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   INTRODUCTION

   REVIEW OF LITERATURE

   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

   REFERENCES

   APPENDIX/ANNEXURE

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BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

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WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

BRAND PRIDE AS A CONSTRUCT CONTRIBUTING TO RETAINING MISSION CRITICAL TALENT OF THE ORGANIZATION: A COMPARATIVE STUDY OF SELECTED ORGANIZATIONS

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ABSTRACT

The present study is an endeavor to find out the significance of brand pride as a major construct which plays a tremendous role in retaining what we call the star performers of the organization, which is a result of multiple organizational practices to create an employer brand image & to ensure the delivery of the brand promise to the employees, leading to the creation of stable organizations . In this quest a comparative study of the selected organizations in the IT sector was conducted .The study followed the grounded theory methodology wherein the raw qualitative data was chunked under the one critical antecedent dimension of organizational people practices ; i.e the brand pride. The sampled organizations; Genpact, Infosys and Google were finalized through incidental sampling within theoretical sampling. The qualitative data was collected through 95 long interviews, participant observation and secondary data .The software, Atlas. ti was used to content analyze the data . The main findings of the qualitative study showed that retaining the star performers of the organization is a function of creating a brand pride amongst the executives at all levels in the organization which manifests itself in the brand delivery and the brand image of the organization. The sub-constructs that evolved under brand delivery were: I. Employee care (1) first experiences, (2) experience of exceptional employee care through life cycle in the job, (3) experiences of infrastructural & recreational facilities, (4) Employee friendly policies & processes ('Rigorous' in the context of ITES & 'Flexible' in the context of IT product companies) . II. Perceived fairness (5) Equal opportunity, (6) Transparent processes. III. Opportunities for learning & Development IV. Growth path for each performer through seamless opportunities for growth & advancement.

JEL CODE
M51, M52, M53.

KEYWORDS
brand pride, brand image, brand delivery, grounded theory methodology.

1. INTRODUCTION
Retaining the star performers of the organization in today's competitive business scenario is indeed quite challenging. It is in this environment that the organizations are continuously on the prowl to outline the strategies to retain the best of the talent available which is the need of the hour. This could be attributed to a number of reasons, the prime being the paucity of the really talented people around in the face of phenomenal demand or due to the reverse trend of business causing a large number of professionals to be on the bench. In either case the onus of retaining the existing supply of the talented people lies on the organizations only. This calls upon the organizations to build up extremely strong muscle to keep up the motivation, commitment and the engagement of the people at an all time high to save the organizations from the so called' Executive Exodus'. The present study was conducted to explore the significance of creating brand pride as an organizational people practice for executive retention.

2. REVIEW OF LITERATURE
Brand Pride: This is a term given to the positive emotion that an employee feels as a result of being a part of the organization. **Brand Image:** it has come out as one of the most grounded constructs encompassing the following sub constructs: (1) brand social visibility, (2) perceived value attributed to products, services or work ethics, (3) size of the operation and stature in comparison to competition, (4) starting salary package (5) perceived culture on employee care (6) comfortable infrastructural & recreational facilities (7) perceived inspirational leadership (8) contribution to society. **Brand Delivery:** has also come out as a critical factor which states that most of the image elements are experienced by the employees on their job. For example employees see policies that are sensitive to their life outside office, or they see that there is actually a shared respect for the top leadership, or they experience great infrastructure (hygiene factors). Brand delivery starts at the time of an individual joining and has a significant impact at that time on whether the employee would feel high brand pride. Here is where best practices like 'giving a feel of the job before joining' or 'assigning a buddy to find your feet' etc. ensure that the new employee faces no dramatic surprises & experiences a soft landing. Additionally, the induction period or technically initial socialization goes a long way in instilling brand pride.

EXTANT LITERATURE FOR BRAND PRIDE

Brand Image: **Browne and Golembiewski (1974)** explained organizational image as a comparative structural frame that each individual develops to rate his organization in comparison with others. **Riordan et al. (1997)** suggest that organizational image reflects individual's perceptions of the actions, activities and the accomplishments of the organization and it ranks the organization in comparison with other organizations**. Dukerich et al. (2000)** have differentiated between the reputation of the organization and its external image wherein the former represents outsider's views of the organization, whereas the latter represents how organizational members think outsiders view the organization.

Researchers show how positive organizational image extrapolates to self esteem, power etc. leading to loyalty or cooperation or a negative image leads to decreased identification (**Brown & Golembiewski, 1974; Sutton and Callahan, 1987;**). On building an attractive image, **Post & Griffin (1997)** emphasize the role of corporate communications department and there have been studies on how a good organizational image attracts good people and vice- versa (**Highhouse et al., 1999; Arnold et al., 2003**). On brand image leading to commitment or loyalty or intention to quit, **Arnett et al. (2002)** enumerate benefits of branding as (1) Low employee turnover (2) An increase in service quality (3) high level of employee satisfaction (4) an improved ability to implement change in the organization. **Gadot & Zion (2004)** showed how relative brand image was an important criterion for intention to quit and join another organization. There have also been discussions on the kind of brand image leading to identification as realism (**Thorsteinson et al., 2004**); large size (**Buchanan, 2009**); integrity or social contribution (**Gorman (2007**) etc.

There have also been researches showing how communication & language go a long way in building an organizational brand image (**Duimering and Safayeni, 1998; Rafaeli, 2000; Schuler, 2004**).Finally there have been references to leadership of the organization being an important element of the brand image **Arlington, 2002; Gorman, 2007**.
Brand Delivery: included delivery of all the expectation both expressed or implicit of the employees from the organization in order to ensure that they are proud to belong to the organization. **Heger's (2007)** construct of Employee Value Proposition (EVP), comes closest. His article addresses an important business concept called Employment Value Proposition (EVP), which describes the value or benefit an employee derives from his or her membership in an organization. The EVP has been suggested to be a determinant of employee engagement and retention, both of which have an impact on critical business outcomes.
Moving on the area of psychological contract, implicit understanding (**Argyris, 1960**) or unsaid expectations (**Levinson et al.,1962**) promises, the literature saw in the recent past critical contribution by **Robinson & Rousseau (1994)**. In their view, "contemporary employment relations are in transition… psychological contracts can, when violated, generate distrust, dissatisfaction, and possibly the dissolution of the relationship itself. **Rousseau's (1990, 2001)** view has evolved and finally gave a comprehensive process on development of a psychological contract.
The antecedents of psychological contract & breach and outcomes of the same have been studied by many researchers. **Robinson (1996)** studied outcomes like performance, civic virtue behavior & intentions to remain with the organization. **McGovern, Stiles & Hope (1996)** studied impact on employee attitudes, in the face of lay offs and found that employees neither expect nor commit a long term association**. Dyne and Ang (1998)**, saw the same phenomenon in the context of contingency workers. **Turnley and Feldman (1999)** studied outcomes like employee's exit, voice, loyalty and neglected behavior. **Smithson & Lewis (2000)** show how the expectation of the young adults from their employers is undergoing a sea change. Outcomes like trust loyalty & commitment were studied by **Pate & Malone (2000).**
Recent studies on antecedents of perceived breach & its impact on attitudes, OCB, intention to quit have been studied by **Kickul (2001); Kickull, Neuman, Parker & Finkl (2001); Kickul & Lester (2001) Shapiro (2002)** where they saw a direct relationship between breach of psychological contract and negative outcomes.
Other individual constructs like employee care, fairness, learning & growth within brand delivery were also reviewed. **Bernstein Arron (1998); Michaud Laura (2002); Leigh Branham (2005); Somaya (2008)** have all set the stage for importance of initiatives like training and growth within the organizations in the context of turbulence in the environment.

3. NEED & SIGNIFICANCE OF THE STUDY
The main reason for undertaking this research was that 'executive retention' is on top of the agenda of the organizations, especially in today's knowledge economy. Looking at the other dimensions of how professionals in ITES viewed this scenario, according to '**Hansa Research**', the ITES/ BPO employees look at their jobs as a stop gap before they get into a proper career or further studies. It is a good way of earning while having fun. While there was shortage of professionals, the ones that were there added to the instability by considering their current jobs to move out from in about a year or so.
While on one hand, organizations and the government were taking steps to curtail this huge gap between the demand and the supply of qualified and talented professionals, on the other hand all the organizations in this sector were making extra effort in retaining their professionals. Organizational branding as the 'Best Employers', 'Great Place to work' etc. are nothing but by- products of the high need of organizations to attract and retain their best people. Further ,
the absence of any previous research on 'the chosen aspect of brand pride as a construct to ensure executive retention ,makes this research all the more significant.

4. STATEMENT OF THE PROBLEM
In the light of the globalized Indian economy, it becomes all the more imperative to find out how are the knowledge based IT & ITES companies coping with the trickling down of the talent from their doors . What are their strategies? What do they need to do to bring about stability in their set up? While there are a lot of surveys being conducted in India like "The Best Employer Survey" by Hewitt Associates, "Best Companies to work for" by Mercer, "Great Places to Work" by Grow Talent etc, it is yet to be seen if the same factors that make them best employers actually maintain a consistent low attrition rate. The organizations are thus making earnest efforts to check this executive exodus by creating brand pride amongst its executives which helps them in retaining the best people .Hence, this research endeavor aims at finding out the role of the organizational people practices encompassing brand pride as a major construct in retaining the star performers of the organization.

5. OBJECTIVE OF THE STUDY
To find out the role of the organizational people practices, encompassing creating brand pride amongst executives in retaining the individuals in the organization.

6. RESEARCH DESIGN
Since Brand pride, as a comprehensive construct in creating stable organizations has not been explored by the researchers so far, The Grounded Theory & Case Study methodology was chosen .The current research initiative is exploratory in nature .

POPULATION & SAMPLE

The researcher chose the best known organizations in the knowledge domain operating in India; **Infosys Technologies**, **Google India** and **Genpact**. Theoretical sampling method was used whereby the sample was selected at two levels: first at the Organization level and the second at the Employees level.

PROCEDURE ADOPTED FOR DATA COLLECTION

Participant observation notes and other documents handed over by the HR & Corporate communications department were collected. Individual one hour interviews were scheduled by HR with vintage employees across locations like Hyderabad, Chandigarh, Gurgaon, Bangalore and Jaipur. Data was collected in the form of digital audio files from interviews, and all the other data was collected again in digital word or PDF files.

TOOLS USED FOR DATA ANALYSIS

The qualitative data was analyzed by using 'content analysis software': **Atlas.ti**. This facilitated in analysis from the constant comparison of events.
Stage one was to use free codes, then these were clubbed together to form categories, and concepts. These concepts were then put together as construct families. Each construct was accompanied with a groundedness score and a density score. Only the highly grounded ones were included in the theoretical model.

7. RESULTS AND DISCUSSION
"For no matter what we achieve, if we don't spend the vast majority of our time with people we love and respect, we cannot possibly have a great life. But if we spend the vast majority of our time with people we love and respect – people we really enjoy being on the bus with and who will never disappoint us – then we will almost certainly have a great life, no matter where the bus goes. The people we interviewed from the good-to-great companies clearly loved what they did, largely because they loved who they did it with."

… **Jim Collins**

Organizational Practices leading to people stability that emerged as the most grounded were: 1) Brand Pride as a result of multiple practices to create an employer brand image & to ensure the delivery of the brand promise to the employees 2) Mission Resonance 3) Mentoring Supervisors 4) Friendships at work 5) Availability of Knowledge & Information when needed (to ensure success) 6) Opportunity to solve real problems & make a contribution 7) Nipping the negative energy at the bud.
In the current paper only brand pride as a construct in retaining the mission critical talent has been explored.

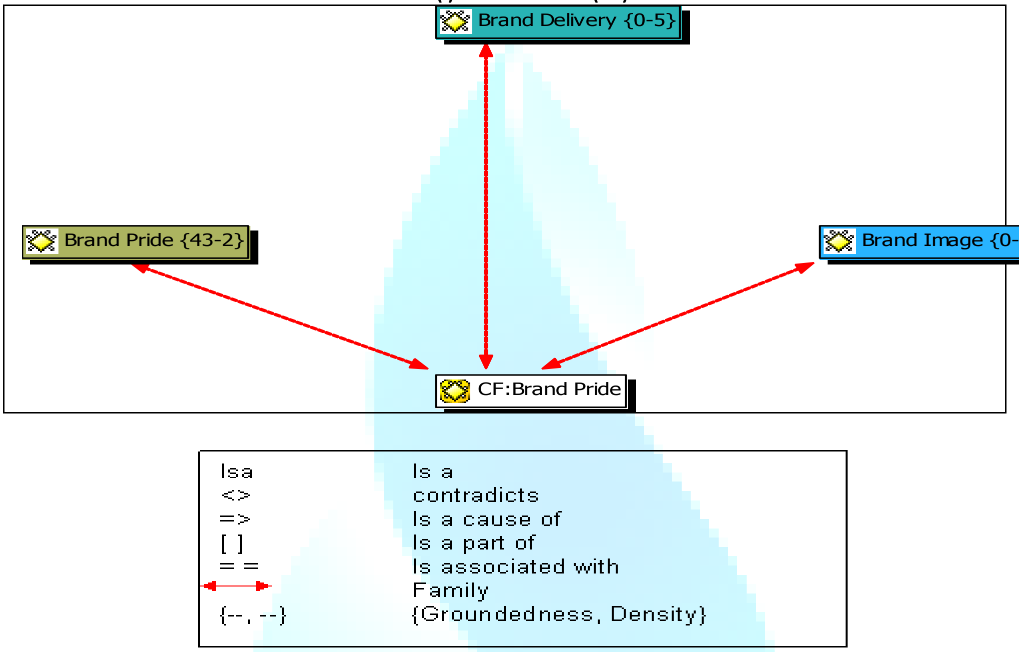
BRAND PRIDE

Brand Pride is a term given to the positive emotion that an employee feels as a result of being a part of the organization. This emotion could be due to two main reasons; due to simply belonging to the best organization in a particular field or due to working with the best people in the industry; or due to conscious organizational practices like brand image building and keeping up the delivery of the brand promise to the employees.

Brand Pride is a positive emotion that each individual belonging to the organization feels as a result of all the formal people processes (run by HR department & corporate communications department). This construct came out as the single most important factor in contributing to organizational people stability. **Cumulative groundedness of this construct is 435**, far surpassing any other. Though brand pride emerged as an independent sub construct as well, it has been used as a main construct label also. The meaning of the two is the same; however, the scope (sub constructs & related codes) differs making this higher in hierarchy as compared to the sub construct. Fig. 7(i) depicts the main construct Brand pride is a family with 3 sub-constructs.

The subsequent figures depict the three main sub constructs: 1) Brand Pride 2) Brand Image 3) Brand Delivery.

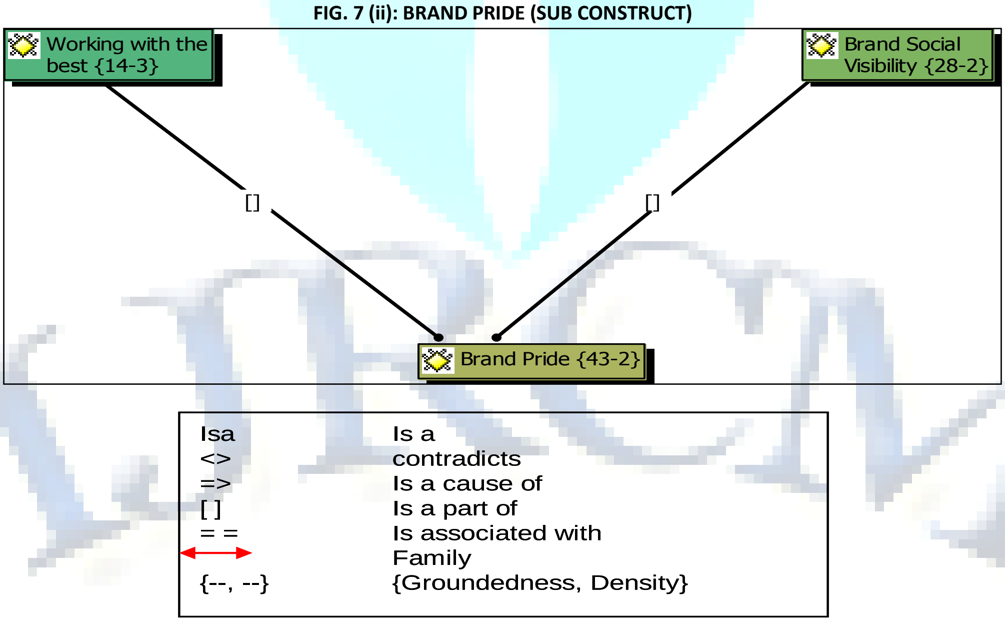
FIG. 7 (i): BRAND PRIDE (BP)



Source: Network view of construct family, Brand Pride, Atlas.ti

The sub- construct **Brand Pride** is a positive emotion felt by an employee by simply belonging to the best organization in the industry or working with the best people available in the field. The code |Brand Pride| was used where employees directly referred to their feeling proud of belonging to the organization they worked for. The following fig. 7(ii) depicts this construct Brand Pride.

FIG. 7 (ii): BRAND PRIDE (SUB CONSTRUCT)

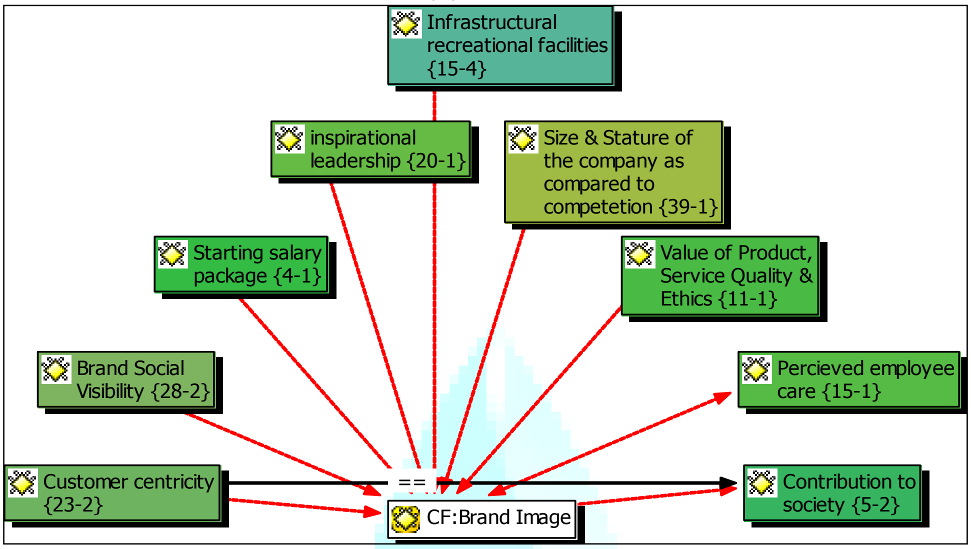


Source: Network view Brand Pride, Atlas.ti

The construct family Brand Pride has been seen to have a large number of codes clubbed within two sub-constructs. Brand Image & Brand Delivery.

Brand Image is a reputation or image that results from of conscious efforts & practices within the organization. Brand image has a cumulative groundedness score of **160**; i.e. it came as a significantly strong factor leading to people stability and retention. The key sub constructs that evolved were, size & stature of the organization as compared to the competition, social visibility, perceived employee care through luxurious infrastructural & recreational facilities & employee sensitive policies, contribution of value to customer or society & large, Inspirational leadership and starting salary package illustrated in fig. 7(iii)

FIG. 7 (iii): BRAND IMAGE



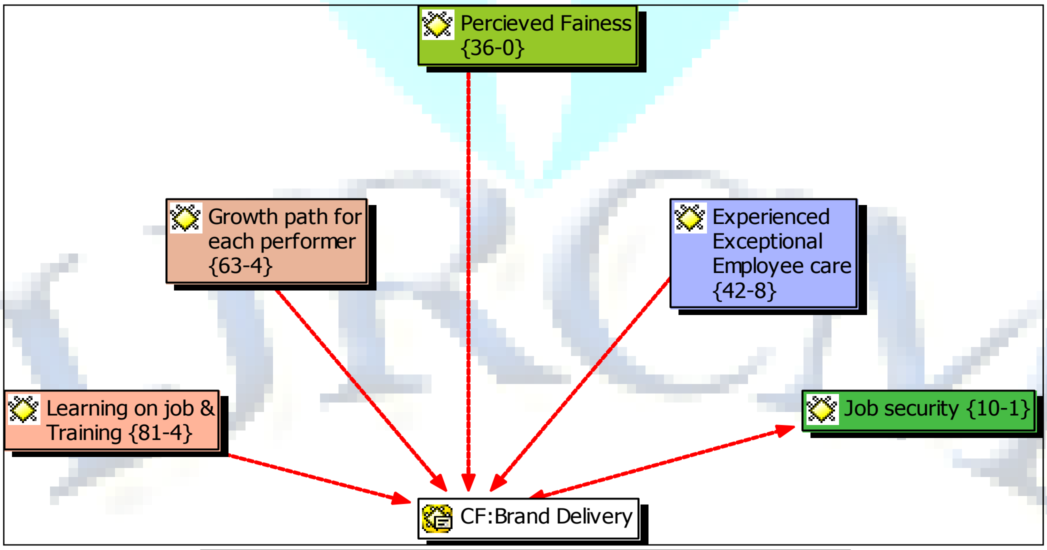
Isa	Is a
<>	contradicts
=>	Is a cause of
[ ]	Is a part of
= =	Is associated with
↔	Family
{--, --}	{Groundedness, Density}

Source: Network view of Brand Image, Atlas.ti

The above figure 7(iii) depicts the family of the construct brand image as evolved from multiple source data collection. The most grounded & dense is the size & stature of the company. During the interview probes, the researcher asked a hypothetical question 'if another organization were to pay double the salary, what all would occur to you?' The answers or counter questions to this gave a clue to how important the size & social stature of the organization was. Directly linked to size, were issues like growth & learning, which formed important construct under brand delivery. The code |Social Visibility| was given to statements like 'somebody in family or friends knew about the company and highly recommended joining it. Another related term that came was |Leadership|; most people were attracted to Genpact (erstwhile GE) because of Jack Welch, or to Infosys because of Narayan Murthy. Here leadership just connotes the reputation & visibility of the learder/ founder team. As this construct came as a strongly grounded construct in the Organizational Strategic Factors, it has been described in detail there.

Brand Delivery essentially means delivering to the employee all that the brand promises. It starts at the time of an individual joining and has a significant impact at that time on whether the employee would feel high brand pride. Here is where best practices like 'giving a feel of the job before joining' or 'assigning a buddy to find your feet' etc. ensure that the new employee faces no dramatic surprises & experiences a soft landing. Additionally, the induction period or technically initial socialization goes a long way in instilling brand pride. Fig 7(iv) shows all the sub- constructs in the family of brand delivery.

FIG.7 (iv): BRAND DELIVERY



Isa	Is a
<>	contradicts
=>	Is a cause of
[ ]	Is a part of
= =	Is associated with
↔	Family
{--, --}	{Groundedness, Density}

Source: Network View of construct family, Brand Delivery, Atlas.ti

The sub-constructs that evolved under brand delivery were: I. **Employee care** (1) experience of exceptional employee care through life cycle in the job, (2) experiences of infrastructural & recreational facilities, (3) Employee friendly policies & processes ('Rigorous' in the context of ITES & 'Flexible' in the context of IT product companies) (4) Variety of rewards & recognition . II. **Perceived fairness** (5) Equal opportunity, (6) Transparent processes. III. Opportunities for **learning & Development** IV. **Growth path for each performer through seamless opportunities for growth & advancement.** As clear from the fig. 7(iv), the cumulative grounded ness score of brand delivery is 232, with learning & development and growth opportunities being large sub-constructs.

8. FINDINGS OF THE STUDY

This research study endeavors at finding out the role of the organizational people practices encompassing brand pride as a major construct in retaining the star performers of the organization.

The study was carried on in the selected organizations in the IT & ITES sector to explore what these knowledge based companies are doing to retain their mission critical talent. And it was found out that creating brand pride amongst the executives was a sure shot recipe for retaining people in the organizations.

T he grounded theory and case study methodology was adopted to sail through the process of data collection in the selected organizations.

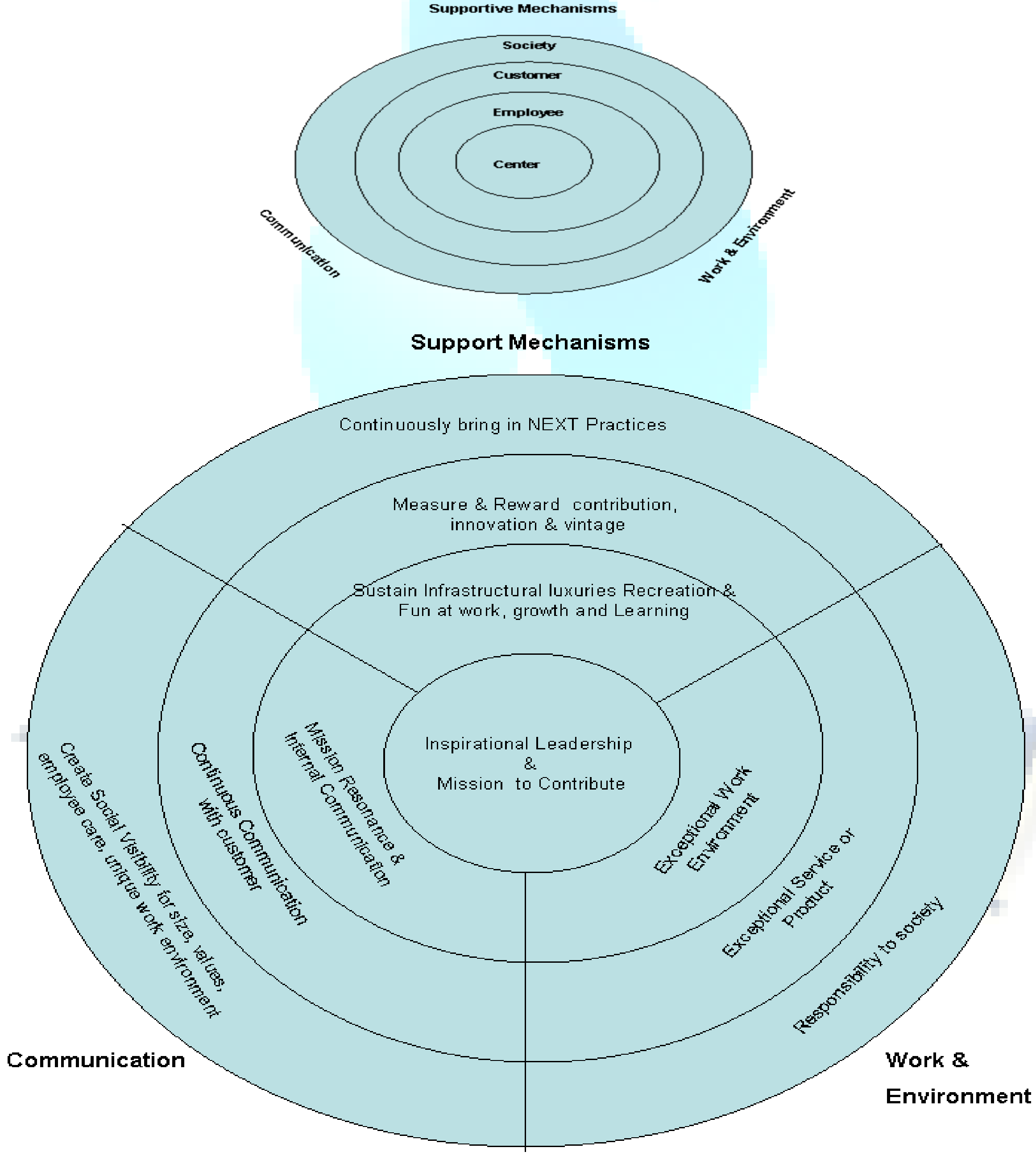
All the constructs within organizational practices were fairly well grounded and had reached theoretical saturation before they got included in the theory. The groundedness & density scores are shared in the output charts for each construct from Atlas.ti. According to this theory, the most highly grounded construct was **brand bride**, with cumulative groundedness score as 532. The sub- constructs for this are brand pride, brand image & brand delivery. Organizational practices on various fronts leading to building a great brand & delivering all that is promised, enabling pride in employees for belonging to that particular organization are part of this construct. Three main codes under the brand delivery also find special mention as they are amongst the highest grounded, generalized learning opportunities, growth for each performer, experienced exceptional employee care.

9. RECOMMENDATIONS AND SUGGESTIONS

SYSTEMATICALLY BUILD THE BRAND PRIDE

The research threw up that the most critical aspect of people stability in terms of people practices was 'Brand Pride'. Most people were stable within the organization because they were proud to be there. This pride was related to multiple aspects of a brand image (built through various communication initiatives) and brand delivery (cemented through systematic employee care and development). The following model, fig. 9 is suggested to build Brand Pride.

FIG. 9: EVOLVED BRAND PRIDE MODEL



At the center of building Brand Pride is “A Mission to contribute” and “Inspirational Leadership”. Inspirational leadership need not be confused with charismatic leadership. A leader inspires by sharing a strong mission to make a contribution; she is inclusive in her approach; finally she is has a clear focus on growth and regeneration. Secondly, mission to contribute also need not be confused with ‘social entrepreneurship’. Contribution can be in multiple ways like providing easy and free access to all information or creating thousands of jobs or in some way making life easier for a particular segment of people. Once the critical contribution is articulated and continuously shared, it provides a direction and a glue to the core team. Finally, create **social visibility** for the values held by the organization or the significant contribution it is making for the customers.

Success should be defined and shared with passion amongst all the stake holders not merely in terms of size, stature or turnover of the organization vis-à-vis competition; it is defined in terms of the best contribution to the customer or community or society. For example, Genpact envisaged the number of jobs it could create while pioneering ITES in India; Infosys envisioned taking India on the Global IT platform and Google embarked upon free and easy access to unlimited knowledge to every individual seeking it.

Organizations can leverage the corporate communications function and systematically devise communications within the organizations as well as to the outside world, to build the brand image. People feel immense pride in working with the ‘best brains in the world’, communications on how they hire only the best in the bracket goes a long way in creating brand pride.

The organizations should set extremely high standards of delivery for both; the employees as well as the customers and then continuously beat their own standards. Right from physical environment management to the service delivery management, every thing needs to match the same quality standards; internal processes and mechanisms should be devised to ensure the same.

Finally, while measuring and tracking performance on each element of building brand is important, benchmarking for best practices is critical; the most important element is the continuous innovation of the ‘Next Practices’. With the customer and the employee at the center, the organization can form **multiple think tanks for bringing out the next practices** and staying ahead of times.

10. CONCLUSION AND IMPLICATIONS OF THE STUDY

In today’s information age it is very important for an organization to build brand pride amongst its people because that is one of the significant factors which can help the organizations in retaining their people , which is of course beneficial for both the organizations as well as the executives.

As evolved in the theory, Brand Image of an organization as a result of conscious practices of the organization is one of the most critical elements in retaining executives. Brand image encompasses, various competencies of the organization like; social visibility, size & stature as compared to similar other organizations, customer centricity & contribution to society, perceived employee care & infrastructural & recreational facilities for employees and inspirational leadership. .

The review of extant literature, showed a lot of overlap between, the constructs of corporate image, brand image, employer brand and reputation. The corporate image basically encompasses an emotive reaction of employee or potential employee to the signals/ messages from the organizational system. The messages could be about the leadership reputation, the product or service quality or employee care. The image is usually a shared ‘sense making’ or meaning converted into a visual of ‘great place to work’ or ‘not a great place to work’. Empirical research shows that a good brand image does go a long way in attracting & retaining talent within the organization. Since the importance of brand image has been realized by the corporate world, a whole strategy of employer brand building both within and outside the company has gained significance.

However, one very critical dimension that evolved was that, the brand image was very important before joining an organization. Brand image was important during the tenure also to derive social pride, however, during the tenure brand delivery became very critical to keep employees motivated and equally engaged. The construct of brand delivery encompassed essentials that the employee came in taking for granted or rather hygiene factors of Herzber’s two factor theory of motivation. If these factors exceeded the expectations, then they had a significant contribution to the brand pride. On the contrary if these factors did not meet the competition benchmarks, they became sore points in the minds of people and lead to dissatisfaction and disengagement.

As clearly seen the construct brand delivery, practically encompasses everything that is there in an organization’s retention strategies. What makes it different is that the focus here is not merely strategy; it is a well engrained construct of meeting or keeping the promise made to any body as a potential employee or a current employee. The organization as a whole devises processes and systems that communicate the same in various ways to the employee.

Thus the findings of this study can be used by organizations facing the problem of executive retention by devising complete strategies to instill brand pride in the executives.

11. LIMITATIONS OF THE STUDY

One of the major limitations of the study is that it is limited to one representative sample for each IT ITES: Indian origin, MNC and Foreign origin MNC’s operating in India only. Organizational Practices leading to people stability that emerged as the most grounded were: 1) Brand Pride as a result of multiple practices to create an employer brand image & to ensure the delivery of the brand promise to the employees 2) Mission Resonance 3) Mentoring Supervisors 4) Friendships at work 5) Availability of Knowledge & Information when needed (to ensure success) 6) Opportunity to solve real problems & make a contribution 7) Nipping the negative energy at the bud .but in the present paper only brand pride as a construct in retaining the mission critical talent has been explored due to paucity of time constraint.

12. SCOPE FOR FUTURE RESEARCH

The scope of the research can be widened to more organizations to get better results. The other factors contributing to executive retention like Mission Resonance , Mentoring Supervisors , Friendships at work , Availability of Knowledge & Information when needed (to ensure success), Opportunity to solve real problems & make a contribution , Nipping the negative energy at the bud can be explored in detail as the current paper has examined only brand pride as a construct in retaining mission critical talent for the organization.

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CONSUMER ATTITUDE AND PERCEPTION TOWARD BRANDS OF EDIBLE OIL: AN EMPIRICAL STUDY

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ABSTRACT

Opening of Indian economy has enhanced the brand consciousness of customers. Today different brands of edible oil are available in the market. Consumers have specific preferences & choice & they evaluate them on the basis of aspects like price, quality, health & packaging etc. The present study undertaken to examine the consumer attitude and perception toward brands of edible oil. Researcher has tried to establish relationship between product quality with consumer satisfaction and brand loyalty. Data was collected from 323 customers in Dehradun city to analyse the demographic profile of customer and its relationship with brand preferences. It was found that quality is the main consideration in selecting the brand of edible oil. It is also seen that quality leads to satisfaction and further enhances the brand loyalty.

KEYWORDS

Edible Oil, Perception, Consumption pattern, preferences, Choice of Brand.

INTRODUCTION

Edible oils constitute an important component of food expenditure in Indian households. Historically, India has been a major importer of edible oils with almost 30-40% of its requirements being imported till 1980s. In 1986, the Government of India established the Technology Mission on Oilseeds and Pulses (TMOP) in order to enhance the production of oilseeds in the country. The TMOP launched special initiatives on several critical fronts such as improvement of oilseed production and processing technology, additional support to oilseed farmers and processors besides enhanced customs duty on the import of edible oils. Consequently, there was a significant increase in oilseeds area, production, and yields until the late-1990s.

Today India is one of the largest producers of oilseeds in the world and this sector occupies an important position in the agricultural economy. The oilseeds area and output is concentrated in Central and southern parts of India, mainly in Madhya Pradesh, Gujarat, Rajasthan, Andhra Pradesh and Karnataka. Edible Oil is purified fat of plant or animal origin, which is liquid at room temperature.

Awareness, knowledge & exposure among consumer towards edible oil are also increasing, because of the level of education, urbanization and also the vast development in communication facilities. Packaging has become appropriate selling proposition now days, although edible oil industry is very competitive and consumers are numerously price conscious but still packaging make an impact on the consumer brand preference.

In edible oil industry, brand preference are more sensitive as compare to any other related industry. Health consciousness among consumer are increasing day by day. Because of these reasons, industry is becoming health sensitive and quality conscious. The edible oil industry is changing because today's eating habits are shifting and creating new markets. While vegetable oils are becoming increasingly valuable in biofuels production, high energy prices and low margins put pressure on balance sheets in the edible oil industry.

An important characteristic of the Indian edible oil consumption pattern is the variation in preferences across regions, driven by taste and availability. The edible oil industry in India is characterized by intense competition and fragmentation ,with the presence of a large number of units attributable to low entry barriers such as low capital and low technical requirements of the business and a liberal policy regime (SSI reservation for traditional oilseeds and sales tax incentives by various state governments). Companies are trying to build up the brand using these elements into their marketing program. The growing health consciousness among the target market forces consumers not to compromise on its preferred brand.

LITERATURE REVIEW

Dr. J.H.Vyas, Imran N. Siddiqu ,Jay K. Dewangan (April 2013) study suggests that when the consumer purchase cooking oil higher importance is given to safety aspects, and the brand image of the cooking oil than the sales promotional schemes offered by the companies. Cooking oil marketers could take maximum efforts in designing the advertisements in such a way that the advertisements provide reliable and maximum information about the nutrition and health aspects, price of the oil.

Dhinesh babu & Venkateshwaran stated that the owners of the edible oil units should be trained to get more marketing knowledge to market their products. They should think global and act local. It implies that their product should be highly qualitative and also suitable to the local consumers. The attractive packaging plays an important role in the marketing of edible oils. All types of manufacturers should realize this fact and try to sell their products in attractive packets. It is not only attractive but also is reachable to all customers' segments.

R Prerna (2013) in their study says that Quality is always important for any production. But it is more important in case of edible oil for reason that it is more related to health. Consumers analyze the price, quality, packaging aspects etc. before they buy the product and hence, it is up to the different brands of sunflower and groundnut oil manufacturers to concentrate on those aspects and workout better strategy to attract more consumers for their brands.

Syed Akif Hasan and Muhammad Zeeshan Khan stated that packaging characteristics influences the consumer brand preference in edible oil. whereas packaging characteristics has eight different dimensions i.e. various sizes of Package, different shapes Package, safety, shelf life, convenience of storage, convenience of use, extra use of package and package attractiveness. Study is also helpful to conclude the factors which are responsible for the increment of market share in edible oil industry by changing or modifying the packaging of product in competitive market.

Butz and Goodstein, (2006) found that demographic variables are the most popular bases for segments the customer groups, One reason is that consumer needs, wants, preferences and usage rates are often highly associated with demographic variables. Another is that demographic variables are easier to measure (Kotler, Philip, and Gary Armstrong, 2006).

N. Rajaveni & Dr. M. Ramasamy study suggests that strongly packaged brand should offer protection and carve out for a point of difference that can protect the brand against competitor activity through trade marking. It is also important to remember that the world is full of cultural and linguistic difference. What works in one market doesn't always work in another. The bottom line for business is that packaging design will almost always have an effect on a company's profit and loss.

OBJECTIVES OF THE STUDY
This study has following objectives:
- To analyse the demographic profile of customer and its relationship with brand preferences.
- To identify the factors influencing customers in building their preferences from normal product to branded products.
- To identify the factors of brand switching.
- To draw conclusions and suggestions on the basis of study.

RESEARCH METHODOLOGY
To complete this study primary as well as secondary source of information is used. To study the consumer attitude & brand preferences of edible oils, ***primary data*** is collected by using a detailed structured questionnaire which was administered to a sample of 323 selected on the basis of convenience sampling method. The study has been carried out in Dehradun city. The ***secondary* data** is collected from published thesis, reputed journals, magazines and related websites. The data so collected is scrutinized, tabulated, analyzed and finally used for the study purpose. For the calculation and analysis of data statistical tools 9Mean, SD, ANOVA and other statistical techniques are used.

HYPOTHESIS
H0: Consumers attitude and perception toward edible oil does not differs significantly across the level of income and education .
H1: Consumers attitude and perception toward edible oil does not differs significantly across the level of income and education .

FINDING & DISCUSSION
TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Category		Count	Percentage
Gender	Male	214	66.3
	Female	109	33.7
Marital Status	Married	183	56.7
	Unmarried	140	43.3
Age	Less than 20 years	5	1.5
	From 21-30 Years	190	58.8
	From 31-40 Years	82	25.4
	Above 40 Years	46	14.2
Family Size	Up to 3 Members	201	62.2
	4-5 members	64	19.8
	6-8 members	22	6.8
	9-10 members	1	0.3
	More than10 members	35	10.8
Education Level	Matric & below	1	.3
	Under Graduate	74	22.9
	Graduate	25	7.7
	Post Graduate	153	47.4
	Professional qualification, if any	70	21.7
Income Level	Below 15000 PM	91	28.2
	15,000 to 30,000 PM	223	69.0
	30,000 to 50,000 PM	8	2.5
	80,000 and above PM	1	.3
	Total	323	100

The information presented in the above table no 1 shows that out of 323 respondents, 66% are males and only 34% are females which implies that males where more than the females in the gender category of respondents. Majority of the respondents (57%) are married and only 43% are unmarried which reveals that majority of respondents are married. Age wise classification is considered to be an attribute of demographic profile, the analysis presented in the above table reveals that sample is dominated by the young category of respondent ranging in the age group of 21-30 years as it contributes 58.8% in the sample while least number of respondents are less than 20 years of age. Almost 62% of the people having a small family of upto 3 member as no of family members describe the consumption pattern of households. Majority that is 62% of respondents are post graduates. With regards to employment status majority that is 69% have income between 15,000-30,000.

TABLE 2: MOST PREFERRED BRAND

Sl .NO	Description	Number of Respondents	Percentage
a	Suffola	99	30.7
b	Fortune	167	51.7
c	Sundrop	20	6.2
d	Dalda	35	10.8
e	Other, Please specify	2	.6
	Total	323	100

Today there is stiff competition among the edible oil industries. Companies are trying their best to build up the brand for differentiating the product. Brand Preferences represents which brands are preferred under assumptions of equality in price and availability. As seen in table 2 out of total 323 respondents almost 51.7% people prefer Fortune,30.7% people prefer Suffola oil & only 10.8% people prefer Dalda ,maximum percentage of people prefer Fortune brand.

TABLE 3: SOURCE OF INFORMATION

Sl NO	Description	Number of Respondents	Percentage
a	Family	113	35.0
b	Friend	77	23.8
c	Retailers	1	.3
d	Advertisement	132	40.9
	Total	323	100.0

Media plays a major role in a consumer's buying decision-making process. There are many ways for customer to get information about various brand of edible oil. Advertising is used through various media to generate brand awareness within consumers. They can be aired as radio ads, television commercials, internet etc. As per the above table 3 out of 323 respondents maximum percentage that is 40% of respondents gets the information about the brand through Advertisement, 35% knows about the brand through family members,23% gets information from friends & only 0.3% gets information from retailers.

TABLE 4: MONTHLY SPENDING PATTERN ON EDIBLE OIL

Sl NO	Description	Number of Respondents	Percentage
a	Less than Rs. 500	97	30.0
b	From 500 to 1000	198	61.3
c	From Rs. 1000 to 1500	5	1.5
d	Rs 1500 & above	23	7.1
	Total	323	100.0

The above table shows that 61.3% of respondents spend 500 to 1000 rupee on monthly basis on edible oil, 30% spend less that 500 rupee per month,7.1% spend 1500 and above & only 1.5 % people spend Rs 1000 -1500 on edible oil.

TABLE 5: FREQUENCY OF PURCHASE

Sl NO	Description	Number of Respondents	Percentage
a	Once in a month	89	27.6
b	2-3 times	198	61.3
c	4-5 times	1	.3
d	More than 5 times	35	10.8
	Total	323	100.0

The information presented in the table 5 reveils that maximum percentage (61.3%) of respondents purchase edible oil 2-3 times in a month. Buying oil is not a daily affair, hence the production and stocking needs to be aligned with this behaviour.

TABLE 6: DURATION OF USING SINGLE BRAND OF EDIBLE OIL

Sl NO	Description	Number of Respondents	Percentage
a	Less than 3 months	90	27.9
b	Upto 6 months	57	17.6
c	Upto 1 year	42	13.0
d	Always using Single brand	134	41.5
	Total	323	100.0

Brand loyalty, in marketing, consists of consumer resistance to change the brand or a consumer's commitment to repurchase or other positive behaviors such as word of mouth advocacy infavour of brand . As seen in Table.6 almost 41.5% of the respondents always prefer single brand, that means consumers are satisfied with their existing brands, Fortune & they don't want to switch to another brand of edible oil.

TABLE 7: AMOUNT OF MONTHLY CONSUMPTION

Sl NO	Description	Number of Respondents	Percentage
a	1 ltr	107	33.1
b	5 ltr	213	65.9
c	10 ltr	3	.9
	Total	323	100.0

As stated in the above table.7 maximum percentage of respondents that is 65.9% consumes almost 5 ltr of edible oil on monthly basis,33.1% monthly consumes 1 ltr & 0.9% consumer 10 ltrs of edible oil on monthly basis.

TABLE 8: PREFERRED PLACE OF PURCHASE

Sl NO	Description	Number of Respondents	Percentage
a	Shopping Mall	8	2.5
b	Local Store	230	71.2
c	Supermarket	85	26.3
	Total	323	100.0

As seen in table.8, 71.2% of respondents purchase edible oil from local stores, whereas 26.3% prefer supermarkets to make their purchases & only 2.5% make their purchases from shopping malls.

TABLE 9: DESCRIPTIVE STATISTICS

	N	Mean	Std. Deviation
I prefer general edible oil,as my family consumption of edible oil is very high	323	2.8545	1.33997
My health condition compel me to use branded edible oil	323	3.6935	1.06125
I prefer branded oil even if prices goes high	323	3.8947	.74854
I prefer branded oil only when there is any offers	323	2.4025	1.15247
Celebrity endorsement influence me most in favour of branded edible oil	323	2.8328	1.12146
Media influence me most in favour of particular brand of edible oil	323	2.5542	.84479
Packaging of the product attract me in favour of branded oil	323	2.8390	1.07430
Information of product ingrediant influence me in brand selection	323	4.1858	.51335
Nature of consumption affect me in particular brand of edible oil	323	3.4334	.83279
Price of the product influence me most in favour of particular brand of edible oil	323	3.2322	.90132
I give due consideration on quality of the product while selecting a particular brand of edible oil	323	4.5542	2.32713
I give due consideration to availability of the product while selecting a particular brand of edible oil	323	3.0000	1.20558
Taste of the brand of edible oil influence me most in selecting a particular brand of edible oil	323	3.5820	.77735
Effect of advertising influence me most in selecting a particular brand of edible oil	323	3.1146	1.01962
Salesman and shopkeeper suggestions is important for me in brand selection of edible oil	323	2.8545	1.11756
Valid N (list wise)	323		

Consumer purchase pattern of edible oil is affected by several factors. A structured questionnaire was developed covering the consumers attitude and perception towards different marketing activities, product quality and role of media in favour of edible oil. Mean and standard deviation was calculated by using

SPSS software. As seen in table.9, maximum percentage of respondents give due consideration on quality of the product while selecting a particular brand of edible oil. As it scored highest mean of 4.5542. highest score of SD (1.33997) of variable like I prefer general edible oil,as my family consumption of edible oil is very high indicates that consumer attitude toward this factor is heterogeneous.

FACTOR ANALYSIS

Factor analysis is a very useful method for reducing data complexity by reducing the number of variables being studied. It is used to identify the factors that influence the perception and attitude of respondents towards edible oil. To determine the appropriateness of applying factor analysis, the KMO and Bartlett's test measures were computed and the results are presented in the below table. Higher values between (0.5 and 1.0) indicate the sample size taken for the study of factor analysis is adequate. As the result in above table indicate sampling adequacy value to be 0.539, the sample size in factor analysis is appropriate. The Kaiser-Meyer-Olkin (KMO)measure of sampling adequacy (KMO=0.54)

TABLE 10: KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.539
Bartlett's Test of Sphericity	Approx. Chi-Square	3530.393
	Df	105
	Sig.	.000

TOTAL VARIANCE EXPLAINED

From the below table the loading of factors can be observed. The loading of factors can be positive or negative. The higher the loading the more important is the factor. . Only factors with Eigen value greater than 1.0 are retained. Factors with variance less than 1.0 are no better than single variable. The exploratory factor analysis extracted 5 factors with Eigen value greater than 1, which accounted for 79.1 per cent of variance in the data. The result are presented in the below mentioned table. It provides an insight about how many variables can be clubbed together to make a single factor. Referring to the Table, Factor 1 having variance 24.325% represents the element Healthy oil , taste & satisfaction level of consumer towards the brand of edible oil is considered to be an important factor that influences the perception and attitude of consumers,even if the prices goes high consumer become loyal towards that brand. Factor 2 with a variance of 20.47% has the statement that Celebrity endorsement, media influence the consumers towards their brand of edible oils. Sometimes, consumers attitude and perception are developed towards brand if it is endorsed by their favourite celebrity. The statements that load into Factor 3, having variance 15.291% represents the pricing of the brand & the various offers that company provides having an influence on consumer. Nature of consumption ia also considered to be an important factor. Factor 4 having variance 12.00% consisted of product design, its packaging, labeling, their composition also the availability of the product to the consumer. Salesman's, shopkeepers suggestions are also considered by the consumer while making purchases. Factor 5 with a variance of 7.019 comprises that Quality is considered to be important while selecting brand of edible oil.

TABLE 11: TOTAL VARIANCE EXPLAINED

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.649	24.325	24.325	3.649	24.325	24.325	2.937	19.579	19.579
2	3.071	20.470	44.795	3.071	20.470	44.795	2.683	17.885	37.464
3	2.294	15.291	60.085	2.294	15.291	60.085	2.596	17.305	54.768
4	1.800	12.000	72.085	1.800	12.000	72.085	2.292	15.278	70.046
5	1.053	7.019	79.104	1.053	7.019	79.104	1.359	9.058	79.104
6	.781	5.210	84.314						
7	.619	4.124	88.438						
8	.537	3.578	92.015						
9	.376	2.508	94.524						
10	.227	1.510	96.034						
11	.182	1.211	97.245						
12	.157	1.044	98.289						
13	.121	.809	99.098						
14	.095	.636	99.734						
15	.040	.266	100.000						
Extraction Method: Principal Component Analysis.									

TABLE 12: ROTATED COMPONENT MATRIX[a]

	Component				
	Product attribute	Celebrity & media influence	Pricing, offers & nature of consumption	Product design, availability & shopkeepers influence	High consumption & product quality
Taste of the brand of edible oil influence me most in selecting a particular brand of edible oil	.833				
My health condition compel me to use branded edible oil	.820				
I prefer branded oil even if prices goes high	.780				
Celebrity endorsement influence me most in favour of branded edible oil		.879			
Media influence me most in favour of particular brand of edible oil		.878			
Price of the product influence me most in favour of particular brand of edible oil			.868		
I prefer branded oil only when there is any offers			.758		
Nature of consumption affect me in particular brand of edible oil			.727		
I give due consideration to availability of the product while selecting a particular brand of edible oil				.734	
Salesman and shopkeeper suggestions is important for me in brand selection of edible oil	-.382			.712	
Effect of advertising influence me most in selecting a particular brand of edible oil				.684	
Packaging of the product attract me in favour of branded oil				.671	
Information of product ingrediant influence me in brand selection				.515	
I give due consideration on quality of the product while selecting a particular brand of edible oil					-.820
I prefer general edible oil,as my family consumption of edible oil is very high					.601

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 7 iterations.

ANALYSIS OF ROTATED COMPONENT MATRIX

From the above table five factors are identified as key determinant that influence the consumer perception and attitude towards edible oil. The rotated component matrix, sometimes referred to as the loadings, is the key output of principal components analysis. It contains estimates of the correlations between each of the variables and the estimated components. In the above rotated component matrix there are five (5) components.

TABLE 13: MEAN OF ALL FIVE FACTOR ACROSS THE LEVEL OF INCOME OF THE RESPONDENTS

Income	Product attribute	Celebrity & media influence	Pricing, offers & nature of consumption	Product design, availability & shopkeepers influence	High consumption & product quality
Below 15000	4.0769	2.2363	2.5092	3.4945	3.8462
15,000 to 30,000	3.5889	2.9126	3.2422	3.0807	3.6682
30,000 to 50,000	3.4167	1.9375	2.7500	3.2000	3.1875
80,000 and above	4.0000	1.5000	3.0000	2.6000	3.0000
Total	**3.7234**	**2.6935**	**3.0227**	**3.1988**	**3.7043**

ANALYSIS

As is the evident from the mean rating of various factors of consumer perception and attitude From the above table it indicates that the mean of all five factors varies among different income group.F1 (Product attribute & satisfaction level) scored highest mean among all income group of respondents.

Analysis of variance (ANOVA) is a collection of statistical models used to analyze the differences between group means and their associated procedures (such as "variation" among and between groups. In the ANOVA setting, the observed variance in a particular variable is partitioned into components attributable to different sources of variation.

TABLE 14: ONE WAY ANOVA WITH THE LEVEL OF INCOME

		Sum of Squares	df	Mean Square	F	Sig.
F1 (Product attribute & satisfaction level)	Between Groups	16.234	3	5.411	11.427	.000
	Within Groups	151.059	319	.474		
	Total	167.293	322			
F2 (Celebrity & media influence)	Between Groups	35.722	3	11.907	16.665	.000
	Within Groups	227.934	319	.715		
	Total	263.656	322			
F3 (Pricing, offers & nature of consumption)	Between Groups	35.334	3	11.778	23.474	.000
	Within Groups	160.055	319	.502		
	Total	195.389	322			
F4(Product design,availability & shopkeepers influence)	Between Groups	11.425	3	3.808	8.172	.000
	Within Groups	148.654	319	.466		
	Total	160.080	322			
F5 (High consumption & product quality)	Between Groups	4.755	3	1.585	1.094	.352
	Within Groups	462.259	319	1.449		
	Total	467.014	322			

ANALYSIS

The value F is a ratio of two means squares. The numerator is the treatment square; the denominator is the experiment error means. Where F= variance of the groups/mean of the within a group. According to the ANOVA test, factors f1 has a ratio of mean 11.43, factors f2 has 16.67, factor f3 has 23.47, factors f4 has 8.17 and factor f5 have 1.094 respectively. On the basis of ANOVA data analysis factor f3 that is pricing,offers & nature of consumption have a huge ratio of mean between groups and within groups so there is the maximum gap between them. And factor f5 that is product quality & high consumption has less ratio of mean (1.094) between groups and within groups so there are little difference and gap between them

- According to ANOVA test, factors F1,F2,F3,F4 calculated value is more than the table value ,hence null hypothesis is rejected.
- In factor F5(Product Quality & high consumption) calculated value is less than the table value. Here, in this factor null hypothesis is accepted.

TABLE 15: MEAN OF ALL THE FACTORS ACROSS THE LEVEL OF EDUCATION

Educational Qualification	Product attribute	Celebrity & media influence	Pricing, offers & nature of consumption	Product design, availability & shopkeepers influence	High consumption & product quality
Matric & below	3.3333	2.5000	3.3333	3.4000	3.5000
Under Graduate	3.5541	2.6757	2.4865	3.9459	3.2770
Graduate	3.9200	2.6000	3.4533	3.2160	4.5800
Post Graduate	3.7298	3.0784	3.2244	3.2065	3.9575
Professional qualification if any	3.8238	1.9071	2.9905	2.3829	3.2929
Total	3.7234	2.6935	3.0227	3.1988	3.7043

ANALYSIS

As is the evident from the mean rating of various factors of consumer perception and attitude From the above table it indicates that the mean of all five factors varies among different educational qualification of respondents.F1 (Product attribute & satisfaction level) scored highest mean among all different educational level of respondents.

TABLE 16: ONE WAY ANOVA WITH THE LEVEL OF EDUCATION

			Sum of Squares	df	Mean Square	F	Sig.
f1 * Educational Qualification	Between Groups	(Combined)	3.953	4	.988	1.924	.106
	Within Groups		163.340	318	.514		
	Total		167.293	322			
f2 * Educational Qualification	Between Groups	(Combined)	66.235	4	16.559	26.672	.000
	Within Groups		197.421	318	.621		
	Total		263.656	322			
f3 * Educational Qualification	Between Groups	(Combined)	32.307	4	8.077	15.749	.000
	Within Groups		163.082	318	.513		
	Total		195.389	322			
f4 * Educational Qualification	Between Groups	(Combined)	87.969	4	21.992	96.984	.000
	Within Groups		72.110	318	.227		
	Total		160.080	322			
f5 * Educational Qualification	Between Groups	(Combined)	54.383	4	13.596	10.478	.000
	Within Groups		412.631	318	1.298		
	Total		467.014	322			

ANALYSIS

The above table shows the ANOVA results, which indicates that the 5% level of significance, with the significance value of .000,it is clear that there is a significant relationship between educational qualification & the factors that consumer consider while making purchases of edible oil. All the factors in the above mentioned table having value greater the 1.0.

TABLE 17: INTENTION TO CHANGE YOUR PRESENT BRAND OF EDIBLE OIL

Sl NO	Description	Number of Respondents	Percentage
a	Yes	90	27.9
b	No	233	72.1
	Total	323	100

Brand loyalty occurs when a customer chooses to repeatedly purchase a product produced by the same company instead of a substitute product produced by a competitor. Brand loyalty shows the satisfaction level of customers toward a particular brand. Here ,maximum percentage of people are satisfied with their existing brands of Fortune & only 28% of the respondents wants to change their brand. It is seen that little more than one fourth (28%) respondents wants to change their brands due to health factor.

TABLE 18: MAIN REASON OF CHANGE OF PRESENT BRAND

Sl NO	Description	Number of Respondents	Percentage
a	Health Factor	168	52.01
b	Price Factor	83	25.69
c	For Change of Taste	65	20.12
d	Quality Consciousness	7	2.18
	Total	323	100

An attempt was made to know the reasons from those respondents who are willing to change their present brand of edible brand. Various reasons were identified like health related issues, price factor, taste factor and quality consciousness. Analysis indicated that health related issue are the main factor for changing of brand as it was indicated by 52.01% respondents. It was followed by price factor. Taste factor was indicated by 20.12% respondents.

CONCLUSION

In the present scenario, consumers do not accept any product which doesn't give them complete satisfaction, that is the reason why so many brands are successful & failure in the consumer market. Quality is considered to be an important factor in case of edible oil, because it is more related with health. Nowadays people are very much health conscious on the basis of various observations made in the study, the consumers feel that edible oil is necessary for day-to-day life. Hence the manufacturers of edible oil follow the concept of being hygienic and healthy oil to attract the consumers. If the consumer is satisfied with the brand it leads to positive perception, loyalty towards brand, positive word of mouth & leads to long term relationship with the brand of edible oil. Consumers have specific preferences towards brands like pricing, taste, packaging, offers, product design, advertisements etc.

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CAPITAL STRUCTURE AND ITS IMPACT ON PROFITABILITY OF AUTOMOTIVE INDUSTRY: THE INDIAN CASE

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ABSTRACT
Capital structure represents the proportion in which equity capital and debt capital is employed to finance the assets of the companies. Over the years capital structure decision is very crucial and important because of the fact that it affects net profit, earning per share, cost of capital, dividend pay-out ratio and liquidity position of the companies and consequently the value of the companies. The purpose of this paper to measure, evaluate and empirically studies the relationship between capital structure and financial performance of automotive companies in India. The data of nine major companies from automotive industry, listed in Indian Stock Exchange (BSE/NSE) has been taken as sample for the study. Study depicts that there is a weak negative correlation between proxies of capital structure and proxies of financial performance. A linear regression model has been developed and it is observed that there is negative and low degree of relationship between the variables under study and there are many other elements and factors apart from capital structure which determine and affect the financial performance of the companies under study.

KEYWORDS
Capital structure, Debt equity ratio, Financial performance, Leverage and Profitability ratios.

INTRODUCTION
Capital structure is one of the most important and effective parameters to the valuation of economic enterprises. There are a multiple sources of financing by which a Company can finance its operations. Sources of financing classify into two categories, the internal sources which consists Equity and Preference shares issued and retained earnings of the Company and the another is external source which includes Long term and Short term borrowings and Debentures issued. The Capital Structure of any Company is the combination or blend of such internal and external sources of financing. Why investors park their savings in Equity? The answer is because every equity investors wants to maximise their wealth and how their wealth will maximise? The answer of these questions lies on the decisions of finance manager about the source of financing. The decision to use debts to finance assets is called leverage which affects the return and risk of owners and lenders. In case of major proportion of debt into capital structure of a Company then it is said to be highly levered, using more debt increases the riskiness due to fixed interest obligations and leads to increase expected return on equity as higher the risk higher will be the expected rate of return by owners. Hence the decision of financing the assets of a Company is very important so that there can be a balance between risk and return to achieve the goal of maximisation of wealth and the value of the Company. The purpose of the present study is analyse the role of capital structure to identify the relationship with financial performance of the automotive companies listed in India.

