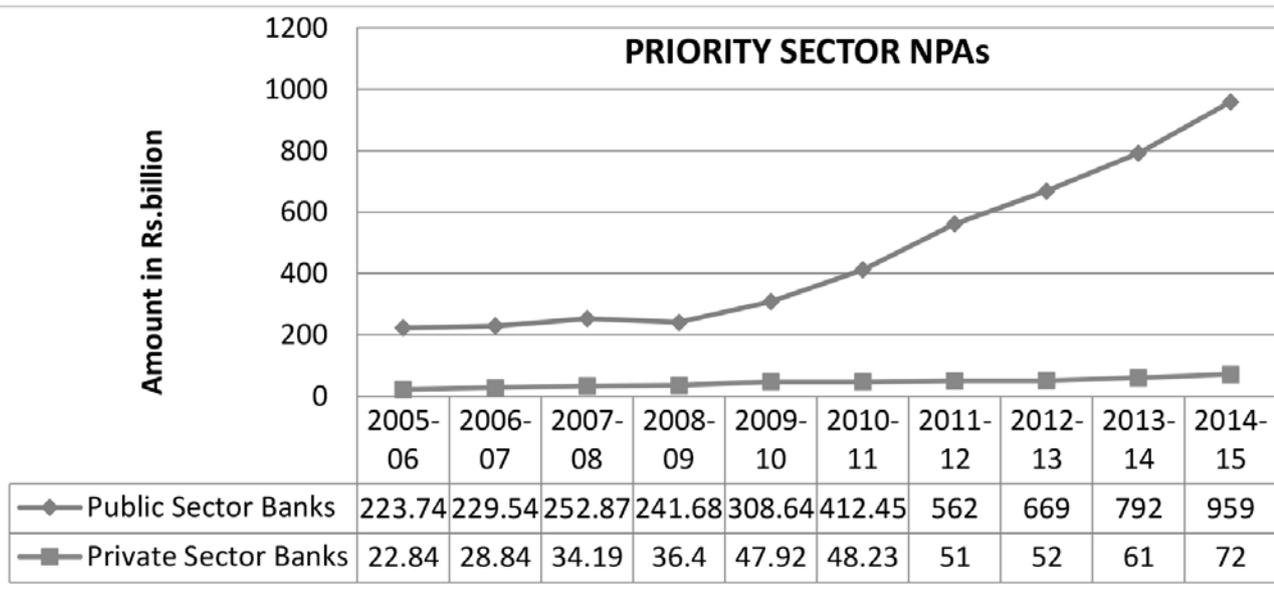
**Others:** Loans up to Rs. 50,000/- is given directly by banks to individuals whose annual income in rural areas does not exceed Rs. 1 lakh and for non-rural areas it does not exceed Rs. 1.6 lakh.

### Trends of NPAs in Priority and Non-Priority Sectors

Even though the NPAs are a serious threat to whole banking sector (both public and private), the public sector is affecting acutely. Here are some of the NPA statistics:

Composition of NPAs in Priority & Non-Priority Sectors – Public & Private Sector Banks (Amount in Rs. Billion)								
YEAR	PRIORITY SECTOR				NON-PRIORITY SECTOR			
	as on 31 <sup>st</sup> March							
	Public Sector Banks		Private Sector Banks		Public Sector Banks		Private Sector Banks	
	Gross NPAs	Gross NPAs as percent of total	Gross NPAs	Gross NPAs as percent of total	Gross NPAs	Gross NPAs as percent of total	Gross NPAs	Gross NPAs as percent of total
2005-06	223.74	54.07	22.84	29	180.72	43.68	55.45	71
2006-07	229.54	59.92	28.84	31	148.61	38.8	63.56	69
2007-08	252.87	63.85	34.19	26	140.15	35.39	95.58	74
2008-09	241.68	54.89	36.4	22	193.9	44.04	132.47	78
2009-10	308.64	53.84	47.92	28	259.23	45.25	125.92	72
2010-11	412.45	58	48.23	27	300.81	42	133	74
2011-12	562	50	51	27.9	563	50	132	72.1
2012-13	669	42.9	52	26	890	57.1	148	74
2013-14	792	36.5	61	26.6	1,375	63.5	167	73.4
2014-15	959	35.9	72	22.8	1,712	64.1	244	77.2

**Source:** RBI, Report on Trends and progress of Banking in India, Various Issues



### Trend of NPAs in Private Sector Banks

Year	Priority sector NPAs (in billion)	Growth rate of NPAs (in%)	Non- Priority sector NPAs(in billion)	Growth rate of NPAs (in%)
2005-06	22.84	-	55.45	-
2006-07	28.84	26.27	63.56	14.63
2007-08	34.19	18.55	95.58	50.38
2008-09	36.4	6.46	132.47	38.60
2009-10	47.92	31.65	125.92	-4.94
2010-11	48.23	0.65	133	5.62
2011-12	51	5.74	132	-0.75

2012-13	52	1.96	148	12.12
2013-14	61	16.44	167	12.76
2014-15	72	19.19	244	46.02

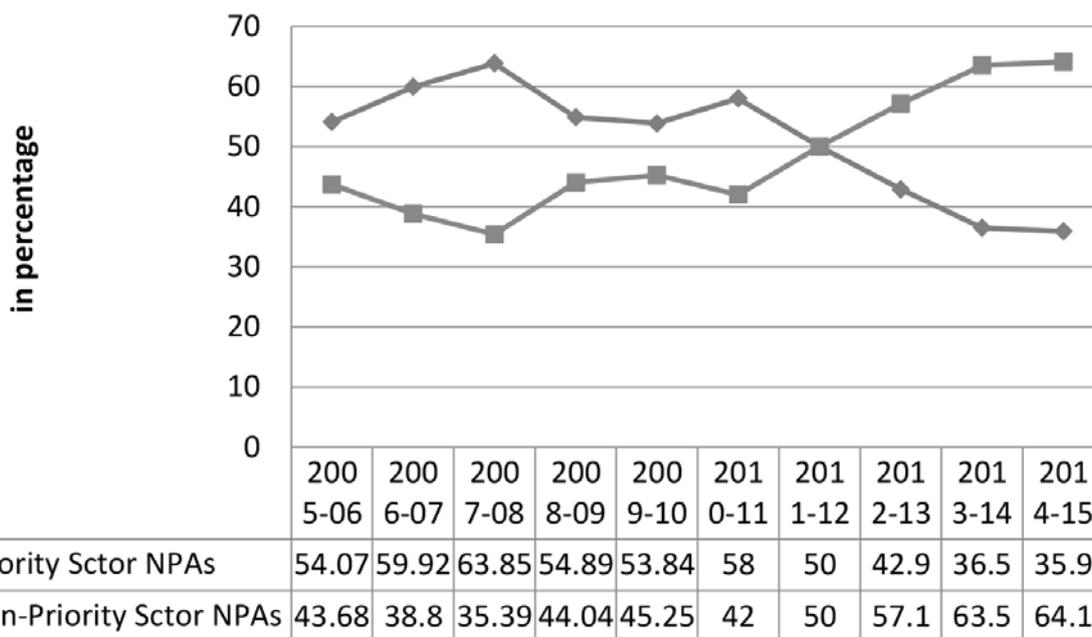
**Source:** RBI, Report on Trends and progress of Banking in India, Various Issues

### Trend of NPAs in Public Sector banks

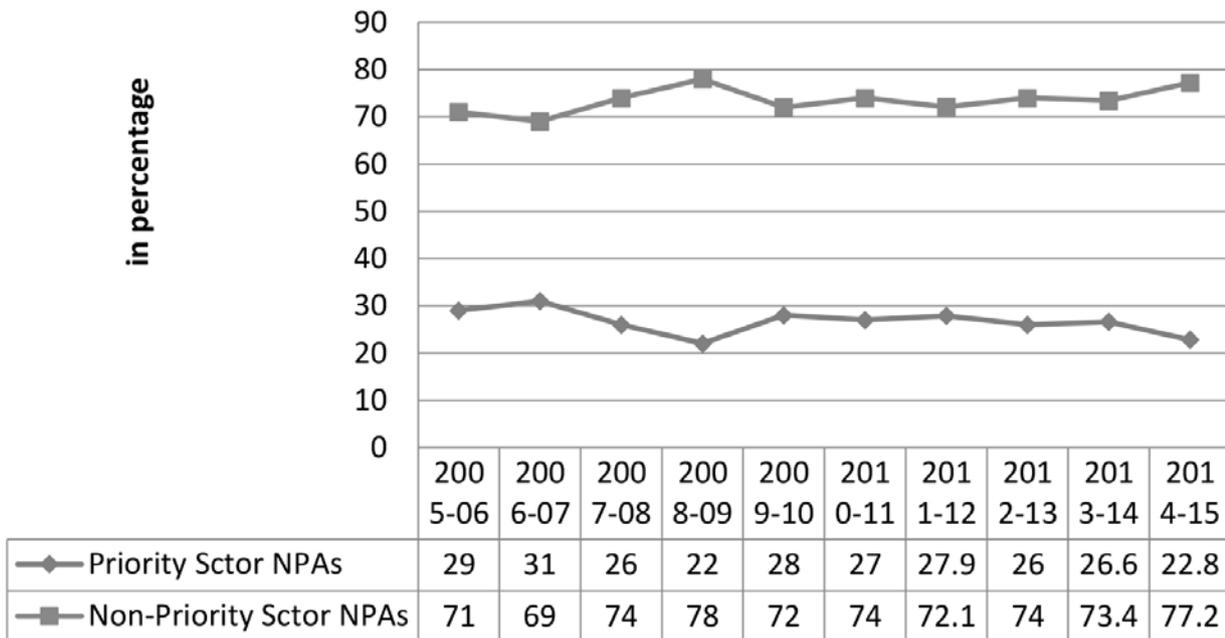
Year	Priority sector NPAs (in billion)	Growth rate of NPAs (in%)	Non- Priority sector NPAs (in billion)	Growth rate of NPAs (in%)
2005-06	223.74	-	180.72	-
2006-07	229.54	2.59	148.61	-17.77
2007-08	252.87	10.16	140.15	-5.69
2008-09	241.68	-4.43	193.9	38.35
2009-10	308.64	27.71	259.23	33.69
2010-11	412.45	33.63	300.81	16.04
2011-12	562	36.26	563	87.16
2012-13	669	19.04	890	58.08
2013-14	792	18.37	1,375	54.55
2014-15	959	21.10	1,712	24.44

**Source:** RBI, Report on Trends and progress of Banking in India, Various Issues

### PUBLIC SECTOR BANKS NPAs



### PRIVATE SECTOR BANKS NPAs



#### The trend of NPAs can be analysed from this past 10 years data.

1. It is not the Priority Sector but the Non-Priority Sector of both Public and Private sector is creating more NPAs to the Banking industry.
2. NPAs coming from the Public sector is showing an upward trend from year to year especially in the case of Non- Priority Sector.
3. NPAs of Public sector Banks in Priority sector was 54.07% in 2005-06, it has shrunk up to 35.9% in 2014-15. But at the same time in the case of Non-Priority Sector it was 43.68% in 2005-06 and has risen up to 64.1% in 2014-15.

One of the main reason highlighted by the officials for increasing NPAs in Public sector was their deployment of advances to the Infrastructure Development Projects which comes under Priority sector category. It is not completely a recognizable reason because public sector banks are able to manage the Priority sector NPAs as the statistics are proving the same. But the problem is coming from the Non-Priority sector where the banks have their own discretion in the lending pattern. So there arise a question... What may be the exact reason for this upward trend of Public sector bank's NPAs in Non-Priority sector??

#### Suggestions

1. Shifting the focus from Corporate Lending to Retail Lending: Mobilizing large amounts as Corporate Lending is one of the main reason for increasing NPAs in Non-Priority Sectors of Public Sector Banks. Corporate Lending or giving large amounts to a single project is like putting all eggs into one basket. So Retail Lending or Multiple Financing can be adopted as a strategic tool for reducing this NPAs.
2. Accountability of sanctioning Board like Branch Level: Sanctioning of large amount of money (corporate lending) is done through Board Meeting at Head Office Level which involves the intervention of the Board of Directors and also some leading politicians indirectly. There is no accurate fixing of responsibility for such NPAs like Branch Level. So accountability should be fixed at top level for this large amount of credit.

3. Client's profile based lending: The information about the clients such as his background, credit worthiness, repayment capacity, track record of past borrowings and repayment, purpose of credit, sustainability etc. should be traced strictly before sanctioning the loan amount.
4. Service of Specialist to appraise big ticket loans: Professionals can be appointed to evaluate the environmental, social and governance parameters to check the viability of big proposals.
5. Efficient management of NPAs through automated Approach: Automated approach can be implemented for managing NPAs more efficiently. With the help of specialized software's probable NPAs can be identified in its primary stage itself than by curing after it became NPAs. i- IRAC (Income Recognition and Asset Classification) is a software used by a scheduled commercial bank headquartered at Trissur, Kerala for the efficient management of NPAs.

## **Conclusion**

Large amount of corporate lending is identified as the main reason for increasing NPAs in the Non-Priority Sectors of Public Sector Banks. It is like putting all eggs into one basket. Recently also we have witnessed the same problem faced by 17 banks (of which majority are public sector banks) who sanctioned crores of money to a corporate giant. Even though Public Sector Banks are not taking any actions to reduce NPAs in Priority Sectors, it is showing a declining trend because only small amounts are sanctioning under this category and follow up measures are taken at the branch level also. But at the same time no such accountability is ensured at the Board level who sanction large amounts to corporate giants. So in effect if the Public sector Banks have a foresight to change its focus from corporate lending to multiple financing and their managing style of NPAs, they can definitely create a safe zone from the threats of NPAs.

## **References**

1. Gupta B.P, Vashistha V.K, Swami H.R (2008). Banking and Finance, Jaipur-New Delhi, Ramesh Book Depot.
2. Gandhi M.M (2013). Financial Inclusion in India Issues and Challenges, International Multidisciplinary Journal of Applied Research.
3. Clifford Gomez Prof. (2011). Banking and Finance: Theory, Law and Practice, Published by PHI Learning.
4. Kothari C.R(2009). Research Methodology, New Delhi, Vikas publishing house Pvt Ltd.
5. Reserve bank of India- Database, rbi.org.in
6. <http://rbi.org.in/scripts/AnnualPublications.aspx?head=Trend and Progress of Banking in India>.
7. <http://rbi.org.in/scripts/AnnualPublications.aspx?head=Statistical Tables Relating to Banks of India>
8. <http://www.ibef.org/industry/Banking.aspx>

# INDIAN STOCK MARKET AFTER ECONOMIC REFORMS - A STUDY WITH SPECIAL REFERENCE TO B S E

\*Aravind C. G. & \*\*Prof. Dr. G. Raju

## Abstract

Indian capital market has undergone tremendous changes since 1991, when the government has adopted liberalization and globalization more seriously than ever before. As a result, there can be little doubt about the growing importance of the stock market from the point of view of the aggregate economy. It has been observed that Indian capital market has been evolved as a major source of raising resources for Indian Corporate. Bombay Stock Exchange's (BSE) total market capitalization as a percentage of India's GDP has increased from 4 per cent in 1978-79 to around 67 per cent in 2014-15. Indian market has also drawn the attention global investors and the dominance of foreign institutional investors has been quite pervasive in the 1990s

**Key Words;** capital market, reforms, market capitalization, BSE SENSEX

## INTRODUCTION

The importance of financial markets in the process of economic growth is conditioned on its functions and services. First of all, the financial markets create an accepted medium of exchange which facilitates trade among agents and contributes to increased specialization in the economy. Secondly, they provide various services related to stimulating the volume of scrips and transferring the services to the most efficient investment projects. Obviously the financial markets do make a valuable contribution to economic growth. Indian capital market is an emerging market. The capital market has undergone drastic transformation in 1990 due to economic reforms, macro-economic changes and the regulation on securities market. This has led to qualitative and quantities changes in the Indian capital market. The Indian capital market has experienced momentous institutional evolution viz., open electronic limit order book market, nationwide integrated market, establishment of clearing corporation that guarantees trade, establishment of depositories, indexation, derivative trading, IPO market, book building mechanism, debt market trading and foreign portfolio inflows. The institutional changes have resulted in increased liquidity, decreased transaction cost and increased market efficiency contributing to overall economic improvements. This has increased capital market acumen and confidence of the people, ultimately resulted in corporate business expansion, more job creation and higher labour productivity. The wealth creation has also taken place. Since liquidity has increased, people have no fear to invest in stocks because they can alter their portfolio at any time. This ultimately resulted in economic growth in India.

## Review of Literature

**Riedel** (1997) concentrated on the capital market integration in developing Asia during the period 1970 to 1994 taking into variables such as net capital flows, FDI, portfolio equity flows and bond flows. He observed that capital market integration in Asian developing countries in the 1990s was a consequence of broad-based economic reforms, especially in the trade and financial sectors, which are the critical reasons for economic crises which followed the increased capital market integration in the 1970s in many countries, will not be repeated in the 1990s.

**Juhi Ahuja** (2010) presented a review of Indian Capital Market & its structure. In last decade or so, it has been observed that there has been a paradigm shift in Indian capital market. The application of many reforms & developments in Indian capital market has made the Indian capital market comparable with the international capital markets. Now, the market features a developed regulatory mechanism and a modern market infrastructure with growing market capitalization, market liquidity, and mobilization of resources.

---

\*Research scholar, Department of Commerce, School of Business Management & Legal Studies, University of Kerala

\*\*Professor, Department of Commerce, School of Business Management & Legal Studies, University of Kerala

**Ramaratnam and Jayaraman** (2012) have investigated the changes in the capital market with respect to industry, size region, sector wise classification of equity capital, and foreign investment inflows in the stock market. Reforms have attracted foreign and domestic institutional investors. The foreign investment inflow also had a drastic change in these years. These changes brought about by globalization have ultimately resulted in more funds for investment and a better link between the investors and industrialists.

### **Objectives of the study**

The specific objectives of the study are:

1. To study various reforms implemented by the Government in stock market since 1991
2. To analyze the impact of these reforms on Indian Stock Market.

### **Hypotheses**

H<sub>0</sub> There is no significant difference in market capitalization of BSE in Pre & Post globalized industrial environment

H<sub>0</sub> There is no significant variation in market capitalization of BSE after implementation of Liberalization policy of Industrial development

### **Research Methodology**

Descriptive research design is adopted for the study and the details of data collection and analyses are discussed here.

**Data collection:** Secondary data are the main source of this study. Newspapers, Periodicals and the Publications of Government of India, Central Statistical Organization (CSO), Reserve Bank of India (RBI), Bombay Stock Exchange (BSE), Securities and Exchange Board of India (SEBI) were the main sources of collecting secondary data for this study.

**Tools for Analysis:** For achieving the above mentioned objectives, different set of techniques and tests were used. Both descriptive and inferential statistical techniques were used. Tabular mode is used for presentation of information.

## **THE INDIAN CAPITAL MARKET**

Although the Indian Capital market is approximately 180 years old, yet it is quite young in terms of extent of globalization and international competitiveness. The Capital Market is an important protagonist in the process of mobilization of finance directly from the investor. The foremost purpose of capital market is to enable allocation or reallocation of financial resources so as to foster the economic growth. Indian capital markets can be traced back to 1830 when business on corporate stocks and shares in Bank and Cotton presses started in Bombay. The very first stock exchange in Asia, the Bombay Stock Exchange, came into existence in 1875. The start of the American Civil War in 1860-61, further increased the number of brokers from 200 to 250. However, the end of the war resulted in a huge slump in the securities market and the brokers continued their transactions in a street (now known as the Dalal Street). The centrally coordinated planning process started in India in 1951, with importance being given to the formation of institutions and markets. The Securities Contract Regulation Act 1956 became the parent regulation after the Indian Contract Act 1872, a fundamental law to be followed by security markets in India. To regulate the issue of share prices, the Controller of Capital Issues Act (CCI) was passed in 1947. 1980s witnessed an explosive growth in the Indian securities market with millions of investors suddenly discovering lucrative opportunities.

The recent years witnessed significant reforms in the capital market. It is well known that trading platform has become automatic, electronic, anonymous, order driven, nationwide and screen based. Shouting and gesticulations have yielded place to punching & clicking. Speed & efficiency are the hallmark of the current system. Weekly settlement system was enforced on all stock exchanges uniformly which was followed by Daily Rollover System in selected scrips from 1999. Trade guarantee fund and investor protection fund were maintained in many stock exchanges. Enforcement of a code of corporate governments, quarterly publications of results and better disclosures were insisted upon the listed companies. Uniform settlement cycle of Monday to Friday was made mandatory for all stock exchanges in India.

BSE went over to electronic trading system in January 1995, called BOLT, BOLT System was enlarged and more centers in India got connected for internet trading. The development in the securities market provides the necessary impetus for growth and development and thereby strengthens the emerging market economy in India. More specifically it results in:

- Improved market efficiency.
- Better transparency.
- Reduction in unfair trade practices.
- International standard in Indian Stock Market

The major yardsticks in the growth of Indian stock market are depicted in Box.1.

### **Box No.1: Indian Capital Market Over the Years**

Year	Event
1830	Business on corporate stock & shares in bank & cotton presses started in Bombay
1875	The “Native shares and stock broker association” was formed
1956	Securities Contracts (Regulation) Act became parent regulator
1957	BSE granted permanent recognition.
1986	Sensex - the countries first equity index launched
1992	SEBI Act established
1993	NSE was recognized as a stock exchange
1995	BSE On Line Trading (BOLT) system introduced
1997	BOLT expanded Nation wide
1999	Central Depository Services Ltd(CDSL) was set up
1999	Interest Rate Swaps (IRS)/Forward Rate Agreement (FRA) allowed
2000	Equity derivatives introduced.
2001	Stock options launched
2002	Fungibility of ADR/GDR
2007	Launch of Unified Corporate Bond Reporting platform: Indian Corporate Debt Market (ICDM)
2008	Currency derivatives introduced
2009	BSE Launches BSE StAR MF Mutual Fund trading platform
2009	Launch of clearing and settlement of Corporate Bonds
2010	Commencement of Volatility Index
2010	Commencement of Shariah Index
2012	Launch of BSE - SME Exchange Platform.
2013	SENSEX becomes S&P SENSEX as BSE ties up with Standard and Poor’s

2014	Foreign Institutional Investors (FIIs) pumped close to Rs 96,573 crore into equities and Rs 2.6 lakh crore in the debt markets.
2015	Indian firms raised 13862 billion rupees via IPOs in

## INDIAN CAPITAL MARKET SINCE 1991

Repeal of capital issue control Act to SEBI: Capital Issues Control Act 1947 was repealed and the office of Controller of Capital Issue (CCI) was abolished with effect from May 29, 1992. Companies are now free to approach to capital market after clearance by SEBI. Today SEBI's main stress is to provide self-regulatory systems in capital markets. It has issued guidelines for free pricing of securities for certain categories of companies by virtue of which companies can ask for any amount of premium.

The major securities market reforms since January 1992 are listed here:

1. The Securities and Exchange Board of India, set up in 1988 under an administrative arrangement, given statutory powers with the enactment of the SEBI Act, 1992
2. Capital Issues (Control) Act, 1947 repealed and the Office of Controller of Capital Issues abolished; control over price and premium of shares removed. Companies now free to raise funds from securities markets after filing letter of offer with SEBI
3. SEBI introduced regulations for primary and secondary market intermediaries, bringing them within the regulatory framework
4. New reforms by SEBI in the primary market include improved disclosure standards, introduction of prudential norms and simplification of issue procedures. Companies required disclosing all material facts and specific risk factors associated with their projects while making public issues.
5. Disclosure norms further strengthened by introducing cash flow statements
6. Listing agreements of stock exchanges amended to require listed companies to furnish annual statement to the stock exchanges showing variations between financial projections and projected utilization of funds in the offer document and at actuals, to enable shareholders to make comparisons between performance and promises
7. New issue procedures introduced - partial book building for institutional investors - aimed at reducing costs of issue
8. SEBI introduced a code of advertisement for public issues for ensuring fair and truthful disclosures
9. The power to regulate stock exchanges delegated to SEBI by the government
10. SEBI reconstituted the governing boards of the stock exchanges, introduces capital adequacy norms for brokers and issues rules for making the client/broker relationship more transparent, in particular, segregating client and broker accounts
11. Over the Counter Exchange of India (OTC) was set up with computerized on line screen based nation-wide electronic trading and rolling settlement
12. National Stock Exchange of India (NSE) was set up as a stock exchange with computerized on line screen based nation-wide electronic trading.
13. The Stock Exchange, Mumbai (BSE) introduced on line screen based trading
14. Capital adequacy requirement for brokers introduced
15. System of mark to market margins introduced on the stock exchanges
16. "Revised carry forward" system introduced in place of "badla"
17. National Securities Clearing Corporation Limited was set up by the NSE
18. SEBI framed regulations for mutual funds. Private mutual funds permitted and several such funds have already been set up. All mutual funds allowed to apply for firm allotment in public issues - also aimed at reducing issue costs
19. SEBI introduced regulations governing substantial acquisition of shares and take-overs and lays down the conditions under which disclosures and mandatory public offers are to be made to the shareholders
20. Indian companies permitted to access international capital markets through Euro issues

21. Foreign Direct Investment allowed in stock broking, asset management companies, merchant banking and other non- bank finance companies
22. Foreign Institutional Investors (FIIs) allowed to access to Indian capital markets on registration with SEBI
23. Guidelines for Offshore Venture Capital Funds announced by the government
24. SEBI strengthened surveillance mechanisms in SEBI and directs all stock exchanges to have separate surveillance departments
25. SEBI strengthened enforcement of its regulations. Begins the process of prosecuting companies for mis-statements, issues show cause notices to merchant bankers, ensures refunds of application money in several issues on account of mis-statements in the prospectus.

