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   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

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   APPENDIX/ANNEXURE

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- 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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CHALLENGES OF INFORMATION & COMMUNICATION TECHNOLOGY (ICT) AS A TEACHING AND LEARNING TOOL IN THE EDUCATION SECTOR IN ZAMBIA: A CASE STUDY OF SELECTED SECONDARY SCHOOLS OF MONGU DISTRICT

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ABSTRACT
The study was conducted to assess the challenges of using information and communication technology (ICT) as a teaching and learning tool in the education sector in Zambia. Following the quantitative research design, the major findings of this study are that the ICT infrastructure support by government in secondary schools in Mongu District of Zambia is a serious challenge. Teachers perceive strong benefits should the government decide to embrace information and communication technology as a teaching and learning tool in the education sector in Mongu District of Zambia. However, the sector is currently lacking government infrastructural development and technical support. The basic conclusion of the study is that the ICT can only be used as a teaching and learning tool in the education sector in Mongu District through the provision of well ICT infrastructure facilities, strong financial capacity, strong-coordinated government support, and highly expertise of human resources to curb the challenges.

KEYWORDS
information, communication technology, learning tool, ICT infrastructure, networks, software, internet.

INTRODUCTION
In this information age, everyone requires information and communication technology (ICT) competences to survive. To borrow the words of Adomi and Kpangban (2010), "the ability to access and use information is no longer a luxury, but a necessity for development". Mulauzi (2007) also asserts that "information and access to ICTs are no longer a luxury, but a human need and basic right". ICT refers to technologies that provide access to information through telecommunications. This includes televisions, radios, satellite, internet, wireless networks, cell phones, and other communication mediums. These ICTs have significant impact on all areas of human activity (Brakel and Chisenga, 2003) and the education sector is no exception. Information and Communication Technology (ICT) is shorthand for the computers, software, networks, satellite links, and related systems that allow people to access, analyse, create, exchange and use data, information, and knowledge until recently, were almost unimaginable. The term 'ICT' is used almost interchangeably with the Internet. The Internet together with its applications (the most well-known being the world wide web) (www) is the infrastructure that brings together people in different places and time zones with multimedia tools for information, communication, data, and knowledge management in order to enlarge the range of human capabilities (Fitz Partrick *et al.,* 2011). Information and communication technology (ICT) and their utilization are increasingly becoming a part of everyday operational activity in learning institutions such as Universities and Colleges and their importance cannot be over emphasized. It is, however, unfortunate that the advancement of ICTs has failed to produce the radical changes in learning and teaching that many anticipated especially in Zambia (Adedokun-Shittu, 2012).

NEED FOR THE STUDY
The Zambian Ministry of Education has attempted, and planned for introduction and use of ICT in teacher training education. Indeed, efforts in the past have been made to define and articulate plans to improve the management and application of information system in the Ministry of Education in all this, the Ministry has recognized the importance, use of ICT in the improvement, application of ICTs quality, and accessibility of Education. So many discussions and planning around the use of ICT have taken place. The number of schools, colleges, and skills training institutes planning for acquiring computers in their computer laboratories is slowly increasing; there is need therefore, for a corresponding strategy for taking advantage of this situation (Global Campaign for education sector 3rd June, 2005). However, Zambia faces many challenges in realizing the potential of secondary education in the penetration levels of ICTs in Zambia's education institutions however, remains low, with those secondary schools that are equipped mostly utilizing second-hand and refurbished computers. This is despite the adoption of a national ICT policy as well as the development of a draft ICT policy for education and an associated implementation framework, which provides an enabling policy environment that promotes far greater access and use of ICTs across all sectors of Zambia's education system, including a system for enhancing education management, administration, and teaching and learning. Recent research has also shown that the impact of ICT has fallen short of the rhetoric that it would produce radical change in learning and teaching in secondary schools (Nepad-Thematic paper for ICT Education African Countries, 2010). Information and communication technology ICT in teaching and learning in secondary education, is defined as an instructional program that prepares individuals to effectively use technology in learning, communication and life skills (Parker and Jones, 2008). ICT also refers to technologies that provide access to information through telecommunications. This includes the internet, wireless networks, cell phones, and other communication mediums.

STATEMENT OF THE PROBLEM
Zambia lacks a clear national policy articulated guide on the information and communication technology (ICT) that can necessitate effective implementation of ICT as a teaching and learning tool in the secondary schools. There is a weak stakeholder base to champion the cause, and advocate for enhancing ICT capabilities in the education sector. Worse still, most training Education Colleges in Zambia, do not offer ICT programmes in their curricular which entails that most teachers who have graduated from these colleges have little or no knowledge about ICT. This has therefore, compelled the researchers to carry out the study to investigate challenges of using ICT as a teaching and learning tool in the Education sector in Mongu District of Zambia.

OBJECTIVES OF THE STUDY
1. To examine the challenges of information and communication technology (ICT) as a teaching and learning tool in the Education sector in Mongu District of Zambia.
2. To examine to what degree does government support affect human resource capacity in the education sector for ICT teaching in Mongu District of Zambia.

3. To examine to what degree does government support affect ICT infrastructure development in the Mongu District secondary schools in Zambia.
4. To access if teachers receive enough government support to attain ICT training in colleges and universities in the Mongu District of Zambia.

METHODOLOGY

The sampling technique used in the study was a non - probability purposive sampling .This enabled the researchers` judgment to select cases to achieve the research objectives .This form of sample is often used when working with small sample sizes. Out of 21 secondary schools 11 has been selected and 205 teachers were taken as sample size and a questionnaire was administered.

SCOPE OF THE STUDY

The scope of the study was basically confined to the education sector and limited to secondary schools found in the Mongu District of Western Province in Zambia. The Secondary schools in Mongu were found to be more convenient to the researchers because one of the researchers is a teacher in one of the schools in the district. In addition this study was conducted for academic purpose and was not sponsored or commissioned by any organization hence, faced financial limitations to cover a wider spectrum of the population. Hence a case studies.

BACK DROP

The Ministry of Education (MOE) has attempted, and planned for introduction and use of ICT for example in teacher education. Indeed, efforts in the past have been made to define and articulate plans to improve the management and application of information system in the Ministry of Education in all this, the Ministry has recognized the importance, use of ICT in the improvement, application of ICTs quality, and accessibility of Education. So many discussions and planning around the use of ICT have taken place. The number of schools, colleges, and skills training institutes planning for acquiring computers in their computer laboratories is slowly increasing; there is need therefore, for a corresponding strategy for taking advantage of this situation (Global Campaign for education sector 3rd June 2005). However, Zambia faces many challenges in realizing the potential of Secondary Education in the penetration levels of ICTs in Zambia's Education institutions however, remains low, with those Secondary Schools that are equipped mostly utilizing second-hand and refurbished computers. This is despite the adoption of a national ICT policy as well as the development of a draft ICT policy for education and an associated implementation framework, which provides an enabling policy environment that promotes far greater access and use of ICTs across all sectors of Zambia's education system, including a system for enhancing education management, administration, and teaching and learning. Recent research has also shown that the impact of ICT has fallen short of the rhetoric that it would produce radical change in learning and teaching in Secondary schools (Nepad-Thematic paper for ICT Education African Countries, 2010).Information and communication technology ICT in teaching and learning in secondary education, is defined as an instructional program that prepares individuals to effectively use technology in learning, communication and life skills (Parker & Jones, 2008). ICT also refers to technologies that provide access to information through telecommunications. This includes the internet, wireless networks, cell phones, and other communication mediums (Techterms, 2010).

ANALYSIS OF THE STUDY

TABLE 1: DESCRIPTIVE STATISTICS MEAN AND STD. DEVIATION ON GOVERNMENT SUPPORT

Government Support	**N**	**Mean**	**Std. Deviation**
Provision of ICT infrastructure by government	98	1.6939	.87824
Government Supports ICT in the curriculum design	98	3.6735	1.29850
Government has a provision for ICT at my School	98	2,7755	1.39610
School has a policy in place to foster ICT	98	3.0612	1.46306
Government allocates funding for ICT at my school	98	3.1633	1.41926
School has staff development policy for teachers to teach ICT	98	2.5714	1.52640
Strategic framework is in place to facilitate training for teachers	98	3.3265	1.36809
Periodic Assessment in place by government at my school for ICT	98	2.1633	1.29785
Periodic Evaluations are made for implementation of ICT	98	3.3469	1.45093
Valid N (Listwise)	98		
Government support Average		**2.8639**	**.61244**

Table 1 above presents data gathered in response to the provision of ICT infrastructure support by government. A mean of 1.6939 (SD= .87824) measuring ICT infrastructure support by government, perceived that government does not support and provide ICT infrastructure in secondary schools in Mongu District. Furthermore, a mean of 3.6735 (SD = 1.29850) supports that government even at school level does not seem to know the ICT infrastructure status. The school staff development programme has a mean of 2.7755 (SD =1.39610) which indicates that government does not support staff development programmes for teachers to teach ICT in secondary schools. The table has also shown a mean of 3.0612(SD = 1.46306) reveals that teachers seem not to know whether government has or does not have a provision for ICT in secondary schools. Failure by government to support such postulates serious challenges by secondary schools to teach pupils using ICT. A mean of 3.1633 (SD = 1, 41926), a mean of 2.5714 (SD = 1, 52640) and a mean of 3.3265(SD = 1.36809) show that there might be challenges in terms of the ICT infrastructure.

TABLE 2: REGRESSION ANALYSIS FOR GOVERNMENT SUPPORT ON ICT HUMAN RESOURCE DEVELOPMENT

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Government support	.497[a]	.247	.239	.40015	.247	31.528	1	96	.000
a. Predictors: (Constant),									

Table 2 shows the adjusted R square .239 or (23.9%) indicating the forecasting outcome or predictive outcome between government support and human resource in the education sector for ICT teaching. The level of government support would affect the level of human resource capacity in secondary schools in Mongu District, if the government would do something here. The positive Beta value of .497 indicates that the higher there would be government support, the higher there would be ICT human resource capacity in secondary schools in Mongu District. This affirms that there is a direct relationship between government support and ICT human resources capacity.

TABLE 3: REGRESSION ANALYSIS FOR GOVERNMENT SUPPORT ON ICT HUMAN RESOURCE CAPACITY (COEFFICIENTS)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
Government support	1.811	.194		9.322	.000			
	.372	.066	.497	5.615	.000	.497	.497	.497
Dependent Variable: human resources have								

The table 3 shows the regression analysis for perceived effect of government support on ICT human resource development. The positive Beta of .497 indicates that the higher the perceived government support, the better will be the ICT human resource capacity in secondary schools. This could be true considering that naturally human resource capacity gets better and better when government support is adequately available. The higher the positive Beta value, the higher the degree of.497 of correlation which is significant with 0.000 less than the standard 0.005. The adjusted R square accounts for 23.9% indicating a predictive out come between government support and ICT human resource capacity. This means that there is perceived higher correlation between government support and human resource capacity to enhance ICT as a teaching and learning tool in the education sector in Zambia.

TABLE 4: REGRESSION ANALYSIS ON CHALLENGES FACED BY GOVERNMENT AND THEIR EFFECT ON SUPPORT FOR ICT INFRASTRUCTURE DEVELOPMENT IN MONGU DISTRICT

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Government support	.389[a]	.151	.142	.52745	.151	17.070	1	96	.000
a. Predictors: (Constant), govsupave									

The table 4 shows the adjusted R squared of .142 or (14.2%) indicating the perceived predictive out come between government support and ICT infrastructure in Mongu District, would the government decide to support ICT infrastructural development in future. The positive beta value of .389 indicates that the higher the government support, the better the ICT infrastructure will be in the secondary schools in Mongu District of Zambia.

TABLE 5: REGRESSION ANALYSIS ON GOVERNMENT SUPPORT IN SECONDARY SCHOOLS AND ITS EFFECT ON ICT INFRASTRUCTURE IN MONGU DISTRICT (COEFFICIENTS)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
Government support	1.624	.256		6.345	.000			
	.361	.087	.389	4.132	.000	.389	.389	.389

The table 5 shows the regression analysis for perceived government support in secondary schools and how it will affect or enhance ICT infrastructure development and capacity should the government decide to lend its needed support. The positive beta value of .389 indicates that the higher the government support, the higher there will be ICT infrastructure development in secondary schools in the Mongu District of Zambia. This postulates that the availability of government support will have an ultimate effect on ICT infrastructure development in secondary schools in the Mongu District of Zambia.

FINDINGS AND SUGGESTIONS

Suggestion 1: The major challenge of using information and communication technology (ICT) as a teaching and learning tool in the education sector in Zambia is lack of provision of well ICT infrastructure facilities, strong financial capacity, strong-coordinated government support, and highly expertise of ICT human resources.

Suggestion 2: There is very strong perception that the government does not support and provide ICT infrastructural development in secondary schools in the Mongu District in Zambia. The general fear is that by its nature this study`s findings can be generalisable to other Districts of Zambia as whole. The results of the study impact negatively on the responsibilities of the government of Zambia when it comes to education.

Suggestion 3: The results of the regression analysis performed strongly indicate that the availability of government support has an ultimate effect on ICT infrastructural development in secondary schools in the Mongu District of Zambia. There is a need for the government of Zambia to embrace the need for ICT as a teaching and learning tool in the education sector, especially in the secondary schools.

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TO MEASURE SIGNIFICANT DIFFERENCE IN FINANCIAL PERFORMANCE OF SELECTED FERTILIZER COMPANIES IN INDIA BASED ON PROFITABILITY RATIOS

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ABSTRACT

Profitability is an indication of the efficiency with which the operations of the business are carried on. Profitability ratios are used for analyze the profitability performance of any business firm. In this study Analysis of variance (ANOVA) carried out for Profitability ratios for the selected fertilizer company in India for the period of 2004-05 to 2013-2014. In these, Profitability ratios includes Operating Profit Margin Ratio, Gross Profit Margin Ratio, Net Profit Margin Ratio, Return on Capital Employed Ratio, Return on Networth Ratio and Return on Assets Ratio. The statistical tools ANOVA is used to test the hypothesis regarding profitability ratios which are based on a sample of six selected companies in fertilizer industry. From the analysis concluded there is significant difference in all Profitability Ratio of six selected fertilizer Companies.

KEYWORDS

ANOVA, Fertilizer Companies, Profitability.

1. INTRODUCTION

Ratio analysis is a widely used tool of financial analysis. It can be used to compare the risk and return relations of firm of different sizes. It is defined as the systematic use of ratio to interpret the financial statements so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. A part from the creditors, both short-term and long term, also interested in the financial soundness of a firm is the owners and management or the company itself. The management of a company is naturally eager to measure its operating efficiency. Similarly, the owners invest their funds in the expectation of reasonable returns. The operating efficiency of a firm and its ability to ensure adequate returns to its shareholders depend ultimately on the profit earns by it. The profitability of a firm can be measured by its profitability ratio. In other word, the profitability ratios are designed to provide answer to question such as (i) is the profit earned by the firm adequate? (ii) what rate of return does it represent? (iii) what is the rate of profit for various divisions and segments of the firm? (iv) what is the earning per share? (v) what was the amount paid in dividends? (vi) what is the rate of return to equity holders? And so on. Various groups are interested to find out the profitability of the firm like investor, bankers, shareholders, financial institutions and other creditors.

To study variation in the financial performance of a profitability aspect of selected fertilizer company in India during the period of 10 years on the basis of ratio, we can also study the variation in financial performance among the selected six companies strength on the basis of values of the ratios of a particular company for the period of the study then on way ANOVA (Analysis of variance) apply on this values of the profitability ratios will help us in studying the difference in performance of a particular aspect among the selected companies for the period of the study.

2. REVIEW LITERATURE

Nagarajrao B.S and Chandar K (1980) analyzed the financial efficiency of fertilizer companies for the selected period 1970 -71 to 1977-78. The profitability of selected companies has been found to have declined from 1970-71 to 1974-75 because the reason of inflation, ever increasing manufacturing cost of fertilizer, continuous fall in capacity utilization due to storage of coal, oil, wagons and drastic power cut.

Hajihassani (2012) presented A Comparison of Financial Performance in Fertilizer Sector in Iran. This study presents comparison of financial performance for the period 2006 to 2009 by using various financial ratios and measures of fertilizer companies working in Iran. Financial ratios are divided into three main categories and measures including two indicators. This work concludes that the performance of fertilizer companies on the basis of profitability ratios different than on the basis of liquidity ratio, leverage ratio.

Prof. Ketan H.Popat (2012) examined "A Comparative Study Of Profitability Analysis of Selected Steel Industries" In this study the researcher analyzed the profitabii to evaluate the profitability analysis with reference to various ratios like, PBDT to Gross Sales, PAT to Gross Sales, PAT to Net Sales, PAT to Shareholders fund and PAT to Total Assets to examined the financial result of selected steel industries in India. This research give us result of profitability with reference to study period from 2006-07 to 2010-11. From the above tables It is revealed that the profitability of Tata Steel Company is better, JINDAL steel shows next to Tata Steel while major fluctuation in profitability shown in JSW and SAIL But Uttam shows decrease trend in profitability.