REVIEW OF LITERATURE
A lot of research has been conducted so far by various researchers all over the world to identify the impact of capital structure on financial performance of the companies. To develop a clear understanding about such relationship review of some of the literatures available are as under:
Modigliani and Miller (1958) establish that under certain assumptions i.e perfect capital market with symmetric information, no transaction and bankruptcy cost exist, absence of taxes, equity and debt choice becomes irrelevant and there will be no impact on company's performance due to selection of source of financing. In **1963, Modigliani and Miller** argued that companies will prefer debt financing because of the tax shield on interest. On the other hand, tax shield from depreciation and other provisions will discourage some management to arrange for debt capital according to **DeAngelo and Marsalis (1980).**
Myers and Majluf (1984) postulates that a company that are generating high earnings are expected to use internal generated funds first due to cost of financing increases with asymmetric information hence financing preference comes from internal funds, debt and new equity.
Sumitra Das and Malabika Roy (2003) in their paper Inter industry in capital structure: The evidence from India conclude the existence of inter-industry difference in the capital structure of Indian companies and identified the factors responsible for such variation. Both company size and industry classes contribute to the existing variation but industry nature and technology used are dominating elements. Though it seems that the relatively large firms were given more importance so far as debt financing is concerned and access to capital markets in particular, in the years immediately after the reforms, this tempo was not maintained over the years.
Zeitun and Tian (2007) investigated the effect of capital structure on firm performance. Their results showed that a firm's capital structure had a significantly negative impact on the firm performance measures, which are return on assets, Tobin's Q, market value of equity to book value of equity ratio and profitability. Firm size and firm performance were found to have a positive relation, because of low bankruptcy costs of large company.
Abor (2007), which investigate the relationship between debt policy and firm performance, with the evidence from small and medium enterprises in Ghana and South Africa from 1998 to 2003. His results is that, in Ghana, the relation between return on assets and all measures of capital structure is found to be significant and negative, short-term debt and gross profit margin is significant and negative relation while long-term debt is significantly and positively related to gross profit margin.
Mat Kila Suhaila and Wan Mansor Wan Mahmood (2008) in their study tests the determinants of capital structure for the firms listed in the Bursa Malaysia Securities Berhad (BMSB) market during the six year period from 2000 to 2005. Applying pooled OLS estimations, the result shows that the size, liquidity and interest coverage ratio is significantly negatively related to total debt. However, the study finds insignificant negative relation between capital structure and growth of the firm, expressed by the annual changes of earnings.
Anurag Pahuja and Anu Sahi (2012) in their study on factors affecting capital structure decisions: Empirical evidence from selected Indian firms, confirmed that independent variables i.e. growth and liquidity indicates positive and significant relationship with debt equity ratio in consistence with pecking order theory of capital structure.
Gill, et al., (2011) undertaken a study on the relationship between capital structure and profitability. The correlations and regression analyses were used to estimate the functions relating to profitability with measures of capital structure. Empirical results show a positive relationship between short-term debt to total assets and profitability and total debt to total assets and profitability.

Mohammad Fawzi Shubita and Jaafer Maroof alsawalhah (2012), their research consists of 39 companies. Applying correlations and multiple regression analysis, the results reveal significantly negative relation between debt and profitability. This suggests that profitable firms depend more on equity as their main financing option. Yet recommendations based on findings are offered to improve certain factors like the firm must consider using an optimal capital structure.

Abbasali Pouraghajan and Esfandiar Malekian (2012), in this study, Variables of return on assets ratio (ROA) and return on equity ratio (ROE) used to measure the financial performance of companies. Results suggest that there is a significant negative relationship between debt ratio and financial performance of companies, and a significant positive relationship between asset turnover, firm size, asset tangibility ratio, and growth opportunities with financial performance measures.

Bimal Jaisawal, Namita Srivastava and Sushma (2013), studies the relationship of capital structure and financial performance of companies in cement industry in India. Study indicates that there is weak positive correlation between capital structure and two determinant of performance GPR and ROE. The other determinants of financial performance NPR, ROCE, ROA are negatively correlated with capital structure. A linear regression model has been developed to estimate the effect of variation in capital structure to the variation in the firm financial performance and it is observed that there is negative and low degree of relationship between the variables under study.

The other major studies undertaken by Mesquita and Lara (2003) , Philips and sipahioglu (2004) , Hadlock and james (2002), Arbabiyan and Safari (2009) , Chakraborty (2010) and Huang and Song (2006) came up with the findings which were conflicting in nature as some studies confirm positive relationship between capital structure and profitability while other studies confirm positive relationship between the variables.

OVERVIEW OF AUTOMOTIVE INDUSTRY A STRATEGIC SECTOR OF INDIAN ECONOMY

With the gradual liberalization of the automotive sector in India since 1991, the number of manufacturing facilities has grown progressively. In the last ten years, the volumes, exports and turnover have increased by 3.8, 19.6 and 6 times respectively. With a CAGR of over of 15% during the last 5-7 years, the automotive sector is aptly described as the next sun rise sector of the Indian economy. The contribution of this sector to the National GDP, with liberalization, has risen from 2.77% in 1992-93 to about 6% now. It provides direct and indirect employment to over 13.1 million people. At present, there are 19 manufacturers of passenger cars & multi utility vehicles, 14 manufacturers of commercial vehicles, 16 of 2/3 wheelers and 12 of tractors besides 5 manufacturers of engines in India. At present, India has amongst the lowest vehicle densities globally at 11 cars per thousand persons and 32 two-wheelers per thousand persons. This is very low as compared to other comparable economies. Thus, there is a huge potential market for automobiles that is yet to be tapped.

(Source: Report of the working group on Automotive Sector for the 12^{th} five year plan (2012-2017)

OBJECTIVE OF THE STUDY

The main objective of this study is to investigate the impact of source of financing on the financial performance of the Automotive Companies listed in India.

HYPOTHESIS

Hypothesis is a tentative solution of particular problem or proposed explanation for a phenomenon. For the present study following two hypothesis are framed:

a) **H_0:** There is no significant relationship between capital structure and financial performance.

b) **H_a**: The capital structure has significant impact on financial performance.

RESEARCH METHODOLOGY

SCOPE AND COVERAGE

The present study is restricted to the Automotive Companies listed in Indian Stock Exchanges (BSE/NSE).The time period taken into consideration for analysis is five year i.e. from financial year 2008-09 to 2012-13.

DATA COLLECTION

Only secondary data is used to attain the objective of the study which is taken from the www.indiabulls.com and cross verified with published annual report of the respective companies which is hunted from official website.

SAMPLE SIZE

For the study, data of nine Companies out of fifteen Companies listed in the CNX Auto Index that are listed on the National Stock Exchange and Bombay Stock Exchange. From automotive industry are taken as a sample and it is assumed that the findings of the sample will apply to the total automotive industry. The companies which are taken in the sample, are as follows: Ashok Leyland Ltd., Hero MotoCorp Ltd, TVS Motor Company Ltd., Bajaj Auto Ltd., Mahindra & Mahindra Ltd., Maruti Suzuki India Ltd., Tata Motors Ltd., Force Motors Ltd.and Eicher Motors Ltd.

DETERMINANT OF VARIABLES

Variables are an identified piece of data that have different values. Variables can be divided into two types, dependent variables and independent variables. An independent variables are regarded as input and also known as a predictor variable. A dependent variables are changed according to change in independent variables and also known as a output variable.

The present study consist capital structure as independent variable and financial performance as dependent variables. Here capital structure is measured with the help of debt equity ratio and financial performance is measured with the help of operating margin ratio, gross profit ratio, net profit ratio, return on net worth ratio and return on long term funds.

TABLE – 1: VARIABLES AND ITS DEFINITION

Variable	Proxy variables	Formula	Proxy
Capital Structure	Debt Equity Ratio	Total Debts/Total Shareholder's fund	DER
Financial Performance	Operating Margin Ratio	Operating Profit / Net Sales	OMR
	Net Profit Ratio	Net Profit/Net Sales	NPR
	Gross Profit Ratio	Gross Profit/Net Sales	GPR
	Return on Net Worth	EBIT / Net worth	RONE
	Return on long term fund	EBIT / Long term funds	ROLTF

TOOLS AND TECHNIQUES OF ANALYSIS

Different statistical measures are used to measure the relation between two variable i.e capital structure and financial performance.

DESCRIPTIVE STATISTICS

To identify the central value and check whether it is represented to whole sample, mean and standard deviation has been calculated.

CORRELATION METHOD

To study the relationship between capital structure and five measures of financial performance correlation method is used.

REGRESSION METHOD

A linear regression model has been developed to estimate the effect of variation in capital structure i.e. independent variable to the variation in the financial performance i.e. dependent variables. Ordinary Least Square (OLS) method is used to estimate the regression line. OLS is used because it minimizes the error between the estimated points on the line and the actual observed points of the estimated regression line by giving the best fit.

ANOVA TEST

To test the hypothesis two-way ANOVAs test is applied.

RESULTS & DISCUSSION

TABLE - 2: DESCRIPTIVE STATISTICS

	DE	OMR	GPR	NPR	RONW	ROLTF	PERFORM
Mean	0.4280	0.1020	0.0765	0.0856	0.2583	0.2466	0.7690
Standard Deviation	0.3934	0.0563	0.0636	0.0684	0.1919	0.1990	0.4904
Count	45	45	45	45	45	45	45

Sources: Author Compilation

In above table 2, mean values of variables with its standard deviation during the financial year 2008-09 to 2012-13 are depicted. The measure taken as financial performance in the evaluation are operating profit margin, gross profit, net profit, return on net worth and return on long term funds of the companies consists in sample, which are on mean 10.20% with a standard deviation of .056, which are on mean 7.65% with a standard deviation of .063, which are on mean 8.56% with a standard deviation of .068, which are on mean 25.83% with a standard deviation of .191 and which are on mean 24.66% with a standard deviation of .199 respectively. The average debt equity ratio came out is 42.8%. This indicated that in Indian automotive industry 42.8% of total assets are represented by debt and concluded that they are averaged geared.

CORRELATION ANALYSIS

Correlation is deal with strength of relationships among variables. The correlation coefficient is a measure of linear association between two variables. Values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear sense, a correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense, and a correlation coefficient of 0 indicates that there is no linear relationship between the two variables.

In the present study analysis of correlation co-efficient is under taken to determine the relationship between debt equity ratio (capital structure) and financial performance.

TABLE – 3: SUMMARISED RESULT OF CORRELATION MATRIX (PEARSON)

Variables	DE	OMR	GPR	NPR	RONW	ROLTF	R Square
DE	1	-0.430	-0.410	-0.520	-0.344	-0.455	-
OMR	-0.430	1	0.991	0.337	0.439	0.875	0.184
GPR	-0.410	0.991	1	0.341	0.430	0.871	0.168
NPR	-0.520	0.337	0.341	1	0.754	0.331	0.270
RONW	-0.344	0.439	0.430	0.754	1	0.642	0.118
ROLTF	-0.455	0.875	0.871	0.331	0.642	1	0.207

Correlation is significant at level alpha=0.01

Sources: Author Compilation

CAPITAL STRUCTURE AND OPERATING MARGIN

Relationship between capital structure and operating margin is shown by the table 3 above. There is a weak negative relationship between two variables. The correlation is -0.430 at significant level 0.01. The co-efficient of determinant is 0.184 i.e only 18.4% of variance in the operating margin is affected by the pattern of capital structure. Therefore, there is a weak negative relationship between these two variables.

CAPITAL STRUCTURE AND GROSS PROFIT

Relationship between capital structure and gross profit is shown by the table 3 above. There is a weak negative relationship between two variables. The correlation is -0.410 at significant level 0.01. The co-efficient of determinant is 0.168 i.e only 16.8% of variance in the gross profit is affected by the pattern of capital structure. Therefore, there is a weak negative relationship between these two variables.

CAPITAL STRUCTURE AND NET PROFIT

Relationship between capital structure and net profit is shown by the table 3 above. There is a weak negative relationship between two variables. The correlation is -0.520 at significant level 0.01. The co-efficient of determinant is 0.270 i.e only 27 % of variance in the net profit is affected by the pattern of capital structure. Therefore, there is a weak negative relationship between these two variables.

CAPITAL STRUCTURE AND RETURN ON NET WORTH

Relationship between capital structure and RONW is shown by the table 3 above. There is a weak negative relationship between two variables. The correlation is -0.344 at significant level 0.01. The co-efficient of determinant is 0.118 i.e only 11.8% of variance in the RONW is affected by the pattern of capital structure. Therefore, there is a weak negative relationship between these two variables.

CAPITAL STRUCTURE AND RETURN ON LONG TERM FUNDS

Relationship between capital structure and ROLTF is shown by the table 3 above. There is a weak negative relationship between two variables. The correlation is -0.455 at significant level 0.01. The co-efficient of determinant is 0.207 i.e only 20.7% of variance in the ROLTF is affected by the pattern of capital structure. Therefore, there is a weak negative relationship between these two variables.

REGRESSION ANALYSIS

Regression analysis involves identifying the relationship between a dependent variable and one or more independent variables.

TABLE – 4: TABLE SHOWING THE MODEL SUMMARY OF DER AND OMR

Model Summary			
R	R Square	Adjusted R Square	Standard Error of the Estimates
-0.430	0.184	0.166	0.051
Predicator (Debt Equity Ratio)			

Sources: Author Compilation

The above table 4 reveals the weak negative correlation between the debt equity ratio (capital structure) and operating margin ratio of the Indian automotive companies taken into sample.

TABLE - 5: TEST OF SIGNIFICANCE OF CORRELATION COEFFICIENT BETWEEN DER AND OMR

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Standard error	Beta		
Intercept	0.128	0.011		11.261	0.000
DE	-0.061	0.020	-0.430	-3.119	0.003
Dependent variable : Operating Margin					

Sources: Author Compilation

The above table 5 indicates the coefficient of correlation between the debt equity ratio (capital structure) and operating margin. Coefficient of determinant R^2 is 0.184. This shows that only 18.4% of variance of operating margin is influenced by the debt equity ratio (capital structure) and remaining 81.6 % of variance with operating margin is attributed to other factors.

In the above table the value of t is -3.119, which signifies that there is a negative correlation between the two variables.

GRAPH 1: FIGURE SHOWING CORRELATION BETWEEN DER AND OMR

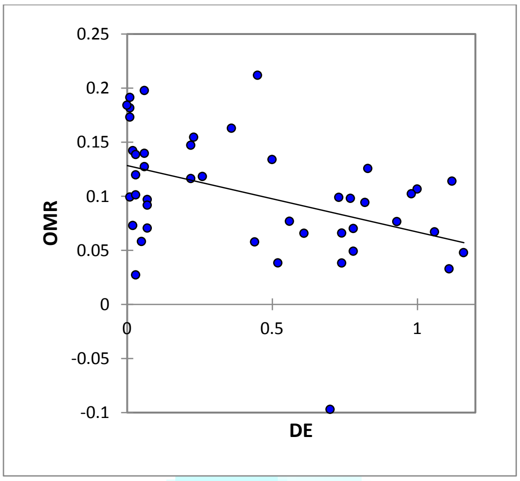


TABLE – 6: TABLE SHOWING THE MODEL SUMMARY OF DER AND GPR

Model Summary			
R	R Square	Adjusted R Square	Standard Error of the Estimates
-0.410	0.168	0.148	0.059

Predicator (Debt Equity Ratio)

Sources: Author Compilation

The above table 6 reveals the weak negative correlation between the debt equity ratio (capital structure) and gross profit of the Indian automotive companies taken into sample.

TABLE - 7: TEST OF SIGNIFICANCE OF CORRELATION COEFFICIENT BETWEEN DER AND GPR

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Standard error	Beta		
Intercept	0.105	0.013		8.055	0.000
DE	-0.066	0.022	-0.410	-2.944	0.005

Dependent variable : Gross Profit

Sources: Author Compilation

The above table 7 indicates the coefficient of correlation between the debt equity ratio (capital structure) and gross profit. Coefficient of determinant R^2 is 0.168. This shows that only 16.8% of variance of gross profit is influenced by the debt equity ratio (capital structure) and remaining 83.2 % of variance with gross profit is attributed to other factors.

In the above table the value of t is -2.944, which signifies that there is a negative correlation between the two variables.

GRAPH 2: FIGURE SHOWING CORRELATION BETWEEN DER AND GPR

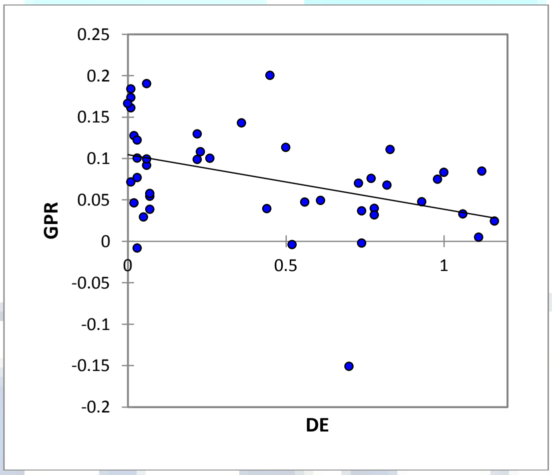


TABLE – 8: TABLE SHOWING THE MODEL SUMMARY OF DER AND NPR

Model Summary			
R	R Square	Adjusted R Square	Standard Error of the Estimates
-0.520	0.270	0.253	0.059

Predicator (Debt Equity Ratio)

Sources: Author Compilation

The above table 8 reveals the weak negative correlation between the debt equity ratio (capital structure) and net profit of the Indian automotive companies taken into sample.

TABLE - 9: TEST OF SIGNIFICANCE OF CORRELATION COEFFICIENT BETWEEN DER AND NPR

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Standard error	Beta		
Intercept	0.124	0.013		9.486	0.000
DE	-0.090	0.023	-0.520	-3.992	0.000

Dependent variable : Net Profit

Sources: Author Compilation

The above table 9 indicates the coefficient of correlation between the debt equity ratio (capital structure) and net profit. Coefficient of determinant R^2 is 0.270. This shows that only 27% of variance of net profit is influenced by the capital structure and remaining 73 % of variance with net profit is attributed to other factors.

In the above table the value of t is -3.992, which signifies that there is a negative correlation between the two variables.

GRAPH 3: FIGURE SHOWING CORRELATION BETWEEN DER AND NPR

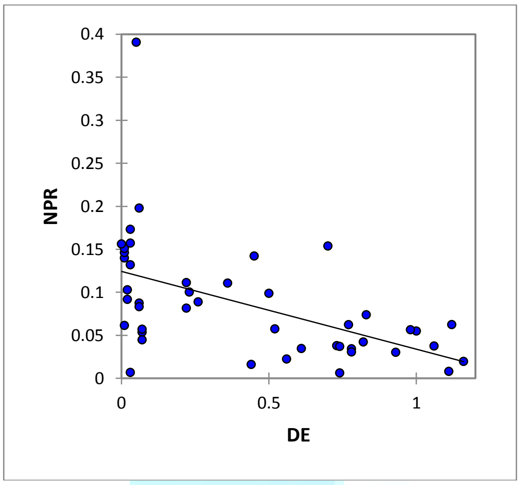


TABLE – 10: TABLE SHOWING THE MODEL SUMMARY OF DER AND RONW

Model Summary			
R	R Square	Adjusted R Square	Standard Error of the Estimates
-0.344	0.118	0.098	0.182

Predicator (Debt Equity Ratio)

Sources: Author Compilation

The above table 10 reveals the weak negative correlation between the debt equity ratio (capital structure) and return on net worth of the Indian automotive companies taken into sample.

TABLE - 11: TEST OF SIGNIFICANCE OF CORRELATION COEFFICIENT BETWEEN DER AND RONW

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Standard error	Beta		
Intercept	0.330	0.040		8.168	0.000
DE	-0.168	0.070	-0.344	-2.399	0.021

Dependent variable : Return on Net Worth

Sources: Author CompilationThe above table 11 i

ndicates the coefficient of correlation between the debt equity ratio (capital structure) and RONW. Coefficient of determinant R^2 is 0.118. This shows that only 11.8% of variance of net profit is influenced by the capital structure and remaining 88.2 % of variance with RONW is attributed to other factors.

In the above table the value of t is -2.399, which signifies that there is a negative correlation between the two variables.

GRAPH 4: FIGURE SHOWING CORRELATION BETWEEN DER AND RONW

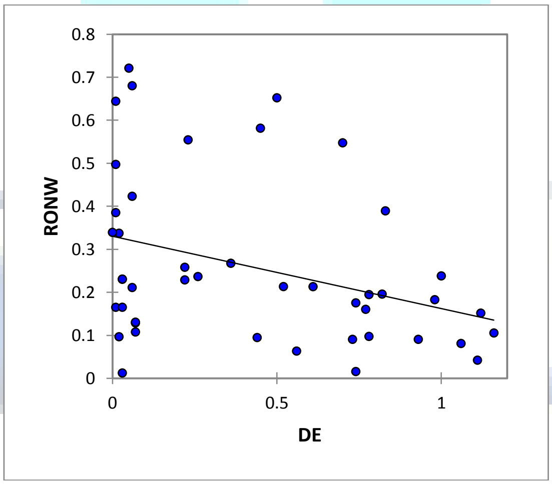


TABLE – 12: TABLE SHOWING THE MODEL SUMMARY OF DER AND ROLTF

Model Summary			
R	R Square	Adjusted R Square	Standard Error of the Estimates
- 0.455	0.207	0.188	0.179

Predicator (Debt Equity Ratio)

Sources: Author Compilation

The above table 12 reveals the weak negative correlation between the debt equity ratio (capital structure) and return on long term fund of the Indian automotive companies taken into sample.

TABLE - 13: TEST OF SIGNIFICANCE OF CORRELATION COEFFICIENT BETWEEN DER AND ROLTF

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Standard error	Beta		
Intercept	0.345	0.040		8.683	0.000
DE	-0.230	0.069	-0.455	-3.346	0.002

Dependent variable : Return on Long Term Funds

Sources: Authors Compilation

The above table 13 indicates the coefficient of correlation between the debt equity ratio (capital structure) and ROLTF. Coefficient of determinant R^2 is 0.207. This shows that only 20.7% of variance of ROLTF is influenced by the capital structure and remaining 79.3 % of variance with ROLTF is attributed to other factors.
In the above table the value of t is -3.346, which signifies that there is a negative correlation between the two variables.

GRAPH 5: FIGURE SHOWING CORRELATION BETWEEN DER AND ROLTF

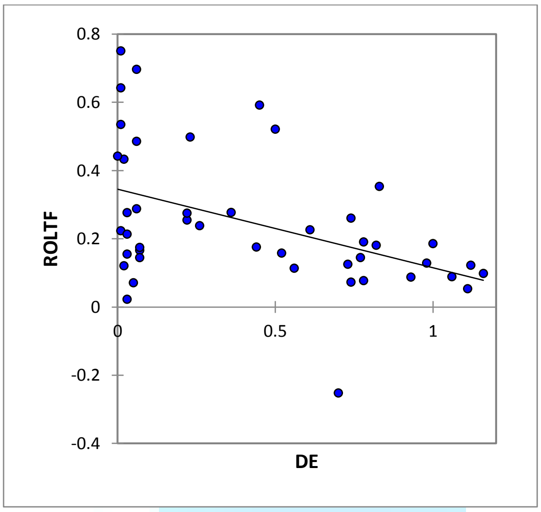


TABLE – 14: TABLE SHOWING THE MODEL SUMMARY OF DER AND PERFORMANCE

Model Summary			
R	R Square	Adjusted R Square	Standard Error of the Estimates
-0.494	0.244	0.226	0.431

Predicator (Debt Equity Ratio)

Sources: Author Compilation

The above table 14 reveals the weak negative correlation between the debt equity ratio (capital structure) and performance of the Indian automotive companies taken into sample.

TABLE - 15: TEST OF SIGNIFICANCE OF CORRELATION COEFFICIENT BETWEEN DER AND PERFORMANCE

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Standard error	Beta		
Intercept	1.032	0.096		10.800	0.000
DE	-0.616	0.165	-0.494	-3.724	0.001

Dependent variable : Performance

Sources: Author Compilation

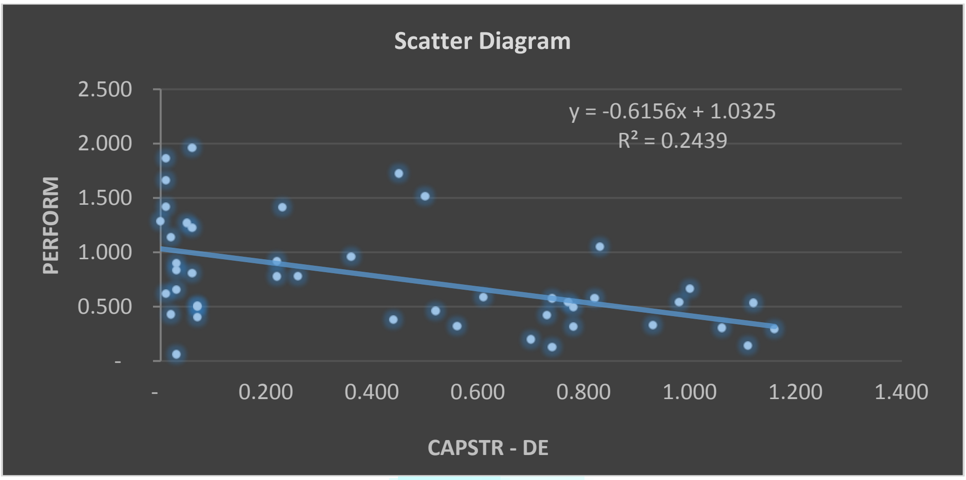
The above table 15 indicates the coefficient of correlation between the capital structure and performance. Coefficient of determinant R^2 is 0.244. This shows that only 24.4% of variance of performance is influenced by the capital structure and remaining 75.6 % of variance with performance is attributed to other factors.
In the above table the value of t is -3.724, which signifies that there is a negative correlation between the two variables.

TABLE - 16: ANOVA

Source	DF	Sum of squares	Mean squares	F	Pr > F
Regression	1	2.580	2.580	13.870	0.001
Residual	43	8.000	0.186		
Total	44	10.580			

Source: Author Compilation

DIG. 1



The ANOVA table shows that F>Sig. which means that H0 is rejected. It means that the debt equity ratio (Capital Structure) has significant impact on financial performance of the Indian Automotive Companies under study.

In the scatter diagram, X axis indicates the capital structure and Y axis indicates the financial performance. It is observable from the above diagram that there is a weak linear negative relationship between these two variables. The plot are scattered loosely around the linear line which mean that pattern of capital structure have some impact over the financial performance and there are many other factors apart from debt equity mix that affect the financial performance of companies under study.

Linear equation is formulated by this diagram as follows:

$y = -0.6156x + 1.0325$

$R^2 = 0.2439$

The regression equation $y = -0.6156x + 1.0325$ X exhibits that the relationship between debt equity ratio (capital structure) and performance. If capital structure is X=0, performance is to be 1.0325. Further capital structure is increased by one; the performance will be decreased by - 0.615. Therefore, it can be said that there is a negative relationship between variables.

FINDINGS AND CONCLUSION

The present study analyse the relationship of capital structure and financial performance of companies in automotive industry in India. Study depicts that there is a weak negative correlation between capital structure and measures of financial performance.

A linear regression model has been developed and it is observed that there is negative and low degree of relationship between the variables under study. This implies that there are many other elements and factors apart from debt equity ratio (capital structure) which determine and affect the financial performance of the companies under study.

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MERGERS AND ACQUISITIONS IN INDIAN BANKING SECTOR: AN IMPACT ANALYSIS WITH SPECIAL REFERENCE TO SELECT SURVIVING COMMERCIAL BANKS (INDIAN OVERSEAS BANK AND FEDERAL BANK LIMITED)

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ABSTRACT

It is generally held opinion that flowing water is free from contamination; and stagnant water is the fulcrum of contamination. This can be encapsulated in relation to corporate sector as growth is the essence of corporate life; and stagnation is death of corporate life. Hence, growth strategies are imperative to keep the wheels of organization on a growth track on continuous basis. The banking sector in India is not an exception to it as banks are operating not under static and stabilized conditions but under ever changing condition since the implementation of LPG policy in 1991. In this backdrop, the present paper aims to evaluate the impact of external growth strategy namely mergers and acquisitions in the banking sector. It aims to determine the impact of mergers on Profitability, Efficiency and Solvency of acquiring banks or bidder banks. For this purpose several relevant and critical financial parameters are used such as Interest spread ratio, Net profit margin, Return on net worth, Interest income/Total fund, Interest expended/Total fund, Operating expenses/Total fund, Net income/Total fund, Credit deposit ratio, Interest coverage ratio and Cash deposit ratio. Data required to evaluate the impact of mergers on surviving banks are collected by dividing study 10 years in to pre-merger period of 5 years and post-merger period of 5 years excluding the year of merger. And so categorized data is systematically Compiled, Classified, Tabulated, and Analyzed and interpreted by using appropriate statistical tools and techniques. To be more specific Paired T-test has been applied to conclude the hypotheses set for the present study. In the ultimate analysis, it can be inferred that there is a positive impact of the event of merger on both Indian overseas Bank and Federal Bank. But the extent of positive impact is found more in case Indian Overseas Bank than Federal Bank.

KEYWORDS
Efficiency ratios, M & A, Profitability ratios, RBI guidelines, Regulatory framework, Solvency ratios.

INTRODUCTION

It is generally held opinion that flowing water is free from contamination; and stagnant water is the fulcrum of contamination. This can be encapsulated in relation to corporate sector as growth is the essence of corporate life; and stagnation is death of corporate life. Hence, growth strategies are imperative to keep the wheels of organization on a growth track on continuous basis. The banking sector in India is not an exception to it as banks are operating not under static and stabilized conditions but under ever changing condition since the implementation of LPG policy in 1991. Under these conditions, no entity even dreams to give pause for its growth and welcome potential disastrous conditions. This growth can be realized either through organic growth route or through in-organic growth route or mixture of both. Organic growth refers to internal growth those results in enhanced customer base, higher sales, increased revenue, without resulting in change of corporate entity. Inorganic growth refers to the external growth producing leap frog effect as it enables to skip few steps on the growth ladder associated with internal growth process. At present, every banking entity desires to pool up the resources, by joining hands with other banking entity, with the purpose of realizing enhanced competitive advantage. One cannot fail to notice occurrences of such events in Indian banking sector. In this backdrop present paper intents to touch and disclose an overview of Mergers and Amalgamations in banking sector; reasons for Mergers and Amalgamations; regulatory framework governing Merger and Amalgamation in banking sector. In addition to, it, present paper intends to evaluate the impact of Mergers on surviving banks in terms of Profitability, Efficiency and Solvency.

Merger and Acquisition in banking sector made modest beginning in the year 1993 Government merged, the New Bank of India and The Punjab National Bank and this was the only merger between nationalized Banks, after that the numbers of nationalized Banks reduced from 20 to 19. In Feb-2008 HDFC bank have approved the acquisition of Centurion Bank of Punjab for Rs-9510 crores ($2.46 billion) is one of the largest mergers in the financial sector in India. Centurion Bank of Punjab shareholders got one share of HDFC Bank for every 29 shares held by them. Due to such Acquisition, HDFC Bank occupied the second largest position private sector bank in India.

THE REGULATORY FRAMEWORK FOR BANK AMALGAMATION UNDER VARIOUS ACTS

The various provisions relating to mergers and amalgamations in banking sector as contained in various Acts are presented hereunder.

MERGERS-BANKING REGULATION ACT 1949

According to this Regulation amalgamation of banking companies are categorized as voluntary amalgamation and compulsory amalgamation.

SECTION 44A OF THE VOLUNTARY AMALGAMATION OF BANKING COMPANIES

Section 44A of the banking regulation act 1949 provides for the procedure to be followed in case of voluntary merger of banking companies. Under these provisions a banking company may be amalgamated with another banking company by approved of shareholders of each banking company by resolution passed by majority of two third (2/3)in value of shareholders of each of the said companies. The Bank to obtain Reserve Bank's section for the approval of the scheme of amalgamation. However, as per the Observation of JPC the role of RBI is limited. The reserve bank generally encourages amalgamation when it is satisfied that the scheme is in the interest of depositors.

SECTOR 45-COMPULSORY AMALGAMATION OF BANKS

Under sector 45(4) of the baking regulation act, reserve bank may prepare a scheme of amalgamation of a banking company with other institution 9 the transferee bank. Under sub- section **(**15) sector 45.Banking institution means any banking company and includes SBI and subsidiary banks or a corresponding new bank**.** A compulsory amalgamation is a passed in to action where the financial position of the bank has become week and urgent measures are required to be taken to safeguard the depositor's interest. Action under their provision of this section is taken by reserve bank in consultation with the central government in the case of banks which are weak, unsold or improperly managed. Under the provisions, RBI can apply to the central government for suspension of business by a banking company and prepare a scheme of reconstruction or amalgamation in order to safeguard the interests of the depositors.

MERGERS NAD ACQUISITIONS ACCORDING TO COMPANIES ACT 2013

Provisions of section 230 and section 232, a scheme of merger or amalgamation may be entered into between two or more small companies or between a holding company and its wholly-owned subsidiary company or such other class or classes of companies. The 2013 Act has streamlined as well as introduced concepts such as reverse mergers (merger of foreign companies with Indian companies) and squeeze-out provisions, which are significant. The 2013 Act has also introduced the requirement for valuations in several cases, including mergers and acquisitions, by registered valuers.

RBI GUIDELINES ON MERGERS AND ACQUISITIONS OF BANKS

- With a view to facilitating consolidation and encourages of strong entities and providing an avenue for non disruptive exit of weak/ unviable entities in the banking sector, it has been decided to frame guidelines to encourage merger / amalgamation in the sector.
- Although the Banking Regulation Act, 1949 (AACS) does not empower Reserve Bank to formulate a scheme with regard to merger and amalgamation of the banks. The state governments have incorporated in their respective act as provision for obtaining prior sanction in writing, of a RBI in order, inter alia, for sanctioning a scheme of amalgamation or reconstruction.
- The request for merger can emanate from bank registered under the same state Act or from banks registered under the Multi State Co operative Societies Act (Central act) for takeover of a banking registered under state Act, while the sate Acts specifically provide for the merger of co- operative societies registered under them, the position with regard to takeover of a co-operative bank registered under the state Act by a co –operative bank registered under the central.
- Although there are no specific provisions in the state Act or the central Act for the merger of a co-operative society under the state Acts with that under the central Act, it is felt that, if all concerned including administrators of the concerned Acts are agreeable to order merger/amalgamation.

REVIEW OF LITERATURE

V.Radha Naga Sai and **Dr.Syed Tabassum Sultan** (2013) in their article entitled to "christened has financial performance analysis in banking sector; a pre and post merger perspective" have made an attempt to evaluate financial performance of the selected two banks based on the financial ratios from the perspective of pre and post merger. To analyze the impact of merger paired t-test was applied to the various financial ratios for before and after merger data relating to Indian overseas bank and HDFC bank. An Indian banking sector plays a significance role in the mergers and Acquisitions (M&A).

Pawan Sharma and **Dr.D.P.warne** (2012) in their article entitled to **"**Banks perspective in merger; A case study on merger of the Bank of Rajasthan ltd with ICIC Bank Ltd," made a brief attempt to analyze the impact of merger with reference to successful movements of merger in between two banks. The main objective of this paper is to analyze the pre and post merger impact of share price fluctuations on selected sample of study. This study is exploratory and descriptive in nature. Secondary source for data and information has been used in the study. As per the requirements of the research, data are taken from the website of NSE (National Stock Exchange).Basically; this paper investigates the impact of merger on ICICI Bank Ltd. The analysis of the collected data is based on appropriate statistical methods/tools.

Devarajappa S. (2012) in his article entitled to as "merger in Indian banks, as study on merger of HDFC bank ltd and Centurion bank Punjab of ltd" has made attempt explore various motives of merger in Indian banking industry covering various aspects of bank merger. In his paper, he has carried out a comparative study of select financial parameters during the pre and post period. He has used independent T-test to tress out spastically significance. He legitimately concludes that banks have been positively affected by the event of merger.

Dr.K.A. Goyal and **Vijay Joshi** (2012) in their article entitled to "Merger and Acquisition in Banking Industry: A Case Study of ICICI Bank Ltd**,** the largest private sector bank in India, which has acquired nine financial firms to make the steps of the ladder of success. Therefore, the aim of this article is to study the growth of ICICI Bank Ltd. through mergers, acquisitions, and amalgamations. This article is divided into four parts. The first part includes introduction and conceptual framework of mergers and acquisition. The second part discusses the historical background of ICICI Bank Ltd and followed by review of literature. The third part discusses all the mergers, acquisitions, and amalgamations in detail. Finally, the article concludes that a firm must devise a strategy in three phases i.e. Pre-merger phase, acquisition phase and post-merger phase. The article will be helpful for policy makers, strategy makers, HR people, bankers, researchers, and scholars

Dr.Abhinn baxi bhatnagar and **Ms. Nitu sinha** (2012) in their article entitled to "Strategic move of ICICI bank; A case study of Merger of ICICI Bank and bank of Rajasthan," have expressed that Changing is the regulation of nature. Any business organization undergoes change on a continuous basis, technically termed as Corporate Restructuring. It is a fundamental fact of finance that growth and capital employed are two basic drivers of the value of an organization. On the other hand neither growth nor improvement in ROCE is possible unless the company is under the control of competent, progressive and visionary management. The present paper is an attempt to understand the strategic move of ICICI bank. The case study will reveal the motives behind and synergies from such M&A activities. Why ICICI Bank has taken such a strategic move and many more questions will be solved from the case study.

Dr.V.K.Shobhana and **Dr.N.Deepa**(2011) in their article entitled to "Merger and Acquisitions in Indian banking sector and pre and post merger technical efficacies-An empirical investigation" have examined technical efficiencies of the nine select merged banks in the post reform period. The study uses stochastic Production Frontier Approach to measure the technical efficiency as a ratio of output and input. The study reveals that of the nine select cases of M&A, the merger deals of Union Bank of India and HDFC Bank only resulted in significance improvement in the technical efficiency.

Awadhesh KR.Tiwari (2011) in his article entitled to "Growth of Merger and Acquisitions in Indian banking industry a case Study. The Indian banking sector is growing at an astonishing pace. A relatively new dimension in the Indian banking industry is accelerated through mergers and acquisitions. It will enable banks to achieve world class status and throw greater value to the stakeholders.

Ms. S. Revathy (2011) in her article entitled to "Mergers and Acquisitions in the Indian Banking Sector-Financial Implications" opined that M&A in the banking sector have been on the rise in the recent past, both globally and in India. In this backdrop of emerging global and Indian trends in the banking sector, this article illuminates the key issues surrounding M&A in this sector with the focus on India. It seeks to explain the motives behind some M&A that have occurred in India post-2000, analyze the benefits and costs to both parties involved and the consequences for the merged entity. Mergers were initiated by regulator (RBI) to protect the interest of depositors of weak banks but the market led mergers have been gaining momentum in the present day context and these cannot be seen as a means of bailing out weak banks any more. Mergers between strong banks/FIs make greater economic and commercial sense and have a "force multiplier effect".

OBJECTIVES OF THE STUDY

1) To determine the impact of mergers on profitability of acquiring banks.
2) To study the impact of mergers on efficiency of the acquiring or bidder banks.
3) To ascertain the impact of merger on solvency of acquiring banks.

SCOPE OF THE STUDY

The present study chosen one public sector bank and one private sector bank to evaluate impact of merger of surviving banks from perspective of pre and post merger. The public sector bank Indian overseas bank and Bharat overseas bank, and The private sector Federal bank ltd and Ganesh Bank of Kurandwada Ltd have been evaluated consider five years pre and post merger.

HYPOTHESES OF THE STUDY

In order to evaluate the impact of merger on surviving banks in terms of profitability, Efficiency and solvency of acquiring banks, the following research hypotheses have been set for the present study.

1) **H1-** Merger results into improvement in profitability of surviving banks.
2) **H2** -Merger results into enhancement efficiency of acquiring banks.
3) **H3**- Merger leads to higher solvency of acquiring banks.

RESEARCH METHODOLOGY

The present paper intents to cockeye the impact of Merger and Acquisitions (M&A) on surviving Bank with a particular focus on Indian Overseas Bank functioning in Public sector which acquired Bharat Overseas Bank Ltd, Federal Bank Ltd, one of the popular Private Sector Bank acquired Ganesh Bank of Kurandwada Ltd .Researcher purposefully selected these two banks for the present study. This is so because, acquisition of Bharat Overseas Bank by Indian Overseas Bank falls under the category of Forced Merger, whereas acquisition of Ganesh Bank of Kurandwada Ltd by Federal Bank Ltd falls under category of Compulsory Merger. In addition to this, researcher felt it relevant to select these entities as one of them involves merger of private bank with public sector bank and another deals with merger of private sector bank with private sector bank. The present study is purely based on secondary data. To make impact study of merger data relating to both acquiring banks are collected by categories them into pre merger period of Five years (2001 to 2005 and 2002 to 2006 of both Banks) And post merger period of Five years (2007 to 2011 and 2008 to 2012 of both Banks) excluding year of merger in each case treating the same transition period. And so categorized data is systematically Compiled, Classified, Tabulated, and Analyzed and interpreted by using appropriate statistical tools and techniques. To be more specific Paired T-test has been applied to conclude the hypotheses set for the present study. The lines of investigation followed under present study are based on Profitability, Management Efficiency and Solvency parameters of impact evaluation. There are three variants of merger and acquisition in Indian banking sector based on nature of banking entities involved either as target bank or as acquiring bank(Public bank and Private), namely I) Public sector banks with Public sector banks (03); ii) Private sector banks with Public sector banks (24); and iii) Private sector banks with Private sector banks (14).

PROFILE OF THE MERGER OF THE INDIAN OVERESEAS BANK AND BHARAT OVERSEAS BANK

Indian overseas Bank (IOB) was founded 0n 10th February 1937 by Sri M Ct. M Chidambaram Chettyar with the twin objectives of specializing in foreign exchange business and overseas banking, with 3 branches across the country. It was nationalized in the year 1969 having 208 branches with an asset mix of Rs, 156 crores. In February 2006, Indian Overseas Bank board cleared a proposal to buy 70% stake of six banks in Bharat Overseas Bank; to take over the old private bank in which it held 30% stake. The other stockholder with their respective proportion of the holding is as follows. Bank of Rajasthan -16%/,Vysya Bank -14.66%, Federal Bank -10.67%, Karur Vysya Bank -10%, South Indian Bank -10% and Karnataka Bank-8.67%. So, there will be no problem in India Overseas Bank taking over Bharat Overseas Bank. RBI norms require commercial banks to have an equity base of the Rs 300 crores. Besides; they must have a diversified holding with no single entity owning more than a 5 percent stake. Accordingly Indian overseas bank acquired Bharat overseas bank during the year 2007.

TABLE-01: FINANCIAL PERFORMANCE OF INDIAN OVERSEAS BANK FOR THE FIVE FINANCIAL YEARS (PRE AND POST MERGER PERIOD)

RATIOS	BEFORE MERGER 5 YEARS					AFTER MERGER 5YEARS				
	2002	2003	2004	2005	2006	2008	2009	2010	2011	2012
Profitability Ratio										
ISR*	5.03	5.18	5.18	4.53	3.81	4.26	4.29	4.69	3.89	3.93
NPM*	6.22	10.52	11.4	14.27	16.44	13.94	11.87	6.14	8.04	5.41
RONW*	22.29	32.1	30.25	29.85	28.55	25.35	22.31	11.13	13.13	9.73
Efficiency Ratio										
Int.Inc/TF*	11.17	10.23	10.09	9.19	8.54	9.09	9.85	9.06	8.46	9.59
Int.Ex/TF*	4.47	4.32	5.21	4.9	4.28	3.34	3.74	3.39	3.32	3.08
Opt.Ex/TF*	6.7	5.91	4.88	4.28	4.26	5.75	6.11	5.67	5.13	6.5
NI/TF*	2.56	3.03	3.38	2.88	2.55	1.67	1.99	2.62	2.28	2.28
Solvency Ratio										
CrDR*	47.71	47.6	48.27	53.08	63.27	70.22	73.36	72.96	74.54	78.03
ICR*	1.3	1.23	1.39	1.51	1.44	0.34	0.32	0.16	0.24	0.16
CDR*	7.69	7.15	8.98	9.92	7.65	9.02	8.17	6.45	6.9	6.24

Source: Compiled from Financials Report from Moneycontrol.com and annual reports.

ISR*: Interest spread, **NPM***: Net profit margin, **ROCE***: Return on capital employed, **Int.Inc/TF*:** Interest Income/Total Fund, **Int.Ex/TF*:** Interest Expended/Total Fund, **Opt.Ex/TF*:** Operating Expenses / Total Fund, **NI/TF*:** Net Income/ Total Fund, **CrDR***: Credit deposits ratio, **ICR*:** Interest coverage ratio, **CDR***: Cash deposits ratio.

The table-01 reveals profitability, efficiency and solvency ratios of Indian overseas bank for a period before merger and after merger. It is clear that during pre merger ISR and RONW have shown increased trend for the first three years and thereafter that exhibited declining trend, whereas NPM ratio as experience an increasing trend. During post merger ISR as declining continuously for the first four years and there after marginal increasing trend; NPM decreased first three years and increased in the fourth year thereafter decreased level of 5.41 % during the year 2011.It is astonishing to more trends except 2011.An Acute in to efficiency ratio of Indian overseas bank during the pre and post merger reveals that Int.Income ratio has shown continuous declining during pre merger period ending 2006.and during the post merger period it has shown volatility; Int.Ex/FT stood at 4.47% for the year 2002 reached to a level of 4.28% during the year 2006 after reaching peak level of 5.21% during 2004 and during the post merger period this ratio stood at 3.34% during the 2008 and bought down to a level of 3.08% during 2001 after reaching high level of 3.47% during the 2009.and solvency ratios in pre merger period CrDR has shown declined trend first one year thereafter continuously increasing up to level of 63.27% whereas ICR and CDR have shown first one year declined there after two years increasing trend then declining trend. In the post merger period. CrDR has shown increasing trend except 2010 (72.96), ICR and CDR have shown mixed trend.

TABLE-02: ANALYSIS OF FINANCIAL RATIOS OF INDIAN OVERSEAS BANK (IOB)

RATIOS	Mean Diff.	Std. Deviation	T-value			Significant / Insignificant
			Actual Value	Table Value	Alternative Hypothesis Reject / Accept	
Profitability Ratios						
a) Interest Spread Ratio	-0.534	0.3947	-3.034	2.132	Accepted	Significant
b) Net Profit Margin	-2.69	7.3037	-0.823	2.132	Accepted	
c) Return on Net Worth	-12.278	9.3646	-2.931	2.132	Accepted	
Efficiency Ratios						
a) Interest Income /Total Fund	-0.634	1.1354	-1.2485	2.132	Accepted	Significant
b) Interest expended / /Total Fund	-1.262	0.4740	-5.9528	2.132	Accepted	
c) Net Income / /Total Fund	-0.715	0.2955	-5.3862	2.132	Accepted	
d)Operating Expenses/ Total Fund	0.626	1.1562	1.2106	2.132	Accepted	
Solvency Ratios						
a) Credit Deposit Ratio	21.836	4.3072	11.3363	2.132	Rejected	Insignificant
b) Interest coverage ratio	-1.130	0.1798	-14.049	2.132	Accepted	Significant
c) Cash Deposit Ratio	-0.922	2.0042	-1.0286	2.132	Accepted	Significant

Source: Based on table 01.

RESULTS AND DISCUSSION

The table-02 reveals that descriptive statistics, to know whether there is significant difference in the Profitability, Efficiency and Solvency ratios before and after merger, paired T-test is applied and considered one tailed T-test. The summery of analysis in the Profitability; ISR, NPM and RONW these are less than 5% one tailed T-test (Table value), it can be concluded that there is Significance difference. In the Efficiency ratios all the four ratios are less than 5% one tailed T-test (Table value), it can be concluded that there is more Significant difference. And Solvency ratios ICR and CDR are less than 5% one tailed T-test (Table value), it concluded that significant difference, but CrDR is more than 5% one tailed T-test (Table value), it can be concluded that no Significant difference in the before and after merger.

PROFILE OF MERGER OF THE FEDERAL BANK LTD AND GANESH BANK OF KURUNDWAD

Federal Bank Ltd (Federal Bank) was incorporated in 1931 as Travancore Federal Bank Ltd. It acquired its present name in 1949 and was licensed under the Banking Regulation Act, 1949 on July 11, 1959 and became a scheduled Commercial bank under the second schedule of Reserve Bank of India Act, 1934 in July 20, 1970. On January 19,2006, the Reserve Bank of India announced an amalgamation scheme due to the continued inability of Ganesh Bank to raise the required capital, the Reserve Bank of India had to exercise the option of compulsory merger available to it under section 45 Banking Regulation Act 1949.Merging the family controlled Western Bank of Kurundwada with Federal Bank. The alive based bank was willing to invest Rs 30 crores capitals into Ganesh Bank from its Rs 657 crores reserves, as it would give the bank greater exposure to Maharashtra, and help build its agriculture loan portfolio.

TABLE-03: FINANCIAL PERFORMANCE OF FEDERAL BANK LTD (FB) FOR THE FIVE FINANCIAL YEARS (PRE AND POST MERGER PERIOD)

RATIOS	BEFORE MERGER 5 YEARS					AFTER MERGER 5YEARS				
	2001	**2002**	**2003**	**2004**	**2005**	**2007**	**2008**	**2009**	**2010**	**2011**
Profitability Ratio										
ISR	6.07	6.88	6.1	5.84	6.19	5.01	4.79	6.31	5.21	5.12
NPM	5.84	6.49	7.85	9.17	7.09	13.91	12.78	13.14	10.79	12.88
RONW	15.7	18.98	21.47	23.29	13.28	19.57	9.39	11.58	9.91	11.5
Efficiency Ratio										
Int.Inc/TF	12.46	13.08	11.75	10.58	7.57	8.61	9.34	9.9	9.78	8.96
Int.Ex/TF	4.15	5.00	4.84	4.94	3.25	3.86	3.62	4.29	4.29	4.11
Opt.Ex/TF	8.31	8.08	6.91	5.64	4.32	4.75	5.72	5.61	5.48	4.85
NI/TF	1.91	1.82	3.25	3.42	2.65	2.06	2.19	2.45	2.52	2.67
Solvency Ratio										
CrDR	62.92	60.75	57.57	56.98	57.63	67.49	71.17	71.06	72.29	74.49
ICR	1.3	1.42	1.26	1.32	1.23	0.5	0.36	0.47	0.44	0.43
CDR	4.62	4.37	5.39	5.47	4.94	6.2	7.55	7.86	6.64	6.64

Source: Compiled Financials Report from Moneycontrol.com and annual reports.

The table-03 presents profitability, efficiency and solvency ratios of Federal Bank Ltd for a period before merger and after merger. It is clear that during pre merger NPM and RONW have shown increased trend for the first three years and thereafter that exhibited declining trend, whereas ISR ratio as experience an mixing trend. During post merger ISR, NPM and RONW as mixing trend; An Acute in to efficiency ratio of Federal bank during the pre and post merger reveals that Int.Income ratio has shown increasing first one year thereafter continuously declining trend, and during the post merger period it has shown volatility; Int.Inc/TF increased first one year thereafter declining trend Int.Ex/TF and NI/TF have shown mixing trend whereas Opt.Ex/TF is exhibited decreasing trend continuously whereas. In post merger period Int.Inc/TF increased first three years thereafter declining trend. Int.Ex/TF and Opt.Ex/TF have shown mixed trend and NI/TF has exhibited continuously increasing trend. And solvency ratio all four ratios have shown mixed trend.

TABLE-04: ANALYSIS OF FINANCIAL RATIOS OF FEDERAL BANK LTD (FB)

RATIOS	Mean Diff.	Std. Deviation	T-value Actual Value	T-value Table Value	T-value Alternative Hypothesis Reject / Accept	Significant / Insignificant
Profitability Ratios						
a) Interest Spread Ratio	-0.928	0.8324	-2.4932	2.132	Accepted	Significant
b) Net Profit Margin	5.412	2.3650	5.1169	2.132	Rejected	Insignificant
c) Return on Net Worth	-6.154	7.0283	-1.9578	2.132	Accepted	Significant
Efficiency Ratios						
a) Interest Income /Total Fund	-1.77	2.1874	-1.8094	2.132	Accepted	Significant
b) Interest expended / /Total Fund	-0.402	0.8131	-1.1056	2.132	Accepted	
c) Net Income / /Total Fund	-0.232	0.5789	-0.8960	2.132	Accepted	
d) Operating Expenses/Total Fund	-1.370	1.6473	-1.8595	2.132	Accepted	
Solvency Ratios						
a) Credit Deposit Ratio	12.030	4.8583	5.5829	2.132	Rejected	Insignificant
b) Interest coverage ratio	-0.866	0.1143	-16.947	2.132	Accepted	Significant
c) Cash Deposit Ratio	2.02	0.8010	5.6393	2.132	Rejected	Insignificant

Source: based on table 03.

RESULTS AND DISCUSSION

The table-04 presents descriptive statistics, to understand whether there is significant difference in the Profitability, Efficiency and Solvency ratios before and after merger, paired T-test is applied and considered one tailed T-test. The summery of analysis in the Profitability ISR, and RONW both are less than 5% one tailed T-test (Table value), it can be concluded that there is Significance difference, but NPM is more than 5% one tailed T-test (Table value), it can be concluded that no Significant difference in the Efficiency ratios all the four ratios are less than 5% one tailed T-test (Table value), it can be concluded that there is more Significant difference and Solvency ratios, ICR is less than 5% one tailed T-test (Table value), it can be concluded that significant difference, but CrDR and CDR are more than 5% one tailed T-test (Table value), it can be concluded that no Significant difference in the before and after merger.

CONCLUSION

Merger is, in fact, a potent strategic tool of consolidation in the banking sector. Many times, mergers do produce positive impact on surviving banks. This conception, perhaps, may not be universally true. Hence the impact differs from case to case. This study shows that impact of merger on financial performance of surviving banks. For this a comparison between pre and post merger performance examined in terms of profitability, efficiency and solvency ratios. In the present study, based on results and discussion of 5 years pre and post merger financial ratios of merger data of Indian Overseas Bank and Federal Bank Ltd, it can be concluded that ISR, RONW, all the four ratios of efficiency and ICR there is significant difference of both banks, while NPM, CDR are significant in the Indian overseas bank but no significant in the Federal bank Ltd, and CDR is no significant in both banks.

In the ultimate analysis, it can be inferred that there is a positive impact of the event of merger on both Indian overseas Bank and Federal Bank. But the extent of positive impact is found more in case Indian Overseas Bank then Federal Bank.

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EXAMINING WEAK FORM EFFICIENCIES IN STOCK MARKETS OF INDIA AND CHINA

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ABSTRACT

This paper reports the results of a test on the weak form market efficiency applied to Sensex of Bombay Stock Exchange (BSE) of India and SSE of China from January 2009 to June 2014. We use variance ratio test on daily return data to test the hypothesis that the stock price index follows random walk. Our results show that the Sensex and SSE are not weak form efficient.

KEYWORDS

Efficient market, Random walk, Variance ratio test.

1. INTRODUCTION

Efficient market theory and random walk hypothesis have been the major issues in financial literature. Random walk hypothesis implies that we cannot predict prices or we cannot earn excess return on the basis of information available in the variation in the past prices. The validity of random walk hypothesis has important implications for financial theories and investment strategies. It is relevant and useful to academicians, practitioners and policy makers. Academicians try to understand the behavior of stock prices or risk-return relationship depends on hypothesis of random walk. The knowledge of random walk is useful to Investors in designing the trading strategies. Efficient Stock Markets provide the vehicle for mobilizing savings and investment resources for developmental purposes. They afford opportunities to investors to diversify their portfolios across a variety of assets. A market in which prices fully reflect all available information is called efficient (Fama, 1970). If market is not efficient, price cannot provide signals for efficient allocation of resources that cause harmful effects on economy. This may direct the policy makers to take steps to correct it.

Fama (1970) classified stock market efficiency into three forms. They are namely 'weak form', 'semi-strong form' and 'strong form'. The classification depends upon the underlying assumptions relating to information set available to market participants. According to weak form of Efficient Market Hypothesis (EMH), current prices reflect all information found in the past prices and traded volumes. Futures prices cannot be predicted by analyzing the prices from the past. The semi strong form of the EMH states that the security price adjusts rapidly to all publically available information. The strong form of EMH maintains that not only the publically available information is useless to the investor but all information whether it is public or inside cannot be used consistently to earn superior return Ever since the work of Fama(1970), attempts were made to examine stock market efficiency in various developed and developing stock markets of the world. Several studies indicate that the stock market prices do not follow a random walk. Globalization of markets has created increasing interest on the study of the issue.

Borges (2009) examined weak form market efficiency of PSI-20 index prices of Lisbon stock market during January 1993 to December 2006. The study used a serial correlation test, a runs test, an Augmented Dickey Fuller (ADF) test and the multiple variance ratio tests as proposed by Lo and Mackinlay (1988) to test the hypothesis of random walk. The study showed that the Portuguese stock market approaches to a random walk behaviour since 2000.

Worthington and Higgs(2004) tested random walk behavior in daily returns for sixteen developed markets (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy,Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom) and four emerging markets (Czech Republic, Hungary, Poland and Russia) during 1986 to 2003 using a combination of serial correlation coefficient and runs tests, Augmented Dickey-Fuller (ADF), Phillips-Perron (PP) and Kwiatkowski, Phillips, Schmidt and Shin (KPSS) unit root tests and multiple variance ratio (MVR) tests. The study found that Germany, Ireland, Portugal, Sweden and the United Kingdom among developed markets and Hungary among developing markets were weak form efficient.

Poshakwale (2002) examined the random walk hypothesis of 100 actively traded stocks of Bombay Stock Exchange National Index from 1 January, 1990 to 30 November, 1998. The study finds that the daily return series do not conform to a random walk. Using BDSL[1] test statistics, the study revealed significant non linear dependence in the return in the form of Autoregressive Conditional Heteroskedasticity (ARCH)[2]. Sharma and Kennedy (1977) evaluated the stock price behavior of stock indices of the Bombay, London and New York Stock exchanges during 1963-73 using run tests and spectral analysis. The study confirmed the random movements of the stock indices for all the three stock exchanges.

The lesser attention is paid to investigate the weak form efficiency of Indian stock market using the most recent time period. Major changes took place during recent period like introduction of screen based trading and circuit filters, dematerialization of shares, rolling settlement, introduction of index based future and options, banning of carry forward facility etc. These changes might have influenced the efficiency of Indian stock markets and therefore it will be instructive to study efficiency during the recent period.

The purpose of this paper is to investigate capital market efficiency in the case of Sensex of Bombay Stock Exchange and Shangai Stock Exhange(SSE) of China. The remainder of the paper is organized as follows. Section 2 discusses data and methodology used. Section 3 presents descriptive statistics and empirical findings are presented in Section 4. Section 5 summarizes.

2. DATA AND METHODOLOGY

PERIOD OF STUDY

We collected data on daily closing price of Sensex and SSE from January 1, 2010 to June 24, 2014. Major changes took place during the period like huge inflows of FII, increasing integration of global stock markets, introduction of India VIX and currency derivatives and global melt down etc. These developments might have influenced the efficiency of the stock market.

THE SAMPLE

The sample of the study comprises of daily closing price, is of 1359 observations for Sensex and SSE. We use yahoo finance data base for analyzing efficiency.

METHODOLOGY

We use daily return. Daily returns are identified as the difference in the natural logarithm of the closing index value for the two consecutive trading days. It can be presented as:

[1] The BDSL (Brock,Dechert,Scheinkman and LeBaron) test is a nonparametric test with the null hypothesis that a time series is independent and identically distributed. The alternative hypothesis encompasses both deterministic chaos as well as linear and nonlinear stochastic behaviour. It measures the statistical significance of the correlation dimension calculations. The correlation integral is the probability that any two points are within a certain length apart in phase space.

[2] A Time series model with conditional heteroscedasticity. Conditional heteroscedasticity means having a non constant conditional variance.

$$R_t = \log(P_t / P_{t-1}) \text{ or } R_t = \log(P_t) - \log(P_{t-1})$$ **Equation 1**

Where R_t is logarithmic daily return at time t. P_{t-1} and P_t are daily prices of an asset at two successive days, t-1 and t respectively.
In this paper we employ variance ratio tests in order to investigate whether Sensex is efficient individually.

VARIANCE RATIO TEST

As pointed out by Gilmore and McManus (2003), a unit root[3] is a necessary but not sufficient condition for a random walk. The reason is that unit root process can have predictable elements, but a random walk for stock prices means that returns must be uncorrelated. Hence, we test for the random walk hypothesis through the VR test (Lo and MacKinlay, 1988) which is based on the assumption that the variance of a random walk term increases linearly with time. This approach has gained popularity and has become the standard tool in random-walk testing. The VR test is as follows:

$$VR(q) = \frac{\sigma^2(q)}{\sigma^2(1)}$$ **Equation 2**

$\sigma^2(q)$ is the ubniazed estimator of 1/q of the varianceof the q-th difference and $\sigma^2(1)$ is the variance of the first difference. Under the assumption of homoscedasticity increments, a standard normal staistics z(q) is calculated as follows:

$$z(q) = \frac{VR(q)-1}{\sqrt{v(q)}} \prec N(0,1)$$ **Equation 3**

Where $v(q) = [2(2q-1)(q-1)]/3q(nq).$ A second test statistics $z^*(q)$ is developed under the assumption of heteroskedasticity increments and expressed as follows:

$$z^*(q) = \frac{VR(q)-1}{\sqrt{v^*(q)}}$$ **Equation 4**

where

$$v^*(q) = \sum_{k=1}^{q-1}\left[\frac{2(q-k)}{q}\right]^2 \phi(k)$$ **Equation 5**

And

$$\phi(k) = \frac{\sum_{t=k+1}^{nq}(p_t - p_{t-1} - \hat{\mu})^2}{\left[\sum_{t=1}^{nq}(p_t - p_{t-1} - \hat{\mu})^2\right]^2}$$ **Equation 6**

Both the z(q) and z*(q) statistics test the null hypothesis that VR(q) = 1 or the chosen index follows a random walk. When the random walk hypothesis is rejected and VR(q) > 1, returns are positively serially correlated.

MULTIPLE VARIANCE RATIO TEST

Chow and Denning (1993) proposed a multiple variance ratio (MVR) test where a set of variance
ratios is tested against one, that is the null hypothesis V(q) =1 for i=1,…,n is tested against the alternative that VR(q) > 1. The null hypothesis is rejected at the a level of significance if the MV1 is greater than the $(1-[\alpha^*/2])^{th}$ percentile of standard normal distribution, where $\alpha^* = 1-(1-\alpha)^{1/n}$. The heteroskedasticity-robust version can be written as $MV_2 = \sqrt{T}\max|z^*(q_i)|$ where $z^*(q_i)$ is defined in equation 4 and it has the same critical value as MV1. Chow and Denning (1993) controlled the size of the MV ratio test by comparing the calculated values of the standardized test statistics, either z(q) and z*(q) with the Standardized
Maximum Modulus (SMM) critical values. If the maximum absolute value of, say z(q) is greater than the SMM critical value then the random walk hypothesis is rejected. SMM distribution has a critical value of 2.491 for the 5 percent level of significance.