All these strengthened market capitalization of Indian stock market which is evident from the increased market capitalization of BSE which is depicted in Table 1

**Table 1**  
**Market Capitalization of BSE**

Year	Market capitalization in cores	Variation in percent
1991-92	323363	-
1992-93	188146	-41.81
1993-94	368071	95.63
1994-95	435481	18.31
1995-96	526476	20.89
1996-97	463915	-11.88
1997-98	560325	20.78
1998-99	545361	-2.67
1999-00	912842	67.38
2000-01	571553	-37.38
2001-02	612224	7.11
2002-03	572198	-6.53
2003-04	1201207	109.92
2004-05	1698428	41.39
2005-06	3022191	77.94
2006-07	3545041	17.30
2007-08	5138015	44.93
2008-09	3086076	-39.93
2009-10	6165620	99.78
2010-11	6839084	10.92
2011-12	6214912	-9.12
2012-13	6387887	2.78
2013-14	7415296	16.08
2014-15	10149290	36.86
2015-16	9475328	-6.64

Source; [www.bseindia.com](http://www.bseindia.com)

Table 1 reveals the market capitalization of BSE has risen by 30 times over a period of 25 years. The highest increase was noticed in the year 2003-04 with market capitalization increased by 109.9 per cent but the global recession in 2008 had resulted a negative impact on BSE market. The greater participation by individuals and

institutional investors in the capital market, permission to Foreign institutional investors (FII) etc are the major factors that had contributed for these significant investment in Indian capital market.

In order to see the significance of this increased investment, the researcher tested the hypothesis that there is no significant variation in market capitalization of BSE after implementation of globalization and for that the data were subject to the statistical test of ANOVA, the result of which are depicted in table 2.

**Table 2**  
**Analysis of Variation of Market Capitalization of BSE**

Market capitalizations	N	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		df	Sig. (2-tailed)	t value
					Lower	Upper			
	25	30567.3320	31871.28297	6374.25659	17411.5130	43723.1510	24	.000	4.795

**Source:** computed data

A look at table 2 shows that the calculated t value 4.795 is more than the table value 2.064 and hence the researcher rejects the the null hypothesis. Thus it is inferred that the market capitalization of BSE have significantly increased after 1991.

The changes in market capitalization is indirectly reflecting in the BSE SENSEX and hence the variation of SENSEX over the years is presented in Table 3.

**Table 3**  
**BSE Sensex 1991-2015**

Year	BSE Sensex	Variation of Sensex in per cent
1991-92	1879.51	
1992-93	2895.67	54.06
1993-94	2898.69	0.10
1994-95	3974.91	37.12
1995-96	3288.68	-17.26
1996-97	3469.24	5.49
1997-98	3812.86	9.90
1998-99	3294.78	-13.58
1999-00	4658.63	41.39
2000-01	4269.69	-8.34
2001-02	3331.95	-21.96
2002-03	3206.29	-3.77
2003-04	4492.19	40.10
2004-05	5740.99	27.79
2005-06	8278.55	44.20
2006-07	12277.33	48.30
2007-08	16568.89	34.95
2008-09	12365.55	-25.36
2009-10	15585.21	26.03

2010-11	18605.18	19.37
2011-12	17422.88	-6.35
2012-13	18202.10	4.47
2013-14	20120.12	10.53
2014-15	26556.53	31.98
2015-16	26322.10	-0.88

Source: www.bseindia.com

Table 3 illustrates the movement of BSE index since 1991. In 1993-94 the BSE Sensex increased by 54.06 per cent, one of the major reasons for that the establishment of SEBI for regulating and control of Indian stock market. A further jump was noticed in the year 2003-04 which witnessed large new capital issue and inflow of foreign investment in stock market. Anyway the SENSEX maintained the momentum over the years even though it got some adverse impact in some years.

In order see whether there really exists relationship between Market capitalization and SENSEX, correlation analysis is attempted and the resultant figures are depicted in table 4.

**Table 4**  
**Correlation of Market Capitalization and BSE SENSEX**

			Market capitalization	BSE Sensex
Pearson correlation	Market capitalization	Correlation Coefficient	1.000	.993**
		Sig. (2-tailed)	.	.000
		N	25	25
	BSE Sensex	Correlation Coefficient	.993**	1.000
		Sig. (2-tailed)	.000	.
		N	25	25

Source: computed data

Table 4 shows that the Correlation Coefficient (r) is 0.993 which indicate a strong relationship between market capitalization and SENSEX.

To assess the impact of reforms on the stock market, market capitalization of BSE in pre and post globalization period is analyzed and the result presented in Table 5.

**Table 5**  
**Market Capitalization During Pre & Post Globalization Period**

Pre –Globalization		Post-Globalization	
Year	Market Cap (crore)	Year	Market Cap (crore)
1982-83	9769	1992-93	188146
1983-84	10219	1993-94	368071
1984-85	20378	1994-95	435481
1985-86	21636	1995-96	526476
1986-87	25937	1996-97	463915

1987-88	45519	1997-98	560325
1988-89	54560	1998-99	545361
1989-90	65206	1999-00	912842
1990-91	90836	2000-01	571553
1991-92	32336	2001-02	612224

Source: www.bseindia.com

To test whether there exists any significant difference in market capitalization during Pre and Post Globalization period, the test of significance 'paired t test' is administered and the resultant figures are depicted in table 6.

**Table 6**  
**Paired T Value on Market Capitalization of BSE in Pre and Post Globalization Period**

Pair Pre-globalization-post-globalization	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t-value	df	Sig. (2-tailed)
				Lower	Upper			
	483710.037	171748.135	54311.529	606571.251	360848.823	8.906	9	.000

Source: computed data

The result of the test shows that the t- value 8.906 is greater than the critical value 2.262 and thus the researcher rejects the null hypothesis that there is no significant difference in market capitalization of BSE in Pre and post globalization period. Thus it is inferred that the market capitalization after globalization is significantly higher than the market capitalization during pre- reforms period.

## CONCLUSION

The study concludes that the financial sector reform measures and globalization measures adopted in India made positive impact on stock market. Wealth creation has also taken place by way of capital appreciation, dividends, bonus shares and by way of increase in market capitalization. A clear policy decision from government, vigilant eye from the regulators, transparency from the stock exchanges and prudent action by the brokers and financiers is the requirement of the day to maintain the growth rate on the Securities Market. The setting up of regulatory bodies like SEBI, credit rating agencies, step towards scrip less trading systems, computerization of dealings, a National Stock Exchange System (NSE), quicker settlement system (now T+2), and setting up of NSDL and CSDL depositories are making it more efficient, transparent and investor friendly. A strong capital market provides the foundation for a developed economy.

## Reference

- 1 James Riedel (1997), "Capital Market Integration in Developing Asia". Blackwell Publishers Ltd.
- 2 Juhi Ahuja (2010), "Indian Capital Market: An Overview with Its Growth" VSRD International Journal of Business & Management Research Vol. 2 (7), pp. 386-399.
- 3 Jayaraman, R., & Ramaratnam, M. (2012), "A Study of Impact of Globalisation for The Recent Development of Indian Capital Market: An Analytical Approach". International Journal of Multidisciplinary Research, 435-446.
- 4 Avadhani V.A, (2009), securities Analysis & Portfolio Management, Himalaya Publishing House.
- 5 Mohan, D. R. (2005). Financial Sector Reforms In India. The Chartered Accountant, 962-972.
- 6 Agarwalla, R. K., & Tuteja, S. (2007), "Causality Between Stock Market Development and Economic Growth: A Case Study Of India", Journal of Management Research, 158-168.

- 7 Dhanda ,N and Sheokand,A (2008) . Recent trends in Indian primary capital market. Indian Journal Management Studies.p .p81- 98.
- 8 Hong, H., Kubik, J.D.& Stein, J.C., (2004),“Social interaction and stock-market participation”. Journal of Finance, 137–163
- 9 L.C.Gupta (1992), “Stock Trading in India”, Society for Capital Market Research and Development, Delhi.
- 10 M.Y.Khan, “Indian Financial System(4/e)”, Tata McGraw Hill, New Delhi.
- 11 Patil RH, (2006), EPW-Recent Developments in Capital Market, December 2006.
- 12 Securities and Exchange Board of India. SEBI Annual Report (various issues). Mumbai. India.
- 13 Handbook of Statistics on Indian Economy.
- 14 Handbook of Statistics on Indian Securities Market.
- 15 <http://www.sebi.govt.in>
- 16 <http://www.bseindia.com>

# SERVICE QUALITY AND SATISFACTION IN SABARIMALA PILGRIMAGE - AN ASSESSMENT

\*Arun Kumar T.T. & \*\*Dr. B. Vijayachandran Pillai

## Abstract

Sabarimala Sree Dharma Sastha Temple, dedicated to Lord Ayyappa, - the most famous and prominent among all the Sastha temples in Kerala - is one of the most visited pilgrimage centres in south India. Various services and amenities are being provided to Sabarimala pilgrims but the same are not functioning throughout the year at its fullest potential since the temple is open for worship only during the days of Mandalapooja, Makaravilakku and Chitra Vishu. Hence there can be considerable degree of variation in the level of satisfaction of pilgrims who visit Sabarimala during season and off-seasons. With this back drop, the authors have examined the service quality gap by comparing the Sabarimala pilgrims' expectations and their perceptions through widely accepted SERVQUAL technique. The pilgrims who visited Sabarimala during season and off-season and also availed various services provided by Travancore Devaswom Board, government and other agencies have been taken as sample for this study. The research findings have confirmed that the servqual scale has been a very successful tool for identifying the expectations of the pilgrims who visited the holy shrine. It is suggested that the Devaswom Board and other agencies may evaluate the quality and quantity of services in different seasons of each year to know the present deficiencies on the basis of the pilgrims' expectations and perceptions thus enabling them to remove these gaps and to improve the service quality process, which would be useful in providing a comfortable and peaceful atmosphere to the devotees for making a visit to Sabarimala.

**Key Words:** Pilgrimage, Expectations and perceptions, Servqual Technique, Service quality, Service Gap.

## 1. Introduction

India is eminent for its devotion and piety. It is a sacred place of numerous religions and factions. In spite of this people live in peace and harmony. Sabarimala temple is a good instance for the uniqueness of Indian people, for it is opened to all, irrespective of caste, creed and religion. Not only Hindus but many believers of other religions also climb the holy hills for darshan. This paper addressed service quality perceived by Sabarimala pilgrims and its impact on their perceived value and overall satisfaction. The research aimed to provide theoretical and practical applications with the goal of enhancing the experiences the pilgrims seek during such religious journeys.

The widely accepted Servqual model has been applied in this study to assess service quality thereby identifying the service gap. According to Parasuraman, Zeithaml, & Berry (1988) service quality is a form of attitude, related but not equivalent to satisfaction, which results from customers comparing expectations with their perceptions of performance. Parasuraman et al (1988) developed the SERVQUAL model, which conceptualizes service quality as the difference between customer expectations prior to consumption and perceptions of the actual service delivered. Measuring service quality in the SERVQUAL scale is based on five dimensions that the authors suggested are appropriate for any type of service. These five dimensions are tangibles, reliability, responsiveness, assurance, and empathy. The SERVQUAL model is most commonly used in the service literature with different customizations of the model. This model has been used in this study by making suitable modifications in order to justify the set objectives.

## 2. Review of Literature

The researcher made an extensive review of available literature based on Servqual model. However, only a few relevant studies which are closely related to the present study have been discussed in the following paragraphs.

---

\*Research Scholar, University of Kerala, E mail. arunkumartt85@gmail.com

\*\* Head, Department of Commerce and Management Studies, University of Calicut- 673 635 Mob.09447241888, Email. bvcuoc@gmail.com

**Mukhles Al-Ababneh** (2013), assessed tourists' perceptions towards quality tourism services provided at Petra historical site and measured tourist satisfaction by examining the impact of quality tourism product on overall tourist satisfaction. The findings confirmed that service quality directly impacted tourist satisfaction throughout destination facilities, destination accessibility and destination attraction. The study argued that there is a significant impact of the service quality on tourist satisfaction, and therefore service quality plays an important role in tourism by increasing the level of tourist satisfaction. The results in this study supported the evidence that there are positive impacts of components of tourism product on tourist satisfaction.

**Poolad Daneshvar & Hc. N. Ramesh** (2013) measured tourists' gap between satisfaction levels of interpretation of services and their preferences of the interpretive service in Mysore. Results indicated that there were significant differences between overall expectations and satisfaction levels of tourists. It was also found that international tourists were exclusively concerned with the value for money services, while Indian tourists regarded security and safety, as important factors for them to stay or revisit Mysore.

**Darfoon, Mohamed** (2013) in his dissertation addressed service quality perceived by Hajj pilgrims and its impact on their perceived value and overall satisfaction. The research concluded with a number of important insights concerning the service quality in the Hajj context. The researcher identified that Hajj service quality consists of five clear practical dimensions: accommodation, mobility, caretaking, food services and problem solving which were strongly or moderately significantly related to customers' perceived service quality, monetary value and overall satisfaction with the purchased Hajj package.

**Anand M B & Arvind Mallik** (2013) studied the present service quality and also the areas needed to be improved in infrastructure at Jog falls. The researchers applied the SERVQUAL model in order to assess service quality and found that there was lack of proper infrastructure development. Public-private partnership has been suggested to ensure infrastructure growth.

Review of earlier studies made it clear that Servqual has been a widely accepted model to measure service quality in various service industries such as insurance, banking, hotels, hospitality, tourism etc. where customer satisfaction plays a key role in the growth of the concerned service organisation. However, the researcher found very few studies in the context of Sabarimala pilgrimage pertaining to the state of Kerala and hence the present study has been taken up.

### 3. Need and Scope of the Study

Sabarimala temple is situated on a hill top-about 3000 feet above sea level. Millions of devotees visit the shrine to see and worship Lord Ayyappa every year. To accommodate and facilitate a comfortable darshan for these millions, the authorities like Travancore Devaswom Board, government departments and other social organizations make elaborate arrangements throughout the year. Devotees from in and around Kerala rush to Sabarimala during the temple opening days, ie, during the days of Mandalapooja, Makaravilakku and Chitra Vishu. During this period tight safety and security arrangements are being made for easy and comfortable darshan by the concerned authorities. However, it is seen that all the services and amenities provided on the way to Sannidhanam and at the hill top are not fully available during off-season. Hence the purpose of the present study is to make an examination of the degree of satisfaction among the selected pilgrims who enjoyed these services during season and off-season. This work enhances understanding of the perceptions, experience, thoughts, and preferences of Ayyappa devotees in the pilgrimage context. The aim is to provide clear insights into the service deficiencies, if any, by making quality assessment in the service delivery system.

#### 4. Objectives of the Paper

Based on the research model, the present study aims to fulfill the following objectives.

1. To compare the level of perception and expectation of Sabarimala pilgrims regarding various services available during season and off-season in Sabarimala based on five dimensions on RATER scale of SERVQUAL model.
2. To determine the relative gap score of the above 5 dimensions significantly influencing pilgrims' satisfaction and
3. To identify the deficiencies if any in the service delivery system.

#### 5. Research Methodology and Database

To measure the quality of service, SERVIQUAL technique has been used which was originally developed by Parasuraman, Zeithmal ad Berry (1998). In this empirical study, this scale has been developed for pilgrimage tourism and its validation has also been checked for the given target segment ., ie, among the Sabarimala pilgrims who visited the holy shrine during season and off-season.

The interview schedule designed for the study was based on the widely accepted Servqual Model. The scale applied is the R-A-T-E-R scale with five dimensions of service quality as identified from 22 variables categorized as follows:-

**Table 1**  
**Servqual Factors with Number of Attributes**

Factors	No of Attributes
1. Responsiveness	4 Attributes
2. Assurance	4 Attributes
3. Tangibles	7 Attributes
4. Empathy	4 Attributes
5. Reliability	3 Attributes

The primary data for the purpose of this paper were collected with the help of a pre tested structured interview schedule. Universe of the present study comprises of the pilgrims who visited Sabarimala during season and off-season. To serve the research objective of the present study, data were collected from a total sample size of 300 pilgrims (Table 1.) 150 pilgrims each were selected from both the groups by employing convenient sampling technique. Kaiser-Meyer-Olkin (KMO) test has been used to measure the sampling adequacy. It is computed as 0.921 which indicates adequacy of sample. The interview schedule used has also been verified with the help of content validity.

For the purpose of the study the pilgrims have been categorized as ;

- a) Group I- those who visited Sabarimala during season and
- b) Group II – those who visited Sabarimala during off-season.

**Table 2**  
**Sample Selection Procedure**

Category of Respondents	Sample Size	Sampling Method
a) Group 1 (Season)	150	Convenient Sampling
b) Group 2 (Off-season)	150	
Total	300	

The interview schedule contained 22 statements each under five dimensions with respect to expectations and perceptions of the pilgrims. The respondents were required to select an alternative which closely reflect their choice on 7 point Likert scale regarding their degree of Strongly Disagreement to Strongly Agreement. The data have been analysed with the help of weighted mean score technique using Microsoft Excel.

## 6. Results of the Analysis

The responses of the pilgrims for each statement have been categorized on a seven point scale from Strongly Disagree (SD) to Strongly Agree (SA). Then average score of all the 22 statements has been calculated. The difference between the average weighted perception and expectation for all 22 variables has been found out to calculate the gap score for each dimension.

### 6.1. Group I

**Table 3**  
**Weighted Average Score of Perceptions of Sabarimala Pilgrims (Group-I)**

Dimensions	Perceptions Weighted Average							
	SD	D	PD	N	PA	A	SA	Weighted Average
	1	2	3	4	5	6	7	
<b>Responsiveness</b>								
RS 1	0	15	37	10	32	33	23	4.67
RS 2	3	11	20	2	44	32	38	5.14
RS 3	0	31	35	8	25	39	12	4.28
RS 4	18	20	19	0	29	54	10	4.36
<b>Assurance</b>								
A1	9	15	18	0	21	30	57	5.18
A2	11	19	31	0	29	38	22	4.46
A3	14	20	8	1	29	55	23	4.79
A4	6	19	14	0	70	27	14	4.64
<b>Tangibles</b>								
T1	8	12	15	6	25	60	24	5.03
T2	9	20	25	17	24	55	0	4.28
T3	0	6	26	32	53	33	0	4.54
T4	0	8	44	30	45	6	17	4.32
T5	0	17	20	3	38	49	23	5.01
T6	3	21	34	3	30	33	26	4.59
T7	7	25	33	12	22	40	11	4.21

Empathy								
E1	0	17	19	26	42	26	20	4.67
E2	0	12	9	8	62	37	22	5.13
E3	4	16	25	0	26	64	15	4.87
E4	6	20	27	7	47	19	24	4.48
Reliability								
R1	5	22	0	5	42	51	25	5.07
R2	7	18	26	33	20	34	14	4.37
R3	15	6	30	6	9	58	26	4.77

Source: Primary Data

**Table 4**  
**Differences between Expectation and Perception Scores of Sabarimala Pilgrims (Group-I)**

Dimensions	Expectations Score (E)	Perceptions Score(P)	Gap Score (P-E)
Responsiveness			
RS1	5.43	4.67	-0.76
RS2	5.71	5.14	-0.57
RS3	6.21	4.28	-1.93
RS4	6.27	4.36	-1.91
Assurance			
A1	5.71	5.18	-0.53
A2	5.99	4.46	-1.53
A3	6.64	4.44	-1.85
A4	5.96	4.64	-1.32
Tangibles			
T1	5.61	5.03	-0.58
T2	5.79	4.28	-1.51
T3	5.88	4.54	-1.34
T4	5.77	4.32	-1.45
T5	5.65	5.01	-0.64
T6	6.67	4.59	-2.08
T7	5.48	4.21	-1.27
Empathy			
E1	5.85	4.67	-1.18
E2	6.10	5.13	-0.97
E3	5.81	4.87	-0.94
E4	5.66	4.48	-1.18
Reliability			
R1	5.93	5.07	-0.86
R2	6.23	4.37	-1.86
R3	5.78	4.77	-1.01

As per Table 3 the pilgrims' (Group –I) perceptions have been positioned mostly between the levels of neutral to partially agreement. Hence it can be interpreted that the pilgrims' expectations are more than their perception values towards services. According to the maximum mean scores (Table 4) provisions like getting prompt service from the authorities concerned (6.27), courteous approach by the staff in various service centres (6.64), Getting proper transportation facilities to and from Sabarimala (6.67) , getting personal attention (6.10) and Keeping the promise made from time to time (6.23) are the most influencing factors as agreed by the pilgrims. Hence it can be interpreted that the concerned authorities should focus more on the above dimensions. It can be further seen that there is gap between expectations and perceptions towards various services and amenities provided to pilgrims during season.

## 6.2. Group-II

**Table 5**  
**Weighted Average Score of Perceptions of Sabarimala Pilgrims (Group-II)**

Dimensions	Perceptions Weighted Average							Weighted Average
	SD	D	PD	N	PA	A	SA	
	1	2	3	4	5	6	7	
<b>Responsiveness</b>								
RS 1	2	19	17	0	29	34	49	5.22
RS 2	52	37	14	1	29	17	0	2.79
RS 3	32	36	35	0	31	16	0	3.07
RS 4	15	24	10	6	29	53	13	4.47
<b>Assurance</b>								
A1	0	14	28	9	24	50	25	4.95
A2	25	44	20	0	12	45	4	3.54
A3	14	19	7	0	19	70	21	4.9
A4	0	11	9	7	22	84	17	5.4
<b>Tangibles</b>								
T1	59	32	14	0	15	30	0	2.80
T2	69	38	18	0	20	5	0	2.19
T3	28	19	34	0	21	40	8	3.79
T4	40	26	17	3	22	42	0	3.45
T5	80	36	9	0	14	11	0	2.10
T6	50	25	36	0	29	10	0	2.75
T7	32	19	40	1	13	40	5	3.56
<b>Empathy</b>								
E1`	13	33	29	2	11	50	12	4.09
E2	17	30	18	0	28	43	14	4.18
E3	8	17	20	2	39	60	4	4.62
E4	14	10	17	3	41	60	5	4.65
<b>Reliability</b>								
R1	22	21	17	12	11	51	16	4.24
R2	57	30	17	2	17	27	0	2.82
R3	7	12	19	0	34	62	16	4.95

**Source:** Primary Data

**Table 6**  
**Differences between Expectation and Perception Scores of Sabarimala Pilgrims (Group-II)**

Dimensions	Expectations Score (E)	Perceptions Score(P)	Gap Score (P-E)
<b>Responsiveness</b>			
RS1	5.8	5.22	-0.58
RS2	6.27	2.79	-3.48
RS3	6.13	3.07	-3.06
RS4	6.39	4.47	-1.92
<b>Assurance</b>			
A1	6.25	4.95	-1.3
A2	6.3	3.54	-2.76
A3	6.05	4.9	-1.15
A4	6.45	5.4	-1.05
<b>Tangibles</b>			
T1	6.15	2.8	-3.35
T2	6.03	2.19	-3.84
T3	6.47	3.79	-2.68
T4	6.66	3.45	-3.21
T5	5.89	2.1	-3.79
T6	5.48	2.75	-2.73
T7	6.41	3.56	-2.85
<b>Empathy</b>			
E1	5.85	4.09	-1.76
E2	6.09	4.18	-1.91
E3	6.69	4.62	-2.07
E4	6.95	4.65	-2.3
<b>Reliability</b>			
R1	6.75	4.24	-2.51
R2	6.4	2.82	-3.58
R3	6.07	4.95	-1.12

As per Table 5 the pilgrims' (Group –II) perceptions have been positioned mostly between the levels of Neutral to Partially Disagreement. Hence it can be concluded that the pilgrims' perceptions are less than their expectation values towards services. According to the maximum mean scores (Table No:6) provisions like accomplishing Pilgrims' requests quickly by the authorities concerned (6.39), developing a sense of confidence (6.45), Providing food and accommodation facilities (6.66) ,Understanding the needs of pilgrims by the staff in various service centres (6.95), Sincere interest by the concerned authorities in solving the problems of pilgrims (6.75) are the most influencing factors as agreed by the pilgrims. Hence it can be interpreted that the concerned authorities should give due attention to the above mentioned dimensions. The gap score comparison made in Table 7 gives an insight in to the degree of service deficiency in Sabarimala during off-season. Though the pilgrims visiting during season have some amount of dissatisfaction regarding the services and amenities provided, the same is more or less doubled during off-season.

**Table 7**  
**Gap Score Comparison**

Dimensions	Gap Score of Group I	Gap Score of Group II
Responsiveness		
RS 1	-0.76	-0.58
RS 2	-0.57	-3.48
RS 3	-1.93	-3.06
RS 4	-1.91	-1.92
Assurance		
A1	-0.53	-1.3
A2	-1.53	-2.76
A3	-1.85	-1.15
A4	-1.32	-1.05
Tangibles		
T1	-0.58	-3.35
T2	-1.51	-3.84
T3	-1.34	-2.68
T4	-1.45	-3.21
T5	-0.64	-3.79
T6	-2.08	-2.73
T7	-1.27	-2.85
Empathy		
E1	-1.18	-1.76
E2	-0.97	-1.91
E3	-0.94	-2.07
E4	-1.18	-2.3
Reliability		
R1	-0.86	-2.51
R2	-1.86	-3.58
R3	-1.01	-1.12

## 7. Major Findings

- 1 Pilgrims visiting Sabarimala during season and off-season do not get the services and amenities provided according to their expectations.
2. Provisions like getting prompt service from the authorities concerned, courteous approach by the staff in various service centres , getting proper transportation facilities to and from Sabarimala, getting personal attention and providing facilities as promised are the crucial factors as mentioned by the pilgrims who visited the shrine during season.
3. Provisions like accomplishing Pilgrims' requests quickly by the authorities concerned, developing a sense of confidence in approaching and availing services, Providing food and accommodation facilities, understanding the needs of pilgrims by the staff in various service centres and sincere interest by the concerned authorities in solving the problems of pilgrims are the vital considerations as pointed out by the pilgrims who visited Sabarimala during off-season.