3. STATEMENT OF THE PROBLEM

Profitability Analysis of the Selected Fertilizer Companies in India.

4. OBJECTIVES OF THE STUDY

- To measure significant difference in financial performance of selected six fertilizer Companies based on Profitability Ratios.
- Profitability Performance of Selected Fertilizer Companies.

5. HYPOTHESES

H_0 = There is no significant difference in financial performance of selected Companies.
H_1 = There is significant difference in financial performance of selected Companies.

6. RESEARCH METHODOLOGY

The study is based mainly on secondary data which is collected from the books, magazine, in-house materials and websites of concerned company on fertilizer industry. Quantitative approach is used. In this study six fertilizer companies selected from top ten companies of India. All selected companies from same strata that are large cap segment. The size of the sample is 6 companies from large cap segment listed on BSE/NSE. In this study find out the variation in the financial performance of a profitability aspect of selected fertilizer company in India during the period of spanning from 2004-05 to 2013-14 on the basis of profitability ratio, we can also study the variation in financial performance among the 6 selected fertilizer companies in India on the basis of values of the ratios of a selected company for the period of the study then one way ANOVA (Analysis of variance) apply on this values of the ratios will help us in studying the difference in performance of a profitability ratios among the 6 companies for the period of the study.

7. RESULT AND DISCUSSION

7.1 OPERATING PROFIT MARGIN RATIO

Analysis of variance (ANOVA) for Operating Profit Margin Ratio among the companies under study. In this part Analysis of variance (ANOVA) for Operating Profit Margin Ratio of 6 selected fertilizer companies under the study have been carried out on the basis of data on Operating Profit Margin Ratio have been exhibited in Table No. 1. The summary of Analysis of variance (ANOVA) based on the data given in Table 2 is as follows. For this ANOVA the H_0 and H_1 are as follows.

H_0 = There is no significant difference in Operating Profit Margin Ratio of 6 Companies.

H_1 = There is significant difference in Operating Profit Margin Ratio of 6 Companies.

TABLE – 1: OPERATING PROFIT MARGIN RATIO

Groups	*Count*	*Sum*	*Average*	*Variance*
GNFC	10	168.84	16.884	15.17638222
GSFC	10	164	16.4	21.92328889
RASHTRIYA FERTILIZAR LTD	10	76.63	7.663	1.77129
COROMANDAL INTERNATIONAL	10	99.61	9.961	4.065765556
DEEPAK FERTILIZAR	10	187.94	18.794	17.90853778
NATIONAL FERTILIZER	10	56.94	5.694	10.34900444

TABLE – 2: ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	1501.82482	5	300.364964	25.31369185	4.75E-13	2.38607
Within Groups	640.74842	54	11.86571148			
Total	2142.57324	59				

Above the table no: 1 represents the detailed statistical data related to the Analysis of variance (ANOVA). Table no: 2 shows sum of square, degree of freedom and mean sum of square for between selected companies and within selected companies. For testing the hypothesis by ANOVA procedure, F test is applied. In ANOVA table find out the value of F - test with corresponding P - Value is given. F value is 2.386 and P value is 0.00. Here the P value is less than 0.05 hence the given hypothesis is rejected. So there is significant difference in Operating Profit Margin Ratio of 6 Companies.

7.2 GROSS PROFIT MARGIN RATIO

Analysis of variance (ANOVA) for Gross Profit Margin Ratio among the companies under study. In this part Analysis of variance (ANOVA) for Gross Profit Margin Ratio of 6 selected fertilizer companies under the study have been carried out on the basis of data on Gross Profit Margin Ratio have been exhibited in Table No. 3. The summary of Analysis of variance (ANOVA) based on the data given in Table 4 is as follows. For this ANOVA the H_0 and H_1 are as follows.

H_0 = There is no significant difference in Gross Profit Margin Ratio of 6 Companies.

H_1 = There is significant difference in Gross Profit Margin Ratio of 6 Companies.

TABLE – 3: GROSS PROFIT MARGIN RATIO

Groups	*Count*	*Sum*	*Average*	*Variance*
GNFC	10	142.1	14.21	29.80557778
GSFC	10	138.75	13.875	23.77685
RASHTRIYA FERTILIZAR LTD	10	65.91	6.591	6.36021
COROMANDAL INTERNATIONAL	10	92.91	9.291	3.344387778
DEEPAK FERTILIZAR	10	166.56	16.656	30.61271556
NATIONAL FERTILIZER	10	39.41	3.941	10.61123222

TABLE – 4: ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	1224.058213	5	244.8116427	14.05469502	8.43E-09	2.38607
Within Groups	940.59876	54	17.41849556			
Total	2164.656973	59				

Above the table no: 3 represent the detailed statistical data related to the Analysis of variance (ANOVA). Table no: 4 shows sum of square, degree of freedom and mean sum of square for between selected companies and within selected companies. For testing the hypothesis by ANOVA procedure, F test is applied. In ANOVA table find out the value of F - test with corresponding P - Value is given. F value is 2.386 and P value is 0.00. Here the P value is less than 0.05 hence the given hypothesis is rejected. So there is significant difference in Gross Profit Margin Ratio of 6 Companies.

7.3 NET PROFIT MARGIN RATIO

Analysis of variance (ANOVA) for Net Profit Margin Ratio among the companies under study. In this part Analysis of variance (ANOVA) for Net Profit Margin Ratio of 6 selected fertilizer companies under the study have been carried out on the basis of data on Net Profit Margin Ratio have been exhibited in Table No. 5. The summary of Analysis of variance (ANOVA) based on the data given in Table 6 is as follows. For this ANOVA the H_0 and H_1 are as follows.

H_0 = There is no significant difference in Net Profit Margin Ratio of 6 Companies.

H_1 = There is significant difference in Net Profit Margin Ratio of 6 Companies.

TABLE – 5: NET PROFIT MARGIN RATIO

Groups	*Count*	*Sum*	*Average*	*Variance*
GNFC	10	89.38	8.938	8.993262222
GSFC	10	88.01	8.801	11.66321
RASHTRIYA FERTILIZAR LTD	10	39.35	3.935	0.547183333
COROMANDAL INTERNATIONAL	10	56.08	5.608	2.666973333
DEEPAK FERTILIZAR	10	105.47	10.547	10.39073444
NATIONAL FERTILIZER	10	20.51	2.051	5.192676667

TABLE – 6: ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	546.5607733	5	109.3121547	16.62372036	6.53E-10	2.38607
Within Groups	355.08636	54	6.575673333			
Total	901.6471333	59				

Above the table no: 5 represent the detailed statistical data related to the Analysis of variance (ANOVA). Table no: 6 shows sum of square, degree of freedom and mean sum of square for between selected companies and within selected companies. For testing the hypothesis by ANOVA procedure, F test is applied. In ANOVA table find out the value of F - test with corresponding P - Value is given. F value is 2.386 and P value is 0.00. Here the P value is less than 0.05 hence the given hypothesis is rejected. So there is significant difference in Net Profit Margin Ratio of 6 Companies.

7.4 RETURN ON CAPITAL EMPLOYED RATIO

Analysis of variance (ANOVA) for Return on Capital Employed Ratio among the companies under study. In this part Analysis of variance (ANOVA) for Return on Capital Employed Ratio of 6 selected fertilizer companies under the study have been carried out on the basis of data on Return on Capital Employed Ratio have been exhibited in Table No. 7. The summary of Analysis of variance (ANOVA) based on the data given in Table 8 is as follows. For this ANOVA the H_0 and H_1 are as follows.

H_0 = There is no significant difference in Return on Capital Employed Ratio of 6 Companies.

H_1 = There is significant difference in Return on Capital Employed Ratio of 6 Companies.

TABLE – 7: RETURN ON CAPITAL EMPLOYED RATIO

Groups	*Count*	*Sum*	*Average*	*Variance*
GNFC	10	168.82	16.882	74.36990667
GSFC	10	220.71	22.071	87.84049889
RASHTRIYA FERTILIZAR LTD	10	135.99	13.599	13.15641
COROMANDAL INTERNATIONAL	10	227.55	22.755	35.46773889
DEEPAK FERTILIZAR	10	161.98	16.198	8.622484444
NATIONAL FERTILIZER	10	107.14	10.714	50.30860444

TABLE – 8: ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	1105.647975	5	221.129595	4.918259989	0.000882	2.38607
Within Groups	2427.89079	54	44.96094056			
Total	3533.538765	59				

Above the table no: 7 represent the detailed statistical data related to the Analysis of variance (ANOVA). Table no: 8 shows sum of square, degree of freedom and mean sum of square for between selected companies and within selected companies. For testing the hypothesis by ANOVA procedure, F test is applied. In ANOVA table find out the value of F - test with corresponding P - Value is given. F value is 2.386 and P value is 0.000882. Here the P value is less than 0.05 hence the given hypothesis is rejected. So there is significant difference in Return on Capital Employed Ratio of 6 Companies.

7.5 RETURN ON NETWORTH RATIO

Analysis of variance (ANOVA) for Return on Networth Ratio among the companies under study. In this part Analysis of variance (ANOVA) for Return on Networth Ratio of 6 selected fertilizer companies under the study have been carried out on the basis of data on Return on Networth Ratio have been exhibited in Table No. 9. The summary of Analysis of variance (ANOVA) based on the data given in Table 10 is as follows. For this ANOVA the H_0 and H_1 are as follows.

H_0 = There is no significant difference in Return on Networth Ratio of 6 Companies.

H_1 = There is significant difference in Return on Networth Ratio of 6 Companies.

TABLE – 9: RETURN ON NETWORTH RATIO

Groups	*Count*	*Sum*	*Average*	*Variance*
GNFC	10	149.68	14.968	44.89432889
GSFC	10	184.1	18.41	41.63771111
RASHTRIYA FERTILIZAR LTD	10	113.33	11.333	1.046467778
COROMANDAL INTERNATIONAL	10	261.56	26.156	86.70184889
DEEPAK FERTILIZAR	10	157.54	15.754	5.462248889
NATIONAL FERTILIZER	10	59.74	5.974	64.05091556

TABLE – 10: ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	2304.472035	5	460.894407	11.34306781	1.66E-07	2.38607
Within Groups	2194.14169	54	40.63225352			
Total	4498.613725	59				

Above the table no: 9 represent the detailed statistical data related to the Analysis of variance (ANOVA). Table no: 10 shows sum of square, degree of freedom and mean sum of square for between selected companies and within selected companies. For testing the hypothesis by ANOVA procedure, F test is applied. In ANOVA table find out the value of F - test with corresponding P - Value is given. F value is 2.386 and P value is 0.00. Here the P value is less than 0.05 hence the given hypothesis is rejected. So there is significant difference in Return on Networth Ratio of 6 Companies.

8. CONCLUSIONS

- From the analysis conclude that there is significant difference in Profitability of 6 selected fertilizer Companies.
- In the séance of Operating Profit Ratio GNFC, GSFC and Deepak fertilizer performance was satisfactory because this company Operating Profit Ratio was higher than Industry Ratio.
- Gross Profit Margin Ratio of the Industry was 10.76. As compare to all selected companies only three companies are on satisfactory level and other three companies like Rashtriya Fertilizer Ltd., Coromandal International and National fertilizer Gross Profit Margin Ratio was not satisfactory.
- Deepak Fertilizer performance regarding Net Profit Ratio was very good because its Net Profit Ratio was 10.55 was higher than Industry this company followed by GNFC and GSFC.
- Coromandal International performance was excellent its Return on Capital Employed Ratio was 22.76 was higher than Industry ratio followed by GSFC that was 22.07. Other selected four company performance was not satisfactory because its Return on Capital Employed Ratio was very poor.
- Return on Networth Ratio of the Industry was found that 15.43. In this séance only Deepak Fertilizer Ltd. Performance was satisfactory and other companies ratio was very poor.
- Regarding Return on Assests Ratio all selected company was very good except two companies like Rashtriya Fertilizer Ltd and National Fertilizer Ltd. GSFC performance regarding this ratio was very good that was 212.20 it is very high than the industry Ratio.

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APPENDIX

TABLE – 11: OPERATING PROFIT MARGIN RATIO (In Percentage)

COMPANY NAME	Mar '14	Mar '13	Mar '12	Mar '11	Mar '10	Mar '09	Mar '08	Mar '07	Mar '06	Mar '05	AVERAGE
GNFC	12.71	13.95	14.27	13.40	13.83	15.94	19.04	21.18	22.74	21.78	16.88
GSFC	9.77	12.76	21.40	24.98	12.08	16.71	13.64	15.13	19.84	17.69	16.40
RASHTRIYA FERTILIZAR LTD	8.59	7.95	6.20	6.74	5.71	7.90	6.61	9.32	7.89	9.72	7.66
COROMANDAL INTERNATIONAL	7.87	8.58	12.34	13.37	11.27	8.63	11.48	9.87	8.49	7.71	9.96
DEEPAK FERTILIZAR	13.20	12.21	18.23	21.89	21.85	21.62	17.12	17.24	18.44	26.14	18.79
NATIONAL FERTILIZER	1.57	0.55	4.16	4.58	6.27	5.09	6.00	9.59	9.30	9.83	5.69
INDUSTRY AVERAGE	8.95	9.33	12.77	14.16	11.84	12.65	12.32	13.72	14.45	15.48	12.57

TABLE – 12: GROSS PROFIT MARGIN RATIO (In Percentage)

COMPANY NAME	Mar '14	Mar '13	Mar '12	Mar '11	Mar '10	Mar '09	Mar '08	Mar '07	Mar '06	Mar '05	AVERAGE
GNFC	9.72	10.45	10.89	9.14	9.35	11.84	15.82	21.26	21.92	21.71	14.21
GSFC	7.08	10.64	18.96	21.90	8.57	14.28	9.63	14.46	18.26	14.97	13.88
RASHTRIYA FERTILIZAR LTD	6.44	5.44	3.99	4.70	3.84	6.86	4.99	8.94	9.49	11.22	6.59
COROMANDAL INTERNATIONAL	6.99	7.89	11.76	12.56	10.35	8.05	10.11	8.87	8.25	8.08	9.29
DEEPAK FERTILIZAR	10.51	8.47	14.73	17.33	16.86	17.92	12.87	19.02	20.94	27.91	16.66
NATIONAL FERTILIZER	-0.03	-1.19	2.91	3.05	4.43	3.21	3.84	6.83	9.98	6.38	3.94
INDUSTRY AVERAGE	6.79	6.95	10.54	11.45	8.90	10.36	9.54	13.23	14.81	15.05	10.76

TABLE – 13: NET PROFIT MARGIN RATIO (In Percentage)

COMPANY NAME	Mar '14	Mar '13	Mar '12	Mar '11	Mar '10	Mar '09	Mar '08	Mar '07	Mar '06	Mar '05	AVERAGE
GNFC	5.97	6.36	7.29	9.27	4.66	7.65	10.74	11.81	13.57	12.06	8.94
GSFC	6.14	8.10	13.86	15.45	6.20	8.39	6.57	7.89	10.20	5.21	8.80
RASHTRIYA FERTILIZAR LTD	3.75	4.02	3.77	4.34	4.09	2.48	3.03	4.19	4.72	4.96	3.94
COROMANDAL INTERNATIONAL	3.65	5.14	7.03	9.01	7.14	5.13	5.47	4.76	4.38	4.37	5.61
DEEPAK FERTILIZAR	6.31	5.50	8.99	11.73	13.09	10.26	9.31	10.76	13.61	15.91	10.55
NATIONAL FERTILIZER	-1.11	-2.52	1.72	2.37	3.33	1.87	2.58	4.52	3.19	4.56	2.05
INDUSTRY AVERAGE	4.12	4.43	7.11	8.70	6.42	5.96	6.28	7.32	8.28	7.85	6.65

TABLE – 14: RETURN ON CAPITAL EMPLOYED RATIO (In Percentage)

COMPANY NAME	Mar '14	Mar '13	Mar '12	Mar '11	Mar '10	Mar '09	Mar '08	Mar '07	Mar '06	Mar '05	AVERAGE
GNFC	6.90	8.74	11.99	8.42	10.87	16.66	26.86	25.67	29.13	23.58	16.88
GSFC	10.94	14.76	28.24	35.15	15.18	39.80	20.23	17.95	20.93	17.53	22.07
RASHTRIYA FERTILIZAR LTD	11.94	11.62	12.62	15.25	9.53	22.55	11.27	12.07	13.64	15.50	13.60
COROMANDAL INTERNATIONAL	19.79	16.82	26.37	32.06	23.35	32.18	24.51	17.45	17.27	17.75	22.76
DEEPAK FERTILIZAR	19.39	12.12	18.57	16.08	14.56	20.34	15.28	14.00	12.71	18.93	16.20
NATIONAL FERTILIZER	0.36	-0.49	5.28	9.49	13.77	13.32	11.10	17.11	16.67	20.53	10.71
INDUSTRY AVERAGE	11.55	10.60	17.18	19.41	14.54	24.14	18.21	17.38	18.39	18.97	17.04