3. DESCRIPTIVE STATISTICS

TABLE 1: DESCRIPTIVE STATISTICS FOR THE RETURNS OF SENSEX

Statistics	SENSEX	SSE
Mean	0.000706	0.00006
Standard Deviation	0.013416	0.01333
Skewness	1.141962	-0.37298
Kurtosis	18.95906	5.46130
Jarque-Bera Statistics*	14706.45(2-tailed p=.000)	374.27(0.000)

*The Jarque-Bera teat statistic is T[skewness^2/6+(kurtosis-3)^2/24].

The mean return for Sensex and SSE is 0.000706 and 0.00006 respectively which is very close to zero indicating that the series is mean reverting. The Sensex return is positively skewed while SSE return is negatively skewed. It suggests that the larger negative tend to be larger than the higher positive return in China while large positive returns tend to be larger in India. The level of kurtosis is high. Large value of Kurtosis suggests that the underlying data are leptokurtic or thick tailed and sharply peaked about the mean when compared with the normal distribution.

4. EMPIRICAL FINDING AND INTERPRETATION

Table 2 shows the Variance ratio test results computed for lags 2, 4, 6 and 8 days, with the one-day return used as a base[4].

[3] Unit root is a situation of nonstationarity where mean and variance of a time series are not constant.
[4] The number of lag periods has been limited to eight for the daily data since the power of the VR test decline as q become large relative to the data set.

TABLE 2: VARIANCE RATIO TEST RESULTS FOR DAILY RETURN OF SENSEX AND SSE

No of days, q, in holding period	2	4	6	8	2	4	6	8
VR(q)	0.549	0.267	0.179	0.129	0.507	0.257	0.175	0.124
z(q)	-16.63**	-14.45**	-12.22**	-10.85**	-18.52**	-14.633**	-12.289**	-10.891**
z*(q)	-7.31**	-7.33**	-6.54**	-6.28**	-11.92**	-11.918**	-10.298**	-8.253

Notes: Variance ratios reported in the main row with homoscedasticity Z(q) and heteroskedasticity Z*(q). Under the random walk null hypothesis, the value of the variance ratio test is 1 and the test statistic have a standard normal distribution (asymptotically). Test statistics marked with asterisks indicate that the corresponding variance ratios are statistically different from 1 at the 5% level of significance.

Results show that the hypothesis that the variance ratio test can be rejected based on the homoscedasticity assumption. The variance ratio test also indicates the presence of positive serial correlation in daily returns across the intervals considered. We report also the z- statistic adjusted for this violation of homoscedasticity, although results remain the same. In conclusion the random walk hypothesis is rejected for Sensex and SSE. It indicates that returns are positively serially correlated.

Results for Chow and Denning's (1993) Mutltiple Variance Ratio tests are reported in Table 3.

TABLE 3: MULTIPLE VARIANCE RATIO TESTS

Multiple Variance Rato	Sensex	SSE
MV_1	-10.85**	-10.89**
MV_2	-6.28**	-8.25**

Note: MV1 is the homoskedastic and MV2 is the heteroskedastic-robust version of the Chow-Denning test.
** reject the null hypothesis at the 5% level of significance. The critical value for the Chow-Denning test are 3.089(1%), 2.68(5%) and 2.310(10%) respectively.

We can see that, at the 5% level of significance, the null of random walk for Chow and Denning's homoscedastic and heteroskedasticity are rejected for both the stock markets suggesting that it does not follow a random walk process.

5. SUMMARY

The assumption that the stock prices are random is basic to the Efficient Market Hypothesis. The study carried out in this paper has found that Sensex and SSE do not follow random walk. It suggests that the returns of the stock market can be predicted by using past returns. There are significant implications of the market efficiency for investors who seek to maximise their risk-adjusted returns. Deviations from efficiency may offer profit opportunities to better informed investors at the expenses of less-informed investors. Policy makers have a task on their hands in terms of mitigating the costs of inefficient markets. This could be assisted by introducing further reforms for improving legal and regulatory framework as well as increasing standards of transparency and internal controls.

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THE MARKET FOR GREEN BUILDINGS IN EMERGING INDIA: A LITERATURE REVIEW AND RESEARCH AGENDA

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ABSTRACT

We reside and work in the buildings which protect us from nature's extremes, but they also affect our well-being in countless ways. Buildings have a major impact on the environment and human health. "Green Building" is gaining momentum in India, as a result of environmental impacts of building activities are becoming more apparent. Green buildings transform the buildings' design and operations to create more comfortable, healthier and sustainable built environments while reducing energy and water consumption, greenhouse gas emission and solid waste generation. Green buildings reduce costs, increase value, and achieve better results in the design, construction, and operation of built environments taking life cycle of buildings in a holistic sense. It includes consideration like, where building materials are sourced, the energy and water sources used and the effect on the buildings' surroundings. Green Building practices and techniques reduce the impacts of buildings on environment and human health. Sustainable building design concepts are increasingly being incorporated into building design and construction through green building rating systems. In the light of above, this paper makes an earnest attempt to gain insight into the various concepts and critically examines the relevant literature on market situation for Green Buildings and provides broad guidelines for the future research.

KEYWORDS
Green buildings, Green building life cycle, Green building rating systems, Sustainable built environment.

1. INTRODUCTION

Over the past few years, energy and resource conservation has taken center stage in the national media. With fuel and gas prices increasing to levels unseen in years, and every state experiencing blackouts, people have begun to focus on energy conservation and resource efficiency. People are transforming their houses into energy efficient, using fuel efficient vehicles, using recycled and reusable goods, and purchasing products that are healthier and harmless to the environment. Sustainability is becoming a necessity and part of a bigger agenda in the urbanizing world of developing countries. With the increasing desire of people for comfortable living, for being healthy, safe and clear living environment, the recognition of people for sustainable development is becoming embedded in peoples' lives. Green marketing has gained significance in the modern market and has developed as an important concept in India and is considered as a strategy of facilitating sustainable development. Green building, the concept of constructing sustainable buildings is making inroads into the construction industry.

There has been tremendous growth in infrastructure and construction development in India. The construction industry is one of the largest economic activities in India that has been growing at an average rate of 9.5% from the past 5 years as compared to the global average of 5% (Indian Green Building Council [IGBC]). A large number of consumers are becoming aware of sustainability and green buildings and benefits of living in green buildings. India's focus on green building is mainly due to the factors like water and power shortages. The introduction of the Indian LEED [Leadership in Energy and Environmental Design] rating system is the driving force for the green building sector followed by the investor and occupier demand for more efficient living and working space. India has taken a leading role in promoting green buildings. Currently, India has 2190 LEED registered buildings and 398 LEED certified buildings with 1.26 billion square feet built up area. (IGBC).

According to U.S. Environmental Protection Agency [EPA], 2008, "Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from siting to design, construction, operation, maintenance, renovation and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort". They utilize designs and materials that are environment friendly. They ensure pollution free environment and reduction in energy expenses through application of smart energy management, application of solar photovoltaic system, high performance windows, and heat resistant paints, among others.

This article provides an overview to the green building concept and identifies and explores the major themes in the literature. The article concludes by outlining a broad research agenda that can help move forward the discussion of the issues of market for green buildings in emerging India.

2. REVIEW OF LITERATURE

There have been extensive research on various aspects of green buildings in different contexts as evidenced in the growing number of papers been published. Majority of these studies have been conducted in developed countries. A systematic review of the existing body of knowledge helps in identifying the common research streams and highlights the future research trends. The concept of green building, green building ratings, benefits of green buildings and measures to achieve green buildings are the common themes discussed in detail.

2.1 CONCEPT OF GREEN BUILDING

Lack of clear understanding of the green building concept poses a challenge in promoting and implementing green buildings (Zuo & Zhao, 2013). The green building definitions have been interchangeably used with sustainable buildings and high performance buildings. In 1994, the Conseil International du Bartiment [CIB], an International Construction Research Networking Organization defined the goal of sustainable construction as "creating and operating a healthy built environment based on resource efficiency and ecological design". The CIB articulated seven Principles of Sustainable Construction, which helps in decision making throughout the buildings life cycle: reduce resource consumption, reuse resources, use recyclable resources, protect nature, eliminate toxics and apply life-cycle costing.

The founder of LEED, the United States Green Building Council [UGBC], describes green building as the ''design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and occupants in five broad areas such as sustainable site planning, safeguarding water and water efficiency, energy efficiency and renewable energy, conservation of materials and resources, and indoor environmental quality.''

Heekin and Meyers (2001), identified Green building as development and construction that endorses less energy consumption, promotes water conservation, propagates the best use of building materials, uses renewable resources, encourages competent waste management techniques, preserves the natural environment, and incorporates health and environmental standards.

According to the department of Energy Efficiency and Renewable Energy [EERE] of United States of America, a high performance building "uses whole building design to achieve energy, economic and environmental performance that is substantially better than standard practice". Whole building considers site, energy, materials, indoor air quality, acoustics and natural resources as well as their interrelation with one another.

The United Nations Environment Programme's (UNEP, 2009) vision for sustainability in the building and construction sector states that Sustainable Building is an active process where policies and incentives provided by the government support sustainable building and construction practices and where investors, insurance companies, property developers and buyers/tenants of buildings are aware of sustainability considerations and take active roles in encouraging Sustainable Building and construction practice.

2.2 GREEN BUILDING RATINGS

To assist the green building developments, a number of rating tools have been developed. Leadership in Energy and Environmental Design (LEED) in United States, Building Research Establishment Environmental Assessment Method (BREEAM) in United Kingdom, Green Star in Australia are the leading green building rating tools. In India, there are two organizations that currently offer Green Building certifications: The Indian Green Building Council (IGBC) is the subsidiary of the Confederation of Indian Industry and The Energy & Resources Institute (TERI) is a government agency. IGBC has developed a rating system which mainly draws from the USGBC's LEED green building rating system. TERI's rating system called GRIHA (Green Rating for Integrated Habitat Assessment) has been developed in partnership with the MNRE (Ministry of New & Renewable Energy).

The green building rating tools are voluntary rather than mandatory. They are developed by the green building council in each country/region. The assessment is undertaken by accredited professionals that are commissioned by respective organization. The structures of these green building rating tools are similar to a large extent, like covering various aspects of sustainability, a number of credits available under each category, different rating tools for various types of projects. Green buildings in different countries are designed and built according to local climatic conditions and to suit the requirements of the locals. Therefore, the assessment criteria for these green building are different. Traditionally the focus of green building ratings is on environmental aspect of sustainability e.g. energy efficiency, water efficiency, resource efficiency and greenhouse gas emission reduction.

Fuerst and McAllister (2009), investigated the price effects of environmental certification on commercial real estate assets. . The hedonic regressions suggest that there is a rental premium of approximately 5% for LEED certification and 4% for Energy Star. For sales prices, price premia of 25% for LEED-certified buildings and 26% for Energy Star.

Fuerst et al. (2011), investigated variations in the adoption of LEED-certified buildings in the United States. It was found that only a mandatory requirement to obtain LEED-certification for new buildings had a significant positive effect on market penetration.

Applying for Green Certifications involves initial cost, but the highest ratings gained attract large number of customers and increase the market value and authenticity of the Buildings.

2.3 BENEFITS OF GREEN BUILDINGS

Green buildings address a range of challenges such as the high cost of electric power, worsening electricity supply, water shortage, and waste disposal and health issues. It also gives consideration to environmental issues such as environmental pollution and global warming. The studies investigating the costs and benefits associated with green building developments are many. A common approach adopted in existing studies is to compare the characteristics of green buildings to those of conventional buildings such as energy efficiency, water efficiency, indoor environmental quality, thermal comfort, health and productivity.

The building sector is responsible for negative impact on the environment such as high energy consumption, solid waste generation, global greenhouse gas emissions, external and internal pollution, environmental damage and resource depletion (CICA, 2002; Zimmermann et al.,2005; Melcher, 2007; Ortiz et al., 2009) (Chan et al. 2009).

A 2009 report by the U.S. General Services Administration found 12 sustainably designed buildings cost less to operate and have excellent energy performance and occupants were more satisfied with the overall building than those in typical commercial buildings.

According to the Commission for Environmental Cooperation (2008), In the United States Green Building Council estimated that green building, on average, reduces energy use by 30 percent, carbon emissions by 35 percent, water use by 30 to 50 percent, and generates waste cost savings of 50 to 90 percent. Substantial research supports the health and productivity benefits of green features, such as day lighting, increased natural air ventilation and moisture reduction, and the use of low-emitting floor carpets, glues, paints and other interior finishes and furnishings. According to researchers, green building has the potential to generate an additional $200 billion annually in the United States in worker performance by creating offices with improved indoor air quality.

In their paper on price differentials of green buildings, Yoshida and Sugiura (2010), found that although green condominiums are on average traded at a premium, the premium is mainly attributed to the building age and quality. The value of green buildings critically depends on the definition of green buildings, institutional settings, policy package, and user preferences.

Aroul and Hansz (2010), examined residential transaction prices in two cities and found a positive and statistically significant effect on transaction prices of green residential properties. They found a modestly stronger price premium associated with green transaction prices of residential properties associated with the mandatory green building program.

Kats et al. (2003), confirmed that minimal increases in upfront costs of about 2% to support green design would, on average, result in life cycle savings of 20% of total construction costs more than ten times the initial investment.

Cajias and Piazolo (2010), investigated the effect of energy consumption on the financial performance of residential buildings. New technologies and especially compulsory construction regulations support the future development and force real estate markets players integrate energy consumption as a key financial indicator into investment decisions.

Smith & Pitt (2011), examined the role of sustainable buildings in providing healthy workplaces in physical and perceptual terms. Sustainable construction has focused on environmental sustainability and contributed to improved health, satisfaction and wellbeing amongst building users. Sick building syndrome and poor indoor air are contributory factors to ill health and reduced productivity. They suggested that sustainable building practices will reduce these effects, improving the quality of buildings for their occupants.

Proponents of sustainable design argue that green technologies and design strategies will enhance interior environmental quality and thus be more conducive to human health and productivity than buildings that use standard practices (Browning and Romm, 1995). Sustainable building design will become a more common practice once the human benefits are identified, primarily the productivity gains believed to be associated with the provision of high quality interior environments (USGBC, 1999).

2.4 MEASURES TO ACHIEVE GREEN BUILDINGS

The essential factors to achieve green buildings and find an efficient market require a comprehensive consideration. Contreras (2011), conducted an in-depth study of sustainability standards and certifications for selected categories of building materials and developed a set of recommendations for government, standards-setting organizations, and industry. The sustainable building had achieved national prominence. Discord, imprecision, and incompatibility among competing standards and certifications characterized the existing landscape for sustainable building materials. Accordingly, a framework was proposed that would greatly improve comparability, precision, transparency, and utility among materials sustainability standards and certifications for the benefit of consumers, architects, designers, contractors, manufacturers and the environment.

According to Kingsley (2007), barriers to innovation in the real estate industry have rendered ineffective the local government attempts to stimulate green building, and suggested that impact fees—fees imposed by local governments on land use development—would be more successful in pushing private real estate developers to build green.

According to Hakkinen and Belloni (2011), organizational and procedural difficulties are major barriers for developments of sustainable building rather than the lack of technologies and rating tools.
There are multiple managerial aspects of green buildings, i.e. project level, company level and market level. At project level, specific project management skill sets are required for managing green buildings. According to Robichaud and Anantatmula (2010), these differences include: involvement of specialist consultant on green buildings, adopting green building assessment methods such as LEED, providing green building related continuous education and training opportunities to employees, and engagement of external stakeholders.
The behavioral and cultural factors are also crucial for green building developments. Therefore, it is critical to raise the level of awareness of all stakeholders (e.g. clients, designers, contractors, and end users) on concepts of sustainable development and green buildings.
Hoffman and Henn (2008), argue that Environmental progress in the building design and construction industry will continue to stall if the significant social and psychological barriers are not addressed. Seven specific strategies are elaborated: issue framing, targeting the right demographic, education, structural and incentive change, indemnifying risk, green building standard improvements, and tax reform. These strategies help overcome the individual, organizational and institutional barriers.
Circo (2008), principally asked what role government should play in promoting sustainable building practices in the private sector. The question involved a narrow band of sustainable development strategies. Preliminary results indicate significant public support for green building practices. Developers continued to build in places where demand remained strong due to the attractive location, demographics, economic activity, and image of each of these places. Indeed, some of the most vigorous green building initiatives evidenced a belief that in the near future a public commitment to sustainability will enhance, not diminish, a locality's economic development image.
Sussman (2008), argues that local governments can have a positive impact on global warming by utilizing measures to foster green buildings, energy efficiency, and renewable energy use in government operations and by the general population. Local governments can proactively develop better solutions to the environmental, social, and economic problems posed by climate change.
Schindler (2010), explained and assessed the privately promulgated LEED standards and suggested that municipalities should enact green building ordinances that have been promulgated by public governmental bodies, rather than private, industry-based organizations, and do so locally, taking into account specific local building-related and environmental concerns.
Potbhare, Syal, and Korkmaz (2009), stated that in the wake of sustainable construction entering the mainstream, many developing countries are either currently pursuing green building guidelines or are planning to pursue them in the near future. The proposed implementation strategy showed that it is important for green building initiatives to identify the organizations that accelerate the adoption of green building guidelines in a society, the incentives and barriers associated with the green building guidelines, and the necessary motivations for the adopter organizations. An informed approach in the form of this implementation strategy might potentially contribute to the acceleration of green building guidelines' adoption in developing countries.
Most of the green building studies focus on aspects of environmental sustainability such as energy consumption, water efficiency and greenhouse gas emission together with the technical solutions. There are innumerable literatures that focus on Green Building concepts in international countries, but there are very few studies conducted in India. The Green Building sector is a highly promising one, with less knowledge and awareness among stakeholders like developers, builders, customers, etc.

3 DIRECTIONS FOR FUTURE RESEARCH
The building construction has profound influence on the natural surroundings, economy, personal well-being and workers' productivity. Therefore, Buildings must be designed, constructed and operated to minimize or eliminate negative impacts and enhance positive impacts. Developments in building design, science and technology are at present available to aspiring green designers, builders, operators and owners, to assist in maximizing the economic and environmental potential of their buildings. A multitude of opportunities in green building development is opened for the enlightened firms that recognize and can adapt to the new realities. The residential green building market is in its nascent stage. Therefore, much remains to understand about the dynamics of key market elements like buyer characteristics and preferences.
Green buildings have a number of attributes that appeal to potential buyers. An intensive and directed sales effort is required. In a budding market, with limited penetration of green buildings, it is vital for a builder or developer to ensure that they capture those consumers who are inherent to their new product offering. Future agenda for green building related research can focus on aged people, women, students and teachers. Aged people are exposed to heat and indoor environmental quality. Women have greater concern for environmental issues. Students will be the future leaders and participants. Teachers perform an important role in moulding the attitude and behavior of students towards the importance of sustainability issues.
Extensive research is undertaken throughout the world regarding the various aspects of the concepts of green building and its impact on the environment and people. Most of the studies are focused on commercial buildings. In terms of real performance, the residential buildings and industrial buildings require further in-depth studies. More empirical studies for different property types in different areas are necessary to understand the value of green buildings. Studies on Post-occupancy Evaluation (POE) are required to validate real performance of green buildings. Further research is essential to know the role of green building construction in providing sustainable buildings, to know the market's reaction to green features, green development, green building programs and rating systems. The social and economic aspects of sustainability also require further investigation.

4 CONCLUSION
Green building construction has made significant contribution in India. With rapid development in Indian economy, there is an immense pressure on environment, electricity, waste disposal and water resources. There has been enormous interest in green building development practices and research in India. Resulting from growing environmental awareness and concerns, green building programs have been implemented in many states. A number of green building projects are rising up in different sectors in the country. The rating systems like LEED-India, GRIHA etc. have accelerated opportunities in the field of construction, architecture and engineering design, building materials and equipment manufacture. The green building movement will transform the well-being of individuals, society and the country at large.

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COMPARATIVE STUDY ON AMWAY & AVON ON THE BASIS OF MLM

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ABSTRACT
Multi-level marketing is a strategy in which the sales force is compensated not only for sales they personally generate, but also for the sales of others they recruit, creating a chain of distributors and a hierarchy of multiple levels of compensation. Other terms for such concept include network marketing, pyramid selling and referral marketing. Salesmen are expected to sell products directly to consumers by means of relationship referrals and word of mouth marketing. Some people equate MLM with direct selling, although MLM is only a part of direct selling. MLM companies had been subject to criticism as well as the target of lawsuits. Criticism has focused on their similarity to illegal pyramid schemes, high initial start-up costs, encouraging if not requiring salespeople to purchase and use the company's products, potential exploitation of personal relationships which are used as new sales and recruiting targets, tedious and sometimes exaggerated compensation schemes. However not all MLM companies operate the same way, and MLM groups have persistently denied that their techniques are anything but legitimate business practices. Companies like Amway and Avon have been frontrunner in this concept and people have always relied and had faith on such companies. This Paper has been done to find out the perception of the people of Haryana regarding these MLM Companies with the help of Chi-Square Test.

KEYWORDS
Marketing, Network, Consumer, Pyramid, Referral.

1.0 INTRODUCTION TO INDUSTRY
M**ulti-level marketing (MLM)** schemes are one of the fastest growing types of business. However, little has been written about the ethics of MLMs. This oversight is somewhat surprising, especially because some prominent MLMs have been accused of being pyramid schemes. Pyramid schemes were the number one type of internet fraud in 1996, and the fourth most common for mlm of internet fraud in 1997. In the aftermath of recession has witnessed a boom in direct selling schemes also known as pyramid selling, multi-level marketing or network marketing. Boasting huge annual sales they provide 'get-rich-quick' opportunities for thousands of potential entrepreneurs. Alternatively, recent court judgments have labeled such schemes 'a swindle on the public', and 'an illegal lottery relying on misleading literature to obtain subscriptions ***(Sarker, 1996).*** This study examines the nature of MLMs and their similarities with and differences from pyramid and endless chain schemes. The paper argues on the fact that MLMs pose some unique ethical issues, issues that are not easy to address or resolve. Multi-level marketing, also known as network marketing, is practice of distributing, selling or supplying products or services through various levels of independent agents (contractors, distributors, etc.). Agents are paid commissions, bonuses, discounts, dividends or other forms of consideration in return n for selling products or services and/or for recruiting other agents. The party who recruits another individual is the "upline" of the recruit. The recruited party is supposedly the "downline" of the recruiter.

1.1 SELLING TO FAMILY MEMBERS AND FRIENDS
Some MLMs encourage participants to sell product to family members and Friends and/ or to recruit them into the MLM. Such marketing strategy poses certain ethical difficulties. Participants, desperate to succeed at their new MLM business, may feel dr iven to pressure relatives and friends into buying cosmetics, water filters, jewelry, etc. In other words, MLMs can alter human relationships, encouraging people to "instrumentalize" relations rooted in love and affection. Relatives may feel somewhat forced into buying goods in order to keep their sons or daughters from feeling ashamed, to show support or to avoid a big fight within the family.

1.2 EXPLOITING THE HOST-GUEST RELATIONSHIP
A related concern: MLM participants typically pitch their products inside potential customers' homes. If you invite the Avon lady (whom you may know personally) into your home, you naturally will feel that you need to be a good host. Ho st should be polite. The feeling that you should feed the "guest" when ofcourse, this guest is not your usual guest. A "guest" does not come into your house and then try to sell you something. MLMs blur the line between the social setting and the selling setup. What the guest wants to receive is the host's order for product and money and/or a commitment to join the MLM. Since the host is accustomed to being responsive, this situation easily can be exploited by the MLM participant. This possibility, though, is not one that MLMs either warn about or guard against. On the contrary, MLMs advocate getting inside people's homes in order to make the sale.

1.3 APPEALING TO GREED
Prospects are encouraged to dream and to envision themselves earning millions of dollars, living in large houses, driving expensive cars. Indeed, MLMs circulate tales of people who have been wildly successful using their techniques. Success is always measured in purely material terms. These "success stories" may not be good parents or citizens, but they do dr ive luxury cars and wear costly clothing.

2.0 INTRODUCTION TO AMWAY
The Year was 1959, when Rich DeVos founded Amway Corp. with his longtime friend and partner, the late Jay Van Andel. Amway now operates in more than 80 countries and territories around the world, and enables people to own independent businesses. The AMWAY business model is based on the AMWAY Business Owner Compensation Plan – a low-risk, low-cost business opportunity that is open to everyone. An AMWAY business rewards for selling products and for sponsoring others who do the same. In this business one can earn income from:
- Retail profit on product to customers. (Retail margins on health, beauty, and home care products average about 29% when these products are sold at Suggested Retail price.)
- Monthly performance bonuses ranging from 3% to 25% of business volume, depending on monthly productivity.
- Monthly and annual leadership bonus & cash awards with business incentives based on group performance.

Are you working towards a better life for you and your family? Are you in control of your future? Are you getting the rewards your hard work deserves? Your life doesn't have to be a trade-off between making the money you need and having the flexibility and time to live your life to the fullest. The Amway Sales and

Marketing Plan put you in control, allowing you the flexibility to work where and when you want, giving you time for family and friends as well as the opportunity to earn a good income. It adapts easily to your needs and ambitions, and grows with them, offering you all the personal support and assistance you require to become the Business Owner you want to be. To start the Amway Business one needs to buy the Amway Business Kit and be sponsored in the business by an already existing Amway Business Owner. Despite what you may have heard, starting an Amway business doesn't involve handing over large amounts of cash. With your efforts and our knowledge, the Amway opportunity can become everything from a means of earning a little extra cash to building an international business. Where do you want to go? The Amway Sales and Marketing Plan is a low risk, low start-up cost business opportunity that is open to everyone. It allows you to build your business through retailing products and sponsoring other people who, in turn, can retail products and offer the business opportunity to others. By passing your sales and marketing knowledge to your developing team, you not only build your own business network but also enable others to build one of their own. The Amway Sales and Marketing Plan has been operating for over 40 years and is available in over 80 countries and territories around the globe. The core of the Amway Sales and Marketing Plan's income opportunity is the sale of quality AMWAY products to retail customers. As your Amway business grows, the rewards you earn grow in proportion. The Amway Sales and Marketing Plan do not compensate anybody for simply recruiting others as Amway Business Owners.

3.0 INTRODUCTION TO AVON (*THE COMPANY FOR WOMEN*)

Avon is the company that invented the direct selling/network marketing industries. Founded by David H. McConnell as California Perfume Company, Avon has since grown to an international organization with more than 5 million representatives worldwide. Company is working more then 120years. It was the company's first sales employee, Mrs. P.F.E. Albee, who pioneered the direct sales. The company's business model offered women a chance to earn their own money in an era where the vast majority of women couldn't find work outside the home. Avon aggressively added new product lines to target additional market niche including upscale jewellery,a youth line called mark,and clothing.Avon has also partnered with existing brand names like Curves and Liiv Botanicals in arrangements that are beneficial for both the brands.Today Avon isn't cosmetics,fragnance and skin care company so much as it is a mall ahere each store's content is availability by direct sales.Avon is international;y known as corporate sponsor of women's charities. Avon's Compensation Plan stresses product sales over recruitment. The plan is very generous with commissions, with the potential to earn up to 50% depending on the size of each order placed. In addition, representatives can "jump start" their Avon businesses by becoming Leadership Representatives and recruiting others as company representatives. Leadership Representatives earn commissions on the earnings of up to a 3-member downline. The company also pays commissions on Internet sales made through its representatives' personal websites.

4.0 DIFFERENCE BETWEEN AMWAY & AVON

The differences between Avon and Amway are not only in the sales method but also the distribution of profits. Avon uses a one-leveled method, in which the income of sales personnel depends on the sales volume. Amway, however, takes the multi-leveled way. The sales people make money not only from sales volume, but also gain commissions from the achievement of the sales people on the lower levels. At times such methods could easily become the notorious 'pyramid sales,' when sales people only focus on developing lower level representatives rather than improving their own sales achievement, But from consumer point of view Amway representatives will offer more direct service to its customers. However it is also seen that too strict control over the selling mode would hinder the development of direct selling, which has many advantages over traditional retail methods, due to the lower costs and more direct service. Again the perceived difference has to do with the company's business model, they are all MLM companies, which has more to do with the products themselves and the way the companies choose to execute that strategy. Amway is perceived as a cult because it acts like one, trying to portray itself more as a lifestyle than a business opportunity. However Avon works with bit more class, and sells reasonably good quality products with a narrow focus. Distributors for Amway tend to concentrate on recruiting rather than on retail sales. The compensation plans promises huge earnings for those who have a large network of distributors under them, simply selling the product is not very lucrative. Contrastingly, when people are called for Avon party they are not surprised with anything that fosters discomfort. People who decide to sell Avon are actually committed to sell the product. Avon promotes itself as a company which makes its customers to earn something extra on the side.

5.0 LITERATURE REVIEW

According to ***(Bloch, 1996)*** people promoting multilevel marketing praise it as an opportunity of a lifetime with no catch. Claims that there is indeed a serious catch: the conventional process of promoting this so-called opportunity to friends and virtually everyone else in someone's circle of acquaintance is, for the most part, unacceptable in western society. Maintains that truly determined sellers may well make money, but most will not, capitulating rather in the face of rejection ranging from disinterest to serious disapproval and resentment of the matter having been raised at all. ***(Msweli & Adrian Sargeant, 2001)*** indicated that a number of the characteristics of NWM organisations, and those of the individual distributors themselves, could offer considerable utility in allowing NWM organisations to predict the duration of the relationship that they might expect to develop with a particular distributor. Observation by ***(Palmer,1996)*** suggested that there has been considerable recent interest in evolving forms of network organizations, and notes the suggestion that organizations are developing increasingly fuzzy external boundaries as ongoing relationships with external subcontractors are developed. Findings of a research by ***(Salciuviene et al., 2011)*** suggested that trust, locus of control and shared values are moderated by channel commitment of the downstream channel members. Findings of a Study by ***(Hillebrand & Biemans, 2011)*** suggested that firms are aware of the importance of downstream customers, but frequently fail to establish effective relationships with them, further they also identified several barriers that hamper an orientation on downstream customers and shows how firms may deal with these barriers. According to ***(Berman & Thelen, 2004)*** A well-integrated multi-channel format enables consumers to examine goods at one channel, buy them at another channel, and finally pick them up at a third channel. Multichannel retailing offers synergies, as it can result in an increased customer base, added revenue, and higher market share. Research by ***(Daryl Koehn, 2001)*** revealed that Pyramid schemes were the number one type of internet fraud in 1996, and the fourth most common form of internet fraud in 1997, also MLMs pose some unique ethical issues, issues that are not easy to address or resolve. Value equity and brand equity respectively have significant effects on customer acquisition and customer retention. Customer acquisition has a significant "feedback" effect on value equity, and relationship equity affects brand equity positively ***(Chang & Tseng, 2005)***. Trust is relevant but not in itself a sufficient condition for the development and sustaining of buyer-supplier relationships. The objective rationality requires that business relationships are centered on organizational needs and benefits which necessitate the rational standard of interorganizational reliance ***(Jiang et al., 2010)***. A study on customer supplier relationship by ***(Laeequddin & Sardana, 2010)*** revealed that the trust focus on partner's characteristics such as benevolence, honesty, reliability, credibility, integrity, contracts, agreements etc., in the context of B2B relationship these perspectives can only help the partners in evaluating the other partner as trust worthy. Once the partners engage in the relationship the orientation will change towards perspectives of rational risk.

6.0 RESEARCH METHODOLOGY

6.1 OBJECTIVE OF STUDY

MAIN OBJECTIVE

To study the awareness of people about multi level marketing (networking) and also about there response about Avon and Amway (networking company)

6.2 SUB OBJECTIVES

- To create the awareness about multi level marketing.
- To know the level of awareness about various networking companies.

7.0 JUSTIFICATION OF THE STUDY

The study attempts to identify the role of networking in human life, which would help them to take the decision that they should invest in networking or not. Some people thought that the networking companies are fraud and are just to make there own profit and nothing to do with there agents and customers. The study also identifies the attitudes of the customer towards such companies. The scope of this study is very wide with the help of it we will be able to know the investing pattern of people. This will also help in spreading awareness among customers about networking companies.

7.1 RESEARCH DESIGN

The research design of this project is Descriptive in nature.

7.2 DATA COLLECTION

- **Secondary data like** Books, magazines, Reports, website have been used for the purpose of this research.

7.3 DATA COLLECTION

100 Questionnaire are being framed for this research, taking into consideration the various aspects.

7.4 SAMPLE AND SAMPLING DESIGN

A random sample of 100 respondents was selected for research purpose. The sample was drawn from Haryana. After scrutinizing the filled questionnaires, 90% of respondents said that they know about multi-level marketing whereas 10% respondents didn't even understood this word.

7.5 HYPOTHESIS

Following Hypothetical assumptions has been used:

1H$_0$: There is no significant difference between the satisfaction and experience for Avon and Amway.

2H$_0$: There is no significant difference between the money spent by respondents on product of Avon and Amway.

3H$_0$: There is no significant difference between the usage period of Avon and Amway.

8.0 DATA ANALYSIS TECHNIQUES

The statistical tools used for data analysis includes Bar diagrams, & Chi-square test. Chi-square test is applied to test the goodness of fit, to verify the distribution of observed data with assumed theoretical distribution. Therefore it is a measure to study the divergence of actual and expected frequencies.

9.0 LIMITATIONS

The Respondents were sometimes unable to spend much time for filling up the, questionnaire. So, the chances for bias in the respondents answer were on the higher side. Lack of time is also a reason of some in comprehensiveness. There is possibility of sampling errors in the study. The responses obtained might be inaccurate or biased, inadvertently or deliberately. Due to limited time, in depth study was not possible.

10.0 DATA ANALYSIS

90% of respondents have positive response that they know about multi-level marketing whereas 10% deny that they don't know about multi-level marketing. So, awareness about multi-level marketing among people is good but this concept should be known to everyone. 55% know about Avon Company whereas 30% knows Oriflame, 10% Amway and only 5% people have knowledge about all the mentioned companies. So, the conclusion is that the awareness about Avon is highest among all of the mentioned companies. 69% of respondents have preference for Avon over Amway and 31% has preference for Amway over Avon. This concludes that people have more preference to Avon. 54% of respondents use Avon whereas only 27% uses Amway and there are only 19% uses both. 73% of respondents prefer Avon, but only 27% has good brand value for Amway. So, the conclusion is that brand value of Avon is more than Amway. 52% respondents prefer Avon products, 10% Amway, 27% Oriflame and 9% Modicare and 2% others. So, the usage of product of Avon is maximum.

43% respondents are highly satisfied by the product and experience of Avon and 29% respond that product are good 15% says that product are average and 13% says that product are bad. 49% respondents are highly satisfied by the product and experience of Amway and 23% respond that product is good 13% says that product is average and 15% says that product is bad. 25% spent money between Rs. 0-10,000, 23% Rs.10,000-15,000 whereas 5% responded to Rs.20,000 and above. 56% spent money between Rs. 0-10,000, 10% Rs.10,000-15,000 whereas none responded to Rs.20,000 and above. 10% of respondents says that there is no risk with networking, 14% says 0-30% and 26% responds that there is more than 90% risk in investing money in networking. 74% of respondents are satisfied with Avon products. This clears that maximum number of person are satisfied with Avon products. 67% of people says that there neighbour prefer Avon over Amway. 3% of people have never used the Avon products while 14% is using Avon from last 1-2 year and 16% are using Avon from more than 3years. 22% of people have never used the Amway products while 29% is using Amway from last 1-2 year and 9% are using Amway from more than 3year.

10.1 STATISTICAL ANALYSIS

Test of Hypothesis

Statistical (Chi-Square) Analysis

TABLE 1

S.NO.	Hypothesis	Calculated Vale of chi sq	Tabulated value of chi sq.	D.O.F.	Status
1	There is no significant difference between the satisfaction and experience for Avon and Amway.	**54.72**	**9.01**	**3**	**Rejected**
2	There is no significant difference between the money spent by respondents on product of Avon and Amway.	**84.72**	**9.01**	**3**	**Rejected**
3	There is no significant difference between the using period of Avon and Amway.	**33.48**	**6.26**	**4**	**Rejected**

Interpretation 1:- 43% of respondents responses that they are highly satisfied using Avon 29% are satisfied using Avon product and 15% says that they are average satisfied by Avon whereas 49% of respondents responses that they are highly satisfied by Amway and 23% are satisfied and 13% are average satisfied using Amway and this is also supported by CHI-SQUARE test.

Interpretation 2:- 25% of respondents responses that they spent Rs. 0-10,000 whereas 47% respondents says they spent 15,000-20,000 whereas only 56% of respondents responses that they spent Rs. 0-15000 on Amway and 34% spent Rs. 15,000-20,000 and this is also supported by CHI-SQUARE test.

Interpretation 3:- 3% of respondents responses that they had never used Avon product and 56% says they are using Avon product from last 2-3 year and 16% are using them from more than 3years whereas 22% of respondents responses that they have never used Amway product and 13% has used the product of AMWAY from last 2-3 years and only 9% is using them for more than 3years this is also supported by CHI-SQUARE test.

11.0 FINDINGS

In working with clients it was seen that payment services underperforms or do not provide certain capabilities sought by clients. These include:

- Majority of respondent's i.e. 90% know about MLM whereas 10% doesn't know about networking.
- Majority 55% know about Avon Company whereas 30% knows Oriflame, 10% Amway and only 5% people have knowledge about all the mentioned companies.
- Majority 54% of respondents uses Avon whereas only 27% uses Amway and there are only 19% uses both.
- 73% of respondents prefer Avon But only 27% has good brand value for Amway. So, the conclusion is that brand value of Avon is more than Amway.

- 43% respondents are highly satisfied by the product and experience of Avon and 29% respond that product are good 15% says that product are average and 13% says that product are bad.

12.0 SUGGESTIONS

- Networking companies should take initiative in providing awareness amongst the people about the multi-level marketing.
- Networking companies should take initiative in providing awareness amongst the people about the products available.
- Multi-level marketing is still not recognized as a good business due to risk factor.
- Company should increase the commission they are giving to agents.
- Proper dealings with clients need to be taken care of.
- A major problem faced by customer is the knowledge about the plan given by networking company as they are very tough to understand.
- Agents and customers should be well informed about the benefits by investing in networking company.

13.0 CONCLUSION

As a project-based enterprise, Networking is very old and highly popular concept.Most of the people are aware about word “Networking” but they get confused when they listen to word “Multi-Level Marketing”.There is a need of creating more awareness about networking in people.Person uses the product but they are not aware about the companies and moreover person who know about the companies fails to understand the palns of companies, commission which will be given to them for selling the product and advantage of being in branches i.e. networking or multi level marketing. From the study it may be concluded that people think that most of the networking companies are fraud and there is no use of investing in such type of networking companies. Also the risks associated with these companies are very high as concluded by study (thinking of respondents). There is a need that companies should inrease there product line.

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CREDIT RISK MANAGEMENT IN SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA (SIDBI)

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ABSTRACT
Development Financial Institutions now provide primarily direct finance, and as a part of it, they provide project finance. Generally they have earned positive operating and net profits; all of them have fulfilled Capital Risk Asset Ratio requirements; they have diversified their activities till 1998-99, after which they have suffered from the lowering of their asset quality, which is reflected in their high Non-performing Assets. At present the performance of banks would be judged not by conventional indicators such as deposit growth and credit expansion, but by their success in recovery and reduction in Non Performing Assets. Small Industries Development Bank of India (SIDBI) an All India Development Financial Institution was established, to function as an apex bank for tiny and small industries, under takes the Promotional and Developmental measures designed to achieve enterprise promotion resulting in setting up new units and enterprise and strengthening to enable Micro Small and Medium Enterprises (MSMEs) to face the emerging challenges of globalization and growing competition through select interventions. As any financial institution is confronted with the credit risk for the nonpayment, Small Industries Development Bank of India is also not an exception to this. The more prudent a bank is managing its risk, the better is its image and prospects of survival and growth. Since the Non-performing advances or Non Performing Assets is constantly referred to for indicating the performance and the state of health of various types of financial institutions and loans are the largest and most obvious source of credit risk, an attempt is made to analyse the Non-performing assets of Small Industries Development Bank in relation to its outstanding portfolio. The objective of risk management in bank operations is to minimize negative effects the risks can have on the efficiency of a bank. As such, in the present study, the impact of Non Performing Assets on the efficiency variables identified is also assessed. The result of regression analysis shows that the impact of Gross Non Performing Assets ratio as well as Net Non Performing Assets ratio on the efficiency indicators is lesser in SIDBI. Hence the credit risks are better managed by SIDBI.

JEL CODE
G2

KEYWORDS
Efficiency variables, Micro Small and Medium Enterprises, Non-performing assets, Outstanding portfolio, Slippage.

INTRODUCTION
Small Industries Development Bank (SIDBI) was established, to function as an apex bank for tiny and small industries. It functions as the principal financial institution for promotion, financing and development of industrial concerns in small scale sectors and for the coordination of the functions of the institutions engaged in similar activities. SIDBI Provides, financial support by way of refinance to eligible prime lending institutions (PLIs) such as banks, state financial corporation (SFCs), Micro Finance Institutions (MFIs) for onward lending to Micro Small and Medium Enterprises (MSMEs) and direct assistance to MSMEs. SIDBI is the Nodal Agency, for the implementation of some of schemes of Government of India (GoI), for encouraging implementation of technology up gradation and modernization of the MSME sector. SIDBI is committed to attain the national goal of a broad based equitable and inclusive growth by providing micro credit through MFIs for on-lending to the bottom-of-the –pyramid segment of the society with special thrust on un-served and under-served regions of the country. It under takes the Promotional and Developmental measures designed to achieve enterprise promotion resulting in setting up new units and enterprise and strengthening to enable MSMEs to face the emerging challenges of globalization and growing completion through select interventions. The Bank as the principal financial institution for the MSME sector, not only imbibes the corporate social responsibility and good corporate governance within, but also inculcated the same in the MSME sector and the institutions it deals with. Development Financial Institutions now provide primarily direct finance, and as a part of it, they provide project finance. Generally they have earned positive operating and net profits; all of them have fulfilled Capital Risk Asset Ratio requirements; they have diversified their activities till 1998-99, after which they have suffered from the lowering of their asset quality, which is reflected in their high Non-performing Assets. Also, the empirical studies on determinants of bank credits have shown that available of lendable resources, level of NPAs and asset prices are the major determinants of bank credit in India during the period 1996-97 to 2006-07. During the period 2002 -03 to 2006-07, NPA level has emerged a significant variable. (Bhole L.M and Jitendra Mahakud(2009). As any financial institution is confronted with the credit risk for the nonpayment, SIDBI is also not an exception to this. The performance of banks would be judged not by conventional indicators such as deposit growth and credit expansion, but by their success in recovery and reduction in NPA (Murugadoss R. (1993). As the measure of reduction of NPAs,the Bank has devised a system review of fresh slippage of accounts into NPA category to understand and analyse the failure causes thereof. As an effective monitoring tool, Default Review Committees at the operating offices are constituted. Loan Recovery Policy is revisited during the year and suitable modifications are carried out there in. Besides, the NPAs during the latter period from 2009-10 has shown some increasing trend. Since the objective of risk management in bank operations is to minimize negative effects the risks can have on the efficiency of a bank and the quantum of NPAs would directly affect the efficiency of the bank, in this paper an attempt is made to analyse the impact of Non-performing assets of SIDBI on the topic '**Credit Risk Management in Small Industries Development Bank of India'.**

2. REVIEW OF LITERATURE
A brief review of various literatures on non-performing asset will enable to have an understanding of the subject matter and is presented. RBI (1999) has admitted that diversion of funds by borrowers for expansion, modernization, setting up of new projects and sister concerns is mainly responsible for rising non-performing assets. Sujit Sikidar(1997), in his study has suggested that by accelerating credit growth and keeping a check on incremental recovery, banks can bring down their NPA level on percentage terms . V.K. Sudhakar (1998), studied the policies and perspectives of NPA reduction in banks and his study revealed that incremental NPAs result in higher provisioning and consequently lead the bank to charge higher interest on the performing borrower. Vepa Kamesan,(2001), in his article has suggested that the banks will have to put in place effective measures o strengthen their credit appraisal and supervision

mechanism for arresting incidence of fresh over dues/NPAs, they should implement the One Time Settlement scheme as early as possible and take maximum advantage of its provisions . Vasant Anand Kumar(2006), in "Trend in Net NPAs in Banking Industry_ 1996- 2005" concluded that RBI, GoI and commercial banks must concertedly initiate steps to recover dues to banks both from individuals and institutional defaulters at the earliest possible. Sunitha R. and Raju J.K (2013), in "Risk Parameters of Banking Sectors in India-A comparative study" stated that the risks are to be identified at an early stage and should be avoided with no or meager loss. Thakar H.M. and Duble U.S (2011), in their paper "Analytical study of NPA Management in Banks" concluded that the NPAs are the outcome of credit activity of the bank which is their most important function to earn profit. The credit is associated with risk and therefore the bank cannot totally avoid non-performing assets. However, strict compliance of lending norms, steady growth of credit spread over different segments and activities, careful planning, monitoring and follow up, banks can control the advances turning into non- performing advances. Even in case of NPAs, recovery or reduction is possible by adopting various strategies.

3. NEED FOR THE STUDY
The Assets quality of banks is an important indicator of financial health and also reflects the efficacy of banks' credit risk management and the recovery environment. The assets are classified on the basis of income into two broad categories namely standard Assets and Non-performing Assets. Standard assets are those assets, which do not disclose any problem or ones which carry only the normal risk. They do not require any provisioning. Nonperforming assets have been defined as an asset in respect of which any amount of interest has remained past due for more than two quarters or any amount of principal has remained past due for more than four quarters. Past due has been defined as any amount that remains outstanding for more than one month beyond the due date. The Gross Nonperforming Assets and Gross Loan Assets include provision for NPAs on doubtful and sub standard assets. It indicates the quality of credit portfolio of the bank. Since the Nonperforming Assets create an adverse impact on the financial health of the institution, it must be kept at minimum. Net NPAs refers to the NPAs after subtracting the provisions for sub standard and doubtful assets from the Gross NPAs. It indicates the degree of riskiness in the credit portfolio of the bank. The reforms introduced since 1991 had helped to bring down NPA of all banks to some extent. The total elimination of NPAs is not possible in banking business owing to externalities but their incidence could be minimized. So an effective and prudent management of non-performing assets is essential for checking creation of NPAs in the first place particularly of fresh loans, improving the quality of NPAs and reducing the NPAs. The reduction of NPAs is one of the steps to increase the return on net worth of the bank and the level of NPAs has inverse relationship with the efficiency measure of the bank. Hence to ensure whether SIDBI has effectively managed its credit risk for nonpayment there is a need to benchmark its efficiency by assessing its Gross NPA ratio and its Net NPA ratio.

4. STATEMENT OF THE PROBLEM
Banking is essentially the management of credit risk, liquidity risk and interest rate risk. The more prudent a bank is in managing its risks the better is its image and prospects of survival and growth. Any performing asset do not turn into non-performing overnight. During its journey, every asset is giving out certain signals for warning the banker that something bad to happen. Hence slippage management is essential before the asset becomes NPA. Improved risk management techniques and greater recovery efforts could bring down Gross NPAs. Therefore, Management of NPAs is an important part of operation of SIDBI. In order to curtail the adverse impact of NPAs on the financial health of SIDBI, the Bank undergoes periodic revisions and improvements in the Loan Recovery Policy to suit the portfolio and emerging economic scenario. The review of Loan Recovery Policy enables the Bank to address the specific issues concerning the Bank's own NPA portfolio. Besides, measures are to be undertaken to prevent the new slippages, to review the progress of recovery, to build adequate safeguards at the time of appraisal / monitoring of the projects/ loans. Generally lower the ratio of Gross Nonperforming Assets to Gross Loan assets, more are the efficient management of Nonperforming assets. Also higher the ratio indicates lower the credit portfolio of the bank and vice versa. Similarly a high Net NPA ratio indicates a high quantity of risky assets of the bank for which no provision has been made. Hence analysis is done to study the NPA in relation to the outstanding portfolio. The efficiency of the bank refers to how effectively the banks are managing their activities in banking and the level of NPAs has inverse relationship with the efficiency measure of the banks. As such, in the present study, the impact of NPAs on the efficiency variables identified is also assessed.

5. OBJECTIVES OF THE STUDY
1. To study the NPAs in relation to the outstanding portfolio.
2. To assess the impact of NPAs on the Efficiency of SIDBI.

6. HYPOTHESIS
The Gross and Net NPAs have insignificant impact on efficiency indicators

7. RESEARCH METHOLOGY
The simple linear regression model is applied to examine the impact of Gross and Net NPAs on efficiency indicators .The fitted model is

$Y = a + b_1 X_{1+e}$

Where Y - Efficiency indicator

X = Gross Nonperforming assets

b_1 - Regression coefficient

a - intercept

e - Error term

The statistical significance of regression coefficients of Gross NPAs is tested with 't' test.

8. RESULTS AND DISCUSSIONS
It covers
1. The ratios of
   - Gross NPAs to Gross Loan Assets (Gross NPA Ratio)
   - Net NPAs to Net Loan Assets (Net NPA Ratio)
2. Non-performing assets and Efficiency in banks

8.1.1 GROSS NPAS TO GROSS LOAN ASSETS

Table 1 presents the ratio of Gross NPAs as percentage on Gross Loan Assets for the study period.

TABLE 1: GROSS NPAS TO GROSS LOAN ASSETS

Year	Gross Nonperforming Assets **(Rs.)**	Gross Loan assets **(Rs.)**	Percentage
2000 - 2001	637	14571	4.32
2001- 2002	784	13160	5.95
2002 - 2003	892	12728	7.01
2003 – 2004	815	10064	8.1
2004 – 2005	1023	10862	9.42
2005 – 2006	889	13890	6.40
2006 – 2007	70	15661	0.44
2007 – 2008	264	19332	1.37
2008 - 2009	62	33358	0.19
2009 – 2010	77	40365	0.19
2010 – 2011	279	46397	0.60
2011 – 2012	374	54539	0.69

Source: ***Annual Reports of SIDBI*** from the year 2000-2001 to 2011-12

The ratio of Gross Nonperforming Assets to Gross Loan assets of SIDBI had a fluctuating trend for the study period. It had an increasing trend from 2000-01to 2004-05, then had a decreasing trend up to 2009-10 with the minimum of 0.19 per cent. In the last two years 2010-11 and 2011-12, it had been increasing and reached 0.69 per cent.

The Gross Nonperforming Assets to Gross Loan Assets had been ranging from 0.19 per cent to 9.42 with a mean of 3.72 per cent and with a coefficient of variation of 94.09 per cent. The co-efficient of variation is very high, indicates that the performance of SIDBI during the study period in terms of Gross Nonperforming Assets is inconsistent to a large extent. This inconsistency is caused by the efforts taken by SIDBI to minimize the NPAs as per the guidelines of RBI.

8.1.2. NET NONPERFORMING ASSETS TO NET LOAN ASSETS

Table 2 presents the ratio of the Net NPAs to Net Loan assets during the study period.

TABLE 2: NET NONPERFORMING ASSETS TO NET LOAN ASSETS

Year	Net NPAs **(Rs.)**	Net Loan assets **(Rs.)**	Percentage
2000 - 2001	174	13972	1.23
2001- 2002	382	12759	2.99
2002 - 2003	473	12307	3.84
2003 – 2004	226	9475	2.39
2004 – 2005	407	10246	3.96
2005 – 2006	261	13262	1.97
2006 – 2007	22	15709	0.14
2007 – 2008	49	19841	0.25
2008 - 2009	26	32857	0.08
2009 – 2010	69	39731	0.17
2010 – 2011	127	45879	0.28
2011 – 2012	184	53859	0.34

Source: ***Annual Reports of SIDBI*** from the year 2000-2001 to 2011-12

The ratio of Net Nonperforming Assets to Net Loan assets of SIDBI had a fluctuating trend for the study period. It had been increasing for the first five years reaching 3.96 per cent with a fall in the year 2003-04 and then had a decreasing trend up to 0.08 per cent in the year 2008-09 with a hike in the year 2007-08; thereafter had an increasing trend up to the last year 2011-2012.

The Net Nonperforming Assets to Net Loan Assets had been ranging from 0.14 per cent to 3.96 per cent with a mean of 1.47 per cent and with a coefficient of variation of 102.50 per cent. The co-efficient of variation is very high, indicates that the Net Nonperforming Assets to Net Loan Assets of SIDBI during the study period is inconsistent to a large extent. This inconsistency is caused by the efforts taken by SIDBI to minimize the NPAs.

8.3. NON-PERFORMING ASSETS AND EFFICIENCY IN BANKS

The efficiency of the bank is measured by the profitability, turnover, and liquidity. In general, it refers to how effectively the banks are managing their activities in banking. The efficiency of the bank are measured by many variables .In the present study, the efficiency variables identified with the banks are return on assets, return on equity, times interest ratio, non-interest income to total assets, administration expense to total income, assets utilization index, equity multiplier, and profit margin.

8.3.1. IMPACT OF GROSS NPAS ON EFFICIENCY INDICATORS

The simple linear regression model is applied to examine the impact of Gross NPAs on efficiency indicators. The impact of Gross NPAs on efficiency indicators is measured one by one and the resulted regression coefficients of Gross NPAs with their respective statistical significance are shown in Tables 3.

TABLE 3: IMPACT OF GROSS NPAS ON EFFICIENCY INDICATORS

Efficiency indicators	Regression coefficient	S.E	't' statistics
Return on Total Assets	0.04286	0.0474	0.9038
Return on Equity	-0.1267	0.2077	-0.6100
Times Interest ratio	-0.0041	0.0162	-0.2536
Non Interest income To Total Assets	-0.0074	0.0179	-0.4123
Administrative expenses To Total income	0.2578	0.2370	1.0878
Assets Utilisation Index	-0.0088	0.1391	-0.0629
Equity Multiplier	-0.3409	0.1234	-2.7625*
Profit Margin	0.8123	0.5238	0.5508

*significant at 5% level of significance

Source: ***Annual Reports of SIDBI*** from the year 2000-2001 to 2011-12

The Gross NPA ratio has significant impact on Equity Multiplier with the co-efficient of -0.3409 .The analysis shows that the effect of Gross NPA ratio on the efficiency indicators is lesser in SIDBI. Hence NPAs are better managed by SIDBI.

8.3.2. IMPACT OF NET NPAS ON EFFICIENCY INDICATORS

The simple linear regression model is applied to examine the impact of Net NPAs on the efficiency indicators. The impact of Gross NPAs on efficiency indicators is measured one by one and the resulted regression coefficients of Net NPAs with their respective statistical significance are shown in Table 4.

TABLE 4: IMPACT OF NET NPAS ON EFFICIENCY INDICATORS

Efficiency indicator	Regression coefficient	S.E	't' statistics
Return on Total Assets	0.0666	0.1135	0.5871
Return on Equity	-0.3831	0.4784	-0.8008
Times Interest ratio	-0.0255	0.0370	-0.6892
Non Interest income To Total Assets	-0.0101	0.0422	-0.2393
Operating expenses To Total income	0.3923	0.5740	0.6834
Assets Utilisation Index	0.0844	0.3239	0.2605
Equity Multiplier	-0.7217	0.3088	-2.3371*
Profit Margin	1.1275	1.3244	0.8513

*significant at 5% level of significance

Source: ***Annual Reports of SIDBI*** from the year 2000-2001 to 2011-12

The Net NPA ratio has significant impact on Equity Multiplier with the co- efficient of -0. 7217 .The analysis shows that the effect of Net NPA ratio on the efficiency indicators is lesser in SIDBI. Hence NPAs are better managed by SIDBI.

9. FINDINGS

The ratio of Gross Nonperforming Assets to Gross Loan assets of SIDBI had

- a fluctuating trend for the study period.
- The minimum of 0.19 per cent in 2008-09, 2009-10 and maximum of 9.42 in 2004-05.
- The mean of 3.72 per cent.
- Increased during the last three years up to 2011-2012.

The ratio of Net Nonperforming Assets to Net Loan assets of SIDBI had

- a fluctuating trend for the study period.
- The minimum of 0.08 per cent in 2008-09 to 3.96 per cent in 2004-05.
- The mean of 1.47 per cent.
- Increased during the last two years up to 2011-2012.

The simple linear regression model is applied to examine the impact of Gross and Net NPAs on efficiency indicators identified namely return on assets, return on equity, times interest ratio, non-interest income to total assets, administration expense to total income, assets utilization index, equity multiplier, and profit margin. It is found that

- The Gross NPA ratio has significant impact on Equity Multiplier with the regression co-efficient of -0.3409.
- The Net NPA ratio has significant impact on Equity Multiplier with the co- efficient of -0. 7217.

10. RECCOMMENDATIONS AND SUGGESTIONS

- The ratio of Gross Nonperforming Assets to Gross Loan assets and the ratio of Net Nonperforming Assets to Net Loan assets of SIDBI had been slowly increasing in the latter years. Hence preventive measures are to be taken seriously to avoid new slippages.
- Equity multiplier indicates the efficiency of the Bank in multiplying the equity into total operating assets, which in fast generates the business income. As the Gross and Net NPA ratios had significant impact on Equity Multiplier, it would affect the profitability of the Bank. Hence the funds are to be utilized and recovered in an effective manner by initiating steps to recover dues both from individuals and institutional defaulters at the earliest possible.

11. CONCLUSION

The level of NPA of the bank showed its sound loan portfolio, from the year 2006-2007. The major reason accounting for the increase in nonperforming assets in 2007-08 was due to the classification of an infrastructure project as nonperforming. Similarly the considerable increase in the year 2010-11 was due to slippage of one SFC. During the year 2011-12, the level of NPAs under Direct Credit portfolio showed the increasing trend due to the adverse impact of the economic slow-down witnessed in the past. The analysis shows that the effect of Gross NPA ratio as well as Net NPA ratio on the efficiency indicators is lesser in SIDBI. The performance of banks would be judged not by conventional indicators such as deposit growth and credit expansion, but by their success in recovery and reduction in NPA. Hence SIDBI is suggested to make its measures to reduce NPAs as more prominent.

12. LIMITATIONS

- The study is compiled of only secondary data obtained from the annual reports of SIDBI. Hence the study carries the defects of the analysis of financial statements.
- It deals with the credit risk for non –payment only.
- Also the study has considered the NPAs during the period of 12 years from 2000=2001 to 2011-12 only.

13. SCOPE FOR FURTHER RESEARCH

The financial institutions are not only facing the credit risk for non- payment but also facing multi—dimensional multivariate risks in the form of portfolio risk, interest rate risk, exchange risk, liquidity risk, capital risk etc. Hence further research can be done on these risks of the Bank.

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OBSTACLES FOR AGRICULTURAL COOPERATIVES DEVELOPMENT IN AMBO ZURIA WOREDA/DISTRICT/, OROMIYA REGION, ETHIOPIA

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ABSTRACT
Cooperatives have been accepted as a major vehicle for rural development. A little research has been done on obstacles for the development of primary agricultural cooperatives at grassroots level. The objectives of the study were: to study the participation of cooperative members towards cooperative development; to study the major problems affecting the development of agricultural cooperatives in Ambo Zuria Woreda and to identify the suitable measures to overcome the inherent weaknesses of agricultural cooperatives development. Survey strategy was adopted for the study. In addition, some Participatory Appraisal Tools and techniques-mainly group discussions were employed to complement the survey statements, and multistage sampling procedure was used for selecting sample. Major findings of the research revealed that the vast majority of members' economic conditions didn't improve after joining cooperatives. Lack of cash credit led 52.2 % of the members to borrow from friends and 34.3 % from relatives while 50.7 % borrowed from moneylenders. Credit in kind was low except for fertilizer. In addition to the above constraints, lack of regular purchase of grain, lack of timely supply of inputs, high price of inputs, low support from union and poor management of cooperative were identified. The majority of the members didn't sell their produce to the cooperatives because the cooperatives occasionally purchased grain, were not paying good prices, were not giving dividends and significant number of farmers were not in a position to produce marketable surplus. Establishing rural saving and credit associations, establishing market linkage for farmers' products with private businesses, timely supply of inputs, expansion of intensive agriculture, improving the fertility status of the soil and improved support of unions will increase the number of members in cooperatives and result in improved living standard of the rural mass. Stakeholders of agricultural cooperatives with the participation of farmers should, however carefully evaluate the situation, prioritize and solve the obstacles of agricultural cooperatives development.

KEYWORDS
Agricultural development, Agricultural input supply, Agricultural product marketing, Cooperatives development, rural development, Ethiopia.

1. INTRODUCTION
Like many other developing countries, agriculture is the backbone of Ethiopia's economy. Special attention to the development of agricultural cooperatives was paid since 1995. The previous thirty five years cooperative life on all sectors had several problems. Development in Ethiopia did not change subsistence agriculture. There were economic, political and other changes that have had impact in agriculture in the country. Agricultural cooperatives have been established for the purpose of marketing of inputs and farmers' products. The farmer's business performance is related to the performance of the services of agricultural cooperatives for which the business relies on. The obstacles at primary and union agricultural cooperative levels need attention. Members, chairmen and board of directors are generally responsible for the success or failure of their cooperatives so long that they get the necessary technical, managerial supports etc.

Farming plays several important roles in the national economy; it provides a means of living for more than 85% of the national population and accounts for 50 % of the GDP and 85 % of the export earnings of the country (MEDaC, 1999). Since the early 1970s, per capital agricultural production has been declining (Befekadu and Berhanu; 2000, Devenreux, 2000) which has made the country dependant on commercial imports of food and food aid, the later contributing the largest share (Clay et al. 1999). Low input use and complete dependence on natural rainfall and low output are the salient features of Ethiopian agriculture; and the overall result has been food insecurity in all its manifestations- chronic, cyclical and transitory at both national and household levels. At present, Ethiopia is one of the poorest and most food insecure countries in the world (Berhanu and Seid 1999; Mulat et al. 2004). Agriculture produces raw materials to manufacturing industries. Farming is the main source of food for household's consumption and the cash income of the majority of the rural population is mainly generated from agriculture. However, in spite of its importance to the national economy, Ethiopian agriculture has only remained at subsistence level and contributing little to the improvement of the living standard of the rural masses.