4. The multiple service dimensions where the pilgrims experienced serious service dissatisfaction during season are delay in getting services requested, their needs were not properly understood by the service staff and were not courteous to them as expected, faced problems with transportation to and from Sabarimala and last but not least was regarding failure in fulfilling the promise made by the service providers.
5. Gap score comparison made it clear that there exist acute deficiencies with regard to various services under different dimensions. In most of the cases, the gap scores of Group-II are higher than the gap scores of Group-I, which indicates that the pilgrims who visited Sabarimala during off-season are more dissatisfied with the services and amenities that they received.
6. Crucial service gap has been observed under “Tangibles” dimension during off-season. It has been found that medical and health related facilities such as hospitals and oxygen parlours were very few, police aid, drinking water facilities, toilet facilities and food supply units were also very few. Hygiene at parking area, trekking routes and at Sannidhanam were also found very poor as reported by the respondents.
7. Last but not least is that there is lack of proper transportation facilities during off-season. Many pilgrims found it difficult to reach Pamba via direct bus transport since KSRTC runs direct bus service from different parts of the state only on special occasions or during season.

## 8. Conclusion

The study has made an attempt to bring out some important insights concerning the service quality in Sabarimala pilgrimage context. The findings have revealed that there exists more degree of dissatisfaction among Group II, ie among the pilgrims who visited Sabarimala during off-season. Hence, the authorities and service providers should make allowances for extending their services during off- season also. The empirical findings can assist Travancore Devaswom Board and Government Agencies/and other service providers in Sabarimala to develop frameworks of their service quality indicators.

## References

1. Dr.Jasveen Kaur (2015), Validation of Servqual model in the Hotel Industry in the Punjab, The Indian Journal of Commerce, April-June 2015,Vol-68, No 2, pp 42-52
2. Mukhles Al-Ababneh (2013), Service Quality And Its Impact On Tourist Satisfaction, Interdisciplinary Journal of Contemporary Research in Business, April 2013, Vol 4, No 12, pp 164-177
3. Poolad Daneshvar & H. N. Ramesh(2013), Evaluation of Service Quality of Tourism Industry Based on Customer Satisfaction and Expectation –A Case Study in Mysore, SDM IMD Journal of Management
4. Darfoon, Mohamed (2013) “An Examination of Service Quality and Satisfaction in a Religious Tourism Setting”, All Dissertations ,Paper 1166
5. Anand M B & Arvind Mallik (2013), “Servqual Analysis of Tourism in India With Special Reference to Jog Falls, Karnataka”, International Journal of Management and Social Sciences Research (IJMSSR), Volume 2, No. 6 ,ISSN: 2319-4421,pp 69-77

# Systematic Investment Plans (SIPs): Disciplined Approach for Wealth Creation

Geetha Rani V.

## Abstract

Investment is an economic activity of allocation of monetary resources to physical or financial assets with an expectation to get monetary return ending on a prearranged period of time that will surpass the time for which the funds are committed, the rate of inflation expected, and the uncertainty of the future payments. The investment management process begins with the determination of the characteristics of various investment avenues and then matching them with the individuals' need and preferences. The objectives of investment would differ from person to person and will depend upon the stage of the individual's life cycle. Investment can be done in lump sum or through fixed amount regularly. Mutual Funds provide an opportunity to investors to invest small fixed amounts periodically that may be monthly, quarterly or half yearly in a particular scheme at a particular date that is Systematic Investment Plan (SIP). SIP helps an investor to invest bigger amount without managing funds at one time and gradually accumulate units of funds scheme. This also helps to introduce discipline in investment practice. This paper attempts to explain the Systematic Investment Plan it's functioning and the benefits, to observe the level of awareness about SIP and also perception of employees of organized sector about SIPs and its benefit to overcome inflation.

**Key Words:** Systematic Investment Plan, Rupee Cost Averaging, Power of Compounding.

## 1.1 Introduction

Investment is an economic activity of utilizing that portion of disposable income that are in surplus after meeting current expenditures. This is an allocation of monetary resources to physical or financial assets with an expectation to get monetary return ending on a prearranged period of time that will surpass the time for which the funds are committed, the rate of inflation expected, and the uncertainty of the future payments. People invest their funds in shares, debentures, mutual funds, fixed deposits, national saving certificates, life insurance policies; provident fund, land, gold etc. to derive future income in the form of interest, dividends, rent, premiums, pension benefits and the appreciation of the value of their principal capital. The investment management process begins with the determination of the characteristics of various investment avenues and then matching them with the individuals' need and preferences. The objectives for an individual may be financial or personal objectives; financial objectives are safety, profitability, and liquidity and personal or individual objectives may be related to personal characteristics of individuals such as family commitments, marital status, dependents, educational requirements, income, expenditure and retirement planning etc. The objectives of investment would differ from person to person and will depend upon the stage of the individual's life cycle. The objectives of investment should be crystal clear prior to making the investment decisions.

Investment can be done in lump sum or through fixed amount regularly. Mutual Funds have come out with the option of fixed regular investment. Mutual Funds provide an opportunity to investors to invest small fixed amounts periodically that may be monthly, quarterly or half yearly in a particular scheme at a particular date that is Systematic Investment Plan (SIP). The total investment planned for such a scheme is spread over a period of time. SIP helps an investor to invest bigger amount without managing funds at one time and gradually accumulate units of funds scheme. This also helps to introduce discipline in investment practice. Under, SIP monthly mutual fund activities can be automated. Investment through SIP can be benefitted with Rupee Cost Averaging, Power of Compounding etc. which are all explained in detail in the coming sections.

Systematic Investment Plans are sure safe way for wealth creation. SIP is a disciplined investment plan which helps to reduce susceptibility to market fluctuations. The share market is buoyant, when it comes to investing in that market, many small investors hesitate. Investors are eager to know how to invest, that avoids

or minimizes the effect of extremely volatile market and reaps the advantage of high rate of returns of the stock markets. The ideal way is Systematic Investment Plan. SIP is most suitable for investors who have a regular flow of money such as salaried employees. SIP uses the same volatility to the investor's advantage. It is a powerful tool that helps to accumulate small savings and also translates the savings into substantial wealth creation in the long run. It helps the salaried individuals to invest in mutual funds in regular intervals. A Systematic Investment Plan or SIP is a smart and hassle free mode for investing money in mutual funds. SIP allows the investor to invest in a certain pre-determined amount at a regular interval (weekly, monthly, quarterly, etc.). A SIP is a planned approach towards investments and helps us to inculcate the habit of saving and building wealth for the future.

## 1.2 Review of Literature

Binod Kumar Singh and Ashutosh Kr. Jha(2009) studied about the awareness level of mutual fund, acceptability of mutual fund, and awareness of systematic investment plan. The study found out that only 38 respondents out of 150 respondents knew about SIP that is only 25 per cent of the samples studied were aware about the advents of mutual fund industry.

Debalina Roy and Koushik Ghosh (2011) studied how the investment in mutual fund through Systematic Investment Plan (SIP) can gain momentum and increase percentage of income. It was found that people with higher income tend to show higher risks and service holders generally prefer investments in fixed deposits, bonds, post office while the businessmen were more inclined to equity market. By mathematical analysis it was also established that the risk in investment by Systematic Investment Plan (SIP) is expected to be less than that by lump sum investment in mutual funds. Hence, SIP seems to be a safer and beneficial mode of investment for the small investors and in a large context it was beneficial for the big investors also.

Dimple Batra and Gunjan Batra (2012) had made an effort to a comparison of SIP with lump sum investment using data envelopment analysis (DEA). The DEA techniques show that SIP was more efficient than Lump Sum as it had a better score as compared to lump sum which was scoring less. The investors preferred to go for fixed deposits in bank because of less risky nature, some of the investors treat mutual funds risky but mutual funds always give good returns if investment was for long time period. The firms should target for more and more young investors as well as for persons at height of their career. The firm should try to highlight the benefits of SIP such as rupee cost averaging, power of compounding, etc.

Raffaele Zenti (Electronic copy available at: <http://ssrn.com/abstract=2341773>) aimed to compare SIPs and LSIs, focusing on the downside risk (without forgetting profitability) of the two popular strategies. SIPs were much less risky than LSIs, but on the upside potential they were often dominated by LSIs. Over relatively short horizons, say 5 years (or even less), SIPs offer median results in line with LSIs, sometimes even better, but with much less shortfall risk. In addition, by investing regularly through SIPs, the investor was freed from the anxiety of making critical decisions in volatile markets. Hence one of the major merits of SIPs is that they allow one to invest on a regular basis, even over a relatively short horizon, without being bogged down by questions about the right time to jump in the market.

## 1.3 Objectives and Methodology of the Study

The objectives of the paper include:

- To explain the Systematic Investment Plan its functioning, and the benefits from that create a road map for wealth creation
- To observe the level of awareness about SIP and
- To examine the perception of employees of organized sector about SIPs and its benefit to overcome inflation.

### 1.3.1 Methodology of the study

The study was carried out among the people employed in the organized sector as per Kerala State - Economic Review 2014. The state was divided into three regions namely northern, central and southern regions. From each region one district was selected on purposive sampling which was having the highest number of employees working in the period of the study. The district selected were Kozhikode from northern region, Ernakulam from central and Thiruvananthapuram from the southern region. A total of 390 samples were selected from the selected sample districts. The samples selected were in proportion to the population of employees in each said district. Random sampling method was used to select the samples of the study. The data were collected through a structured questionnaire which had the desired value of cronbach's alpha reliability test. The samples proportion was shown under:

**Table 1.1**  
**Proportionate Sample Plan**

District	No. of Samples
Thiruvananthapuram	139
Ernakulam	175
Kozhikode	76
Total	390

### 1.4 Working of Systematic Investment Plans

A SIP is a flexible and easy investment plan. The hard earned money is auto-debited from investor's bank account and invested into a specific mutual fund scheme. Every investor are allocated certain number of units based on the ongoing market rate (called NAV or net asset value) for the day. Every time investor invests money, additional units of the scheme are purchased at the market rate and added to our account. Hence, units are bought at different rates and investors benefit from Rupee-Cost Averaging and the Power of Compounding.

SIP is a method of investing a fixed sum, regularly, in a mutual fund scheme. SIP allows one to buy units on a given date each month, so that one can implement a saving plan for themselves. The biggest advantage of SIP is that one need not time the market. In timing the market, investor can miss the larger rally and may stay out while markets were doing well or may enter at a wrong time when either valuation have peaked or markets are on the verge of declining. Rather than timing the market, investing every month will ensure that every investor is invested at the high and the low, and make the best out of an opportunity that could be tough to predict in advance. An investor can invest a pre-determined fixed amount in a scheme every month or quarterly, depending on convenience through post-dated cheques or through ECS (auto-debit) facility.

#### 1.4.1 Power of Compounding

Albert Einstein once said, "Compound interest is the eighth wonder of the world. He who understands it, earns it... he who doesn't... pays it." The rule for compounding is simple - the sooner we start investing, the more time our money will grow.

Example: If we started investing Rs. 10000 a month on our 40th birthday, in 20 years of time we would have put aside Rs. 24 lakhs. If that investment grew by an average of 7% a year, it would be worth Rs. 52.4 lakhs when we reach at the age of 60years.

When an investor invest regularly through SIP and invest for the long term, the benefits are magnified by the compounding effect. The money grows over time as the money we invest earns returns. And the returns also earn returns, i.e. in effect your actual investments over time plus returns get compounded over the years which can grow into a large sum over a period of time.

The most advantage of beginning to invest early in our career is to realize the full benefits of compounding. Compounding is a disciplined investor's best friend. Through this technique one can reap greater returns because it transforms investments into an effective income generating asset. The basic premise behind the concept is that, over a period of time, earning from investments that are not spent but re-invested, can generate greater returns. Compounding interest is critical to investment growth because it is paying interest on interest as compared to simple interest which earns interest on the principle. In other words, with compounding interest the initial investment is continually reinvesting itself. The last five years are crucial for the power of compounding. The gains from compounding are initially modest but they gather strength as the years pass. The longer the money stays invested, the faster it grows.

Many young investors keep procrastinating over their investment plans without realizing that with each year passing, they are foregoing the opportunity to benefit from the extra ordinary power of compounding. The best way to ensure financial nirvana is to start savings today. Another factor that influences in the long term is the rate of return we get. Though rate of return may not be under our control, it is natural for any investor to aim for the highest possible return on investment. That is possible only with the equity investments held with the long term view.

### Thumb Rule of 72

According to Albert Einstein, "The Rule of 72 is a rule of Thumb that investors used to approximate the time it takes for money to double at a given rate of return. It states that, if we divide the number 72 by any given rate of return, the answer we get is the time it takes for the money to double at a given interest rate. On an assumption, we will get the same rate each year and it is compounded annually".

It is essential to take into consideration, the inflation factor which determines the real rate on investments.

**Table 1.2**  
**Power of Compounding**

AGE (in Years)	SIP (Rupees per Month)	PERIOD (in Years)	PRINCIPAL INVESTED (inRs.)	CORPUS AT 60 YEARS* (inRs.)
25	2000	35	8.4 Lakhs	1.09 Crores
35	4000	25	12 Lakhs	67.46 Lakhs
45	8000	15	14.4 Lakhs	37.72 Lakhs

\* Assumed rate of return-12%

\*\* Source: The Hindu, 2<sup>nd</sup> Dec 2014.

### 1.4.2 Rupee Cost Averaging

With volatile markets, most investors remain skeptical about the best time to invest and try to 'time' for making an entry into the market. Rupee-cost averaging allows an investor to opt out of the guessing game. Since we are a regular investor, our money fetches more units when the price is low and lesser when the price is high. During volatile period, it may allow you to achieve a lower average cost per unit.

### 1.4.3 Power of Starting Early Investment

The earlier one starts saving and investing regularly, the easier it is to achieve your goals. The difficulty of market timing can be overcome by starting investing early. The longer we stay in a good investment portfolio the more it will grow and reward with higher profits. Most of the investors agree to the fact that equities have the potential to deliver the highest returns among various asset classes. However in reality most investors do not

benefit from the long term compounding ability of equity. Some of the investors stay away from the equity market due to its volatile nature. Some of the investors try equity investment for a short period, in this process they end up with making huge losses. The possible solution to overcome these issues is to remain invested in equity with a long term view and may also opt equity mutual funds, since they are managed by experts in professional fund houses.

In the long term view, i.e. 5 years or more, the market rewards the investors with multiple benefits. First, it helps the investors to overcome short term volatility - situation which occurs because price of shares change almost every second, which get influenced by news reports about the company or any information about company operates and also from the domestic and global macroeconomic situation. However in the long term, fundamentally strong companies manage to survive and grow their business in all environments. Therefore, the longer we stay invested the higher will be our gain. But in the short term view market participants, typically over react to information that lead to high volatility in stock markets. However in medium to long term period sanity prevails and volatility is lesser.

The investors who remain invested for a long period do not succumb to the temptation of timing the market. Majority of the investors want to buy shares or equity funds at a lesser price and sell them at a higher price. But in the process one may miss the best days in the market. In reality no one can predict the best or worst day in the equity market. Therefore a prudent investor is one who remains invested and allows his money to compound.

#### 1.4.4 Other Benefits of SIP

- Disciplined Saving - Discipline is the key to successful investments. When investment is done through SIP, there is commitment to save regularly. Every investment is a step towards attaining the financial objectives.
- Flexibility - It is advisable to continue SIP investments with a long-term perspective, as there is no compulsion. Investors can discontinue the plan at any time. One can also increase/ decrease the amount being invested.
- Long-Term Gains - Due to rupee-cost averaging and the power of compounding SIPs have the potential to deliver attractive returns over a long investment horizon.
- Convenience - SIP is a hassle-free mode of investment. One can issue a standing instruction to your bank to facilitate auto-debits from your bank account.

SIPs have proved to be an ideal mode of investment for retail investors who do not have the resources to pursue active investments.

#### In short - Why SIP?

- Disciplined approach to investments.
- No need to time the market.
- Harness the power of two powerful Investment strategies
  - Rupee Cost Averaging - Benefit from Volatility
  - Power of Compounding - Small investments create Big Kitty over time
- Lighter on the wallet
- Reap benefits of starting early

### 1.5 Perception in the awareness of Systematic Investment Plan (SIPs) and its benefit to beat inflation with respect to their characteristics

Systematic Investment Plan (SIP) is a method of investing a fixed sum, regularly, in a mutual fund scheme. SIP allows the investor to invest in a certain pre-determined amount at a regular interval (weekly, monthly, quarterly, etc.). A SIP is a planned approach towards investments and helps us to inculcate the habit of saving and building wealth for the future.

The sample profile of the respondents' showed their social characteristics and economic status. Table 1.3 presented the profile of the respondents with reference to their characteristics. On the basis age classification; the employees up to the age of 30 years form a part of 20.26 per cent of the total sample; 36.67 per cent represent age group of 30 – 40 years; 22.56 per cent came under the category of age group of 41 -50 years and 20.51 per cent were under the classification of employees whose age of above 50 years. Out of the total sample; the majority of the employees, i.e. 59.23 per cent employees were male and the remaining 40.77 per cent of the sample were female. The samples covered in the study were grouped into two categories on the basis of marital status, i.e., not married and married. Only 16.41 per cent of the total sample came under the category of not married, and the remaining 83.59 per cent; i.e., majority of employees were coming the under the category of married classification.

**Table 1.3**  
**Distribution of Respondents by their Characteristics**

Characteristics		n	%
Age (in years)	Up to 30	79	20.26
	31-40	143	36.67
	41-50	88	22.56
	Above 50	80	20.51
Gender	Male	231	59.23
	Female	159	40.77
Marital Status	Not Married	64	16.41
	Married	326	83.59
Status of Spouse Employment	Yes	199	61.04
	No	127	38.96
Size of Family	2	16	4.10
	3	87	22.31
	4	196	50.26
	5	65	16.67
	5+	26	6.67
No. of Dependents	Nil	54	13.85
	1	82	21.03
	2	137	35.13
	3	86	22.05
	3+	31	7.95
Annual Income	Below 2,50,000	41	10.51
	2,50,000 - 5,00,000	98	25.13
	5,00,001-10,00,000	186	47.69
	Above 10,00,000	65	16.67

Percentage of Savings	Upto 10	36	9.23
	11-20	113	28.97
	21-30	115	29.49
	31-40	47	12.05
	41-50	54	13.85
	Above 50	25	6.41

**Source:** Primary Data

Employment status of spouse tabulation showed that majority 61.04 per cent of the sample respondents spouse were under the category of employed and the remaining 38.96 per cent of the sample respondents came under category of not employed. On the basis of size of the family, the samples studied 4.10 per cent of the total respondents had two members in their family, 22.31 per cent of the sample size were having three members, majority 50.26 per cent of the total sample size were having four members in their family, 16.67 per cent of the samples were with five members and the left out portion 6.67 per cent were having a family size of more than five members. While considering the characteristic of dependents in the family; 13.85 per cent does not had any dependent on their income, 21.03 per cent of the sample size had one person as their dependent, 35.13 per cent were having two members as dependent, 22.05 per cent had three people as dependents and the remaining 7.95 per cent were having more than three members as dependents on their personal income. As per the annual income of the employees, 10.51 per cent came under the low income group i.e., below Rs.2,50,000 employees', 25.13 per cent encompassed middle income group, Rs.2,50,000 - 5,00,000 employees'; 47.69 per cent came under upper middle income group, Rs.5,00,001-10,00,000 employees' and the remaining 16.67 per cent of the total sample size were high income group employees' i.e. above Rs.10,00,000. From among the total sample respondents' studied 9.23 per cent of the employees' made a percentage of annual savings up to 10 per cent. The next 28.97 per cent of the employees made a percentage of annual savings of 11-20 percentage; 29.49 per cent of employees' made a percentage of saving in a range of 21-30 percentage; 12.05 per cent made a percentage of savings of 31-40 percentage; after that 13.85 per cent of employees created a savings of 41-50 percentage and the remaining 6.41 per cent of employees' created a percentage of savings above 50 percentage, i.e., half of the income was saved for future consumption.

Table 1.4 presents mean awareness score of salaried class about systematic investment plan with test of significance. From the table it can be seen that the mean score of awareness of salaried class about systematic investment plans is 1.79 which is significantly lower than mean of the response scale as the significance level of one sample t-test is less than 0.05. The result indicates that the awareness of salaried class about systematic investment plan is below average. The table also shows that the levels of awareness are average for employees whose age is above 50 years, for employees who are employed with public sector undertakings, for those employees who are unmarried, for the salaried class who possess the educational qualification of professional degree and also the employees whose residence are in the urban areas as the significance levels are greater than 0.05. Among the salaried employees in the other categories of characteristics the awareness about SIPs is significantly below average.

**Table 1.4**  
**Mean Awareness Score of Salaried Class about Systematic Investment Plan with Test of Significance**

		Mean	SD	t	P-Value
Age	Up to 30	1.80	0.77	-2.325	0.023
	31-40	1.73	0.67	-4.737	0.000
	41-50	1.81	0.72	-2.500	0.014
	Above 50	1.89	0.71	-1.414	0.161
Gender	Male	1.89	0.77	-2.137	0.034
	Female	1.65	0.60	-7.328	0.000

Category of Employer	Private	1.57	0.73	7.836	0.000
	Public	1.98	0.65	0.426	0.671
Marital Status	Single	1.84	0.88	1.426	0.159
	Married	1.79	0.68	5.726	0.000
Qualification	UG	1.68	0.70	4.241	0.000
	PG	1.82	0.71	3.908	0.000
	Professional	1.85	0.72	1.531	0.132
Place of Residence	Rural	1.41	0.67	7.353	0.000
	Semi urban	1.74	0.67	3.965	0.000
	Urban	1.94	0.70	1.167	0.245
Annual Income	Below 2,50,000	1.73	0.74	2.314	0.026
	2,50,000 - 5,00,000	1.69	0.69	4.362	0.000
	5,00,001-10,00,000	1.76	0.74	4.485	0.000
	Above 10,00,000	2.09	0.58	1.286	0.203
All Sample		1.79	0.71	5.684	0.000

**Source:** Primary Data

Table 1.5 presents the Level of Awareness and Opinion on Systematic Investment Plan to overcome the effect of Inflation. From the table it can be seen that the salaried class employees who are unaware about Systematic Investment Plans (SIPs) were 37.69 per cent and they have no favorable or unfavorable opinion about the benefit of SIP to overcome effect of inflation and cent per cent of the employees who were unaware about SIP were of the opinion of don't know about the benefit. The salaried employees who partially aware about the Systematic Investment Plans (SIPs) were 45.13 per cent only, out of which 28.98 per cent were of the favourable opinion about SIPs to overcome the effect of inflation whereas 23.30 per cent employees did not support the benefit of SIP over inflation and 47.73 per cent employees were not known about the benefit of SIPs. 17.18 per cent of the total sample salaried employees were fully aware about Systematic Investment Plans (SIPs) from which majority (82.09 per cent) were fully supportive on the benefit of SIPs to overcome the effect of inflation. On the contrary 17.91 per cent did not support the benefit of SIPs to overcome inflation effect.

**Table 1.5**  
**Distribution of Salaried class by their Level of Awareness and Opinion on Systematic Investment Plan to overcome the effect of Inflation with Test of Significance**

		Opinion on Systematic Investment Plans (SIPs) helps to overcome the effect of Inflation						Total	
		yes		No		Don't Know			
		n	%	n	%	n	%	n	%
Level of awareness about Systematic Investment Plans	Unaware	0	0.00	0	0.00	147	100.00	147	37.69
	Partially	51	28.98	41	23.30	84	47.73	176	45.13
	Fully Aware	55	82.09	12	17.91	0	0.00	67	17.18
Total		106	27.18	53	13.59	231	59.23	390	100.00
Chi Square		232.454							
P-Value		0.000							

**Source:** Primary Data

Table 1.5 also exhibits the relationship between the level of awareness of Systematic Investment Plan and the opinion on the benefit of SIPs to overcome the effect of inflation. For verifying the relationship between the two variables Chi-Square analysis was applied. Since p value is less than 0.05, the result explains that there is significant difference in the level of awareness of Systematic Investment Plan and the opinion on the benefit of SIPs to overcome the effect of inflation.