TABLE – 15: RETURN ON NETWORTH RATIO (In Percentage)

COMPANY NAME	Mar '14	Mar '13	Mar '12	Mar '11	Mar '10	Mar '09	Mar '08	Mar '07	Mar '06	Mar '05	AVERAGE
GNFC	9.92	10.05	11.31	11.65	5.95	11.29	20.20	20.79	25.03	23.49	14.97
GSFC	8.16	13.14	21.54	26.49	11.86	25.85	16.18	19.55	25.77	15.56	18.41
RASHTRIYA FERTILIZAR LTD	9.96	11.92	11.47	12.18	12.78	12.65	10.28	10.26	10.83	11.00	11.33
COROMANDAL INTERNATIONAL	15.42	20.40	29.23	36.47	32.62	44.03	26.40	19.66	19.08	18.25	26.16
DEEPAK FERTILIZAR	16.35	11.17	17.40	17.50	18.49	18.52	14.37	14.62	13.91	15.21	15.75
NATIONAL FERTILIZER	-6.00	-10.78	7.22	8.28	10.84	6.62	7.71	12.84	9.26	13.75	5.97
INDUSTRY AVERAGE	8.97	9.32	16.36	18.76	15.42	19.83	15.86	16.29	17.31	16.21	15.43

TABLE 16: RETURN ON ASSETS RATIO (In Percentage)

COMPANY NAME	Mar '14	Mar '13	Mar '12	Mar '11	Mar '10	Mar '09	Mar '08	Mar '07	Mar '06	Mar '05	AVERAGE
GNFC	189.52	174.81	161.34	147.14	133.77	129.59	118.76	101.06	80.31	64.93	130.12
GSFC	105.16	98.92	441.27	354.93	269.04	242.36	184.87	171.30	143.00	111.14	212.20
RASHTRIYA FERTILIZAR LTD	45.47	42.69	39.36	36.46	33.30	30.31	27.87	26.23	24.68	23.05	32.94
COROMANDAL INTERNATIONAL	78.86	76.86	83.92	67.56	102.30	80.57	56.79	40.33	34.48	149.21	77.09
DEEPAK FERTILIZAR	169.05	149.00	138.71	120.87	105.48	90.99	79.09	71.83	64.75	59.44	104.92
NATIONAL FERTILIZER	30.45	32.28	35.76	34.09	32.25	29.98	28.69	27.94	25.47	23.84	30.08
INDUSTRY AVERAGE	103.09	95.76	150.06	126.84	112.69	100.63	82.68	73.12	62.12	71.94	97.89

A STUDY ON DEMOGRAPHIC PROFILE AND PROBLEMS FACED BY THE POWERLOOM OWNERS WITH SPECIAL REFERENCES TO COIMBATORE CLUSTER

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ABSTRACT
The purpose of this study is to find out the major problems of power loom units in Coimbatore cluster. The objective of the study is to understand the personal profile and major problems faced by the owners of the power loom units in the study area. A total number of owners taken for the study is 200 and statistical tools employed to analyze are percentage analyze, descriptive Statistics and one way Anova.

KEYWORDS
Power loom Owners, Coimbatore Cluster, Problems of Power loom owners.

PREAMBLE
The Indian textile industry has an remarkable existence in the Indian economy. It is second largest employer after Agriculture in India. It is one of the largest in the world with a enormous raw material and textiles manufacturing base. The India Textile Industry has three main segments mill sector, handloom sector and decentralized power loom sector. Around 35 million people are directly employed in the textile manufacturing activities. Indirect employment including the manpower engaged in agricultural based raw-material production like cotton and related trade and handling could be stated to be around another 60 million. Weaving is one of the most ancient handicrafts patronized all over the world and at all times. Like food and shelter, clothing is also a basic need of every human being. The Indian textile industry today comprises of the large scale, well established and well organized mill sector on the one hand and the largely dispersed and unorganized handloom and power loom sector on the other. In fact, among the counties of the world, ancient India enjoyed an attractive position as a producer of the finest variety of hand spun and hand woven cloth. The art of spinning and weaving had certainly attained a high level of excellence and the craftsmen had acquired extra ordinary skills. Since ancient times, weaving has by and large remained the exclusive preserve of certain specific castes and communities.

This district is the most industrialised district in the state. In addition to the textile industry, the engineering industry also is quite developed which supports the textile manufacturing industry and vice versa. The growth and concentration of textile industry in the district has helped the growth of the industry engaged in the manufacture of machinery and tools for use in the textile industry. Also the handloom production is having a significant presence in this area. Coimbatore is noted even today for its handloom fabrics. These have contributed in no small measures towards establishing the industrial base of the district's economy. Coimbatore city has rightly been called the Manchester of South India.

REVIEW OF LITERATURE
IrannaT.Hatti (1996) in his research work has explained the economic problems and prospects of cotton power loom industry in Mumbai – Karnataka region. He emphasized on the importance of decentralized power loom sector in Indian Textile Industry.

Rakshit (2007) explained the overview of Power loom Industry in India. He focused on the decentralized sector of power loom industry. The decentralized sector plays a vital role in meeting the clothing needs of the country.

Ansari Abdul Majid(2007) in his research work studied the management, organisation and marketing problems of power loom co-operative societies in Malegaon. He has studied the profile of power loom co-operative societies in Malegaon, functions of the societies, structure of the societies etc.

Thakor D. V. (2010) has done research work on challenges and perspectives of Indian Power loom industry. Today the decentralized sector is facing numerous problems like obsolete technology, no implementation of business ethics, traditional method of marketing, lack of trained human resource, high cost of production with low quality etc.

Anusya.D, Perma.R (2013) studied the Problems and prospects of power loom units in somanur cluster in relation to its production efficiency and capabilities with a view to speed up modernization of the power looms. The study shows that there is no significant relationship between the experience of the power loom owners and problems faced by them.

Santhosh.V, Poorna.K, (2014) has studied the Electricity Problem in Power loom Units in Coimbatore. This study mainly concentrated on electricity problems of power loom industry which affects the production of the fabric and reduces the income of the weavers. The power loom sector has various areas of concern like the cost problem, weaving problem, no proper government support, etc., Many weavers have lost their sources of income and business due to shortage of power supply.

NEED FOR THE STUDY
In the present economic environment where dependency on foreign capital and know-how is increasing all round, the power loom industry presents a sustainable model of economic activity that is not energy intensive and has low capital costs, as well as an extensive skill base. The owners of power loom units in Coimbatore cluster facing different problem like production, finance and marketing in their day to day operations. Its survival in and adaptability to a wide range of economic conditions also needs to be understood in proper perspective, in order to underline the inherent problems of this enterprise is the need of the hour.

OBJECTIVES OF THE STUDY
The present study has been carried out with the prime objective of assessing The demographic profile of Power loom operators in Coimbatore cluster and study the major problems of power loom units' owners in Coimbatore cluster.

RESEARCH DESIGN

The study is an empirical analysis of the selected handloom and power loom units in the Coimbatore cluster. Data is collected both from primary and secondary sources. The areas are selected on the basis of a good concentration of handloom and power loom units in the Coimbatore district. Moreover proximity and convenience of the location of the units was another compelling reason for the selection of the area for the field survey.

PRIMARY DATA

The study is based basically on primary data obtained from the power loom units selected for obtaining the needed information. The primary data have been collected through structured and pre-tested questionnaire, personal interviews, discussions and observations.

SELECTION OF SAMPLE UNITS FOR PRIMARY DATA

The primary data has been collected from 200 sample power loom owners through a comprehensive questionnaire which was specially designed for the purpose. The questionnaire was administered to 200 sample units and data has been collected through personal interview method. In order to conduct survey of sample units in the study area, the interview time was fixed to suit the convenience of the respondents and the interviews were held at the place of weaving. This enabled to observe the working and living conditions of the owners from close angles.

SECONDARY DATA

The primary data were supplemented by a spate of secondary sources of data. The secondary data pertaining to the study was gathered from the records published by the Ministry of textile industry Government of India, Power loom service centre, SITRA, Textile committee Coimbatore, various University libraries and from Internet web resources. Further, the secondary data were also collected from various leading journals. A number of standard text books were studied to obtain pertinent literature on migrated workers in unorganized sectors.

DISCUSSIONS AND INFORMAL INTERVIEWS

In order to know the knowledge assessment on textile business recent changes in the textile manufacturing, benefits and problems, come accrossed by the owners, several rounds of discussion were held with knowledgeable persons in the field of power loom industries, and research supervisor.

PRE-TEST

The interview schedule meant for the respondents was pre-tested with 50 power loom entrepreneurs. After pre-testing, necessary modifications were made in the interview schedule to fit in the track of the present study.

TABLE- 1: SHOWING PERSONAL PROFILE OF THE POWER LOOM OWNERS

Gender	Frequency	Percent	Cumulative Percent
Male	144	72	72
Female	56	28	100
Age			
20 to 30 years	76	38	38
31 to 40 years	63	31.5	69.5
41 to 50 years	46	23	92.5
Above 50 years	15	7.5	100
Educational Qualification			
Illiterate	22	11	11
School level	88	44	55
Under Graduate	60	30	85
Post Graduate	30	15	100
Total	200	100	
Monthly Income			
Rs. 20000 to30000	63	31.5	31.5
Rs. 30001to40000	73	36.5	68
Rs. 40001to 50000	42	21	89
Above Rs. 50000.	22	11	100
Total	200	100	
Marital status			
Married	122	61	61
Unmarried	78	39	100
Total	200	100	
Nature of Family			
Nuclear	110	55	55
Joint Family	90	45	100
Total	200	100	
Size of Family			
Upto 2 members	16	8	8
3 to 5members	143	71.5	79.5
Above 6 members	41	20.5	100
Total	200	100	
Experiences			
Upto 2 years	37	18.5	18.5
3 to 5years	65	32.5	51
6 to 10years	59	29.5	80.5
Above 10years	39	19.5	100
Total	200	100	
Number of power looms owned			
Below 10	71	35.5	35.5
10 to 20	82	41	76.5
21 to 30	34	17	93.5
Above 31	13	6.5	100
Total	200	100	

Source: Primary Data

The above table shows that majority of the sample respondents are male with ate age category of 20 to 30 years, they are having only school level education and monthly income level to the majority of power loom owners is Rs. 30001to40000 per month. 55 % of the sample respondents' nature of family is Nuclear family with 3-5 members. 65% owners are having 3 to 5years power loom business experience and 82 % of the owners owned 10 to 20 power looms.

TABLE- 2: SHOWING PROBLEMS FACED BY THE POWER LOOM OWNERS

Problems Faced by the Power loom owners	N	Sum	Mean	Std. Deviation
Shortage of Power	200	419	2.10	0.98
Scarcity of Raw Materials	200	463	2.32	1.03
Lack of government support	200	504	2.52	1.23
Changes in climatic condition	200	495	2.48	1.16
High Cost of Production	200	532	2.66	1.26
Lack of proper maintenance	200	614	3.07	1.33
Shortage of working capital	200	411	2.06	1.03
Increase in material cost	200	433	2.17	0.97
Increase in salaries and work force	200	526	2.63	1.14
Lack of Government Subsidies	200	520	2.60	1.26
Higher Rate of Interest charged by private financers	200	516	2.58	1.46
Lack of awareness to market information	200	442	2.21	1.20
Transportation problems	200	494	2.47	1.07
Warehousing problems	200	540	2.70	1.19
Competition from another sector	200	538	2.69	1.15
Lack of advertising	200	630	3.15	1.41

Source: Primary Data

The above descriptive Statistics table shows that the problems Faced by the Power loom owners in Coimbatore cluster.

ONE WAY ANOVA

HO: There is no mean difference between gender and problems faced by the Power loom Owners.

ANALYSIS OF VARIANCE

TABLE 3

Problems		Sum of Squares	df	Mean Square	F	Sig.	Result
Shortage of Power	Between Groups	0.1	1	0.07	0.07	0.79	NS
	Within Groups	191.1	198	0.97			
	Total	191.2	199				
Scarcity of Raw Materials	Between Groups	0.0	1	0.00	0.00	0.96	NS
	Within Groups	211.2	198	1.07			
	Total	211.2	199				
Lack of government support	Between Groups	5.5	1	5.49	3.67	0.06	NS
	Within Groups	296.4	198	1.50			
	Total	301.9	199				
Changes in climatic condition	Between Groups	0.3	1	0.32	0.24	0.63	NS
	Within Groups	269.6	198	1.36			
	Total	269.9	199				
High Cost of Production	Between Groups	1.2	1	1.23	0.78	0.38	NS
	Within Groups	313.7	198	1.58			
	Total	314.9	199				
Lack of proper maintenance	Between Groups	0.2	1	0.21	0.12	0.73	NS
	Within Groups	350.8	198	1.77			
	Total	351.0	199				
Shortage of working capital	Between Groups	0.6	1	0.64	0.60	0.44	NS
	Within Groups	209.8	198	1.06			
	Total	210.4	199				
Increase in material cost	Between Groups	8.7	1	8.73	9.77	0.00	S
	Within Groups	176.8	198	0.89			
	Total	185.6	199				
Increase in salaries and work force	Between Groups	0.6	1	0.55	0.42	0.52	NS
	Within Groups	260.1	198	1.31			
	Total	260.6	199				
Lack of Government Subsidies	Between Groups	1.8	1	1.75	1.10	0.30	NS
	Within Groups	316.3	198	1.60			
	Total	318.0	199				
Higher Rate of Interest charged by private financers	Between Groups	17.4	1	17.44	8.48	0.00	S
	Within Groups	407.3	198	2.06			
	Total	424.7	199				
Lack of awareness to market information	Between Groups	0.7	1	0.68	0.47	0.49	NS
	Within Groups	284.5	198	1.44			
	Total	285.2	199				
Transportation problems	Between Groups	3.2	1	3.18	2.78	0.10	NS
	Within Groups	226.6	198	1.14			
	Total	229.8	199				
Warehousing problems	Between Groups	0.3	1	0.25	0.18	0.67	NS
	Within Groups	283.7	198	1.43			
	Total	284.0	199				
Competition from another sector	Between Groups	0.1	1	0.14	0.10	0.75	NS
	Within Groups	262.6	198	1.33			
	Total	262.8	199				
Lack of advertising	Between Groups	0.1	1	0.06	0.03	0.86	NS
	Within Groups	395.4	198	2.00			
	Total	395.5	199				

Source: Primary Data

5% Level of Significance NS=Not Significant S= Significant

The above table shows that the F ratio values of "Increase in material cost" and "Higher Rate of Interest charged by private financers" are greater than p value hence null hypothesis is rejected and concluded that there is significance difference between the mean values among the male and female power loom owners. But all other problems there is no significance difference between the male and female power loom owners. Hence the null hypothesis is accepted.

SUGGESTIONS

The development and expansion of power loom sector is greatly required for India's overall economic development. The owners of power loom sector in India should form a cluster to share infrastructure and technology. There should be integrated and regulated markets for supply of fine quality of materials at affordable rates to the power loom sector. The government should motivate the banks to provide financial assistance to the power loom sector with easy documentations. Research and development should be carried on constantly in the power loom sector for enhanced innovation and creativity. Export markets should be taped to the advantages of power loom sector with the help of government and other stakeholders. Sufficient steps should be taken to promote the export of power loom products. The owners of power loom sector must enter into joint venture with their peers abroad in order to reap the global benefits.

CONCLUSION

The power loom industry provides one of the basic necessities of life. The power loom industry occupies an important role in the economy of India because of its contribution to the industrial output as well as the generation of the employment. The above study shows that the owners of the power loon units in Coimbatore cluster face much number of problems. The shortage of power supply, scarcity of raw materials, lack of government support and changes in the climatic conditions are some paramount problems faced by the owners.

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ANALYTICAL STUDY OF DIRECT TAX CODE TO BE INTRODUCED IN INDIAN ECONOMY

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ABSTRACT

The Direct Taxes Code (DTC) is an attempt by the Government of India (GOI) to simplify the direct tax laws in India. DTC will revise, consolidate and simplify the structure of direct tax laws in India into a single legislation. The DTC, when implemented will replace the Income-tax Act, 1961 (ITA), and other direct tax legislations like the Wealth Tax Act, 1957. The first draft bill of DTC was released by GOI for public comments along with a discussion paper on 12 August 2009 (DTC 2009) and based on the feedback from various stakeholders; a Revised Discussion Paper (RDP) was released in 2010. DTC 2010 was introduced in the Indian Parliament in August 2010 and a Standing Committee on Finance (SCF) was specifically formed for the purpose which, after having a broad-based consultation with various stakeholders, submitted its report to the Indian Parliament on 9th March 2012. Recently as a follow-up on this initiative and as stated by the Finance Minister (FM) in his Interim Budget Speech in February 2014, after taking into account the recommendations of the SCF, a "revised" version of DTC (DTC 2013) has been released on 31 March 2014. This paper focuses on the key features of the Direct Tax Code, its impact on the Indian Economy and various stakeholders as a whole and analyze the practical issues on the effective implementation of the DTC in India. This paper also discusses the need and benefits of such tax initiative to reduce the number of compliances under various acts by the citizens and tax payers.