In Ethiopia, there are three well known traditional cooperatives or self-help groups that still operate almost in all parts of urban and rural areas. ***Edir*: -** It is similar with burial cooperatives or organization. ***Ekub*:** It is a financial form of traditional cooperative formed voluntarily. ***Debo/ Wenfel/ Jigie:***. *Debo* is a system of farmer's cooperation during the time of farming, weeding, harvesting, trashing, and house construction etc. in the rural areas of the country (Veerakumaran, 2007).

Modern cooperative movement started in 1960 in Ethiopia during the regime of the emperor. The number of registered cooperative societies was 112 during the imperial government out of which 76 was farmers' cooperatives; while the rest consists of different sectors mainly handicrafts and marketing cooperatives. (Hagos, 1987)

The number of cooperative societies reached to well over 13,500 during the Derg government. After the fall of the Derg regime, a large number of cooperative societies was dismantled by their members for different reasons. (Hagos, 1987)

The Cooperative Proclamation No. 147/1998 identified clear goals and authorities, which supported a more conducive legal environment for the formation of Ethiopian cooperatives. The required human resource has been assigned starting from the *Woreda* to federal level. (Emana, 2009).

Cooperatives appear to operate on a significant scale in developing countries: studies have shown that over seven per cent of the African population is affiliated to primary cooperatives, and this number is increasing (Delvetere, 2008; Pollet, 2009). Agricultural cooperatives play an important role in food production and distribution, and in supporting long-term food security. Cooperatives are also sometimes seen as beneficial for conflict resolution, peace building and social cohesion.

Despite the dominant role of agriculture in the Ethiopian economy, the number of non-agricultural cooperatives outweighs the number of agricultural cooperatives. Approximately 37 per cent of the primary cooperatives are engaged in agricultural activities. Multipurpose agricultural cooperatives dominate the list of primary cooperatives (28 per cent) followed by Saving and Credit Cooperatives (SACCOs), which are organized both in the rural and urban centers (26 per cent) (Emana, 2009).

The obstacles of agricultural cooperatives' development at *Woreda* in Ethiopia have not been adequately studied. The study identified the major of agricultural cooperatives at *Woreda* level and suggested appropriate interventions. Past research on cooperative development concentrated at macro level (state and region levels). Hence, the study tried to identify the obstacles of agricultural development at *Woreda* agricultural cooperatives level.

2. OBJECTIVES

The objectives of the study are the following:

1. To study the participation of cooperative members towards cooperative development;
2. To study the major problems affecting the development of agricultural cooperatives in Ambo Zuria *Woreda* and
3. To identify the suitable measures to overcome the inherent weaknesses of agricultural cooperative development.

3. METHODOLOGY

3.1. METHODOLOGY AND DATA

Survey strategy was adopted for the study. In addition to the survey, some participatory appraisal tools and techniques mainly group discussions were employed to complement the survey statements and multistage sampling procedure was used for selecting the samples. Sample cooperatives were selected and sample members were selected from sample cooperatives. Sample non-members were selected from those who live around the sample cooperatives. Due to problem of inaccessibility farmers living far away from the sample cooperatives were not selected.

3.1.1.. THE STUDY AREA

Ambo Zuria *Woreda* is one of the 20 *Woreda*s in West Shewa zone of Oromiya Regional state of the Federal Democratic Republic of Ethiopia. The capital city of West Shewa zone is Ambo town which is located in Ambo Zuria *Woreda*. Ambo town is 125 km. away from Addis Ababa on Addis Abeba - Nekemte road. The *Woreda* capital is Ambo (Ambo *Woreda* was divided into Ambo Zuria and Toke Kutaye *Woreda*s at the end of 2005/2006). Ambo Zuria *Woreda* has got a total area of 83599 hectares (old Ambo was 149094 hectares). In the year 2006/07, 68 % (56820 hectares), 10 % (8370 hectares), 1.6 % (1379) and 20.4 % (17030 hectares) of the land was used for crop production, grazing land, vegetation and for other purposes respectively while in the year 2007/8 65 % (54289hectares), 10 % (8370 hectares) 1.6 % (1379) and 23.4% (19561 hectares) of the land was used for crop production, grazing land, vegetation and for other purposes respectively (PBD AWFEDO, 2008).

In the year 2007/08 the average land-holding size per household was 2.5 ha. In the same year the number of households holding less than 1ha, 1-2 ha, greater than 2 to 3 ha, greater than 3 to 4 ha and greater than 4 ha accounted to 18%, 40%, 22%, 12% and 8% respectively(*Ibid.*).

Ambo Zuria *Woreda* has got 34 Peasant Associations (PAs) and 7 *Kebele* (urban) Associations (KAs) in the towns. There were 23396 households in the rural areas in 2006/07 and 2007/08. The household size of the *Woreda* shows that it is 3.92 and 3.55 for rural areas in 2006/07 and 2007/08. According to the census of 2007 the total population residing in the rural areas of the *Woreda* was 109468 (54741 male and 54727 female). Out of the total population of the *Woreda*, about 98.8% resided in the rural areas and 1.2% was urban dwellers (FDRE, PCC 2008).

Multipurpose agricultural cooperatives (MPAC) are formed from farmers of different peasant associations. There were 13 registered multipurpose agricultural cooperatives with total members of 3497 in 2006/07 and 2007/08 and with a capital of Ethiopian Birr (ETB) 2174905 and 2181420 Birr in 2006/07 and 2007/08 respectively. In the years 2006/07 and 2007/08 male members accounted for 88% while female members accounted for 12% of the total members (PBD AWFEDO, 2008). While crop and livestock mixed farming system is practiced in the *Woreda*. The major crops cultivated include teff (*Eragrostis tef*), wheat, barley, maize, sorghum, horse beans, and noug (*Guzotia Abyssinica*). 6872.5 quintals and 8550 quintals of fertilizer Diammonium Phosphate (DAP) was distributed to the farmers in 2006/7 and 2007/8 in the *Woreda* respectively. 4323.5 quintals and 4484 quintals of the fertilizer Urea was distributed to the farmers in 2006/7 and 2007/8 in the *Woreda* respectively. Improved seeds such as teff, wheat, maize, and barley etc. were distributed to the farm households in 2006/07 and 2007/08. About 85%, 9% and 5% of the improved seeds distributed in the *Woreda* in 2006/07 accounted for wheat, maize and teff respectively. Improved wheat, maize and teff seeds were the only seeds that were distributed to the farmers in the *Woreda* in 2006/07 (Ibid). In the years 2006/07 and 2007/08, on average about 12% of the farmers did not own any oxen, 21% owned one ox, 33% owned a pair of oxen and 34% of the farmers owned 3-4 oxen in the Woreda (Ibid).

Farm households in the *Woreda* own different types of livestock for draught purposes, milk, egg, and meat production. The total livestock population was 182676 in the *Woreda* in 2006/07. Out of which cattle, sheep and goats accounted for 60%, 20 % and 9.5 % respectively. The total number of horses, donkeys and mules was 8509, 9416 and 600 respectively in 2006/07 in the Woreda. Horses, donkeys and mules each accounted for 4.6 %, 5.2%, and 0.34 % respectively of the livestock population in the same period (PBD AWFEDO, 2008). The chicken population was 52084 in 2006/07. The major livestock feed include open grazing, hay and crop residue (OPEDWSZ, 1998). There were 4569 and 7099 beehives in the years 2006/07 and 2007/08 respectively, out of which 148 were modern beehives in each of the period. The average yield per modern beehive was 20 kg and the average yield per traditional beehive was 7 kg in each of the period respectively. There was an increase in livestock population in a range of 2.5% - 6% from 2006/07 and 2007/08 except for sheep population where there was no change from 2006/07 to 2007/08 (AWFEO, PBD 2008).

3.1.2. SELECTION OF THE STUDY UNITS AND RESPONDENTS

Out of 13 multipurpose agricultural cooperatives, three (about 23% of the multipurpose agricultural cooperatives) were purposively selected since they are accessible and found convenient to the researcher. Moreover, other factors like agro-ecological conditions, and dominant farming systems were considered. The selected sample multipurpose agricultural cooperatives were:

1. Altufa multipurpose agricultural cooperatives - 17 kms from Ambo on Ambo - Wonchi - Woliso road, where the MPAC serve for one peasant association.
2. Awaro multipurpose agricultural cooperatives - 5 kms from Ambo on Ambo – Addis Abeba road, where the MPAC serve for one peasant association
3. Meti multipurpose agricultural cooperatives - 15 kms from Ambo on Ambo - Addis Abeba road, where the MPAC serve for five peasant associations

Sample multipurpose agricultural cooperatives (MPAC) members were selected at field level using simple random sampling technique. 13, 24, and 30 MPAC members were randomly selected from Altufa, Awaro, and Meti MPAC respectively. A total of 67 approximately 4% of the members from each cooperative was selected. About 5% from Altufa, 3.5% from Awaro and 4.2% from Meti members were selected. The sample representative included cooperative executives and ordinary members of the selected cooperatives. Purposive sampling method was employed to select representatives from non-members living in and around the areas of the selected cooperatives. 49 sample non-member farmers were randomly selected from the vicinity of the selected cooperatives. 12, 24, and 13 non-members were selected from Altufa, Awaro, and Meti respectively. This makes the total respondents (members and non-members) to be 116.

3.1.3. DATA COLLECTION AND ANALYSIS

The methods of data collection were a mixture of questionnaire survey (with both closed and open ended questions) and some participatory appraisal tools mainly group discussions with representatives of sample multipurpose agricultural cooperatives (for members) and representatives of non-members from three peasant associations. The agricultural development agents of the areas organized the group discussions. Discussions were held in the local language (in Oromifa) and interpreted by another person who was a graduate in rural sociology and extension and member of the Department of Cooperatives at Ambo College of Agriculture (at present Ambo University). The enumerators were given training on the content of the questionnaire, methods of data collection and on how to approach farmers. During the fieldwork, the researcher closely supervised the enumerators.

The secondary source of data included both published and unpublished information about the study area in general and cooperatives agricultural production in particular. Along with secondary data collection, several discussions with key informants and *Woreda* agricultural personnel were conducted to get insight about the study area and to assess the previously conducted research and development works. The study was conducted from July 1, 2005 to June 30, 2006. Data from respondents were collected in February 2006 and group discussions with selected farmers were conducted in the first week of March 2006. The collected data were processed through Statistical Package for Social Sciences (SPSS). Simple percentages and averages were used. The facts revealed by the farmers during the group discussions were also complemented to the survey statements.

4. FINDINGS AND DISCUSSIONS

4.1 MEMBERS' FINDINGS AND DISCUSSIONS

Table 1 shows the number of sample MPACs and the number of member sample members of the cooperatives.

TABLE 4: SAMPLE MPACS AND SAMPLE MEMBER RESPONDENTS IN AMBO ZURIA *WOREDA*

Sl. No	Name of MPAC society	Number of member respondents	Percent
1	Altufa	13	19.4
2	Awaro	24	35.8
3	Meti	30	44.8
4	Total	67	100

Source: Computed from the survey data

4.1.1 PURPOSE OF JOINING COOPERATIVES

TABLE 2: MEMBERS PURPOSE TO JOIN MPAC (n=67)

Purpose	Respondents				Total	
	Yes	Percentage	No	Percentage	No. of Resp.	Percentage
Credit	37	55.2	30	44.8	67	100
Input	67	100	0	0	67	100
Marketing	50	74.6	17	25.4	67	100
Other	0	0	67	100	67	100

Source: Computed from the survey data

It is very obvious from table 2 that one hundred % of the respondents joined cooperatives for the purpose of getting input from the institution. 50 respondents (74.6 %) were of the opinion that they have joined to avail the marketing facility given by the cooperatives. Only 37 respondents (55.2 %) of the respondents said that they have joined cooperatives for the purpose of availing of a credit facility. All the 67 respondents responded that they have joined cooperatives for availing input.

TABLE 3: ENROLLMENT OF MEMBERSHIP TO JOIN MPACs

Category	Respondents				Total	
	Yes	Percentage	No	Percentage	Total	Percentage
Friends	5	7.5	62	92.5	67	100
Relatives	7	10.4	60	89.6	67	100
Other members	7	10.4	60	89.6	67	100
Cooperative leaders	32	47.8	35	52.2	67	100
Local Administrative Leaders	28	41.8	39	58.2	67	100
Community Elders	7	10.4	60	89.6	67	100
My own	12	17.9	55	82	67	100

Source: Computed from the survey data

The efforts taken by the cooperative leaders in this *Woreda* regarding the enrollment of membership is clearly evident from table 3 that 32 respondents (47.8 %) informed that they have enrolled in cooperatives only because of the motivation given by the cooperative leaders. Next to cooperative leaders, local leaders (41.8 %) also contributed a lot in motivating the public to join in the cooperative movement. 17.9 % of the respondents said that they have joined cooperatives on their own.

TABLE 4: MEMBERS' KNOWLEDGE ABOUT COOPERATIVE PRINCIPLES, BYLAWS AND HOW A COOPERATIVE IS ORGANIZED

Description	Responses				Total Response	
	Yes	Percentage	No	Percentage	Total	Percentage
Knowledge of cooperative Principles	9	13.4	58	86.6	67	100
Knowledge of cooperative bylaws	15	22.4	52	77.6	67	100
Knowledge how a cooperative is organized	13	19.4	54	80.6	67	100

Source: Computed from the survey data

It is clear from table 4 that the majority of the respondents didn't know how a cooperative is organized, bylaws of the cooperative and principles of cooperatives. Among these responses, 86.6 % of the respondents didn't know their principles and 80.6 % of the respondents didn't have the knowledge how a cooperative is organized. 77.6 % of the respondents did not know the cooperative bylaws. Among those who responded that they know the principles (13.4 %) none of them was able to state any one of the principles. Among those who responded that they knew how a cooperative is organized (19.4 %), 3 % said that to get organized and to work together, 15 % said pay shares and become members, and 1.5 % said advice non-members to become members of cooperatives.

TABLE 5: MEMBERS' KNOWLEDGE ABOUT COOPERATIVE PRINCIPLES, BYLAWS AND HOW A COOPERATIVE IS ORGANIZED

Description	Responses				Total Response	
	Yes	Percentage	No	Percentage	Total	Percentage
Knowledge of cooperative Principles	9	13.4	58	86.6	67	100
Knowledge of cooperative bylaws	15	22.4	52	77.6	67	100
Knowledge how a cooperative is organized	13	19.4	54	80.6	67	100

Source: Computed from the survey data

It is clear from table 5 that the majority of the respondents didn't know how a cooperative is organized, bylaws of the cooperative and principles of cooperatives. Among these responses, 86.6 % of the respondents didn't know their principles and 80.6 % of the respondents didn't have the knowledge how a cooperative is organized. 77.6 % of the respondents did not know the cooperative bylaws. Among those who responded that they know the principles (13.4 %) none of them was able to state any one of the principles. Among those who responded that they knew how a cooperative is organized (19.4 %), 3 % said that to get organized and to work together, 15 % said pay shares and become members, and 1.5 % said advice non-members to become members of cooperatives.

4.1.2 ECONOMIC BENEFITS DERIVED FROM COOPERATIVES

TABLE 6: ECONOMIC BENEFITS TO WHICH MEMBERS DERIVED FROM MPAC IN THE STUDY AREA IN 2006/07 (n=67)

Benefits	Yes	Percentage	No	Percentage	Total	Percentage
Credit	9	13.4	58	86.6	67	100
Marketing	36	53.7	31	46.3	67	100
Input	65	97.0	2	3	67	100
Savings	13	19.4	54	80.6	67	100

Source: Computed from the survey data

Cooperative members get organized to get a number of benefits. Table 6 discloses the economic benefits derived from cooperatives to its members. One can conclude from the above table that the vast majority (97 %) of the respondents enjoyed the benefit of input supply from cooperatives. Nearly 36 respondents (53.7 %) got the economic benefit of marketing. 13 and 9 respondents (19.4 % and 13.4 %) availed of the economic benefits with regard to savings and credit respectively.

4.1.3 SOURCES OF BORROWINGS OF MEMBERS OF MPAC

TABLE 7: SOURCE OF BORROWINGS OF MEMBERS OF MPAC IN THE STUDY AREA IN 2006/07 (n=67)

Source	Yes	Percentage	No	Percentage	Total	Percentage
Cooperative	2	3	65	97	67	100
Relatives	23	34.3	44	65.7	67	100
Friends	35	52.2	32	47.8	67	100
Money lenders	34	50.7	33	49.3	67	100
Others	7	10.4	60	89.6	67	100

Source: Computed from the survey data

Borrowings become the part and parcel of the peasant community. The right source will lead the farmers in right direction. From table 7 it is very clear that the majority of the respondents (52.2 %) borrowed money from their friends and 50.7 % of the respondents were under the clutches of money lenders and 34.3 % of the respondents depended upon their relatives for their monetary needs. It is good to see that nearly 33 respondents (49.3 %) got borrowings from other sources other than from the money lenders. Only 3 % were able to borrow from the cooperative (the amount not revealed) which indicates that the credit facility has to be strengthened. It is clear from the table that some of the members borrowed from more than one source.

4.1.4 TYPE OF CREDIT IN KIND WHICH MEMBERS OF MPAC GOT

TABLE 8: TYPE OF CREDIT IN KIND WHICH MEMBERS OF MPAC GOT IN THE STUDY AREA IN 2006/07 (n=67)

Type of Input	Yes	Percentage	No	Percentage	No. Answer	Percentage	Total	Percentage
Fertilizer	65	97	1	1.5	1	1.5	67	100
Improved seeds	20	29.9	44	65.7	3	4.5	67	100
Herbicides	53	79.1	12	17.9	2	3	67	100

Source: Computed from the survey data

Issue of components like fertilizer, seeds, herbicides etc. credit in kind, to the members is the major subsidiary business to all cooperatives. It is very clear from table 8 that 65 respondents (97 %) availed fertilizer from the cooperatives and 53 respondents (79.1 %) procured herbicides from the cooperatives. Only 20 respondents (29.9%) purchased improved seeds from the cooperatives.

4.1.5 ADVANTAGES IN SELLING PRODUCT THROUGH COOPERATIVES

TABLE 9: ADVANTAGES IN SELLING PRODUCT THROUGH COOPERATIVES IN THE STUDY PERIOD IN THE STUDY AREA

n=67						
Advantages	Yes	Percentage	No	Percentage	Total	Percentage
Price Advantage	19	28.4	48	71.6	67	100
No cheating while weighing	24	35.8	43	64.2	67	100
No cheating in payment	14	20.9	53	79.1	67	100
Dividend received	17	25.4	50	74.6	67	100
Product sold to cooperative	28	42	39	58	67	10

Source: Computed from the survey data

There are so many advantages one can avail of from the cooperatives by way of selling their agricultural produces. In table 9 some of the advantages are listed by the respondents, among all the advantages no cheating while weighing stood first (35.8 %), next comes price advantage (28.4 %), no cheating in payment was said by 20.9 % of the respondents but the majority of the respondents (71.6 to 79.1%) were of the opinion that they haven't availed of any of these advantages from their institution. 42 % of the members sold their produce to the cooperatives while 58 % sold their produce to others than the cooperatives. The reasons why they didn't sell to their cooperatives (OEQR) include 21 % of them said that the cooperatives purchased occasionally, 9 % believed that the cooperatives did not offer good prices, 13 % believed there was no surplus generated from selling to the cooperatives and 15 % believed other different reasons.

TABLE 5: AMOUNT OF MONEY INCURRED FOR DAP AND UREA BY COOPERATIVE MEMBERS IN THE *WOREDA* IN THE STUDY YEAR

Fertilizer	Amount paid in Birr for fertilizers								Total
	200 and below		201-300		301-400		Above 400		
	Respondents Number	%	Respondents Number	%	Respondents Number	%	Respondents Number	%	
DAP	1	1.7	6	10	27	45	26	43.3	60
Urea	6	10.9	17	30.9	32	55.2	-	-	55

Source: Computed from the survey data

Table 10 depicts that 10%, 45%, and 43.3%, of the respondents incurred 201-300 Birr, 301-400 Birr and over 400 Birr for DAP respectively while 10.9%, 30.9%, and 55.2% incurred below 200 Birr, 201-300 Birr and Birr 301-400 Birr for urea respectively.

4.1.6 MEMBERS' ECONOMIC CONDITION AFTER BECOMING COOPERATIVE MEMBERS (MPAC)

TABLE 11: MEMBERS' ECONOMIC CONDITION AFTER BECOMING COOPERATIVE MEMBERS (MPAC) IN AMBO ZURIA *WOREDA* IN THE STUDY YEAR

Particulars	Response				Total	
	Yes	Percentage	No	Percentage	Total	Percentage
Additional land	2	3	65	97	67	100
Better house condition	5	7.5	62	92.5	67	100
Livestock	3	4.5	64	95.5	67	100
Other	0	0	67	100	67	100

Source: Computed from the survey data

It is very clear from table 11 that the vast majority of the respondents were of the opinion that they haven't seen any kind of improvement in their economic condition due to their membership in cooperatives. Only very meager number of respondents said that they had some economic improvement in their life such as additional land, better house condition and livestock.

As from the investigator's field discussions, it looked that there was low support from Ambo Union due to the union's limited capacity then and the high needs of member cooperatives especially in marketing of produce and supply of improved seeds.

4.1.7 REASONS FOR SLOW GROWTH OF THEIR COOPERATIVES AS PERCEIVED BY MEMBERS

TABLE 12: MEMBERS' VIEWS REGARDING GROWTH, SATISFACTION WITH THE SERVICE, BOARDS' EFFICIENCY AND EMPLOYEES IN THEIR COOPERATIVES

Description	Response						Total	
	Yes	%	No	%	Don't know	%	No. of Respo-ndents	%
Cooperatives showed growth	37	55.2	26	38.8	-	-	67	100
Satisfied with the variety of services	37	55.2	30	44.8	-	-	67	100
Think board is efficient	48	71.6	15	22.4	4	6	67	100
Think the cooperatives have enough employees	25	37.3	38	56.7	4	6	67	100
Cooperatives' employees are courteous and helpful	33	49.3	25	37.3	9	13.4	67	100
Cooperatives have enough capital	20	29.9	43	64.2	4	6	67	100

Source: Computed from the survey data

Table 12 reveals that 55.2 % of members believed that their cooperative showed growth while 38.8 % believed that their cooperative did not show any growth. Data from Open Ended Question Responses (OEQR) reveal that among those who perceived that their society did not show growth believed that they didn't see cooperative expansion (17.9 %), felt that there was corruption (6 %), felt board members did not work in team spirit (4.5 %), there was no input supply other than fertilizer (4.5 %), the cooperative had no sufficient money (4.5 %), for other different reasons (7.5 %). Regarding the number or variety of services of the cooperatives, 55.2 % of members were satisfied while 44.8 % were not satisfied. Data from OEQR reveal that their reasons for dissatisfaction included no cash credit (23.9 %), cooperatives have limited services (11.9 %), no timely supply of inputs (1.5 %), no organized marketing services (1.5 %), and for other different reasons (6 %). Regarding additional services by the society, members proposed cash credit services (58.2 %), supply of consumer goods at fair price (13.4 %), no timely supply of inputs (7.5%) no timely purchase of agricultural products (7.5 %), and for other different reasons (6 %).

4.1.8 PROBLEMS FACED BY THE SOCIETY AS PERCEIVED BY MEMBERS

TABLE 16: PROBLEMS FACING COOPERATIVES AS PERCEIVED BY MEMBERS

Members' impression	**Yes**	**%**
Problems related to funds		
1. Shortage of cash	20	34.5
2. Corrupt	4	6.9
3. No problem	5	8.6
4. Don't know	26	44.8
5. Others	3	5.2
Total	58	100
II. Problem related to marketing		
1. Don't purchase grain regularly	23	36.5
2. Store grain they purchase	2	3.2
3. No problem	23	36.5
4. Don't know	15	23.8
Total	63	100
III. Problem related to input		
1. No timely supply of inputs	17	25.8
2. .High price of inputs	9	13.6
3. No problem	30	45.5
4. Don't know	9	13.6
5. Others	1	1.5
Total	66	100
IV. **Problem related to stores**		
1. Shortage of storage capacity	5	7.5
2. High storage expense	5	7.5
3. No storage problem	55	82.0
4. Don't know	2	3.0
Total	67	100
V. **Problem related to staff (employees)**		
1. Shortage of staff	7	10.6
2. Misunderstanding of staff	3	4.6
3. No problem of staff	27	40.9
4. Don't know	27	40.9
5. Others	2	3.0
Total	66	100
VI. **Problem related to board and chairman**		
1. Poor management capacity	9	13.8
2. Don't work cooperatively	4	6.2
3. Problem	31	47.7
4. Don't Know	18	27.7
5. Others	3	4.6
Total	65	100
VII. **Problem related to government**		
1. No sufficient government control	4	6.6
2. High fertilizer price	1	1.6
3. No problem	39	64
4. Don't know	16	26.2
5. Others	1	1.6
Total	61	100

Source: Computed from the survey data

Table 13 reveals problems related to funds, to marketing, to inputs, to stores, to staff, to board and chairman and to government. Regarding problems related to funds the respondents revealed that shortage of cash, lack of timely supply of inputs, high price of inputs, lack of regular purchase of grain by the cooperatives and poor management capacity are very important problems that need attention for better development of cooperatives. The cooperative should purchase grain regularly from members to improve its output marketing efficiency. Rural saving and credit cooperatives need to be established to improve cash credit services. Regarding problems related to marketing the respondents revealed that the cooperatives don't purchase grain regularly (36.5 %), sort the grain they purchase (3.2%), believe that there is no problem of marketing (36.5%) and stated that they do not know (23.8 %). Regarding problems related to inputs the respondents revealed that the there is problem of timely supply of inputs (25.8 %), high price of inputs (13.6 %), believe that there is no problem related to inputs (45.5 %), stated that they don't know (13.6 %) and stated other reasons(1.5 %). Regarding problems related to stores the respondents revealed that there is shortage of storage capacity (7.5 %), high storage expense (7.5 %), believe that there is no storage problem (82%) and stated that they don't know (3%).

Regarding problems related to staff/employees the respondents revealed that they believe that there is shortage of staff (10.6%), believe that there is no problem of staff (40.5%) there exist misunderstanding of staff (4.5 %), believe that there is no problem of staff (40.5 %), and stated other reasons (3%). Regarding problems related to board and chairman the respondents revealed that there is poor management capacity (13.8 %), don't work cooperatively (6.2%), believe that there is no problem (47.7%), stated that they don't know (27.2%) and stated other reasons (4.6 %). Regarding problems related to government, the respondents revealed that there is no serious problem (64 %), believe that there is no sufficient control (6.6 %), expressed that there is high fertilizer price (1.6 %) stated that they don't know (267.2%) and stated other reasons (1.6 %).

4.1.9 FOCUS GROUP DISCUSSION (MEMBERS OF MPAC)

A team of researchers went to the area with the objective of assessing major problems encountering cooperative societies in the area. Accordingly, major problems facing cooperative societies in the area were assessed with active participation of farmers as members.

As to the procedure followed in conducting the focus group discussion, chairpersons of cooperative societies, administrators of peasant association, opinion leaders and community development workers were contacted to arrange the group discussion meeting. 12 members of cooperative societies were established in the area for purpose. Accordingly, the major problems facing the cooperative societies in the area and opportunities were assessed and analyzed with the help of PRA techniques. The points raised in the focus group discussion conducted are summarized as follows.

The participants of the focus group discussion reached consensus on the following issues.

4.1.9.1 BENEFITS OF COOPERATIVE SOCIETIES (SOCIAL AND DEMOCRATIC)

I. SOCIAL BENEFITS OF COOPERATIVE SOCIETIES

The cooperative societies in the area have the following social benefits:

- Members of the cooperative societies in the area are trusted and accepted
- Members are seen as good examples for non-members to attract them to the cooperative societies.

II. DEMOCRATIC BENEFITS OF COOPERATION IN THE AREA

The cooperative societies in the area are lacking the following democratic benefits:

- There is nominal cooperation
- Duties and responsibilities are not clear for members
- Members are not convinced about the importance of cooperatives
- There were no meetings organized to attract and motivate non-members.

4.1.9.2 SERVICES PROVIDED BY COOPERATIVE SOCIETIES IN THE AREA

The cooperative societies in the area are providing the following services on credit basis:

- Provision of Agricultural inputs like fertilizer, improved seed and herbicides
- Provision of poultry packages
- Provision of fattening technologies

As to the preference of service provision, the group participants agreed that fertilizer is the first choice in the area because of its importance to improve the living standard of farmers.

4.1.9.3 PROBLEMS RELATED TO SERVICE PROVISION IN THE AREA

The following problems were agreed upon as problems related to service provision of cooperative societies in the area:

- Lack of quality agricultural inputs.
- Lack of timely delivery of agricultural inputs
- Lack of adequate research on improved agricultural technologies and soils as prerequisite for wide scale agricultural production.
- High price of agricultural inputs and lower price of agricultural products.
- Poor communication infrastructure

4.1.9.4 PROBLEMS OF COOPERATIVE SOCIETIES IN THE AREA

i. PROBLEMS RELATED TO THE CONSTITUTION OF COOPERATIVES

Regarding problems related to constitution of cooperatives, the cooperative societies in the area have the following problems:

- There is no adequate training and education for members of cooperative societies on cooperative principles
- The geographical coverage is wider and some members are not well addressed about the decisions passed on the meetings.
- The objective of the cooperative society is not clear for some members of the society who are residing at distant places from the cooperative societies.
- Some of the people in the area are afraid of bankruptcy and corruption of cooperative leaders and refrain from becoming members.
- The membership of the cooperative societies is not on voluntary basis. Farmers are becoming members of cooperative societies only to get agricultural inputs.

After outlining the problems related to the constitution of cooperative societies the group discussion participants agreed that they have to continue being members of the cooperatives to improve their living standards on sustainable basis even though the benefits are meager. (*"We should not destroy the house that we own until we build a better one"(an interpretation from expression in Oromifa to explain the idea that they should not dismantle their cooperatives)*. That was how they perceive cooperation in general.

As to their future plan being members of cooperative societies in the area, they are planning to establish a grain bank through which they can alleviate problems related to grain marketing.

ii. PROBLEMS RELATED TO MANAGEMENT OF COOPERATIVES

Regarding problems related to management of cooperatives, the cooperative societies in the area have the following problems:

- There is no regular meeting organized as per the agreement on the bylaws
- Members are not willing to participate on the meetings
- There is no strong bond between the members and management bodies of the cooperative societies.
- Members do not trust the management bodies because of the bad experience of cooperatives during the past socialist regime.

iii. PROBLEMS RELATED TO ADMINISTRATION OF COOPERATIVES

Regarding problems related to management of cooperatives, the cooperative societies in the area are not having problems related to administration. The interference of the government in the administration of cooperatives is perceived as positive action. The facilitation of government in providing training and agricultural inputs was highly acknowledged by the group discussion participants. The only problem raised by the group discussion participants was the skyrocketing of prices of agricultural inputs and the low price of agricultural products.

iv. PROBLEMS RELATED TO THE INTERFERENCE OF MERCHANTS

There is no Interference of merchants to misguide members from firmly established goals and objectives of cooperative societies in the area.

4.2 NON- MEMBERS' FINDINGS AND DISCUSSIONS

4.2.1GENERAL -PRELIMINARY DETAILS

TABLE 14: NON-MEMBERS' SAMPLE POPULATION BY TYPE OF SOCIETY

Society	Number of Respondents	Percent
Altufa	12	24.5
Awaro	24	49
Meti	13	26.5
Total	49	100

Source: Computed from the survey data

Table 14 shows the non-members' sample population by type of society. The reason why the non-member respondent is low is because of the influence of the purposive sampling of non-members selection around the sample cooperatives. This may be because most of the farmers who live in the vicinity of the office of the MPACs are members of MPACs.

4.2.2 AWARENESS OF NON-MEMBERS ABOUT COOPERATIVES

TABLE 15: SOURCES OF INFORMATION WHERE NON-MEMBERS HEARD OF COOPERATIVES (n=49)

Category	Respondents				Total	
	Yes	Percentage	No	Percentage	Total	Percentage
Friends	13	26.5	36	75.5	49	100
Relatives	12	24.5	37	73.5	49	100
Cooperative leaders	23	46.9	26	53.1	49	100
Officials	2	4.1	47	95.9	49	100
Cooperative members	11	22.4	38	77.6	49	100

Source: Computed from the survey data

Table 15 reveals that 46.9 % of non-member respondents heard about cooperatives from cooperative leaders of the area while 26.5 %, 24.5 %, and 22.4 % heard about cooperatives from friends, relatives and cooperative members respectively. Cooperative leader contributed a lot to influence non-members to know about MPAC.

4.2.3 REASONS FOR NOT JOINING COOPERATIVES

TABLE 16: NON-MEMBERS' REASONS FOR NOT JOINING COOPERATIVES

Reasons	Yes	%	No	%	Total	%
Not interested	8	16.3	41	83.7	49	100
No good opinion	3	6.1	46	93.9	49	100
Corrupt Administration	1	2	48	98	49	100
Inefficient Administration	7	14.3	42	85.7	49	100
Cannot afford to pay the fees	34	69.4	15	30.6	49	100
Others	8	16.3	41	83.7	49	100

Source: Computed from the survey data

The researcher wanted to know the reasons why non-members did not join in the cooperatives. Table 16 depicts the reasons why non-members did not join in cooperatives. It is evident from the above table that a good majority of the respondents 34 in number (69.4 %) were of the opinion that they didn't have enough money to pay for the share subscription and entrance fee, 16.3 % of the respondents said that they didn't have any interest in becoming member and 14.3 % of the respondents boldly were of the opinion that the administration is inefficient. Among those who gave other reasons 8.15 % of them said that they didn't know the advantage of cooperative and the other 8.15 % stated different reasons.

TABLE 17: COMPARISON OF BENEFIT FOR NON-MEMBERS BETWEEN COOPERATIVES AND OPEN MARKET MERCHANTS

Comparison points	Yes	Percentage	No	Percentage	Total	Percentage
Good price	12	24.5	37	75.5	49	100
Advance Money	4	8.2	45	91.8	49	100
Immediate payment	9	18.4	40	81.6	49	100
Farm purchase	1	2	48	98	49	100
Others	0	0	49	100	49	100

Source: Computed from the survey data

Most of the non-members had a feeling that they pay higher price for inputs to open market merchants than the cooperatives. Table 17 also reflects the same feeling of the non-members. Most of the respondents (91.8 %) were of the opinion that the cooperatives didn't provide advance money like private market players and 81.6 % of the non-members said that there was no immediate payment done by the cooperatives and almost all the respondents (98 %) complained that there was no farm gate purchase done by the cooperatives but only 12 respondents (24.5 %) were of the opinion that cooperatives were paying good price for their produces.

Cooperatives are generally expected to pay higher price for produces to members. Because of cash shortage of cooperatives and members' high need for cash, farmers appreciate selling produce in the market at a price even lower than the cooperatives. The price difference is the cost paid for getting the cash when needed. Cash shortage of the cooperatives was the cause for not purchasing farmers' produce when they needed to sell their produce.

TABLE 18: NON-MEMBERS' RESPONSES TO THE QUESTION IF THEY HAVE INTENTION TO JOIN COOPERATIVE AND THROUGH WHOM THEY JOIN

Particulars	Yes	Percentage	No	Percentage	Total	Percentage
Own	42	85.7	7	14.3	49	100
Board Member	0	0	49	100	49	100
President	1	2	48	98	49	100
Other cooperative member	6	12.2	43	87.8	49	100
Others	1	2	48	98	49	100

Source: Computed from the survey data

It is obvious from table 18 that 42 respondents (85.7 %) have an idea to join the cooperative; they said the decision is taken by their own. And other members also motivated some of the respondents (6 in number, 12.2%) to join in cooperatives.

4.2.4 FOCUS GROUP DISCUSSION (NON-MEMBERS)

Non-members of cooperative Societies with 12 members was established with active participation of community development workers, team of researchers, opinion leaders and community development workers. The points raised in the focus group discussion conducted are summarized as follows.

Non-members of cooperative society's views on cooperation: the participants of the FGD expressed their views on the following points. Regarding the utilization of services of cooperative societies, the group discussion participants agreed that services are being provided only for actual members. Nevertheless, the main service being provided by cooperative societies in the area is fertilizer. Surprisingly, non-members are also getting fertilizer provision service.

Regarding their interest to become members of cooperative societies, they reached to the consensus that they are very much interested to become members of the cooperative societies provided that previous members will be good examples in deriving benefit and teaching them about the advantages of being members.

Regarding reasons for their refusal to become members of the cooperative societies, they reached on the consensus that the socialist regime negative impact is the stumbling block for them to become members. That means they are afraid of the corruption and mistrust of cooperative leaders.

Regarding the proposed solution to attract non-members for membership, they reached consensus that exemplary work about the advantages of cooperatives in the area and demonstration of successful cooperative societies via experience exchange field visits are the two important events to happen in the area.

Regarding their general perception about cooperatives, they reached consensus that cooperatives are important elements to enable farmers alleviate the complex socio-economic problems in the area. As suggested by the group discussion participants the most important thing to be done in the area is to support cooperative societies through education of cooperative principles to members and arrangement of experience exchange field visits for both members and non-members.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS ON MEMBER RESPONDENTS' FINDINGS

5.1.1 OBSTACLES

Results of the schedule survey and the FGD revealed that there are problems to the agricultural cooperatives development in the study area. Unmet expectations of members from agricultural cooperatives was manifested by not having their purpose of joining in cooperatives fulfilled i.e. to get credit, inputs and marketing of agricultural products. The service available is input distribution out of which fertilizer is the main one. Marketing of agricultural products is very small. This finding is in line with the case study findings that "input supply constitutes the major activity of the cooperatives, and marketing of products needs additional attention" (Assefa, 2011) and the importance of marketing of agricultural products was further emphasized by the fact that "co-ops have failed without a market-driven approach that allows small business owners and farmers to compete effectively in local, regional and global markets, with the motivation of increased profits" (US Overseas Development Council, 2010). Dorseey et al, also revealed that "as a result of market linkages farmers have obtained higher prices and guaranteed market for their products|" (Dorseey, J., and Assefa, T., 2005). OCDC emphasized that "cooperatives have failed without a market-driven approach that allows them to compete. They need a competitive advantage through professional management, operational and financial efficiency, high quality products, and competitive pricing" (OCDC, 2007). The marketing of products of members of agricultural cooperatives was mentioned by Gabre-Madhin, et al, 2003, Kodama, Y. 2007, Meherka, A. 2008 in Tanguy Bernard et al, 2010; "Although the cooperative movement in Ethiopia has chalked up successes in traditional export sectors, such as coffee (see Gabre-Madhin et al. 2003; Kodama 2007), its successes in the food staple sector are far fewer". "During 2003–07, cooperatives marketed 282,000 metric tons of grain, less than 1 percent of total grain production in the country" (Meherka, 2008).

Under such circumstances one should not wonder if the cooperative members did get low or no economic benefits from joining agricultural cooperatives from marketing of products. As a result members' economic conditions did not change. Improving the marketing of the products of primary cooperatives by establishing business linkages with the private sectors should be focused by the cooperatives with the help of their unions, federal and regional cooperative agencies and NGOs.

The other problems that were found from the study were no cash credit and very limited credit in kind. Experiences of USAID and the visionary Bank of Abyssinia showed that "cooperatives have been able to access credit and have sufficiently demonstrated their creditworthiness (100% on-time repayment)" (Assefa, 2007). Therefore establishment of rural saving and credit cooperatives by farmers or rural people belong to the means that creates access to credit for farmers. Even though the amount of capital that can be accumulated by credit cooperatives operating at the local level is low, the earlier they establish their saving with what they can afford the better will be their business future. Access to credit is necessary for success. "Financial cooperatives contribute to poverty reduction in various ways. Access to credit to finance micro, small and medium enterprise generates employment and incomes. Low-cost savings facilities for the poor and small depositors help to reduce members' vulnerabilities to shocks such as medical emergencies, and encourage future investments, including education and small business enterprises" (UN, 2009**)**.

Low awareness of members on cooperative principles, bylaws and how a cooperative is organized have been witnessed by the study. Training of farmer members about cooperative concepts and principles and the basic knowledge of cooperative business is important for better agricultural cooperatives development at grassroots level

Advantages in selling products through cooperatives were no cheating while weighing, no cheating in payment, price advantage ranging from 10 to 60 Birr per quintal and dividend to be received by members from the cooperatives. Only few members used these opportunities. The reason being cooperatives did not purchase products from members due to financial limitations as members needed to get cash.

Shortage of cash, lack of regular purchase of grain by the cooperatives, lack of timely supply of inputs, high price of inputs, and poor management capacity were problems as perceived by members that hinder the development of agricultural cooperatives.

28.4 % (19), 43.3 % (29), and 41.8 % (28) of wheat, teff and gauya producers were not able to retain for seed respectively. 17.9 % (12), 22.4 % (5) and 41.8 % (28) of wheat, teff and gauya producers were not able to retain for food respectively. 52.2 % (35), 58.2 % (39) and 77.6 % (52) of wheat, teff and gauya non-member farmers were not able to retain for market respectively. About 29 to 44%, 18 to 42% and 53 to 78% of wheat, teff and gauya member farmers were not able to retain for seed, food and market respectively. The intervention options to alleviate this problem may include timely supply of inputs, expansion of intensive agriculture through the adoption of appropriate crop technologies and improving the fertility status of the soil by adopting appropriate soil and water conservation strategies. Attention should be given to increase production so that member farmers can retain for seed, food and market by improving the supply of inputs and extension services. Further research should be conducted to reveal the severity of the constraints.

5.1.2 OPPORTUNITIES

The findings showed that there are several opportunities. 57 % of attendance and 39 % of active participation in the general assembly, positive attitude of members towards cooperative leaders, employees and *Woreda* Cooperative Bureau officials are important invaluable assets for the development of agricultural cooperatives. This has to be supported by improved economic benefits of members from their cooperative activities.

5.2 CONCLUSIONS ON NON-MEMBER RESPONDENTS' FINDINGS

5.2.1 OBSTACLES

The survey result revealed the reasons as to why non-members did not want to join in agricultural cooperatives. The reasons included that non-members didn't have enough money to pay for the share subscription and entrance fee, didn't have any interest in becoming members and the cooperative administration is inefficient. Gabre-Madhin et al. found also that the reasons why non members do not join cooperatives among others, fees are too high compared to benefits (Gabre-Madhin et al. 2003). The FGD with the non-members reached consensus that they are very much interested to become members of the cooperative societies provided that previous members will be good examples in deriving benefit and teaching them about the advantages of being members and further reached consensus that the socialist regime negative impact was the stumbling block for them to become members for they were afraid of the corruption and mistrust of cooperative leaders. The survey and the FGD findings don't complement each other therefore the issues need further investigation.

The FGD further outlined that the main service being provided by cooperative societies in the area is fertilizer and non-members were also getting fertilizer provision service. The survey result regarding services of cooperative societies revealed that there were limited services of improved crop seeds and herbicides to members.

About one third of respondents of non-members also accepted that there is a political influence in the election process, decision making process and in admitting new members. This problem was stressed by DFID from its statement; "a main challenge facing many cooperatives is over-control and regulation by government (DFID, 2010). Autonomy and freedom from government control is positively associated with success. While government support can be helpful, governments should avoid overregulation. In Ethiopia, US technical assistance has helped overcome this legacy" (Assef,a 2007).

32.7 % (16), 38.8 % (19), and 49 % (22), of wheat, teff and gauya producers were not able to retain for seed respectively. 18.4 % (9), 32.7 % (16), and 46.9 % (23), of wheat, teff and gauya producers were not able to retain for food respectively. 46.9 % (23), 65.3 % (32) and 55.1 % (27) of wheat, teff and gauya non-member farmers were not able to retain for market respectively. About 33 to 49%, 19 to 47% and 47 to 66% of wheat, teff and gauya member farmers were not able to retain for seed, food and market respectively. The intervention options to alleviate this problem may include timely supply of inputs, expansion of intensive agriculture through the adoption of appropriate crop technologies and improving the fertility status of the soil by adopting appropriate soil and water conservation strategies. Attention should be given to increase production so that non-member farmers can retain for seed, food and market by improving the supply of inputs and extension services. Further research should be conducted to reveal the severity of the constraints.

Refusal of non-members to become members of the cooperative societies was due to socialist regime's negative impact for they were afraid of the corruption and mistrust of cooperative leaders. Tanguy *et al*. also found out under the previous regime, cooperatives were used to extend strong government control to the local level and to promote socialist ideology through compulsory participation (Tanguy *et al*, 2010). The political interference finding of the study was 15 years after the downfall of the Derg government. It will still take several years to have trust in cooperatives. Tanguy *et al* have got truth as their findings of field observations suggested that "a long process of trust recovery is required for present-day cooperatives to overcome persisting suspicion and wariness on the part of potential members" (Ibid.).

5.2.2 OPPORTUNITIES

The views of non-members towards the *Woreda* cooperative promotion officials and the government were positive and can also be considered as an opportunity for cooperative development. Future research needs to be conducted to identify the constraints and opportunities of cooperatives in general and agricultural cooperatives development at *Woreda* levels in particular.

6. LIMITATIONS OF THE STUDY

The study was limited to one year. The study area covered only the rural area of **Ambo Zuria Woreda**. Sample members of the agricultural cooperatives were included and sample non-member farmers living in and around the sample cooperatives were included in the study

7. SCOPE FOR FURTHER RESEARCH

The study assessed the obstacles to the development of agricultural cooperatives. The study was conducted through interview schedule and focus group discussion regarding the participation of cooperative members towards cooperative development and the major problems affecting the development of agricultural cooperatives in Ambo Zuria Woreda. The fact that the study was conducted in one Woreda the findings may vary from other Woredas. Nevertheless, the study was not free from certain limitations. Non-availability and dearth of data regarding contributions of cooperatives to benefit their members was witnessed. The study was carried out covering a wide cross section of cooperatives in a particular Woreda, the inferences and conclusions, which are drawn from the study, may be generalized to the entire Oromiya Region since the Woreda under survey reflect the paradigms of cooperatives in Oromiya Region. Therefore, research in the obstacles of agricultural cooperatives development should be conducted at grassroots level to attract the attentions of stakeholders.

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ESTIMATION OF PARAMETERS OF STRUCTURAL CHANGE UNDER SMALL SIGMA APPR0XIMATION THEORY

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ABSTRACT

In this paper, the structural change in a linear regression model over two different periods of time is estimated. The ordinary least squares and Stein-rule estimators are employed to estimate the structural change. Their efficiency properties are derived using the small sigma theory and dominance conditions are derived.

KEYWORDS
Structural change, ordinary least squares, Stein-rule estimators.

1 INTRODUCTION

In regression analysis it is generally assumed that the regression coefficients do not change over the period of study. However, in practice, there may arise many situations in which some or al the regression coefficients change.

In econometrics, it is often necessary to estimate model with structural change since economic relationships are usually unstable. Thus it is necessary to estimate the model under structural change. Suppose there exists a structural change in a linear regression model so that the model has two regimes. An important question in the regression analysis is whether sets of coefficients for different samples are identical. Once it is known that when models change and which coefficient change, estimation can be simply handed by the ordinary least square method.

Small disturbance asymptotic methods have been used previously on by many authors, e.g., Kadane [1] found the distribution to test of the over-identifying restrictions, Ramage [2] studied the specification error, Brown [3] studied the reduced form estimation and forecasting, Klein[4] studied the effect of choosing a particular normalization rule, Peck [5]studied estimators in the presence of pooled time-series and cross-sectional data, Srivastava [6] and Brown, Ramage and Srivastava [7] studied the disturbance variance estimators, Sawa [8] studied the small sigma (σ) asymptotically unbiased estimator whose finite sample moments exists. Thus small asymptotic can by thought of as reasonably good approximation. Small sigma asymptotic has the important advantage over large sample theory of being able to "correct" the sample size. Therefore, whenever an econometrician is prepared to trust large sample theory, he should be willing to trust small σ theory as well. Small disturbance approximation will be good or poor in any application depending on whether σ is small or not in context.

In this paper the estimation change in coefficients of a linear regression model over two different periods of time. For these ordinary least squares estimator and estimators arising from the family of stein-rule are employed to study the efficiency properties o difference estimator by employing small sigma approximation theory.

2 MODEL SPECIFICATION AND ESTIMATORS

Consider the linear regression model under the structural change as

$$y^* = X^*\beta^* + \sigma u^* \qquad (1)$$
$$y^{**} = X^{**}\beta^{**} + \sigma u^{**} \qquad (2)$$

where y^* and y^{**} are the $T^* \times 1$ and $T^{**} \times 1$ vectors of observations on the study variable respectively, X^* and X^{**} are the $T^* \times p$ and $T^{**} \times p$ full column rank matrices of observations on p explanatory variables respectively, β^* and β^{**} are the $p \times 1$ vectors of regression coefficients, u^* and u^{**} are the $T^* \times 1$ and $T^{**} \times 1$ vectors of disturbances respectively and σ is a scalar. These disturbance vectors are assumed to the stochastically independent following a multivariate normal distribution with mean vector null and variance covariance matrix identity. Thus it follows that

$$E(u^*) = E(u^{**}) = 0$$
$$E(u^* u^{*\prime}) = I_{T^*}$$
$$E(u^{**} u^{**\prime}) = I_{T^{**}}$$
$$E(u^* u^{**\prime}) = 0.$$

Here we are interested in the estimation of structural change in regression coefficients, which is measured by

$$\Delta = (\beta^* - \beta^{**}). \qquad (3)$$

If we employ the ordinary least squares method to estimate β^* and β^{**}, then Δ can be estimated by

$$D_{OLS} = (b^*_{OLS} - b^{**}_{OLS}) \qquad (4)$$

Where

$$b^*_{OLS} = (X^{*\prime} X^*)^{-1} X^{*\prime} y^*$$
$$b^{**}_{OLS} = (X^{**\prime} X^{**})^{-1} X^{**\prime} y^{**}.$$

It is well known that the ordinary least squares procedure provides the best estimators of regression coefficient in the class of linear and unbiased estimators. In practice, sometimes the introduction of non- linearity and bias may lead to gain in efficiency considerably such as the estimators arising from Stein-rule procedure, see, e.g., Judge and Bock [9]. If we employ the Stein-rule procedure, then Δ can be estimated by

$$D_{SR} = (b^*_{SR} - b^{**}_{SR}) \qquad (5)$$

Where

$$b^*_{SR} = \left[1 - \frac{k}{T^* - p + 2} \frac{(y^* - X^* b^*_{oLs})'(y^* - X^* b^*_{oLs})}{b^{*\prime}_{oLs} X^* X^* b^*_{oLs}}\right] b^*_{oLs}$$

$$b_{SR}^{**} = \left[1 - \frac{k}{T^{**} - p + 2} \frac{(y^{**} - X^{**} b_{oLs}^{**})'(y^{**} - X^{**} b_{oLs}^{**})}{b_{oLs}^{**'} X^{**'} X^{**} b_{oLs}^{**}}\right] b_{oLs}^{**}$$

With k as positive characterizing scalar.

Another estimator of Δ can be formulated by writing the equations (1) and (2) compactly as

$$\begin{bmatrix} y^* \\ y^{**} \end{bmatrix} = \begin{bmatrix} X^* & 0 \\ 0 & X^{**} \end{bmatrix} \begin{bmatrix} \beta^* \\ \beta^{**} \end{bmatrix} + \sigma \begin{bmatrix} u^* \\ u^{**} \end{bmatrix}$$

$$y = X\beta + \sigma u. \tag{6}$$

Now we can estimate the whole vector β by applying the Stein-rule procedure. This leads to the following estimator of Δ.

$$\hat{\Delta}_{SR} = \left(\hat{\beta}^* - \hat{\beta}^{**}\right) \tag{7}$$

Where

$$\hat{\beta}^* = \left[1 - \frac{k}{T - p + 2} \frac{S}{b_{oLs}^{*'} X^{*'} X^* b_{oLs}^* + b_{oLS}^{**'} X^{**'} X^{**} b_{oLS}^{**}}\right] b_{oLS}^*$$

$$\hat{\beta}^{**} = \left[1 - \frac{k}{T - p + 2} \frac{S}{b_{oLs}^{*'} X^{*'} X^* b_{oLs}^* + b_{oLS}^{**'} X^{**'} X^{**} b_{oLS}^{**}}\right] b_{oLS}^{**}$$

With

$$S = \left[y^* - X^* b_{0LS}^*\right]' \left[y^* - X^* b_{0LS}^*\right] + \left[y^{**} - X^{**} b_{0LS}^{**}\right]' \left[y^{**} - X^{**} b_{0LS}^{**}\right]$$

is the residual sum of squares in the combined model and $T = T^* + T^{**}$.

3 PROPERTIES OF ESTIMATORS

In order to study the properties of D_{OLS}, D_{SR} and $\hat{\Delta}_{SR}$, we observe that

$$(D_{OLS} - \Delta) = (b_{oLS}^* - \beta^*) - (b_{oLS}^{**} - \beta^{**})$$
$$= \sigma [(X^{*'} X^*)^{-1} X^{*'} u^* - (X^{**'} X^{**})^{-1} X^{**'} u^{**}],$$

Whence it is easy to see that

$$E(D_{OLS} - \Delta) = 0 \tag{8}$$

$$Var(D_{OLS}) = \sigma^2[[X^{*'} X^*]^{-1} + [X^{**'} X^{**}]^{-1}]. \tag{9}$$

Thus D_{OLS} is an unbiased estimator of Δ. However, if we consider D_{SR} and $\hat{\Delta}_{SR}$, it can be easily verified that both are biased estimators of Δ. The exact expressions for the bias vectors and mean squared error matrices of D_{SR} and $\hat{\Delta}_{SR}$ can be derived following judge and Bock [9] but these expressions will be quite intricate and may not shed any light on the efficiency properties as well as the gain arising from the use of one estimator over the other. We have therefore employed the small disturbance asymptotic theory to derive the efficiency properties. The properties of the estimators are given in the following theorems.

Theorem 1: When disturbance are small, the bias vector upto $0(\sigma^2)$ and mean squared error matrix upto $0(\sigma^4)$ are

$$B(D_{SR}) = E(D_{SR} - \Delta)$$

$$= -\sigma^2 k \left[\frac{T^* - p}{(T^* - p + 2)\theta^*} \beta^* - \frac{T^{**} - p}{(T^{**} - p + 2)\theta^{**}} \beta^{**}\right]. \tag{10}$$

$$MSE(D_{SR}) = E(D_{SR} - \Delta)(D_{SR} - \Delta)'$$

$$= V(D_{OLS}) - \sigma^4 k \left[\frac{T^* - p}{(T^* - p + 2)\theta^*} C^* + \frac{T^{**} - p}{(T^{**} - p + 2)\theta^{**}} C^{**}\right]. \tag{11}$$

whence

$$\theta^* = \beta^{*'} X^{*'} X^* \beta^*$$
$$\theta^{**} = \beta^{**'} X^{**'} X^{**} \beta^{**}$$

The proof of theorem 1 is given in Section 4.

Theorem 2: When disturbances are small, the bias vector upto $0(\sigma^2)$ and mean squared error matrix upto $0(\sigma^4)$ are

$$B(\hat{\Delta}_{SR}) = E(\hat{\Delta}_{SR} - \Delta)$$

$$= -\sigma^2 k \frac{T - 2p}{(T - p + 2)(\theta^* + \theta^{**})} \Delta \tag{12}$$

MSE($\hat{\Delta}_{SR}$) = E($\hat{\Delta}_{SR}$ - Δ)($\hat{\Delta}_{SR}$ - Δ)'

$$= V(D_{OLS}) - \sigma^4 k \frac{(T-2p)}{(T-p+2)(\theta^*+\theta^{**})} C \qquad (13)$$

Where $C^* = 2(X^{*'}X^*)^{-1} - \left[\frac{4+k}{\theta^*}\right]\beta^*\beta^{*'}$

$C^{**} = 2(X^{**'}X^{**})^{-1} - \left[\frac{4+k}{\theta^{**}}\right]\beta^{**}\beta^{**'}$

$C = 2(X^{*'}X^*)^{-1} + 2(X^{**'}X^{**})^{-1}$

$$- \frac{1}{(\theta^*+\theta^{**})} + \left[4+k\frac{T-2p+2}{T-p+2}\right]\Delta\Delta'.$$

The proof of Theorem 2 is given in Section 4. From equations (8), (9) and (12), it is observed that the estimator D_{OLS} estimates Δ unbiased while the other two estimators D_{SR} and $\hat{\Delta}_{SR}$ do not so. However it is, difficult to draw any clear inference regarding the relative magnitude of biases.

Next, let us compare the estimators with respect to the criterion of the trace of mean squared error matrix. From (9) and (11), we observe that

tr Var(D_{OLS}) – tr MSE(D_{SR}) (14)

$$=\sigma^4 k\left[2tr[X^{*'}X^*]^{-1} + 2tr[X^{**'}X^{**}]^{-1} - (4+k)\left(\frac{\beta^{*'}\beta^*}{\theta^*} + \frac{\beta^{**'}\beta^{**}}{\theta^{**}}\right)\right]$$

Which is positive if

$$0 < k < 2a : a > 0 \qquad (15)$$

Where

$$a = \frac{\frac{\theta^*}{\beta^{*'}\beta^*}tr\left(X^{*'}X^*\right)^{-1} - 2}{1+\frac{\theta^*}{\theta^{*'}}\frac{\beta^{**'}\beta^{**}}{\beta^{*'}\beta^*}} + \frac{\frac{\theta^{**}}{\beta^{**'}\beta^{**}}tr\left(X^{**'}X^{**}\right)^{-1} - 2}{1+\frac{\theta^{**}}{\theta^*}\frac{\beta^{*'}\beta^*}{\beta^{**'}\beta^{**}}}.$$

If $\lambda_1^* \geq \lambda_2^* \geq \ldots \geq \lambda_p^*$ denotes the characteristic roots of ($X^{*'}X^*$) and $\lambda_1^{**} \geq \lambda_2^{**} \geq \ldots \geq \lambda_p^{**}$ are the characteristic roots of ($X^{**'}X^{**}$), then

$$\lambda_p^* \leq \frac{\theta^*}{\beta^{*'}\beta^*} = \frac{\beta^{*'}X^{*'}X^*\beta^*}{\beta^{*'}\beta^*} \leq \lambda_1^* \qquad (16)$$

$$\lambda_p^{**} \leq \frac{\theta^{**}}{\beta^{**'}\beta^{**}} = \frac{\beta^{**'}X^{**'}X^{**}\beta^{**}}{\beta^{**'}\beta^{**}} \leq \lambda_1^{**}. \qquad (17)$$

Utilizing (16) and (`17), we observe that the inequality (15) is satisfied at least as long as

$$0 < k < 2a_{min} \,;\, a_{min} > o \qquad (18)$$

Where

$$a_{min} = \frac{\lambda_p^{**}}{\lambda_1^* + \lambda_p^{**}}\left(\sum\frac{\lambda_p^*}{\lambda_i^*} - 2\right) + \frac{\lambda_p^*}{\lambda_1^{**} + \lambda_p^*}\left(\sum\frac{\lambda_p^{**}}{\lambda_i^{**}} - 2\right),$$

The sufficient condition (18) has an advantage over the condition (15), that it does not involve unknown regression coefficients and therefore can be fruitfully utilized in practice.

Similarly it is observed from (9) and (13) that $\hat{\Delta}_{SR}$ is supporter to D_{OLS} with respect to the criterion of trace of mean squared error matrix to the order of our approximation when trace of mean squared error matrix is positive, i.e.,

$$0 < k < 2\alpha \,;\, \alpha > 0 \qquad (20)$$

where

$$\alpha = \left[\frac{T-p+2}{T-2p+2}\right]\left[\frac{\theta^*+\theta^{**}}{\Delta'\Delta}\right][tr\,(X^{*'}X^*)^{-1} + tr\,(X^{**'}X^{**})^{-1} - 2].$$

Observing

$$\frac{\theta^*}{\Delta'\Delta} = \frac{\beta^{*\prime} x^{*\prime} x^* \beta^*}{(\beta^* - \beta^{**})'(\beta^* - \beta^{**})} \geq \frac{\beta^* X^{*\prime} X^* \beta^*}{\beta^{*\prime} \beta^*} \geq \lambda_p^* \qquad (21)$$

$$\frac{\theta^{**}}{\Delta'\Delta} = \frac{\beta^{**\prime} X^{**\prime} X^{**} \beta^{**}}{(\beta^* - \beta^{**})'(\beta^* - \beta^{**})} \geq \frac{\beta^{**\prime} X^{**\prime} X^{**} \beta^{**}}{\beta^{**\prime} \beta^{**}} \geq \lambda_p^{**}, \qquad (22)$$

the condition (18) is satisfied so long as

$$0 < k < 2\alpha_{min} : \alpha_{min} > 0 \qquad (23)$$

where

$$\alpha_{min} = \left[\frac{T-p+2}{T-2p+2}\right]\left[\frac{\lambda_p^* + \lambda_p^{**}}{\Delta}\right]\left[\Sigma\left(\frac{1}{\lambda_i^*} + \frac{1}{\lambda_i^{**}}\right) - 2\right].$$

Next, let us compare the estimators D_{SR} and $\hat{\Delta}_{SR}$. It is seen from (11) and (13) that

$$\text{tr MSE}(\hat{\Delta}_{SR}) - \text{tr MSE}(D_{SR})$$

$$= \frac{T^* - p}{(T^* - p + 2)\theta^*} \text{tr } C^* + \frac{T^{**} - p}{(T^{**} - p + 2)\theta^{**}} \text{tr } C^{**}$$

$$- \frac{(T-2p)}{(T - p + 2(\theta^* + \theta^{**})} \text{tr } C. \qquad (24)$$

Thus a condition on k for the superiority of one estimator over the other can be obtained. From such a condition it will, however, not be possible to deduce a neat condition.