## 1.6 Conclusion

Understanding the relationship between risk and return is essential to understand why people make investment decisions as they do. Rational thinking informs that in opportunity to earn a high expected rate of return investors must be prepared to assume significant return volatility or risk. Very low risk investments are made, only modest returns can be projected. Because the risks of various investments are usually gauged on the basis of historical experience, high expected returns are typically achieved only by making unconventional investments that can involve taking on high risks. An asset allocation model has specified percentages of the portfolio allocated to each investment category. The allocation is done according to the risk return profile of the investor and depends on many factors such as time period of investment, risk tolerance capacity, interest rate movements and the market outlook. Changing economic conditions affect various types of assets differently and consequently, each asset category's return may partially offset that of the others. Rupee Cost Averaging is a process of systematically investing a fixed rupee amount at regular time intervals. When the disciplined programme is adhered to and market fluctuations are ignored, it attempts to smooth out the ups and downs of the market over the long haul. SIPs helps to create an ocean from small drops of savings to investment that is regular small investment in SIP scheme helps to create wealth so as to achieve the various financial goals in different stages of life cycle. The analysis on the basis of level of awareness about SIP, the study concluded that the mean score of awareness of salaried class about systematic investment plans is 1.79 which is significantly lower than mean of the response scale as the significance level of one sample t-test is less than 0.05. The result indicates that the awareness of salaried class about systematic investment plan is below average. While looking into the perception of employees of organized sector about SIPs and its benefit to overcome inflation, 17.18 per cent of the total sample salaried employees were fully aware about Systematic Investment Plans (SIPs) from which majority (82.09 per cent) were fully supportive on the benefit of SIPs to overcome the effect of inflation. The result explains that there is significant difference in the level of awareness of Systematic Investment Plan and the opinion on the benefit of SIPs to overcome the effect of inflation.

## 1.7 Bibliography

- Singh, Binod Kumar and Jha, Ashutosh Kr. (2009). An empirical study on awareness and acceptability of mutual fund. Research Gate.
- Roy, Debalina and Ghosh, Koushik (2011). The Scenario of Investment in Systematic Investment Plan (SIP) among the Retail Customers. Global Journal of Finance and Economic Management. 1(1). 49-62.
- Batra, Dimple and Batra, Gunjan (2012). A DEA Comparison of Systematic and Lump Sum Investment in Mutual Funds. International Journal of Computing and Business Research. 3(2).
- Mishra, K.C. and Doss, Steward (2009). Basics of Personal Financial Planning. Cengage Learning India Pvt. Ltd. New Delhi.
- www.sbimutualfunds.com
- The Hindu
- The Business line.

# A STUDY ON CONSUMER BEHAVIOUR OF REFRIGERATORS IN KERALA

Sabu R.L<sup>1</sup> & Dr. K. Gopalakrishnan Nair <sup>2</sup>

## Abstract

This paper explores the consumer behaviour of refrigerators in Kerala. The scope of the study is related to factors like source of awareness, person influencing most in purchase decision, factors influenced while making purchase decision and level of post purchase satisfaction of the customers. Understanding the customer's views and satisfaction level will help the manufacturer in developing their products to meet customer's needs, designing the proper marketing programs and strategy.

**Key Words:** Consumer behaviour, Refrigerator industry, Purchase decision, Customer satisfaction.

## 1. INTRODUCTION

The world of marketing is changing continuously. This happens because the consumer's desires are changing day by day. The entry of new competitors with novel product features in a competitive environment is crucial the success, which keep the customers satisfied and engaged. The prime goal of marketing is creation of a satisfied customer.

Home appliances are electrical and mechanical appliances which accomplish some household functions, such as cooking or food preservation or cleaning. The household appliances have a major role in the stylish appearance of any home. The major appliances used in households include refrigerators, mixer-grinder, air conditioner, washing machine, microwave oven and television. The refrigerator segment holds a major market share in the kitchen appliances market, followed by cooking appliances. The changing lifestyle, rise in disposable incomes along the growing food service industry are the key factors, fuelling the demand for the kitchen appliances market.

Refrigerators were introduced in households during 1915. In 1930s it gained wider acceptance in the United States after introduction of non-toxic, non-flammable synthetic refrigerants such as Freon-12 (R-12). Electrolux in 1930 launched the first built-in refrigerator. In the next year they produced the first, air-cooled refrigerator. In 1939, General Electric introduced dual temperature refrigerator with one section for frozen food and a second for chilled food.

In India refrigerator manufacturing began in the later half of the nineteen forties by Allwyn in technical collaboration with Prest Cold of the U.K. In the early 50's the second unit was started by Kelvinator India Limited in collaboration with the Kelvinator Company of U.S.A. Later in the 60's Godrej entered in Indian market with its own research and development units. Two other companies Blue star and Voltas also entered in Indian market in the 60's but only as traders and not as manufacturers. But in the early 80's Voltas set its own manufacturing unit in India without any foreign collaboration. Later Voltas quit its refrigeration business by selling its manufacturing facilities to the Swedish company Electrolux Allwyn. Today the fields major players are Whirl-pool, LG, Samsung, BPL, Godrej and Videocon.

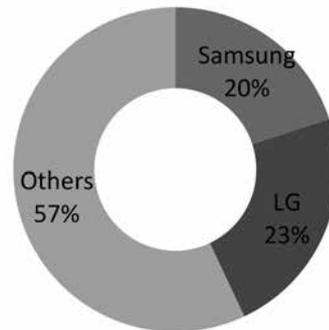
According to Manish Sharma, Managing Director, Panasonic India and President, Consumer Electronics and Appliances Manufacturers Association, the Indian market for consumer electronics and appliances was valued at \$9.7 billion in 2015. This is expected to grow to \$20.6 billion by 2020 and become the fifth-largest in the world by 2025. It is also reported by Global Information and Measurement giant Nielsen, that rural India's FMCG and consumer durables market will spike up to US\$ 100 billion mark by 2025. According to India Brand Equity Foundation, in the Indian consumer durable market, urban sector contributes the major share

<sup>1</sup>Associate Professor, Centre for Management Development, Thiruvananthapuram, Kerala.

<sup>2</sup>Formerly Dean (PG Studies), College of Engineering Thiruvananthapuram, Kerala.

(65%) and the rest 35% by the rural sector. They also pointed out that in rural markets, refrigerators as well as consumer electronic goods are likely to witness growing demand in the coming years as the Government plans to invest significantly in rural electrification. During 2014, the LG leads Indian refrigerator market with 23% share. The brand wise Indian refrigerator market is shown in the Chart-1.

**Chart 1**  
**Brand-Wise Indian Refrigerator Market –2014**



According to the National Sample Survey Organisation's 68th Round Survey of Household Consumption of Various Goods and Services in India, during 2011-12, refrigerators were possessed by 43.8 per cent urban households as compared to 31.9 per cent during 2004-05. Moreover the Socio Economic and Caste Census 2011(SECC) in India indicates only 11.04 per cent of Indian rural households own refrigerators. Goa with 69.37 per cent is on the top among the list followed by Punjab with 66.43 per cent households owning it. Bihar has the lowest number of refrigerators. Only 2.61 per cent households own a refrigerator. Chhattisgarh follows Bihar in ascending order with 3.30 per cent of the households own this.

## 2. SCOPE OF THE STUDY

Kerala State is well known for its consumerism. This is mainly on account of higher purchasing power and high literacy rate. The other reasons are inflow of foreign money into the State, from the huge number of people of the State working in Europe, Gulf counties, USA, Australia and other Asian countries.

It is felt that, the replacement cycle of refrigerator has undergone a rapid change. People prefer to change the refrigerator more often than earlier. This trend has given rise to demand for new models with advanced features due to the high level of disposable income among the prospective buyers. The increased demand is partly because of the exposure to the home appliances industry worldwide. Many Keralites working abroad have come across the performance of these products in the Middle East and Far East.

The availability of published data on the brand-wise sales of refrigerator in Kerala market is very much limited. Moreover, limited organized study has been conducted in the area of refrigerator industry, with specific reference to the State of Kerala. With many Refrigerator manufacturers launching their product in the Kerala state, the study will definitely benefit the stakeholders of refrigerator manufacturers, dealers, financing agencies, to formalize and plan their policies towards an effective marketing strategy.

## 3. LITERATURE REVIEW

The study to understand how a consumer makes decision to buy goods by using the available resources is known as consumer behavior (Chetan Bajaj). It is also described as a combination of emotional, mental and physical activity of an individual for purchase and use of goods and services for a demand or need (Shukazmi). The decision making process of an individual physically by engaging in assessing, buying and using or disposing the goods and services is defined as consumer behaviour (David L. Loudon). The consumer

behaviour is associated with the culture and economy of a country. Consumer behaviour explains the processes through which buyers make decisions. It also gives the reasons and logic that underlie purchasing decisions and consumption patterns.

Kotler and Armstrong (2001) stated that consumer's buying behaviour refers to the buying behaviour of the individuals and households who buy the goods and services for personal consumption. The consumers around the world are different in various factors such as income education level, age and preferences, which may affect the way they avail of goods and services. They also pointed out that, consumer behaviour affects how products and services are presented to the different consumer markets. The components which influence consumer behaviour are cultural, social, personal and psychological (Kotler & Armstrong, 2001). In order to create an effective marketing plan, the needs to assess these elements are very much necessary, since the companies cannot control these characteristics. Consumers have their favorites in purchasing products from precise retailers and hence the residual retailers are chosen using the rule of "survival of the fittest" (Blackwell et al., 2006). They also pointed out that the consumers' decisions can provide a clue for which industry to survive, which companies to succeed, and also which products to excel. The firms can make use of information on the buying habits and through understanding the reasons for consumers to buy the products, they can devise corresponding marketing strategies in response to the consumers' needs (Blackwell et al., 2006).

In recent years, among Indians, due to enhanced awareness and information technology, there is a large shift in consumer behaviour. The influence of socio-economic conditions, cultural environment, education level, occupation and wide media coverage have dramatically changed the lifestyle among rural consumers. The increase in working women after 1990's are proving to be equally as good as men and they make their own decision to buy things which they need. Yet Indian consumers think before they buy, they are more cautious in spending.

Geethanjali R, Asokumar.S, in their study on Consumer Buying Behaviour towards Home Appliances in Salem City concluded that, knowledge about home appliances differ based on the age level. The demographic factors like age, gender, marital status, qualification, occupation, income and family type are affecting the buying behaviour of home appliances.

Uma K and Sasikala P (2014) while studying the consumers perception and consumer behaviour for selected home appliances products at Madurai District, Tamil Nadu found that brand name plays a dominant role in purchasing the home appliances.

Adithya H.S (2013) in his study on Consumer Behaviour towards Refrigerators in Bangalore City concluded that only the gender and educational qualification have significant influence over brand possessed. He also concluded that there is no significant relationship between the personal factors like age, gender, educational qualification, occupation, annual income and time of purchase.

Vijayalakshmi. S, Mahalakshmi.S, et.al (2013), in their study on the consumer behaviour towards selective Electronic Home Appliances in Hyderabad City stated that the main factors involved in selecting home appliances are price, brand name, quality, after sales service and offers given by the retailer.

Krishna Kumar (2011) in his study on Consumer Behaviour towards Electronic Goods with reference to Occupational Factors – a study in Cuddalore Town has concluded that the consumption of electronic goods and other products are increasing, with the increasing disposable income of the population and their perception.

Rajeselvi (2013) in her study on the Buyer behaviour towards Electronic Goods has critically examined the behaviour of buyer towards electronic goods and the author has opined that, despite the basic characteristics of consumers the behaviour pattern of consumers are more or less similar to each other, particularly in the aspects like quality, preference and decision making.

The economic growth in India and young Indian population over 21 years has influenced the consumers to

spend and buy more. Their friends and socio cultural environments influence the consumers. More spending options are growing among Indian consumers, which induce higher spending on gaining status. Indian consumers were more careful in lending and now this attitude is changing with more credit options in the form of Credit Cards and loans. The behaviour has western influence among the Indian consumers; foreign brands have penetrated the market and acquired a good share.

The researchers evaluated various secondary studies conducted on the consumer behaviour of refrigerator by other researchers in the relevant area. However, the present study differs from earlier studies done in this area; the buyer behaviour in Kerala towards the refrigerator is analyzed here. The scope and the area of the study are unique in nature.

#### 4. OBJECTIVES OF THE STUDY

The objectives of this study are:

- To identify the major sources of awareness about refrigerators in Kerala
- To identify the person who have influenced most in the purchase decision
- To study the factors influencing the consumers in choosing the refrigerator
- To assess the post purchase satisfaction level of consumers
- To find out whether there exists any significant association between income and period of refrigerator being used
- To find out whether there exists any significant association between income and brand of refrigerator being used

#### 5. RESEARCH METHODOLOGY

The research aims to examine the buying behaviour of consumers' for refrigerator in Kerala. The study was targeted to the Refrigerator owners in the State of Kerala, as a population. All the brands of house hold Refrigerator users were considered as the population for the study. As the population for the study is large, Random Sampling Technique was applied to select the sample respondents. A total of 660 interview schedules were used for the present study. Three districts representing three regions of the State were covered. The sample districts selected are Kozhikode from northern region, Ernakulam from central region and Thiruvananthapuram from southern region. The statistical tools used were simple percentage, weighted average, and Chi-Square Test. The primary data has been collected and analysed. Cronbach's Alpha reliability test was used to test the degree of dependability, consistency or stability of the scale adopted.

#### 6. ANALYSIS AND DISCUSSIONS

The demographic characteristics of the respondents are given below (see Table 1).

**Table 1**  
**Demographic Characteristics of the Respondents**

Sl. No	Particulars	No. of Respondents	% of Respondents	Sl. No	Particulars	No. of Respondents	% of Respondents
1	<b>Gender</b>			5	<b>Occupation</b>		
	Male	258	39.09%		Unemployed	91	13.79%
	Female	402	60.91%		Government employee	133	20.15%
	<b>Total</b>	<b>660</b>	<b>100.00%</b>		Private sector employee	210	31.82%

2	<b>Marital Status</b>				Business/ Self employed	113	17.12%
	Married	588	89.09%		Casual Labour	48	7.27%
	Unmarried	72	10.91%		Retired	65	9.85%
	Total	660	100.0%		Total	660	100.00%
3	<b>Education</b>			6	<b>Monthly Income</b>		
	Upto SSLC	128	19.39%		Less than Rs. 25,000	162	24.55%
	Plus two	138	20.91%		Rs. 25001 Rs. 50000	264	40.00%
	Diploma	52	7.88%		Rs. 50001 Rs. 75000	144	21.82%
	Graduate	183	27.73%		Rs. 75001 Rs. 100000	53	8.03%
	Post-Graduate	108	16.36%		Above Rs. 1,00,000	37	5.61%
	Professional	51	7.73%		<b>Total</b>	<b>660</b>	<b>100.00%</b>
	<b>Total</b>	<b>660</b>	<b>100.00%</b>	7	<b>Age</b>		
4	<b>Family Size</b>				Upto 20 years	14	2.12%
	Up to 2 members	35	5.30%		21-25 years	46	6.97%
	3 to 4 members	431	65.30%		26-35 years	172	26.06%
	4 to 6 members	171	25.91%		36-45 years	182	27.58%
	Above 6 members	23	3.48%		46-60 years	171	25.91%
<b>Total</b>	<b>660</b>	<b>100.00%</b>		Above 60 years	75	11.36%	
				<b>Total</b>	<b>660</b>	<b>100.00%</b>	

Out of the 660 samples, majority of refrigerator consumers are females (60.91%) and the rest 39.09% are males. The age of the majority of refrigerator consumers are in the range of 36 years to 45 years (27.58%) followed by 26 years to 35 years (26.06%), 46 years to 60 years (25.91%), above 60 years (11.36%), 21 years to 25 years (6.97%) and the rest 2.12% in the age group of upto 20 years.

It is also found that 31.82% of the respondents are having occupation as Private Sector Employees followed by Government employees (20.15%), Business/Self Employed (17.12%) and the rest Others. The majority of respondents are having a monthly income of Rs. 25,001 to Rs. 50,000 (40%), followed by less than Rs. 25,000 (24.55%) and Rs. 50,001 to Rs. 75,000 (21.82%). The majority of refrigerator consumers are having a family size of 3 to 4 members (65.30%) followed by 4 to 6 members (25.91%), 5.30% up to 2 members and the rest above 6 members (3.48%).

From the questionnaire, it is also found that about 93.94% of the respondents are having one refrigerator and the rest 6.06% are having two refrigerators in their family. It is also found that about 43.94% of the respondents so far owned only one refrigerator whereas 38.48% owned two refrigerators, 16.06% owned three refrigerators and the rest 1.52% owned more than three refrigerators. Regarding the period of usage of refrigerator, it is found that about 30.61% of the respondents are using refrigerator since last 11 to 20 years, whereas 26.67%

are using refrigerator since last 6 to 10 years (see Table-3). During the study it is found that 37.27% of the respondents are currently using Whirlpool refrigerator, followed by Samsung (27.12%), LG (17.27%) and Godrej (10.61%). The details are given in Table-4.

**Table 3**  
**Period of Usage**

Period of Use	No. of Respondents	% of Respondents
Up to 2 years	42	6.36%
2-5 years	138	20.91%
6-10 years	176	26.67%
11-20 years	202	30.61%
above 20 years	102	15.45%
	<b>660</b>	<b>100.0%</b>

**Table 4**  
**Brand Profile of Refrigerators in Kerala**

Sl. No.	Brand	No. of Respondents	Percentage
1	Samsung	179	27.12%
2	LG	114	17.27%
3	Whirlpool	246	37.27%
4	Godrej	70	10.61%
5	Kelvinator	20	3.03%
6	Videocon	19	2.88%
7	Others *	12	1.82%
	<b>Total</b>	<b>660</b>	<b>100.00%</b>

\*- Others includes Haier, Panasonic, Electrolux, Huawei , Onida , Daewoo, Hitachi , BPL, Sharp, IFB, etc.

Regarding the prices of the refrigerator currently being used, it is found that, about 46.97% of the respondents are using refrigerator having price range Rs. 10001 - Rs. 15000, followed by 23.03% in the price range upto Rs. 10,000 and Rs. 15001 - Rs. 20000 by 20.61% (see Table-5).

**Table 5**  
**Details of Refrigerator Currently Being Used**

Sl. No	Particulars	No. of Respondents	% of Respondents	Sl. No	Particulars	No. of Respondents	% of Respondents
1	<b>Capacity (Ltrs)</b>			2	<b>Type</b>		
	Less than 200	323	48.94%		Single door	354	53.64%
	200-299	253	38.33%		Double door	281	42.58%
	300-400	54	8.18%		Side by side	25	3.79%
	above 400	30	4.55%	<b>Total</b>	<b>660</b>	<b>100.00%</b>	
	<b>Total</b>	<b>660</b>	<b>100.00%</b>	4	<b>Price</b>		

3	<b>No. of years being used</b>			Upto Rs. 10,000	152	23.03%	
	Up to 2 years	155	23.48%		Rs. 10001 Rs. 15000	310	46.97%
	3-5 years	306	46.36%		Rs. 15001 Rs. 20000	136	20.61%
	6-10 years	156	23.64%		Rs. 20001 Rs. 30000	35	5.30%
	11-20 years	43	6.52%		Rs.30001 Rs. 40000	17	2.58%
	<b>Total</b>	<b>660</b>	<b>100.00%</b>		Above Rs. 40,000	10	1.52%
				<b>Total</b>	<b>660</b>	<b>100.00%</b>	

In the case of capacity of refrigerator currently being used, it is found that about 48.94% of the respondents are using refrigerator with capacity less than 200 litres followed by 200 to 299 litres by 38.33% and the rest 12.73% are using refrigerator with above 300 litres capacity. Regarding the type of refrigerator being used it is found that majority of consumers in Kerala are using single door (53.64%) followed by double door (42.58%) and the rest 3.56% side-by-side.

If we look into the occupation of respondents and the capacity of the refrigerator they use, it is found that 15.3% of the respondents having occupation as Private Sector Employee are using refrigerator with capacity 200 to 299 litres followed by 12.7% with less than 200 litres refrigerators (see Table-6).

It is found that 46.4% of the respondents are using the present refrigerator for the last 3 to 5 years, followed by 23.6% of respondents with 6 to 10 years and 23.5% of respondents up to 2 years. It is also found that 47% of the respondents are having refrigerator with price range Rs. 10,001-Rs. 15,000 (see Table 7).

**Table 6**  
**Occupation Versus Capacity of Refrigerator Currently Being Used**

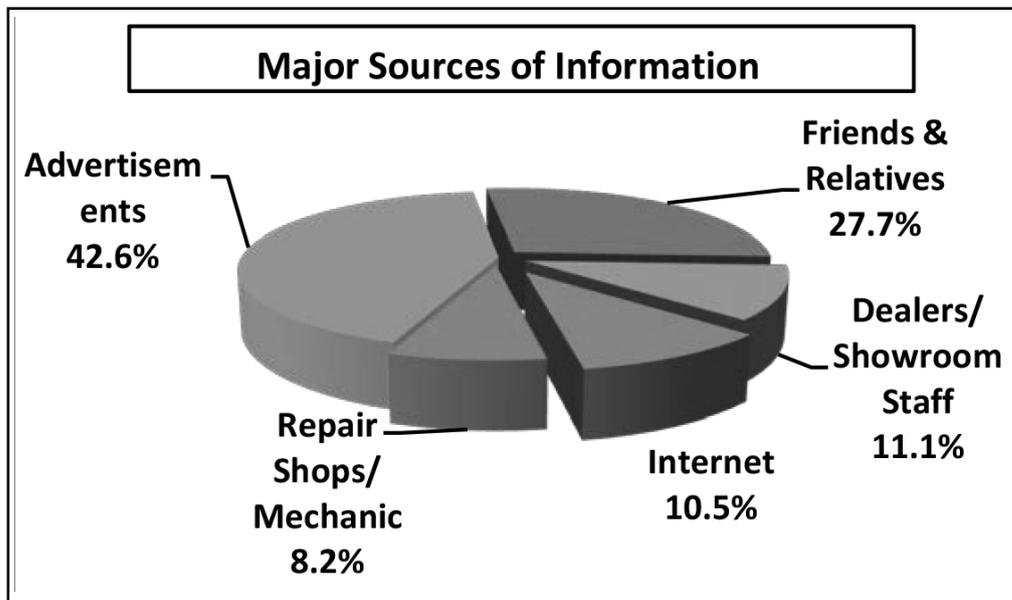
Sl. No.	Occupation	No. of Respondents					% of Respondents				
		Less than 200 Litres	200-299 Litres	300-400 Litres	above 400 Litres	Total	Less than 200 Litres	200-299 Litres	300-400 Litres	above 400 Litres	Total
1	Unemployed	53	30	4	4	91	8.0%	4.5%	0.6%	0.6%	13.8%
2	Government Employee	54	64	5	10	133	8.2%	9.7%	0.8%	1.5%	20.2%
3	Private Sector Employee	84	101	19	6	210	12.7%	15.3%	2.9%	0.9%	31.8%
4	Business/Self Employed	56	32	18	7	113	8.5%	4.8%	2.7%	1.1%	17.1%
5	Casual Labour	30	14	4		48	4.5%	2.1%	0.6%	0.0%	7.3%
6	Retired	46	12	4	3	65	7.0%	1.8%	0.6%	0.5%	9.8%
	<b>Total</b>	<b>323</b>	<b>253</b>	<b>54</b>	<b>30</b>	<b>660</b>	<b>48.9%</b>	<b>38.3%</b>	<b>8.2%</b>	<b>4.5%</b>	<b>100%</b>

**Table 7**  
**Price and Period of Use of Refrigerator**

Price	Up to 2 years	2-5 years	6-10 years	Above 10 years	Total
Up to Rs. 10000	2.7%	9.2%	9.2%	1.8%	23.0%
Rs. 10,001 Rs. 15,000	15.5%	20.8%	7.0%	3.8%	47.0%
Rs. 15,001 Rs. 20,000	1.8%	12.4%	5.6%	0.8%	20.6%
Rs. 20,001 Rs. 30,000	1.4%	2.4%	1.5%	0.0%	5.3%
Rs. 30,001 Rs. 40,000	0.8%	1.4%	0.3%	0.2%	2.6%
Above Rs. 40,000	1.4%	0.2%	0.0%	0.0%	1.5%
<b>Total</b>	<b>23.5%</b>	<b>46.4%</b>	<b>23.6%</b>	<b>6.5%</b>	<b>100.0%</b>

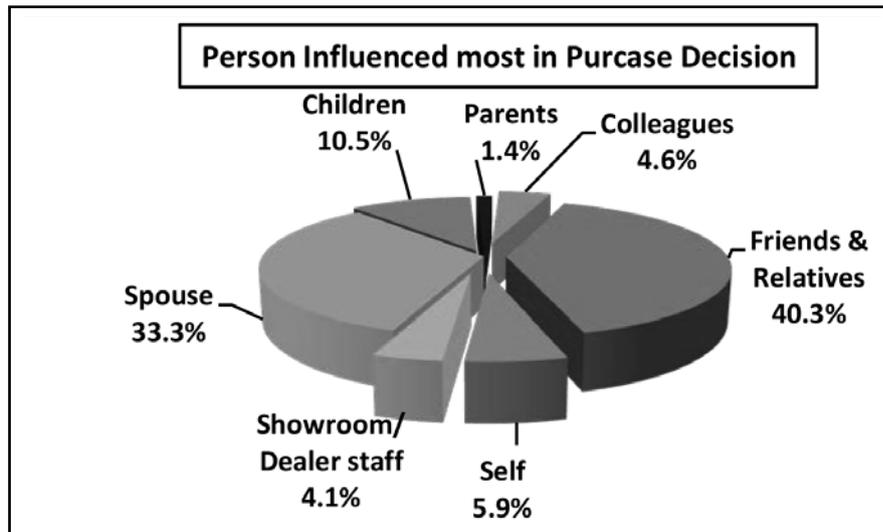
For determining the pre-purchase behaviour of the customers, they were asked about the major sources of information while purchasing a refrigerator. Majority of respondents were found to be relying upon Advertisements (42.6%) followed by information from Friends & Relatives (27.7%), Showroom/dealer staff (11.1%), Internet (10.5%) and the rest (8.2%) Refrigerator repair shops/Mechanic (see Chart 2).