KEYWORDS
Direct Tax Code , Government of India, Income Tax Act, 1961, Tax Rates, tax-GDP ratio, tax administrator, Hindu Undivided Family.

INTRODUCTION
The Government of India introduced the Direct Tax Code 2010 (DTC) in the Parliament on 30th August, 2010. The DTC was proposed to be made effective from the financial year 2012-13 i.e. year starting from 1st April, 2012.

While some onerous provisions from the first draft of the DTC have been rightly dropped after representations, several proposals in the DTC are still likely to compel the corporate to rethink their existing structures and mode of conducting business. For example, the DTC proposes to tax transfer of shares of a foreign company, on the basis that there is a transfer of a capital asset situated in India, if the fair value of the asset situated in India constitute at least 50 percent of the assets directly or indirectly held by the foreign company.

Further , an overseas company with a place of effective management in India will now be treated as a tax resident in India and would be consequently liable to tax in India on its global income. Introduction of CFC rule would result in taxing income of certain overseas subsidiaries in the hands of their Indian owners, even before such income is distributed.

The other important provisions that have been retained and refined relates to GAAR, APA, CFC regulations, residency rule for the foreign company and branch profit tax. Another important key relaxation relates to tax holidays for the SEZ developers and SEZ units. The other welcome move is the continuation of exemptions of capital gain on sale of listed shares and concessional tax treatment for short term capital gain as well as unlisted shares.

India has long advocated its preference for a modern, stable and simple tax regime. Whether the DTC meets these criteria is something that will be undoubtedly debated as one analyses the fine print. However, it is the tax administration's implementation that will determine the long-term impact of the new tax regime.

OBJECTIVES OF THE STUDY
The primary goal of this study is to examine the basic provisions of Direct Tax Code in the context of emerging Indian Economy.

The secondary objectives are as per following:

a. To understand the need for enactment and implementation of DTC in India.
b. To appreciate the role of administration in effective implementation of DTC.
c. To create awareness amongst various stakeholders regarding the provisions of DTC in comparison with the prevailing tax system in India.

LIMITATION
This is a study is based on the secondary data collected from It is supported more by facts than by numerical data. The study is further limited to the discussion of the provisions of the Direct Tax Code, its impact on the stakeholders and various aspects f the act in comparison with the present direct tax system in India.

HYPOTHESIS
It is the tax administration's implementation that will determine the long-term impact of the Direct Tax Code as a new tax regime.

METHODOLOGY
This study is based on **secondary data's**. The information has been collected from books, periodicals, government publications and web sites.

STATEMENT AND SIGNIFICANCE
DIRECT TAX CODE
The **direct tax code** seeks to consolidate and amend the law relating to all direct taxes, namely, income-tax, dividend distribution tax, fringe benefit tax and wealth-tax so as to establish an economically efficient, effective and equitable direct tax system which will facilitate voluntary compliance and help increase the tax-GDP ratio. Another objective is to reduce the scope for disputes and minimize litigation.

It is designed to provide stability in the tax regime as it is based on well accepted principles of taxation and best international practices. It will eventually pave the way for a single unified taxpayer reporting system.

The salient features of the code are:

- **Single Code for direct taxes**: all the direct taxes have been brought under a single Code and compliance procedures unified. This will eventually pave the way for a single unified taxpayer reporting system.
- **Use of simple language**: with the expansion of the economy, the number of taxpayers can be expected to increase significantly. The bulk of these taxpayers will be small, paying moderate amounts of tax. Therefore, it is necessary to keep the cost of compliance low by facilitating voluntary compliance by them. This is sought to be achieved, inter alia, by using simple language in drafting so as to convey, with clarity, the intent, scope and amplitude of the provision of law. Each sub-section is a short sentence intended to convey only one point. All directions and mandates, to the extent possible, have been

conveyed in active voice. Similarly, the provisos and explanations have been eliminated since they are incomprehensible to non-experts. The various conditions embedded in a provision have also been nested. More importantly, keeping in view the fact that a tax law is essentially a commercial law, extensive use of formulae and tables has been made.

- **Reducing the scope for litigation**: wherever possible, an attempt has been made to avoid ambiguity in the provisions that invariably give rise to rival interpretations. The objective is that the tax administrator and the tax payer are ad idem on the provisions of the law and the assessment results in a finality to the tax liability of the tax payer. To further this objective, power has also been delegated to the Central Government/Board to avoid protracted litigation on procedural issues.
- **Flexibility**: the structure of the statute has been developed in a manner which is capable of accommodating the changes in the structure of a growing economy without resorting to frequent amendments. Therefore, to the extent possible, the essential and general principles have been reflected in the statute and the matters of detail are contained in the rules/schedules.
- **Ensure that the law can be reflected in a Form**: for most taxpayers, particularly the small and marginal category, the tax law is what is reflected in the Form. Therefore, the structure of the tax law has been designed so that it is capable of being logically reproduced in a Form.
- **Consolidation of provisions**: in order to enable a better understanding of tax legislation, provisions relating to definitions, incentives, procedure and rates of taxes have been consolidated. Further, the various provisions have also been rearranged to make it consistent with the general scheme of the Act.
- **Elimination of regulatory functions**: traditionally, the taxing statute has also been used as a regulatory tool. However, with regulatory authorities being established in various sectors of the economy, the regulatory function of the taxing statute has been withdrawn. This has significantly contributed to the simplification exercise.
- **Providing stability**: at present, the rates of taxes are stipulated in the Finance Act of the relevant year. Therefore, there is a certain degree of uncertainty and instability in the prevailing rates of taxes. Under the Code, all rates of taxes are proposed to be prescribed in the First to the Fourth Schedule to the Code itself thereby obviating the need for an annual Finance Bill. The changes in the rates, if any, will be done through appropriate amendments to the Schedule brought before Parliament in the form of an Amendment Bill.

Major Changes in comparison with the present tax structure:

- The draft tax code proposes a new tax rate of 35% for individuals havin income exceeding 10 crore.
- The standing committee on Finance headed by senior BJP leader Shri. Yashwant Sinha had proposed the tax stabs as follows :-

INCOME	TAX RATE
Income up to Rs. 3,00,000/-	NIL
Income between Rs. 3,00,000 to Rs. 10,00,000/-	10%
Income between Rs. 10,00,000 to Rs. 20,00,000/-	20%
Income beyond Rs. 20,00,000/-	30%

But these recommendations did not make into the draft Direct Tax code. These recommendations will result in huge revenue loss. The total revenue loss on account of recommended changes in income tax slabs and removal of cess works out to Rs. 60,000 crore approximately. Whereas the present structure of tax is as follows:

INCOME	TAX RATE
Income up to Rs. 3,00,000/-	NIL
Income between Rs. 2,00,000 to Rs. 5,00,000/-	10%
Income between Rs. 5,00,000 to Rs. 10,00,000/-	20%
Income beyond Rs. 10,00,000/-	30%

1. The draft Direct Tax Code-2013 proposes to reduce the age for tax exemption for senior citizens to 60 years from 65 years.
2. The new draft tax code widens the base for levy of wealth tax. The revised code captures all assets for wealth tax, whether physical or financial, thereby removing the distinction between physical and financial assets. Wealth tax is proposed to be levied on individuals, Hindu Undivided Family (HUF) and private discretionary trusts at the rate of 0.25 % . The threshold for levy of wealth tax in the case of individual and HUF shall be Rs. 50 crore. According to current tax norms, every individual and HUF who has wealth exceeding Rs. 30 lakh is required to pay wealth tax and the wealth tax rate is 1%.
3. With a view to provide parity in treatment of insurance products and mutual fund products, the new Direct Tax Code proposes to levy income distribution tax on equity linked insurance products on the lines of equity oriented mutual funds.
4. The new tax code proposes additional tax @ 10% on recipient of dividend (liable to dividend distribution tax) exceeding Rs. 1 crore. Under the Income Tax Act, the dividend distribution tax is to be levied at the rate of 15%.
5. The revised DTC says the provisions of Income from House Property shall not apply to the house property or any part of the house property which is used for business or commercial purposes.
6. The new tax code says the amount of rent received in arrears or the amount of rent which is not realized from a tenant and is realized subsequently shall be deemed to be the income from house property of the financial year in which such rent is received or realized.
7. For the purposes of the dedication in respect of interest on loan taken for self-occupied house property, the loan given by the employer should also qualify for this concessions.
8. Further certain novel provisions are also included such as additional tax levy on certain persons having high net worth such as dividend tax levy on dividend income earned by resident shareholders in excess of Rs. 10 million.
9. With a view to provide smooth transition from IT Act to Direct Tax Code, the new tax code says provisions will be made for treatment of losses remaining to be carried forward and set off as per the provisions of the existing Income Tax Act on the date on which DTC comes in to effect.

Other Important Highlights of the Direct Taxes Code

- Proposal to levy dividend distribution tax at 15 per cent.
- Exemption for investment in approved funds and insurance schemes proposed at Rs. 150,000 annually.
- Proposed bill has 319 sections and 22 schedules against 298 sections and 14 schedules in existing IT Act.
- Many provisions in Income Tax Act will be a part of DTC as well.
- Mutual Funds/ULIP dropped from 80C deductions : Income from equity-oriented mutual funds or ULIP shall be subject to tax @ 5%
- Fringe benefits tax will be charged to the employee rather than the employer.
- Political contribution of up to 5 percent of the gross total income will be eligible for deduction.

CONCLUSIONS

The DTC 2013 is presently a draft version which can be implemented only after it is presented before the Indian Parliament where. The fate of the DTC 2013 continues to be is uncertain. Nevertheless, DTC 2013 provides an opportunity to assess the impact of the proposals on current structures and business models. Based upon recommendation of the Parliamentary Standing Committee on Finance, the Code provides for investment linked incentives to specified businesses such as generation of power, infrastructure facility, hospital, hotel, cold chain facility, etc. However, no deduction is allowable on expense incurred to acquire land, goodwill or financial instrument.

The efforts of the Government to introduce a simpler tax regime are welcome but most of the Code seemingly contains provisions similar to the current legislation with only a few exceptions.

This code is not an attempt to amend the Income Tax Act, 1961 nor it is an attempt to improve upon the present Act, It is an overall new exercise in which assumption which have held the ground for many years have been discarded

India has long advocated its preference for a modern, stable and simple tax regime. Whether the DTC meets these criteria are something that will be undoubtedly debated as one analyses the fine print. However, it is the tax administration's implementation that will determine the long-term impact of the new tax regime.

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NEED OF ICT FOR DIRECT RELATION BETWEEN FARMER AND CONSUMER

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ABSTRACT

Today all of we lives in e-World, means electronic world. Most of transactions of Business, Industries and Services are done through electronically, via computer & communication technology. The paper suggest the need of ICT to our Indian agricultural field. If this is adopted then it will change our current scenario of agriculture and create a high growth of development in India.

KEYWORDS

ICT, electronic world.

INTRODUCTION

India is an agricultural country. Agriculturing is the primary business of India, and so many businesses are depends upon agriculture. We uses ICT for developing businesses, industries and service sector. But there is less use of ICT in agriculture field. This paper focuses on need of ICT for maintaining direct relation between farmers and consumers so farmers can be get more profits and also consumers can be get cheaper goods directlyfrom farmers and the mediators and theirs profits is to be omitted from this procedure. And it is also important for to develop our agricultural based economy.

OBJECTIVES OF THE STUDY

1. To study the impact ICT in agriculture.
2. To study the need of ICT for Farmers and Consumers.
3. To suggest the advantages of ICT in agriculture.
4. To study the limitations of ICT in agriculture.

HYPOTHESIS

1. There is less use of ICT in agriculture field.
2. Most of farmers don't know about ICT.
3. Traditional way of selling and buying of goods are adopted in India.
4. It is very challengeous to adopting ICT in all area of agricultural field.

RESEARCH METHODOLOGY

Primary data are collected through observation and survey in local area market, marketing committee and secondary data are collected from web media, books, Journals/ research paper.

USES & LIMITATIONS OF THE STUDY

This research paper useful to farmers as well as consumers to maximizes their connectivity directly through electronic media and do their transactions more effectively and get satisfaction about profit, price and quality. But this paper not useful to them who are not educated.

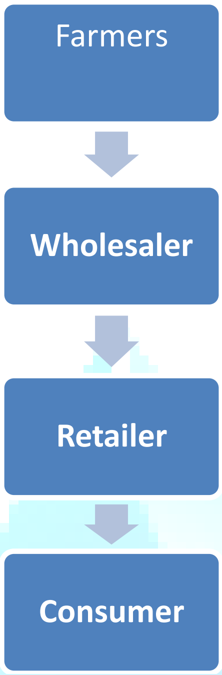
MEANING & DEFINITION OF ICT

ICT means information and communication technology in which computer and communication technology combinely play a vital role to develop e-world. Computer and internet are the key points of this technology. ICT includes multimedia, EDI (electronic data interchange), e-commerce, e-Business, e-services, e-marketing, e-banking, e-payment, e-e- communication, e-shopping etc. Its capture global market electronically.

Current scenario in agriculture field in India:

The buying and selling procedure of agricultural goods are as follows in our India.

FIG. 1



The above figure shows a simple supply chain of distributing goods. As per the distance between farmers and consumers more agents and mediators are added in this chain automatically. But normally if we think about above chain farmer go to the wholesaler who purchase or auction the product and receive commission from farmers. After that wholesaler included his profit and covered his expenses and sale to the retailers. And retailers added more profit and covered their expenses and sale to the consumer at higher rate and earn more profits.

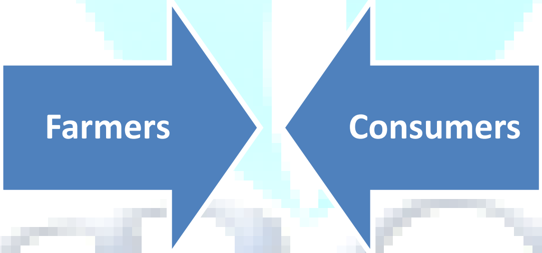
For example – If a farmer sales wheat to the wholesaler, as per quality of wheat wholesaler paid Rs.14 per kg. to farmer after wholesaler sale it to retailer at Rs. 16 and then retailer sold it to consumer at Rs. 20. Retailer have no fixed rate to sale it to consumer .Hence he earn more profit with comparison of farmers and wholesalers. In this procedure farmers get less profit and mediators earn high profit and also consumer pays high rate for it.This creates inequality in our economy and society.

TABLE 1

Product	Farmer sale or wholesaler purchase price/cost – 1 kg.	Wholesaler sale or retailer purchase price/cost – 1 kg.	Retailer sale or consumer purchase price/cost – 1 kg.
Wheat	14	16	20
Jawar	15	17	22
Bajra	13	15	19

Source: Local area market .

TABLE 2: SUGGESTED CHAIN FOR BUYING AND SELLING GOODS WITH USE OF ICT



NEED AND ADVANTAGES OF ICT FOR FARMERS AND CONSUMERS

1. For to increase the farmers profit.
2. It helps to sale and buy product through online minimizes cost, expenses, time, money, travelling and efforts of both faemers and consumers.
3. It removes the mediators profits.
4. Consumers purchase goods at lower and cheaper price.
5. It gives employment to computer hardware and software maintainers.
6. Improved consumer's satisfaction.
7. For privacy of information in transactions.
8. Remain open all the time 24 hours/ 365 days.
9. Competition between farmers increase quality
10. It provides users more options and quicker delivery of product.
11. It helps to growth of economic development.
12. Farmers adopting latest technology in farming field.
13. Banking, transport, advertising, insurance all service sectors growing rapidly.
14. Products can be purchased from remote areas.

LIMITATIONS OF ICT IN AGRICULTURAL FIELD

1. Hackers creates problems for farmers and consumers to complete their transactions.
2. Ill literacy about ICT is creates problems to operate online transactions.
3. There can be lack of system security, reliability, or standards owing to poor implementation of e –Commerce.

4. User may not trust the site being unknown faceless seller.
5. Lack of touch or feel of products during online shopping.
6. ICT applications are still evolving and changing rapidly.
7. Internet access is still not cheaper and inconvenient to use for many potential farmers and consumers like one living in remote villages.
8. Barrier in telecommunications and internet connection affects transactions.
9. It creates unemployment for mediators.
10. Power cut creates problems to users of computers.

SUGGESTIONS

1. Workshops and Training based programmes taken by government for literacy of ICT for farmers.
2. Subsidies provided to internet user farmers to develop ICT in agriculture field.
3. Cheaper internet facility are to be provided by the web companies.
4. Be careful from hacking and harmful activities. Cyber laws are to be followed properly.
5. All service sectors combinely helps to farmers to increase the use of ICT.