SUMMARY

In this paper, the aspect of structural change in regression analysis is considered. The estimators arising from least squares principle and Stein-rule procedure are employed to study the effect of change in structural coefficients in a linear regression model. The efficiency properties of the estimators are studied and the dominance condition of D_{SR} and $\hat{\Delta}_{SR}$ over D_{OLS} are derived by using the small sigma theory.

DERIVATION OF THE RESULTS

In order to derive small disturbance asymptotic approximations, we observe that

$$(b_{0LS}^* - \beta^*) = \sigma(X^{*\prime} X^*)^{-1} X^{*\prime} u^* \qquad (25)$$

$$(y^* - X^* b_{0LS}^*)'(y^* - X^* b_{0LS}^*) = \sigma^2 u^{*\prime} M^* u^* \qquad (26)$$

where

$$M^* = 1 - (X^{*\prime} X^*)^{-1} X^{*\prime}.$$

$$\bar{M}^* = (X^{*\prime} X^*)^{-1} X^{*\prime}.$$

Similarly, we get

$$\frac{1}{b_{0LS}^* X^{*\prime} X^* b_{0LS}^*} = \frac{1}{\beta^{*\prime} X^{*\prime} X^* \beta^*}\left[1 + 2\sigma \frac{\beta^{*\prime} X^{*\prime} u^*}{\beta^{*\prime} X^{*\prime} X^* \beta^*} + \sigma^2 \frac{u^{*\prime}(I - M^*)u^*}{\beta^{*\prime} X^{*\prime} X^* \beta^*}\right]^{-1}$$

$$= \frac{1}{\beta^{*\prime} X^{*\prime} X^* \beta^*} - 2\sigma \frac{\beta^{*\prime} X^{*\prime} u^*}{(\beta^{*\prime} X^{*\prime} X^* \beta^*)^2} + \ldots. \qquad (27)$$

Employing (25), (26) and (27) we find that

$$(b_{SR}^* - \beta^*) = \sigma e_1^* - \sigma^2 e_2^* - \sigma^3 e_3^* + 0_p(\sigma^4) \qquad (28)$$

where

$$e_1^* = (X^{*\prime} X^*)^{-1} X^{*\prime} u^*$$

$$e_2^* = \left[\frac{k}{T^* - p + 2}\right] \frac{u^{*\prime} M^* u^*}{\beta^{*\prime} X^{*\prime} X^* \beta^*} \beta^*$$

$$e_3^* = \left[\frac{k}{T^* - p + 2}\right] \frac{u^{*\prime} M^* u^*}{\beta^{*\prime} X^{*\prime} X^* \beta^*} A^* X^{*\prime} u^*$$

with

$$A^{*} = (X^{*\prime} X^{*})^{-1} - \frac{2}{\beta^{*\prime} X^{*\prime} X^{*} \beta^{*}} \beta^{*\prime} \beta^{*}.$$

Similarly expressions can be obtained for the estimation error of b_{SR}^{**} as follows :

$$(b_{0LS}^{**} - \beta^{**}) = \sigma(X^{**\prime} X^{**})^{-1} X^{**\prime} u^{**} \quad (29)$$

$$(y^{**} - X^{**} b_{0LS}^{**})^{\prime} (y^{**} - X^{**} b_{0LS}^{**}) = \sigma^{2} u^{**\prime} M^{**} u^{**} \quad (30)$$

where

$$M^{**} = I - (X^{**\prime} X^{**})^{-1} X^{**\prime}$$

$$\overline{M}^{**} = (X^{**\prime} X^{**})^{-1} X^{**\prime}.$$

After utilizing (29) and (30) we observe that

$$\frac{1}{b_{0LS}^{**\prime} X^{**\prime} X_{0LS}^{**} b^{**}} = \frac{1}{\beta^{**\prime} X^{**\prime} X^{**} \beta^{**}} \left[1 + 2\sigma \frac{\beta^{**\prime} X^{**\prime} u^{**}}{\beta^{**\prime} X^{**\prime} X^{**} \beta^{**}} + \sigma^{2} \frac{u^{**\prime} (I - M^{**}) u^{**}}{\beta^{**\prime} X^{**\prime} X^{**} \beta^{**}} \right]^{-1}$$

$$= \left(X^{**\prime} X^{**} + \frac{\sigma^{**2}}{\sigma^{*2}} X^{*\prime} X^{*} \right)^{-1}. \quad (31)$$

Employing (29), (30) and (31) we find that

$$(b_{SR}^{**} - \beta^{**}) = \sigma e_{1}^{**} - \sigma^{2} e_{2}^{**} - \sigma^{3} e_{3}^{**} + 0_{p}(\sigma^{4}) \quad (32)$$

where

$$e_{1}^{**} = (X^{**\prime} X^{**})^{-1} X^{**\prime} u^{**}$$

$$e_{2}^{**} = \left[\frac{k}{T^{**} - p + 2} \right] \frac{u^{**\prime} M^{**} u^{**}}{\beta^{**\prime} X^{**\prime} X^{**} \beta^{**}} \beta^{**}$$

$$e_{3}^{**} = \left[\frac{k}{T^{**} - p + 2} \right] \frac{u^{**\prime} M^{**} u^{**}}{\beta^{**\prime} X^{**\prime} X^{**} \beta^{**}} A^{**} X^{**\prime} u^{**}$$

with

$$A^{**} = (X^{**\prime} X^{**})^{-1} - \frac{2}{\beta^{**\prime} X^{**\prime} X^{**} \beta^{**}} \beta^{**\prime} \beta^{**}.$$

Using the expression we get the estimation error of D_{SR}.

$$(D_{SR} - \Delta) = \sigma(e_{1}^{*} - e_{1}^{**}) - \sigma^{2}(e_{2}^{*} - e_{2}^{**})$$

$$+ \sigma^{3}(e_{3}^{*} - e_{3}^{**}) + 0_{p})\sigma^{4}). \quad (33)$$

Thus the bias vector to order $0(\sigma^{2})$ is given by

$$B(D_{SR}) = \sigma E(e_{1}^{*} - e_{1}^{**}) - \sigma^{2} E(e_{2}^{*} - e_{2}^{**}). \quad (34)$$

We find that

$$E(e_{1}^{*}) = 0$$

$$E(e_{2}^{*}) = \frac{k(T^{*} - p)}{(T^{*} - p + 2)\theta^{*}} \beta^{*}.$$

$$E(e_{3}^{*}) = 0.$$

Similarly we can find

$$E(e_{1}^{**}) = 0$$

$$E(e_{2}^{**}) = \frac{k(T^{**} - p)}{(T^{**} - p + 2)\theta^{**}} \beta^{**}.$$

$$E(e_{3}^{**}) = 0.$$

Utilizing the above expectations, we get the result stated in the Theorem.

Next, the mean squared error matrix of order $0(\sigma^{4})$ is given by

$$MSE(D_{SR}) = \sigma^2 E(e_1^* - e_1^{**})(e_1^* - e_1^{**})' - \sigma^2 E[(e_1^* - e_1^{**})(e_2^* - e_2^{**})' + (e_2^* - e_2^{**})(e_1^* - e_1^{**})'] - \sigma^4 E[(e_1^* - e_1^{**})(e_3^* - e_3^{**})' + (e_3^* - e_3^{**})(e_1^* - e_1^{**})' - (e_2^* - e_2^{**})(e_2^* - e_2^{**})']. \qquad (35)$$

It can be seen that

$$E(e_1^* - e_1^{**})(e_1^* - e_1^{**})' = [(X^{*'}X^*)^{-1} + (X^{**'}X^{**})^{-1}]$$

$$E(e_1^* - e_1^{**})'(e_2^* - e_2^{**})' = 0.$$

$$E(e_1^* - e_1^{**})(e_3^* - e_3^{**})' = k\left[\frac{T^* - p}{(T^* - p + 2)\theta^*}A^* - \frac{T^{**} - p}{(T^{**} - p + 2)\theta^{**}}A^{**}\right]$$

$$E(e_2^* - e_2^{**})(e_2^* - e_2^{**})' = k^2\left[\frac{T^* - p}{(T^* - p + 2)\theta^*}\beta^{*'}\beta^* - \frac{T^{**} - p}{(T^{**} - p + 2)\theta^{**}}\beta^{**'}\beta^{**}\right].$$

Substituting the above expectations in (35) we obtain the mean squared error of D_{SR} as stated in the Theorem. Similarly the results (12) and (13) can also be derived.

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ROLE OF NGOS FOR SOCIO-ECONOMIC DEVELOPMENT IN RURAL AREAS THROUGH ICT: AN EMPIRICAL STUDY

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ABSTRACT
Information and Communication Technology (ICT) is constantly evolving in our daily lives. Rural development in India is one of the important factors for the growth of Indian economy. To enhance Rural Development, government and Non- Government Organizations (NGOs) are extensively involved in educating and training the rural population. ICTs are quite easily used by the urban peoples and also ICT plays a great role in their daily life. Does ICT also play a great role in the social and economic life of rural people? The main aim of this study is to find out the role of NGOs for Socio-Economic development in rural areas through ICT in Coimbatore District.

KEYWORDS
NGO, ICT, socio-economic conditions.

INTRODUCTION
India is a country of villages and about 50% of the villages have very poor socio-economic conditions. Since the dawn of independence constant efforts have been made to emancipate the living standard of rural masses. The five year plans of the central government also largely aim at rural development. The ministry of rural development in India is the apex body for formulating policies, regulations and acts pertaining to the development of the rural sector. Agriculture, handicrafts, fisheries, poultry, and dairy are the primary contributions to the rural business and economy.

Voluntary organization can play a crucial role in rural development by supplementing government efforts as they are close to the minds and hearts of the rural people. They have their roots in the people and can respond to the needs and aspirations of the community very effectively. They can experiment new approaches to rural development. (Dhillon & Hansra -1995)

Rural development which is concerned with economic growth and social justice, improvement in the living standard of the rural people by providing adequate and quality social services and minimum basic needs becomes essential. The present strategy of rural development mainly focuses on poverty alleviation, better livelihood opportunities, provision of basic amenities and infrastructure facilities through innovative programs of wage and self-employment. ICT is the new tool for rural development. Information and Communication Technology, if used properly can be of great advantage for the development at grass root levels. At the same time challenge remains with the administration to capture the minds of the rural masses, mostly illiterate, to help them adapt the new technology which is completely alien to them. There are various rural development schemes run by the government of India and also organizations are present to look after the implementations of these programs. In this, Non-Governmental Organizations (NGOs) play a very important role in the development of rural areas and in implementing many ICT related training programs in the rural areas.

OBJECTIVES OF THE STUDY
1. To study how far the NGOs are extensively involved in the process of socio-economic development in rural areas through ICT
2. To analyze how far the NGOs are effective in rural development through Information and Communication Technology.

SCOPE OF THE STUDY
The success of the rural development depends upon the active participation and willing co-operation of the rural people through self-help organizations and voluntary agencies. In the guidelines issued by the Government of India on rural schemes, the need for socio-economic development has strongly been stressed and the successful implementation of the ICT scheme through effective and innovative role of NGOs. Keeping all the above in mind, the present study proposes to find the answers for the following questions;
1. What are the various methods used for rural development in promoting the SHGs?
2. How effective are those methods in fulfilling the expectations of SHG?
3. About the Role of the NGOs in rural development.
4. Problems that arose during the process and implementation of ICT programs in rural areas.
5. What are the important suggestions to improve ICT programs in rural areas?

NEED FOR THE STUDY
The study on role of NGO in socio-economic development in the context of ICT has assumed greater significance, in the recent past, as a response to the failure of the top down, welfare oriented approaches to the rural development programs. In recent years, development agencies, decision makers, and officials increasingly laud the role of NGOs in socioeconomic development programs particularly in the context of ICT. Indeed, ICT has to be termed as an effective intervention with a positive impact on socio economic improvement of rural people. Also, it needs to be studied in detail to understand the real impact made on socioeconomic development by the sample NGOs in implementing the new scheme called ICT. Hence the present study is aimed at bringing out various methods used in rural development and significant impact made on promotion of Self Help Groups and implementation of ICT.

SIGNIFICANCE OF THE STUDY
Given the importance of ICTs in national development, countries across the globe have put in place mechanisms such as universal service funds and other forms of government intervention to achieve universal access to ICTs. These focus inter alia on bridging the digital divide between urban areas/populations and rural areas/populations.

The significance of bridging this divide in developing countries stems mainly from the fact that rural areas often lack or lag behind urban areas in terms of essential infrastructure and services such as transportation, health, education and government services. This creates a politically and ethically unacceptable inequality of services and opportunities for rural populations and prevents them from participating appropriately and fully in socio-economic and political life of the nation. Rural isolation and deprivation can negatively impact growth and certainly growth cannot be sustainable unless it is inclusive. This is especially true of a nation like India where nearly 70% of population resides in rural areas and is largely engaged in low productivity agriculture and allied activities. ICTs can overcome many infrastructural constraints. Through ICTs people in rural areas can connect with the local, regional and national economy and access markets, banking/financial services and employment opportunities. ICTs also serve as an instrument of awareness creation and feedback giving rural people a voice in the nation's socio-political life. ICTs can act as a channel of delivery of e-government services including health and education. Thus bridging the digital divide also bridges the overall infrastructural gap and addresses other constraints faced by rural areas. ICTs can help mainstream rural populations.

LIMITATIONS OF THE STUDY

The present study has been conducted based on the following limitations:

- The present study is limited to Coimbatore district only, the results generated cannot be generalized for other places.
- Further, the study has been mainly based on the information and facts given by the respondents, relevant to their beliefs, attitudes, and their state of mind at the time of responding to the questionnaire. Hence, the generalization of the findings of the study is subject to these limitations.

LITERATURE REVIEW

Role of NGOs in rural development was analyzed by **Indu Bhaskar and Geethakutty (2001)** through a case study on two NGOs in Thrissur District of Kerala State. Majority of the beneficiaries, non-beneficiaries, workers of NGOs and workers of other development agencies considered rural development works of the NGOs as effective for rural development. The fact was accepted by the different sections as an effective machine for rural development.

Muhammad Ismail (2012) investigated role of non-governmental organizations'(NGOs) contribution in teaching primary education in Pakistan. The study said that there is need to develop awareness in the children regarding their right to education. Government has to implement compulsory primary education for all children. A lot of NGOs play their role in the development of primary education but more needs to be done. There is need to develop a strong relationship between government organization and NGOs. Proper monitoring is required for utilizing funds in primary education of children. There is need to fully implement primary education both by the Government as well as NGOs. Government organization and NGOs performance is good but needs improvement.

Sushmita Mukherjee (2011) focused on the scope of ICT in Rural Development, the opportunities and the challenges that can come along. If implemented properly ICT can surely bridge the gap between economically and technology backward and forward classes. Proper training and implementation of ICT programs in simple way and language which is easily understandable by the rural people can surely bring about revolution in rural development.

Najamuddin and Manraj guliani (2006) have described the process of functioning of rural organizations in implementation of government proposals and emphasize on the role played by them in the success of these programs. The study has brought forward a number of lacunae in the system, which have been carefully examined and suggestions have been made to overcome the same. NGOs working in the rural sector are at times more efficient than government organizations. Programs launched by government are keeping in view the country as a whole. This, at times does not fulfill the needs of a particular area, whereas an NGO working in that area is easily able to recognize the aspirations of the people and take necessary action. Thus, certain regions and states get developed sooner and others fall back due to want of proper approach and efforts for development.

Renee Kuriyan *et al* examine the social and political challenges related to the implementation of ICT kiosk projects for rural development in India. Specifically, the paper focuses on the Akshaya project, a franchise of rural computer-service kiosks, which was implemented in Kerala as public-private sector collaboration. Using interview and participant observation methods, they had examined the challenges that state actors and entrepreneurs face in simultaneously addressing social and financial sustainability. The paper demonstrates that the implementation of ICTs for development is not simply a technical process of delivering services to the poor, but is a highly political process that involves tradeoffs and prioritization of particular goals to attain sustainability.

Geoff Walsham (2010) analyzed whether ICTs have been valuable in providing broader development benefits to all Indian citizens. It is argued that ICTs should not be seen as 'silver bullets' for development but neither are they irrelevant. Rather, they are potentially important contributors towards development in India but only through their integration in wider socio-technical interventions. The literature analyzed in this paper suggests that ICTs have contributed to 'economic facilities' through initiatives such as telecentres, the use of mobile phones for farmers and others, improved agricultural supply chains, and better banking services. 'Social opportunities' have been generated through the widespread use of mobile phones and the more limited use of telecentres. 'Transparency guarantees' can be seen in the visibility of computerized land records, and e-government services for the payment of bills. The contribution of ICTs to 'political freedoms' can be seen as rather limited to date, NGOs empowering slum dwellers through the provision of improved information.

Hargittai (1999) and other studies have shown that the rate of IT diffusion is correlated to the general level of socio-economic development. A most recent finding is that ICT plays a vital role in advancing economic growth and reducing poverty (Fourie, 2008). A survey of firms carried out in 56 developing countries finds that firms that use ICT grow faster, invest more, and are more productive and profitable than those that do not (Fourie, 208)

Dabla (2004) has made comprehensive literature references enticing the relationship between ICTs and Socio-Economic Development. Similarly, Jeremy Grace et al (2004) have deliberated the characteristics and forces in ICTs that play a pivotal role in the economic growth of a country.

There is little empirical research that focuses on the economic impact of the integration of ICTs with micro-entrepreneurial and revenue-generating activities; research is vital to clarify the role and impact of ICTs in rural economic development, and to move this vital debate and its concomitant resource allocation away from speculative arguments.

METHODOLOGY

The study is mainly analyzed in and around the Coimbatore District and the data has been collected directly from the NGOs, SHG members, annual reports, books, magazines, etc., There are 22 registered NGOs in Coimbatore according to the information got from Coimbatore collectorate and also there are 295 villages in Coimbatore district with 10 blocks.

The sampling technique used for this study is quota sampling. This is a sampling method in which a sample is selected by quotas from each defined portion of the population. It involves breaking down the parent population into strata according to relevant feature and calculating how many individuals to include in each of these categories to reflect the parent population structure. Contacts are made until a quota is filled. Therefore non-response cannot occur. The present study consists of 300 samples from 10 selected NGOs in Coimbatore district.

ANALYSIS AND INTERPRETATION

TABLE 1: SOCIO- ECONOMIC CONDITIONS

Particulars	Classification	No.	%
Gender	Male	70	23.3
	Female	230	76.7
Age(in years)	20 – 30	51	17.0
	31 - 40	118	39.3
	41 - 50	94	31.3
	Above 50	37	12.3
Education	Illiterate	5	1.7
	Primary	49	16.3
	Lower secondary	89	29.7
	Higher secondary	157	52.3
Occupation	Agriculture	60	20.0
	Employed	45	15.0
	Self-employed	89	29.7
	Home-maker	16	5.3
	Other	90	30.0
Marital status	Married	221	73.7
	Single	49	16.3
	Divorcee	16	5.3
	Widow	14	4.7
Family type	Joint	86	28.7
	Nuclear	214	71.3
No. of children	1	83	27.7
	2	142	47.3
	3	6	2.0
	4	6	2.0
	None	63	21.0
Family size	1 – 3	103	34.3
	4 – 6	192	64.0
	7 – 9	5	1.7
Health facilities available	Rural health care centres	77	25.7
	Health care centres provided by NGOs	3	1.0
	Private hospitals/clinics	36	12.0
	None	16	5.3
	Both Govt & Pvt Hospitals	168	56.0
	Self- medication	2	.7
Monthly income (in Rs.)	Less than 2000	14	4.7
	2000 – 5000	56	18.7
	Above 5000	230	76.7
Land holding	< 1 acre	32	10.7
	1 - 3 acres	51	17.0
	4 - 6 acres	31	10.3
	Above 6 acres	2	.7
	None	184	61.3
Crops cultivated	Sugar cane	5	1.7
	Sunflower	1	.3
	Cotton	9	3.0
	None	245	81.7
	Other	40	13.3
TOTAL		300	100.0

It is summarized from the above table 1 that 77% of the respondents are female;39% of the respondents under the age group of 31-40 years old; 52% of them qualified higher secondary level; 30% of the respondents are self-employed; 74% of them married;71% of them having nuclear family; 47% of the respondents are having 2 children; 64% of the respondents belonged to a family size of 4 – 6 members ; 56% of the respondents said that there are both government & private hospitals in their area; 77% of the respondents are earning a monthly income of above Rs.5000/-; 63% of them do not possess any land; and 82% of the respondents are not cultivating any crops in their land.

ROLE OF NGOS IN THE DEVELOPMENT OF RURAL TELECOMMUNICATION

Information is critical to the social & economic activities that comprise the development process. Telecommunications, as a means of sharing information, is not simply a connection between people, but a link in the chain of the development process itself (Hudson, 1995).

In this study, it is found that 92% of the respondents have interaction between the group members which is facilitated through meetings; 3% of them through mobile phones and 5% through meetings and circulars. It is believed that encouraging the uptake of mobile phones is the most effective response to the Digital Divide (Fourie, 2008). Mobile phones support long-term growth rates, and their impact is twice as big in developing countries (Odendaal *et al*., 2011). A more sensible approach to promote ICT would therefore be to donate mobile phones instead of computers. Mobile phones do not rely on a permanent power supply and can be used by people who cannot read or write.

The researcher asked respondent about application of ICT which is provided by NGOs in their area. It is found that 74% of the respondents came to know about computer through NGOs. The results show that 288 respondents were using ICT in their daily life for making communication with friends, relatives; 260 respondents were using for banking and insurance purpose; 257 respondents were using for educational information and 251 respondents were using for agricultural information and 255 respondents were using for employment information.

It is inferred from above analysis the service role of ICTs can enhance rural communities' opportunities by improving their access to market information and lower transaction costs (for poor farmers and traders); increase efficiency, competitiveness and market access; enhance ability to access health care and education. Furthermore, ICTs can promote greater transparency, speed-up decision-making process of governments and thus empower rural communities by expanding use of government services, and reduce risks by widening access to microfinance. However, barriers to access, high costs and minimal human resources often prevent those living in poverty in reaping the benefits. When NGOs and civil sectors work together as partners, benefits of ICTs can be greatly enhanced, returns to the community improved and profits increased.

TRAINING AND EXPERIENCE

TABLE 2: TRAINING RECEIVED FROM NGOS

Particulars	No.	Percent
Yes	298	99.3
No	2	.7
Total	300	100.0

From the Table 2 shows that, 99% of the respondents said that they have received training related to SHG activities from NGO.

TABLE 3: EFFECTIVENESS OF TRAINING

Types of Training		Excellent	Good	Fair	TOTAL
Onsite training	No.	196	21	14	231
	%	84.8	9.1	6.1	100.0
Offsite training	No.	93	16	15	124
	%	75.0	12.9	12.1	100.0
Orientation	No.	68	18	15	101
	%	67.3	17.8	14.9	100.0
Exposure tour	No.	28	4	4	36
	%	77.8	11.1	11.1	100.0
Confidence building	No.	236	12	15	263
	%	89.7	4.6	5.7	100.0
Work shop	No.	177	104	17	298
	%	59.4	34.9	5.7	100.0
Rallies	No.	41	5	6	52
	%	78.8	9.6	11.5	100.0
Skill development	No.	232	12	16	260
	%	89.2	4.6	6.2	100.0
Marketing linkages	No.	164	11	14	189
	%	86.8	5.8	7.4	100.0
Micro enterprises development	No.	127	6	10	143
	%	88.8	4.2	7.0	100.0

From the Table 3, it is found that 89.7% of the respondents said that the training for confidence building is excellent and 34.9% of the respondents said that the training for work shop is good and also it is found that 14.9% of the respondents said that the orientations organized by the NGOs is fair.

CHART 1: EFFECTIVENESS OF TRAINING

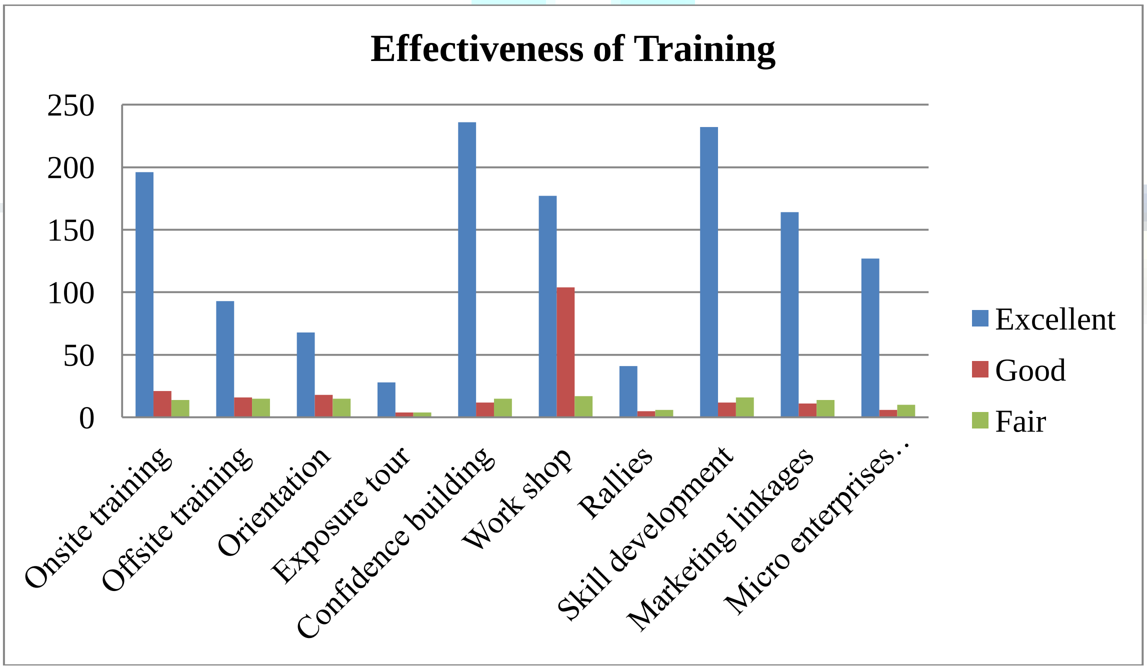
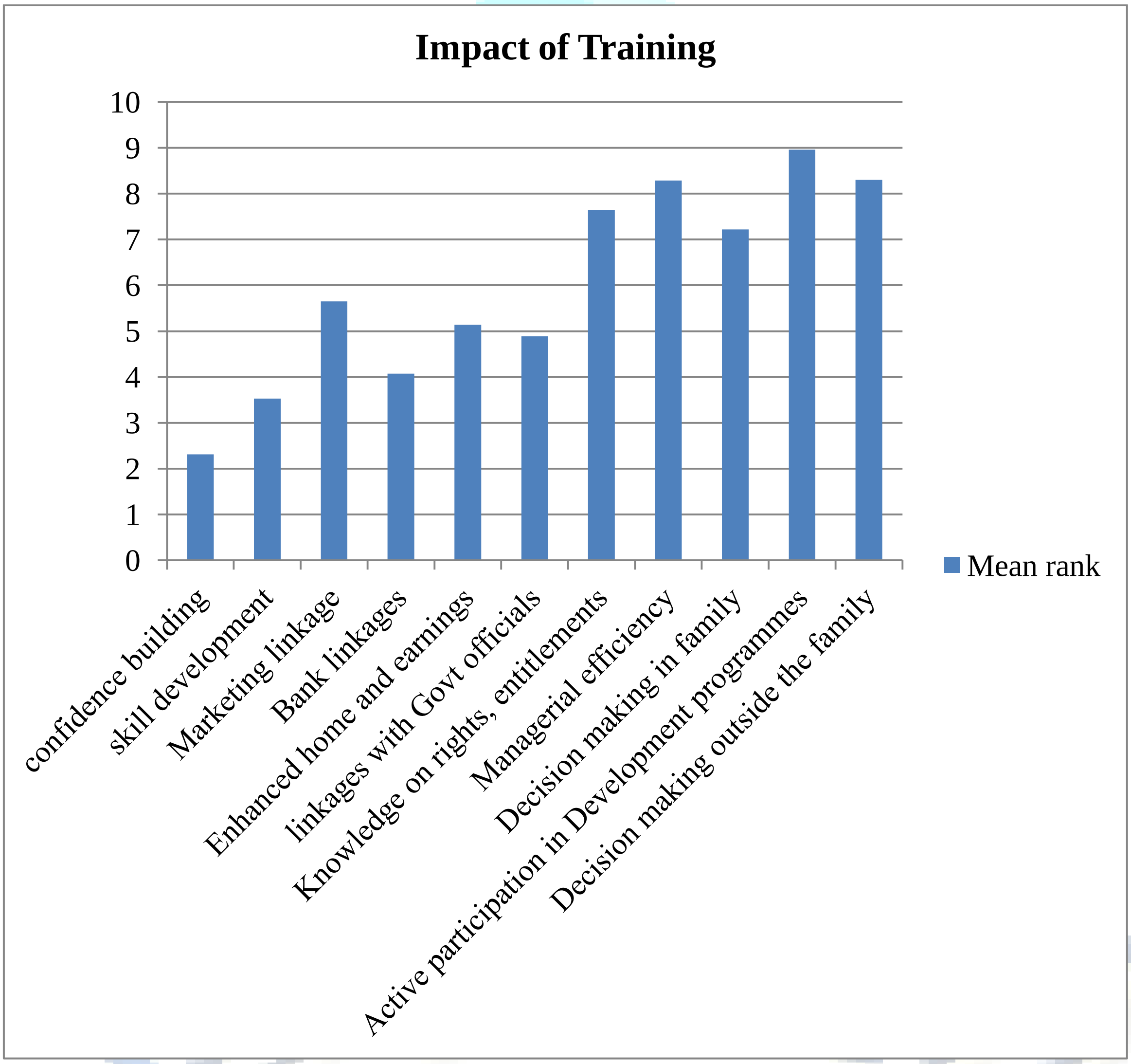


TABLE 4: IMPACT OF TRAINING

Types of Training	Mean Rank
Confidence building	2.31
Skill development	3.53
Marketing linkage	5.65
Bank linkages	4.07
Enhanced income and earnings	5.14
Linkages with Government officials	4.89
Knowledge on rights, entitlements	7.65
Managerial efficiency	8.29
Decision making in family	7.22
Active participation in Development Programmes	8.96
Decision making outside the family	8.30

From Table 4regarding the impact of training, it is found that the mean rank for confidence building is 2.31 which is highly effective and the mean rank for active participation in development programs is 8.96 which is the least effective.

CHART 2: IMPACT OF TRAINING



Kendall's Coefficient of Concordance

Kendall's W	.446

The Kendall's coefficient of concordance for the impact of training is found to be 0.446 which shows that there is moderate similarity among the respondents who received training from NGOs and their representatives.

IMPACT ON SHGs

CHANGES ON SOCIO-ECONOMIC STATUS AFTER JOINING SHG

TABLE 5: CHANGES ON SOCIO - ECONOMIC STATUS AFTER JOINING SHG

Status	No.	Percent
Same	4	1.3
Increased	242	80.7
Decreased	54	18.0
Total	300	100.0

From the Table 5, it is found that 81% of the respondents said that there are changes on their socio-economic status after joining in SHG. Only 1% of the respondents have said that there are no changes in their socio-economic status after joining SHG.

TABLE 6: CHANGES ON SOCIO - ECONOMIC STATUS AFTER JOINING SHG

Socio-economic status	N	Minimum	Maximum	Mean	Std. Deviation
Mobility	300	4.00	5.00	4.9800	.1402
Recognition in family	300	4.00	5.00	4.9500	.2183
Recognition in community	300	4.00	5.00	4.9567	.2039
Interaction with outsiders	300	3.00	5.00	4.7500	.4847
Literacy/education	300	2.00	5.00	4.4133	.8194
Access to Health services	300	2.00	5.00	2.5100	.7153
Access to Immunization	300	2.00	5.00	2.4900	.7059
Access to sanitation facility	300	2.00	5.00	2.5100	.7292
Access to credit sources	300	2.00	5.00	4.6200	.9479
Access to building	300	2.00	5.00	2.2067	.5875
Asset Building	300	1.00	5.00	2.2000	.5898
Family income	300	2.00	5.00	4.8467	.4732
Skill Development	300	2.00	5.00	4.8067	.5689
Nutrition awareness	300	2.00	5.00	2.5800	.8676
Girl child development awareness	300	2.00	5.00	2.8800	1.0437
Health awareness	300	2.00	5.00	2.7400	.9498
Decision making related to child centred	300	1.00	5.00	2.8367	.9729
Decision making related to money centred	300	2.00	5.00	4.6600	.5587
Participation in Development Programmes	300	2.00	5.00	4.2867	.7958
Individual income	300	2.00	5.00	4.9367	.3460

From the Table 6, it is observed that the mobility of the respondents has the highest mean score of 4.9800 among others. i.e., the mobility of the respondents has increased after joining in SHG. And their recognition in their family has also increased after joining in SHG where the mean score is 4.9500.

Recognition in the community and interaction with outsiders has increased after joining in SHG which is shown by the mean score of 4.9567 and 4.47500 respectively. Their literacy /education have a mean of 4.4133 which states the literacy rate also increased after joining in SHG.

The mean of 2.5100 it is found that they have only a minimal access to health services and sanitation facilities provided by the SHGs. And also the mean of 2.4900 shows that there is only minimal accessibility to immunizations provided by the SHGs.

It is observed that with the mean of 4.6200 there is a maximum accessibility to credit sources among the respondents provided by the SHGs.

It is found that with respect to access to building and asset building of the respondents, the mean is only about 2.2067 and 2.2000 respectively.

With a mean of 4.8467 it is found that there is an increase in family income and in their skill development of the respondents after joining in the SHG.

CHART 3: CHANGES ON SOCIO - ECONOMIC STATUS AFTER JOINING SHG

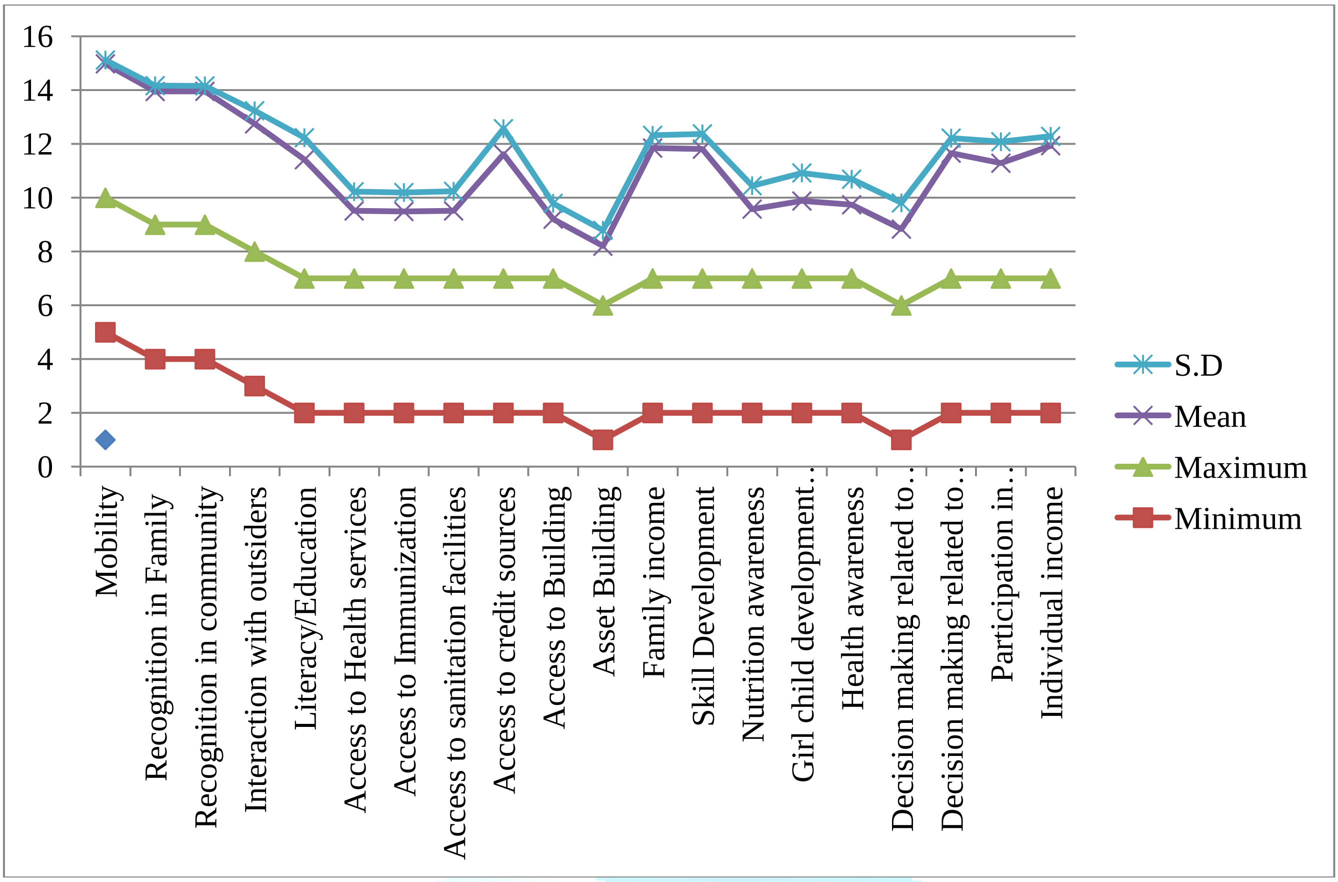


TABLE 7: BENEFITS OBTAINED BY THE RESPONDENTS THROUGH ICT KNOWLEDGE

Benefits through ICT	Mean Rank
Professional activities made easy	1.29
Easy communication	2.15
Academic activities made easy	3.08
Enjoying more recreational activities	3.47

From the table 7 for benefits obtained by the respondents through ICT knowledge, it is observed that the mean rank of 1.29 shows that the benefits is high for professional activities and the mean of 3.47 shows that the benefits obtained is low for enjoying of recreational activities.

Kendall's Coefficient of Concordance

Kendall's W	.645

The Kendall's coefficient of concordance for the above table is found to be 0.645 which shows that there is a high similarity among respondents who obtained the benefits through ICT knowledge.ICTs greatly accelerate the process of knowledge generation from data collection and the transmission of information because the user is able to determine very selectively what information is relevant. The role of ICTs in future rural development strategies is therefore dependent on users being able to select the information that is most relevant to their own social and cultural knowledge systems. Roling (1988) places particular emphasis on the role of the 'environment' in which knowledge is developed. The multi-media capabilities of ICTs offer the potential to move beyond databases towards the presentation of information in formats that are more appropriate and meaningful to local populations.

TABLE 8: RESPONDENTS' BUSINESS OR WORK BY USING ICT

Particulars	No.	Percent
Yes	70	23.3
No	230	76.7
Total	300	100.0

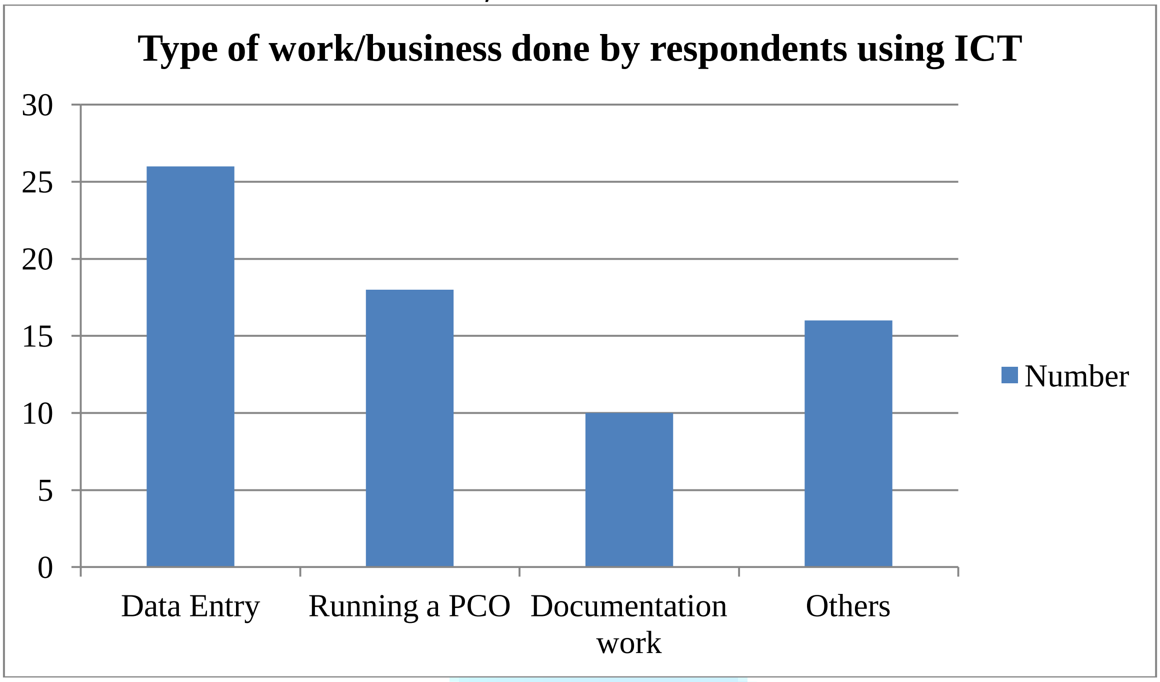
It is shown in the Table 8 that 77% of the respondents are not using ICT in their work or own business and only 23% of the respondents are currently using ICT in their work or own business.

TABLE 9: TYPE OF WORK/BUSINESS DONE BY RESPONDENTS USING ICT

Type of work/Business	No.	Percent
Data entry	26	37.1
Running a PCO	18	25.7
Documentation work	10	14.3
Others	16	22.9
Total	70	100.0

It is observed from the Table 9, among 70 respondents who are working or having their own business by using ICT, 37% of the respondents are using ICT for data entry jobs; 26% of the respondents are using ICT for running a PCO; 23% of the respondents are using ICT for other jobs or business and only 14% of the respondents are using ICT for documentation works.The village database is, therefore, designed to be expanded to include a wide variety of information that has been collected and generated specifically for use within that community. The potential of ICTs in future rural development strategies is therefore not only to provide information that is relevant to developing communities but to empower them to choose and demand the information themselves.

CHART 4: TYPE OF WORK/BUSINESS DONE BY RESPONDENTS USING ICT



CONCLUSION AND SUGGESTIONS

From the study it is found that the NGOs are conducting meetings regularly for SHG members through various means but the usage of mobile phone among the member is very low. The NGOs can improve the ability of the members to meet and communicate each other through sms, email, etc. Further instead of using ICT for mere two-way communication purpose, ICT should be utilized to accelerate their decision-making process in agriculture, access to micro-finance, and health care activities. Confidence building measures are excellent through training programs but ICT oriented training should be given in all functional areas. Even though there are changes on socio-economic status of the respondents after joining as a member in SHG, the use of ICT's could enable even the poorest of the people to "leapfrog" traditional problems of development like: poverty, ill-literacy, disease, unemployment, hunger, corruption and social inequalities, so as to move rapidly into the modern information age. The knowledge of ICT is more beneficial for professional activities and easy communication, but the role of ICT in future rural development strategies should be relevant to their own social and cultural knowledge systems. The results show that most of the respondents are using ICT for data entry business but it can empower them to choose and demand the application. It is also found that some key issues in the implementation of developmental programs are:

- Centralized planning
- Multiplicity of agencies
- Bureaucratic and administrative setups
- Monitoring large programs
- Inadequate resources

To overcome these problems the government, private industries and NGOs should jointly take the decision on need based and implement the ICT services in the rural areas for socio-economic development.

The development of a society largely depends on the access to information and so far in rural India - ICT has greatly facilitated the flow of information and knowledge offering the socially-marginalised and unaware community unprecedented opportunities to attain their own entitlements. On the other hand, to break the vicious circle of rural poverty and to bridge the digital divide and empower the rural communities - ICT-intervention has proved its effectiveness in the sphere of capacity-building of rural communities for breaking these barriers. So the government, technology industry and society should work together to deploy ICT to accelerate economic and social development in rural areas. Hence it may be concluded that an integrated framework for ICT interventions in rural areas will unquestionably pave the way towards sustainable rural growth.

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MICRO FINANCE AND WOMEN EMPOWERMENT: AN INDIAN PERSPECTIVE

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ABSTRACT

In India, the emergence of liberalization and globalization in early 1990's aggravated the problem of women workers in unorganized sectors from bad to worse almost of the women who were engaged in various self-employment activities have lost their livelihood. Despite in tremendous contribution of women to the agriculture sector, their work is considered just an extension of household domain and remains non-monetized. Microfinance is emerging as a powerful instrument for poverty alleviation in the new economy. Economic empowerment results in women's ability to influence or make decision, increased self-confidence, better status and role in house hold etc. Micro finance is necessary to overcome exploitation, create confidence for economic self-reliance of the rural poor, particularly among rural women who are mostly invisible in the social structure. This paper seeks to examine the impact of Micro finance with respect to poverty alleviation and socioeconomic empowerment of rural women.

KEYWORDS

Woman empowerment, poor reduction.

INTRODUCTION

Empowerment implies expansion of assets and capabilities of people to influence control and hold accountable institution that affects their lives (World Bank Resources Book). Empowerment is the process of enabling or authorizing an individual to think, behave take action and control work in an autonomous way. It is the state of feelings of self-empowered to take control of one's own destiny. It includes both controls over resources, (Physical, Human, Intellectual and Financial) and over ideology (Belief, Values and attitudes, Batliwala, 1994). Empowerment can be viewed as a means of creating a social environment in which one can take decisions and make choice either individually or collectively for social transformation. Empowerment occurs with in sociological psychological economic spheres and at various levels, such as individual, group and community. Empowerment women put the spotlight on education and employment which are an essential element to sustainable development.

OBJECTIVE

To discuss a woman empowerment and impact of micro finance.

EMPOWERMENT: FOCUS ON POOR WOMEN'S

In India, the trickle down effects of macroeconomic policies have failed to resolve the problem of gender inequality. There are several reason for this : Among the poor , the poor women are most disadvantaged they are characterized by lack of education and access of resources, both of which is required to help them work their way out of poverty and for upward economic and social mobility. The problem is more acute for women in countries like India, despite the fact that women's labour makes a critical contribution to the economy. This is due to the low social status and lack of access to key resources. Evidence show that groups of women are better customers than men, the better managers of resources. If loans are routed through women benefit of loans are spread wider among the household. The women's empowerment is key to socio economic development of the community, bringing women into the mainstream of national development has been a major concern of government. The Ministry of Rural Development has special components for women in its programmes. Funds are earmarked as "Women's component" to ensure flow of adequate resources for the same. Besides Swarangayanti Grameen Swarazagear Yojona (SGSY) Ministry of Rural Development is implementing other scheme having women's component. They are the Indira Awas Yojona (IAJ), National Social Assistance Programme (NSAP), Restructured Rural Sanitation Programme, Accelerated Rural Water Supply programme (ARWSP), Integrated Rural Development Programme (IRDP), Development of Women and Children in Rural Areas (DWCRA) and the Jowahar Rozgar Yojana (JRY).

CONCEPT OF MICRO FINANCE

The term micro finance is a recent origin and commonly used in addressing the issues related to poverty alleviation, financial support to micro entrepreneurs, gender development etc. There is no statutory definition of micro finance. The taskforce on supportitative policy and Regulatory Frame work for Micro finance has defined as "provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-urban or urban areas for enabling them to raise their income levels and improve living standards". The term "Micro" literally means "small". But the taskforce has not defined any amount. However as per Micro Credit Special Cell of the Reserve Bank of India, the borrowable amount up to the limit of Rs.25,000/- could be considered as micro credit products and this amount could be gradually increased up to Rs.40,000/- over a period of time which roughly equals to $500- a standard for South Asia as per international perceptions. The term micro finance sometimes is used interchangeably with the term micro credit. However, while micro credit refers to purveyance of loans in small quantities, the term microfinance has a broader meaning covering in its ambit other financial services like saving, insurance etc. as well.

GRAMEEN GROUPS

In these model, financial assistances is provided to the individual in a group by the formal institution on the strength of groups assurance. In other words, individual loans are provided on the strength of joint liability / co obligation. This microfinance model was initiate by Bangladesh Garmeen Bank and is being used by some of the Micro Finance Institutions (MFIs) in our country.

WOMEN'S EMPOWERMENT AND MICRO FINANCE

Concern with women's access to credit and assumptions about contributions to women's empowerment are not new. From the early 1970s women's movements in a number of countries became increasingly interested in the degree to which women were able to access poverty-focused credit programmes and credit cooperatives. In India organizations like Self Employed Women's Association (SEWA) among others with origins and affiliation in the Indian labour and women's movements identified credit as a major constraint in their work with informal sector women workers.

The trend was further reinforced by the Micro Credit Summit Campaign starting in 1997 which had 'reaching and empowering women' as its second key goal after poverty reduction (RESULTS 1997). Micro-finance for women has recently been seen as a key strategy in meeting not only Millennium Goal on gender equality, but also poverty Reduction, Health, HIV/AIDS and other goals. Micro finance is promoted as an entry point in the context of wider strategy for women's economic and socio–political empowerment which focuses on gender awareness and feminist organization.

POVERTY REDUCTION PARADIGM

The poverty alleviation paradigm underlies NGO integrated poverty targeted community development programmes. Poverty alleviation here is defined in broader terms than market incomes to encompass increasing capacities and choices and decreasing the vulnerability of poor people. The main focus of programmes as a whole is on developing sustainable livelihoods, community development and social service provision like literacy, healthcare and infrastructure development. There is not only a concern with reaching the poor but also the poorest.

FINANCIAL SUSTAINABILITY

The ultimate aim is large programmes which are profitable and fully self-supporting in competition with other private sector banking institutions and able to raise funds from international financial markets rather than raising on funds from development agencies. The main target group, despite claims to reach the poorest, is the 'bankable poor': small entrepreneurs and farmers. This emphasis on financial sustainability is seen as necessary to create institutions which reach significant numbers of poor people in the context of declining aid budgets and opposition to welfare and redistribution in macro-economic policy. Policy discussions have focused particularly on setting of interest rates to cover costs, separation of micro- finance from other interventions to enable separate accounting and programme expansion to increase outreach and economics of scale, reduction of transaction costs and ways of using groups to decrease costs of delivery.

Definition of empowerment is in individualist terms with the ultimate aim being the expansion of individual choice or capacity for Self-reliance. It is assumed that increasing women's access to micro–finance services will in itself lead to individual economic empowerment through enabling women's decisions about savings and credit use enabling women to set up micro–enterprise, increasing incomes under their control. It is then assumed that this increased economic empowerment will lead to increased well-being of women and also to social and political empowerment.

MICRO FINANCE INSTRUMENT FOR WOMEN'S EMPOWERMENT

Micro finance is emerging as a powerful instrument for poverty alleviation in the new economy. In India, micro finance scene is dominated by self Help Groups bank linkage programme aimed at providing a cost effective mechanism for providing financial services to the "unreached poor''. Based on the philosophy of peer pressure and group savings as collateral substitute the SHG programme has been successful in not only in meeting peculiar needs of the rural poor, but also in strengthening collective self-help capacities of the poor at the local level, leading to their empowerment. Micro Finance for the poor and women has received extensive recognition as a strategy for poverty reduction and for economic empowerment. Increasingly in the last five years, there is questioning of whether micro credit is most effective approach to economic empowerment of poorest and, among them, women in particular. Development practitioners in India and developing countries often argue that the exaggerated focus on micro finance as a solution for the poor has led to neglect by the state and public institutions in addressing employment and livelihood needs of the poor.

IMPACT OF MICRO FINANCE

Micro finance programmes are currently being promoted as a key strategy for simultaneously addressing both poverty alleviation and women's empowerment. Where financial service provision leads to the setting up or expansion of micro-enterprises these range of potential impacts including:

- Increasing women's income levels and control over income leading to greater level of economic independence.
- Access to network and markets giving wider experience of the world outside the home, access to information and possibilities for development of other social and political roles.
- Enhancing perceptions of women's contribution to household income and family welfare, increasing women's participation in house hold decisions about expenditure and other issues and leading to greater expenditure on women's welfare.
- More general improvements in attitudes to women's role in the household and community.

Before 1990's, credit scheme for rural women were almost negligible. The concept of women's credit was born on the insistence by women oriented studies that highlighted the discrimination and struggle of women in having the access of credit. However, there is a perceptible gap in financing genuine credit needs of the poor especially women in the rural sector.

PROBLEM AND CHALLENGES

Some difficulties for women empowerment through micro businesses. These elements are:

- Lack of knowledge of the market and potential profitability thus making the choice of business difficult.
- Inadequate book-keeping.
- Employment of too many relative which increases social pressure to share benefits.
- Setting prices arbitrarily.
- Lack of capital.
- High interest rates.
- Inventory and inflation accounting is never undertaken.
- Credit policies that can gradually ruin their business (many customers cannot pay cash on the other hand suppliers are very harsh towards women).

CONCLUSION

It is clear that gender strategies in micro finance need to look beyond just increasing women's access to savings and credit and organizing self-help groups to look strategically at how programmes can actively promote gender equality and women's empowerment. Moreover the focus should be on developing a diversified micro finance sector where different type of organizations NGO, MFI s and formal sector banks all should have gender policies adapted to the needs of their particular target groups/institutional roles and capacities and collaborate and work together to make a significant contribution to gender equality and pro-poor development.

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CONSUMER DEMOGRAPHICS AND ITS INFLUENCE ON THEIR CAR PREFERENCES IN INDIAN FOUR WHEELER MARKET

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ABSTRACT
The automobile industry today is the most lucrative industry. Due to the increase in income of both rural and urban sector and easy finance being provided by all the financial institutes, more number of consumers are purchasing four wheeler based on the income level and needs. Competition is heating up in the sector with a host of new players coming in and others like Audi, BMW all set to venture in the Indian markets. One factor that could help the companies in the marketing of their car products is by knowing their customers' four wheeler preferences. However, the customers' four wheeler preference is based on their demographics influence such as age, gender, occupation, income level. Hence, this research attempts to answer this question regarding four wheeler preferences of Indian consumers based on their demographic profiles. This research will be helpful for the new car entrants and existing car companies in India to find new ways to market their products by understanding customers' tastes and preferences based on their demographics.

KEYWORDS
Indian Four Wheeler Market, Consumer Preference, Customer Demographics.

INTRODUCTION
The concept of "buying behavior" is of prime importance in marketing and has evolved over the years. It is important to understand consumer buying behavior as it plays a vital role in creating an impact on purchase of products. The human wants are unlimited and always expect more and more. Cars are no exception to this behavior. This lead to constant modifications of Car Models & its features and today we see a new model coming into the market practically every quarter. The market is a very important place to study the behavior of consumers and also provide useful insights what a consumer requires in a product. It is only through research that a company will be able to study the buying behavior of consumers.

"As one of the measurements of the performance of the quality management system, the organizations shall monitoring information relating to customer perception as to whether the organization has met customer requirements. The method for obtaining and using this information shall be determined" The requirement has been there in the QS9000 standard clause 4.1.6 which says: "Trends in customer satisfaction and key indicators of customer dissatisfaction shall be documented and supported by objective information. These trends shall be compared to those of competitors, or appropriate benchmarks, and reviewed by senior management." There is obviously a strong link between customer satisfaction and customer retention. Customer's perception of service and quality of product will determine the success of the product or service in the market. With better understanding of customer's satisfaction, companies can determine the actions required to meet the customer's needs. They can identify their own strengths and weaknesses, where they stand in comparison to their competitors, chart out the path future progress and improvement. Customer satisfaction measurement helps to promote an increased focus on customer outcomes and stimulate improvements in the work practices and processes used within the company. The decision-making process consists of a series of steps which the consumer undergoes.

The constant use of the product leads to the satisfaction or dissatisfaction of the consumer, which leads to repeat purchases, or to the rejection of the product. The marketing strategy is successful if consumers can see a need which a company's product can solve and, offers the best solution to the problem. For a successful strategy, the marketer must lay emphasis on the product/brand image in the consumer's mind. Position the product according to the customers likes and dislikes. The brand which matches the desired image of a target market sells well. Sales are important and sales are likely to occur if the initial consumer analysis was correct and matches the consumer decision process. Satisfaction of the consumer, after the sales have been affected, is important for repeat purchase. It is more profitable to retain existing customers, rather than looking for new ones.

LITERATURE REVIEW
Bhupesh Gautam (28 Jun 2011), says Disadvantages of Diesel car over Petrol car are (1) Initial price of Diesel car is more than a Petrol car, (2) maintenance cost for Diesel car is more than that of a Petrol car. Disadvantage of Petrol car 1) Petrol costs more than diesel, (2) When compared with similarly powered cars, consumption of fuel per km. in Petrol car is more than Diesel car." Considering the above points, thumb rule given by automobile experts is that if one drives 1500 km or more on a monthly average, buying a diesel car makes sense. Otherwise, petrol car should be preferred.

Anuroop (30 Jun 2011), says "customer may option for a petrol car if: (a) customer don't drive that often (diesel engines get problems if not operated regularly); (b) customer are not a long distance traveller (no need to invest on a petrol car for the sake of cheaper diesel). customer may opt for a diesel car, if: (a) customer drive quite often (b) customers you are a long distance traveller (can save a lot on fuel price)".

Krishnamoorthy (05 Jul 2011) says **"**If customer are seeking a car for personal use than petrol version is better than diesel but on the contrary if customers are using for commercial use than diesel version is recommended. Actually it depends on usage, if customers are using vehicle 40-60 km per day than petrol version is profitable otherwise go with diesel version. The maintenance cost for the diesel version is very high in comparison with petrol version."

Kishore (11 Jul 2011) says "It's depends on customer usage, if customer daily travel 70+ km then go for Diesel no second thought. Diesel cars are 1 lakh expensive than petrol if you keep that 1 lakh in bank (FD) you will get 950 every month that will go into petrol maintenance cost."

P.V.S.V. Prasad (12 Jul 2011) says**,** diesel price is less when compared to petrol. It's better to use diesel cars. They emit less quantity of carbon particles into the atmosphere. Also diesel prices don't hike as fast as petrol. Otherwise if customer use car for long distances customer opt a petrol engine car.

Akanksha Pandit (28 Jun 2011) says**,** the main difference between a diesel vehicle and a petrol vehicle (other than the fuel used) lies in its engine. A diesel engine is more powerful than a petrol engine. Diesel engine requires a complex propulsive mechanism and that's why diesel cars are costlier. But the mileage of a diesel car is more than that of a petrol car because of powerful engine. The cost of petrol is also more than that of diesel. Diesel car thus is more cost effective. However, diesel car is more polluting than petrol car.

Lee Boyce (Published: 12:52 GMT, 18 April 2012) A diesel will typically cost ten to 15% more to insure than an equivalent petrol car. It has higher average accident repair costs, especially if the turbo intercooler is damaged. And many diesels have twin radiators, which are more vulnerable in a head-on collision.

PROBLEM STATEMENT

Four wheeler has become a symbol of status in society. Now a day's every class people wish to have four wheelers. There are many types of four wheelers available in market and there are a lot of differences between those four wheelers based on the price, features, maintenance, engine power, safety etc. Customers while making purchase decisions, assign priorities based on their preferences and usage patterns. Their preferences and usage pattern may again depend on their demographic factors. Their usage pattern will be a main factor which will determine what kind of car they will purchase. Hence this research focuses on customer brand preferences.

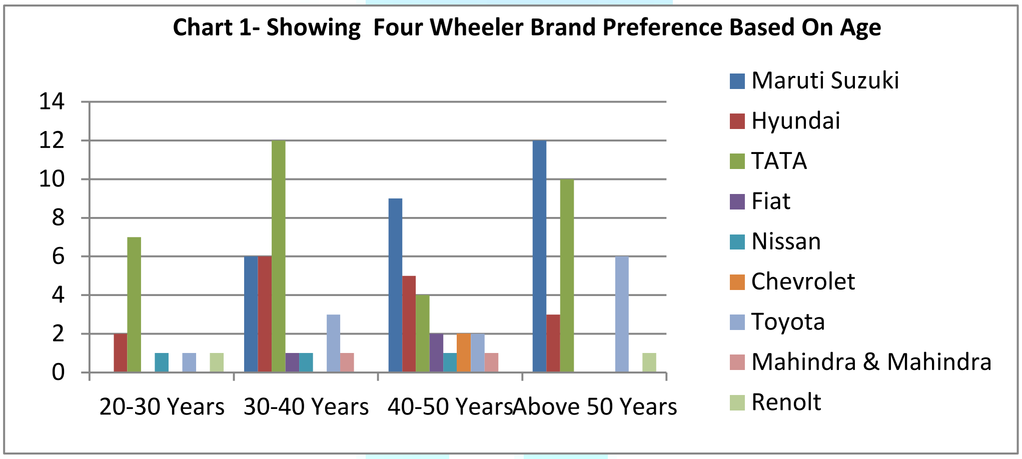
OBJECTIVE OF THE STUDY

To know the customer's preferences of four wheelers based on their demographic profiles (such as age, gender, occupation & income level).