**Chart 2**



On analysing the answer to the question “Who influenced most in your purchase decision of the Refrigerator?”, it is found that only 5.91% of the respondents are taking purchase decision by themselves. Friends & relatives are influencing about 40% of the respondents, followed by spouse and children. The details are represented in Chart 3.

**Chart 3**  
**Person Influenced most in the Purchase Decision of Refrigerator**



During the study, various factors influencing the selection of a refrigerator by the respondents were also analysed. Twenty one such factors are identified as indicated in the Table 8. Respondents were asked to indicate their level of influence on a five point scale, i.e. No Influence, Low Influence, Moderate Influence, High Influence and Very High Influence. Scores were also assigned to different points and weighted scores were also arrived. The scores assigned are 0 points to No influence, 1 to Low Influence, 2 to Moderate Influence, 3 to High Influence and 4 to Very high influence. It was seen that value of Cronbach Alpha for the above variables are 0.82. This indicates that the data is reliable and consistent as the calculated values of the Cronbach Alpha is above the recommended value of 0.70.

It is clear from the data that all the factors are not equally important for the consumers. It is found that price is the most influencing factor while making the decision to purchase a refrigerator and followed by Warranty, Promotional schemes/Exchange offers/Festival offers, Brand Image, After sales services, Durability, Capacity, Storage space, Star rating, Frost free, etc. The details are indicated in the Table 8.

It is found that about 67.8% of the respondents showed high to very high level of influence on price while selecting a refrigerator. This is followed by Promotional schemes/ Exchange offers/ Festival offers (62.7%) warranty (59.2%), Brand image (52.9%) and After sales services (52.6%). The least influencing factors while purchasing a Refrigerator are Resale value, followed by Convertible freezer and Stabilizer free operation.

**Table 8**  
**Factors Influencing Purchase Decision**

Sl. No.	Factors	No Influence		Low Influence		Moderate Influence		High Influence		Very High Influence		Total		Weighted Score
		No	%	No	%	No	%	No	%	No	%	No	%	
1	Price	36	5.5%	48	7.3%	129	19.5%	248	37.6%	199	30.2%	660	100.0%	1846
2	Warranty	18	2.7%	25	3.8%	226	34.2%	240	36.4%	151	22.9%	660	100.0%	1801
3	Promotional schemes / Festival offer/ Exchange offers	30	4.5%	56	8.5%	160	24.2%	232	35.2%	182	27.6%	660	100.0%	1800

4	Brand Image	10	1.5%	58	8.8%	243	36.8%	250	37.9%	99	15.0%	660	100.0%	1690
5	After Sales Services	9	1.4%	34	5.2%	270	40.9%	278	42.1%	69	10.5%	660	100.0%	1684
6	Durability	12	1.8%	80	12.1%	242	36.7%	212	32.1%	114	17.3%	660	100.0%	1656
7	Capacity	12	1.8%	90	13.6%	245	37.1%	212	32.1%	101	15.3%	660	100.0%	1620
8	Storage Space	67	10.2%	104	15.8%	183	27.7%	235	35.6%	71	10.8%	660	100.0%	1459
9	Star Rating	83	12.6%	114	17.3%	169	25.6%	187	28.3%	107	16.2%	660	100.0%	1441
10	Frost Free/ Direct Cool	143	21.7%	160	24.2%	154	23.3%	126	19.1%	77	11.7%	660	100.0%	1154
11	No. of doors	148	22.4%	181	27.4%	141	21.4%	134	20.3%	56	8.5%	660	100.0%	1089
12	New Technology	227	34.4%	127	19.2%	122	18.5%	101	15.3%	83	12.6%	660	100.0%	1006
13	Financing Schemes	192	29.1%	164	24.8%	166	25.2%	86	13.0%	52	7.9%	660	100.0%	962
14	Colour	174	26.4%	214	32.4%	141	21.4%	105	15.9%	26	3.9%	660	100.0%	915
15	Style/ Design	210	31.8%	159	24.1%	142	21.5%	126	19.1%	23	3.5%	660	100.0%	913
16	Size	204	30.9%	153	23.2%	175	26.5%	105	15.9%	23	3.5%	660	100.0%	910
17	Noise Level	69	10.5%	380	57.6%	144	21.8%	46	7.0%	21	3.2%	660	100.0%	890
18	Additional Accessories	305	46.2%	176	26.7%	84	12.7%	63	9.5%	32	4.8%	660	100.0%	661
19	Stabilizer free operation	370	56.1%	130	19.7%	81	12.3%	56	8.5%	23	3.5%	660	100.0%	552
20	Convertible freezer	526	79.7%	48	7.3%	41	6.2%	33	5.0%	12	1.8%	660	100.0%	277
21	Resale Value	520	78.8%	140	21.2%	0	0.0%	0	0.0%	0	0.0%	660	100.0%	140

Scores assigned: No influence - 0, Minor Influence - 1, Moderate Influence- 2, High Influence- 3, Very high influence-4

During the study the level of post purchase satisfaction of the refrigerator customers were also assessed. Factors considered were Ease of use, Value for money, Exterior/look, Features, Performance and after sales services. Respondents were asked to classify their level of satisfaction on a five point scale, i.e. Highly dissatisfied, dissatisfied, Slightly satisfied, Moderately satisfied, and Highly satisfied. Scores were also assigned to different levels and weighted scores were also arrived. The details are indicated in the Table 9.

**Table 9**  
**Level of Post Purchase Satisfaction**

Sl. No.	Factors	Highly Dissatisfied		Dissatisfied		Slightly Satisfied		Moderately Satisfied		Highly Satisfied		Total	Weighted Score
		No	%	No	%	No	%	No	%	No	%		
1	Ease of Use	-	0.0%	9	1.4%	190	28.8%	346	52.4%	115	17.4%	660	1869
2	Value for money	2	0.3%	14	2.1%	192	29.1%	352	53.3%	100	15.2%	660	1822
3	Exterior/ Looks	8	1.2%	24	3.6%	184	27.9%	345	52.3%	99	15.0%	660	1759
4	Features	3	0.5%	28	4.2%	194	29.4%	364	55.2%	71	10.8%	660	1730
5	Performance	-	0.0%	45	6.8%	188	28.5%	322	48.8%	105	15.9%	660	1717
6	After Sales Service	4	0.6%	66	10.0%	259	39.2%	267	40.5%	64	9.7%	660	1501

Scores assigned - Highly Dissatisfied:-2, Dissatisfied:-1, Slightly Satisfied: 2, Moderately Satisfied: 3, Highly Satisfied: 4

Based on the weighted score, among the six factors, highest satisfaction was reported for ease of use, followed by value for money, exterior/look, features, performance and after sales services. It is also found that about 10.6% of the respondents were dissatisfied or highly dissatisfied and 39.2% are slightly satisfied with the after sales services they had received.

#### **Income vs Period of Use of Refrigerator - CHI SQUARE Test**

In order to identify whether there exists any significant association between monthly income of the respondents and period of refrigerator being used by the consumers, chi square is applied.

Ho: There is no association between monthly income and period of use of the refrigerator being used by the consumers

**Table 10**  
**Income vs Period of use of Refrigerator Being Used**

Monthly Income	Up to 2 years	3-5 years	6-10 years	Above 10 years	Total
Less than Rs. 25,000	48	72	41	1	162
Rs. 25001 Rs. 50000	63	121	65	15	264
Rs. 50001 Rs. 75000	26	74	22	22	144
Rs. 75001 Rs. 100000	5	30	13	5	53
Above Rs. 1,00,000	13	9	15		37
<b>Total</b>	<b>155</b>	<b>306</b>	<b>156</b>	<b>43</b>	<b>660</b>

Calculated  $X^2$  Value = 55.1      d.f =16

Table Value of  $X^2$  @ 5% significance level = 26.30

Table Value of  $X^2$  @ 1% significance level = 32.00

Since the calculated Chi square value is greater than table value the null hypothesis is rejected. Hence there exists a significant association between monthly income and period of refrigerator being used.

### Income vs Brand of Refrigerator - CHI SQUARE Test

In order to identify whether there exists any significant association between monthly income of the respondents and brand of refrigerator being used by the consumers, chi square is applied.

Ho: There is no association between monthly income and brand of refrigerator being used by the consumers

**Table 11**  
**Income vs Brand of Refrigerator Being Used**

Income	Samsung	LG	Whirlpool	Godrej	Kelvinator	Videocon	Others	Total
Less than Rs. 25,000	33	33	54	24	11	7		162
Rs. 25001 Rs. 50000	73	42	100	32	7	6	4	264
Rs. 50001 Rs. 75000	43	27	62	6	1	2	3	144
Rs. 75001 Rs. 100000	21	6	14	6	1	4	1	53
Above Rs. 1,00,000	9	6	16	2			4	37
<b>Total</b>	<b>179</b>	<b>114</b>	<b>246</b>	<b>70</b>	<b>20</b>	<b>19</b>	<b>12</b>	<b>660</b>

Calculated  $X^2$  Value = 61.6      d.f =30

Table Value of  $X^2$ @ 5% significance level = 43.77

Table Value of  $X^2$ @ 1% significance level = 50.89

Since the calculated Chi square value is greater than table value the null hypothesis is rejected. Hence there exists a significant association between monthly income and brand of refrigerator being used.

## 7. SUGGESTIONS & RECOMMENDATIONS

- The refrigerator companies have to improve their after sales service which helps to satisfy the customers in a better way. The time taken from complaint reporting to rectifying should be reduced to improve the customer satisfaction.
- Most of the respondents feel that the price of the refrigerator is comparatively high. The refrigerator manufacturers may explore the possibilities to reduce the present prices.
- The price comparisons of new refrigerator models across showrooms are not always possible, since same model refrigerators are not available in nearby shops.
- Provide proper training to customers on good handling and ways of effective utilisation of refrigerators.

- The performance of a refrigerator greatly depends on opening and closing of the doors. Presently there is no system to indicate the partial closure of refrigerator doors. Provide alarm to indicate non closure or partial closure of refrigerator doors.
- Introduce more energy efficient refrigerators.
- The majority of the respondents have pointed out that they are not fully satisfied with the approach of the Sales Executives in the shops. The staff are not equipped to clarify their doubts. The companies/dealers m
- The customers expect to transport refrigerator from shops to home free of cost. The dealers/ manufacturing companies may explore the possibilities to free home delivery of refrigerator.

## 8. CONCLUSION

Kerala has always been the favourite market for refrigerator. This study identified sources of awareness, person influencing most in purchase decision, factors influenced while making purchase decision and level of post purchase satisfaction of the customers in Kerala. It is also found that there is significant association between the price of the refrigerator and its period of use. It is also found that there is significant association between brand of the refrigerator being used and monthly income of the respondents. The study shall help the manufacturers and dealers in developing their products to meet customer's needs, designing the proper marketing programs and strategy.

## 9. REFERENCES

1. Adithya, H.S “ An Empirical Study on Consumer Behaviour Towards Refrigerators in Bangalore City” Indian Journal of Research, Volume: 2 Issue:1, January 2013 ISSN - 2250-1991, 2013.
2. Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2006): Consumer behaviour, Mason: Thomson.
3. Chetan Bajaj, Nidhi Srivastava, Rajnish Tuli. Retail Management. New Delhi: Oxford University Press, 2009.
4. David L. Loudon, Albert J. Della Bitta. Consumer behaviour. New Delhi: Tata McGraw-Hill, 2002.
5. Geethanjali R, Assokumar.S, “A Study on Consumer Buying Behaviour Towards Home Appliances in Salem City”, IJEMR, Volume 1, Issue 5, 2001.
6. Kotler,P., & Armstrong, G.(2001): Principles of marketing, Prentice Hall, London.
7. Krishna Kumar.R , “Consumer behaviour towards electronic goods with reference to occupational factors – a study in Cuddalore Town”, Research analysis & evaluation, vol.2, Issue 24, pp.60-65. 2011
8. Rajaselvi(2013), “Buyer behaviour towards electronic goods”, International Journal of Enterprise and Innovation Management studies (IJEIMS), vol.1, No.3, pp:74-81.
9. Uma, K. Sasikala,P. “Study on Consumer's Perceptions and Buying Behaviour Towards Selected Home Appliances Products in Madurai District”, Indian Journal of Applied Research, Volume :4, Issue:4 , April 2014.
10. Vijayalakshmi,. S. Mahalakshmi, S. et.al , “Study on Consumer Buying Behaviour towards Selective Electronic Home Appliances in Hyderabad City” International Journal of Logistics & Supply Chain Management Perspectives, Volume 2, Number 4, October-December 2013.

# A Study of Effect of Accounting Information System in Assurance of Financial Information in Automotive Industry in India

Naser Atabaki

## Abstract

This paper investigates the effect of accounting information system in assurance of financial information in the automotive industry in India. The automotive industry in India has various types of products, but majority of products is allocated to three types of products which are passenger cars, commercial cars and two wheelers, this industry deserves a huge share in gross domestic products and large volume of employment. Financial information should obtain some critical qualification and compliant with generally accepted accounting principles, auditors making assurance for this information. Accounting information system as producer of financial information has an effect on assurance of financial information on the automotive industry in India, so this research, investigate the effect of accounting information system on assurance of financial information in the automotive industry in India.

**Key Words:** accounting information system, assurance services, financial information

## Introduction

Accounting Information System (AIS) is the producer of financial information in companies. This system has four phases/steps like other system. The first phase is 'input' of the system which collects financial data and the second phase is the 'process' of the system which is considered as one of the main phases in accounting procedure. The emphasis of the 'Process' part is on preparing information based on Generally Accepted Accounting Principles (GAAP). On the other hand, 'Output' being the third phase of the system puts emphasis on generation of financial reports of the companies and the last step is 'evaluating and assurance' of these financial reports which is done by the auditors.

In this research, relevant questions were designed for evaluating the effect of Accounting Information System on assurance of financial information by measuring opinion of most relevant respondents who have direct contact with Accounting Information System in the automotive industry in India.

## Literature Review

(Du & Roohani, 2007) focused on continuous, auditing model for external auditors which provides opportunity to audit clients or reduce auditor's independent compromising. The model's requires operation of the auditor's system with auditee's system and systems do not interfere. Smooth and effective communication is a must to communicate auditor's system with auditee's system to data capturing process continuously. This paper shows how XML (eXtensible Markup Language) and CORBA (Common Object Request Broker Architecture) helps effectively connect with auditee's system and supporting communication of two independent systems smoothly. This paper also introduced continuous auditing cycle. This cycle also helps engagement's definition of period between client and auditor and makes audit within system continuously.

(Kvasnina, Nilsson, & Larsson, 2010) investigated of issues regarding financial statements reported in XBRL, which reported in XBRL format. This thesis also investigates on XBRL assurance process mythology which practitioners and relevant parties experience and envisions.

(Shan, Troshani, & Richardson, 2015) evaluates the effect of eXtensible Business Reporting Language (XBRL) on the audit process, assess how XBRL's effect across different countries. This study specially considers with publicly listed firms in the United States and Japan over an eight year period of time. The firms which XBRL was first mandated for public listed firms. Comparative analyses show XBRL use and audit fees is in inversely association which are positively turn associated with firm size. Another finding of the

study, overall moderate association between audit firms and firm size in both United States and Japan. These moderating effects among Japanese firms are weaker

(Wang & Dou, 2014) assesses the effects of accounting firm's organizational form and audit quality. Finding of this research reveals transformation limited liabilities of limited liability partnership has negative effect significantly on the discretization accruals of audited firm's absolute value. Transformation has negative effect significantly on positive discretionary accrual and there is no effect on negative discretionary accruals the other finding of the study that CPA's are more likely to modify audit opinion in that year after the transformation, and no evidence between listed company ownership influence and accounting firms the relationship between audit quality and transformation. This research provides empirical evidence for enriching the literature on accounting firm's organizational firms and policy makers

## Research Methodology

This research is an applied research which probe into the effect of Accounting Information System on making assurance of financial reports. An interview schedule was designed carefully to measure this effect. The validity of the schedule was measured and the same was prepared by consulting with professionals and academician to ensure that the research instrument measures what it should measure. The average score of validity obtained was above four which confirmed that interview schedule was valid and for reliability Cronbach's alpha test was applied and the mark was above 80% which meant that the research instrument had sufficient reliability.

## Sampling Method

In this study multistage random sampling was applied, which is the most optimal method for the representation of the population for the study. The techniques used in multistage were cluster sampling and stratified sampling.

- a) Stage I (Cluster Sampling) :- According to SIAM (Society of Indian Automobile Manufacturers ) 97% of automotive market in India are deserved by three category of products such as passenger cars , commercial cars and two wheelers. So in the first stage , based on this report, the aforesaid products were selected for this study.
- b) Stage II (Stratified Random Sampling):- At this stage four category of respondents namely Top Managers, Finance Managers, Accountants and Auditors were identified and subsequently selected because of their direct contact with Accounting Information System. Cochran formula was applied to identify the number of observations to be included in the sample. Accordingly 400 observations were selected proportionately from each category.

## Objectives and Hypotheses of the Study

Objectives are settled after reviewing of previous studies and research gap.

To review the effect of accounting information system in assurance of financial information in the automotive industry in India.

And hypothesis is formulated to test and evaluate the effect of accounting information system on assurance of financial information.

H0: passenger cars, commercial cars and two wheelers manufacturers do not differ in opinion of effect of accounting information system practices on assurance of financial information ( $\mu_1 = \mu_2 = \mu_3$ ).

H1: passenger cars, commercial cars and two wheeler manufacturers differ in opinion of effect of accounting information practices on assurance of financial information (one of the mean variable is differ from others)

## Analyses of the study

The statistical tool is Analyses of Variance (ANOVA) .

**Table 1:**  
**Effect of AIS on Audit Planning**

Variable	Group	Mean	SD	Levene's Test of Homogeneity of Variables		F	Sig.
				Statistics.	Prob.		
AIS helps to set effective audit planning	Passenger cars	3.32	.923	.640	.528	.229	.795
	Commercial cars	3.38	.934				
	Two wheelers	3.29	1.000				

The P. value (0.795), the null hypothesis is retained, hence it is concluded that passenger cars, commercial cars and two wheelers manufacturers do not differ in perception of AIS helps to set effective audit planning. Hence, based on the mean value it can be seen that setting of audit planning by using accounting information systems in passenger cars, commercial cars and Two Wheeler companies is effective ( $3 < \text{mean} \leq 4$ ).

**Table 2**  
**Effect of AIS on Assessing of Control Tests**

Variable	Group	Mean	SD	Levene's Test of Homogeneity of Variables		F	Sig.
				Statistics.	Prob.		
AIS helps to assessing of control tests	Passenger cars	3.64	.963	.708	.493	.241	.786
	Commercial cars	3.67	.957				
	Two wheelers	3.72	.894				

The P. value (0.786), the null hypothesis is retained, hence it is concluded that passenger cars, commercial cars and two wheelers manufacturers do not differ in perception of AIS helps to assessing of control tests. Hence based on the mean value it can be seen that assessing of control tests by accounting information system in passenger cars, commercial cars and Two Wheeler companies is effective ( $3 < \text{mean} \leq 4$ ).

**Table 3**  
**Effect of AIS on Choosing Effective Strategy**

Variable	Group	Mean	SD	Levene's Test of Homogeneity of Variables		F	Sig.
				Statistics	Prob		
AIS helps to choose effective strategy	Passenger cars	3.39	.965	1.759	.173	1.637	.196
	Commercial cars	3.35	.930				
	Two wheelers	3.17	.897				

The P. value (0.196), the null hypothesis is retained, hence it is concluded that passenger cars, commercial cars and two wheelers manufacturers do not differ in perception of AIS helps to choose effective strategy. Hence based on the mean value it can be seen that choose effective strategy by accounting information system in passenger cars, commercial cars and Two Wheeler companies is effective ( $3 < \text{mean} \leq 4$ ).

**Table 4**  
**Effect of AIS on Accounts Verifications**

Variable	Group	Mean	SD	Levene's Test of Homogeneity of Variables		F	Sig.
				Statistics.	Prob.		
AIS helps to effective account's verifications	Passenger cars	3.70	.920	2.937	.054	1.360	.258
	Commercial cars	3.72	.915				
	Two wheelers	3.52	1.022				

The P. value (0.258), the null hypothesis is retained, hence it is concluded that passenger cars, commercial cars and two wheelers manufacturers do not differ in perception of AIS helps to effective account's verifications. Hence based on the mean value it can be seen that account's verifications by accounting information system in passenger cars, commercial cars and Two Wheeler companies is effective ( $3 < \text{mean} \leq 4$ ).

**Table 5**  
**Effect of AIS on Applying Content Tests of Accounts**

Variable	Group	Mean	SD	Levene's Test of Homogeneity of Variables		F	Sig.
				Statistics.	Prob.		
AIS helps to better applying of content tests of accounts	Passenger cars	3.34	.926	1.180	.308	.157	.855
	Commercial cars	3.31	.922				
	Two wheelers	3.38	1.015				

The P. value (0.855), the null hypothesis is retained, hence it is concluded that passenger cars, commercial cars and two wheelers manufacturers do not differ in perception of AIS helps to better applying of content tests of accounts. Hence based on the mean value it can be seen that apply of content test of accounts by accounting information system in passenger cars, commercial cars and Two Wheeler companies is effective ( $3 < \text{mean} \leq 4$ ).

**Table 6**  
**Effect of AIS on Implementation of Auditing Operations**

Variable	Group	Mean	SD	Levene's Test of Homogeneity of Variables		F	Sig.
				Statistics.	Prob.		
AIS helps to implementation of auditing operations	Passenger cars	3.48	.756	.313	.732	.472	.624
	Commercial cars	3.48	.767				
	Two wheelers	3.57	.775				

The P. value (0.624), the null hypothesis is retained, hence it is concluded that passenger cars, commercial cars and two wheelers manufacturers do not differ in perception of AIS helps to implementation of auditing operations. Hence based on the mean value it can be seen that implementation of auditing operations by using of accounting information system in passenger cars, commercial cars and Two Wheeler companies is effective ( $3 < \text{mean} \leq 4$ ).

**Table 7**  
**Effect of AIS on Quality Control Policies**

Variable	Group	Mean	SD	Levene's Test of Homogeneity of Variables		F	Sig.
				Statistics.	Prob.		
AIS helps to determine efficient quality control policies	Passenger cars	3.81	.685	.253	.776	1.206	.301
	Commercial cars	3.81	.672				
	Two wheelers	3.93	.708				

The P. value (0.301), the null hypothesis is retained, hence it is concluded that passenger cars, commercial cars and two wheelers manufacturers do not differ in perception of AIS helps to determine efficient quality control policies. Hence based on the mean value it can be seen that determining efficient quality control policies by using of accounting information system in passenger cars, commercial cars and Two Wheeler companies is effective ( $3 < \text{mean} \leq 4$ ).

**Table 8**  
**Effect of AIS on Internal Auditing**

Variable	Group	Mean	SD	Levene's Test of Homogeneity of Variables		F	Sig.
				Statistics.	Prob.		
AIS helps in doing better internal auditing	Passenger cars	4.00	.563	1.486	.227	.319	.727
	Commercial cars	3.98	.563				
	Two wheelers	4.04	.627				

The P. value (0.727), the null hypothesis is retained, hence it is concluded that passenger cars, commercial cars and two wheelers manufacturers do not differ in perception of AIS helps in doing better internal auditing. Hence based on the mean value it can be seen that internal auditing by using of accounting information system in passenger cars, commercial cars and Two Wheeler companies is highly effective ( $4 < \text{mean} \leq 5$ ).

## Conclusion

The result of the analysis shows that AIS helps to set effective audit planning. Based on type of production there is no significant difference in opinion of respondents in commercial cars, passenger cars and two wheelers. The other question is whether AIS helps in assessing of control tests, for which it is found that there is no difference in opinion of respondents based on types of production and the producers believes that this is effective in the industry. The third question is whether AIS helps to choose effective strategy. In this case also it is found that there is also no difference in opinion of the respondents. Again, when asked about whether AIS helps to effective accounts verifications, the null hypothesis is accepted and it shows that there is no difference

in opinion of producer in effect of accounting information system on accounts verifications. The other findings include that AIS helps to better applying of content tests of accounts and manufactures believes AIS is effective on implementation of auditing operation. It is also found that AIS has an effective role in determining efficient quality control policies, and lastly it is concluded that AIS helps in better internal control and internal auditing.

## References

Du, H., & Roohani, S. (2007). Meeting Challenges and Expectations of Continuous Auditing in the Context of Independent Audits of Financial Statements. *International Journal of Auditing*, 11, 133–146.

Kvasnina, A., Nilsson, S., & Larsson, P. (2010). Assuring financial statements filed in XBRL—A new technology's effect on the assurance process. Lund University. Retrieved from <http://lup.lub.lu.se/record/2169661/file/2435738.pdf%5Chttp://lup.lub.lu.se/student-papers/record/2169661/file/2435738.pdf>

Shan, Y. G., Troshani, I., & Richardson, G. (2015). An empirical comparison of the effect of XBRL on audit fees in the US and Japan. *Journal of Contemporary Accounting & Economics*, 11(2), 89–103. <http://doi.org/10.1016/j.jcae.2015.01.001>

Wang, C., & Dou, H. (2014). Does the transformation of accounting firms' organizational form improve audit quality? Evidence from China. *China Journal of Accounting Research*, 8(4), 279–293. <http://doi.org/10.1016/j.cjar.2014.08.005>

# INSTITUTIONAL CREDIT AND ITS IMPACT ON SOCIO-ECONOMIC CHANGES OF SCHEDULED CASTE AND SCHEDULED TRIBE HOUSEHOLDS IN KERALA

Sumalatha. S

## Abstract

Even after the starting of co – operative credit institutions in the beginning of the 20th century, until the 1950s, SC/ST people depended heavily on individual sources of finance such as money lenders, traders, commission agents, landlords, friends and relatives for their credit needs. These sources by their very nature were not capable of meeting the credit needs of the SC/ST people. Also they were not dependable sources; especially during the time of crop failure (due to limited sources). Moreover, they had to go through a lot of unfair conditions including higher interest rates. Realizing these defects, both the central and the state Government of India took a number of policy decisions and enacted necessary legislation to progressively institutionalize finance. Today institutional credit accounts for a share of over 50 percent of total credit needs, compared to less than 10 percent in the fifties. The institutions under policy imperatives do not always aim at profit maximization but are more concerned with the spreading of new technology to help SC/ST beneficiaries in stepping up production and productivity, thereby improving their living conditions.