CONCLUSION

Compare with traditional agriculture activities it is an innovative technique, which is more useful to farmers and consumers, but due to above limitations it is very challengeous to adopting this technology all the remote and far flung village area. It is more flexible and provides 24 hours, 365 days facility any time anywhere. There is more need of literacy and help of government and service sectors to improve this technology in agriculture field.

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FINANCIAL ANALYSIS OF COMMERCIAL BANKS: A COMPARATIVE STUDY

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ABSTRACT
Banking Sector plays an important role in economic development of a country and is featured by a large network of bank branches, which serves many kinds of financial services of the people. State Bank of India (SBI) and Housing Development Finance Corporation Limited (HDFC) are selected as sample banks for the study as they are top banks in the domain of public and private sectors. The State Bank of India, popularly known as SBI is one of the leading public sector bank in India. In this paper, an effort has been made to analyze the financial performance of public and private sector banks. The study is a case method of Research and comparative analysis in nature. The study used only secondary data that was collected from research articles, books related and thesis works already done on the topic and particularly from annual reports of SBI and HDFC Bank.

KEYWORDS
Financial Analysis, Commercial Banks, financial performance, ratios.

INTRODUCTION
India's banking sector is constantly growing. With the potential to become the fifth largest banking industry in the world by 2020 and third largest by 2025, India's banking and financial sector is expanding very quickly. The Indian Banking industry is currently worth Rs. 81 trillion (US $ 1.31 trillion) and banks are now utilizing the latest technologies like internet and mobile devices to carry out transactions and communicate with the masses. The Indian banking sector consists of 27 public, 20 private sector banks and 43 foreign banks along with 61 regional rural banks (RRBs).

The Banking Laws (Amendment) Bill that was passed by the Parliament in 2012 allowed the Reserve Bank of India (RBI) to make final guidelines on issuing bank licenses. The role of the Indian Government in expanding the banking sector is noticeable. It is expected that the new guidelines issued by RBI will curb practices of impish borrowers and streamline the loan system in the country. In the coming years, India could see a rise in the number of banks, a shift in the style of operation, which could also evolve by including modern technology in the industry. The banking system of India is featured by a large network of bank branches, which serves many kinds of financial services of the people. State Bank of India (SBI) and Housing Development Finance Corporation Limited (HDFC) are selected as sample banks for the study as they are top banks in the domain of public and private sectors. In this paper, an effort has been made to analyze the financial performance of public and private sector banks.

Financial statements are prepared primarily for decision-making and they play a dominant role-in setting the framework of decision making. The information provided in financial statements is not an end in itself as no meaningful conclusions can be drawn from these statements. The information provided in the financial statements is of immense use in making decisions through financial analysis. Financial analysis is "the process of identifying the financial strengths and weakness of a firm by properly establishing relationship between the balance sheet and profit and loss account". The techniques of financial analysis are comparative balance sheets statements, trend analysis, common size statements, funds flow and cash flow statement, cost volume-profit analysis, and particularly in banking, the financial analysis is very much essential as they deal with money of the public. Ratio analysis methodically classifies the data of banks income statement and Balance sheet by establishing the relationship among various items of those statements, wherefrom many performance indicators can be received by the managers and can understand well about the functioning and financial performance of a bank. It is very vivid that the financial performance of individual banks differ from one to another, however, the performance as discussed is also distinguishable between public sector banks and private sector banks.

LITERATURE REVIEW
1. **K. Sriharsha Reddy (March 2012)** suggested CAMEL Approach to evaluate relative performance of banks in India. It is found that public sector banks have significantly improved indicating positive impact of the reforms in liberalizing interest rates, rationalizing directed credit and Investments and increasing competition.
2. **Amitava Mandal, Santanu Kumar Ghosh (2012),** made an attempt to investigate empirically the relationship between intellectual capital and financial performance of 65 Indian banks for a period of ten years from 1999 to 2008. The analysis indicates that the relationships between the performance of a bank's intellectual capital, profitability and productivity are varied.
3. **Mohammad Firoz (2011)**, made an attempt to analyze the preparations carried out by the Indian banking industry for the implementation of the International Financial Reporting Standards on and after 1 April 2011. The main finding of this paper is that the Indian banking industry is preparing according to the target for convergence from 1 April 2011, but alteration in the various statutory laws of India are yet to be implemented / approved by the government.
4. **Pankaj Gupta and Seema Garg (2011)**, states that it is due to fierce competition with financial corporate, banks have to use various performance measurement tools to improve the quality of their services. The study investigates, analyses and compares the efficiency of 49 Commercial Banks by employing the Data Envelopment Analysis (DEA) resulting in the delineation and identification of the causes of inadequate performance. The study reveals that there is a variation in the technical efficiency and the scale efficiency of most of the banks.

OBJECTIVES OF THE STUDY
1. To find out various financial services and facilities offered by the public and private sector banks.
2. To compute and compare the financial performance of SBI and HDFC through Investment valuation ratios.

HYPOTHESIS OF THE STUDY
H_0 : The financial performance in terms of Investment Valuation Ratios of SBI and HDFC bank does not differ significantly
H_1 : The financial performance in terms of Investment Valuation Ratios of SBI and HDFC bank does differ significantly

SCOPE AND LIMITATIONS OF THE STUDY
The present study focuses on a critical evaluation of financial performance of select public sector and private sector banks through Investment Valuation ratios. Though the study is very comprehensive in nature, it is subjected to the limitations as under:
1. One of the major limitations of this study is all the banks in Hyderabad were not considered as the network of operation of all the banks is quite distinguishable.
2. The banks considered are SBI from Public sector Banks and HDFC from private sector banks as they are the leading banks.

3. Co-operative banks and foreign banks are kept out of the study as they follow different set of guidelines given by RBI.

RESEARCH METHODOLOGY

The study is a case method of Research and comparative analysis in nature. The study used only secondary data that was collected from research articles, books related and thesis works already done on the topic and particularly from annual reports of SBI and HDFC Bank. State Bank of India (SBI) and Housing Development Finance Corporation Limited (HDFC) are selected as sample banks for the study as they are top banks in the domain of public and private sectors. The total time period of the study is 5 years, i.e. 2008-2012. To prove the authenticity of the findings, t-Test and Test of difference between proportions are employed.

DATA ANALYSIS & INTERPRETATION

DIVIDEND PER SHARE

The amount of dividend that a stockholder will receive for each share of stock held is called Dividend per Share. The formula for calculating DPS is the total amount of dividends paid divided by the total shares outstanding. The following table is a modest attempt to analyze Dividend per Share of SBI and HDFC.

TABLE 1

Dividend Per Share		
Years	**SBI**	**HDFC**
2008	35	**4.3**
2009	30	**16.5**
	(-14.3)	**283.7**
2010	30	**12**
	0	**(-27.3)**
2011	29	**10**
	(-3.3)	**(-16.7)**
2012	21.5	**8.5**
	(-25.9)	**(-15)**
Average	29.1	**10.26**
	t-Value	**6.37**
	t-Critical	**2.31**

Source: Secondary data

It is clear from the above table that the Dividend per Share of SBI is completely declined whereas the Dividend per Share of HDFC Bank initially increased and afterwards declined.

OPERATING PROFIT PER SHARE

Operating profit per share ratio establishes the relationship between operating profit and sales. In other words, it indicates the portion remaining out of every rupee worth of sales after all operating costs and expenses have been met. In the following table, an attempt has been made to analyze the operating profit per share of select banks.

TABLE 2

Operating Profit Per Share		
Years	**SBI**	**HDFC**
2008	289.44	**37.71**
2009	255.39	**160.36**
	(-11.76)	**(+325.2)**
2010	229.63	**106.25**
	(-10.1)	**(-33.7)**
2011	230.04	**92.36**
	(+0.18)	**(-13.1)**
2012	173.61	**107.32**
	(-24.5)	**(+16.2)**
Average	235.62	**100.8**
	t-Value	**4.94**
	t-Critical	**2.31**

Source: Secondary data

It is evident from the above table that the Operating Profit per Share of SBI and HDFC Bank reported a mixed trend. It is because of the dynamics in the business profits of both the banks. As the size and operational levels are quite different, the two banks are differing absolutely in terms of operating profits.

NET OPERATING PROFIT PER SHARE

Net operating profit represents the profitability of a company after accounting for cost of goods sold and operating expenses. In the following table, an attempt has been made to present the net operating profit per share of select banks.

TABLE 3

Net Operating Profit Per Share		
Years	**SBI**	**HDFC**
2008	1776.47	**138.66**
2009	1504.34	**524.34**
	(-15.32)	**(+278)**
2010	1353.15	**436.3**
	(-10.05)	**(-16.8)**
2011	1179.45	**464.77**
	(-12.84)	**(+6.6)**
2012	899.83	**348.57**
	(-23.7)	**(-25)**
Average	1342.648	**382.53**
	t-Value	**5.91**
	t-Critical	**2.31**

Source: Secondary data

The above table exhibits Net Operating Profit per Share of SBI and HDFC Bank. It can be observed that the Net Operating Profit per Share is completely declined whereas it reported a mixed trend in case of HDFC Bank. The declining trend of net operating profit might be caused by the volatility of interest rate.

TEST OF HYPOTHESIS I

H_0 : The financial performance in terms of Investment Valuation Ratios of SBI and HDFC bank does not differ significantly

H_1 : The financial performance in terms of Investment Valuation Ratios of SBI and HDFC bank does differ significantly

TABLE 4

Type of Ratios	Name of the Test	Degrees of freedom	Level of significance	Calculated Value	Critical Value	Decision
Dividend Per Share	t-test	8	5%	6.37	2.31	Rejected
Operating Profit Per Share				4.94	2.31	Rejected
Net Operating Profit Per Share				5.91	2.31	Rejected

Source: Primary data

With the help of t – test, it is examined that there is a significant difference in the financial performance in terms of Investment Valuation Ratios of SBI and HDFC Bank. The calculated t-value of Dividend per Share, Operating Profit per Share and Net Operating Profit per Share is greater than Critical Value and therefore the hypothesis is rejected.

FINDINGS OF THE STUDY

7. The Dividend per Share of SBI is completely declined whereas the Dividend per share of HDFC Bank initially increased and afterwards declined.
8. The operating profit per share of SBI and HDFC reported a mixed trend. It is due to dynamics in the business profits of the individual banks.
9. The net operating profit per share of SBI is found declining whereas, HDFC Bank reported very least growth as the operating profits of SBI differed significantly from HDFC bank.

CONCLUSIONS

With regard to banking activities, the performance of HDFC is better than SBI and for the investors who are intended for long term investments HDFC is better but with respect to the growth in the market, SBI is more appropriate. The analysis shows that HDFC Bank has satisfactory NPA's, Net profit margin, Net Interest margin & Return on equity which states that it is managing it assets far better than SBI but with regards to share value performance SBI share value is better in the market when compared to HDFC. Overall analysis states that financial performance of HDFC is better than SBI.

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EFFICIENCY OF COMMODITY FUTURES IN PRICE DISCOVERY: AN EMPIRICAL STUDY OF AGRICULTURAL COMMODITIES

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ABSTRACT

The main aim of the present study is to find out whether commodity futures market is efficient in price discovery for agricultural commodities in India. The daily closing price information of spot and futures markets, for a period of 10 years (2004 – 2013), for three agricultural commodities viz., Chana, Chilli and Turmeric which are traded in National Commodity & Derivatives Exchange Ltd (NCDEX), is taken for the study. The present study examines price discovery function in spot-futures agricultural commodity market in India by using VAR model, Johansen test of Co-integration, VECM, OLS method, and Granger Causality tests. The cointegration results reveal that there is a long-run association between commodity spot and futures prices of Chana, Chilli and Turmeric. The VECM results show that there is a long–run causality running from futures prices to spot prices of near month contracts of Chana, Chilli and Turmeric. The speed of adjustment towards equilibrium is lower in the sample agricultural commodities. The granger causality test results disclose that there is only a unidirectional causality from futures returns to spot returns of Chilli and Turmeric. In case of Chana, bidirectional causality from futures to spot returns is observed. So, it is revealed that the near month futures contracts are suitable for hedging.

JEL CLASSIFICATION
C22, C32, G14, O13, Q13.

KEYWORDS
Commodity Futures, Price Discovery, Price Risk Management, Price Volatility.

1. INTRODUCTION

In the wake of globalization and surge in global uncertainties, the prices in commodity markets have been showing wide fluctuations. Commodity price volatility is the most critical issue faced by the producers of primary commodities. Fluctuating commodity prices pose a continuous financial risk for businesses. Derivatives products serve the vitally important economic functions of price discovery and risk management. The transparency, which emerges from their trading mechanism, ensures the price discovery in the underlying market. Further, they serve as risk management tools by facilitating the trading of risks among the market participants.

Price discovery and risk transfer are considered to be two major contributions of futures market towards the organization of economic activity (Garbade & Silber, 1983). Price discovery hinges on whether new information in the market is reflected first in the changes in futures prices or changes in spot prices (Hoffman, 1932). Through price discovery function, futures market establishes a competitive reference (future) price from which spot price can be derived. This implies that futures price serves as market's expectations of subsequent spot price. In other words, price discovery is the process by which markets incorporate this information to arrive at equilibrium (Working, 1948). In a static sense, price discovery implies the existence of equilibrium price and in a dynamic sense, the price discovery process describes how information is produced and transmitted across the markets. Futures prices serve as the market expectations of subsequent spot prices and can be used by exporters, producers including farmers for optimal decision making and resource allocation.

In efficient markets, new information is impounded simultaneously into cash and futures markets (Zhong et al. 2004). In other words, financial market pricing theory states that market efficiency is a function of how fast and how much information is reflected in prices. The rate at which prices exhibits market information is the rate at which this information is disseminated to market participants (Zapata et al. 2005). In reality, institutional factors such as liquidity, transaction costs, and other market restrictions may produce an empirical lead-lag relationship between price changes in the two markets. The market that provides the greater liquidity and low trading cost as advocated by Fleming, Ostdiek and Whaley (1996) is likely to play a more important role in price discovery.

2. REVIEW OF LITERATURE

Pindyck and Robert S (2001) have provided an explanation of short-run commodity price movements that is based on "fundamentals," i.e., rational shifts in supply and demand in each of two markets. It also explained how prices, rates of production, and inventory levels are interrelated, and are determined via equilibrium in two interconnected markets.

Susan Thomas (2003) has shown some evidence on the role played by the nascent futures markets in price discovery. They offered three policy proposals: using reference rates for strengthening transparency, exploring a greater role for cash settlement, and treating warehouse receipts as securities.

YangJianet et al. (2005) have examined the lead-lag relationship between futures trading activity (volume and open interest) and cash price volatility of major agricultural commodities. Granger causality tests and generalized forecast error variance decompositions method have shown that an unexpected increase in futures trading volume unidirectionally causes an increase in cash price volatility for most commodities. Further, they found a weak causal feedback between open interest and cash price volatility.

S.M. Lokare (2007) has examined the efficacy and performance of commodity derivatives in steering the price risk management. He found that almost all the commodities throw an evidence of co-integration in both spot and future prices, presaging that these markets are marching in the right direction of achieving improved operational efficiency, *albeit*, at a slower pace. He also found that hedging proves to be an effective proposition in respect of some commodities, while the others entail moderate or considerably higher risk.

R. Salvadi Easwaran and P. Ramasundaram (2008) have made an investigation into the futures markets in agricultural commodities in India. Bartlett's homogeneity of variance test was used to test the integration between spot and futures markets. The test results of price discovery have indicated that price discovery does not occur in agricultural commodity futures market. The econometric analysis of the relationship between price return, volume, market depth and volatility has shown that the market volume and depth are not significantly influenced by the return and volatility of futures as well as spot markets.

Nath and Lingareddy (2008) the authors have tried to explore the effect of futures trading on spot prices of pulses by using correlations, regression analysis and the Granger causality test. Their study found that volatility in urad as well as pulses prices was higher during the period of futures trading than in the period prior to its introduction as well as after the ban of futures contract.

Mantu Kumar Mahalik et al. (2009) have examined price discovery and volatility spillovers in Indian spot-futures commodity markets by using cointegration (Johansen, 1991), VECM and the bivariate EGARCH (Nelson, 1991) model. This study has used four futures and spot indices of Multi-Commodity Exchange (MCX). VECM shows that commodity futures markets effectively serve the price discovery function in the spot market implying that there is a flow of information from future to spot commodity markets. Besides the bivariate GARCH model indicates that the volatility spillovers from future to the spot market are dominant in the case of ENERGY and COMDEX index while AGRISP acts as a source of volatility towards the agri-futures market.