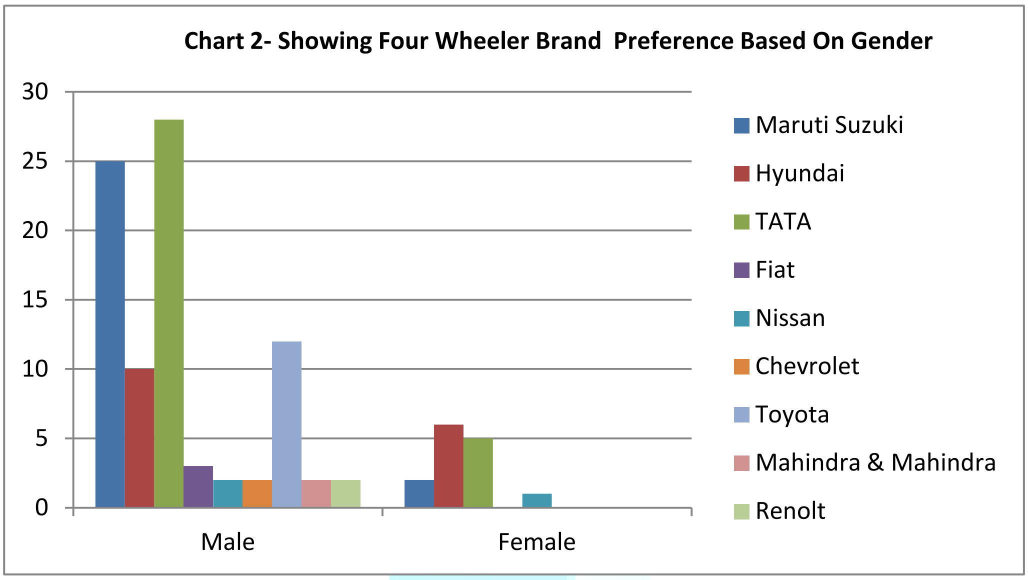
RESEARCH METHODOLOGY

This research has adopted both exploratory and descriptive research designs. In exploratory research many focus groups and depth interviews were conducted among various demographics to understand the insights of brand preference and their tastes. Based on the ideas generated during exploratory research the descriptive research design was finalised. A well structured questionnaire was developed for the same and data was collected. The research has been conducted in Bagalkot city, Karnataka, India. The sample units chosen were car users and owners. Study was restricted to company cars like, TATA, Maruti Suzuki, Volks Wagon, Fiat, Toyota, Mahindra, etc (Top end cars like BMW, Benz, Audi, Hummer, etc are not considered). The sample size to which questionnaires were administered was 100. and 100 respondents responded. Hence the response rate is 100%.

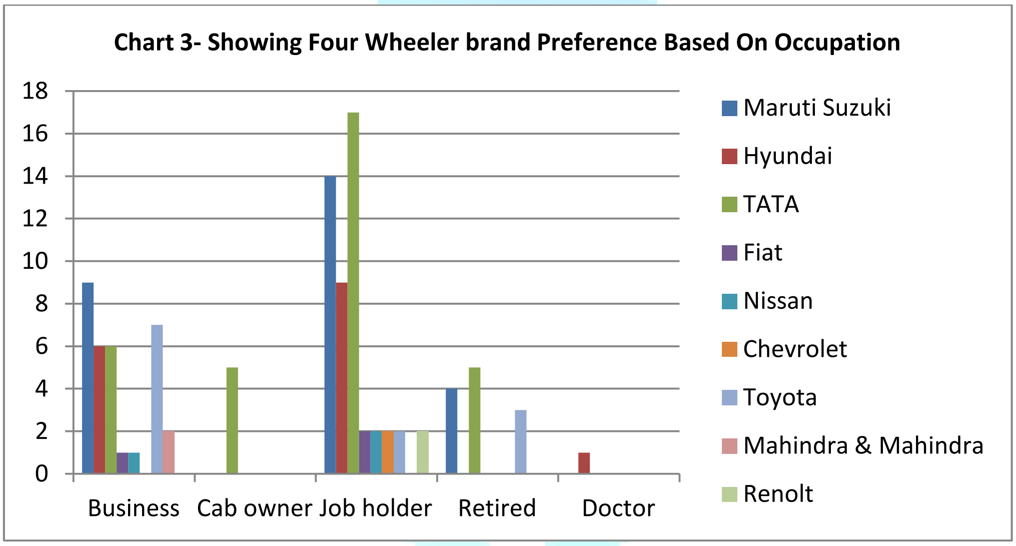
DATA ANALYSIS AND INTERPRETATION



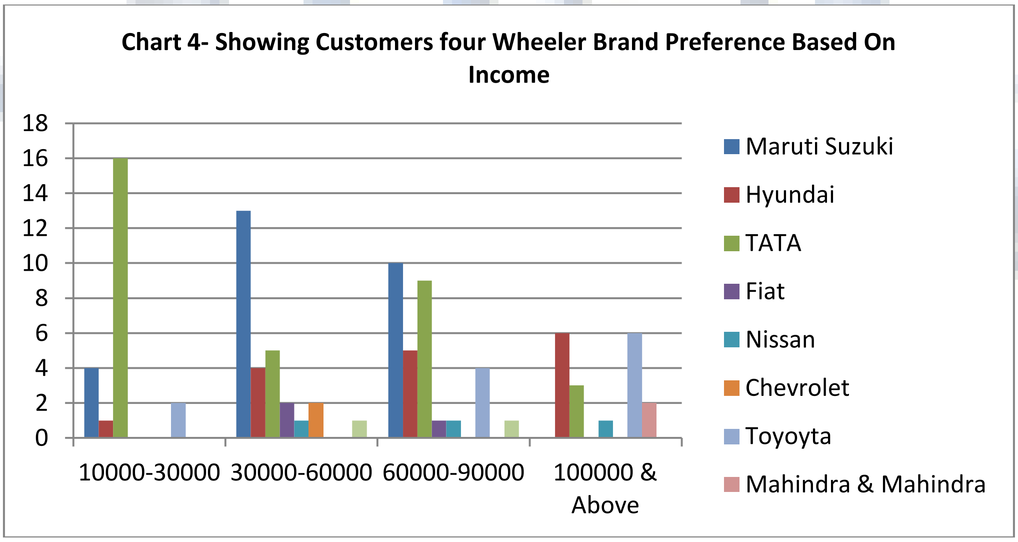
From chart 1 it is seen that, 20-30 aged consumers give more preference to Tata because Tata is famous for diesel cars and these people have low range income compare to other age segments so they go for diesel cars. And their next preference is to Hyundai because Hyundai offers cars which have good outlook and these cars attract more youths. And there equal preference to Nissan, Toyota, and renolt. 30-40 aged people also give more preference to Tata the reason is same as above. Next preference is to maruti Suzuki and Hyundai, preference for Hyundai is same as above and for maruti, it is offering good mileage and low maintenance cars. 40-50 aged people give more preference to maruti Suzuki because of low maintenance, next preference is to Hyundai because of its attractive designs and features, third preference goes to tata due to less unique features and their next preference is to fiat, Chevrolet and renolt. And last preference is to Nissan and Mahindra. Above 50 aged people gives first preference to maruti because of low maintenance, next preference is to tata for good mileage cars, next preference is to Toyota, next preference is to Hyundai and at last renolt.



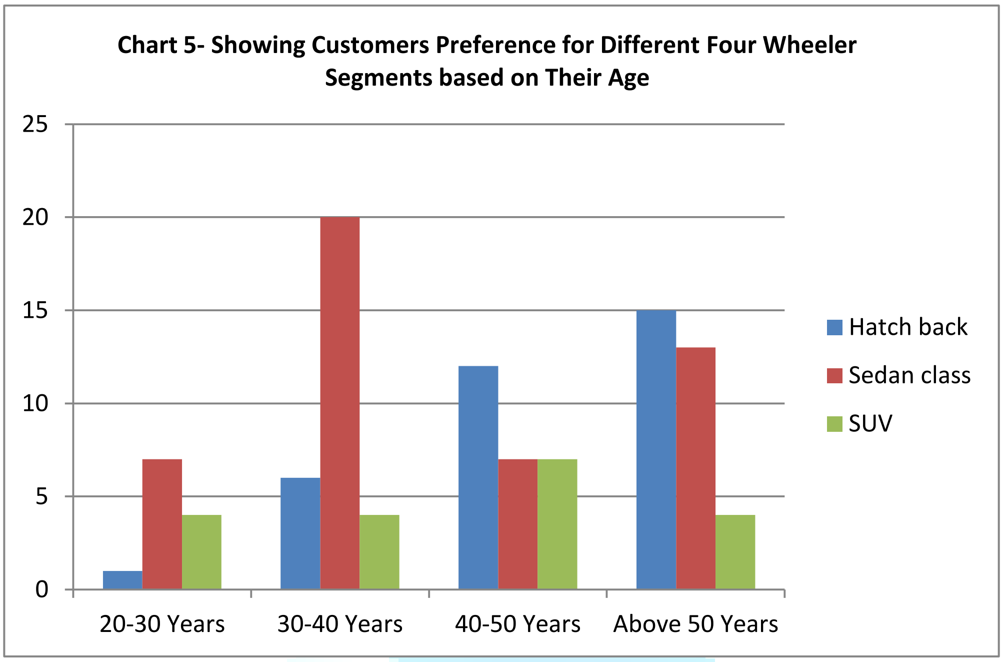
From chart 2 it is seen that, Male segment more prefer tata cars and next preference is to maruti, because in both company some cars suits for male's personality. And third preference is to Toyota, it is famous for manufacturing SUV, these SUV also suits for male's personality. And next preference is to Hyundai it look good for both male and female. Female segment give first preference to Hyundai, all Hyundai cars suits for female's personality and next preference is to tata, some cars in tata also looks good for females. And next preference is to maruti and last preference is to Nissan.



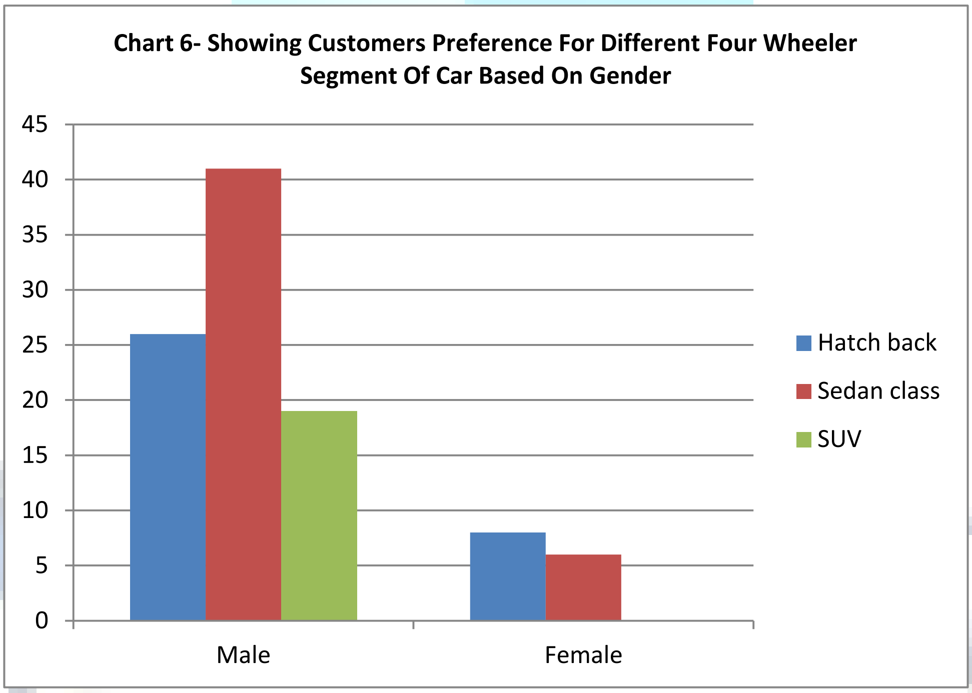
From chart 3 it is seen that, Business man's first preference is maruti Suzuki because of specious, attractively designed, cars and next preference is Toyota because of attractive SUVs and status delivered by those SUVs. Next preference is to hyundai and tata, at last Mahindra, fiat and Nissan. Cab owners only prefer tata because safety and mileage of tata cars. Job holder's first preference is tata and next is maruti because of brand name and good mileage. Maruti and tata cars suits for the personality of jib holders. Next preference is fiat, Nissan, Chevrolet, Toyota, renolt.



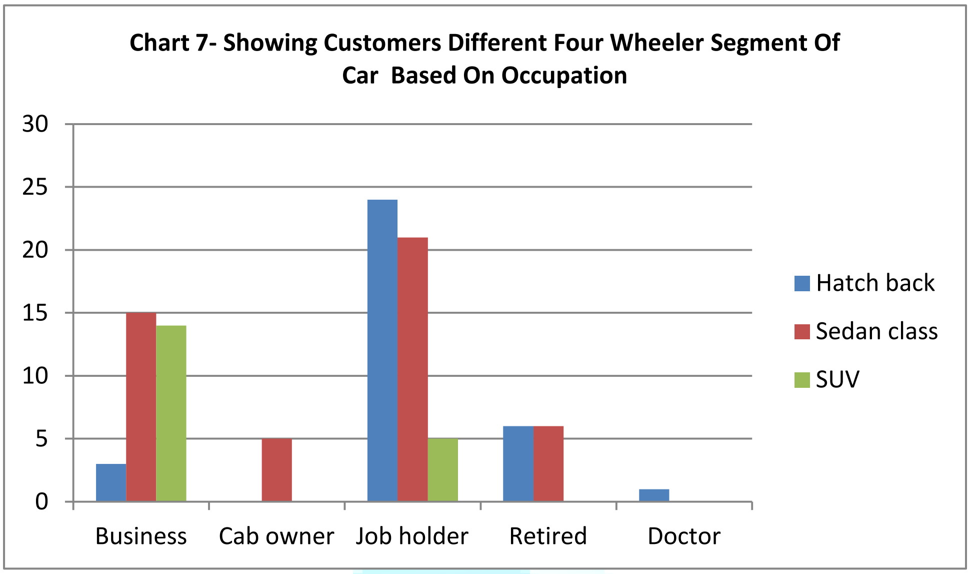
From chart 4 it is seen that, Tata is a first preference of people who are having 10000-30000 income per month. Next is maruti, and last is Toyota. These people purchase the cars which come under their budget. Maruti is the first preference of people who are having 30000-60000 income next one is tata and after that Hyundai, next fiat and Chevrolet and last is Nissan. This segment people little bit conscious about the luxury and status. Again maruti is first preference of people who are having 60000-90000 and next one is tata and third preference is Hyundai and next Toyota and at last fiat and Nissan. Hyundai and Toyota is first preference of people who are having 100000 and above income. This segment considers luxury and SUVs because of high income. And next is tata and third is mahindra and last one is Nissan.



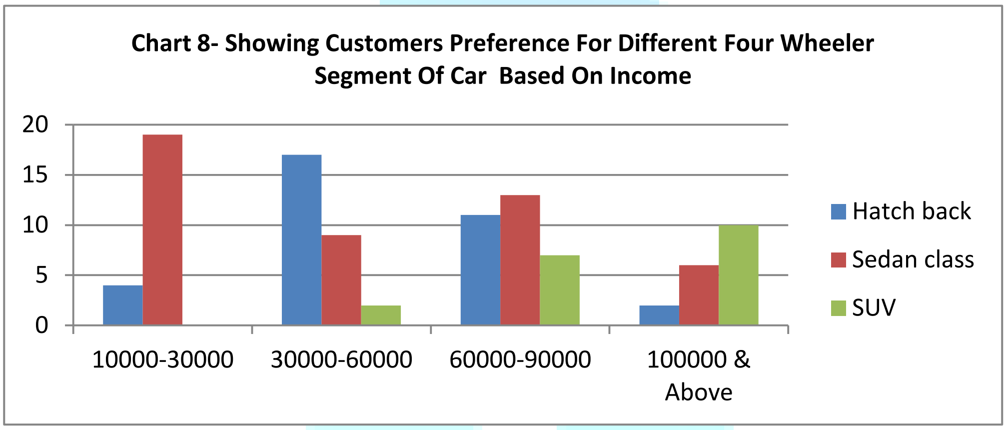
From chart 5 it is seen that, 20-30 aged consumers give more preference to sedan class, in this segment most of them are fresher for job and they are young moderate income people so they prefer sedan. And next preference is to SUV and at last hatch back cars. By this chart it is cleared that this segmentation is not having more interest in hatch back cars. 30-40 aged consumers also prefer sedan class more but they have interest in hatch back, due to attractive size and shape so second preference is for hatch back and at last SUV due to more maintenance and less mileage compare other two class cars.



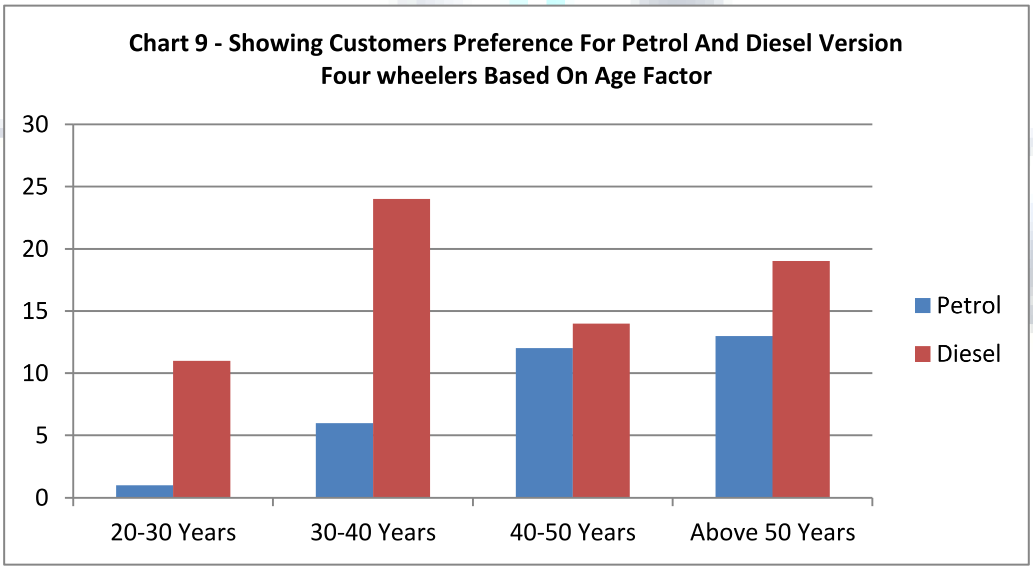
From chart 6 it is seen that, Male segment prefers all class, because for male all three class suits for their personality. And first preference is to sedan class, second preference is to hatch back and third preference is to SUV. Female segment only prefers hatch back and sedan because SUVs do not suit for female personality. So in female segment first preference is to hatch back cars, they feel easy to drive because of compact size, and next preference is to sedan class.



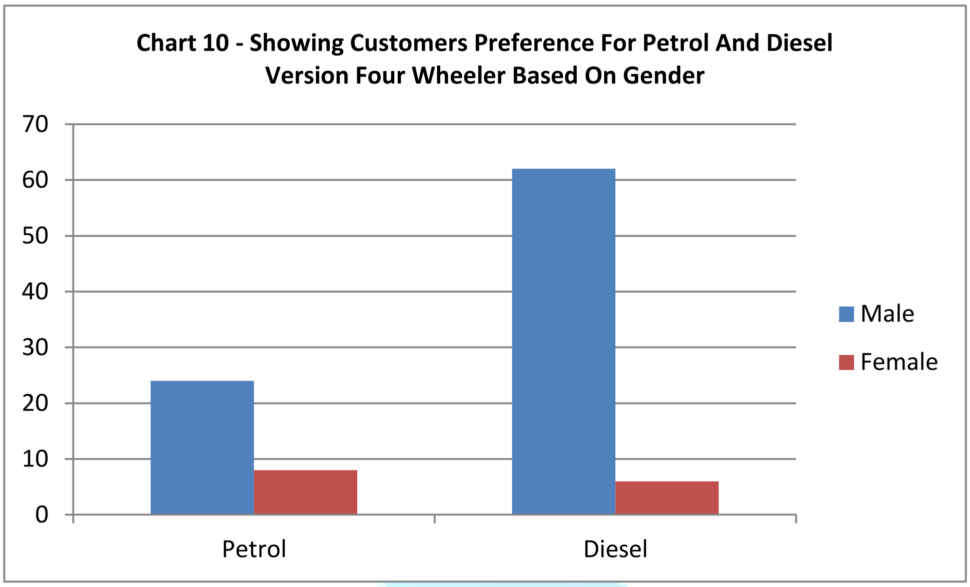
From chart 7 it is seen that, Business man first preference is hatch back cars and next is SUVs these two class increases the status of business man, as per chart preference towards hatch back cars is least compare to sedan class and SUVs. Cab owners only prefer sedan class. They use cars for business purpose so they purchase specious cars and cars which gives more mileage. Job holder's first preference is hatch back cars and second preference is sedan class because these cars suits for their profession. And least preference to SUVs because SUVs don not revel professionalism. Retired people only prefer hatch back and sedan class, these segment people will not feel comfort with SUVs because of age. Doctor's first preference is hatch back car because its suits for personality.



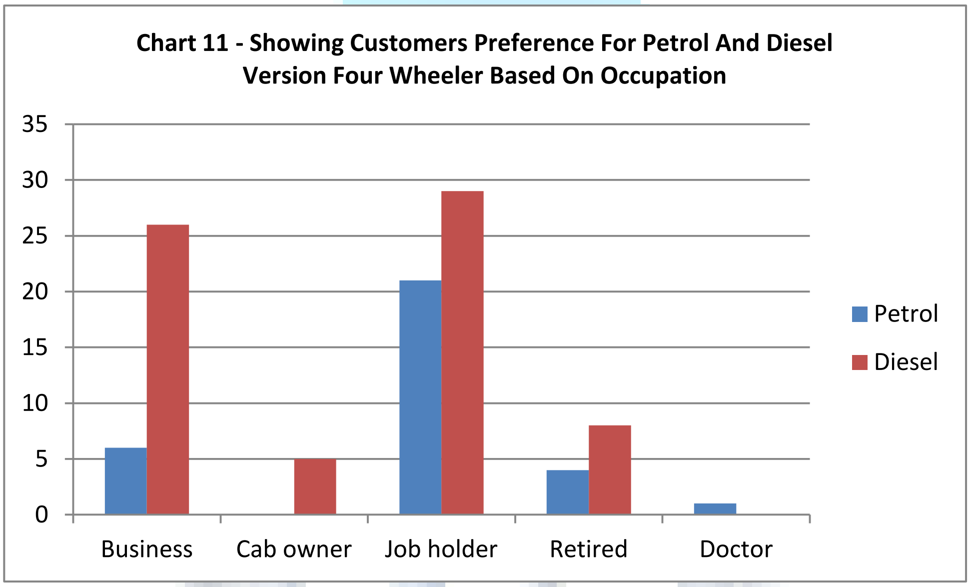
From chart 8 it is seen that, People who are having 10000-30000income, they prefer sedan class because they need such cars which gives more mileage. And least preference for hatch back cars. People who having 30000-60000 income they prefer hatch back cars and next sedan class. As there is hike in income some of them has preferred SUV. People who are having 60000-9000 income their first preference is sedan class and next is hatch back car. As again increase in income, some of them have preferred SUV. In this segment preference will as per their status. People who are having 100000 and above income, they first preference is SUVs because hike in income, do not consider maintenance cost etc. only luxury and status is considered while purchasing car.



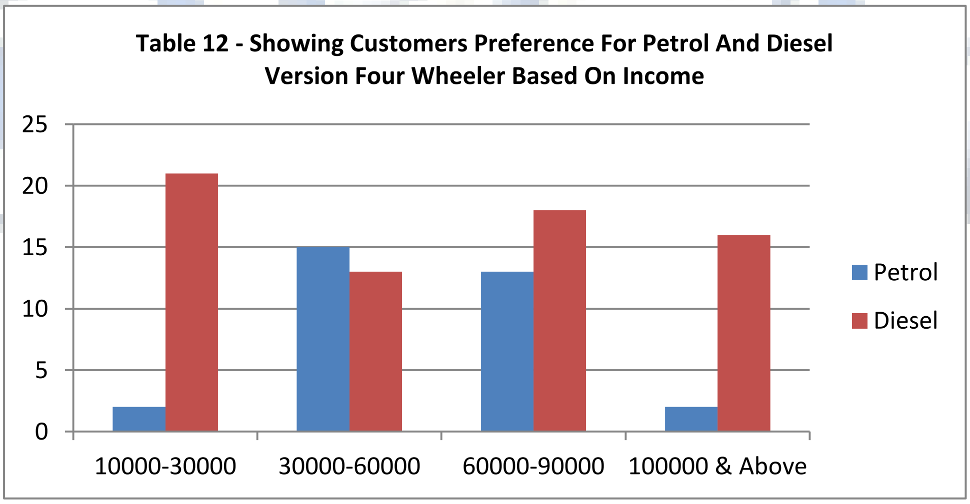
From chart 9 it is seen that, in the entire age segment most of them prefer diesel car, because diesel price is less than petrol, though diesel cars costlier than petrol cars. And next preference is to petrol cars, due to high fuel price. And petrol four wheelers gives less mileage compare to same segment of diesel four wheelers. And one more reason is no consistency in petrol price. Diesel price do not goes up within short period but petrol price varies from month to month.



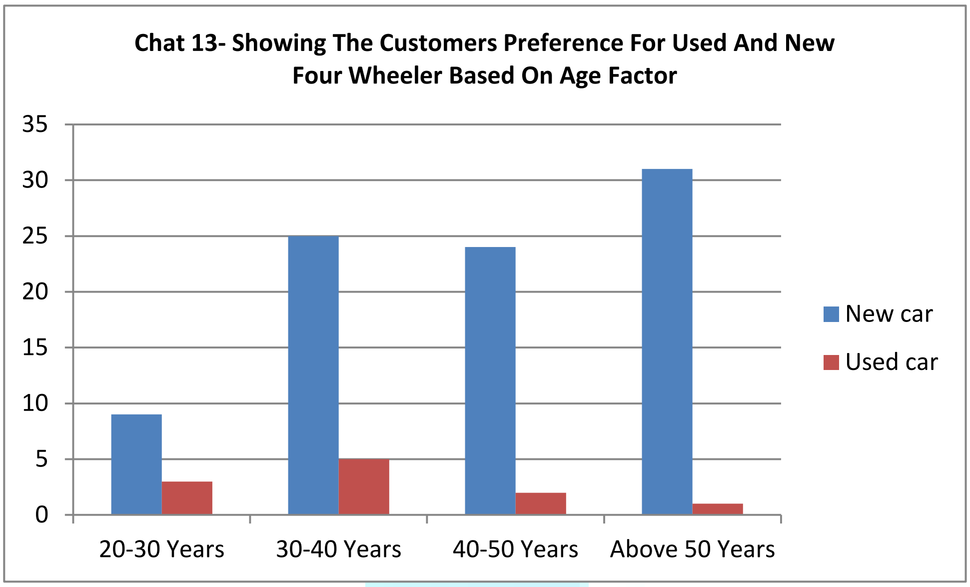
From chart 10 it is seen that, if we come to the choice between petrol car and diesel car both male and female give first preference to diesel though diesel car's price is higher than petrol car, because petrol price is higher than diesel price and diesel cars gives more mileage than petrol cars. By this chart it is clear that fuel price affects the preference towards cars.



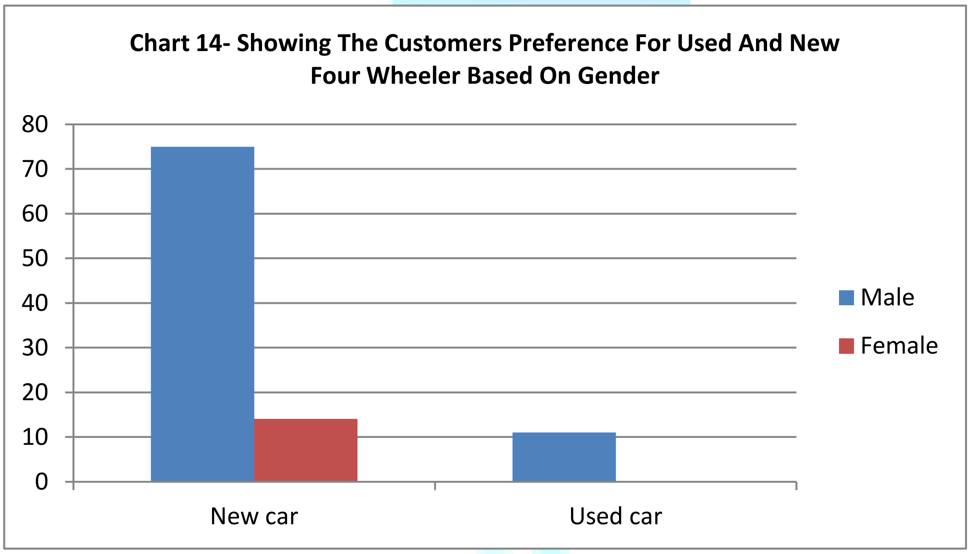
From chart 11 it is seen that, except doctor remaining segment's first preference is diesel. Business man's drive more so they highly prefer diesel cars. All segments preference is diesel car because, petrol price is higher than diesel. And job holders prefer petrol car also because of low maintenance.



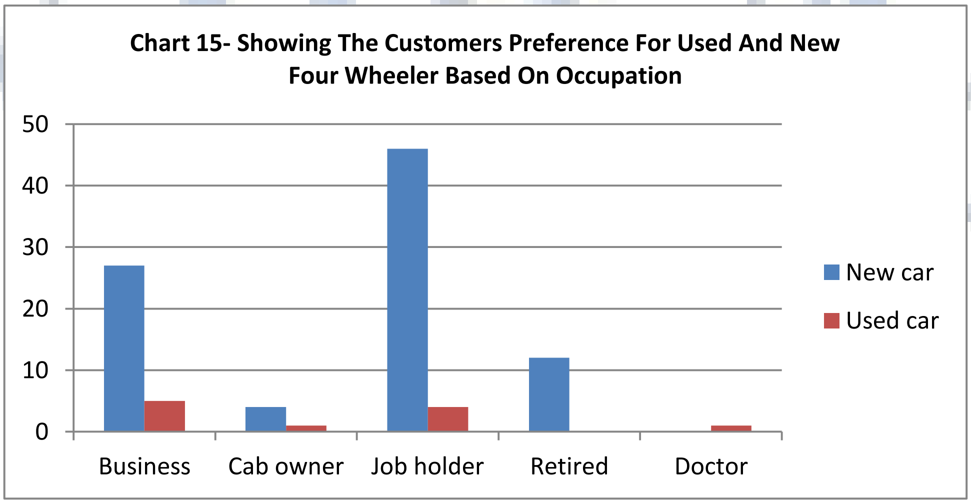
From chart 12 it is seen that, all segment income people prefer diesel car because price diesel is less than petrol. Here it is cleared that sometimes high class people also prefer diesel cars, because most of SUVs are diesel version.



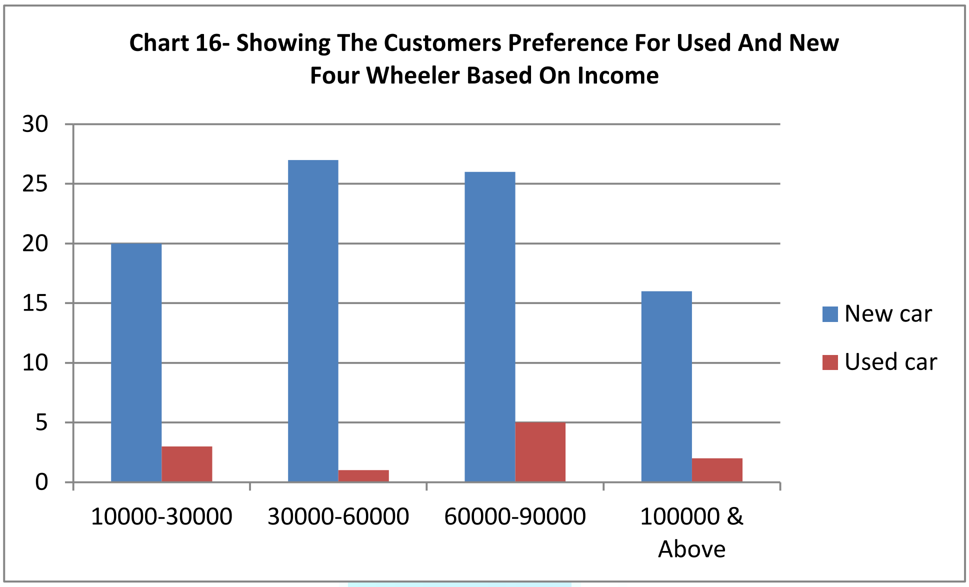
From chart 13 it is seen that, in every age segment consumers prefer or showing interest towards new cars. Consumers think that they have to purchase always new products for personnel use, purchase of used products reduces their status, and this is a customer perception. So there is a least preference to used cars. Only cab owners purchase used cars.



From chart 14 it is seen that, Male segment highly prefer new car, because of status. And only some cab owners prefer used cars because they use it for business purpose. And females do not prefer used car for personal use. Consumer's perception is that purchasing used car reduces their status level because car is symbol of status and their perception is that they have to spend more for used cars.



From chart 15 it is seen that, except doctor remaining segments first preference is new car. For personal use these people purchase new car and it increases the status of person. Some business mans, cab owners, and job holders have prefer the used car because they do not use it for personal use, they use it for business purpose.



From chart 16 it is seen that, all segment income people prefer new car for their personal use. Used car performance and luxury will not be good so least number of people prefer used car. They purchase used car for business purpose not for personal use.

FINDINGS

- 20-30 aged consumers are not preferring maruti Suzuki cars, they are preferring TATA, Hyundai, Nissan, Toyota, Renolt. 30-40 aged consumers first preference is TATA, then maruti and Hyundai, then Toyota. Maruti, tata and Hyundai are the most preferred cars by 40-50 aged and 50 above aged consumers.
- 20-30 aged people first preference is sedan class next is SUV and last is hatch back. 30-40 aged people first preference sedan class, second preference is hatch back and last is SUV. 40-50 aged people first preference is hatch back car and same preference for SUV and sedan class. Above 50 aged people's first preference is hatch back, second preference is sedan class and last preference is SUVs.
- All segment people first preference is diesel car then second is petrol car.
- Less preference for used cars in all segments, first preference is for new cars.
- Male 'first, second, third and fourth preference is tata, maruti, Toyota and Hyundai respectively. And least preference is towards Feat, Nissan, renolt , Mahindra and Mahindra, Chevrolet. Female first preference Hyundai, second is tata, third is maruti Suzuki and last is Nissan, and female do not prefer fiat, Mahindra & Mahindra, Chevrolet, renolt, Toyota.
- Male first preference is sedan class, second is hatch back and last preference is SUVs. Female prefer sedan and hatch back cars, they do not prefer SUVs.
- Male gives more preference to diesel cars and less preference to petrol cars. Female gives more preference to petrol car and less preference to diesel cars
- Female do not prefer used car. Male gives least preference to used cars.
- Business man's first preference is maruti Suzuki, next is Toyota and same preference towards tata and Hyundai. Cab owners only prefer tata. Job holders more preference is tata, maruti and Hyundai.
- Business man gives more importance to sedan class and SUVs. Least preference for hatch back cars. Job holders prefer hatch back and sedan class, least preference to SUVs.
- Cab owners do not prefer petrol car. Business man, job holder and retired people give more preference diesel car and least preference for petrol car.

CONCLUSION

The purpose of this study is to know the consumer preference of four wheelers based on their demographic profile. From the study it can be conclude that, maximum preference in middle class, upper middle class and in high class is for new car. Only cab owners prefer to buy used cars. In all classes female do not prefer SUVs because they are having perception that SUVs do not suit for their personality. From the survey it is clear that most of consumers prefer four wheelers from TATA, Maruti Suzuki and Hyundai brands.

The price difference between the petrol and diesel affects the consumer and many consumers prefer diesel version four wheelers even though the diesel version four wheelers are costlier than petrol version four wheelers. By this study it is clear that hatch back and sedan class segment four wheelers are attracting more number of consumers. In all classes preference is more for sedan and hatch back segment four wheelers. Job holders do not prefer SUVs wereas business men do prefer to buy SUVs.

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ANALYSIS OF WORKING CAPITAL MANAGEMENT IN INDIAN INDUSTRY: A COMPARATIVE STUDY OF SELECTED INDUSTRIES

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ABSTRACT

Working Capital position not only is important from an internal standpoint; it also is widely used as one measure of the firm's risk. Risk, as used in this context, deals with the probability that a firm will encounter financial difficulties, such as the inability to pay bills on time. All other things being equal, the more net working capital a firm has, the more likely that it will be able to meet current financial obligations. The present paper is an attempt to study the size, liquidity and efficiency of working capital components in Cotton Textile Industry, Man Made Textile Industry, Cement Industry, Chemical Industry and Iron & Steel Industry during 1999-2000 and 2010-11(12 years period). For this purpose, current assets to total net assets Ratio, Current Ratio, Quick Ratio, Inventories to Sales Ratio, Sundry Debtors to Sales Ratio, which have been published in various issues of monthly bulletins of RBI are used. For the purpose of comparison and drawing meaningful conclusions, statistical techniques such as, Mean, Standard Deviation, Co-efficient of Variance, t-test, etc., have been used and concluded that (1) the ratio of current assets to total net assets was low in all selected industries, except in Chemical Industry (2) the liquidity position was poor in all selected industries, except in Chemical Industry, (3)The efficiency in utilizing the inventories was very poor in all selected industries, except in Chemical Industry (4) the efficiency in utilizing the sundry debtors was very poor in Chemical Industry.

KEYWORDS

Cotton Textile Industry, Man Made Textile Industry, Cement Industry, Chemical Industry, Iron and Steel Industry.

INTRODUCTION

Working capital typically means the firm's holdings of current or short-term assets such as cash, receivables, inventory and marketable securities. These items are referred to as gross working capital or circulating assets because of their cyclical nature. Net Working Capital, which is the difference between current assets and current liabilities, provides an accurate assessment of the liquidity position of the firm. With the liquidity-profitability dilemma solidly authenticated in the financial scheme of management, concerted efforts are made to ensure the ability of the firm to meet these obligations which mature within a twelve month period. Management must always ensure the solvency and viability of the firm. An examination of the components of working capital is helpful at this point because of the preoccupation of management with the proper combination of assets and acquired funds. Although careful maintenance of the proper asset and funds-acquired mixes is subjected to close scrutiny, it must be noted that there exists a close correlation between sales fluctuations and invested amounts in current assets. Although current liabilities are often overlooked, it should be noted here that each of these current asset items must be financed – frequently from short-term funds. All other things being equal, the more net working capital a firm has, the more likely that it will be able to meet current financial obligations. The present paper is an attempt to study the size, liquidity and efficiency of working capital components, i.e., inventories and debtors, in selected industries in India. Before going to review the literature and methodology of the study, a brief profile of the selected industries, i.e., Cotton Textile Industry, Man Made Textile Industry, Cement Industry, Chemical Industry and Iron & Steel Industry in India is presented.

COTTON TEXTILE INDUSTRY AND MAN MADE TEXTILE INDUSTRY (CTI & MMTI)

The Indian textile industry has an overwhelming presence in the economic life of the country. Apart from providing one basic necessities of life, the textile industry also plays a pivotal role through its contribution to industrial output, employment generation and the export earnings of the country. Currently, it contributes about 14 percent to industrial production, 4 percent to the GDP and 12.53 percent to the country's export earnings. It provides direct employment to over 35 million people. The textile sector is the second largest provider of employment after agriculture. Thus, the growth and all round development of this industry has direct bearing on the improvement of the economy of the nation. Due to policy measures initiated by the government in the recent past, the Indian textile industry is in a stronger position than it was in the last six decades. The industry which was growing at 3-4 percent during the last six decades has now accelerated to an annual growth rate of 8-9 percent in value terms. The growth manifests through a consistent increase in production of fabric and investment.

CHEMICAL INDUSTRY (CHEM I)

The chemical industry whose development influences the development of other industries, including the development of agriculture, defence and manufacture of drugs, etc., has claimed a pride of place in the industrial map of India. The World Bank and other eminent organizations have accepted that India has reached a very well progressed stage in having created sufficient capacity for the manufacture of all types of process plant equipment. The chemical industry of India has got its origin in West Bengal. With their plans for developing the chemical industry other States have also been forging ahead. The chemical industry is an omnibus term. The heterogeneous structure of the industry gives basis for the classification of the entire industry into: production of heavy chemicals, chemical fertilizers, plastics, drugs and pharmaceuticals, and synthetic rubber. During the last two decades the Indian chemical industry has forged ahead confidently and recorded an advance in practically every sector. Its position today is that it has 7.2 per cent share in the national industrial capital and contributes 7.4 per cent of the total gross output.

CEMENT INDUSTRY (CEM I)

Cement, being the basic building material, plays a vital part in a country's planned development. It is one of the established major industries in our country. Besides providing direct employment to 70,000 workers, it accounts for an annual output valued at the Rs.110 crores. The industry annually pays over Rs.65 crores to the exchequer by way of direct taxes and around Rs.28 crores to the railways towards freight charges. The industry plays an important role not only from the employment and national income point of view, but also it is an essential ingredient for the development process to be kept apace. The process of economic growth will inevitably generate an increasing demand for cement, although the actual level of consumption will be governed by the pattern of investment in the development programme. Though the annual cement production has been rising at the rate of seven per cent, the demand for the product is growing at the rate of eight per cent. Even at this rate of growth of the demand for cement, the per capita consumption of cement in our country is very low when compared to the advanced countries where the per capita consumption is nearly 15 to 20 times to that of India.

IRON AND STEEL INDUSTRY (I & S I)

Iron and Steel Industry forms the base of all industrial activity. The development of all manufacturing and consumer goods industries depends upon the extent of development of iron and steel industry. The most important among the industries, directly dependent on iron and steel industry, are engineering industry, wagon building industry, and other transport equipment industries. The development of agriculture is dependent on steel both directly and indirectly – directly in the manufacture of machinery for fertiliser and pesticides industries. Steel production has a multiplier effect on the development of all other industries. Therefore, it has been rightly called a 'mother industry'. Iron and steel industry provides direct employment to thousands of workers in the quarrying and mining of ores, coal and other minerals and in the actual steel production. Apart from this, a number of ancilliary industries come into being and the investment in the steel plant by itself will have an immense multiplying effect in carrying new employment opportunities to thousands of workers.

From the above profile, it was clear that these industries have been playing a major role in economic development since independence. Apart from other things, their performance and success also depends upon efficiency in management of working capital. Hence, current assets are to be managed effectively and efficiently so as to reduce investment in them to increase profitability and at the same time without adversely affecting liquidity. The present study has been undertaken to evaluate various facets of working capital, i.e., size, liquidity and efficiency in utilization of working capital components in selected industries, i.e., Cotton Textile Industry (CTI), Man Made Textile Industry (MMTI) Chemical Industry (Chem I), Cement Industry (Cem I) and Iron and Steel Industry (I &S I). A brief review of literature is presented here before stating the objectives, methodology and plan of the present study.

REVIEW OF LITERATURE

Kirkham (2012) has undertaken a study to examine the value in analysis of the liquidity of 25 companies of telecommunication sector in Australia using the traditional ratios i.e., current ratio, quick ratio, interest coverage ratio and compared to the more recently devised cash flow ratios, i.e., the cash flow ratio, critical needs cash coverage ratio, and cash interest coverage ratio. The study revealed that differences existed between the traditional liquidity ratios and cash flow ratios. A conclusion based solely on the traditional ratios could well have lead to an incorrect decision regarding the liquidity of a number of companies.

Gumber and Kumar (2012) have studied the efficiency of working capital management in public (NFL, MFL &GSFCL) and cooperative sectors (IFFCL & KBCL) of fertilizer industry and concluded that the cooperative sector was better off than the public sector as regard liquidity and payment to creditors as their credit period were much shorter than the public sector.

A study has been conducted during 2003-04 to 2008-09 with the objective of examining and evaluating the working capital management in major cement industries in India and to find relationship between working capital efficiency and profitability by Vilas Vijaya and Sundar Rama (2013).

Mehrotra (2013) made an attempt to examine the working capital trends and practices in FMCG Sector in India by selecting five FMCG companies namely, HUL, Nestle, Brittannia, P&G and ITC. The study is based on secondary data, i.e., Annual Reports of the selected companies. The period of study is five years and traditional method of data analysis and ratio analysis as tools of financial statement analysis for examine the degree of efficiency of working capital management has been adopted.

Madhu and Raju (2013) have made an attempt to analyse the liquidity and profitability in Cotton Textile Industry and Man Made Textile Industry which are major wings of Textile industry in India and compared with All Industries Average. This study is based on the overall industry data published by the RBI and covers a period 12 years from 1999-00 to 2010-11. It has concluded that the liquidity and profitability of Cotton Textile Industry and Man Made Textile Industry was very poor during the study period.

IMPORTANCE OF THE STUDY

It is evident from the above review of literature, a considerable work has been done to analyse the efficiency of working capital management in different organizations and industries in different study periods. However, very few studies have been conducted in these selected industries. Therefore, the present study is one of the unique studies in this direction.

STATEMENT OF THE PROBLEM

Due to several problems, many industries are running losses and becoming sick in India. One of the reasons for failure of the industry may be inefficiency in management of current assets/working capital. Therefore, proper management of working capital not only improves performance of the industry but also reduce the burden of the economy. In this present study efforts have been made to analyse the size, liquidity and efficiency in management of working capital in selected industries in India.

OBJECTIVES OF THE STUDY

1. To analyse the size of current assets in selected industries.
2. To analyse the liquidity position of the selected industries.
3. To analyse the efficiency in utilization of working capital components, i.e., inventories and debtors, in selected industries.

HYPOTHESES

The study is undertaken to test the following hypotheses;

1. There is no difference in size of current assets among the selected industries.
2. There is no difference in liquidity position among the selected industries.
3. There is no difference in efficiency in utilising working capital components among the selected industries

RESEARCH METHODOLOGY

The present study is an attempt to analyse the size, liquidity and efficiency in utilising working capital components in CTI, MMTI, Chem I, Cem I and I&SI. For this purpose, secondary data on current assets to total net assets ratio, current ratio, quick ratio, inventories to sales ratio and sundry debtors to sales ratio in selected industries and All Industries Average published in various monthly issues of RBI Bulletins (i.e., May 2003, March 2006, March 2009 and March 2012) have been collected and used. Statistical techniques such as, Mean, Standard Deviation, Coefficient of Variation and T-test, have also been used to compare and draw meaningful conclusions. This study covered a period of 12 years i.e., from 1999-00 to 2010-11. The number of units covered in each industry during the study period is presented in table 1. The total study has been divided into three parts, i.e., A) Size Analysis B) Liquidity analysis C) Efficiency analysis.

TABLE 1: NUMBER OF UNITS COVERED IN EACH INDUSTRY GROUP

Year	Cotton Textile Industry (CTI)	Man Made Textile Industry (MMTI)	Chemical Industry (Chem I)	Cement Industry (Cem I)	Iron & Steel Industry (I&SI)	All India Industries (AI)
1999-00 to 2001-02	41	62	163	26	33	990
2002-03 to 2004-05	40	49	174	35	35	964
2005-06 to 2007-08	89	42	228	28	68	1526
2008-09 to 2010-11	106	21	298	37	93	2072

RESULTS & DISCUSSION

A. SIZE ANALYSIS

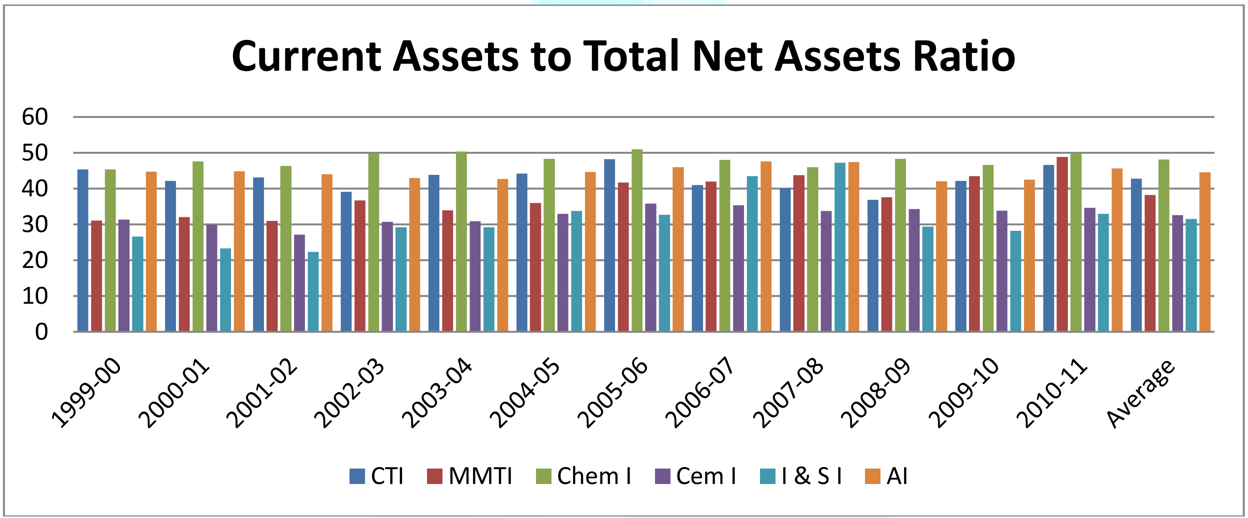
Though the size of current assets in any industry depends upon several factors, such as nature of industry, size of firm, level of sales, credit policy, availability of finance, rate of interest, etc., every industry should maintain minimum level of current assets without which it is very difficult to run day-today activities.

1. CURRENT ASSETS TO TOTAL NET ASSETS RATIO

Size analysis of Working capital in selected industries during the study period has been done with the help of Current Assets to Total Net Assets. The ratio of current assets to total net assets shows the proportion of current assets in the total net assets of the organization. Higher the ratio more will be the liquidity of the firm and vice versa. The ratio of current asset to total net assets in selected industries has been presented in table 2.

TABLE 2: CURRENT ASSETS TO TOTAL NET ASSETS RATIO IN SELECTED INDUSTRIES (%age)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	45.3	31.1	45.3	31.3	26.6	44.7
2000-01	42.1	32	47.6	29.9	23.3	44.8
2001-02	43.1	31	46.3	27.1	22.3	44
2002-03	39.1	36.7	49.8	30.7	29.2	42.9
2003-04	43.8	33.9	50.3	30.9	29.2	42.7
2004-05	44.2	36	48.3	32.9	33.7	44.6
2005-06	48.2	41.7	51	35.8	32.7	46
2006-07	41	41.9	48	35.3	43.5	47.6
2007-08	40.1	43.7	46	33.7	47.2	47.4
2008-09	36.9	37.6	48.3	34.3	29.4	42
2009-10	42.1	43.5	46.6	33.8	28.2	42.5
2010-11	46.6	48.8	49.9	34.6	32.9	45.6
Average	42.71	38.16	48.12	32.53	31.52	44.57
S.D	3.20	5.75	1.85	2.57	7.39	1.86
C.V	7.49	15.07	3.84	7.9	23.45	4.17
t-value	2.01	3.86*	6.65*	16.23*	6.12*	



a) Cotton Textile Industry: This ratio has been fluctuated between 36.9 per cent and 48.2 per cent during the study period in this industry and recorded 42.71 per cent on an average which was not significantly different from that of AI (t-value).
b) Man Made Textile Industry: In this industry, it was fluctuated between 31 per cent and 48.8 per cent and recorded 38.16 per cent on an average during the study period. The difference between the average ratio of this industry and that of AI was significant (t-value).
c) Chemical Industry: It was fluctuated between 45.3 per cent and 51 per cent and recorded 48.12 per cent on an average during the study period. The average of this industry was significantly different from that of AI (t-value).
d) Cement Industry: It was fluctuated between 27.1 per cent and 35.8 per cent during the study period in this industry. There was a significant different between the average ratio of this industry (32.53 per cent) and AI (t-value).
e) Iron & Steel Industry: This ratio was fluctuated between 22.3 per cent and 47.2 per cent during the study period. On an average, it was recorded as 31.52 per cent, which was significantly different from that of AI (t- value).

B. LIQUIDITY ANALYSIS

The liquidity ratios (Current Ratio, Quick Ratio) measure the ability of a firm to meet its short term obligations and reflect the short term financial strength of a firm.

1. CURRENT RATIO

The current ratio of a firm measures its short term solvency, that is, its ability to meet short term obligations. Although there is no hard and fast rule, conventionally, a current ratio of 2:1 is considered satisfactory. Current Ratio in selected industries has been presented in table 3.

TABLE 3: CURRENT RATIO IN SELECTED INDUSTRIES (No. of times)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	1.2	0.9	1.3	0.9	0.7	1.3
2000-01	1.2	0.9	1.4	0.9	0.7	1.3
2001-02	1.1	0.8	1.3	0.8	0.7	1.2
2002-03	1	1	1.3	0.8	0.7	1.2
2003-04	1.2	0.9	1.3	0.9	0.8	1.1
2004-05	1.2	1	1.3	1	1	1.2
2005-06	1.3	1.2	1.4	1.3	1	1.2
2006-07	1.1	1.1	1.3	1.4	1.5	1.3
2007-08	1.1	1.2	1.3	1.2	1.6	1.3
2008-09	1.3	0.8	1.3	1.2	0.8	1.1
2009-10	1.5	0.9	1.3	1.3	0.9	1.2
2010-11	1.4	1	1.4	1.2	1.1	1.2
Average	1.22	0.98	1.33	1.08	0.96	1.22
S.D	0.14	0.14	0.05	0.21	0.31	0.07
C.V	11.47	14.29	3.76	19.44	32.29	5.74
t-value	0	5.94*	7.62*	2.31	2.91*	

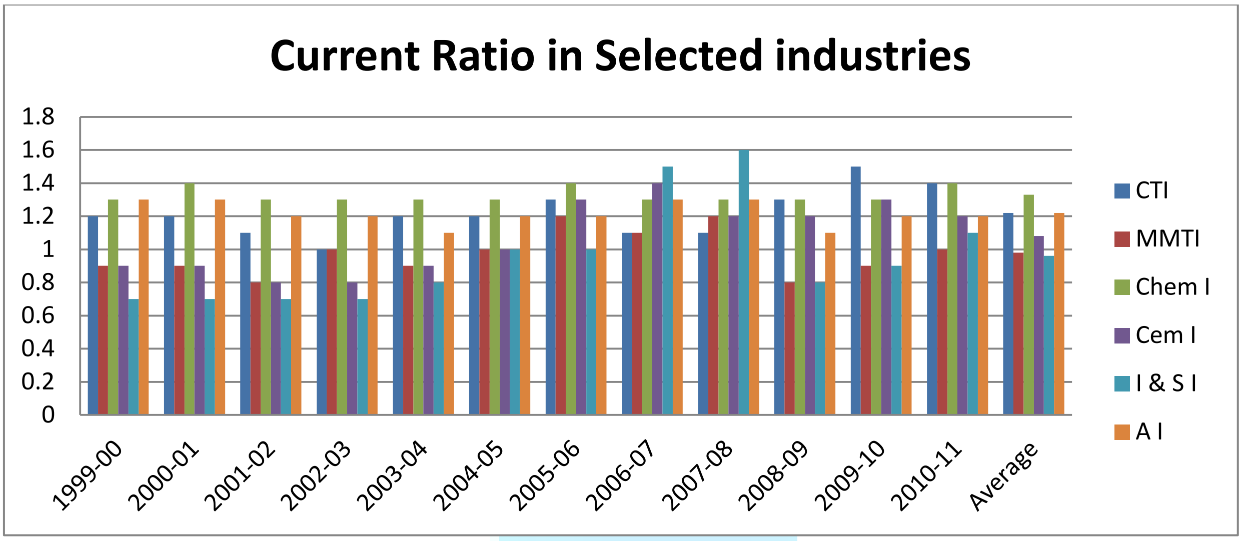
a) Cotton Textile Industry: This ratio was fluctuated between one time and 1.5 times during the study period. On an average it was 1.22 times which was same to that of AI during the study period.

b) Man Made Textile Industry: It was fluctuated between 0.8 times and 1.2 times in this industry during the study period. On an average, it was 0.98 times, which was significantly different from that of AI (t-value).

c) Chemical Industry: A steady trend was observed in this ratio during the study period in this industry. The average ratio was 1.33 times, which was significantly different from that of AI (t-value).

d) Cement Industry: It was fluctuated between 0.8 times and 1.4 times and recorded on an average 1.08 times during the study period.

e) Iron & Steel Industry: This ratio was fluctuated between 0.7 times and 1.6 times during the study period. It was 0.96 times on an average, which was significantly different from that of AI (t-value).

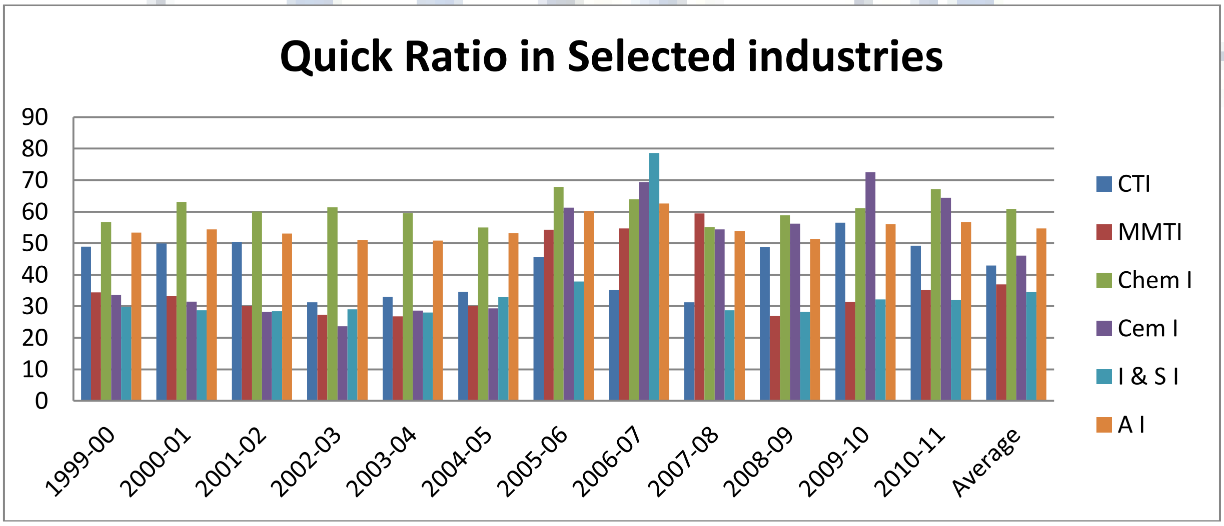


2. QUICK RATIO

The quick ratio or acid test ratio is the ratio between quick assets and current liabilities and is calculated by dividing the quick assets by the current liabilities. A quick test ratio of 1:1 is considered satisfactory as a firm can easily meet all current claims. Quick ratio in selected industries during the study period has been presented in table 4.

TABLE 4: QUICK ASSETS TO CURRENT LIABILITIES RATIO IN SELECTED INDUSTRIES (%age)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	48.9	34.4	56.7	33.6	29.8	53.4
2000-01	49.9	33.2	63.1	31.5	28.7	54.4
2001-02	50.4	30	60.1	28.2	28.4	53.1
2002-03	31.3	27.3	61.4	23.7	29	51
2003-04	33	26.8	59.6	28.6	28	50.8
2004-05	34.6	30.1	55	29.3	32.9	53.2
2005-06	45.7	54.3	67.9	61.3	37.9	60.2
2006-07	35.1	54.7	63.9	69.4	78.6	62.6
2007-08	31.3	59.4	55.1	54.4	28.7	53.9
2008-09	48.8	26.9	58.8	56.2	28.2	51.3
2009-10	56.5	31.4	61.1	72.5	32.2	56
2010-11	49.2	35.1	67.2	64.4	32	56.7
Average	42.89	36.97	60.83	46.09	34.53	54.72
S.D	9.07	11.94	4.22	18.48	14.17	3.64
C.V	21.15	32.3	6.94	40.09	41.04	6.65
t-value	*4.52	*5.15	5.02*	1.62	4.94*	



a) Cotton Textile Industry: This ratio was fluctuated between 31.3 per cent and 56.5 per cent and recorded 42.89 per cent on an average during the study period. The average ratio of this industry was significantly different from that of AI (t-value).

b) Man Made Textile Industry: It was fluctuated between 26.8 per cent and 59.4 per cent during the study period. The average ratio of this industry (36.97 per cent) was significantly different from that of AI (t-value).

c) Chemical Industry: It was fluctuated between 55 per cent and 67.9 per cent during the study period. The difference between the average ratio of this industry (60.83 per cent) and AI (54.72 per cent) was significant (t-value).

d) Cement Industry: It was fluctuated between 23.7 per cent and 72.5 per cent during the study period in this industry. On an average, it was 46.09 per cent.

e) Iron & Steel Industry: This ratio has been fluctuated between 28.2 per cent and 78.6 per cent and recorded 34.53 per cent on an average during the study period. The average ratio of this industry was significantly different from that of AI (t-value).

C. ANALYSIS OF EFFICIENCY

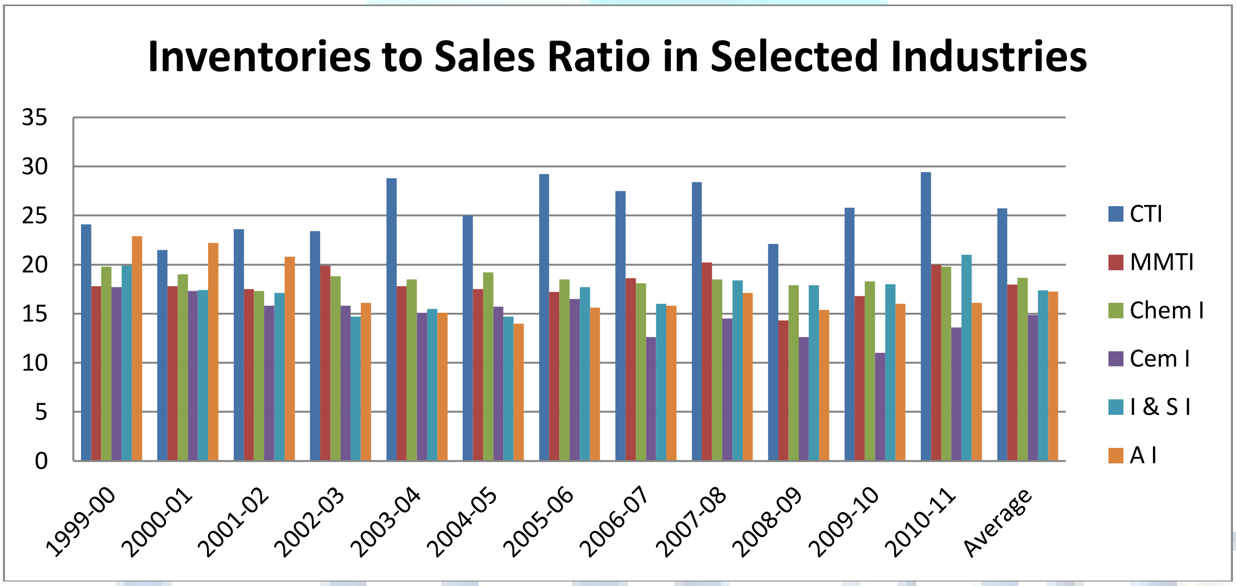
Efficiency or Turnover or Activity analysis reflects the intensity with which the firm uses its components of current assets in generating sales. This analysis is made with the help of inventories to sales ratio and sundry debtors to sales ratio in selected Indian industries during the study period.