## INTRODUCTION

Lending institutions follow a set of rules while granting loans whereas private finance may be influenced by personal relations and considerations between the money lender and the borrower. Institutional agencies have vast funds at their disposal and can substantially meet short, medium and long term needs of the SC/ST people. This is not the case with private finance as it is mainly governed by the profit motive and therefore is more often exploitative in nature. The consequence is that private finance can be expensive, irregular and inadequate, while institutional agencies have the resources to employ and train experts in various agricultural operations enabling them to provide proper guidance to cultivators. Private individuals are neither interested in providing this type of guidance nor are capable of doing it even if they mean to provide such guidance. On account of the above considerations, institutional finance to agricultural and rural sectors of the economy is more beneficial than private finance.

In order to make the SC/ST less vulnerable in the socio economic front several institutions provide Institutional Credit such as:

1. Banking Institutions
2. The Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes LTD
3. Kerala State Scheduled Caste and Scheduled Tribes Development Co-operative Federation Limited. No.4351.
4. District Rural Development Agency.

## Objectives of the study

The Research paper discusses the following objectives:

1. To examine the awareness and time lag in availing institutional credit by SC/ST beneficiaries
2. To analyse the utilization of institutional credit and its impact on the socio-economic condition of SC/ST beneficiaries
3. To study the reasons for overdrafts of institutional finance by SC/ST beneficiaries

## Hypotheses

The following hypotheses are formulated based on the specific objectives set for the study.

1. Majority of the SC/ST population are not aware about the various lending scheme of the Financial Institutions.
2. The amount of credit given to the borrowers is not adequate.
3. There is no delay in granting credit to SC/ST borrowers by financial institution.
4. Majority of the borrowers have not misused the credit granted by financial Institutions.
5. Low income is the major reason for over dues.
6. There is no significant improvement in the income, employment, asset Position and standard of living of the borrowers.

## Research Methodology

The research design employed in this research work is descriptive one by using primary data. The required primary data was collected from SC/ST beneficiaries who had availed institutional loans.

## Sample Design

For the purpose of examining various aspects of credit, a multi-stage random sampling technique is designed as detailed here.

For revenue administration, the entire state is divided into 14 revenue districts. Most of the districts in Kerala show identical topography, size and distribution of population with slight regional variations. In the first stage of the study, Kerala State is selected, and it is divided into three regions-southern, central and northern. The southern region includes Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzha districts. The central region comprises of Kottayam, Idukki, Ernakulam and Thrissur districts. The northern region covers the six northern districts, viz, Palakkad, Malappuram, Wayanad, Kozhikode, Kannur and Kasargode. Based on the population from each of these regions one district is selected at random for detailed investigation. Accordingly, Thiruvananthapuram district from Southern region, Trissur district from central Region and Palakkad district from northern region will be selected.

In the second stage, a list of blocks in the selected district was obtained. There are 11 blocks in Thiruvananthapuram, 17 Blocks in Thrissur and 13 Blocks in Palakkad. One Block at random was selected from each selected district. The Selected blocks are Kilimanoor Block in Thiruvananthapuram, and Pazhayannur Block in Thrissur and Chittoor Block in Palakkad District. Thus a total of 3 Blocks were Selected for the study.

In the third stage, the panchayath with the maximum SC/ST population was identified. Accordingly two panchayaths were selected from each block. Pazhayakunnummel and Pulimath panchayath from Kilimanoor block, Pazhayannur and Thiruvilwamala from Pazhayannur and Nalleppilly and Perumatty from Chittoor Block were selected. Thus a total of 6 panchayaths were selected for the study.

In the final stage, from each panchayath, five wards were selected and in each ward 10 Beneficiaries were selected, thus the total number of beneficiaries is 300.

## Analysis of Data

Data collected through structured interview schedule were subject to data analyses. Statistical Analysis was carried out using statistical package, SPSS (version 22.0.0.0) and Microsoft Excel. The sample size is calculated using sample calculator 'Survey Monkey'. Descriptive Statistics, One sample binomial test, Chi-square test, paired t-test etc. have been used for the analysis of the data.

## Findings based on Testing of Hypotheses

1. H<sub>0</sub>: Majority of the SC/ST beneficiaries are not aware of the various lending schemes of the Financial Institutions.

Level of awareness normally depends upon the educational background of the beneficiaries. Awareness about the Scheme means knowledge about the various terms and conditions connected with the scheme. This vital information is necessary for the smooth running of the project and for ensuring its repayment. Levels of awareness of sample beneficiaries about the scheme are classified into four categories. They are Kerala State Development Corporation for SC/ST, Kerala State SC/ST Development Co-operative Federation, District Rural Development Agency and Banking Institutions. The frequency distribution of the various financial institutions is given below. The table below suggests that all the respondents are aware of banking institutions.

**Table 1**  
**Awareness About Financial Institution**

	Frequency	Percent
Kerala State Development Corporation for SC/ST	151	50.3
Kerala State SC/ST Co-operative Development	65	21.7
District Rural Development Agency	232	77.3
Banking Institutions	300	100

**Source:** Primary Data

From table 1 it is clear that 77.3% of the people know about District Rural Development Agency. The data further reveals that 50.3% of the people know about Kerala State Development Corporation for SC/ST and 21.7% have an idea of Kerala State SC/ST Development Co-operative Federation.

One sample binomial test is used to test the null hypothesis that the proportion of people who know about Kerala State Development Corporation for SC/ST, Kerala State SC/ST Co-operative Development and District Rural Development Agency is less than or equal to 0.5. The test is not conducted for banking institutions as 100% of the people surveyed know about banking institutions. The results of the test are given below.

**Table 2**  
**Awareness About Financial Institution – Test of Significance**

		N	Observed Prop.	Test Prop.	Exact Sig. (1-tailed)
Kerala State Development Corporation for SC/ST	Yes	151	.503	.50	.454
	No	149	.497		
	Total	300	1.00		
Kerala State SC/ST Co- operative Federation	No	235	.78	.50	1.000
	Yes	65	.22		
	Total	300	1.00		
District Rural Development Agency	Yes	232	.77	.50	.000
	No	68	.23		
	Total	300	1.00		

**Source:** Primary data

Table 2 suggests that the proportion of people who know about District Rural Development Agency is significantly greater than 0.5, but the proportion of people who know about Kerala State Development Corporation for SC/ST and Kerala State SC/ST Co-operative Federation is not significantly greater than 0.5. i.e., the beneficiaries are not aware of the various lending schemes of these two financial Institutions.

## 2. H0: The amount of credit given to the borrowers is not adequate

The time lag between application and sanctioning of loan is studied and the results are given in the table below.

**Table 3**  
**Time Lag in Sanctioning Loans**

Time lag	Frequency	Percent	Cumulative Percent
Up to 1 month	106	35.3	35.3
1 to 3 months	194	64.7	100.0
Total	300	100.0	

**Source:** Primary Data

Table 3 shows that almost 65% of the applications took one to three month between application and the sanctioning of loan. Only 35% took up to one month.

Paired t-test is used to test the null hypothesis that the mean difference among loan amount applied and loan amount sanctioned is equal to zero. The results are given below.

**Table 4**  
**Descriptive Statistics on Loan Disbursement Amount**

	Mean	N	Std. Deviation	Std. Error Mean
Loan amount applied	137013.333	300	123589.946	7135.469
Loan amount sanctioned	124876.933	300	107830.321	6225.587

**Source:** primary data

The descriptive statistics suggest that the mean value of loan amount applied is higher than the mean value of loan amount sanctioned. The results of the paired t test are given below.

**Table 5**  
**Result of Paired T-test for Loan Amount**

Mean difference	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
12136.400	62188.681	3590.465	3.380	299	0.001

Table 5 suggests that the mean difference in loan amount applied and the loan amount sanctioned is Rs. 12136.40 which is also significantly greater than zero ( $t(299) = 3.380$ ,  $p\text{-value} = 0.001$ ). Thus it can be concluded that the amount of credit given to borrowers is not adequate

## 2. H0: There is no delay in granting credit to SC/ST borrowers by financial institution.

Chi-square test of association is used to test the null hypothesis that there is no association among ‘the time lag between application and sanction’ and ‘institution from where credit was availed’. The results are given in table 6.

**Table 6**  
**Time Lag in Sanctioning Loans-Financial Institution wise Analysis**

	Up to 1 month	1 to 3 months	Total	Chi-square	df	p-value
Kerala State Development Corporation for SC/ST	1	99	100	110.575	3	0.000
Kerala State SC/ST Co-operative Development	6	11	17			
District Rural Development Agency	26	55	81			
Banking Institutions	73	29	102			
Total	106	194	300			

**Source:** Primary data

Table 6 illustrates that out of 102 banking institutions, 73 (72%) had a time lag of up to one month. For other institutions, almost 65% took 1 to 3 months’ time between application and sanction. It can also be concluded that there is significant association (chi-square (3) = 110.575, p-value < 0.001) among ‘the time lag between application and sanction’ and ‘institution from where credit was availed’.

## 5 .H0: Majority of the borrowers have not misused the credit granted by financial Institutions.

It was also a part of the study to find out whether the loan amounts were fully utilized by the creditors for the original purpose. The responses are given below. 70.3% of the people only partially utilized the loan amount, only 29% people fully utilized the amount and 7% did not utilize the amount in a proper way.

**Table 7**  
**Utilization of Loans**

Utilization	Frequency	Percent	Cumulative Percent
Fully utilized	87	29.0	29.0
Not utilized	2	.7	29.7
Partially utilized	211	70.3	100.0
Total	300	100.0	

**Source:** Primary data

Binomial test is used to test the null hypothesis that the proportion of people who did not fully utilize the loan amount is less than or equal to 0.5. The results are given below.

**Table 8**  
**Binomial Test on Utilization of Loans**

	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Utilized	87	.29	.50	.000
Misused	213	.71		
Total	300	1.00		

Source: Primary data

Table 7 suggests that the proportion of people who did not fully utilize the loan amount is greater than 0.5 which is found statistically significant.

**6:H0: Low return is the major reason for over dues.**

The main reasons for non-repayment of loans were low return of activity and the repayment of other debts.

**Table 9**  
**Reasons For Non-Repayment**

Non repayment	Frequency	Percent	Cumulative Percent
Low return from the activity	80	26.7	33.2
Compelling family consumption	38	12.7	49.0
Unwilling to repay	9	3.0	52.7
Repayment of other debt	114	38.0	100.0
Total	241	80.3	
Missing	59	19.7	
Total	300	100.0	

Source: primary data

Binomial test is used to test the null hypothesis that the proportion of low return from activity as the reason for non-repayment of loan is less than or equal to 0.5. The results are given below which points out that low return from activity cannot be considered as the main reason for non-repayment of loan.

**Table 10**  
**Reasons for Default -Binomial Test**

	N	Observed Prop.	Test Prop.	Exact Sig. (1-tailed)
Low return	80	.33	.50	1.000
Other reasons	161	.67		
Total	241	1.00		

Source: computed data

## 7. H0: There is no significant improvement in the income, employment, asset position and standard of living of the borrowers.

To study the improvements in basic facilities, the respondents were asked to respond the improvements in food, housing, employment, educational level of family members, infrastructure facility, accessing high durables, savings, clothing, indebtedness and transportation facility on likert scale from strongly agree to strongly disagree.

One-sample t-test was used to test the null hypothesis that the mean values of food, housing, employment, educational level of family members, infrastructure facility, accessing high durables, savings, clothing, indebtedness and transportation facility is less than or equal to 3. The results are given below.

**Table 11**  
**Descriptive Statistics on Socio- Economic Variables**

	N	Mean	Std. Deviation	Std. Error Mean
Food	300	2.147	.7025	.0406
Housing	300	3.543	1.1688	.0675
Employment	300	2.421	1.2939	.0748
Educational level of family members	300	3.190	1.0119	.0584
Infrastructure facility	300	3.147	1.0594	.0612
Accessing high durables	300	3.873	1.2765	.0737
Savings	300	3.947	1.0837	.0626
Clothing	300	2.413	.7378	.0426
Indebtedness	300	2.690	.8812	.0509
Transportation facility	300	4.327	1.3263	.0766

**Source:** Primary Data

Table 10 suggests that the mean values of housing, educational level of family members, infrastructure facility, accessing high durables, savings and transportation facility are greater than 3. The results of the one sample t-test are given below.

The results suggest that the mean values of housing, educational level of family members, infrastructure facility, accessing high durables, savings and transportation facility are significantly greater than 3. Thus there is an improvement in housing, educational level of family members, infrastructure facility, accessing high durables, savings and transportation facility after availing loan.

**Table 12**  
**One Sample T-test on Socio Economic Variables**

	t	df	Sig. (1-tailed)	Mean Difference	Decision
Food	-21.040	299	1.000	-.8533	Accept
Housing	8.052	299	.000	.5433	Reject
Employment	-7.732	298	1.000	-.5786	Accept
Educational level of family members	3.252	299	.001	.1900	Reject

Infrastructure facility	2.398	299	.009	.1467	Reject
Accessing high durables	11.850	299	.000	.8733	Reject
Savings	15.130	299	.000	.9467	Reject
Clothing	-13.773	299	1.000	-.5867	Accept
Indebtedness	-6.093	299	1.000	-.3100	Accept
Transportation facility	17.325	299	.000	1.3267	Reject

**Source:** computed data

The results suggest that the mean values of housing, educational level of family members, infrastructure facility, accessing high durables, savings and transportation facility are significantly greater than 3. Thus there is an improvement in housing, educational level of family members, infrastructure facility, accessing high durables, savings and transportation facility after availing loan.

## Conclusion

Majority of the SC/ST beneficiaries live in rural areas, so these people are not aware of the various schemes adopted by the Credit Institutions. So the Lending officers should visit the area and conduct various awareness and Training Programs relating to the various schemes, credit limit, Interest rate, repayment period and other legal formalities. The study also reveals that majority of the beneficiaries misuse the amount and hence the lending Institutions should conduct a better follow up procedure to prevent the same and at the same time to ensure that the objective of these institutional landings, i.e. their socio-economic empowerment is made possible through these lending schemes of the Financial Institutions.

## References

1. Government of Kerala, (2014).Guidelines on Rural Development, Government press, Thiruvananthapuram.
2. Economic Review, State Planning Board, TVM, February 2014.
3. Government of Kerala, (2013).Guidelines on Innovative Housing and Habitat Development Commissinerate of Rural Development, Government press, Thiruvananthapuram
4. Anilkumar K, "Scheduled Caste and Scheduled Tribes in Kerala – Institutional support of Government for social and economic growth",The journal of Business studies,VOL.5, July 2006.
5. Benson Kunjukunju, (2001).Role of Institutional Finance in Rural Development of Kerala", University of Kerala, 2001
6. Beveridge, William. (1942). Social Insurance and Allied Services, New York. Mac Millan.
7. Report of Commissionarate of Rural Development Department2005-15.
8. Report of State Level Banker's Committee, Kerala 2006 to 2014.

# A STUDY ON THE RELATIONSHIP BETWEEN SIZE OF THE FIRM AND MANAGEMENT ACCOUNTING PRACTICES IN STEEL INDUSTRY IN INDIA

Mahdi Sheikhi

## Abstract

This study tried to investigate the relationship between size of the firms and management accounting practices in Indian steel industry. Steel industry as one of the important industry in India and this industry deserve a key role in economic development. Management accounting plays important role in evaluate and reduce cost of production, size of the firms requires to applying advanced techniques of management accounting. In this study management accounting practice is measured by six variables which are; use of costing systems, use of budgeting systems, use of performance evaluation systems, use of capital budgeting techniques, use of decision support systems, use of strategic management accounting.

**Key Words:** management accounting practice, size of the firms, turnover

## Introduction

Management accounting is wide field of accounting. The term “Management Accounting” includes two words, Management and Accounting. It refers to Accounting for the Management. It links the management with accounting. Comparing with other form of accounting like financial or cost accounting, Management accounting developed recently. Management accounting is a system or procedure to develop reports from the outputs of cost and financial accounting that will assist the top management and other departments in the formation of policy, control of execution and appreciation of effectiveness. Basically it is the study of managerial aspect of financial accounting, “accounting in relation to management function”. Management accounts are prepared for internal use only, this is the basic difference between management accounting and other form of accounting. Financial and cost accounting uses accounting techniques only but Management accounting uses statistical and mathematical tools also. In management accounting, it prepares separate reports for level of management wise and department wise. It contains financial and non-financial information and forward looking nature.

## Research Question

Research problem is figured based on previous studies and after reviewing of previous studies research gap is identified, so research question is carried out from review of previous studies. The research questions is present based on the objectives of the study

Is there any relation between size of the Indian steel industry and management accounting practice?

## Literature review

**Hopper T. and Bui B. (2016)<sup>1</sup>** this article analyzed the contributions Management Accounting Research (MAR) has (and has not) madeto social and critical study of management accounting in the 25 years since its introduction. The article concluded by evaluating the contributions of Management Accounting Research against the objectives of groups recognized in the opening personal historiography. Management Accounting Research has made substantial contributions to social and critical accounting but not in serious areas endeavoring to give greater voice and impact to marginalized sectors of society worldwide. Third Sector firms, politics, civil society involvement, development and developing countries, labor, the public interest, political economy, and until lately social and environmental accounting have been neglected.

**Jamil C. Z. M., Mohamed R., Muhammad F. and Ali A. (2015)<sup>2</sup>** this research analyzed aspects and barriers which affect the practice of environmental management accounting (EMA). Survey is conducted and the institutional theory and data are collected. This research centers on small medium enterprises (SMEs) specifically, Malaysian small medium manufacturing companies. The results showed that most companies have a budget distribution for environmental activities and practice corporeal EMA. The research claimed that coercion is a leading aspect for practicing EMA and therefore, barriers to EMA improvement should be determined by the Malaysian government and other authorities.

**Amanda Curry (2014)<sup>3</sup>** The aim of this article was to spot the challenging issue of the limited study of management accounting at operational levels, and the conflicting findings from the two perspectives of management accounting research and operations management research. The objectives of the paper were to analyze management accounting and operations management literature to define how the practice of management accounting in production atmospheres has developed over time within the two research arenas, comparing management accounting and operations management literature for dissimilarities and resemblances in the practice and effectiveness of management accounting in production surroundings within the two research fields, recognize proposed challenges and solutions with management accounting at operational stages in production environments within the two research fields.

**Gornjak M. (2014)<sup>4</sup>** the science of management accounting started to grow in the eighties of the last era, the science of knowledge management in the nineties. Current businesses based on knowledge thus, knowledge management and management accounting are the important part of the company and the company's processes. The significance of knowledge is not only in knowledge itself, or the knowledge of the single or the organization, but the knowledge of applying processes in knowledge management methods, which brings to the company a competitive benefit. Organization can be more operative and have a competitive benefit in the market by changing the organizational methods of management accounting, as confirmed by the findings of research. In the theoretical model, which requires experiential research and is based on computable study, the author also tried to connected strength and directness or indirectness effect of changes in management accounting procedures on competence and innovation organizations.

### **Research methodology**

Research methodology is the backbone of every reach work to solve the research questions. In this study seven steps were followed to ensure a scientific approach in problem solving. As the first step research problem was explained to understand the issues faced in steel industry in India; secondly previous studies were reviewed to get an insight into the existing knowledge about the topic, third step was identification of variables, setting objectives and formulation of hypothesis. A well considered research design following appropriate sampling method was framed as the next step. In the fifth stage data were collected and subsequently the collected data were analysed and tested in the next stage. In the final stage findings, contributions and suggestions regarding the study about steel industry in India were reported in a lucid manner.

### **Sampling method**

In this study multi-stage random sampling was applied to ensure that optimal number of observations would be included in the sample. Multi-stage random sampling was followed in two stages which were cluster sampling and stratified random sampling. In the first stage, companies having highest net sales were identified from Bombay Stock Exchange and then 91 companies were selected and in the second phase stratified random sampling was applied to choose respondents. The respondents included three category of officials namely top managers, finance managers, accountants. Based on Cochran formula 400 observations were selected.

### **Objectives and hypotheses of the study**

*To study the relationship between size of the firm and management accounting practices in steel industry in India*  
*There is a significant and positive relationship between size of the firm and the use of management accounting*

Sub hypothesis one: There is a significant and positive relationship between size of the firm and the use of costing systems

Sub hypothesis two: There is a significant and positive relationship between size of the firm and the use of budgeting systems

Sub hypothesis three: There is a significant and positive relationship between size of the firm and the use of performance evaluation systems

Sub hypothesis four: There is a significant and positive relationship between size of the firm and the use of capital budgeting techniques

Sub hypothesis five: There is a significant and positive relationship between size of the firm and the use of decision support systems

Sub hypothesis six: There is a significant and positive relationship between size of the firm and the use of strategic management accounting,

### Analyses and discussion

**Table 1**  
**Relationship Between Size of the Firms and use of Costing System**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	157.576a	3	.000
Likelihood Ratio	31.341	3	.000
Linear-by-Linear Association	68.767	1	.000
N of Valid Cases	400		

$\chi^2 (3) = 157.57, p = 0.000$

### Discussion:

Since p value is less than 0.05 the null hypothesis is rejected. Hence it is concluded that there is a significant relationship between size of the firm and use of the costing system.

**Table 2**  
**Relationship Between Size of the Firms and use of the Budgeting System**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	277.863a	3	.000
Likelihood Ratio	58.297	3	.000
Linear-by-Linear Association	121.262	1	.000
N of Valid Cases	400		

$\chi^2 (3) = 277.86, p = 0.000$

### Discussion:

Since p value is less than 0.05 the null hypothesis is rejected. Hence it is concluded that there is a significant relationship between size of the firm and use of the budgeting system.

**Table 3**  
**Relationship Between Size of the Firms and use of the Performance Evaluation Systems**

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	117.884a	3	.000
Likelihood Ratio	23.117	3	.000
Linear-by-Linear Association	51.446	1	.000
N of Valid Cases	400		

$$\chi^2 (3) = 117.88, p = 0.000$$

**Discussion:**

Since p value is less than 0.05 the null hypothesis is rejected. Hence it is concluded that there is a significant relationship between size of the firm and use of the performance evaluation systems.

**Table 4**  
**Relationship Between Size of the Firms and use of the Capital Budgeting Techniques**

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	78.392a	3	.000
Likelihood Ratio	15.175	3	.002
Linear-by-Linear Association	34.211	1	.000
N of Valid Cases	400		

$$\chi^2 (3) = 78.39, p = 0.000$$

**Discussion:**

Since p value is less than 0.05 the null hypothesis is rejected. Hence it is concluded that there is a significant relationship between size of the firm and use of the capital budgeting techniques.

**Table 5**  
**Relationship Between Size of the Firms and use of the Decision Support Systems**

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	117.884a	3	.000
Likelihood Ratio	23.117	3	.000
Linear-by-Linear Association	51.446	1	.000
N of Valid Cases	400		

$$\chi^2 (3) = 117.88, p = 0.000$$

## Discussion:

Since p value is less than 0.05 the null hypothesis is rejected. Hence it is concluded that there is a significant relationship between size of the firm and use of the decision support systems.

**Table 6**  
**Relationship Between Size of the Firms and use of the Strategic Management Accounting**

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	78.392a	3	.000
Likelihood Ratio	15.175	3	.002
Linear-by-Linear Association	34.211	1	.000
N of Valid Cases	400		

$$\chi^2 (3) = 78.39, p = 0.000$$

## Discussion:

Since p value is less than 0.05 the null hypothesis is rejected. Hence it is concluded that there is a significant relationship between size of the firm and use of the strategic management accounting.

## Conclusion

This study investigated the relationship between size of the firms from steel industry in India and management accounting practices. Results of the study shows that while size of the firm as measured by net sales is large, so, the management accounting practices and its techniques more followed by the firms. This study shows that using of costing system, budgeting system ,performance evaluation systems, capital budgeting techniques, decision support systems and strategic management accounting in steel industry in India is at high level. The reason is that the size of the companies makes their internal reports for managers more complicated and large companies in steel industry are interesting to follow these techniques for internal purposes. The main finding of this study is size of the firms has positive and significant effect on management accounting practices and its techniques.

## References

- Hopper, T., & Bui, B. (2016). Has management accounting research been critical?. *Management Accounting Research*, 31, 10-30.
- Jamil, C. Z. M., Mohamed, R., Muhammad, F., & Ali, A. (2015). Environmental management accounting practices in small medium manufacturing firms. *Procedia-Social and Behavioral Sciences*, 172, 619-626..
- Curry, A. (2014). The use of management accounting in the social interplay between management accountants and operations managers in mining production environments. *Sort*, 20(50), 100.
- Gornjak, M. (2014). Knowledge Management and Management Accounting. In *Human Capital without Borders: Knowledge and Learning for Quality of Life; Proceedings of the Management, Knowledge and Learning International Conference 2014* (pp. 1349-1359). To Know Press.