Mallikarjunappa T and Afsal E M (2010) had made an attempt to determine the lead-lag relationship between spot and futures markets in the Indian context by using high frequency price data of twelve individual stocks, observed at one-minute interval. The study applied the concept of co-integration and establishes the spot-futures relationship using Vector Error Correction Mechanism (VECM) represented by EGARCH framework. They found no significant leading or lagging effects in either spot or futures markets with respect to top twelve individual stocks. There exists a contemporaneous and bi-directional lead-lag relationship between the spot and the futures markets.

Mukherjee Kedar Nath (2011) has made an attempt to re-validate the impact of futures trading on agricultural commodity market in India. The statistical techniques used are multiple regression model, VAR model and GARCH model. The analysis showed that the price volatility for most of the selected agricultural commodities was higher in pre- futures period and gets significantly reduced after getting listed in futures. The empirical findings have significantly shown that comparative advantage of futures market in disseminating information, leading to a significant price discovery and risk management.

Kumar Brajesh and Pandey Ajay (2011) have investigated the effectiveness of the price discovery function of commodity futures markets in India. It can be concluded that in the Indian commodity futures markets, futures markets do not dominate the price discovery process as they do in other developed markets. For the precious metals and energy commodities, the futures markets lead the price discovery role. In the case of agricultural commodities and industrial metals, the price discovery takes place in both spot and futures markets. For the precious metals and energy commodities, which are more tradable in nature, futures markets are not affected by spot markets.

Sehgal Sanjay et al. (2012) have empirically examined the effect of futures trading activity (trading volume; proxy of futures liquidity) on spot price volatility for seven agricultural commodities (guar seeds, turmeric, soya bean, black pepper, barley, Maize and Castor Seed). They found that unexpected futures trading volume is Granger causing spot price volatility and are significant for five out of seven agricultural commodities (Guar seed, Turmeric, Soybean, Maize and Castor Seed).It has been found reversed effect for one commodity i.e. Pepper the effect of spot volatility on futures trading and for Barley no causality is revealed either from future to spot or Vice-Versa.

Chauhan Ajay Kumar et al. (2013) have made an effort to analyze the market efficiency of the Indian commodity market and volatility spillover effects between the spot and future market with reference to agri-commodities guar seed and chana. The results indicated that the commodity futures markets effectively serves the price discovery function in the spot market implying that there is a flow of information from future to spot commodity markets. The results also indicated that the volatility spillovers from future to the spot market are dominant. However in Agri-commodities the volatility in spot market may influences volatility in future market.

3. NEED FOR AND IMPORTANCE OF THE STUDY

Indian markets have been increasingly integrating with global markets in commodities. This opens a window of opportunity to Indian companies but at the same time exposes them to a whole new world of risks. Among these risks, the most important one is commodity price volatility. Companies need to be able to manage these risks if they are to be globally competitive, and this is where an efficient commodity futures market plays a vital role not only in facilitating price/volatility risk mitigation but also catalyzing near-perfect price discovery. Therefore, the price volatility drives the demand for hedging the risk in the commodity market. The need for commodity derivatives is multifarious in a growing economy like India. Since India is one of the largest producer of agricultural commodities, time is ripe for India to take a dominant role in price leadership at international level. In this backdrop, it is important to empirically examine the price discovery mechanism of select agricultural/primary commodities.

4. RESEARCH GAP

Though commodity markets in emerging economies like India have been growing, not much research has been done on testing the efficiency of commodity derivatives in price discovery of agricultural/primary commodities in India. In this backdrop, an attempt has been made to revisit the debate on price discovery mechanism in agricultural commodities market. It covers fairly longer study period compared to prior research of the subject. The study attempts to address the following question: Are the commodity futures prices useful in price discovery function of spot prices?

5. OBJECTIVE OF THE STUDY

The main aim of the present study is to find out whether commodity futures market is efficient in price discovery for agricultural commodities in India.

6. HYPOTHESES OF THE STUDY

H_{01}: There is no significant long-run association between commodity futures and spot prices.
H_{02}: There is no significant Granger causality from commodity futures prices to spot prices.

7. DATA & RESEARCH METHODOLOGY

This study is based on secondary data which is obtained from the National Commodity & Derivatives Exchange Limited (NCDEX). The daily prices of near-month contracts of spot and futures markets, for a period of 10 years (2004 – 2014), for three agricultural commodities, such as Chana, Chilli and Turmeric are taken from the NCDEX website. Natural Logarithm of daily closing prices is taken to minimize the heteroscedasticity in data. In order to analyze price discovery and risk management functions in both spot and futures prices in agricultural commodity market, Ordinary Least Square (OLS) Method, Vector Autoregression (VAR) model, Johansen test of Co-integration, Vector Error Correction Model (VECM) and Granger Causality model have been used.

8. SCOPE OF THE STUDY

The present study has been carried out with the focus of studying effectiveness of commodity futures in price discovery of agricultural commodities in India with special reference to National Commodity & Derivatives Exchange Limited (NCDEX). Since NCDEX is the largest national commodity exchange for agricultural commodities trading, the primary agricultural commodities which have more domestic consumption viz., Chana, Chilli and Turmeric have been selected for the study. The study has covered a period of 10 years daily near-month contract prices.

9. DATA ANALYSIS

TABLE 1: DESCRIPTIVE STATISTICS OF DAILY SPOT PRICE AND FUTURES PRICES (2004 – 2014)

Descriptive Statistics	*NCDEX - Agricultural Commodities - Near Month Contracts*											
	Chana				Chilli				Turmeric			
	SP	FP	SR	FR	SP	FP	SR	FR	SP	FP	SR	FR
Mean	2561.86	2570.97	0.03	0.02	5673.81	5502.37	0.13	0.12	5503.32	5405.33	0.05	0.06
Median	2390.00	2404.50	0.00	0.00	5452.15	5178.00	-0.07	-0.04	4947.50	4719.00	-0.02	-0.06
Maximum	5021.90	4933.00	10.39	10.63	10420.00	10336.00	47.30	42.95	17047.05	15776.00	23.31	31.90
Minimum	1386.45	1398.00	-12.17	-25.76	1695.60	1733.00	-49.78	-58.06	1896.65	1817.00	-44.65	-36.45
Std. Dev.	759.14	742.28	1.48	1.72	1944.90	1917.04	3.13	3.95	3827.61	3592.07	2.66	3.34
Skewness	0.97	0.93	-0.22	-1.61	0.39	0.62	2.38	0.58	1.43	1.37	-4.25	0.21
Kurtosis	3.96	3.86	9.82	31.24	3.08	3.22	124.04	68.10	4.20	4.05	96.48	32.48
No. of Observations	2676	2676	2675	2675	1187	1187	1186	1186	1386	1386	1385	1385

Note: SP = Spot Price; FP = Futures Price; SR = Spot Returns; FR = Futures Returns

Table 1 reports the descriptive statistics of variables for the period of the sample based on the daily prices and returns. It shows that the returns on spot and futures of Chilli are much higher than the returns of Chana and Turmeric during the study period. It also shows that the standard deviation of returns of Chilli and Turmeric is more than the Chana. It implies that the variability in returns is more in case of Chilli and Turmeric than Chana. Positive skewness was observed in the prices of spot and futures for Chana, Chilli and Turmeric near month contracts. Negative skewness was observed in the returns of spot and futures of Chana and spot returns of Turmeric. A large Kurtosis figure (> 3) is also observed in the prices and returns of spot and futures of Chana, Chilli and Turmeric commodities, indicating a relatively Leptokurtic distribution.

EFFECTIVENESS OF COMMODITY FUTURES IN PRICE DISCOVERY OF SPOT PRICES

TESTING STATIONARITY OF COMMODITY FUTURES AND SPOT RETURNS

Augmented Dickey Fuller (ADF) test has been conducted to analyse the stationarity of spot and futures returns of sample commodities for near month contracts. The following equation describes the estimation of stationarity under ADF test.

$$\Delta Y_t = \alpha_0 + \gamma Y_{t-1} + \sum_{j=1}^{p} \beta_j \Delta Y_{t-j} + \varepsilon_t$$

The unit root test is then carried out under the null hypothesis γ =1 against the alternative hypothesis of γ < 1. Once the value for the test statistic is computed, it can be compared to the relevant critical value for the ADF test. If the test statistic is less than the critical value then the null hypothesis of γ =1 is rejected and no unit root is present and the series become stationary.

TABLE 2: TESTING OF STATIONARITY OF COMMODITY SPOT AND FUTURES PRICES & RETURNS

Augmented Dickey Fuller test - Log Prices						
Particulars	**Chana - Near Month**		**Chilli - Near Month**		**Turmeric - Near Month**	
	t-Statistic	*Prob.**	*t-Statistic*	*Prob.**	*t-Statistic*	*Prob.**
Log Spot Prices	-1.983179	0.2945	-1.901357	0.3319	-0.967595	0.7664
Log Futures Prices	-2.008064	0.2835	-2.096392	0.2463	-1.083507	0.7243
Augmented Dickey Fuller test - Ln futures and Spot Returns						
Particulars	**Chana - Near Month**		**Chilli - Near Month**		**Turmeric - Near Month**	
	t-Statistic	*Prob.**	*t-Statistic*	*Prob.**	*t-Statistic*	*Prob.**
Spot Returns	-47.11322	0.0001	-31.62426	0.0000	-32.88813	0.0000
Futures Returns	-50.83035	0.0001	-31.63985	0.0000	-36.53932	0.0000

Test critical values:1% level -3.432948; 5% level -2.862574; 10% level -2.567366

*MacKinnon (1996) one-sided p-values.

The table 2 shows the results of stationarity test on the log values of spot and futures prices and log values of spot and futures returns for near month contracts of Chana, Chilli and Turmeric respectively. The results of the ADF test confirm that the data series of spot and futures prices is non- stationary at level form (p > 0.05) and the data series of spot and futures returns is stationary (p < 0.05). Hence, Johansen test of cointegration is used to check long run equilibrium relationship between spot and futures prices of sample commodities.

TABLE 3: OPTIMAL LAG SELECTION – NEAR MONTH CONTRACTS

VAR Lag Order Selection Criteria – Endogenous variables: **LSP LFP – Chana**						
Lag	**LogL**	**LR**	**FPE**	**AIC**	**SC**	**HQ**
0	5000.367	NA	8.13E-05	-3.741293	-3.736884	-3.739697
1	15147.52	20271.52	4.10E-08	-11.33347	-11.32025	-11.32869
2	15442.96	589.7779	3.30E-08	-11.55162	-11.52957*	-11.54364
3	15456.55	27.10598	3.27E-08	-11.5588	-11.52793	-11.54763
4	15471.98	30.75584*	3.25e-08*	-11.56735*	-11.52767	-11.55299*
Endogenous variables: **LSP LFP - Chilli**						
Lag	**LogL**	**LR**	**FPE**	**AIC**	**SC**	**HQ**
0	842.2153	NA	0.000828	-1.420482	-1.411901	-1.417248
1	5006.643	8307.735	7.30E-07	-8.454173	-8.428429*	-8.444469
2	5017.61	21.83968*	7.22e-07*	-8.465950*	-8.423044	-8.449776*
3	5021.583	7.899248	7.22E-07	-8.465905	-8.405836	-8.443262
4	5024.191	5.176524	7.23E-07	-8.463552	-8.38632	-8.434439
Endogenous variables: **LSP LFP - Turmeric**						
Lag	**LogL**	**LR**	**FPE**	**AIC**	**SC**	**HQ**
0	750.5869	NA	0.00116	-1.083339	-1.075768	-1.080507
1	6276.749	11028.33	3.93E-07	-9.07489	-9.052178	-9.066394
2	6304.389	55.07988	3.79E-07	-9.109101	-9.071248*	-9.094941
3	6317.253	25.59748*	3.74e-07*	-9.121929*	-9.068934	-9.102105*
4	6320.497	6.445701	3.75E-07	-9.120834	-9.052699	-9.095347

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level); FPE: Final prediction error; AIC: Akaike information criterion; SC: Schwarz information criterion; HQ: Hannan-Quinn information criterion

As the results of cointegration are sensitive to lag length used in the analysis, selection of optimal lag length is necessary. Table 3 presents the results of lag length selection criteria applied in the present study. As per Akaike Information Criterion (AIC) the optimal lag length of 4 days is selected for near month contracts of Chana, 2 days for Chilli and 3 days for Turmeric respectively.

ESTIMATION OF LONG-RUN ASSOCIATION BETWEEN COMMODITY FUTURES AND SPOT PRICES

The price linkage between futures market and spot market is examined using cointegration (Johansen, 1991) analysis which reveals the extent to which two markets have moved together towards long run equilibrium. There are two test statistics for cointegration under the Johansen approach, which are formulated as

TRACE TEST

$$\lambda_{trace}(r) = -T \sum_{i=r+1}^{k} \ln(1-\hat{\lambda}_i)$$

MAXIMUM EIGENVALUE TEST

$$\lambda_{max}(r, r+1) = -T \ln(1-\hat{\lambda}_{i+1})$$

Where *r* is the number of cointegrating vectors under the null hypothesis and $\hat{\lambda}_i$ is the estimated value for the *i*th ordered Eigenvalue from the Π matrix. It is the *i*th largest Eigenvalue of matrix Π. T is the sample size or number of observations. $\hat{\lambda}_{i+1}$is the $(1+r)^{th}$ largest squared Eigenvalue. λ_{trace} is a joint test where the null is that the number of cointegrating vectors is less than or equal to *r* against an unspecified or general alternative that there are more than *r*. λ_{max} conducts separate tests on each Eigenvalue, and has as its null hypothesis that the number of cointegrating vectors is *r* against an alternative of *r* +1.

TABLE 4: ESTIMATION OF LONG-RUN ASSOCIATION BETWEEN COMMODITIES FUTURES AND SPOT PRICES

Johansen Co-integration Test							
LSP LFP - Chana - Near Month Contracts							
Hypothesized No. of CE(s)	Eigenvalue	Trace Test			Max-Eigen Value Test		
		Statistic value	Critical Value	Prob.**	Statistic value	Critical Value	Prob.**
None *	0.022399	64.30359	15.49471	0.0000	60.50876	14.2646	0.0000
At most 1	0.00142	3.794828	3.841466	0.0514	3.794828	3.841466	0.0514
LSP LFP - Chilli - Near Month Contracts							
Hypothesized No. of CE(s)	Eigenvalue	Trace Test			Max-Eigen Value Test		
		Statistic value	Critical Value	Prob.**	Statistic value	Critical Value	Prob.**
None *	0.036177	47.28236	15.49471	0.0000	43.62791	14.2646	0.0000
At most 1	0.003082	3.654446	3.841466	0.0559	3.654446	3.841466	0.0559
LSP LFP - Turmeric - Near Month Contract							
Hypothesized No. of CE(s)	Eigenvalue	Trace Test			Max-Eigen Value Test		
		Statistic value	Critical Value	Prob.**	Statistic value	Critical Value	Prob.**
None *	0.031188	44.94325	15.49471	0.0000	43.7877	14.2646	0.0000
At most 1	0.000836	1.155554	3.841466	0.2824	1.155554	3.841466	0.2824

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level; Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level; * denotes rejection of the hypothesis at the 0.05 level; **MacKinnon-Haug-Michelis (1999) p-values

Table 4 reveals that there is a presence of one cointegration equation between commodity spot and future prices of near month contracts of Chana, Chilli and Turmeric and this signifies the long-run association. While the trace test results point out less than or one cointegration equations, Maximum Eigen value test results confirm the presence of one cointegration equation.

ESTIMATION OF LONG-RUN AND SHORT-RUN ADJUSTMENT/CONVERGENCE TOWARDS EQUILIBRIUM (CAUSALITY) BETWEEN COMMODITY SPOT AND FUTURES PRICES

To examine the lead-lag relationship or the long-run and short-run speed adjustment/convergence towards equilibrium or long-run steady state (causality) between spot and futures prices of the select commodities, the study uses the Vector Error Correction Model (VECM) as spot and futures prices are cointegrated. When the coefficient of error correction term (coefficient of CointEq1) is negative in sign and significant, then it can say that there is a long-run causality running from futures prices to dependent spot prices (Gujarati, 2009).

$$R_{St} = \alpha_S + \lambda_S Z_{t-1} + \sum_{i=2}^{k} \beta_{Si} R_{St-i} + \sum_{j=2}^{l} \gamma_{Fj} R_{Ft-j} + \varepsilon_{St}$$

$$R_{Ft} = \alpha_F + \lambda_F Z_{t-1} + \sum_{i=21}^{k} \beta_{Fi} R_{Ft-i} + \sum_{j=2}^{l} \gamma_{Sj} R_{St-j} + \varepsilon_{Ft}$$

Where α_S and α_F are the intercepts and ε_{St} and ε_{Ft} are the error terms. Z_{t-1} is the error correction term, which measures how the dependent variable adjusts to the previous period's deviation from the long-run equilibrium. $Z_{t-1} = S_{t-1} - \alpha F_{t-1}$ where α is the cointegrating vector. The coefficients λ_S and λ_F are interpreted as the speed of adjustment parameters. The larger the λ_S, the greater the response of S_t to the previous period's deviation from the long-run equilibrium.