1. INVENTORIES TO SALES RATIO

The ratio of inventories to sales indicates how much of investment is made in inventory for every one rupee of sales. A low ratio is good from the viewpoint of liquidity and vice versa. A high ratio would signify that inventory does not sell fast and stays on the shelf or in the warehouse for a long time. Table 6 shows the inventories to sales ratio in selected industries during the study period.

TABLE 6: INVENTORIES TO SALES RATIO IN SELECTED INDUSTRIES (%age)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	24.1	17.8	19.8	17.7	19.9	22.9
2000-01	21.5	17.8	19	17.3	17.4	22.2
2001-02	23.6	17.5	17.3	15.8	17.1	20.8
2002-03	23.4	19.9	18.8	15.8	14.7	16.1
2003-04	28.8	17.8	18.5	15.1	15.5	15.1
2004-05	25	17.5	19.2	15.7	14.7	14
2005-06	29.2	17.2	18.5	16.5	17.7	15.6
2006-07	27.5	18.6	18.1	12.6	16	15.8
2007-08	28.4	20.2	18.5	14.5	18.4	17.1
2008-09	22.1	14.3	17.9	12.6	17.9	15.4
2009-10	25.8	16.8	18.3	11	18	16
2010-11	29.4	20	19.8	13.6	21	16.1
Average	25.73	17.95	18.64	14.85	17.36	17.26
S.D	2.85	1.63	0.74	2.05	1.93	2.96
C.V	11.08	9.08	3.97	13.8	11.12	17.15
t-value	*12.49	1.49	6.96*	4.07*	0.18	



a) Cotton Textile Industry: This ratio has been fluctuated between 21.5 per cent and 29.4 per cent during the study period. On an average, it was 25.73 per cent, which is significantly different from that of AI (t-value).

b) Man Made Textile Industry: It has been fluctuated between 14.3 per cent and 20.2 per cent registering an average ratio of 17.95 per cent during the study period. There is no significant difference between the average of this industry and AI (t-value).

c) Chemical Industry: This ratio has been fluctuated between 17.3 per cent and 19.8 per cent during the study period. However, there is a significant difference between the average of this industry (18.64 per cent) and AI (t-value).

d) Cement Industry: This ratio has been fluctuated between 11 per cent and 17.7 per cent during the study period. There is a significant difference between the average ratio of this industry (14.85 per cent) and AI (t-value).

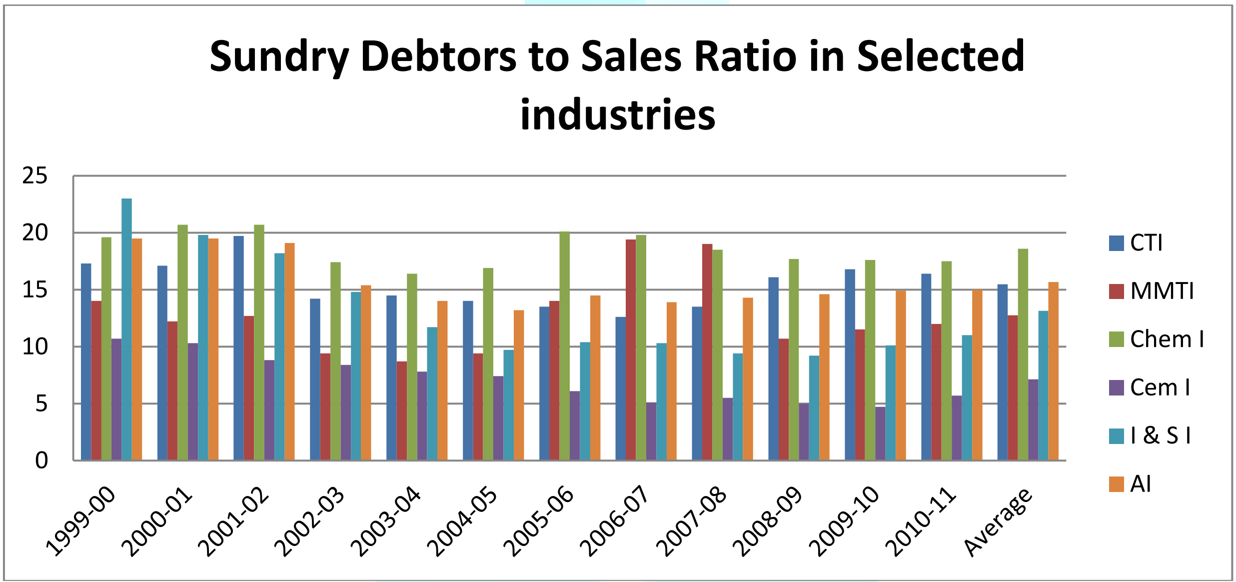
e) Iron & Steel Industry: This ratio has been fluctuated between 14.7 per cent and 21 per cent registering 17.36 per cent on an average during the study period. There is no significant difference between the average of this industry and AI (t-value).

2. SUNDRY DEBTORS TO SALES RATIO

The sundry debtors to sales ratio, which is calculated by dividing the debtors with the sales, indicate the velocity of debt collection of a firm. Generally, the lower the ratio efficient is the management of debtors/sales or more liquid are the debtors. The ratio of sundry debtors to sales in selected industries has been presented in table 7.

TABLE 7: SUNDRY DEBTORS TO SALES RATIO IN SELECTED INDUSTRIES (%age)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	17.3	14	19.6	10.7	23	19.5
2000-01	17.1	12.2	20.7	10.3	19.8	19.5
2001-02	19.7	12.7	20.7	8.8	18.2	19.1
2002-03	14.2	9.4	17.4	8.4	14.8	15.4
2003-04	14.5	8.7	16.4	7.8	11.7	14
2004-05	14	9.4	16.9	7.4	9.7	13.2
2005-06	13.5	14	20.1	6.1	10.4	14.5
2006-07	12.6	19.4	19.8	5.1	10.3	13.9
2007-08	13.5	19	18.5	5.5	9.4	14.3
2008-09	16.1	10.7	17.7	5	9.2	14.6
2009-10	16.8	11.5	17.6	4.7	10.1	14.9
2010-11	16.4	12	17.5	5.7	11	15
Average	15.48	12.75	18.58	7.13	13.13	15.66
S.D	2.08	3.46	1.53	2.09	4.70	2.31
C.V	13.43	27.14	8.23	29.31	35.8	14.75
t-value	0.3	2.91*	35.46*	14.14*	1.86	



a) Cotton Textile Industry: In this industry, this ratio has been fluctuated between 12.6 per cent and 19.7 per cent during the study period. There is no significant difference between the average ratio of this industry (15.48 per cent) and AI (t-value).

b) Man Made Textile Industry: This ratio has been fluctuated between 8.7 per cent and 19.4 per cent during the study period and registered an average ratio of 12.75 per cent. A significant difference could be observed between the average of this industry and AI (t-value).

c) Chemical Industry: In this industry, this ratio has been fluctuated between 16.4 per cent and 20.7 per cent during the study period. A significant difference could be observed between the average of this industry (18.58 per cent) and AI (t-value).

d) Cement Industry: This ratio has been fluctuated between 4.7 per cent and 10.7 per cent during the study period. The difference between the average ratio of this industry (7.13 per cent) and AI is significant (t-value).

e) Iron & Steel Industry: It has been fluctuated between 9.2 per cent and 23 per cent and registered an average ratio of 13.13 per cent during the study period. There is no significant difference between the average ratio of this industry and AI (t-value).

FINDINGS

1. The average ratio of Current Assets to Total Net Assets was 48.12 per cent in Chem I, 42.71 per cent in CTI, 38.16 per cent in MMTI, 32.53 per cent in Cem I and 31.52 per cent in I & S I as against 44.57 per cent in AI.
2. The average Current Ratio was 1.33 times in Chem I, 1.22 times in CTI, 1.08 times in Cem I, 0.98 times in MMTI and 0.96 times in I&SI as against 1.22 times in AI.
3. The average Quick Ratio was 60.83 per cent in Chem I, 46.09 per cent in Cem I, 42.89 per cent in CTI, 36.97 per cent in MMTI and 34.53 per cent in I & S I as against 54.72 per cent in AI.
4. The average Inventories to Sales ratio was 14.85 per cent in Cem I, 17.36 per cent in I&SI, 17.95 per cent in MMTI, 18.64 per cent in Chem I, 25.73 per cent in CTI as against 17.26 per cent in AI.
5. The average Sundry Debtors to Sales ratio was 7.13 per cent in Cem I, 12.75 per cent in MMTI, 13.13 per cent in I & S I, 15.48 per cent in CTI and 18.58 per cent in Chem I as against 15.66 per cent in AI.

TESTING OF HYPOTHESIS

1. There is a significant difference in the size of current assets in selected industries
2. There is a significant difference in liquidity position of selected industries.
3. There is a significant difference in efficiency in utilizing the working capital components in selected industries.

CONCLUSIONS

1. The ratio of current assets to total net assets was lower in all selected industries, except in Chemical Industry.
2. The liquidity position was poor in all selected industries, except in Chemical Industry.

3. The efficiency in utilizing the inventories was very poor in all selected industries, except in Cemical Industry.
4. The efficiency in utilizing the sundry debtors was very poor in Chemical Industry.

SUGGESTIONS

1. Chemical Industry has to reduce the size of current assets or improve the sales performance.
2. The liquidity ratios i.e., current ratio and quick ratio, should be improved in all selected industries, except in Chemical Industry.
3. The efficiency in utilizing the components of working capital i.e., inventories and sundry debtors, should be improved in Cotton Textile Industry and Chemical Industry.

LIMITATIONS

This study is based on the data is relating to the large industrial units, the paid up capital of which is Rs. 5 Crore and above, published by the RBI. Therefore, findings may not be applicable to other category of industries.

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DISCIPLINARY ACTION TAKEN ON EMPLOYEES AND ITS IMPACT ON THE MORALE OF THE EMPLOYEES: A STUDY

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ABSTRACT

Discipline must be maintained in any culture, including the culture of any private sector organization. An employer has a legitimate right, if not an obligation, to expect employees to meet acceptable standards of performance and behavior, including maintaining satisfactory attendance, performing work in a careful, accurate and efficient manner, following job instructions, following safety rules and practices, and accepting job assignments or instructions from supervisors. Management should always keep in mind the educational function of corrective discipline. Consistent discipline helps to set limits: It lets employees know what they can and cannot do. Inconsistent discipline inevitably leads to confusion and uncertainty. When some rules are permitted to go unenforced, employees may either (1) decide to ignore all rules, or (2) become confused about what is really required of them. However, exceptions to the consistent application of discipline should be limited to extraordinary situations. The exception should not, in other words, "swallow the rule." Also, when there is a well-deserved departure from standards, the employee should be told that (s)he is being given extra consideration and that his/her conduct would normally result in a more severe disciplinary action. The action taken should, in turn, be documented as "the exception." Discipline is a most for every organization that wants to move forward. It is very essential for the smooth running of any firm. It is also very important for peace and harmony in an organization. Peace between employees, customers and clients. It is always necessary for discipline to be instilled in employees to get the best out of your workforce.

KEYWORDS
Discipline, Employer, Employee, Standards, Organization, Performance.

INTRODUCTION

'Discipline Builds Culture'
'No Man Ever Grows Untill He Is Disciplined'
'Discipline Is The Bridge Between Goals And Accomplishment'

Discipline is generally administered when an employee violates company policy or falls short of work expectations. Members in an organization need to respect the rules and agreement that govern the organization. Overview the control function provides supervisors with opportunities to improve systems on a continuous basis. An emphasis on coaching and counseling can prevent discipline problems. For example, poor performance due to low ability or inadequate training, learning problems, drug and alcohol dependency, physical or mental illness, marginal health, or disability respond much better to coaching and counseling than to punitive measures. However, disciplinary action as a behavioral control technique is necessary when self-discipline breaks down. Effective discipline can eliminate ineffective employee behavior(Margaret Mader-Clark, Lisa Guerin ,2009)

To discipline thus means to instruct a person or animal to follow a particular code of conduct, or to adhere to a certain "order." An employee should be disciplined when he or she chooses to break the rules or is not willing to perform the job to standards. Discipline is corrective actions taken by a supervisor when an employee does not abide by organizational rules and standards. (Douglas, Murray A, Strauss,*2007).*

To be disciplined is either a virtue (the ability to follow instructions well) or a euphemism for punishment (which may also be referred to as disciplinary procedure). (Pickett, Joseph P, *2000)*

Discipline is a most for every organization that wants to move forward. It is very essential for the smooth running of any firm. It is also very important for peace and harmony in an organization. Peace between employees, customers and clients. It is always necessary for discipline to be instilled in employees to get the best out of your workforce. Discipline can be seen or defined as a force that prompts individuals, organizations, nation etc to observe rules and regulations stipulated which are deemed necessary for the effective and efficient running of the group, organization or nation. In this article discipline in firms can be seen as an orderly conduct by employees of an organization to adhere to the rules and regulations as well as policies guiding the activities and running of the organization.

Effective discipline in any organization is not about penalizing and punishing the behavior you don't want to see; it is much more about encouraging the behavior you do want to see. That means making clear what a good job looks like in the first place. Since most people actually prefer to do a good job, just making that clear will lead to the vast majority of your employees conforming to your reasonable standards without a problem. After all, external discipline exercised occasionally by you will never work as well as self-discipline exercised by the individual every hour of the day.

The IT boom has brought with it, its own set of challenges to organization . How to put in place and processes that should be in tune with IT revolution ,how to strategize, compete with globalization?

One of the booming and growing industry is the IT industry. The performance and profitability of the organization will depend on the quality of services offered by individuals. The creativity, innovativeness, knowledge and skill of the employees are the most important assets .The organization cannot manage these assets when employees get into indiscipline and the company is forced to take disciplinary action.

It is important for any organization ,large or small to maintain discipline. There should be proper communication of the rules concerning discipline in the firm. To avoid indisciplinary actions these rules should be written in the employee handbook and also put in notice boards. By so doing no employee can say he or she is not aware of the rules and would not affect the productivity of any employee.

This study is going to be all about these IT industries who have managed to avoid indisciplinary actions among employees which if not managed could affect the productivity of the employee as well as of the organization.

REVIEW OF LITERATURE

Discipline is a most important for every organization that wants to move forward. It is very essential for the smooth running of any firm. It is also very important for peace and harmony in an organization. Peace between employees, customers and clients. It is always necessary for discipline to be instilled in employees to get the best out of your workforce. Discipline can be seen or defined as a force that prompts individuals, organizations, nation etc to observe rules and regulations stipulated which are deemed necessary for the effective and efficient running of the group, organization or nation

Misconduct includes theft, falsifying employment application, willfully damaging organizational property, punching another employee's time card, and falsifying work records. On-the-job Problem Behaviors.(Frank Lafasto and Carl Larson, 2007)

Another study examines about the disciplinary action .

Before conducting a discipline discussion, the supervisor should be able to:

a) Describe the incident by answering: Who? What? When? How? Where? Witnesses? Why?

b) Refer to the policy or procedure that was violated.
c) Determine whether the employee was previously notified of the correct operating procedure and be able to provide documentation, if it exists.
d) Determine whether other employees have violated the same policy/procedure and what discipline, if any, they received. (Source Part one – Articles by forum member,2006)

In discipline discussions with an employee, the supervisor points out the unsatisfactory behavior, explains the need for and purpose of the rule or practice that is being violated, and expresses confidence in the employee's willingness and ability to make the necessary changes in behavior. Discipline decides action ,action defines norms.(M.S BALA,1979)

During a discipline discussion the supervisor should be objective in reviewing the situation and give the employee specific examples of the behavior that is causing the problem. The employee should be allowed an opportunity to present his or her own case. The supervisor needs to make sure the employee has a clear understanding of the consequences of his or her behavior. The supervisor and the employee should agree on specific recommendations for correcting the performance. (Sunil Ramlall,2006)

STATEMENT OF THE PROBLEM

The performance and profitability of the organization will depend on the quality of services offered by individuals. The creativity , innovativeness, knowledge and skill of the employees are the most important assets .The organization cannot manage these assets when employees get into indiscipline and the company is forced to take disciplinary action.

The impact of disciplinary actions on the morale of the employees can be positive and negative .How we can incorporate and help them in achieving the ultimate goal i.e. exceptional performance would be a real challenge.

OBJECTIVES OF THE STUDY

- To identify and describe the disciplinary actions taken on employees in an organisation.
- To analyse the impact of the disciplinary actions on the morale of the employees.
- To review the situation arising out of indisciplinary action.
- To give suitable suggestions and recommendations.

RESEARCH METHODOLOGY

DATA COLLECTION

An exploratory research study is conducted and a sample method is employed. Descriptive research study has been used for the purpose of the study.

SAMPLE TECHNIQUES

Random sampling has been used for the purpose of the study, so that the sample could be split into different groups based on the convenience of the researcher.

SAMPLE SIZE

All organizations have similar disciplinary issues/concern. As such my focus has been mostly on medium industry. Hence the study covers approximately 50 employees.

CONTACT METHOD

In –depth interview through Questionnaire

STATISTICAL TOOLS USED FOR ANALYSIS

Percentage analysis: Percentage analysis refers to a specific kind of ratio used in making the comparison between two or more series of data. Percentage is used to describe relationship and can also be used to compare the relative terms, the distribution of two or more series in data.

Percentage of respondents = (no. of respondent/total no. Of respondent)*100

HYPOTHESIS

(a)NULL HYPOTHESIS(Ho): There is no relationship between disciplinary actions and productivity of the organization.
ALTERNATIVE HYPOTHESIS(H1) : There is relationship between disciplinary actions and productivity of the organization.
(b)NULL HYPOTHESIS(Ho): Disciplinary action does not affect the morale of the employees.
ALTERNATE HYPOTHESIS(H1): Disciplinary action affects the morale of the employee

LIMITATIONS OF THE STUDY

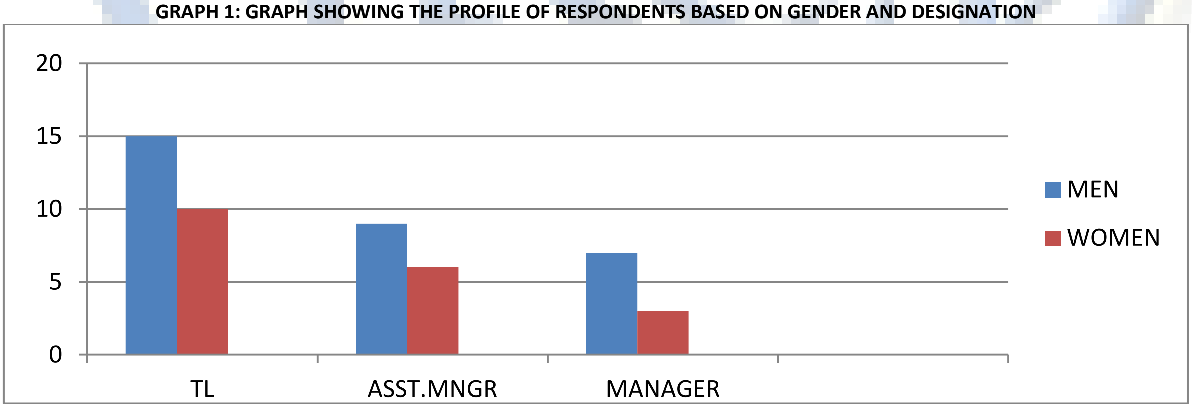
- Indisciplinary actions are usually observed and are common in labour intensive industry run by trade unions .A close interaction with such form of unions could not provide insight on the issues.
- Indisciplinary actions are also observed with minimum intensity in high tech industry. Data was limited and confidential to organisation.
- In depth knowledge of various complicated issues causing indiscipline could not be found.

RESULTS AND DISCUSSION

TABLE 1:TABLE SHOWING THE PROFILE OF RESPONDENTS BASED ON GENDER AND DESIGNATION:

DESIGNATION	TL	ASST.MGNR	MNGR
MEN	15	10	7
WOMEN	10	5	3

GRAPH 1: GRAPH SHOWING THE PROFILE OF RESPONDENTS BASED ON GENDER AND DESIGNATION



Source: field survey

INFERENCE

The above graph clearly depicts that the Male respondents are more than the female respondents in the mentioned designations(TL, Asst. Manager, Manager)

TABLE 2:TABLE FOR IDENTIFYING COMMON DISCIPLINARY ISSUES AN EMPLOYEE FACES:

PARTICULARS	PERCENTAGE
Sexual harassment	30
Theft	15
Falsifying employment application	40
Willfully damaging organizational property	5

INFERENCE

Sexual harassment creating indiscipline is 30%Theft creating indiscipline is 15%Falsifying employment application creating indiscipline is 40%Willfully damaging organizational property creating indiscipline is 5%. The above chart clearly depicts that falsifying employment application creates the maximum disciplinary issues in an organization.

TABLE 3: TABLE FOR IDENTIFYING ON THE JOB PROBLEM BEHAVIORS

AREAS	PERCENTAGE
Fighting	37
Sleeping	10
smoking	48

INFERENCE

From the above chart it is observed that 37% of On the Job Problem Behaviors are due to Fighting.10% of On the Job Problem Behaviors are due to Sleeping and 48% of On the Job Problem Behaviors are due to Smoking.

TABLE 4: TABLE SHOWING THE CAUSES OF INDISCIPLINE

PARTICULARS	PERCENTAGE
Favoritism	15
Lack of communication of policies and norms	50
Lack of leadership	10
Bad habits	25

Source: field survey

INFERENCE

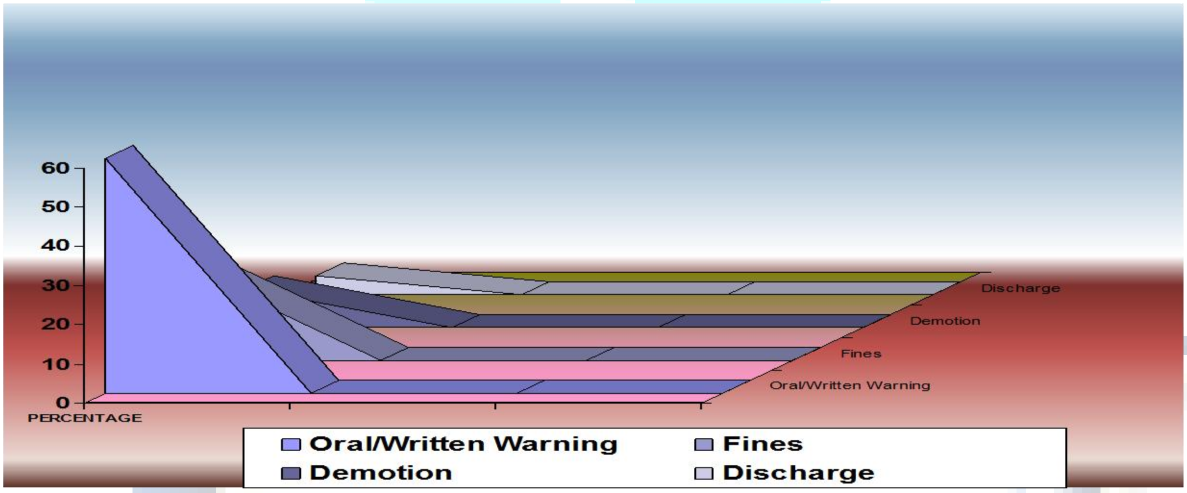
The answers portrayed significant change. As the graphic indicates, almost 50% of the employees causes indiscipline due to lack of communication of policies and norms in the organization. 25% of the employees were indisciplined due to bad habits.

15% of the employees were indisciplined due to favoritism and 10% were indisciplined due to lack of leadership.. Therefore the above chart clearly indicates that the main cause of indiscipline is lack of communication of policies and norms.

TABLE 5:TABLE SHOWING THE BASIC AND FOREMOST DISCIPLINARY PUNISHMENT TAKEN AGAINST THE EMPLOYEE

PARTICULARS	PERCENTAGE
Oral/Written Warning	60
Fines	25
Demotion	10
Dismissal	5

GRAPH 5: GRAPH SHOWING THE BASIC AND FOREMOST DISCIPLINARY PUNISHMENT TAKEN AGAINST THE EMPLOYEE



Source: field survey

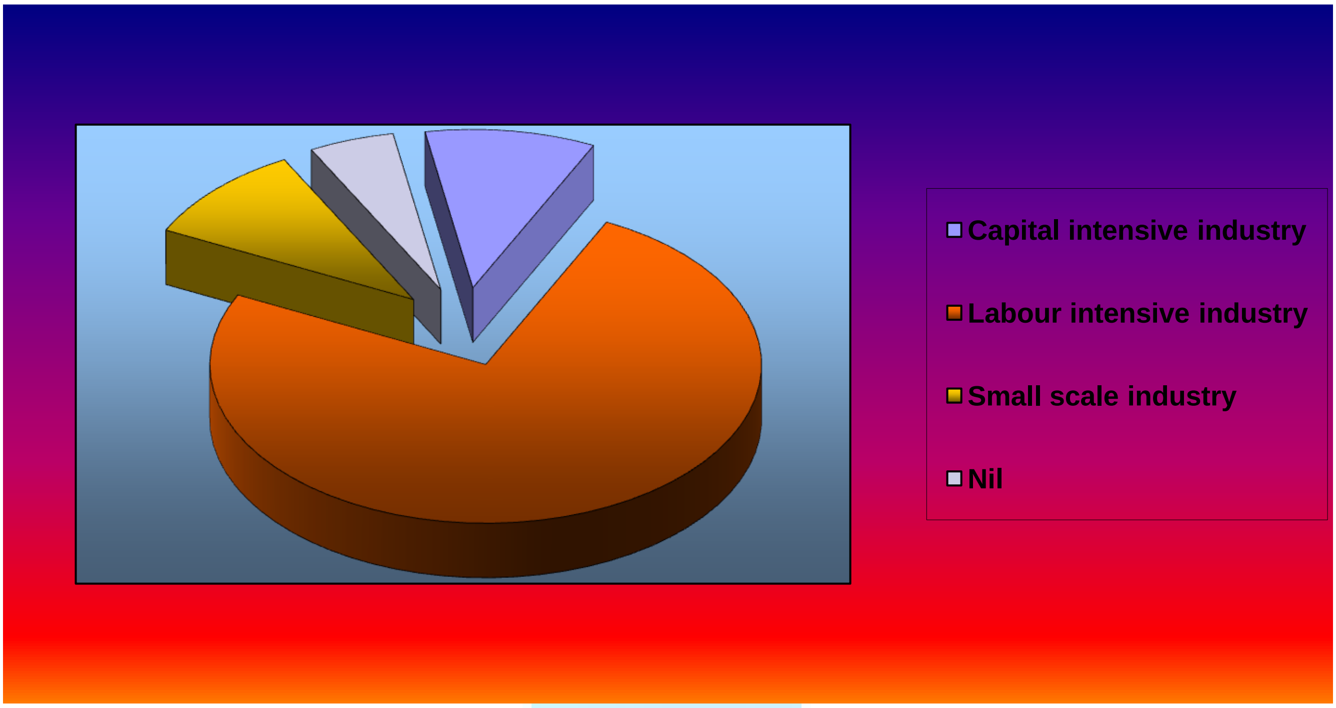
INFERENCE

As the graph indicates that 60% of them says that the basic and foremost disciplinary punishment to be taken against the employee is Oral/Written Warning. 25% of them says that that the basic and foremost disciplinary punishment to be taken against the employee is Fine.10% of them says that that the basic and foremost disciplinary punishment to be taken against the employee is Demotion.5% of them says that the basic and foremost disciplinary punishment to be taken against the employee is dismissal.

TABLE 6:TABLE SHOWING WHETHER DISCIPLINARY NORM /POLICIES / PROCEDURE ARE IMPORTANT TO BE COMMUNICATED TO EMPLOYEES

PARTICULARS	PERCENTAGE
Yes	89
No	7
Can't Say	4

GRAPH 6:GRAPH SHOWING INDISCIPILNARY ACTION ARE HIGHLY NOTED IN WHICH OF THE FOLLOWING INDUSTRY



Source: field survey

INFERENCE

10% of Indiscipilnary action are noted in Capital Intensive Industry.75% of Indiscipilnary action are noted in Labour Intensive Industry.10% of Indiscipilnary action are noted in Small scale industry and 5% of Indiscipilnary action are noted in none of the industries.

HYPOTHESIS ANALYSIS

(a) HYPOTHESIS STATEMENT

The disciplinary actions will have an impact on the performance and productivity of the organization.

NULL HYPOTHESIS

Ho: There is no relationship between disciplinary actions and productivity of the organization.

ALTERNATE HYPOTHESIS

The chi-square test is one of the simplest and most needly used non parametric test in statistical work. The quality of chi-square describes the magnitude of the discrepancy between theory and observation.

TABLE 7: TABLE SHOWING HYPOTHESIS

HYPOTHESIS	STATEMENT
Null	Ho
Alternative	H1

TABLE 8: TABLE SHOWING HYPOTHESIS AND DEGREE OF OPINIONS

SL.NO	OPINIONS	RESPONDENTS	PERCENTAGE
A	Highly disagree	0	0
B	Disagree	2	4
C	Can't Say	8	16
D	Agree	25	50
E	Highly agree	15	30
Total		**50**	**100**

SUMMARY OF FINDINGS,RECOMMENDATIONS AND CONCLUSION

SUMMARY OF FINDINGS

- Majority of the respondents says falsifying employment application is the common disciplinary issues an employee faces in an organisation and few of them agrees that sexual harassment, theft and wilfully damaging organisational property are also some of the common disciplinary issues that an employee faces.
- Majority of the respondents says that smoking is the frequent on the job behaviour. were as few of them says fighting are also one of the frequent on the job behaviour and very few of them says sleeping is also one of the on the job behaviour.
- Majority of the respondents says lack of communication of policies and norms are major cause of indiscipline and few of them agrees that favouritism, lack of leadership and bad habits are the causes of indiscipline.
- Majority of the respondents says that Unrecognition is the cause of dissatisfaction that leads to indiscipline and few of them says that salary and favouritism are also the cause of dissatisfaction that leads to indiscipline.
- Majority of the respondents agrees that the degree of disciplinary action taken for misbehaviour on employees is strict whereas many of them feels that the degree of disciplinary action taken for misbehaviour on employees is Normal and few of the respondents even feels the degree of disciplinary action taken for misbehaviour on employees is low.
- Majority of the respondents agrees that the disciplinary actions provide congenial environment in the organisation whereas many of them feels that the disciplinary actions doesn't provide congenial environment in the organisation and few of the respondents have no idea about it.
- Majority of the respondents agrees that disciplinary norms/policies/procedure are important to be communicated to employees whereas few of them doesn't agree that disciplinary norms/policies/procedure are important to be communicated to employees.

- Majority of the respondents says that knowledge of rules are essential for good disciplinary actions whereas many of them feels that prompt action, fair action, well defined procedure, constructive handling of disciplinary action are the essentials of good disciplinary action.
- Majority of the respondents says that indisciplinary actions are highly noted in labour intensive industry whereas many of them says that indisciplinary actions are highly noted in capital intensive industry and small scale industry and few of the respondents have no idea about it.

RECOMMENDATIONS

- **Rules and regulations should be clearly stated**: For discipline to be instilled in employees there should be clear rules and regulations that stipulates what is expected of each employee and what is not expected of them. The employee handbook for instance should be clear in the dos and don'ts of the firm.
- **There should be no discrimination in enforcing rules and regulations:** To make sure that there is discipline in an organization there should be a general rule for every defaulter. Whatever applies to A when he defaults should also be applicable to B. This will prevent employees from getting involved in discipline should be discouraged and prevented and the productivity of an individual would not be affected.
- **There should be proper communication of the rules concerning discipline in the firm:.** These rules should be written in the employee handbook and also put in notice boards. By so doing no employee can say he or she is not aware of the rules. Disciplinary actions should be in such a way that defaulters will not want to be disciplined a second time after defaulting for a first time.
- **Flexible working:** Flexible working will help the employees to be disciplined in the organisation. The rules, regulations and norms of an organisation should not be so strict that the employees are forced to get involved indiscipline which in turn would affect the productivity of an individual as well as of the organisation.

CONCLUSION

Discipline is most important for every organization that wants to move forward. It is very essential for the smooth running of any firm. It is also very important for peace and harmony in an organization. Peace between employees, customers and clients. It is always necessary for discipline to be instilled in employees to get the best out of your workforce. Discipline builds high integrity among employees. Predefined policies increases the productivity of employee. Clarity of communication safe guards the respect of employees specially woman work force. Awareness of actions likely to be taken against employees for a particular offense he/she found involved into.

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INFORMATION TECHNOLOGY IN BANKING SECTOR

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ABSTRACT

Financial institutions, particularly banks rely heavily on gathering, processing, analyzing, and providing information in order to meet the needs of customers. The last decade the banking industry has been in the process of fundamental changes. These changes brought new competitors into the marketplace. Banks have become more customer-orientated aiming at the satisfaction of their customers. Initiation of Information Technology and Communications networking system is set to change the operating environment of banks drastically. Technology has already enabled some of the banks to introduce innovative products to their customers in the form of ATM facility, Telebanking, Home Banking, 'Anytime' and 'Anywhere' banking, etc. Technological advances have allowed banks to provide innovative, new services or improvements in quality and convenience that attract new customers and increase demand. Technological innovations have enabled the industry to open up efficient delivery channels. It is said that IT has helped the banking industry to deal with the challenges the new economy poses. In this paper, an attempt has been made to discuss the various developments done in Banking Sector with their applications in different areas like customer, working of banks and employees. Also various services which are being offered by the banks to the customers is the focus of this paper. But these innovations produce some challenges as well which are also the part of this research paper.

KEYWORDS

Technology, Innovation,Banking,Customer-oriented.

INTRODUCTION

The usage of information technology (IT), broadly referring to computers and peripheral equipment, has seen tremendous growth in service industries in the recent past. With the globalization trends world over it is difficult for any nation big or small, developed or developing, to remain isolated from what is happening around. For a country like India, which is one of the most promising emerging markets, such isolation is nearly impossible. More particularly in the area of Information technology, where India has definitely an edge over its competitors, remaining away or uniformity of the world trends is untenable.

The most obvious example is perhaps the banking industry, where through the introduction of IT related products in internet banking, electronic payments, security investments, information exchanges (Berger, 2003), banks now can provide more diverse services to customers with less manpower. The explosion of technology is changing the banking industry from paper and branch banks to' digitized and networked banking services. It has already changed the internal accounting and management systems of banks. It is now fundamentally changing the delivery systems banks use to interact with their customers.

All over the world, banks are still struggling to find a technological solution to meet the challenges of a rapidly-changing environment. It is clear that this new technology is changing the banking industry forever. Banks with the ability to invest and integrate information technology will become dominate in the highly competitive global market. Bankers are convinced that investing in IT is critical. Its potential and consequences on the banking industry future is enormous. Seeing this pattern of growth, it seems obvious that IT can bring about equivalent contribution to profits.Commercial Banks in India are now becoming a one-stop Supermarket. The focus is shifting from mass banking to class banking with the introduction of value added and customized products. Technology allows banks to create what looks like a branch in a business building's lobby without having to hire manpower for manual operations.

EVOLUTION OF TECHNOLOGY IN INDIAN BANKING

First, it started off with computerization of a few key functions and departments in principal branches through adoption of what I called earlier, advanced ledger posting machines. These systems were designed to take care of the accounts related functions of the banks which were at the heart of banking operations and which had assumed great significance in terms of the need for accuracy and control. Second, the next progress was towards branch automation. This enabled setting up of "Single Window Service" facilities which were focused on the customers. Third, there was the emergence of network based operations which were aimed at providing interbank connectivity. Fourth, an important stage in the evolution of the user friendly technology arrived with the deployment of ATMs and the adoption of Core Banking Solution which radically transformed the way banking was done in India both by bankers and customers. Fifth, with the setting up of IDRBT, three most important technology infrastructures were created and these were INFINIT in 1999, the implementation of PKI based electronic data transfer and the Structured Financial Messaging System (SFMS) which facilitated the development of secured payment system practice in India. Sixth, a slew of innovations in newer delivery channels like internet banking, mobile banking and pre-paid cards issued by non-banking entities emerged. India also became a member of the Basle Committee of Payment Settlement systems.

PILLARS

In India, banks as well as other financial entities entered the world of information technology and with Indian Financial Net (INFINET). INFINET, a wide area satellite based network (WAN) using VSAT (Very Small Aperture Terminals) technology, was jointly set up by the Reserve Bank and Institute for Development and Research in Banking Technology (IDRBT) in June 1999.

The Indian Financial Network (INFINET) which initially comprised only the public sector banks was opened up for participation by other categories of members.

The first set of applications that could benefit greatly from the use of technological advances in the computer and communications area relate to the Payment systems which form the lifeline of any banking activity. The process of reforms in payment and settlement systems has gained momentum with the implementation of projects such as NDS ((Negotiated Dealing System), CFMS (Centralized Funds Management System) for better funds management by banks and SFMS (Structured Financial Messaging Solution) for secure message transfer. This would result in funds transfers and funds-related message transfer to be routed electronically across banks using the medium of the INFINET. Negotiated dealing system (NDS), which has become operational since February 2002 and RTGS (Real Time Gross Settlement system) scheduled towards the end of 2003 are other major developments in the area. Internet has significantly influenced delivery channels of the banks. Internet has emerged as an important medium for delivery of banking products &services. Detailed guidelines of RBI for Internet Banking has prepared the necessary ground for growth of Internet Banking in India. The Information Technology Act, 2000 has given legal recognition to creation, trans-mission and retention of an electronic (or magnetic) data to be treated as valid proof in a court of law, except in those areas, which continue to be governed by the provisions of the Negotiable Instruments Act, 1881.

DEVELOPMENT OF IT IN BANKING SECTOR

Developments in the field of information technology strongly support the growth and inclusiveness of the banking sector by facilitating inclusive economic growth. IT improves the front end operations with back end operations and helps in bringing down the transaction costs for the customers. The important events in the field of IT in the banking sector in India are:

- SWIFT as a co-operative society was formed in May 1973.
- Arrival of card-based payments- Debit/ Credit card in late 1980s and 90s.
- Introduction of Electronic Clearing Services (ECS) in late 1990s.
- Introduction of Electronic Fund Transfer (EFT) in early 2000s.
- Introduction of RTGS in March 2004.
- Introduction of National Electronic Fund Transfer (NEFT) as a replacement to Electronic Fund Transfer/Special Electronic Fund Transfer in 2005/2006.
- CTS in 2007.

Computers are getting more sophisticated. They have given banks a potential they could only dream about and have given bank customers high expectations. The changes that new technologies have brought to banking are enormous in their impact on officers, employees, and customers of banks. Advances in technology are allowing for delivery of banking products and services more conveniently and effectively than ever before - thus creating new bases of competition. Rapid access to critical information and the ability to act quickly and effectively will distinguish the successful banks of the future. The bank gains a vital competitive advantage by having a direct marketing and accountable customer service environment and new, streamlined business processes. Consistent management and decision support systems provide the bank that competitive edge to forge ahead in the banking marketplace.

APPLICATIONS OF IT IN BANKS

With the advancement of IT in the banking sector, the three –directional advantages have been achieved i.e. to the customer, to the bank and to the employee.

FOR THE CUSTOMER

Banks are aware of customer's need for new services and plan to make them available. IT has increased the level of competition and forced them to integrate the new technologies in order to satisfy their customers. They have already developed and implemented a certain number of solutions among them:

- Self-inquiry facility: Facility for logging into specified self-inquiry terminals at the branch to inquire and view the transactions in the account.
- Remote banking: Remote terminals at the customer site connected to the respective branch through a modem, enabling the customer to make inquiries regarding his accounts, on-line, without having to move from his office.
- Anytime banking- Anywhere banking: Installation of ATMs which offer non-stop cash withdrawal, remittances and inquiry facilities. Networking of computerized branches inter-city and intra-city, will permit customers of these branches, when interconnected, to transact from any of these branches.
- Telebanking: A 24-hour service through which inquiries regarding balances and transactions in the account can be made over the phone.
- Electronic Banking: This enables the bank to provide corporate or high value customers with Graphical User Interface (GUI) software on a PC, to inquire about their financial transactions and accounts, cash transfers, cheque book issue and inquiry on rates without visiting the bank. Moreover, LC text and details on bills can be sent by the customer, and the bank can download the same. The technology used to provide this service is called electronic data interchange (EDI). It is used to transmit business transactions in computer-readable form between organizations and individuals in a standard format.
- As information is centralized and updates are available simultaneously at all places, single-window service becomes possible, leading to effective reduction in waiting time.

FOR THE BANK

During the last decade, banks applied IT to a wide range of back and front office tasks in addition to a great number of new products. The major advantages for the bank to implement IT are:

- Availability of a wide range of inquiry facilities, assisting the bank in business development and follow-up.
- Immediate replies to customer queries without reference to ledger-keeper as terminals are provided to Managers and Chief Managers.
- Automatic and prompt carrying out of standing instructions on due date and generation of reports.
- Generation of various MIS reports and periodical returns on due dates.
- Fast and up-to-date information transfer enabling speedier decisions, by interconnecting computerized branches and controlling offices.

FOR THE EMPLOYEES

IT has increased their productivity through the followings:

- Accurate computing of cumbersome and time-consuming jobs such as balancing and interest calculations on due dates.
- Automatic printing of covering schedules, deposit receipts, pass book / pass sheet, freeing the staff from performing these time-consuming jobs, and enabling them to give more attention to the needs of the customer.
- Signature retrieval facility, assisting in verification of transactions, sitting at their own terminal.
- Avoidance of duplication of entries due to existence of single-point data entry.

TECHNOLOGY VENDORS

Many Indian banks handled technological issues in house till the late 1990s. Thereafter, the complications of the business necessitated the engagement of specialized vendors to handle complex issues. Due to the complexities involved, most banks now prefer to engage IT vendors to introduce specialized softwares to help in their risk management systems, retail and corporate banking, card management systems, complete back office support including data management systems.

Vendor	Flagship Products and Flagships
i-flex solutions (Oracle Financial Services Software limited)	• Flex cube-core banking solutions, retail, corporate, core banking, internet banking, investor servicing and asset management. • Other offerings include Flexcube lending suite,Flexcube for Islamic banking, Private banking. • Reveleus-risk management solutions. • Mantas-risk and compliance solutions.
Infosys	Finacle-core banking solutions,e-banking,CRM,treasury,cash management,wealth management,Islamic banking etc.
TCS	TCS BaNCS- suite of solutions covering banking,capital market and insurance firms 28.5
Nucleus Software	• Finnone –comprehensive suit of software for retail banking applications. • Cash@ will-cash management. • TRADe facto- trade finance. • BankOnet- Internet banking. • PowerCard-credit cards. • FME-fraud Management System

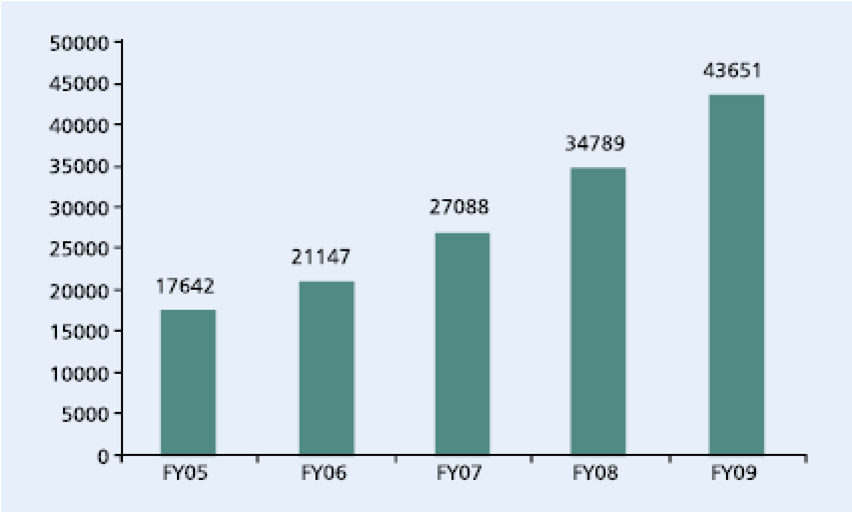
Source: D&B Industry Research Service

INNOVATIVE SERVICES OFFERED BY BANKING SECTOR

AUTOMATIC TELLER MACHINES

ATMs were introduced to the Indian banking industry in the early 1990s initiated by foreign banks. Most foreign banks and some private sector players suffered from a serious handicap at that time- lack of a strong branch network. ATM technology was used as a means to partially overcome this handicap by reaching out to the customers at a lower initial and transaction costs and offering hassle free services. Since then, innovations in ATM technology have come a long way and customer receptiveness has also increased manifold. Public sector banks have also now entered the race for expansion of ATM networks. Development of ATM networks is not only leveraged for lowering the transaction costs, but also as an effective marketing channel resource.

GROWTH OF ATM IN COUNTRY



Source: RBI

INTRODUCTION OF BIOMETRICS

Banks across the country have started the process of setting up ATMs enabled with biometric technology to tap the potential of rural markets. A large proportion of the population in such centers does not adopt technology as fast as the urban centers due to the large scale illiteracy. Development of biometric technology has made the use of self service channels like ATMs viable with respect to the illiterate population. Though expensive to install, the scope of biometrics is expanding rapidly. It provides for better security system, by linking credentials verification to recognition of the face, fingerprints, eyes or voice. Some large banks of the country have taken their first steps towards large scale introduction of biometric ATMs, especially for rural banking. At the industry level, however, this technology is yet to be adopted; the high costs involved largely accounting for the delay in adoption.

MULTILINGUAL ATMs

Installation of multilingual ATMs has also entered pilot implementation stage for many large banks in the country. This technological innovation is also aimed at the rural banking business believed to have large untapped potential. The language diversity of India has proved to be a major impediment to the active adoption of new technology, restrained by the lack of knowledge of English.

MULTIFUNCTIONAL ATMs

Multifunctional ATMs are yet to be introduced by most banks in India, but have already been recognized as a very effective means to access other banking services. Multifunctional ATMs are equipped to perform other functions, besides dispensing cash and providing account information. Mobile recharges, ticketing, bill payment, and advertising are relatively new areas that are being explored via multifunctional ATMs, which have the potential to become revenue generators for the banks by effecting sales, besides acting as delivery channels. Most of the service additions to the ATM route require specific approval from the regulator.

ATM NETWORK SWITCHES

ATM switches are used to connect the ATMs to the accounting platforms of the respective banks. In order to connect the ATM networks of different banks, apex level switches are required that connect the various switches of individual banks. Through this technology, ATM cards of one bank can be used at the ATMs of other banks, facilitating better customer convenience. Under the current mechanism, banks owning the ATM charge a fee for allowing the customers of some other bank to access its ATM.

Among the various ATM network switches are CashTree, BANCS, Cashnet Mitr and National Financial Switch. Most ATM switches are also linked to Visa or MasterCard gateways. In order to reduce the cost of operation for banks, IDRBT, which administers the National Financial Switch, has waived the switching fee with effect from December 3, 2007.

INTERNET BANKING

Internet banking in India began taking roots only from the early 2000s. Internet banking services are offered in three levels. The first level is of a bank's informational website, wherein only queries are handled; the second level includes Simple Transactional Websites, which enables customers to give instructions, online applications and balance enquiries. Under Simple Transactional Websites, no fund based transactions are allowed to be conducted. Internet banking in India has reached level three, offering Fully Transactional Websites, which allow for fund transfers and various value added services.

Internet banking poses high operational, security and legal risks. This has restrained the development of internet banking in India. The guidelines governing internet banking operations in India covers a number of technological, security related and legal issues to be addressed in relation to internet banking. According to the earlier guidelines, all internet banking services had to be denominated in local currency, but now, even foreign exchange services, for the permitted underlying transactions, can be offered through internet banking.

Internet banking can be offered only by banks licensed and supervised in India, having a physical presence in India. Overseas branches of Indian banks are allowed to undertake internet banking only after satisfying the host supervisor in addition to the home supervisor.

POINT OF SALE TERMINAL

Point of Sale Terminal is a computer terminal that is linked online to the computerized customer information files in a bank and magnetically encoded plastic transaction card that identifies the customer to the computer. During a transaction, the customer's account is debited and the retailer's account is credited by the computer for the amount of purchase.

PHONE BANKING AND MOBILE BANKING

Phone and mobile banking are a fairly recent phenomenon for the Indian banking industry. There exist operative guidelines and restrictions on the type and quantum of transactions that can be undertaken via this route. Phone banking channels function through an Interactive Voice Response System (IVRS) or telebanking executives of the banks. The transactions are limited to balance enquiries, transaction enquiries, stop payment instructions on cheques and funds transfers of small amounts (per transaction limit of Rs 2500, overall cap of Rs 5000 per day per customer). According to the draft guidelines on mobile banking, only banks which are licensed and supervised in India and have a physical presence in India re allowed to offer mobile banking services. Besides, only rupee based services can be offered. Mobile banking services are to be restricted to bank account and credit card account holders which are KYC and AMC compliant.

With the rapidly growing mobile penetration in the country, mobile banking has the potential to become a mass banking channel, with very minimum investment required by the banks. However, more security issues need to be addressed before banking can be conducted more freely via this channel.

CARD BASED DELIVERY SYSTEMS

Among the card based delivery mechanisms for various banking services, are credit cards, debit cards, smart cards etc. These have been immensely successful in India since their launch. Penetration of these card based systems have increased manifold over the past decade. Aided by expanding ATM networks and Point of Sale (POS) terminals, banks have been able to increase the transition of customers towards these channels, thereby reducing their costs too.

PAYMENT AND SETTLEMENT SYSTEMS

The innovations in technology and communication infrastructure in recent years have impacted banks in a large way through the development of payment and settlement systems, which are central to the major portion of the businesses of banks.

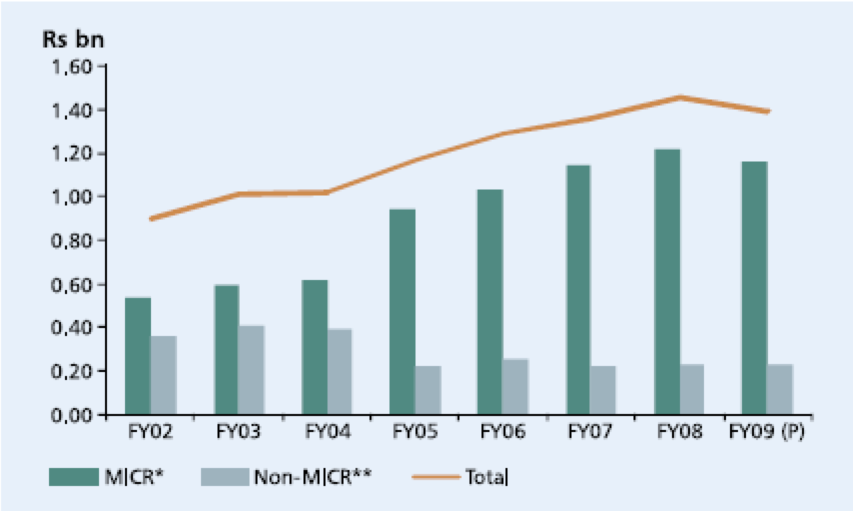
In order to strengthen the institutional framework for the payment and settlement systems in the country, the RBI constituted, in 2005, a Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) as a Committee of its Central Board. The BPSS now lays down policies relating to the regulation and supervision of all types of payment and settlement systems, sets standards for existing and future systems, approves criteria for authorization of payment and settlement systems, and determines criteria for membership to these systems, including continuation, termination and rejection of membership. Thereafter, the government and the RBI felt the need for a legal framework dedicated to the efficient functioning of the payment and settlement systems. The Payment and Settlement Systems Act was passed in December 2007, which empowered the RBI to regulate and supervise the payment and settlement systems and provided a legal basis for multilateral netting and settlement.

Important technological innovations in payment and settlement systems introduced by the RBI in recent years are discussed here.

PAPER BASED CLEARING SYSTEMS

Among the most important improvement in paper based clearing systems was the introduction of MICR technology in the mid 1980s. Though improvements continued to be made in MICR enabled instruments, the major transition is expected now, with the implementation of the Cheque Truncation System for the processing of cheques.

CHEQUE CLEARING



Source: RBI

CHEQUE TRUNCATION SYSTEM (CTS)

Truncation is the process of stopping the movement of the physical cheque which is to be truncated at some point en-route to the drawee branch and an electronic image of the cheque would be sent to the drawee branch along with the relevant information like the MICR fields, date of presentation, presenting banks etc. Thus, the CTS reduces the probability of frauds, reconciliation problems, logistics problems and the cost of collection.

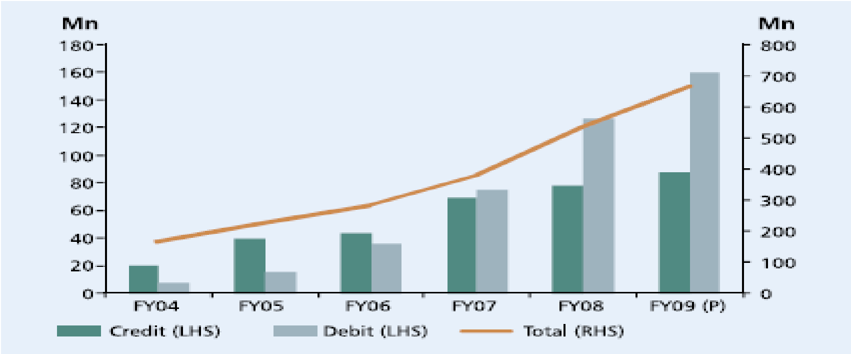
The cheque truncation system was launched on a pilot basis in the National Capital Region of New Delhi on February 1, 2008, with the participation of 10 banks. The main advantage of the cheque truncation system is that it obviates the physical presentation of the cheque to the clearing house. Instead, the electronic image of the cheque would be required to be sent to the clearing house. This would provide a more cost-effective mode of settlement than manual and MICR clearing, enabling realization of cheques on the same day. Amendments have already been made in the NI Act to give legal recognition to the electronic image of the truncated cheque, providing for a sound legal framework for the introduction of CTS.

Currently the effort is on increasing the processing efficiency with respect to paper based transactions, and as far as possible, to reduce the burden on paper based clearing. Through the introduction of advanced electronic funds transfer mechanisms, the RBI has been successful in diverting a large portion of paper based transactions to the electronic route.

ELECTRONIC CLEARING SERVICE

The Electronic Clearing Service (ECS) introduced by the RBI in 1995, is akin to the Automated Clearing House system that is operational in certain other countries like the US. ECS has two variants- ECS debit clearing and ECS credit clearing service. ECS credit clearing operates on the principle of 'single debit multiple credits' and is used for transactions like payment of salary, dividend, pension, interest etc. ECS debit clearing service operates on the principle of 'single credit multiple debits' and is used by utility service providers for collection of electricity bills, telephone bills and other charges and also by banks for collections of principal and interest repayments. Settlement under ECS is undertaken on T+1 basis. Any ECS user can undertake the transactions by registering themselves with an approved clearing house.

ECS TRANSACTIONS



Source: RBI

ELECTRONIC FUNDS TRANSFER SYSTEMS

The launch of the electronic funds transfer mechanisms began with the Electronic Funds Transfer (EFT) System. The EFT System was operationalised in 1995 covering 15 centres where the Reserve Bank managed the clearing houses.

Special EFT (SEFT) scheme, a variant of the EFT system, was introduced with effect from April 1, 2003, in order to increase the coverage of the scheme and to provide for quicker funds transfers. SEFT was made available across branches of banks that were computerized and connected via a network enabling transfer of electronic messages to the receiving branch in a straight through manner (STP processing). In the case of EFT, all branches of banks in the 15 locations were part of the scheme, whether they are networked or not.

A new variant of the EFT called the National EFT (NEFT) was decided to implemented (November 2005) so as to broad base the facilities of EFT. This was a nation wide retail electronic funds transfer mechanism between the networked branches of banks. NEFT provided for integration with the Structured Financial Messaging Solution (SFMS) of the Indian Financial Network (INFINET). The NEFT uses SFMS for EFT message creation and transmission from the branch to the bank's gateway and to the NEFT Centre, thereby considerably enhancing the security in the transfer of funds. While RTGS is a real time gross settlement funds transfer product, NEFT is a deferred net settlement funds transfer product. As the NEFT system stabilized over time, the number of settlements in NEFT was increased from the initial two to six. NEFT now provides six settlement cycles a day and enables funds transfer to the beneficiaries account on T+0 basis, bringing it closer to real time settlement.

The commencement of NEFT led to discontinuation of SEFT, and EFT is now available only for government payments. With the SFMS facility, branches can participate in both the RTGS and the NEFT System. It is envisioned that all the RTGS enabled bank branches would be NEFT-enabled too, so that the customer would have a choice between RTGS or NEFT, based on time urgency, value of the transaction and different charges applicable on the two systems. Using the NEFT infrastructure, a one-way remittance facility from India to Nepal has also been implemented by the RBI since 15th May 2008.

In order to increase the coverage of NEFT to a wider section of bank customers in semi-urban and rural areas, an enhancement of the NEFT called the NEFT-X [National EFT (Extended)] is also proposed for phase wise implementation. This would facilitate non-networked branches of banks to transfer funds electronically by accessing NEFT-enabled branches for transfer of funds. NEFT (Extended) would work on a T+1 basis and would ensure wide rural coverage of the electronic funds transfer system.

RTGS

The other payment and settlement systems deployed were mostly aimed at small value repetitive transactions, largely for the retail transactions. The introduction of RTGS in 2004 was instrumental in the development of infrastructure for Systemically Important Payment Systems (SIPS).

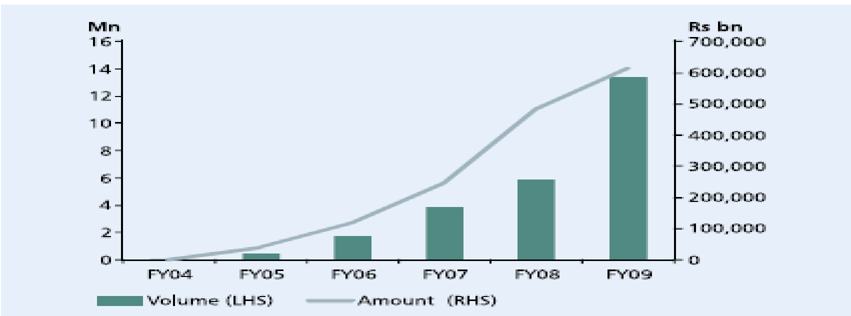
Categories under SIPS:

- The Interbank Clearing System.
- The High Value Clearing System.
- The equities Clearing and Settlement systems of the Stock Exchange systems.
- The MICR clearing systems.
- The Government Securities Clearing Systems.
- The Foreign Exchange Clearing Systems.
- The Real Time Gross Settlement Systems.

The payment system in India largely followed a deferred net settlement regime, which meant that the net amount was settled between banks on a deferred basis. This posed significant settlement risks.RTGS was launched by RBI, which enabled a real time settlement on a gross basis. To ensure that RTGS system is used only for large value transactions and retail transactions take an alternate channel of electronic funds transfer, a minimum threshold of one lakh rupees was prescribed for customer transactions under RTGS on January 1, 2007.

RTGS minimizes systemic risks too, in addition to settlement risks, as paper based funds settlement through the Interbank clearing are replaced by the electronic, credit transfer based RTGS system. High systemic risks are posed by high value interbank transfers, so, it is considered desirable that all major interbank transfers among commercial banks having accounts with RBI be routed only through the RTGS system. The RTGS system had a membership of 107 participants (96 banks, 8 primary dealers, the Reserve Bank and the Deposit Insurance, Credit Guarantee Corporation and Clearing Corporation of India Ltd.) as at end-August 2009. The reach and utilization of the RTGS has witnessed a sustained increase since its introduction in 2004. The bank/branch network coverage of the RTGS system increased to 58,720 branches at more than 10,000 centres facilitating the increased usage of this mode of funds transfer.

PROGRESS IN RTGS TRANSACTIONS



Source: RBI

DRAWBACKS OF IT IN BANKING SECTOR

Likewise coin has two faces, IT has two facets .One is a positive scenario in which the innovations in the field of IT has provided various applications with the use of which the banking sector has developed a lot. But on the other hand, there are various challenges because of highly competitive environment and employees' resistance towards changes. The choice of right channel, justification of IT investment on ROI, e-governance, customer relationship management, security concerns, technological Obsolescence, mergers and acquisitions, penetration of IT in rural areas, and outsourcing of IT operations are the major challenges and issues in the use of IT in banking operations.

Business Challenges	Operational Challenges
Meet customer expectations on service and facility offered by the bank.	Frequent challenges in technologies used focusing up grades in hardware and software, attending to that implementation issues and timely roll out.
Customer retention.	Managing technology, security and business risks.
Managing the spread and sustain the operating profit	System re-engineering to enable. Defined and implemented efficient processes to be able to reap benefits off technology to its fullest potential.
Retaining the current market share in the industry and the improving the same.	Upgrading the skill of work force spread across the country.