# A STUDY ON CONSUMERS' DILEMMA TOWARDS CELEBRITY ENDORSED ADS AND NON-CELEBRITY ENDORSED ADS

Divya V.P.

## Abstract

Endorsing products with the help of celebrities have become a common practice among the FMCG producers and hence celebrities have been used extensively in advertisement to push their products and brands. This is especially true for shopping, specialty and luxury items of consumer products. The present study begins with the review of earlier studies available on celebrity endorsements and has confirmed that using celebrities would influence consumers' attitude and would also increase the rate of acceptance among consumers towards a particular product or / and brand in FMCG. This study attempts to analyse the consumers' attitude towards celebrity and non-celebrity endorsed ads and their influence on purchase behaviour. The data were collected through an interview schedule from a sample of 180 consumers from selected cities of Wayanadu district and analyzed with SPSS package using some of the major statistical tools such as Mean, percentage analysis, Chi-square and rank correlation analysis. Respondents were asked to rate their perception on different aspects related to celebrity and non-celebrity endorsements shown in the interview schedule on a five point Likert scale. The results found that there exists a significant relationship between consumers' attitude towards celebrity endorsed ads and non-celebrity endorsed ads. It is also found that there is no significant correlation between celebrity endorsed ads and non-celebrity endorsed ads by considering the purchasing behaviour of consumers.

**Key Words:** Celebrity, Endorsement, FMCG, Brand Recall

## 1. Introduction

Fast Moving Consumer Goods (FMCG) are popularly named as consumer packaged goods. Items in this category include all consumables (other than groceries/pulses) people buy at regular intervals. The most common in the list are toilet soaps, detergents, shampoos, toothpaste, shaving products, shoe polish, packaged foodstuff, and household accessories and extends to certain electronic goods. These items are meant for daily frequent consumption and have a high return. The Indian FMCG sector is the fourth largest sector in the economy with a total market size in excess of US\$ 13.1 billion

Business organizations spend hundreds of crores of money every year for celebrity endorsement. Using celebrities for endorsing brands has become a trend among marketers in promoting their brands as well as the company's image. Promotion of a company's products through these celebrities is called as celebrity endorsement. The company makes use of the celebrity's qualities and characteristics to establish an analogy with the products specialties with an aim to position them in the minds of the target consumers.

Alsmadi (2006) defined a celebrity as , "A well-known personality who enjoys public recognition by a large share of a certain group of people". According to Shimp (2003) "celebrity is a well known personality 'actor, entertainer, or athlete' who is known to the public for his or her accomplishment in areas other than the product class endorsed". Advertisers have attempted to quantify and qualify the use of celebrities in their marketing campaigns by evaluating their awareness, appeal, and relevance to a brand's image and the celebrity's influence on consumer buying behavior. Celebrities include film stars, sports personalities, talk show personalities, politicians and all the others who have the charisma. Endorsing a celebrity does not give guarantee for sales but they play a key role in purchase decision making process. It can create a buzz and make consumer feel better about the product, which in turn give a sense of trust and belongingness of celebrity towards that brand. This paper makes a sincere attempt to measure the attitude of customers towards celebrity and non-celebrity endorsed ads in FMCG.

## 2. Literature Review

**Khushboo Makwana, Anuradha Pathak and Chandan Maheshkar (2015)** found that there is no considerable impact of celebrity endorsement on branding of FMCG products in Indian small towns. The study also revealed that the celebrity endorsement is not significantly influencing the brands and its undertaken factors such as brand positioning, brand identity, brand image etc. and further, consumer perception and behavior is not affected by celebrity endorsement. They further added that since rural consumer is different from urban consumers in terms of their lifestyles and the kind of choices they made, celebrity endorsement does not guarantee for sales in rural areas.

**J. Sridevi (2014)**, undertook a study to measure the effectiveness of celebrity advertisement on a group of selected FMCG. She concludes that compared to an ordinary person celebrity advertisements have a significant effect towards FMCG and a well established celebrity with a positive image which is in harmony with a product being advertised would definitely influence consumer behavior.

**Anagha Shukre & Neha Dugar (2013)**, made an attempt to specify the impact of using celebrity endorsers in advertisements on purchase intentions of customers related to FMCG products. They made it clear that there should be an explicit fit between celebrity and the brand. They also proved that celebrity endorsement has a strong effect on consumers' memory and learning approach too. They further added that marketers should take care of the gender of the celebrities endorsing the product as it matters to the consumers.

**Ms. Anmol Randhawa and Mr. Javeed Ahmed Khan (2014)**, in their study found that celebrity endorsement enhances product information and creates awareness among consumers. Celebrity Endorsed Ads persuade customers to purchase products rather than non celebrity endorsed Ads and other types of ads and also help them to recall the brands easily. However, the purchase attitude is influenced by the Quality of the products rather than endorsement factors, price of the product, Discounts and offers etc. According to them frequent changes in celebrity for advertising the product reduce the purchasing decision of customers.

**Garima Malik (2014)** revealed that people from urban and rural areas have interest in celebrity endorsements and have same opinion but the degree of effectiveness is high in rural area. From the study, it is proved that celebrity endorsement has a major and significant role in enhancing the brand awareness and brand image and also ultimately affects the consumer buying intention. It was found that attributes like popularity, trustworthiness, attractiveness, entertaining personality of the celebrity are not very important factors affecting purchase decision but smartness of the celebrity affects purchase decision.

**Dr. Saroj Kumar Dash & Mr. Deepti Ranjan Sabat (2012)** conducted a study to understand the demographic aspects behind a company's choice of celebrity endorsement as part of its promotional strategy while positioning its brand to a particular market segment. Their research result suggested that the use of celebrity endorsers in TV commercials could be effective in influencing attitudes and purchase intentions, but the success of the use of celebrity endorsers varies across different products. The researchers conclude that the organizations should go for celebrity as endorser in TV ads with a clear demographic perspective of the target audiences since demography make a significant difference of the psyche of the consumers.

**Sajana K V & S. Nehru** attempted to study whether celebrity endorsement truly contributes to the information search of consumers about a product and its influence on the purchase decision process of consumers. It is found that the consumer satisfaction mainly depends on the quality and promptness of the service rendered, above and beyond celebrity endorsement and replacement guarantee. According to them, the pleased customers recommend the product to their friends and relatives, by recalling the celebrity advertisements of the brand which leads to the enhancement of sale of the particular branded product.

### 3. Objectives

1. To study the relationship between consumer attitude towards celebrity endorsed and non-celebrity endorsed ads
2. To study the significant correlation between consumer buying behaviour and celebrity and non-celebrity endorsed ads

### 4. Methodology

The study is descriptive and analytical in nature. Both secondary and primary data were used for the present study. Primary data were collected from three major business towns of Wayanad district namely Bathery, Mananthavadi and Kalpatta, Being the district head quarters Kalapatta was taken for this study and similarly the other two cities - Bathery and Mananthavadi-were taken due to their proximity to Mysore and Kozhikode and also the fact that the highway passes through the district so that people from Wayanad are found moving to these cities for business and commerce and also for other employment opportunities. Data were collected through an interview schedule. Consumers were categorized into five groups according to consumer behaviour i.e., Frequent buying consumers, Occasional buying consumers, Branded product buying consumers, Cheap costly item purchasing consumers, High costly item purchasing consumers. A sample size of 180 consumers consisting of 60 respondents each from the three cities was taken for the study. 60 consumers were again classified into five category of consumer behaviour.

**Table 1**  
**Sample Distribution**

<b>Consumers</b>	<b>Bathery</b>	<b>Mananthavadi</b>	<b>Kalpatta</b>
Frequent buying consumers	12	12	12
Occasional buying consumers	12	12	12
Branded product buying consumers	12	12	12
Cheap costly item purchasing consumers	12	12	12
High costly item purchasing consumers	12	12	12
Total	60	60	60

**Source:** Survey Data

### 4. Hypothesis

The hypotheses set for this study are:-

H<sub>0</sub>- There is no significant relationship between Consumer attitude towards Celebrity and Non-celebrity endorsed ads

H<sub>0</sub>- There is no significant correlation between Celebrity endorsed ads and Non-celebrity endorsed ads by considering consumer buying behaviour

## 5. Discussion and Analysis

In order to ensure accuracy and consistency of the interview schedule it was pre-tested over 20 % of total sample and made changes accordingly. Reliability of the measure was assessed with the use of Cronbach's Alpha. The Cronbach's Alpha of the interview schedule was 0.760. As a general rule, a coefficient greater than or equal to 0.7 is considered acceptable. Hence, it was found reliable for further analysis.

### 5.1. Demographic characteristics of the Respondents

The demographic profile of the respondents are listed vide Table 2 below which shows that 55% of the respondents are male consumers and the remaining 45% are female consumers. Most of the respondents (39.44 %) belonged to the age group of 31-40 followed by 21.11 % in the 41-50 age group. Only 8.88 % belonged to the age group of below 20. It is further understood that majority of the respondents are self employed (30%) followed by 22.77 % who carry on business activities; 19.44 % serve as government employees, 17.22 % are students and the remaining 10.55 % belonged to profession. The Table further illustrates that 14.44 % of consumers have income below Rs.50,000 followed by 46.66 % consumers belonging to 50001-100000 category, 25% falls in the group 100001-200000, 8.88 % in the group 200001-250000 and only 5 % belonged to above 250000 group.

**Table 2**  
**Demographic Characteristics**

SL No	Characteristics	Variations	No of Respondents	Percentage
1	Gender	Male	99	55
		Female	81	45
		Below 20	16	8.88
2	Age	21-30	36	20
		31-40	71	39.44
		41-50	38	21.11
		Above 50	19	10.55
3	Occupation	Government Employee	35	19.44
		Student	31	17.22
		Business	41	22.77
		Self employed	54	30
		Profession	19	10.55
4	Income	Below 50000	26	14.44
		50001-100000	84	46.66
		100001-200000	45	25
		200001-250000	16	8.88
		Above 250000	9	5

**Source:** Primary

## 5.2. Consumer Attitude towards Celebrity Endorsed Ads and Non-Celebrity Endorsed Ads

A total of six variables were identified by the researcher through prior studies, observation and personal discussion with the ad promoters and experts. The variables are: V1-Product quality assured, V2-Fair price stage, V3-Capturing attention, V4-Easy identification of products, V5-More convincing and V6-Induced to purchase.

**Table 3**  
**Consumers' Attitude towards Celebrity Ads and Non-Celebrity Ads**

Consumers	Variables	Ch-Square	P-Value
Frequent buying consumers	V1, V2, V3, V4, V5, V6	16.167	.000
Occasional buying consumers	V1, V2, V3, V4, V5, V6	12.500	.002
Branded product buying consumers	V1, V2, V3, V4, V5, V6	10.500	.005
Cheap costly item purchasing consumers	V1, V2, V3, V4, V5, V6	11.556	.009
High costly item purchasing consumers	V1, V2, V3, V4, V5, V6	7.167	.028

Source: Survey Data, df- 2. Sig. 0.05

Table 3 explains the attitude of consumers towards celebrity endorsed ads and non-celebrity endorsed ads. 5 point measurement scale was used in the interview schedule. Chi-Square test was used to analyze the collected data. Here the table shows the 5 category of consumers according to the buying behaviour and whole category got p-value less than the level of significance. Thus the result depicts that the attitude of all the 5 category of consumers has significant relationship towards celebrity ads and non-celebrity ads. Thus the researcher rejects the null hypothesis and accepts the alternative hypothesis that there is a significant relationship between consumers' attitude towards celebrity endorsed ads and non-celebrity endorsed ads.

## 5.3. Purchase Behaviour

Consumers' purchase behaviour is shown in table 4. Purchase behavior of 5 categories of consumers was analyzed by using mean score. Ten questions relating to purchase behaviour of consumers towards celebrity endorsed ads were raised by the researcher. 5 point measurement scale was used. T1 represents the frequent buying consumers, T2 represents occasional buying consumers, T3 represents branded products buying consumers, T4 represents Cheap costly item purchasing consumers and T5 represents High costly item purchasing consumers.

**Table 4**  
**Purchase Behavior of Consumers towards Celebrity Endorsed Ads**

Variables	T1	T2	T3	T4	T5
Celebrity ads motivate me to purchase a product	3.24	2.87	3.21	3.12	3.41
Celebrity ads assured the quality of products	3.12	2.54	3.17	3.21	3.01
Beauty of celebrity and ads motivates me to purchase the product rather than price	3.01	1.18	4.92	1.02	3.89
Beauty of celebrity and ads motivates me to purchase the product rather than quality	4.21	2.02	3.60	3.21	3.61

Beauty of celebrity and ads motivates me to purchase the product rather than brand	3.67	1.67	3.09	3.21	3.79
Beauty of celebrity and ads motivates me to purchase the product rather than offers and special features	2.93	1.02	3.76	2.31	3.74
My favorite celebrity ads help me to easy identification of products in the shop	4.56	3.87	3.12	3.78	3.90
Celebrity ads force me to purchase a product when shopping	2.13	1.01	3.94	1.84	3.86
Celebrity ads give us details of products and that made me purchase products	2.78	2.52	2.64	2.01	2.54
Celebrity ads made me feel good about products that made me purchase	3.72	1.56	4.51	2.67	4.01

**Source:** Survey Data

**Type 1 Consumers:** Here, majority of the consumer agrees that celebrity endorsed ads influence their purchase behaviour but simultaneously they opine that celebrity ads do not force them to purchase products. Beauty and favorite celebrity ads more influenced their purchase behaviour.

**Type 2 Consumers:** Celebrity ads do not matter for occasional buyers, they only agree that their favorite celebrity ads help them in easy identification of products in the shop.

**Type 3 Consumers:** The result shows that celebrity ads made huge influence on branded product buying consumers. They give more priority to celebrity ads than the other factors like price, quality, offers and special features. They also opined that celebrity ads do not force them to purchase a product.

**Type 4 Consumers:** The results show that celebrity endorsed ads also motivate cheap costly buying consumers to purchase products but they are more conscious about the price of products than the ads.

**Type 5 consumers:** The result depicts that celebrity endorsed ads influence the purchasing behaviour of high costly item purchasing consumers.

**Table 5**  
**Purchase Behavior of Consumers towards Non-Celebrity Endorsed Ads**

Variables	T1	T2	T3	T4	T5
Non-celebrity ads motivate me to purchase a product	2.10	2.01	3.01	1.90	3.25
Non-celebrity ads assured the quality of products	1.89	1.43	2.09	1.34	3.21
Beauty of Non-celebrity and ads motivates me to purchase the product rather than price	1.89	1.59	4.21	1.23	4.23
Beauty of Non-celebrity and ads motivates me to purchase the product rather than quality	3.01	2.53	3.92	1.78	3.21
Beauty of Non-celebrity and ads motivates me to purchase the product rather than brand	2.42	2.01	2.06	1.74	3.12
Beauty of Non-celebrity and ads motivates me to purchase the product rather than offers and special features	2.78	2.06	3.67	1.43	3.98
My favorite Non-celebrity ads help me to easy identification of products in the shop	1.90	2.76	3.41	1.67	4.27
Non-Celebrity ads force me to purchase a product when shopping	1.67	2.56	2.06	1.45	3.98

Non-Celebrity ads give us details of products and that made me purchase products	1.32	1.54	1.84	1.90	2.54
Non- Celebrity ads made me feel good about products that made me purchase	1.07	1.80	1.93	1.23	4.67

**Source:** Survey Data

Table 5 shows the result of purchasing behaviour of consumers towards the non-celebrity endorsed ads.

**Type 1 consumers:** Majority of them opined that a non celebrity ad doesn't affect their purchasing behaviour.

**Type 2 consumers:** Majority of them opined that non celebrity ad doesn't influence their purchasing behaviour.

**Type 3 Consumers:** The result shows that non-celebrity ads influence the purchasing behaviour of branded product buying consumers. Also they opined that non- celebrity ads doesn't give much information about products details.

**Type 4 Consumers:** The result depicts that non- celebrity endorsed ads doesn't influence the purchasing behaviour of cheap costly items purchasing consumers.

**Type 5 consumers:** The result explains that non-celebrity ads influence the purchasing behaviour of high costly item purchasing consumers.

#### 5.4. Correlation between Celebrity Endorsed ads and Non-Celebrity ads by considering Purchasing Behaviour of Consumers

**Table 6**  
**Correlation Between Celebrity Endorsed ads and Non-Celebrity endorsed ads**

Correlation		Celebrity Endorsed Ads	Non-Celebrity Endorsed Ads
Celebrity Endorsed Ads	Pearson Correlation	1	.321
	Sig. (2-tailed)		.091
	N	180	180
Non-Celebrity Endorsed Ads	Pearson Correlation	.321	1
	Sig. (2-tailed)	.091	
	N	180	180

**Source:** Survey Data. Sig. 0.025 (2-tailed)

Table 6 shows the Pearson correlation result. The result shows that there is weak correlation (.321) between Celebrity endorsed ads and Non-celebrity endorsed ads and p-value got is more than significant level (0.025). Thus the result accepts the null hypothesis that there is no significant correlation between celebrity endorsed ads and non-celebrity endorsed ads by considering the purchasing behaviour of consumers.

## 6. Findings

The study on Consumers' Dilemma Towards Celebrity Endorsed Ads and Non-celebrity Endorsed Ads shows that there exists relationship between the attitude of all the five category of consumers towards celebrity and non-celebrity endorsed ads. It means that the consumers who were attracted by both celebrity ads and non-celebrity ads have some common characteristics with regard to ad and product components such as quality ,

price, capturing attention, product identification etc. The study revealed that celebrity ads made huge influence on branded product buying consumers and high costly item purchasing consumers while the other category of consumers are not much influenced by celebrities. However, they agree that with the help of celebrity ads they are motivated to buy the product to some extent. It is also found that non-celebrity ads also influence the purchase behaviour of FMCG consumers to some extent. But it does not force them to buy the same. This study further found that there is no significant correlations exist in between Celebrity Endorsed ads and Non-Celebrity ads by considering Purchasing Behaviour of Consumers.

## 7. Conclusion

This research focused on studying consumers' attitude towards celebrity and non-celebrity endorsed ads and also whether these ads influence their purchasing behaviour. From the study it is evident that celebrity ads are more influencing the purchase behaviour among branded and high costly item purchasing consumers. The ultimate aim of every endorser is to make the potential buyer a regular, loyal and delightful consumer. Meanwhile, it is found that these ads do not push them to buy the product, which is a serious vow as far as FMCG producers and marketers are concerned. So appropriate strategies should be incorporated in their endorsement campaigns to significantly influence and force these groups to buy the product. Similarly, it is found that non-celebrity ads do not provide much information about the product features. Hence companies focusing on non-celebrity ads should include more information about their products so that they could win over the confidence of people in the market.

## 8. Reference

1. Khushboo Makwana, Anuradha Pathak and Chandan Maheshkar (2015), Impact Of Celebrity Endorsement on Branding of FMCG Products in Indian Small Towns, *Pacific Business Review International* Volume 8, Issue 4, pp 1-8
2. Dr.J.Sridevi (2014), Effectiveness of Celebrity Advertisement on Select FMCG –An Empirical Study, *Procedia Economics And Finance* 11, pp 276 – 288
3. Dr. Anagha Shukre & Neha Dugar (2013), Effect of Celebrity Endorsements on Consumers' Decision-Making Processes: A Study Of Television Advertisements For Selected FMCG Products, *International Journal Of 360o Management Review*, Vol. 01, Issue 01, ISSN: 2320-7132, Pp 1-17m
4. D. Ganesan, Dr. M. G. Saravananaraj and A.Pughazhendi (2012), A Study on Effectiveness of Celebrity Endorsements Towards Television Viewers Perceptive in Salem City, Tamilnadu, India. *IJMIE*, Volume 2, Issue 4 ISSN: 2249-0558
5. Kumar Na & Joseph J (2014) A Study On Consumer Behavior Towards FMCG Products Among The Rural-Suburban Hhs Of Ernakulam. *J Glob Econ* 2:127. Doi:10.4172/2375-4389.1000127
6. Ms. Anmol Randhawa and Mr. Javeed Ahmed Khan (2014), Impact Of Celebrity Endorsement On Consumer Buying Behaviour, *International Journal Of Business Management* ISSN No.:2349-3402 Vol. 1(2), Pp 170-189, [www.Imjb.Co.In](http://www.Imjb.Co.In)
7. Nadia Nasir, Shabnam Khan, Pirzada Sami Ullah Sabri And Sobia Nasir (2016), Human Resource Management At The Superior College., 17-Km Raiwind Road, Lahore, Pakistan, Celebrity Endorsement And Consumer Buying Intention With The Mediating Role Of Brand Performance: An Empirical Consumer Perception Study In FMCG Sector Of Pakistan., ISSN 1013-5316; Coden: Sinte 8 *Sci.Int.(Lahore)*,28 (1),617-624.
8. Dr. Garima Malik (2014), Comparative Analysis Of Celebrity Endorsements On Rural And Urban Areas With Reference To FMCG Sector, *Pacific Business Review International* Volume 7, Issue 1
9. Dr. Saroj Kumar Dash & Mr. Deepti Ranjan Sabat (2012), The Impact Of Celebrity Endorsed TV Commercials On Demographic Dynamics Of Attitude: An Indian, Iracst- *International Journal Of Research In Management & Technology (Ijrmt)*, Issn: 2249-9563 Vol. 2 No.2, Pp 192-204
10. Al-smadi Sami (2006). *Business & Management, Journal of Accounting*, 13, pp 69-84.
11. Shimp, T. (2003). *Advertising & Promotion: Supplemental Aspects of Integrated Marketing Communications*, sixth edition, Dryden Press, New York
12. SAJANA .K .V & Dr. S. NEHRU, Effectiveness of Celebrity Endorsement on Brand Recognition with Special Reference to Trivandrum city, Kerala. *IOSR Journal of Business and Management (IOSR-JBM)* e-ISSN: 2278-487X, p-ISSN: 2319-7668 PP 91-96

# Estimation of Employment Generation in Kerala's Tourism Sector: An Evaluative Study

\*Dr. A. Basheer & \*\*Aneesh. B

The adoption of tourism as a development strategy is commonly based on the benefits that tourism brings to the people at destinations. One of the most frequently reported benefits of tourism is the generation of employment for those who live in the localities and for those in surrounding areas or who temporarily migrate in search of tourism income. The contribution of tourism to employment at a macro level has been largely documented; at micro level very little is known about the effects of tourism on employment. These effects are shaped by the specific characteristics of the tourism employment held by each individual.

The characteristics of tourism employment have been commonly cited by scholars. Attributes such as low income, seasonality and low wages, to mention some, have been used to describe tourism employment. Since most of these characteristics are commonly applicable to various destinations, it is reasonable to believe that such characteristics are not ever-present in the so called tourism industry. This recognition makes sense if we take into account that the socioeconomic, cultural and political conditions vary among different destinations. The specific qualities of tourism employment at a particular destination will be shaped by several factors like, the economic conditions existing at the destination, the social and cultural structures of local communities, and certainly the type of tourism activity.

Tourism is widely recognized as a labor intensive service sector industry. In addition to that the nature of this sector is such that the multiplier and spillover effects are generally expected to be higher than other sectors. Tourism generates employment for workers at all levels of skill and qualities (ESCAP 1996). But, with respect to income and output no direct estimates of employment in tourism sector are not possible on the basis of the prevalent scheme of generating statistics at the sectoral and sub sectoral levels. An attempt has been made in this paper to estimate the volume of employment that can be generated by tourism in India by applying an alternative methodology that uses derived coefficients from available data.

Apart from the contribution for foreign exchange earnings, the importance of tourism industry can be measured in terms of its contribution to the national income (as measured by the tourism GDP) and employment. The nature of tourism industry makes estimation of these parameters difficult as tourism is a composite sector. It generates income from a large number of activities that feature as sectors and sub sectors in the classificatory scheme of the National Accounts Statistics (NAS). Important among them are (i) Hotels and other accommodation units; (ii) Restaurants; (iii) Travel agents and tour operators; (iv) Transport services; (v) Tourist resorts and complexes; (vi) Entertainment facilities; (vii) Shopping facilities including sales outlets for curios, handicrafts, souvenirs, etc.; (viii) Conference and Convention facilities; (ix) Adventure and recreational sports facilities; and (x) Guide services. These activities provide goods and services to both the local population and tourists and therefore there is the problem of apportionment of output between tourism and non tourism components and further, within tourism, between that generated by domestic and foreign tourism.

The travel and tourism industry is one of the largest and most dynamic industries in today's globalised economy. It is expected to generate about 9 per cent of total GDP and provide more than 235 million jobs in 2010, representing 8 per cent of global employment. Last November, over 150 government, employer and worker delegates from more than 50 countries, met at the ILO's Global Dialogue Forum on 'New Developments and Challenges in the Hospitality and Tourism Sector', discussed about new developments and challenges in the sector. The Forum was opened by Mr Taleb Rifai, Secretary-General of the World Tourism Organization (UNWTO) and Mr Juan Somavia, Director-General of the ILO.

Compared to other sectors of the global economy, it is one among the fastest growing industry, accounting for more than one-third of the total global services trade. The ILO Forum addressed the high intensity of labour

\*Principal. MSM College, Kayamkulam.

\*\*Research Scholar, Sree Narayana College, Kollam.

within the industry, making it a significant source of employment and placing it among the world's top creators of jobs that require varying degrees of skills and allow for quick entry into the workforce by youth, women and migrant workers.