TABLE 5: ESTIMATION OF LONG-RUN AND SHORT-RUN ADJUSTMENT /CAUSALITY BETWEEN COMMODITY FUTURES AND SPOT PRICES

VEC - Vector Error Correction Estimates of LSP LFP for Near Month Contracts							
		Chana		Chilli		Turmeric	
Error Correction:		**D(LSP)**	**D(LFP)**	**D(LSP)**	**D(LFP)**	**D(LSP)**	**D(LFP)**
CointEq1	Coefficient	-0.021754	0.044737	-0.02778	0.039219	-0.044087	0.028871
	Standard Error	0.0086	0.01087	0.01179	0.01497	0.01317	0.01708
	t-statistics	[-2.52934]	[4.11402]	[-2.35688]	[2.61933]	[-3.34655]	[1.68986]
	Prob.	0.0115	0.0000	0.0186	0.0089	0.0008	0.0913
D(LSP(-1))	Coefficient	-0.140273	0.048932	0.01054	-0.093393	-0.052826	0.052339
	Standard Error	0.02521	0.03188	0.04125	0.05241	0.03802	0.04931
	t-statistics	[-5.56322]	[1.53491]	[0.25550]	[-1.78214]	[-1.38939]	[1.06145]
	Prob.	0.0000	0.1249	0.7984	0.0750	0.1649	0.2887
D(LSP(-2))	Coefficient	0.019354	0.068243	-0.053819	-0.064645	-0.087443	-0.02068
	Standard Error	0.02536	0.03206	0.04119	0.05233	0.03741	0.04852
	t-statistics	[0.76315]	[2.12833]	[-1.30652]	[-1.23540]	[-2.33715]	[-0.42623]
	Prob.	0.4454	0.0334	0.1916	0.2169	0.0196	0.6700
D(LSP(-3))	Coefficient	-0.087573	0.009288			0.034782	0.017152
	Standard Error	0.02527	0.03196			0.03606	0.04677
	t-statistics	[-3.46491]	[0.29065]			[0.96443]	[0.36672]
	Prob.	0.0005	0.7713			0.3350	0.7139
D(LSP(-4))	Coefficient	-0.064059	0.055019				
	Standard Error	0.02233	0.02823				
	t-statistics	[-2.86897]	[1.94893]				
	Prob.	0.0042	0.0514				
D(LFP(-1))	Coefficient	0.3772	0.007302	0.068277	0.147738	0.158608	0.000229
	Standard Error	0.02035	0.02573	0.03298	0.0419	0.03045	0.03949
	t-statistics	[18.5370]	[0.28384]	[2.07006]	[3.52609]	[5.20862]	[0.00579]
	Prob.	0.0000	0.7766	0.0387	0.0004	0.0000	0.9954
D(LFP(-2))	Coefficient	-0.057483	-0.037123	0.075657	0.046685	0.132713	0.042404
	Standard Error	0.02224	0.02812	0.03311	0.04206	0.03066	0.03976
	t-statistics	[-2.58449]	[-1.32010]	[2.28490]	[1.10991]	[4.32921]	[1.06660]
	Prob.	0.0098	0.1869	0.0225	0.2673	0.0000	0.2863
D(LFP(-3))	Coefficient	-0.004722	-0.01027			0.028648	0.021175
	Standard Error	0.02212	0.02796			0.03003	0.03894
	t-statistics	[-0.21348]	[-0.36727]			[0.95411]	[0.54380]
	Prob.	0.8310	0.7134			0.3402	0.5867
D(LFP(-4))	Coefficient	0.036744	-0.03691				
	Standard Error	0.02128	0.02691				
	t-statistics	[1.72643]	[-1.37164]				
	Prob.	0.0844	0.1703				
C	Coefficient	0.000256	0.000205	0.001179	0.001203	0.000432	0.000522
	Standard Error	0.00026	0.00033	0.0009	0.00114	0.00069	0.0009
	t-statistics	[0.97738]	[0.61949]	[1.30903]	[1.05089]	[0.62308]	[0.58069]
	Prob.	0.3285	0.5356	0.1908	0.2935	0.5333	0.5615
R-squared		0.166567	0.013296	0.024333	0.01566	0.066839	0.005486
Adj. R-squared		0.163748	0.009959	0.020192	0.011482	0.062084	0.00042
F-statistic		59.09103	3.984085	5.875785	3.748278	14.05914	1.082847
Prob(F-statistic)		0.0000	0.000045	0.0000	0.002264	0.0000	0.371762

Table 5 shows the error correction terms of spot and futures prices for different lags and indicate the long-run and short-run speed adjustment/convergence towards equilibrium or long-run steady state. In case of near month contracts of all the select commodities, the coefficient of error correction term of log spot prices is negative in sign and significant ($p<0.05$), which shows long-run causality running from futures prices to spot prices for all the three commodities. The error correction terms of sample commodities viz., Chana, Chilli and Turmeric are -0.021754, -0.02778 and -0.044087 and indicate that there is nearly 2.2%, 2.8% and 4.4% speed of adjustment towards equilibrium.

TABLE 6: ESTIMATION OF PRESENCE OF SHORT-RUN CAUSALITY BETWEEN COMMODITY FUTURES AND SPOT PRICES

Wald Test: - LSP LFP - Near Month Contracts									
Test Statistic	Chana			Chilli			Turmeric		
	Value	df	Prob.	Value	df	Prob.	Value	df	Prob.
F-statistic	107.539	(4, 2661)	0.0000	4.825	(2, 1178)	0.0082	12.497	(3, 1374)	0.0000
Chi-square	430.155	4	0.0000	9.650	2	0.0080	37.490	3	0.0000

Wald test is performed to test the null hypothesis that the joint value of coefficients of future prices at different select lag lengths is zero and the results of the Wald test disproves the hypothesis ($p < 0.05$) for all the coefficients of futures prices of select commodities. This indicates the presence of the short-run causality between the spot and futures markets of Chana, Chilli and Turmeric.

ESTIMATION OF DIRECTION OF CAUSALITY – GRANGER CAUSALITY

Engle and Granger (1987) and Johansen (1991) suggest that if cointegration exists between two variables in the long-run, then there must be either unidirectional or bi-directional causality between these variables. If spot and futures prices are cointegrated, then causality must exist at least in one direction (Granger, 1986). Further, to find out the direction of the causality, Granger Causality test is conducted with the help of the following equations:

CAUSAL RELATIONSHIP FROM FUTURES TO SPOT MARKET

$$R_{St} = \alpha_0 + \sum_{k=1}^{p} \alpha_{1k} R_{S(t-k)} + \sum_{k=1}^{p} \beta_{1k} R_{F(t-k)} + \mu_t \qquad (i)$$

CAUSAL RELATIONSHIP FROM SPOT TO FUTURES MARKET

$$R_{Ft} = \alpha_0 + \sum_{k=1}^{p} \alpha_{1k} R_{S(t-k)} + \sum_{k=1}^{p} \beta_{1k} R_{F(t-k)} + \mu_t \qquad (ii)$$

In the above two equations, R_{St} and R_{Ft} are returns of spot and futures price in period *t* and $R_{S(t-k)}$ and $R_{F(t-k)}$ are the spot and futures price returns in *k* previous periods, i.e. period *(t- k)*. α_k, and β_k are the coefficients and μ_t are the error terms. For the first equation the null hypothesis $\beta_k = 0$ implies that previous periods futures returns do not Granger- cause present periods spot price returns. However, if the null is rejected using a standard joint test like the F-test then it would imply that previous period futures price returns help in predicting today's spot price returns. Similarly, for the second equation rejection of the null $\beta_k = 0$ (which means previous periods spot prices do not cause today's futures price) would signify the power of the previous values of spot price returns in predicting today's futures price returns.

TABLE 7: ESTIMATION OF DIRECTION OF CAUSALITY – GRANGER CAUSALITY

Pairwise Granger Causality Tests										
SR FR - Near Month Contracts		**Chana**			**Chilli**			**Turmeric**		
Null Hypothesis:	*Lag Length*	*Observns*	*F-Statistic*	*Prob.*	*Observns*	*F-Statistic*	*Prob.*	*Observns*	*F-Statistic*	*Prob.*
FR does not Granger Cause SR	1	2674	451.889	0.0000	1185	7.08975	0.0079	1384	29.488	0.0000
SR does not Granger Cause FR			3.32821	0.0682		2.58746	0.108		2.90959	0.0883
FR does not Granger Cause SR	2	2673	228.938	0.0000	1184	7.5234	0.0006	1383	27.2572	0.0000
SR does not Granger Cause FR			5.5052	0.0041		1.76861	0.171		1.08408	0.3385
FR does not Granger Cause SR	3	2672	157.65	0.0000	1183	6.51013	0.0002	1382	19.6185	0.0000
SR does not Granger Cause FR			3.8435	0.0093		1.65155	0.1758		0.70631	0.5483
FR does not Granger Cause SR	4	2671	120.024	0.0000	1182	4.84565	0.0007	1381	14.8807	0.0000
SR does not Granger Cause FR			4.05751	0.0028		1.0378	0.3864		1.67486	0.1533
FR does not Granger Cause SR	5	2670	95.6639	0.0000	1181	3.93751	0.0015	1380	12.0153	0.0000
SR does not Granger Cause FR			3.93567	0.0015		0.99848	0.4173		1.21754	0.2984

Table 7 presents the results of granger causality. The granger causality test has been done from lag one to lag five, to assess the direction of causality on all the week days prices in futures and spot market. The results disclose that there is only a unidirectional causality from futures returns to spot returns of commodities Chilli and Turmeric ($P < 0.05$). However, in the case of Chana, there is a unidirectional causality from futures to spot returns ($P < 0.05$) for lag one and bidirectional causality from futures to spot returns of Chana ($P < 0.05$) for remaining lags.

10. FINDINGS & CONCLUSIONS OF THE STUDY

The cointegration results reveal that there is a presence of one cointegration equation between commodity spot and future prices of near month contracts of Chana, Chilli and Turmeric. It also reveals that there is a long-run association between commodity spot and futures prices of Chana, Chilli and Turmeric. The VECM results show that there is a long –run causality running from futures prices to spot prices of near month contracts of Chana, Chilli and Turmeric. The results of the Wald test reveals that the joint value of all the coefficients of futures prices at select lag lengths of Chana, Chilli and Turmeric contracts indicates the presence of the short-run causality between the spot and futures markets. The granger causality test results disclose that there is only a unidirectional causality from futures returns to spot returns of Chilli and Turmeric. In case of Chana, a unidirectional causality from futures to spot returns for lag one and bidirectional causality from futures to spot returns for remaining lags is observed. So, it is revealed that the near month futures contracts are efficient in price discovery of agricultural commodities in India.

11. IMPLICATIONS OF THE STUDY

As Derivatives market resembles the price expectations of the farmers, the commodity futures will be helpful in efficient price discovery in the agricultural spot market in India. Despite gaps, the futures price and spot prices are related in long-run. The farmer can use futures to hedge price risk. The futures indicate future spot price and so in two commodities futures decide the price of spot but in one commodity there is bidirectional flow showing spot gives the direction to futures.

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NON PERFORMING ASSETS MANAGEMENT IN HDFC BANK

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ABSTRACT

Non Performing Assets surfaced suddenly in the Indian banking scenario around the eighties. In the midst of turbulent structured changes overtaking the international banking institutions and where the global financial markets were undergoing sweeping changes. Management of Non Performing Assets nowadays is a critical performing area for banks. It is better for Indian banks to try for the international standard in terms of efficiency, productivity, profitability, assets recognition norms, and provisioning and capital adequacy to compete in the competitive new economy. Non Performing Assets (NPA's) are one of the major areas of concern for the Indian banking industry. The strength of a Bank and its health are determined by the quality of assets it possesses. Non-Performing Assets are like a double edged sword. They do not generate any income, whereas, the bank is required to make provisions such as assets. Thus Non-Performing Assets are the assets which show how healthy the bank is, so most of the banks are still in the process of decreasing the NPA's. And they still don't find the reasons behind the assets turning into NPA's.

KEYWORDS

gross NPA, NPA, net advances, time series.

INTRODUCTION

Non Performing Assets surfaced suddenly in the Indian banking scenario around the eighties. In the midst of turbulent structured changes overtaking the international banking institutions and where the global financial markets were undergoing sweeping changes. Management of Non Performing Assets nowadays is a critical performing area for banks. It is better for Indian banks to try for the international standard in terms of efficiency, productivity, profitability, assets recognition norms, and provisioning and capital adequacy to compete in the competitive new economy. Non Performing Assets (NPA's) are one of the major areas of concern for the Indian banking industry. The strength of a Bank and its health are determined by the quality of assets it possesses.

Non-Performing Assets are like a double edged sword. They do not generate any income, whereas, the bank is required to make provisions such as assets. Thus Non-Performing Assets are the assets which show how healthy the bank is, so most of the banks are still in the process of decreasing the NPA's. And they still don't find the reasons behind the assets turning into NPA's.

WHAT IS N.P.A.?

With a view to moving towards International best practices and to ensure greater transparency the '90 days overdue' norm for identification of Non Performing Assets has been adopted by the R.B.I. (w.e.f. 31.03.2004).

SO NPA REFERS TO,

- Interest and/ or installment of principal remain overdue for a period of more than 90 days in respect of a term loan.
- The Account remains 'out of order' for a period of more than 90 days. In respect of an overdraft/ C.C.
- The bills remains 'overdue' for a period of more than 90 days in the case of bills purchased and discounted.

"Non Performing Asset" management is a key subject which plays an important role in deciding the overall performance of the Bank. Therefore, the subject of "Non Performing Asset" is chosen for the project work. Accordingly the project is undertaken at HDFC **Bank.**

MAIN REASONS FOR ACCOUNTS BECOMING NPAs

- Units closed
- Borrower Absconding
- Sale of Assets
- Diversion of Funds
- Willful Default
- Non Renewal of the Limits
- Interest/Installments not paid.
- Non repayment of loans due to natural calamities such as drought, floods, earthquakes etc.
- Lack of verification of his/her securities.

REASONS FOR NPAs IN INDIA

- Corruption
- Judicial system flaws
- Nonexistent fear of penalties
- Inefficient credit appraisal systems
- Lack of technology, methodology and data support for scientific credit appraisal

WAYS TO REDUCE NPAs

- Personal contacts.
- Frequent follow-ups by bank officials.
- Issue of periodical notices.
- Adjustments of his/her O/S deposits.
- Apply of Scientific for appraisal before the loan is disbursed and monitor it closely in real time.
- Conduct recovery Champaign
- Break up recovery to branch level network
- Take every NPA case as a separate issue and analyze the need for further funding from an economic point of view.
- Implement a system for selecting a good borrower.

EFFECTS OF NPAs
As the number of accounts become NPAs this will lead to additional provisions which has to be made and these provisions are made out of profits earned by the Bank. Ultimately it leads to reduction in profits.

PREREQUISITES TO CONTROLLING NPAs
1. GOVERNANCE
- Independent oversight board with clear mandate.
- Defined and transparent procedures.
- Improved reporting standards.

2. GREATER FOCUS ON RESTRUCTURING
- The quality and speed of asset resolution is the key.
- Taking ownership of NPAs and proactive management.
- Working with debtors to improve cash-flow of assets underlying NPAs.

3. GREATER POWERS AND INSTITUTIONAL CAPABILITIES
- For example, power to separate bad management from the debtor and to liquidate debtors, which cannot be expeditiously restructured.
- Training, knowledge Transfer.
- Leadership.

4. INCENTIVES AND DISCIPLINES FOR BANKS
- Enhanced accountability of Banks and Bank managers.
- Ensure banks put in place risk analysis and credit management systems.
- Ultimate burden not transferable to AMCs.

5. GREATER PROTECTION OF CREDITOR RIGHTS
- Credible liquidation procedures and efficient secured transaction processes.
- Triggers and inventives for insolvency.
- Strong and Credible regulators, free from political pressure.

6. THE ROAD TO RECOVERY
The key Facilitators
- Early detection
- Speed
- Voluntary references
- Facilitation and quick arbitration.

NEED FOR THE STUDY
Non Performing Assets (NPA's) are one of the major areas of concern for the Indian banking industry. The strength of a Bank and its health are determined by the quality of assets it possesses. Non-Performing Assets are like a double edged sword. They do not generate any income, whereas, the bank is required to make provisions such as assets. Thus Non-Performing Assets are the assets which show how healthy the bank is, so most of the banks are still in the process of decreasing the NPA's. And they still don't find the reasons behind the assets turning into NPA's. Credit risk is defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms, or in other words it is defined as the risk that a firm's customer and the parties to which it has lent money will fail to make promised payments is known as credit risk The exposure to the credit risks large in case of financial institutions, such commercial banks when firms borrow money they in turn expose lenders to credit risk, the risk that the firm will default on its promised payments. As a consequence, borrowing exposes the firm owners to the risk that firm will be unable to pay its debt and thus be forced to bankruptcy.