So, there is a need to focus on various initiatives for up gradation of technology in banking sector and most important is the implementation of the developed technologies. Many initiatives can be taken into consideration for fully utilizing the IT techniques. Like, completion of correct MIS details in all accounts, Customer/ Account data completion/correction, Customer-ID crystallization, Aggressive marketing of Internet Banking & Debit Card products to increase share of delivery channels transaction, Skill up gradation & increase in awareness of all staff member, Strict compliance of Circular & Guidance available online (CBSINFO)/ Messages issued through scrolling ticker on login page etc.

CONCLUSION

The basic structure of the banking sector is increasingly in conflict with the changing product, delivery, and service needs of the customers.The future belong to financial service provider's not traditional banks. The vast majority of large banks will create value networks. Doing so presents tremendous challenges. Banks will have to first develop a comprehensive distribution system that will enable customers to touch them at multiple points. Banks must also create performance measurement systems to assure the mix products and services they offer are beneficial to both the customer and the bank. They must determine whether to deploy new technologies themselves or with other service providers. Nevertheless, technology alone will not solve issues or create advantages. This technology needs to be integrated in an organization, with the change management issues linked to people resisting new concepts and ideas. It also needs to support a clearly defined and well communicated business strategy.

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NON-GOVERNMENTAL ORGANIZATIONS AND THEIR ACCOUNTABILITY

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ABSTRACT

Non-governmental organizations (NGOs) have overtaken a wider variety of roles from the government. Also a lot of social welfare measures have been delegated to them by the government or even by the private sector for implementation. Bu there has also been increase in cases of misappropriation and mismanagement of grants provided for welfare schemes. So, it becomes essential to assess to accountability of NGOs in terms of utilization of funds as well as their impact on the target groups. This paper delves into the issues of how, why and in what measures accountability of NGOs should be instituted in the contemporary scenario.

KEYWORDS

NGO, social welfare.

INTRODUCTION

Non-governmental organizations (NGOs) are now recognized as key third sector of change on the landscapes of development, human rights, humanitarian action, environment, and many other areas of public action. NGOs exist for various reasons, usually to further the political or social goals of their members or funders. However, there are a huge number of such organizations and their goals cover a broad range of political and philosophical positions. NGOs fulfil a number of functions in areas which tend to be neglected by the private and public sectors. Due to declining the public sector/ governmental provision of services in many countries, NGOs have played an increasingly influential role in a variety of activities which impact upon the lives of many people.

But why do we have to look at NGO Accountability? There are a number of reasons: There has been a rising visibility and stakes of NGOs work. A crisis of legitimacy in many sectors, especially business and government, has amplified the need for NGOs as a ` counterbalance'. More vocal advocacy by NGOs has also challenged the work of corporations, governments and international organization, which in turn has elicited counterattacks. Their potential to address institutional failures (formal and / or informal) for global problems is also being increasingly recognized.

On the other hand, cases of NGO misconduct in advocacy, fund use, management, and governance, have come to light, questioning their very legitimacy and congruency with social values and expectations. Some NGO have also ignored the fact that they are answerable to key stakeholders and the constituency that they work, for promises of performance.

REVIEW OF LITERATURE

Ebrahim (2003) examined how accountability is practiced by non-governmental organizations (NGOs). For this the author reviewed five broad mechanisms: reports and disclosure statements, performance assessments and evaluations, participation, self-regulation, and social audits. Each mechanism, distinguished as either a ''tool'' or a ''process,'' is analyzed along three dimensions of accountability: upward–downward, internal–external, and functional–strategic. The author observed that accountability in practice has emphasized ''upward'' and ''external'' accountability to donors while ''downward'' and ''internal'' mechanisms remain comparatively underdeveloped. Moreover, NGOs and funders have focused primarily on short-term ''functional'' accountability responses at the expense of longer-term ''strategic'' processes necessary for lasting social and political change.

Ann Tilt (2007) *outlined the necessity for a varied conceptualisation of accountability for NGOs, than the one we use when calling for larger accountability of corporations, and exhibits there already existing effective accountability mechanisms. The author found a major defect in the argument for greater NGO accountability is that it is usually offered from a viewpoint that overlooks the conflict between control and the role that NGOs play in civil society - a role that provides a voice for those unable to express themselves, and counters the opinions of more powerful groups. Therefore, the author concluded that NGOs play an important role in society and in the absence of motives for existence such as profit or power it is necessary to apply different criteria when judging their effectiveness.*

Songco (2007) found that the efforts for forming a more practical situation for NGO accountability is to cut apart the different stages at which accountability needs to be promoted, the means that can be used by NGOs functioning in these different levels and incentives and disincentives that can be instituted in this regard.

O'Dwyer and Unerman (2008) investigated the developments occurred in accountability practices at the Irish section of the human rights advocacy NGO Amnesty International and found that while managers preferred the development of holistic accountability mechanisms displaying accountability to a varied range of stakeholders, a hierarchical notion of accountability favouring a narrow range of potential influential stakeholders, has begun to control external accountability discourse and practices.

OBJECTIVES

1. To discuss the need for accountability of Non-Government Organisations.
2. To contextualize accountability and discuss the methods adopted for it.
3. To analyse various challenges faced while practicing accountability practices by Non-Government Organisations.

CIVIL SOCIETY AND ACCOUNTABILITY

The concept of accountability-referring to the ways by which individuals or groups are held responsible for their actions -has become a buzzword in recent years, enjoying broad currency in debates that extend beyond the narrow disciplines of political theory and corporate governance. Concerns about accountability are increasingly being raised, from a variety of quarters, in relation to the burgeoning 'third sector' of civil society organizations (CSOs) and popular social movements, whose role in contributing to and shaping public life in communities around the world can no longer be ignored.

WHY IS THIS DEBATE HAPPENING?

There are several major factors contributing to the rise of this particular debate.

1. The explosive growth of non-profit organizations and citizen groups in recent years, particularly in the past decade since the end of the Cold War and the wave of democratization which swept through many parts of the world. As CSOs have proliferated and become more visible, while remaining relatively unregulated in many parts of the world (compared to government and the private sector), questions have been raised about the basic 'checks and balances' on civil society activity.

2. Some high profile scandals involving non-profit organizations have attracted public attention and done serious damage to the overall credibility of civil society groups. Such instances have not only motivated external audiences to question whether CSO accountability mechanisms are sufficiently robust and developed, but have also led to an internal drive from within the sector to develop improved tools and processes for ensuring accountability.
3. As civil society has grown in size, its scope and influence have also grown. If at one time civil society groups focused primarily upon the direct provision of services to constituencies at the local or national level, CSO are increasingly expanding their work to include advocacy activity aimed at addressing the policies which impact upon their particular area of work. NGOs administering networks of homeless shelters, for example, join forces on campaigns around housing and welfare policies, while humanitarian aid and development groups increasingly engage in campaigns around social and economic justice in order to lessen political causes of famine and poverty.

This growing political role for CSOs seems to be taken as a challenge by other established political actors who question what right civil society groups have to be demanding a say in policy decisions.

Although calls for the greater accountability of NGOs have become louder in recent years, the issue has been recognized by many NGOs for decades and a wide range of experience and scholarship exists on some of the problems and solutions. That scholarship has largely focused on two key areas-international development assistance, where questions of an organization's accountability to their intended beneficiaries are considered, and policy advocacy, where questions about freedom of expression and diversity and legitimacy of representation are debated.

METHODS OF ACCOUNTABILITY

If these are some of the main sources of an NGO's legitimacy, they are intricately connected to specific mechanisms of accountability. If performance is critical to an NGO's legitimacy, it must then find convincing and transparent ways of proving the quality of its performance.. If an NGO claims that it gains part of its mandate from the people that support it and work with it, then it must be able to show that it is engaged in a meaningful relationship with these people which ensures they are informed about the organization and influential in its operations.

NGO accountability has define as, which involve the three aspects of reporting, involving and responding as a;

'the process by which an NGO holds itself openly responsible for what it believes, what it does and what it does not do in a way which shows it involving all concerned parties and actively responding to what it learns'.

The fact that accountability is primarily a process means that applying it is all about designing and operating practical mechanisms to make it a reality. In order to identify these people, the methodology of stakeholder analysis has become one of the key tools of NGO and other organizations' accountability as follow:

1. Any accountability process is to map and analyses an NGO's various stakeholders in a given situation. Even an initial mapping usually reveals certain conflicting interests between stakeholders. An NGO must then find ways to priorities these stakeholders in some way as primary.
2. This stakeholder analysis then becomes the key document with which to design the right accountability mechanisms-whether they are social audits, evaluations, external regulation, complaints procedures, membership systems, environmental impact assessments, specific stakeholder surveys etc.

CONTEXTUALIZING ACCOUNTABILITY

A key part of the process of tailoring the right accountability mechanism to the right stakeholders is recognition of context. The context in which human rights organizations and NGOs operate is by no means uniform.. Accountability methodology will have to be developed imaginatively in any many contexts where 'off the shelf' mechanisms may be unworkable.

Accountability mechanisms must be open for all to see. While this is a given in current accountability doctrine, it may pose certain problems for human rights organisations who may not always be in a position to reveal their sources and contacts - some of the 'how' of their operations. Nevertheless, any accountability system must recognise transparency as primary and identify specific criteria for reserving certain information on occasion.

A BASIC FRAMEWORK

Several people in the NGO world have produced simple accountability frameworks. For most NGOs, only a small part of this accountability is legally required. Although the predominant metaphor of accountability is financial, the actual demands of NGO accountability today are much wider than a financial procedure that ensures that figures tally. Accountability is much more about reporting on relationships, intent, objectives, method and impact. It records facts and makes judgments. Also, current orthodoxy in accountability is as keen to 'embrace failure' and so learn from it, as it would be to celebrate success and repeat it.

ACCOUNTABILITY FOR WHAT?

An accountability process should start by identifying the rights involved in any NGO programme, the relevant rights-holders and duty-bearers related to that right and the content of the duty. From this rights-duties analysis, an NGO can then identify its own specific duty and set out to account for it, while making clear the responsibilities of others.

ACCOUNTABILITY TO WHOM?

In any piece of work, an NGO will need to account to different groups of people as stakeholders. These will be the targeted rights-holders, the various duty-bearers and those secondary and tertiary stakeholders beyond the primary stakeholders who operate as interested or critical observers.

ACCOUNTABILITY HOW?

Different stakeholders will require accounting to in different ways. Some people will require figures alone and Others will require figures and impact. Some will be literate, others will not. So accountability will require diverse media. Accountability processes must also involve key stakeholders through representative meetings, research, representative assemblies or voting systems. But virtues common to all NGO accountability mechanisms must be veracity and transparency.

ACCOUNTABILITY TO IMPROVE

NGO accountability mechanisms must show clearly how the agency is responding to what it has learnt and what its stakeholders are telling it. The mechanisms chosen must demand and show responsiveness by informing people about, and involving people in, new action taken.

WHAT: IS BEING DONE TO IMPROVE THE ACCOUNTABILITY OF CIVIL SOCIETY?

It is important to underscore that civil society legitimacy and accountability is an extremely important and valid issue. This is particularly true when discussion is held with an eye to building up the long-term credibility and effectiveness of civil society as an actor. Expanding CSO capacity around reporting and information disclosure.

There are a range of accountability mechanisms that are being used by civil society groups to proactively and self-critically take responsibility for their Organizational structures, operations, policies and activities. These tools are far from mutually exclusive and, in many instances, combinations of these techniques are integrated in order to meet the different demands of 'upwards' and 'downward' accountability.'

These include:

1. **NGO CODE OF CONDUCT**

Voluntary codes of conducts are but one way for NGOs to address accountability issues. They are usually developed by national or sectoral NGO coalitions and consist of a public commitment to "principles or standards of performance to which an organisation or a group of organisations voluntary sign up and against which they are willing to be judged."

The overall goal of developing a code of conduct is to provide an appropriate framework to address these issues, setting standards of performance with regard to:

- Effectiveness of NGOs in the quantity, quality and responsiveness of their activities;
- The independence, transparency and reliability of their institutional structures.
- The adherence to their mission as well as to a set of core values, guiding principles, and policies.

BENEFITS OF DEVELOPING A CODE OF CONDUCT FOR NGOs

They are many expected benefits of developing codes of conducts for NGOs. The general drive behind this type of initiatives is to promote the sector's integrity and legitimacy by setting high common accountability standards and sometimes also clear reporting requirements. They represent a powerful statement of intent directed at both internal and external stakeholders that unethical behaviour will not be tolerated. More specifically, the establishment of and adherence to a code of conduct sends both external and internal audiences a signal of credibility, legitimacy, trustworthiness, and professionalism:

A) LEGITIMACY

The adoption of an ethical code can contribute to increasing the trustworthiness and credibility of an organisation, and enhancing the confidence and commitment of its stakeholders to the legitimacy of its operations. NGOs speaking from a strong value base are more likely to attract supporters and fend off political attacks.

B) TRANSPARENCY AND CLARITY OF INTERNAL PROCESSES

Codes of conduct can also contribute to clarify internal processes and introduce greater transparency in the organisation's management and way of operating.

C) ACCOUNTABILITY AND REPRESENTATION

By setting up an explicit set of values, principles, standards of performance and internal processes, codes of conducts provide a framework against which organisations can be held accountable.

D) PROFESSIONAL STANDARDS AND PERFORMANCES

By promoting high standards of practice and rigorous standards of performance, a code of conduct can also contribute to raise the organisation's professional standards and increase its performance and effectiveness.

E) INTERNAL COHESION

Codes of conduct can enhance the sense of community and belonging between an organisation's staff, members and sakeholders that commit to a set of core values and share a common mission.

F) POTENTIAL FINANCIAL BENEFITS

Donors typically ask accountability related questions before channeling aid through NGOs, investigating their independence, effectiveness and accountability. Addressing accountability issues in a code of conduct may not only contribute to attract more funds but ensure better use of resources.

CHALLENGES

The major challenge involved in introducing a code of conduct for NGOs relates to implementation and enforcement. Much time, resources and energy are usually spent on the development process but many organisations fail to implement and maintain the code.

Organisations often overlook the impact that the code of conduct may have on the way of doing things and the changes involved in the agencies processes. Change management is therefore a critical and often neglected aspect of the implementation of codes of conduct to overcome potential resistance to change from staff whose work will be altered by the new standards. It is therefore important to promote the code of conduct though communication, education and training, using various channels such as workshops, seminars, conferences, etc.

Another limitation of codes of conducts as a self regulatory mechanism is that they are by nature voluntary and non binding and often lack clear reporting or formal complaints mechanisms. In addition, when codes of conduct regulate a group of organisations, signatory agencies may be reluctant to report one another for breaching the code.

2. **TRANSPARENCY**

NGOs should operate open information policies, based on the presumption of disclosure, and make information easily accessible to relevant collaborators.

NGOs operate for public benefit, like governments, rather than private benefit, like companies. In order to make the most contribution to other people's efforts, NGOs should operate with the openness and transparency expected from democratic governments, unless there are strong reasons not to.

Information is power. Transparency empowers the people an NGO works with. It makes it easier for them to collaborate with the NGO, as they understand its work better and how it can best contribute to other efforts.

Finally, by being transparent themselves, NGOs model the good practice that they often press other stakeholders to meet, for instance among governments and private sector companies. This can help citizens develop the skills and confidence to hold powerful actors to account.

NGOs should routinely publish:

- Strategic plans, goals and background analysis
- Performance reports, including feedback & scope indicators and evaluations
- Which standards they use and performance in comparison to them Major collaborators
- Legal status, governance and management arrangements, including identifying board members and senior managers
- Financial information
- Contact information

However, transparency is much more than merely complying with regulations around disclosure of annual reports and financial accounts; it is about engaging with key stakeholders to understand their information needs and responding to these needs so that they can make informed choices in relation to the organisation they are affected by. But why provide more information than is legally required?

Greater transparency will help shore up NGO legitimacy and credibility. Greater transparency will improve performance. Being transparent opens up channels of communication with stakeholders, builds trust and improves impact.

Yet there are risks associated with transparency, if it is not thought through properly. Opening up about one issue often results in questions about another. For example, with increased transparency around the use of financial resources, NGOs are finding it necessary to also explain how their activities translate into impact.

STANDARDS FOR DISCLOSURE AND PUBLIC REPORTING

Standards for disclosure and public reporting are determined in some countries by national legislation, but are adopted by CSOs in other contexts on a voluntary basis. Area such as annual reports, organisational or project evaluations, strategic plans based on external assessments, and regular communications (newsletters, updates, briefs) can provide channels for public access to information about the organization's work, financial status, governance structure and operational impact.

3. **CONSULTATIVE AND PARTICIPATORY MECHANISMS**

Consultative and participatory mechanisms, allow for the meaningful involvement of diverse constituencies (including beneficiaries) in the organisation's work, from project planning to evaluations. There are also two critical 'built-in' accountability mechanisms that bear mentioning as below

a) The principle of 'perform or perish: not a single cent secured to undertake CSO activities is secured on the basis of obligation. Whether funding is derived from a government agency, individual donor, foundation, business organisation or multilateral institution, resources will not continue to be available if the CSO is not performing on the basis of its vision, mission and objectives.
b) 'Built-in' mechanism concerns the effectiveness of civil society advocacy efforts. Civil society groups that do not have credibility, genuine links to the grassroot level and expertise around an issue are automatically limited in their effectiveness when it comes to advocacy. This is a reflection of the 'internal' drive for accountability that characterises many CSOs -a sense of responsibility deriving from within the group which pushes it to act in concert with its articulated mission and values in making a meaningful contribution to the vision for which the organization exists.

SETTING STANDARDS

A number of initiatives set standards for how NGOs should collaborate with other people. Standards need to balance flexibility, so they apply in different contexts and being specific, to provide guidance for staff. They should encourage staff to analyze social situations and different interest groups and to pay particular attention to the priorities of the poorest and most marginalized people, including women.

SUPPORTING STAFF

Across the sector NGOs have a lot of experience of supporting staff to build constructive relationships with different people. For instance, a great deal of training and resource material is available, along with opportunities for staff to reflect and share experience. Some commonly used approaches can be built into organisational policies, including:

- Making operational decisions together
- Transparency
- Delivering on expectations and maintaining quality
- Working with credible staff or partners
- Being easy to contact and demonstrably responsive
- Staying in one place for enough time

MONITORING RELATIONSHIPS

The quality of relationships can be systematically monitored using feedback. This should be triangulated with other views and discussed together with staff and relevant collaborators. Staff should be held to account for their performance in managing constructive relationships. However oversight needs to be handled sensitively, as it can directly affect relationships. It should be proper check upon the field visits, discussions with collaborators and requiring simple reports. NGO's work is primarily determined by the quality of its relationships with its intended beneficiaries.

CONCLUSION

Although many NGOs are not yet actively considering their own accountability, there is a significant amount of initiative and experience that can be drawn upon to ensure NGOs develop their accountability to those they seek to serve. Therefore, unless they address issues of comparative power in society and frame their work in the context of democratic accountability, even those initiatives on NGO accountability which do not seek to hinder NGOs may actually do so. People working within NGOs and the international community should engage with the concerns of their critics and channel them toward the truly troubling un-accountabilities in society, and help move us beyond a focus on organizational accountability towards one of societal democracy.

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LEGAL FRAMEWORK OF ENVIRONMENTAL ACCOUNTING IN INDIA

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ABSTRACT

The Study Focused on the legal Framework of environmental accounting in India. The main purpose of this paper is the effect of environmental accounting on the companies. The study described the all the rules and regulations related to the environmental accounting. It also examined the why the companies are used the environmental accounting. The study analyzed environmental accounting benefit able for the companies as well as customers. The study based on descriptive nature. It also observed that the environmental accounting had positive effect on the companies.

KEYWORDS

Environmental Accounting, Regulation, Companies, Performance.

MEANING OF ENVIRONMENTAL ACCOUNTING

Environmental accounting is a subset of Accountancy proper, its target being to incorporate both economic and environmental information. It can be conducted at the corporate level or at the level of a national economy through the National Accounts of Countries. Environmental Accounting is a field that identifies resource use, measures and communicates costs of a company's or national economic impact on the environment. Costs include costs to clean up or remediate contaminated sites, environmental fines, penalties and taxes, purchase of pollution prevention technologies and waste management costs. An environmental accounting system consists of environmentally differentiated conventional accounting and ecological accounting. Environmentally differentiated accounting measures effects of the natural environment on a company in monetary terms. Ecological accounting measures the influence a company has on the environment, but in physical measurements.

DEFINITION OF ENVIRONMENTAL ACCOUNTING

"Accounting including costs to environment in decision making the practice of including the indirect costs and benefits of a product or activity". For example, its direct costs when making business decision.

SUBFIELD OF ENVIRONMENTAL ACCOUNTING

1. **Global Environment**
2. **National Environment**
3. **Corporate Environment**

- Environmental Management Accounting
- Environmental Financial Accounting

HISTORY OF ENVIRONMENTAL ACCOUNTING

The number of companies and other organizations solidifying their environmental approach and developing business activities that take the environment into consideration and include environmental Conservation efforts continue to increase. Efforts made in environmental accounting comprise a part of these environmentally-conscious business activities. Environmental accounting data is not only used by companies or other organizations internally, but is also made public through disclosure in environmental reports. The disclosure of environmental accounting data as one of the key elements in an environmental report enables those parties utilizing this information to get an understanding of the company's stance one environmental management and how it specifically deals with environmental issues. At the same time, a more comprehensive grasp of the companies and other organizations' environmental information can be obtained. The first environmental accounts were constructed in several European countries working independently of each other. Norway was one of the first. Influenced by the publication of Limits to Growth (Meadows et al. 1972) and a burgeoning environmental movement, Norwegian officials were concerned that their natural resources, on which their economy is relatively dependent compared with other European countries, would run out. They therefore developed accounts to track use of their forests, fisheries, energy, and land. In the 1980s, they developed accounts for air pollutant emissions, which were closely tied to the energy accounts. The energy accounts were integrated into models used for macroeconomic planning, taking into consideration the roles of resource-based sectors in economic growth.

The Netherlands was also a leader in the development and adoption of environmental accounting. Dutch interest in this area originated with the work of Roefie Hurting, who developed and sought to implement a measure of sustainable national income that would take into account the degradation and depletion of environmental assets resulting from economic activity. (3) Although his approach was not implemented at that time, his work led the national income accountants to develop the national accounts matrix including environmental accounts (NAMEA), which builds on portions of the national income accounts by adding physical data on pollutant emissions by sector. The NAMEA approach has been adopted by Eurostat, implemented in many other European countries, and integrated into the environmental accounting procedures developed under UN auspices (de Haan 1999). The Hueting approach also has since been tested in the Netherlands (Verbruggen 2000). France was a third early adopter of environmental accounting. In the 1980s, it began developing an approach termed the Comptes du patrimonies', or patrimony accounts. These involved an integrated system structured around three distinct but linked units of analysis. First, natural, cultural, and historical resources were to be measured in physical terms and their stocks and flows quantified. Second, places were

REVIEW OF LITERATURE

Obrealova et al.(2005) the study focused on the selected problems of environmental accounting at corporate level .The study also analyzed the role of small medium scale enterprise in sustainable development .The study helpful for the companies with connected to management system. **Seethar.et al. (2007)** examined the relationship between environmental accounting and environmental management system .It also assessed the sustainability of organization. The study also analyzed the organization lack of awareness and interest about environmental prevention. It concluded that the environmental accounting benefit able for the organization by taken environment corporate policies and technological development. **Stanciu et al. (2011)** the study focused on the environmental costs. It also provided important information about company financial position & performance of entities .It also described four stages of environmental accounting .**Ali et al.(2010)** examined the nature of the environmental accounting in Bangladesh It also showed that the impact of companies activities on the environment. **Makori&Jagongo (2013)** examined the environmental accounting had ability to provide accurate information in the financial statement. The study observed that the significant relationship between the environmental accounting and profitability of selected firms listed in India .It considered data from annual reports and account of 14 randomly selected quoted companies in Bombay Stock Exchange in India. The results indicated that the positive relationship between environmental accounting net profit margin and dividend per share and negative relationship between return on capital employed. **Saymah ,F and Shouboki (2013)** assessed the environmental responsibly unit of Jorden Industries Companies listed at ASE .The study had taken two hypothesis .firstly there is not significant relationship between the Jorden Industries companies with environmental accounting. **Igbal et al (2013)** examined the environmental accounting implementation and environmental performance and environmental disclosure as mediation on company value .It had taken the sample of 59 company's .It also used the sampling technique.

OBJECTIVES OF THE STUDY

1) To Study the Legal Framework of environmental Accounting.
2) To Study the environmental protection in India.

LEGAL FRAMEWORK OF ENVIRONMENTAL ACCOUNTING

In the last few years, there is growing awareness of the need to discover the art of living with nature and also realized that environment is not a permanent asset .Now a day's more attention is paid to the skills of protection of natural resources instead of earlier focused on the aspects of creation damage .The later Mrs Indira Gandhi (1972) had rightly observed "We must predicate ourselves to the protection and wise management of our life sustaining environment

Environment Protection from the Indian Constitution Perspective.

1) The State's responsibility with regard to environmental protection has been laid down under Article 48-A of our Constitution, which reads as follows: "The State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country".
2) Environmental protection is a fundamental duty of every citizen of this country under Article 51-A
3) Article 21 of the Constitution is a fundamental right which reads as follows: "No person shall be deprived of his life or personal liberty except according to procedure established by law."
4) Article 48-A of the Constitution comes under Directive Principles of State Policy and Article 51 A(g) of the Constitution comes under Fundamental Duties.
5) Of our Constitution which reads as follows:"It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures."
6) The State's responsibility with regard to raising the level of nutrition and the standard of living and to improve public health has been laid down under Article 47 of the Constitution which reads as follows:"The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavor to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health."

MANDATORY REQUIREMENTS - ENVIRONMENT

- **THE ELECTRICITY ACT, 2003**

This Act seeks to create a framework for the power sector development by measures conducive to the industry. Electricity Act does not explicitly deal with environmental implications of activities related to power transmission. The applicable legal provisions under this Act are as follows: Section 68(1) - sanction from the Ministry of Power (MOP) is a mandatory requirement for taking up any new project. The sanction authorizes SJVN to plan and coordinate activities to commission new projects.

- **THE FOREST (CONSERVATION) ACT, 1980**

This Act provides for the conservation of forests and regulating diversion of forestlands for non-forestry purposes. When projects fall within forestlands, prior clearance is required from relevant authorities under the Forest (Conservation) Act, 1980. State governments cannot de-reserve any forestland or authorize its use for any non-forest purposes without approval from the Central government.

- **ENVIRONMENTAL (PROTECTION) ACT, 1986**

The Environment (Protection) Act, 1986 was introduced as an umbrella legislation that provides a holistic framework for the protection and improvement to the environment.In terms of responsibilities, the Act and the associated Rules requires for obtaining environmental clearances for specific types of new / expansion projects (addressed under Environmental Impact Assessment Notification, 1994) and for submission of an environmental statement to the State Pollution Control Board annually. Environmental clearance is not applicable to hydro projects also.

- **AIR (PREVENTION AND CONTROL OF POLLUTION) ACT 1981**

The objective of this Act is to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith. Decisions were taken at the United Nations Conference on the Human Environment held in Stockholm in June 1972, in which India participated, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, includes the preservation of the quality of air and control of air pollution. Therefore it is considered necessary to implement the decisions foresaid in so far as they relate to the preservation of the quality of air and control of air pollution.

- **WATER (PREVENTION & CONTROL) ACT 1974**

The objectives of the Water (Prevention and Control of Pollution) Act are to provide for the Prevention and Control of Water Pollution and the maintenance or restoration of the wholesomeness of water for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.

- **WILDLIFE PROTECTION ACT, 1972**

According to the Wildlife Protection Act, 1972 "wildlife" includes any animal, bees, butterflies, crustacean, fish and moths; and aquatic or land vegetation which forms part of any habitat. In accordance with Wildlife (Protection) Amendment Act, 2002 "no alternation of boundaries / National Park / Sanctuary shall be made by the State Govt. except on recommendation of the National Board for Wildlife (NBWL)".

- **THE BIOLOGICAL DIVERSITY ACT, 2002**

The Ministry of Environment and Forests has enacted the Biological Diversity Act, 2002 under the United Nations Convention on Biological Diversity signed at Rio de Janeiro on the 5th day of June, 1992 of which India is also a party. This Act is to "provide for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the sued of biological resources, knowledge and for matters connected therewith or incidental thereto."

- **HAZARDOUS WASTES (MANAGEMENT AND HANDLING) AMENDMENT RULES, 2003**

These Rules classify used mineral oil as hazardous waste under the Hazardous Waste (Management & Handling) Rules, 2003 that requires proper handling and disposal. Organization will seek authorization for disposal of hazardous waste from concerned State Pollution Control Boards (SPCB) as and when required Other Environment – Related Laws

- **THE SHORE NUISANCE (BOMBAY AND KOLABA) ACT, 1853**

This is the earliest Act on the statue book concerning control of water pollution in India.

- **THE SERAIS ACT, 1867**

The Act enjoined upon a keeper of Serai or an inn to keep a certain quality of water fit for consumption by “persons and animals use it” to the satisfaction of the District magistrate or his nominees. Failure for maintaining the standard entailed a liability of rupees twenty.

- **THE NORTH INDIA CANAL AND DRAINAGE ACT, 1873**

Certain offences have been listed under the Act contained in Section 70.

- **OBSTRUCTION IN FAIRWAYS ACT, 1881**

Section 8 of the Act empowered the Central Government to make Rules to regulate or prohibit the throwing of rubbish in any fairway leading to a port causing or likely to give rise to a bank or shoal.

- **INDIAN EASEMENTS ACT, 1882**

Illustrations (f), (h) and (j) of Section 7 of the Act deal with pollution of waters.

- **THE INDIAN FISHERIES ACT, 1897**

The Indian Fisheries Act, 1897 contains seven sections. Section 5 of the Act prohibits destruction of fish by poisoning waters.

- **THE INDIAN FOREST ACT, 1927**

Section 26(I) of the Act makes it punishable if any person, who, in contravention of the rules made by the State Government, poisons water of a forest area. The State Government has been empowered under Section 32(f) to make rules relating to poisoning of water in forests.

- **THE DAMODAR VALLEY CORPORATION ACT, 1948**

The Act _government the Corporation to make regulations with the previous sanction of the Central Government for preventing “pollution of water”.

- **THE FACTORIES ACT, 1948**

Factories Act, 1948 is social welfare legislation intend to secure health, safety and welfare of the workers employed in factories. However, some of the provisions of this Act are concerned with prevention of water pollution.

- **THE MINES ACT, 1952**

Chapter V of the Act deals with provisions regarding health and Safety of the employees. Section 19(I) Government upon arrangement for the quality of water for drinking purposes.

- **THE RIVER BOARDS ACT, 1956**

The Act provides for the creation of River Boards for regulation and development of interstate rivers and river valleys. One of the functions of the Board is to advise to the Government concerned on “prevention of pollution of the waters of the interstate rivers”.

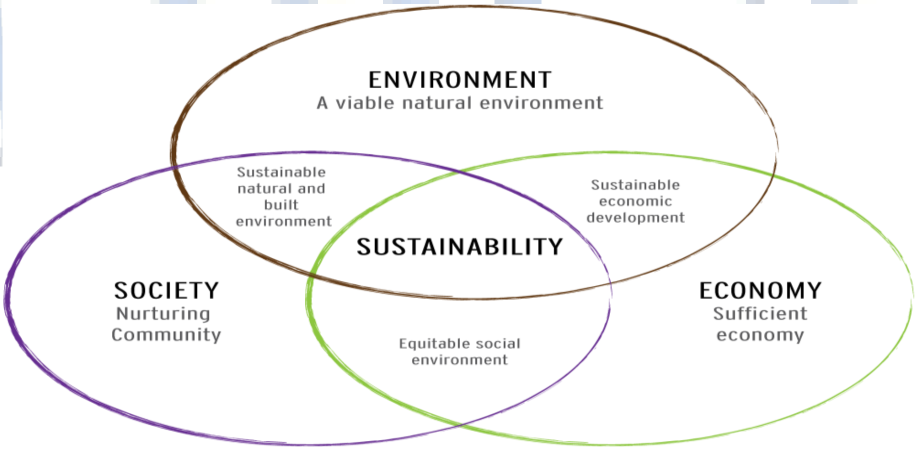
- **THE MERCHANT SHIPPING ACT, 1958**

The International Convention for the Prevention of Pollution of the Sea by Oil, 1954 is the first treaty for the reduction of oil pollution of the sea. In order to give effect to this Convention, the Merchant Shipping Act regulates and controls the discharge of oil or oil mixture by an Indian tanker or ship within any of the prohibited zones or by a foreign tanker or other ship within the prohibited zone adjoining the territories of India. Further, there is a prohibition for discharging any oil anywhere at sea from an Indian ship.

WHY SHOULD COMPANIES USE ENVIRONMENTAL ACCOUNTING?

Companies and managers usually believe that environmental costs are not significant to the operation of their businesses. However, often it does not occur to them that some production costs have an environmental component. For instance, the purchase price of raw materials: the unused portion that is emitted in a waste is not usually considered an environmentally related cost. These costs tend to be much higher than initial estimates (when estimates are even performed) and should be control end and minimized by the introduction of effective cleaner production initiatives whenever possible. By identifying and controlling environmental costs, EMA systems can help environmental managers justify these cleaner production projects, and identify new ways of saving money and improving environmental performance at the same time. 74 UNDSD: Improving Government’s Role in the Promotion of Environmental Managerial Accounting, United Nations, New York, 2000, p. 39 .When Hidden, it is impossible to know what share of the costs is related to any particular product or process or is actually environmental Polluting products will appear more profitable than they actually are because some of their production costs are hidden, and they may be sold under priced. Cleaner products that bear some of the environmental costs of more polluting products (through the overhead), may have their profitability underestimated and be over priced. Since product prices influence demand, the perceived lower price of polluting products maintains their demand and encourages companies to continue their production, perhaps even over that of a less polluting product. Finally, implementing environmental accounting will multiply the benefits gained from other environmental management tools. Besides the cleaner production assessment, EMA is very useful for example in evaluating the significance of environmental aspects and impacts and prioritizing potential action plans during the implementation and operation an environmental management system (EMS). EMA also relies significantly on physical environmental information. It therefore requires a close cooperation between the environmental manager and the management accountant and results in an increased awareness of each other's concerns and needs. As a tool, EMA can be used for sound product, process or investment project decision-making. Thus, an EMA information system will enable businesses to better evaluate the economic impacts of the environmental performance of their businesses.

HOW TO ENVIRONMENTAL ACCOUNTING WORKS



RESEARCH METHODOLOGY

This study is descriptive and exploratory in nature. A descriptive research is a type of conclusive research that has as its major objective the description of something- usually market characteristics or functions. Descriptive Research assumes that the researcher has much prior knowledge about the problem situation. It is characterized by the prior formulation of specific hypotheses. Thus, the information needed is clearly defined. It is preplanned and structured. The present study is purely theoretical in nature and based on the findings of other researchers.

CONCLUSION

Environmental accounting is a subset of Accountancy proper, its target being to incorporate both economic and environmental information. This study is benefit able for the customers. Environmental accounting has wide area. Environmental accounting is helpful for the companies as well as investors, government and others parties. In this paper we explained much environmental protection Act in India. Environmental Accounting also analyzed the company financial position .

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CORPORATE SOCIAL RESPONSIBILITY: AN INDIAN PERSPECTIVE

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ABSTRACT

India had a robust history of philanthropy. Corporate sector philanthropy can be traced in 20th century when companies provide huge funds for social welfare activities. But now in 21st century there is a need to distinguish between philanthropy and corporate social responsibility. As philanthropy is voluntary in nature, so very less companies were there who recognised their responsibility towards the stakeholders. So Companies Act, 2013 introduced the concept of corporate social responsibility under section 135 that makes it mandatory for companies of a certain size and profitability to spend 2% of their average net profits of previous 3 years on corporate social responsibility. Insertion of this section legally acknowledges that corporate sector needs to take a balanced view of the components of corporate social responsibility and implement the strategies in coherence with their vision, mission and values. In this paper an attempt has been made to highlight the need of legal recognition of corporate social responsibility provision by studying a sample of top 30 companies in India.

KEYWORDS

Corporate social responsibility, Companies Act, 2013, Philanthropy.

1. INTRODUCTION

In India many corporate houses have been traditionally engaged in doing philanthropy. Corporate philanthropy and CSR can be distinguished as corporate philanthropy is optional and often very generous donation but CSR provisions put formal and greater responsibility on companies to set out clear framework and process to ensure strict compliance. CSR provisions are effective from financial year 2014-15. Indian constitution have provided right to equality but the socio-economic realities of the country still have a long way to go to match this vision of independent India where today there are many first among equals. The inclusion of the CSR disclose-or-explain mandate under the Companies Act, 2013 is an attempt to supplement the government's efforts of equitably delivering the benefits of growth and to engage the corporate sector with the country's development agenda through promoting greater transparency and disclosure their activities. Schedule VII of the Act, lists out the CSR activities, suggests society to be imperative for the business.

2. CONCEPT OF CORPORATE SOCIAL RESPONSIBILITY

Corporate social responsibility (CSR)

The term "corporate social responsibility" is often used interchangeably with corporate responsibility, corporate citizenship, sustainable development and business ethics and in some cases corporate governance. Although these terms are different, they all point in the same direction: throughout the industrialized world and in many developing countries there has been a sharp escalation in the social roles corporations are expected to play. Companies are facing new demands to engage in public-private partnerships and are under growing pressure to be accountable not only to shareholders, but also to all stakeholders.

Corporate social responsibility encompasses not only what companies do with their profits, but also how they make them. It goes beyond philanthropy and compliance and addresses how companies manage their economic, social, and environmental impacts, as well as their relationships in all key spheres of influence: the workplace, the marketplace, the supply chain, the community, and the public policy realm.

According to the UNIDO "Corporate Social Responsibility is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives ("Triple-Bottom-Line- Approach"), while at the same time addressing the expectations of shareholders and stakeholders. In this sense it is important to draw a distinction between CSR, which can be a strategic business management concept and charity, sponsorships or philanthropy. Even though the latter can also make a valuable contribution to poverty reduction, will directly enhance the reputation of a company and strengthen its brand, the concept of CSR clearly goes beyond that." So from the above we say CSR is more comprehensive concept as it includes welfare of all the stakeholders.

3. REVIEW OF LITERATURE

Asongu (2007) finds that a strategic CSR can bring both short and long term financial benefits to a socially responsible company. Those responsible for CSR programs in various companies must perceive social responsibility as not being mere charity or philanthropy. The benefits that can accrue from a properly implemented strategic CSR program entail classifying such a program as an investment for the company, not an expense. Epstein-Reeves (2012) provide six reasons companies should embrace CSR Companies that "get it" are the ones that are using CSR as a way to push the following business processes into the organization that is innovation, cost savings, brand differentiation, long-term thinking, customer engagement, employee engagement. Valor (2005) highlighted that when stakeholders have made it clear that companies must achieve social and environmental performances, managers have shown their reluctance to sacrifice profits in favour of the common good. This reluctance is labelled as "managerial capture" and which no one denies that it prevails almost all over the world.

4. OBJECTIVES

1. To study the phases of CSR in India.
2. To study need for mandating CSR under Companies Act, 2013

5. PHASES OF CSR IN INDIA

Phase I (Till 1914): CSR motivated by charity and philanthropy

The oldest form of CSR was motivated by charity and philanthropy with direct influence from culture, religion, family tradition, and industrialization process. Industrialist shared a part of their treasure with the society for various causes. But their efforts towards social as well as industrial development were not only driven selfless and religious motives but also influenced by caste groups and political objectives.

Phase II (1914-1960): CSR for India's social development

Dominated by the country's struggle for independence and influenced fundamentally by Gandhi ji's theory of trusteeship for consolidation and amplification of social development. Gandhi ji's reform programs which included activities that sought in particular the abolition of untouchability, women empowerment and rural development. According to Gandhi, Indian companies were supposed to be the "temples of modern India".

Phase III (1960-1980): CSR under the paradigm of the mixed economy

The paradigm of mixed economy with the emergence of legislation on labour and environmental standards, affected the third phase of Indian CSR. This phase is characterized by a shift from corporate self regulation to strict legal and public regulation of business activities.

Phase IV (1980-till 2013): CSR at the interface between philanthropic and business approaches

Indian companies and stakeholders began abandoning traditional philanthropic engagement and, to some extent, integrated CSR into a coherent and sustainable business strategy, partly adopting the multi stakeholder approach.

Phase V (2014 onwards): Legal Recognition under Companies Act 2013

Changing nearly six decades old regulations for corporate reporting, the new Companies Act makes it mandatory for certain class of profitable enterprises to spend profits on social welfare activities. Such move estimated to provide thousands of crore a year. Scheduled to be implemented in 2014-15, the relevant section 135 saw extensive public consultations, debates and the exercise is now completed. Several reports from the houses of Grant Thompson and KPMG have been circulated both defining, outlining and show the path for strategising the CSR both form the regulatory perspective as well as the company implementation perspective.

6. LEGAL AND PROCEDURAL ASPECTS OF SECTION 135 UNDER COMPANIES ACT, 2013

6.1 Every company having

6.1.1 Net worth ≥ Rs 500cr or

6.1.2 Turnover ≥ Rs 1,000cr or

6.1.3 Net profit ≥ Rs 5cr;

During any financial year shall constitute a CSR Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director.

6.2 Role of CSR committee

6.2.1 formulate and recommend to the Board, a CSR Policy which shall indicate the activities to be undertaken by the company as specified in Schedule VII;

6.2.2 recommend the amount of expenditure to be incurred on the activities referred to in clause (*a*); and

6.2.3 monitor the Corporate Social Responsibility Policy of the company from time to time.

6.3 Role of the board of directors

6.3.1 after taking into account the recommendations made by the Corporate Social Responsibility Committee, approve the Corporate Social Responsibility Policy for the company and disclose contents of such Policy in its report and also place it on the company's website, if any, in such manner as may be prescribed; and

6.3.2 ensure that the activities as are included in Corporate Social Responsibility Policy of the company are undertaken by the company.

6.3.3 the Board shall ensure that the company spends, in every financial year, at least two per cent. of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy:

Provided that the company shall give preference to the local area and areas around it where it operates, for spending the amount earmarked for Corporate Social Responsibility activities:

Provided further that if the company fails to spend such amount, the Board shall, in its report made under clause (*o*) of sub-section (*3*) of section 134, specify the reasons for not spending the amount.

6.4 Calculation of Profit

For the purposes of this section "average net profit" shall be calculated in accordance with the provisions of section 198.

6.5 Activities which may be included by companies in their Corporate Social Responsibility Policies as per SCHEDULE VII

Activities relating to:—

6.5.1 eradicating extreme hunger and poverty;

6.5.2 promotion of education;

6.5.3 promoting gender equality and empowering women;

6.5.4 reducing child mortality and improving maternal health;

6.5.5 combating human immunodeficiency virus, acquired immune deficiency syndrome, malaria and other diseases;

6.5.6 ensuring environmental sustainability;

6.5.7 employment enhancing vocational skills;

6.5.8 social business projects;

6.5.9 contribution to the Prime Minister's National Relief Fund or any other fund set up by the Central Government or the State Governments for socio-economic development and relief and funds for the welfare of the Scheduled Castes, the Scheduled Tribes, other backward classes, minorities and women; &

6.5.10 such other matters as may be prescribed.

7. NEED FOR INSERTION OF SECTION 135

It is estimated that 16,000 companies will finally have to start discharging their CSR as per the new Companies Act, 2013. If most companies actually comply with the requirement of spending 2% of their profits on CSR, an estimated INR 20,000 Crore and substantial expertise will flow to the social sector. Let us now analyse the immediate position of CSR contribution by Sensex companies immediately before the mandatory requirement of CSR under Companies Act, 2013

TABLE 1: SENSEX COMPANIES CONTRIBUTION TOWARDS CSR FOR THE YEAR 2013

	Company	Industry	Actual Amount Spent on CSR during 2013 (Cr)	2% of Average Profit after tax of 2010, 2011, 2012 (Cr.)
1	Hero Motocorp	Automotive	1.27	43.58
2	Mahindra & Mahindra	Automotive	33.52	50.85
3	Tata Motors	Automotive	19.14	35.29
4	Maruti Suzuki	Automotive	18.90	42.80
5	Bajaj Auto	Automotive	51.73	53.63
6	State Bank Of India	Banking	123.27	194.25
7	HDFC Bank	Banking	39.01	80.27
8	ICICI Bank	Banking	116.55	104.27
9	Larsen & Toubro	Conglomerate	73.16	85.26
10	ITC	Conglomerate	82.34	101.41
11	Housing Development Finance Corporation	Consumer finance	NA	68.89
12	Hindustan Unilever	Consumer goods	69.09	47.99
13	Bharat Heavy Electricals	Electrical equipment	63.00	115.75
14	Infosys	Information Technology	NA	138.10
15	Wipro	Information Technology	14.13	93.29
16	Tata Consultancy Services	Information Technology	65.21	161.09
17	Hindalco Industries	Metals and Mining	29.79	41.93
18	Sterlite Industries	Metals and Mining	NA	2.86
19	Coal India	Metals and Mining	NA	NA
20	Oil and Natural Gas Corporation	Oil and gas	261.58	405.42
21	Reliance Industries	Oil and gas	357.05	377.07
22	GAIL	Oil and gas	64.65	69.03
23	Dr. Reddy Laboratories	Pharmaceuticals	16.82	17.67
24	Cipla	Pharmaceuticals	7.65	21.10
25	Sun Pharmaceutical	Pharmaceuticals	4.55	28.01
26	Tata Power	Power	7.88	20.38
27	NTPC	Power	79.53	180.35
28	Tata Steel	Steel	170.59	124.05
29	Jindal Steel & Power	Steel and power	99.14	37.69
30	Bharti Airtel	Telecommunication	29.56	152.48

Source: Compiled from Annual reports of the respective companies

From the above we can conclude that only 4 companies that are ICICI Bank, Hindustan Unilever, Tata Steel and Jindal Steel & Power are contributing beyond 2% of the average profit of the previous year's 2010, 2011 and 2012 when CSR was not mandatory. Data for 4 companies are not available in their annual reports or their websites. From the table we conclude that companies are gaining at the cost of society but in return paying meagre amount towards its welfare so we can conclude that this provision is very much necessary.

8. CONCLUSION

Some companies are paragons of socially responsible behaviour but no one can deny the fact that many companies are not under this category as we can analyse from the above table which is just an overview of 30 companies. Many companies were not acting in socially responsible manner for past so many years either they disregard this concept or they perceive this as if it reduces their profits. So companies Act, 2013 incorporates the concept of corporate social responsibility mandating that companies give 2% of their average net profits for past three years to social causes. At this point we hope that this pragmatic provision will bring drastic changes in the functioning of corporate India and society as a whole.

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PONZI SCHEMES: A FRAUDULENT BITE

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ABSTRACT

The paper deals with the origin of ponzi scheme and the factors which have been largely responsible for mushrooming of these schemes in India. The financial impact of the schemes in India has been also analyzed along with the steps taken by the regulators for controlling the illegal flow of money in hands of fraudulent companies. The effect the Prime Minister's Jan Dhan Yojna may have on reducing the siphoning of money from hands of unbanked sector of Indian society has also been discussed.

KEYWORDS
fraudulent, pyramid, consumer price inflation, SEBI, RBI, Prime Minister Jan Dhan Yojna, securities (laws) amendment ordinance.

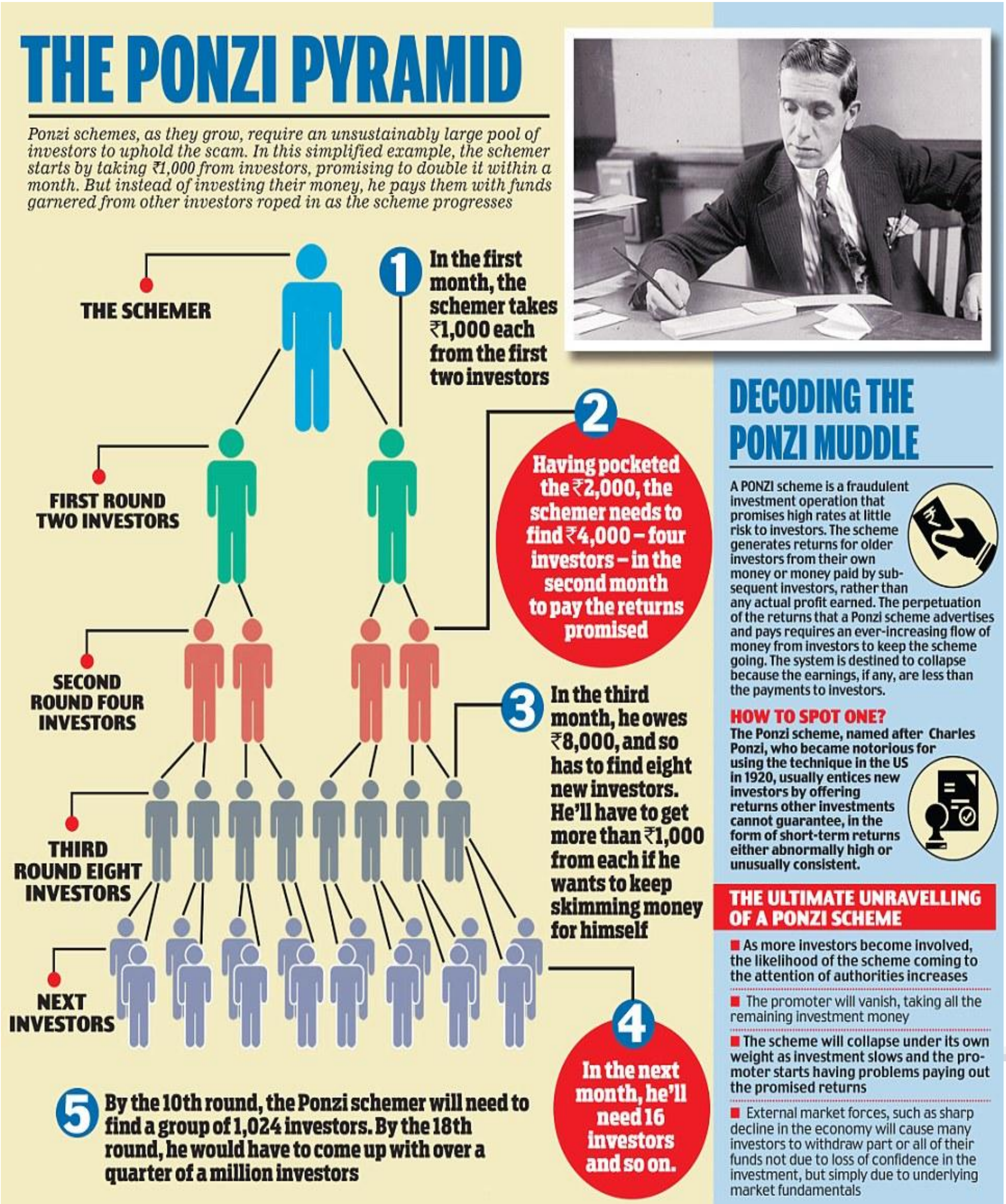
INTRODUCTION
A **Ponzi scheme** is a fraudulent investment operation where the operator, an individual or organization, pays returns to its investors from freshly raised new capital collected by the scheme operators from the new investors, rather than from profit earned by the operator. Operators of Ponzi schemes usually entice new investors by offering higher returns than other investments, in the form of short-term returns that are unrealistic, abnormally high or fake. The scheme is named after Charles Ponzi, who became notorious for using the technique in 1920.

TEN TOP PONZI SHOCKERS
1. THE NAMESAKE
The King of Get Rich Quick, Charles Ponzi became a millionaire in six months by promising investors 50% return in 45 days on international postal coupon investments. He earned $15 million, which in 1920s terms was serious money. After Ponzi was caught, investors only received $5 million back.
2. MADMAN MADOFF
Bernard Madoff's scam is still unfolding. The facts as we know them now are that Madoff spent decades building the biggest Ponzi scheme in history, bilking nonprofits, famous people, funds, banks, and countless others out of $50 billion.
3. THE RETIREE PLUNDERER
Mexican resort owner Michael Eugene Kelly schemed retirees and senior citizens out of $428 million. He offered them timeshare investments in Cancun hotels that he called "Universal Leases." The timeshares came with rental agreements promising investors a nice fixed rate of return. Most of his victims used their retirement savings, thinking they would get solid, low-risk returns. The SEC says that "more than $136 million of the funds invested (came) from IRA accounts." Kelly, meanwhile, bought himself a private jet, racetrack, and four yachts.
4. THE BOY BAND BANDIT
Beginning in the late 1980s, Lou Pearlman, Art Garfunkel's cousin and former manager of 'N Sync and the Backstreet Boys, offered attractive returns through his FDIC-insured Trans Continental Savings Program. The scheme was neither a savings and loan nor FDIC-approved, but that didn't stop Pearlman from bilking investors out of nearly $500 million, with which he planned on funding three MTV shows and an entertainment complex.
5. THE BIBLICAL BILKER
In fraud-rich Florida, the Greater Ministries International church used Bible-speak to cheat its flock out of $500 million. Starting in the early 1990s, the church, led by gun-toting minister Gerald Payne, offered worshippers investments in gold coins. Payne then created an investment plan that would "double the 'blessings' that people invested" by funneling money towards the church's fake precious metals investments. According to the Anti-Defamation League,
Payne said that God had modernized the multiplication of the loaves and fishes and asked him to share the secret.
$500 million later, the Feds caught Payne, but most investors never got their money back.
6. THE COSTA RICA CROOKS
Three Costa Rican brothers, Enrique, Osvaldo and Freddy Villalobos, defrauded clients–mostly American and Canadian retirees–out of $400 million in a 20-odd-year unregulated loan scheme that started in the late 1980s. They promised interest rates of 3% per month on a minimum investment of $10,000. Villalobos moved money through shell companies before paying investors. Its staying power had to do with the fact that margins were low, the brothers were disciplined, and the outfit just barely skirted past laws.
7. THE LOTTERY UPRISING
When Albania was moving out from behind the Iron Curtain in the mid-1990s, a powerful government and environment of questionable ethics resulted in a financial system dominated by pyramid schemes. The government endorsed various Ponzis, which robbed the majority of the population and netted more than $1 billion in losses. Albanians rioted and overthrew the government.
8. THE SCIENTOLOGIST SNAKE
Earthlink co-founder and Scientology minister Reed Slatkin posed as a brilliant investment advisor for A-list Hollywood residents and corporate bosses. Working out of his garage, Slatkin cheated the rich and famous out of roughly $593 million, creating fake statements referring back to fake brokerage firms to prove his mettle. He fed the Church of Scientology with millions of his winnings. In 2000, the SEC caught wind that Slatkin wasn't licensed, and busted the scheme.
9. THE HAITI HATERS
Ponzi schemes popped up all over Haiti in the early 2000's. These schemes sold themselves as government-backed "cooperatives." They ran mainstream-sounding ads, some of which featured Haitian pop stars. As a result, people felt safe investing more than $240 million–60% of Haitian GDP in 2001–into the schemes, which ended up being a massive swindle.
10. THE FRAUDULENT FEMINIST
In 1880, Boston Ponzian Sarah Howe promised women 8% interest on a "Ladies Deposit." She said it was only for women, selling an implicit assumption of safety. She took the money and ran.

METHODOLGY
Ponzi schemes normally begin as legitimate businesses, until the business fails to achieve the returns promised. The operations turns a Ponzi scheme and it then continues under fraudulent terms. Whatever the initial situation, the commitment of the high returns propels the need for an ever-increasing flow of money from new investors to sustain the scheme.
A sample of urban middle class having gross annual income between Rs.300000 and Rs.750000 were contacted. Their saving pattern with reference to the options available to them viz. FDRS, Mutual Funds, Equity, Real Estate and Gold with reference to the ROI were examined. The survey and interaction with people revealed typically, extraordinary returns which were promised on the original investment and vague verbal constructions such as "hedge futures trading", "high-yield investment programs", or "offshore investment" were factors that attracted small and middle level investors towards these schemes.

It is noted that Initially the promoter will pay out high returns to attract more investors, and to lure current investors into putting in additional money. Other investors begin to participate, leading to a cascade effect. The "return" to the initial investors is paid out of the investments of new entrants, and not out of profits. The investors and the down the line joining appear like a pyramid. The original investor is also given an incentive in form of high bonus in cash and kind to lure further people to the net of PONZIS.

HOW THE PONZI PYRAMID WORKS



ANALYSIS AND DISCUSSION

These Ponzi schemes have managed to raise thousands of crore over the years. How do these schemes collect such large sums of money? A June 2011 report in The Economic Times had estimated that PACL had managed to collect Rs 20,000 crore ($3.30 billion) from investors at that point of time. This means that since then the company has managed to collect Rs 30,000 crore ($4.92 billion) more from investors. An April 2013 report in Mint, quoting state officials had put the total amount of money collected by Saradha group at Rs 20,000 crore ($3.30 billion). Sahara is returning more than Rs 20,000 crore ($3.30 billion) that it collected from investors over the years.

These funds often target poor, rural residents without bank accounts who have nowhere else to put their money. Many investment firms employ agents who earn commissions as high as 10 percent from their employers for collecting as little as 20 rupees (33¢) every day from rural depositors, says S. Ananth, an independent researcher based in the state of Andhra Pradesh who specializes in rural financing. “It's a good thing SEBI has finally woken up,” he says. “These schemes have smartly tapped a population that saves through daily deposits of pygmy sums. The more under banked a region is, the more is the presence of such elements." While these ponzi schemes have been ballooning, household financial savings, or the money invested by individuals in fixed deposits, small savings scheme, mutual funds, shares, insurance etc., have actually been declining.

Since May, SEBI has cited 46 companies—including one named Weird Industries—compared with eight in the previous 12 months. The 54 companies it has cited since May 2013 have raised $10.6 billion in assets. They are instructed not to collect any money from the public or start funds until they are approved by SEBI, according to documents on the regulator's website. In the orders, SEBI makes no determination about whether the companies are legitimate—only whether they collect and pool money from the public and therefore require regulatory approval. Most of these Ponzi schemes were running what Sebi calls a collective investment scheme, though they tried to portray it as something else.

A spate of Ponzi schemes has come to light in recent years. All of them typically involve legal wrangling with regulators, public assurances by company officials that they are being unfairly targeted and every investor will get her money back, and eventually, the inevitable happens – hapless millions are parted with their life's savings.

The recent bust-ups include Sahara, Saradha Chit Fund, Rose Valley Hotels and Entertainment and most recently, PACL. In an order against PACL, the Securities and Exchange Board of India estimated that the company had managed to collect close to Rs 50,000 crore ($8.27 billion) from investors.

The latest annual report by the Reserve Bank of India points out that "the household financial saving rate remained low during 2013-14, increasing only marginally to 7.2 per cent of GDP in 2013-14 from 7.1 per cent of GDP in 2012-13 and 7.0 per cent of GDP in 2011-12...the household financial saving rate [has] dipped sharply from 12 per cent in 2009-10."

While the household financial savings have dipped, the money collected by Ponzi schemes has grown by leaps and bounds. What explains this dichotomy? Some experts have blamed the low penetration of banks as a reason behind the rapid spread of Ponzi schemes in the last few years. K C Chakrabarty, former deputy governor of the Reserve Bank of India, in September 2013 had pointed out that only 40,000 out of the 600,000 villages in India have a bank branch. Hence, investors find it easier to invest their money with Ponzi schemes, which seem to have a better geographical footprint than banks. The trouble with this reasoning is that the bank penetration in India has always been low. So, why have so many Ponzi schemes come to light only in the last few years?

Another explanation is that the rate of return promised by these Ponzi schemes is high and investor greed gets the better of them. This claim needs to be understood closely. Take the case of Rose Valley. The return on the various investment schemes run by the company varied from anywhere between 11.2% to 17.65%. PACL offered returns of 12.5-14% on investments. Saradha reportedly offered returns of 17.5-22%.

It is clear that returns promised by these Ponzi schemes have been significantly higher than the returns available on fixed income investments like fixed deposits, small savings schemes, provident funds etc., which ranged between 8-10%. The lower band of the returns offered by such schemes were not a whole lot higher than fixed income investments. Rose Valley was paying 11.2% on one of its schemes. PACL was offering 12.5%. Also, investment made in fixed income investments like public provident fund and employees provident fund qualifies for a tax deduction, thus pushing up effective return to greater than 10%.

The returns offered by the likes of Rose Valley, Saradha, Sahara and PACL are very low. But investors have still flocked to them. In fact, in its order against PACL, Sebi estimated that the company had close to 5.85 crore investors. Why, indeed, are so many people flocking to such schemes?

CONCLUSION

The answer lies in the high inflation that has prevailed in the county since 2008. For most of this period, the consumer price inflation and food inflation have been greater than 10%. In this scenario, the returns on offer on fixed income investments have been lower than the rate of inflation. Hence, people have had to look at other modes of investment, in order to protect the purchasing power of their accumulated wealth.

This explains why so much money has founds its way into Ponzi schemes, despite not offering outrageous returns. They offer returns that are higher than inflation and that is, naturally, an attractive rate of return. It is through this artificial suppression of interest rates that the government of India has contributed to the success of Ponzi schemes. Recently launched Jan Dhan Yojna of the Prime Minister is going to play a major role in busting the role of these schemes. The recently enacted the securities (laws) amendment ordinance, will empower sebi to control the proliferation and propgataion of such schemes. the key notes of the said ordinance are ;

1. With promulgation of this ordinance, India capital market regulator the Securities and Exchange Board of India (SEBI) got back the power to act against ponzi schemes, illegal deposit schemes and assess call data records in securities-related offences.
2. It provides powers for SEBI chairman to authorise Investigating Authority or any other officer of the regulator to conduct search and seizure under the Sebi Act and crack down on Ponzi schemes.
3. SEBI can regulate any money pooling scheme worth Rs. 100 crore or more and attach assets in cases of non-compliance and its Chairman can order "search and seizure operations
4. The ordinance also empowers the market watchdog to seek information, such as telephone call data records, from any persons or entities in respect to any securities transaction being investigated by it.

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