According to an ILO report prepared for the Forum, international tourism was affected by the global economic and social crisis but is projected to grow significantly over the coming decade. The United Nations World Tourism Organization (UNWTO) is expecting that this sector will provide worldwide 296 million jobs by 2019.

The tourism sector suffered a decline in the beginning of the second half of 2008 and intensified it in 2009 after several consecutive years of growth. A sharp reduction in tourist flows, length of stay and spending, as well as increased restrictions on business travel expenses, led to a significant contraction of economic activity in this sector worldwide.

Among the most affected sectors during the crisis was international tourist arrival, which decreased by 4 per cent in 2009, while international tourism revenues showed an increase of 6 per cent for this period. The regions hit hardest by the decline in worldwide international tourism were the Middle East (-4.9 per cent), Europe (-5.7 per cent), and the Americas (-4.6 per cent). Only Africa showed constant growth (+2.9 per cent), based on a comparatively low travel volume.

Despite the crisis, global employment in the tourism industry increased by about 1 per cent between 2008 and 2009, the report says. But there were significant regional differences with respect to the impact of the crisis on employment in hotels and restaurants. While the Americas suffered a 1.7 per cent decrease in employment, employment in Asia and the Pacific region remained resilient, gaining 4.6 per cent.

Tourism has emerged as one of the largest industries both in terms of gross domestic product (GDP) and employment in the world today (ESCAP 1999; WTTC 2004b). In 2006 tourism GDP accounted for about 10 per cent of world GDP (WTTC 2006). India also has a large unexploited potential for foreign tourism (GOI 2001). Foreign tourism has been steadily increasing in India in terms of number of tourist arrivals to the country. During the last decade and a half, the number of tourists of foreign nationality visiting India increased from 16.8 lakhs in 1991 to 33.7 lakhs in 2004. The average annual growth rate of tourism in terms of foreign tourist arrivals was about 5.1 per cent for this period.

The importance of tourism as a source of foreign exchange for India cannot be ignored. The total foreign exchange earnings from tourism increased from about USD 1861 million in 1991 to about USD 4810 million in 2004. Thus, tourism receipts recorded an average annual growth rate of about 7.02 per cent between 1991 and 2004. In 2004, it accounted for about 12.1 per cent of total services exports from India. Its share in total exports (of goods and services) in the same year was 4.2 per cent.

### **Domestic Tourist**

A domestic tourist is a person who travels within the country to a place other than his usual place of residence and stays in hotels or other hotel establishments run on commercial basis in dharmashalas, agraharas etc for a duration of not less than 24 hours or one night and for not more than 12 months at a time for pleasure, pilgrimage, social functions, business conferences and study and health programmes.

### **Foreign Tourist**

A foreign tourist is defined in line with the UN/WTO tourism statistics as any person normally living outside India (with an Indian or foreign nationality) and travelling to India for less than 12 months and "whose main purpose of the trip is other than the exercise of an activity remunerated from within the place visited." Therefore foreign tourists include foreign nationals as well as non resident Indian nationals (NRI).

### **The characteristics of tourism employment**

Several studies have examined the contribution of tourism to employment within specific destinations. Many cases including Bali (Cukier & Wall, 1993), Gambia (Farver, 1984), Hawaii (Choy, 1995), the UK (Hughes,

1982), the Seychelles (Archer & Fletcher, 1996), to mention but a few, have been documented. A large number of these investigations have examined the effect of tourism on employment at a macro or national level, and very few have focused on micro levels. Analyzing the conditions of tourism employment at micro level, in developing countries. It might be useful in understanding and explaining the diverse dimensions of employment in tourism. It may also help to explain the diverse and complex relationships between tourism and employment at regional and national levels. General observations about the “inherent” characteristics of tourism employment of Wall and Mathieson (2006), be summarised as follows:

1. Employment and income effect are closely but not perfectly related.
2. The effects of tourism employment vary by tourism activity; some tourism activities are more labour-intensive than others.
3. Many jobs are self employed, particularly in destinations where tourism enterprises are small.
4. Tourism employment is characterised by being low-wage occupations, part-time and casual.
5. Tourism employment commonly requires low skill levels and low entry requirements. Where specific skills are required, particularly in poorly developed areas, the industry often turns to outside expertise rather than provide training for local people (Cohen, 1984; Murphy, 1981).
6. Tourism employment is strongly seasonal.
7. The effects of tourism employment are frequently not visible and hence not recognised; tourism may take people from other sectors of the economy and go beyond a narrowly defined destination area.
8. Tourism employment is structured by gender; the majority of jobs in most tourism tasks are held by women, particular the low-paid, part-time and seasonal positions. It has been estimated that over 70% of tourism employees are women (Marshall, 2001).

The distinguishing characteristics of tourism employment at a global basis cannot, or should not be an easy task. This is especially true when considering that the view of what tourism employment is.

“The image of tourism as a generator primarily of low-wage and low-skill employment is a misleading one, and it underestimates tourism’s impact on overall wages and salaries. In fact, many of the jobs at the technical, managerial, and professional levels require education and training which command compensation commensurate with these qualifications” (UNWTO, 1997, p. 213-214).

The characteristics of a large number of tourism positions may concur with commonly held beliefs (see also Choy, 1995), they may also differ significantly from each other. The attributes of many, if not all, social phenomena (including employment) are rarely determined by only one factor. The characteristics and qualities of tourism employment are not to be defined exclusively by the alleged ‘nature’ of tourism, but also by the macro and specific micro economic, political and socio-cultural conditions in the destination community. Issues such as the economic development of the region, the type of tourism activity, and the existence of employment alternatives will be important factors in defining the attributes of tourism employment in each location, particularly in developing world destinations. As Mitchell and Ashley (2010, p. 39) argue, “There is little consensus about the quality of tourism employment and wages of the poor. Much depends on the specific country, its labour market and tourism seasonality, and on whether the comparison is with desired norms, other sectors, or other countries”; in summary, the specific conditions of the destination area will play an important role in defining at a micro level the characteristics of employment of any type of tourism.

A large number of studies on tourism employment have been undertaken on the basis of quantitative methods (Brown & Connelly, 1986). Quantitative approaches seem to be more reliable and more valuable for policy design and the intervention of governments due to the potential for representativeness. However, qualitative approaches offer a valuable alternative in examining the characteristics of tourism employment from the perspective of informants. Through the eyes of informants, the actual attributes of employment in ecotourism can be not only listed and described, but also explained and illustrated in depth through the experiences of those involved in ecotourism jobs. Bearing this in mind, a qualitative approach was adopted for the aim of this study. In particular, in-depth interviews, participant observation and a large number of informal conversations with employees were

used as research techniques for the collection of data. For the interviewing process, a series of guiding questions were designed to explore the specific properties of employment. Based primarily on existing literature, questions about seasonality, level of skills, wages, training, to mention some, were incorporated in the instrument. At the same time, visitations to the destination was permitted to observe certain characteristics that had not been sufficiently cited in the literature; these included issues such as staff turnover, contracts, recruitment procedure and child labour etc were incorporated in the instrument.

A study conducted in Great Britain to predict the employment potential in tourism sector, a good number of employment categories are used as a proxy to predict the employment potential in tourism sector. This employment estimate is then used to calculate the amount of tourism revenue required to generate each job i.e. 'revenue per job'. The revenue per job can be estimated by dividing the total tourism expenditure by the total number of tourism related jobs estimated from the statistics provided by the tourism department and Government.

In order to determine accurate tourism employment data a micro economic approach is developed to calculate the tourism related employment and tourism revenue required to create each job. The key sectors of tourism employment namely Accommodation, Restaurants and Attractions accounts for 60 percent of tourism expenditure. This sectoral wise analysis can provide micro level data to provide accurate estimate of tourism employment.

### **Estimating Employment in Tourism: Approaches, Methods and Data**

Three different approaches have generally been used for estimating employment in the tourism sector. They are (i) employment coefficient approach, (ii) input-output analysis approach, and (iii) computational general equilibrium analysis approach (CGE). Each of these approaches has its own advantages and limitations. The employment coefficient is the ratio of employment (number of jobs) to output. In the case of tourism, employment coefficient is derived as the weighted average of the coefficients of sectors and subsectors in which employment generated as a result of tourism. Estimating employment with the use of coefficients is straight forward method provided, data on output or income are available for the sectors concerned.

The input-output analysis has been popular among scholars, institutions and government agencies estimating the employment impacts of tourism (Dwyer and Forsyth 1998; Stynes 2001). In the input-output method, estimates for industry output for different sectors are estimated for a given aggregate tourism expenditure. Aggregate tourism-generated employment is then estimated by multiplying the tourism related output of each industry by employment coefficient (employment to output ratio) for that industry and summing estimates across industries (Dwyer and Forsyth 1998 and ESCAP 1990). Input-output method is, however, criticised for its unrealistic assumptions and inflexibility as far as changes in prices and technology are concerned.

The World Travel and Tourism Council (WTTC) estimates employment generated by Travel and Tourism Industry and Travel and Tourism Economy for various countries using the Tourism Satellite Accounts (TSA) methodology based on input output method. In India, a recent study has attempted to estimate total employment and output generated by the tourism sector using the TSA methodology (NCAER 2006). The computable general equilibrium (CGE) analysis can be described as an improvement over the input-output method. The CGE method does not suffer from some of the inadequacies of the input-output method (Dwyer and Forsyth 1998). CGE models allow for detailed analysis of inter-industry links together with price variations and supply constraints. However, setup costs of a CGE model are high in terms of hardware, software and data requirements. Thus, analysis based on CGE models is generally undertaken by large agencies such as the government and institutions that have a long term interest in monitoring an economy or specific sectors of the economy.

There have been some earlier attempts to estimate total employment due to tourism in India without distinguishing between employment effects of domestic and foreign tourism. The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) estimated the direct and indirect employment generated by tourism in India for a few years till 1989–90. The National Council of applied Economic Research (NCAER) has recently developed the first ever Tourism Satellite Account for India (NCAER 2006). This provides estimates of total output and employment generated by tourism in India again without distinguishing between domestic and foreign tourism. The TSA estimates are based on surveys on tourist expenditure pattern conducted in 2002–03 and input output tables of 1998–99.

The WTTC has been estimating country-wise annual data on employment generated in the tourism sector since 1998. Based on TSA methodology, the WTTC provides estimates of employment generated by tourism at two levels: the travel and tourism industry and the travel and tourism economy. While the former captures direct employment due to tourism, the latter includes indirect employment in the economy due to tourism. The nature of foreign tourism is very different from that of domestic tourism and therefore its effects, on the economy, in general, and specifically on employment, is likely to be different from that of domestic tourism. We have not come across any recent study that has attempted to estimate employment generated by foreign tourism in India.

The present study, attempts to estimate the size of the employment generated by tourism industry using more recent data and through some improved methodologies used in earlier studies.

The present study is an attempt to estimate direct employment generated by tourism industry in India in recent years and to make projections on employment generation for the next 10 years in domestic and foreign tourism.

For this purpose we have used the employment coefficient approach. The employment coefficients are computed for such sectors and sub sectors that provide goods and services to tourists as hotels and restaurants, transport and travel services, cultural and recreational services, trade (retail trade of food products, trade in products such as handicrafts, textiles and so on) and manufacture (food products, textiles, gems and jewellery, handicraft and so on).

## REVIEW OF LITERATURE

In order to have a clean understanding about the topic, a good number of reviews have already been done by the researchers. Details about the most relevant reviews are given below.

1. Tourism includes all activities and interplay that happens in period of tourist journey. It can contain tour planning, reaching to destination, staying, returning and many activities like that (Mansourifar, 2010)
2. Leiper (1995) said that destinations are places where people travel to and where they stay for awhile in order to have certain travel experiences, depending on the destinations' attractions. Hu and Ritchie (1993) also stated that a "tourism destination reflects the feelings, beliefs, and opinions that an individual has about a destinations' perceived ability to provide satisfaction in relation to his or her special vacation needs (p.25)."
3. New Tourism is characterised mainly by supersegmentation of demand, the need for flexibility of supply and distribution, and achieving profitability through diagonal integration and subsequent system economies and integrated values, instead of economies of scale (Fayos-Solá, 1996)
4. This new tourism phenomenon is not only influenced by economic factors but also by new cultures and a new generation of tourists. In tourism, the different destinations compete worldwide through globalisation (Saayman, 1998).
5. Tourism entrepreneurship is defined as activities related to creating and operating a legal tourist's enterprise. Legal enterprises refer to those businesses that operate on a profitable basis and seek to satisfy the needs of tourists (Saayman & Saayman, 1998).
6. Entrepreneurship and innovation are critical factors in tourism and are both central to the continued success and development of the industry, both globally and regionally (Parra López, Buhalis & Fyall, 2009).
7. Tourism entrepreneurship is defined by Koh (1996:30) and Saayman and Saayman (1997) as activities related to creating and operating a legal tourists enterprise. Legal enterprises refer to those businesses that operate on a profitable basis and seek to satisfy the needs of tourists and visitors. These enterprises include, among others, hotels, guest houses, travel agencies and tour operators. This means that persons who hawk goods or services, such as arts and crafts, to tourists are also tourism entrepreneurs, but are more often referred to as street vendors

### Objectives of the study

Following are the specific objectives set for the smooth conduct of the study.

1. To identify the present volume of employment generated in the State through different sectors of tourism.
2. To promote Entrepreneurship Development Programme as a tool for employment generation in tourism sector

3. To identify other promotional activities required in tourism sector to generate more employment.
4. To forecast the volume of employment that can be generated from tourism in future.

**Methodology**

In the estimation of employment in tourism sector in Kerala the researcher used the employment coefficient approach. The employment coefficients are computed for such sectors and sub sectors that provide goods and services to tourists as hotels and restaurants, transport and travel services, cultural and recreational services, trade (retail trade of food products, trade in products such as handicrafts, textiles and so on) and manufacture (food products, textiles, gems and jewellery, handicraft and so on).

**Definition of employment coefficient**

Employment coefficient measures the ratio between employment and output/value added in a sector/economy, and can be expressed in several ways. In this exercise we define employment coefficient for a sector as the number of workers employed in that sector for a crore of rupees of value added in that sector.<sup>8</sup> If the currency used in the computation of the employment coefficient is the US dollar, the corresponding definition of employment coefficient is given as the number of workers employed for every million US dollar worth of value added that is generated. The aggregate employment coefficient for the economy or for a composite sector such as the tourism sector is given by the weighted average of the employment coefficients of the different sub sectors that form the economy or composite sector. The estimate of total employment in the composite sector is given by the product of the total expenditure in the composite sector and aggregate employment coefficient for the composite sector.

$$eci = ni /v \quad \dots 1$$

The aggregate employment coefficient is then

$$EC = \sum wi \ eci \quad \dots 2$$

or

$$EC = \sum wi \ ni /vi$$

where  $i = 1 \dots m$  (total number of sub sectors), and

$wi$  = weight for sector  $i$

**Note:** in case of tourism, weight  $w$  of each of the sub sectors is derived from the expenditure pattern of tourists. The employment in the economy/composite sector is given by

$$\text{Employment} = EC \ \text{GDP}_i \quad \dots 3$$

Where,  $\text{GDP}_i$  is the domestic product of the economy or the composite sector. In case of a composite sector (tourism), the tourism GDP can be estimated from the sum total of all expenditures by tourists.

In order to have a clean understanding about the topic details regarding aggregate income from tourism for a period of 25 years including projections, number of employments and employment co-efficient were given in table1.

**Table 1**  
**Aggregate employment co-efficient of tourism sector in Kerala**

Total				
Year	Income	Employments		Em_coef
2001	4500.0			
2002	4931.0	690340	6.90340	140.0
2003	5938.0	766002	7.66002	129.0
2004	6829.0	805822	8.05822	118.0
2005	7738.0	899543	8.99543	116.3
2006	9126.0	1044927	10.44927	114.5

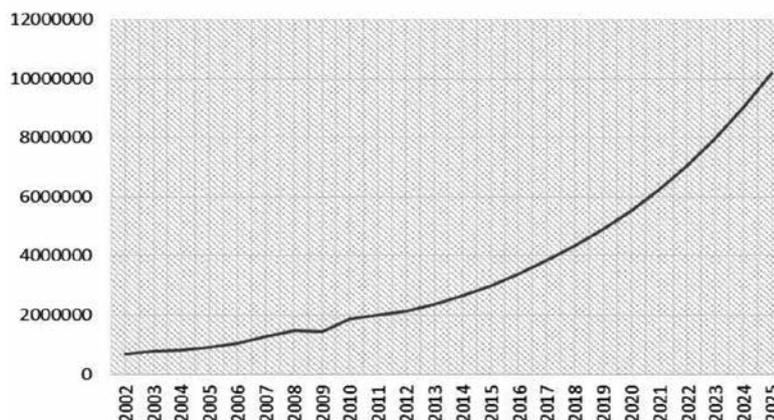
2007	11433.0	1289071	12.89071	112.8
2008	13130.0	1457430	14.57430	111.0
2009	13231.0	1445877	14.45877	109.3
2010	17348.0	1866396	18.66396	107.6
2011	19037.0	2016363	20.16363	105.9
2012	20430.0	2130366	21.30366	104.3
2013	22902.3	2351156	23.51156	102.7
2014	26287.3	2656828	26.56828	101.1
2015	30172.6	3002240	30.02240	99.5
2016	34632.1	3392558	33.92558	98.0
2017	39750.7	3833622	38.33622	96.4
2018	45625.9	4332028	43.32028	94.9
2019	52369.4	4895231	48.95231	93.5
2020	60109.5	5531655	55.31655	92.0
2021	68993.7	6250821	62.50821	90.6
2022	79191.0	7063484	70.63484	89.2
2023	90895.4	7981802	79.81802	87.8
2024	104329.8	9019508	90.19508	86.5
2025	119749.7	10192127	101.92127	85.1

**Source:** computed by the researcher

During the above mentioned period income from tourism increased from Rs.4500 crores to Rs.119749.7 crore rupees. The increase in the estimated income from tourism over a period of 25 years is enormous to a small state like Kerala, compared to growth rate attained by other sectors of the economy. The growth in the volume of employment for the above period also shows astonishing results. The decline in employment co-efficient is quite natural as the management adopts steps for cost minimization through labour saving techniques like automation and computerization. The employment co-efficient of 140 per crore of income invested in tourism sector in 2002 was estimated to decline to a level of 85 in 2025. The volume of estimated employment for the study period was based on the projected employment co-efficient figures.

Figure 1 graphically represents the pattern of growth in income from tourism sector for the study period. The results of the statistical estimates reveal that tourism segment grows in a uniform pattern as tourists prefer to travel for leisure and enjoyment, throughout their life.

**Figure 1**  
**Income from Tourism Estimated Through Trend Projection Curve Method**



The uniformity of distribution in the pattern of income reveals the trend of growth of tourism industry in Kerala.

### Major Findings of the Study

1. Tourism is a seasonal activity; the tourist season of the state extends from September to June every year and the maximum number of foreign tourists prefers to visit the state during Christmas and New Year period.
2. The volume of employment opportunity from different sectors of tourism was found uniform.
3. The volume of total income generated from tourism in Kerala in 2013 increased to 22,927 crores rupees from Rs 4500 crores in 2001.
4. The income from tourism for the period under review revealed a fluctuating trend of 7 percent to 40 percent. This variation was due to variation in the volume of tourist inflow to the state due to regional, national and international factors.
5. The projection on income and employment in this study was made for a period of 12 years extending from 2014 to 2025. During this period the estimated volume of income from tourism was 1,19,750 crores rupees where as it was only 26,287 crores in 2014, reveals a four and a half times increase (450%).
6. Employment co-efficient index was used to predict the future employment potential of tourism industry of the state. It showed a declining trend. This was due to the cost reduction and labour saving techniques adopted by the stake holders. This index declined to 85 in 2025 as against 140 in 2002. The overall decrease in the employment coefficient for the study period was estimated as 55 persons per rupee one crores of value added.
7. The trend of projection reveals that tourism industry will make tremendous growth for the projected period of 24 years. By 2025 the volume of employment opportunities in tourism sector of the state will be 101.92 lakhs as against 6.90 lakhs in 2002. This increase is to a tune of 14.77 times for the projected period.
8. Destination development leads to increased tourist inflows which in turn results in generation of additional income and employment opportunities to the State.
9. Entrepreneurship Development Programmes leads to tourism development and employment generation.
10. People migrate from other sectors in offseasons to tourism segment in search of employment.
11. Tourism employment is structured by gender; the majority of jobs in most tourism tasks are held by women, particularly the low-paid, part-time and seasonal positions
12. Tourism facilitates to improve the livelihood and standard of living of the locals at destinations

Tourism as a major social and economic activity of the day leads the state to attain rapid economic growth. High level of tourism development leads to man power development and improved delivery of services in this smokeless industry. The efficacy of Manpower Planning and Management are the basic element which determines the success behind this industry. In tourism sector, the scope and potential of economic development and employment generation is unpredictable. In the state of Kerala manpower planning is an effective tool which can be deliberately used by planners and policy makers to solve the crucial problem of unemployment.

### END NOTES

1. MANSOURIFAR, Mohammad(2010). Investigate Tourism Industry Development Barriers in MAZANDARAN. MAZANDARAN, SARI: SHELPHIN Press, 2010, 978-600-100-103-1.
2. .Hu, Y., & Ritchie, J. R. B. (1993). Measuring destination attractiveness: A contextual approach. *Journal of Travel Research*, 32(2), 25-34.
3. FAYOS-SOLÁ, E. 1996. Tourism Policy: a midsummer night's dream? *Tourism Management*. 17:6, pp 405-412. Britain: Elsevier Science Ltd.
4. SAAYMAN, M. 1998. The impact of globalisation on tourism in Africa. Paper presented at the World Leisure and Recreation Conference. Sao Paulo, Brazil. 26-30 October 1998.
5. Saayman, M & Saayman, A. 1998. Tourism and the South African Economy: Growing Opportunities for Entrepreneurs. *African Journal for Health, Physical Education, Recreation and Dance*. Vol5:1.
6. Parra Lopéz, Eduardo; Buhalis, Dimitrios; Fyall, Alan (2009). *Entrepreneurship and Innovation in Tourism*. PASOS. Revista de Turismo y Patrimonio Cultural. ISSN 1695-7121.
7. SAAYMAN, A. & SAAYMAN, M. Tourism and the South African economy: growing opportunities for entrepreneurs. 10th annual SAESBA conference, Victoria Falls, Zimbabwe. 27-29 April 1997.

### **INDIAN ACCOUNTING ASSOCIATION (IAA) KERALA BRANCH**

The Kerala branch of the IAA undertakes seminars and workshops in the area of accounting education and research it is an affiliate of IAA. For membership and more details contact: Secretary, IAA Kerala Branch, Department of Commerce, University of Kerala, Trivandrum - 695581.

Email: docuok@gmail.com

### **INDIAN COMMERCE ASSOCIATION (ICA) KERALA CHAPTER**

Indian commerce association Kerala chapter is a regional unit of the national body Indian commerce association (ICA). ICA organizes regional seminars in association with professional bodies and industrial experts. For membership and more details contact: Secretary, ICA Kerala Chapter, Department of Commerce, University of Kerala, Trivandrum -695581

Email: docuok@gmail.com

## GUIDELINES TO CONTRIBUTORS

Research Oriented Papers in the area of Commerce, Business Studies, Management and issues relating to industrial applications are invited. The length of the Paper inclusive of tables, diagrams, graphs should not exceed 15 double space pages. Book reviews and summary of Ph.D dissertations not exceeding two double space pages are invited under the Review Column. The Papers send for publication in this journal should be original in nature and not published or send for publication elsewhere.

Two Copies of the manuscript typed in double space A4 size bond paper should be submitted. Soft copy of the Paper should be send in Word format (2007 version) through a CD. All contributions will be subjected to peer review and the decision of the review committee will be final.

Follow the Author-date (Harvard) system in-text reference. Only cited works should be included in the 'References' which should appear alphabetically at the end of the Paper. Follow the reference citation strictly in accordance to the following examples.

**Book:** Narasimham N.V. 1994. A Model for the commodity price system analysis. New Delhi: Himalaya Publications.

**Journal Article:** Alagh K. 1997. Agriculture Trade and Policies. The Indian Journal of Commerce L (192):1-11 vol. No. Issue No.

**Government Publication:** Government of India, Ministry of Communications, Department of Telecommunications 1995. Annual report 1994-95. New Delhi: Government of India, Ministry of Communications, Department of Telecommunications

All copy rights are with the Researchers' Forum, Department of Commerce, University of Kerala. The authors are responsible for copy right clearance for any part of the content of their articles. The opinions expressed in the articles of this journal are those of the authors, and do not reflect the objectives or opinion of the Association.

All manuscripts should be send to the Secretary, Researcher's Forum, Department of Commerce, Kariyavattom Campus, University of Kerala, Thiruvananthapuram-695581, Tel: 9446645223,

Email: forumdept123@gmail.com

## SUBSCRIPTION FORM

Name Mr/ Ms .....

Current subscription number (if renewing) .....

Address .....

.....

.....

City/District .....

State..... PIN 

--	--	--	--	--	--

Email ..... Phone (Mobile) .....

(res/off) Std Code..... Cheque No\* / DD.No .....

Dated ..... for ₹/\$ ..... toward one year subscription of **Commerce & Business Researcher** favouring Secretary Researchers' Forum, Department of Commerce and Management, University of Kerala payable at Thiruvananthapuram. Bank Name.....

### Subscription Rates

Annual

Individuals/Scholars  ₹600

Institution  ₹1500

Student  ₹400

Single copy  ₹300