PROFILE OF HDFC BANK
HDFC Bank Limited is an Indian banking and financial services company headquartered in Mumbai, Maharashtra. It is the fifth largest bank in India by assets, incorporated in 1994. It is the largest private sector bank in India by market capitalization as of 24 February 2014. As on Jan 2 2014, the market cap value of HDFC was around US$26.88 billion, as compared to Credit Suisse Group with US$47.63 billion. The bank was promoted by the Housing Development Finance Corporation, a premier housing finance company (set up in 1977) of India. According to the Brand Trust Report 2014, HDFC was ranked 32nd among India's most trusted brands. HDFC was ranked 45th on the list of top 50 Banks in the world in terms of their market capitalization. As of 31 March 2013, the bank had assets of INR 4.08 trillion. For the fiscal year 2012-13, the bank has reported net profit of INR 69 billion, up 31% from the previous fiscal year. Its customer base stood at 28.7 million customers on 31 March 2013. HDFC Bank has following core products: (1) NRI Banking (2) SME Banking (3) Wholesale Banking. HDFC Bank provides the following services to its customers – (1) Whole sale banking services (2) Retail banking services and (3) Treasury

On May 23, 2008, the amalgamation of Centurion Bank of Punjab with HDFC Bank was formally approved by Reserve Bank of India to complete the statutory and regulatory approval process. As per the scheme of amalgamation, shareholders of CBoP received 1 share of HDFC Bank for every 29 shares of CBoP. The amalgamation added significant value to HDFC Bank in terms of increased branch network, geographic reach, and customer base, and a bigger pool of skilled manpower. In a milestone transaction in the Indian banking industry, Times Bank Limited (another new private sector bank promoted by Bennett, Coleman & Co. / Times Group) was merged with HDFC Bank Ltd., effective February 26, 2000. This was the first merger of two private banks in the New Generation Private Sector Banks. As per the scheme of amalgamation approved by the shareholders of both banks and the Reserve Bank of India, shareholders of Times Bank received 1 share of HDFC Bank for every 5.75 shares of Times Ban. As of 30 September 2013, HDFC Bank has 3,251 branches and 11,177 ATMs, in 2,022 cities in India, and all branches of the bank are linked on an online real-time basis. The Bank has overseas branch operations in Bahrain and Hong Kong. It has won many national and international awards and recognitions.

HDFC Bank has two subsidiaries: HDB Financial Services Limited and HDFC Securities Limited.

HDB Financial Services Limited ('HDBFS'): HDBFS is engaged in retail asset financing. It is a non-deposit taking non-bank finance company (NBFC). Apart from lending to individuals, the company grants loans to micro, small and medium business enterprises. It also runs call centers for collection services to the HDFC Bank's retail loan products. HDFC Bank holds 97.4% shares in HDBFS. As of March 31, 2013, HDBFS has 230 branches in 184 cities. During the FY 2012-13, HDBFS had turnover of INR 9.6 billion and profit after tax of INR 1 billion. It has 6,404 employees as of 31 March 2013.

HDFC Securities Limited ('HSL'): HSL is engaged in stock broking. As of March 31, 2013, HDBFS has 194 branches across 150 cities. HDFC Bank has 62.1% shareholding in HSL. During the FY 2012-13, HSL had turnover of INR 2.3 billion and profit after tax of INR 668 million. During the year, the Company received the "Best e-Brokerage Award - 2012" in the Outlook Money Awards in the runner up category.

OBJECTIVES OF THE STUDY
1. To analyze the NPA level of HDFC Bank.
2. To study the Ratio of Gross NPA to Total Advances of bank.
3. To study the Ratio of Net NPA to Total Advances of bank
4. To know why account becomes Non Performing Assets and the steps taken by the bank to reduce Non Performing Assets.

5. To study the movements of Non Performing Assets and its effects on Bank.
6. To find tools to control Non Performing Assets.

DATA COLLECTION METHOD

To fulfill the objectives of the study, the researcher has been taken into considerations secondary data. The data was collected from the Magazines, Annual reports, Internet of the HDFC Bank. Also collected from books, journals, websites etc. Various ratios have been computed & Time series was used to analyze and interpret the NPA's of HDFC.

(A) DIFFERENT TYPES OF RATIOS

RATIO OF GROSS NPA TO TOTAL ADVANCES

TABLE – 1 (in lacs)

YEAR	NET ADVANCES	GROSS NPA	GNPA (%)
2007 – 08	6342690	90697	1.43
2008 – 09	9888304.73	198807	2.01
2009 – 10	12583059.39	181676	1.44
2010 – 11	15998266.54	169848	1.06
2011 – 12	19542002.92	200317	1.02
2012 – 13	23972064.32	233464	0.97
2013 - 14	30300027.12	298928	0.98

Source: annual reports of HDFC bank

INTERPRETATION

Above table shows that the percentage of GNPA has declined from 2007-08 to 2010-11. In the year 2007-08 the percentage of GNPA was 2.062%. In the year 2008-09 it declined to 1.977%, which shows positive indication and it continued again in the year 2009 – 10 it further decreases to 1.743%. In the year 2010 – 11 it decreases to 1.28%. And again it is increases to 1.34% in the year 2011 -12. Again in the year 2012 – 13 it decreases to 0.97%. Finally in the year 2013 – 14 it further decreases to 0.821%.Overall the performance of the company is good compare to most of the public and private sector banks.

RATIO OF NET NPA TO TOTAL ADVANCES

TABLE – 2 (in lacs)

YEAR	NET ADVANCES	NET NPA	NNPA (%)
2007 – 08	6342690	29852	0.47
2008 – 09	9888304.73	62762	0.63
2009 – 10	12583059.39	39205	0.31
2010 – 11	15998266.54	29862	0.186
2011 – 12	19542002.92	35419	0.181
2012 – 13	23972064.32	46895	0.19
2013 - 14	30300027.12	82003	0.27

Source: annual reports of HDFC bank

INTERPRETATION

In the year 2007-08 the percentage of Net NPA was 0.18%. Again it increases to 0.24% in the year 2008-09. And again it is declined for the next two years i.e. for 2009-10 it is0.22% and for 2010-11 it is 0.07%. Again in the year 2011-12 it increases to 0.32% and in the year 2012-13 it is 0.36%. Finally in the year 2013 -14 it further increases to 0.411%. As a whole the percentage of NNPA is very low compare other public sector and private sector banks.

(B) TIME SERIES

This method is also known as **Trend Projection Method.** Under this method past trend is projected in order to interpret the future trend. The past data can be arranged chronologically with regular intervals of time. Such data when arranged chronologically yield **Time Series**. The most popular method of analyzing time series is to project the trend of the time series. A trend line can be fitted through series either usually by means of statistical techniques such as the method of least squares. This method is very popular because it is simple and inexpensive and also because time series data often exhibit a persistent growth trend. With the help of Time Series method we can find out the advances for the year 2014. This following table shows the Year and Advances amount of entire HDFC bank

TABLE – 2 (Rs. In Lacs)

YEAR	ADVANCES
2007 – 08	6342690
2008 – 09	9888304.73
2009 – 10	12583059.39
2010 – 11	15998266.54
2011 – 12	19542002.92
2012 – 13	23972064.32
2013 – 14	30300027.12

TABLE – 3 (Rs. In Lacs)

YEAR	ADVANCES (Y)	X	X * X = X^2	XY
2007 – 08	6342690	-3	9	- 19028070
2008 – 09	9888304.73	-2	4	- 19776609
2009 – 10	12583059.39	-1	1	-12583059
2010 – 11	15998266.54	0	0	0
2011 – 12	19542002.92	1	1	19542003
2012 – 13	23972064.32	2	4	47944129
2013 - 14	30300027.12	3	9	90900081
N = 7	∑ Y =118626415	∑ X = 0	$\sum X^2 = 28$	∑ XY =106998475

We can substitute the value of ΣY, ΣX, ΣX^2, ΣXY in the equation given below:

Y = a + bx .... (1)

To find the value of **'a'**

Solve the equation

ΣY = Na + bΣX .... (2)

Where Σ Y= 118626415, N = 7, Σ X=0

118626415 = 7*a+b*0

118626415 =7a+0
118626415 = 7a
a = 118626415/7
a = 16946631
To find the value of **'b'**
Solve the equation
Σ XY = aΣX + bΣX^2 .... (3)
Where ΣXY= 106998475, a= 16946631, Σ X=0, ΣX^2 = 28
106998475 = 16946631 (0) +b (28)
106998475 = 0 + 28b
106998475 = 28b
b= 106998475 / 28
b= 3821374
Substituting the values of **'a'** and **'b'** in equation **Y=a + bX**
Y= 16946631 + 3821374X
Using the equation, we can find out the trend values for the previous years and estimate the Advances for the 2015. The trend values and estimates are as follows:
Y 2008 = **16946631 + 3821374** (-3) = 5482509
Y 2009 = **16946631 + 3821374** (-2) = 9303883
Y 2010 = **16946631 + 3821374** (-1) = 13125257
Y 2011 = **16946631 + 3821374** (0) =16946631
Y 2012 = **16946631 + 3821374** (1) = 20768005
Y 2013 = **16946631 + 3821374** (2) = 24589379
Y 2014 = **16946631 + 3821374** (3) = 28410753
Y 2015 = **16946631 + 3821374** (4) **= 32232127**
Thus the Bank is expected to have advances of **Rs. 32232127 lakhs** for the year **2014-15** based on Time Series Method.

FINDINGS

- Bank is expected to have advances of Rs. **32232127** lakhs for the year 2015 based on Time Series Method.
- There has been a positive trend that has been in favor of HDFC Bank.
- There has been a considerable reduction in the level of NPA.
- The Net NPA of HDFC Bank is very low compared to most of the prominent public and private sector banks.
- The NPA level is bit low in HDFC Bank as compared to the other commercial banks, and thus HDFC Bank is giving tough competition to other Banks and leading in private sector banking.

SUGGESTIONS

- Immediate action has to be taken for reduction of NPA's.
- The HDFC Bank has to go for securitization of those accounts, which has been in the NPA category from a long time. NABARD should restructure or rescheduled the accounts well before the accounts slip into NPA's.
- There should be frequent follow ups by the HDFC Bank officials. In some cases the NABARD should perform personal visits for recovering NPAs.
- The HDFC Bank should take every NPA case as a separate issue and analyze the need for further from an economic point of view.
- Effective Training and Guidance should be given to the recovery team of the HDFC in order to recover the dues from hardcore defaulter.

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COMMERCIALISATION OF FOREST RESOURCES: AN EMERGING ISSUE IN ARUNACHAL PRADESH

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ABSTRACT

Arunachal Pradesh is one of the economically backward states in India. It is situated in the eastern most part of the country. It is a tribal dominated state and the tribal people largely depend on forest resources for their livelihood and survival. Nature has bestowed the state with abundance of natural resources including forest. The state is rich in natural assets like barren land, thick forest, abundance of water, flora and fauna, etc. The tribal community uses forest resources not only for agriculture but also to meet their domestic and ritualistic consumptions. However, the agricultural practice or for that matter, the consumption of the forest resources by the indigenous tribal people in the state is minimum and restricted to subsistence level only. They used mostly the forest resources for their survival rather than for commercial purposes. However, during the last two decades, the consumption or use of different forest or natural resources shifted from subsistence level to commercial level due to the intervention of state sponsored developmental activities and penetration of market system in the tribal society. In the process the various forest resources that were preserved and kept unnoticed comes to limelight and became commercially important and a source of income for many indigenous people. Hence, there is growing commercial interest in these natural or forest assets among the tribal people that have significant impact on their economic condition. Under the above background the present paper attempts to examine the availability of forest resources, nature and extend of interventions in exploiting the forest resources in terms of commercial use and consumption and its economic impact on the lives of indigenous people of the state.

KEYWORDS
commercial use, development activity, economic value, forest resources, intervention, indigenous people, Tribes.

INTRODUCTION
Forest resources are the source of survival of human being from the time immemorial. Since the early dawn of human civilisation, human being has been depending upon forest resources mostly for their physical consumption. Forest provides timber & foods for humans, food & shelter for flora and fauna and helps in maintaining proper nutrient cycle and ecosystem. Infact, the forest resources helps in sustaining lives or promoting welfares of human civilization. Arunachal Pradesh is one of the economically backward states in India. Nature has bestowed the state with abundance of natural resources including forest, water, flora and fauna, sunlight, variety of stones etc. The diversity of topographical and climatic condition has favoured the growth of luxuriant forests, which are home to myriad plant and animal forms, adding beauty to the landscape. Living in this incredible cradle of nature are the colourful and vibrant tribes of Arunachal Pradesh for whom the forests and wildlife are of special significance. Livelihoods of local people have been closely linked and heavily dependent on forest resources since time immemorial. Forest resources plays a vital role as large sections of tribal population of the state totally depends on it for their livelihood and survival. The tribal community of this state has been using forest resources not only for agriculture but also to meet their domestic and ritualistic requirements. Earlier, the local populace of Arunachal Pradesh used forest resources and its products only to meet their subsistence needs. However, with increasing population, development activities, large number of wood-based industries and unsustainable land use practices like jhuming, the pressure on forest resources is consistently increasing leading to their degradation affecting regeneration and productivity. Moreover, the last two decades witnessed phenomenal rises in the intervention of state sponsored developmental activities and penetration of market system in the tribal society that leads to the massive commercialisation of these forest resources by the local people. There is a colossal shift in uses of forest resources from subsistence to commercialization during this period. In the process, the various forest resources that were preserved and kept unnoticed comes to limelight and became commercially important and a perennial source of income for many indigenous people across the state.

OBJECTIVES OF THE STUDY
The main objective of the present study is:
1. To highlight the status of forest resources in Arunachal Pradesh.
2. To examine the nature and extend of commercial use of forest resources in the state.
3. To study the impact of commercial use of forest resources in the lives of indigenous people.

STATUS OF FOREST RESOURCES AND ITS USES IN ARUNACHAL PRADESH
As already pointed out, Arunachal Pradesh is a gifted garden of biodiversity famous not only in India but also around the globe. The State Forest Report of Forest Survey of India estimated that about 82% of total geographical area of 83,740 sq. km is under forest cover. The important forests types found in the state are Tropical evergreen, semi evergreen, deciduous, Pine, Temperate, Alpine and grassland etc. These forests and its resources are the mainstay for the tribal people of the state and is the richest bio-geographical province in eastern Himalayan zone. The State has 20 percent species of country's fauna, 4500 species of flowering plants, 400 species of pteridophytes, 23 species of conifers, 35 species of bamboos, 20 species of canes, 52 Rhododendron species & more than 500 species of orchids and around 450 medicinal plants. Moreover, it is considered as one of the 12th mega diversity "Hot Spots" in the world. The forest resources and its various products has been presented in Table-A.

TABLE A: FOREST RESOURCES OF ARUNACHAL PRADESH

FLORA					FAUNA			LAND
Vegetable	Vegetation	Medicinal plants	Fruits	Roots	Animals	Birds	Fish	
Oyik Rare Papuk Osik oyik Onyor Taka Akshap Oiik Mushroom	Tree Bamboo Cane Wild banana Thatch Leaves plate Tase Flower Broom Orchids	Mishmi Teeta Panex Revoultic	Buri Boglok Jackfruit Hichir	Ingin	Bear Monkey Dear Mongoose Squirrel\	Dove Wild cock Pigeon	Different type of fish	Land, Soil, Sand, Sand gravels, Boulders

Source: Compiled from field observation

Indeed, Arunachal Pradesh is very rich in forest resources in the form of flora, fauna and land. In terms of flora, it has wide ranges of vegetation, vegetables, medicinal plants (Mishmi Teeta), fruits, roots etc. Bamboo, cane, wild banana, thatch, leaves plate, *Tase*, mushroom, flower broom, orchids, wide ranges of vegetables like *Oyik, Rare, Papuk, Osik, Oyik, Onyor, Taka, Akshap, Oiik,* wide range of fruits *like Buri, Boglok,* Jackfruit, *Hichir* and *Ingin (roots)* are some of the floral species and its products(Table-A). The state is rich in faunal resources like varieties of animals, birds and fishes. Animal comprises of bear, monkey, dear, mongoose, squirrel, dove, wild cock & pigeon, fish includes *Ngopi, Ngobi, Tingir, Take* and other aquatic animals etc. Moreover, there are ample of other forest resources available throughout the state like variety of soil, grassland, sand, gravels & pebbles and boulders etc (Table-A). Undoubtedly, Arunachal Pradesh is storehouse of many precious and rare forest resources- flora, fauna and land respectively. These resources are used for domestic consumption fulfilling physical, ritualistic, cultural and agricultural requirements of the indigenous population of the state from time immemorial. Every activity of the tribal people is associated with the forest and its products. May it be a cultivation of field, construction of dwelling house, cultural activities like festival, rituals, marriages and organising public feast, etc. Hence, forest and its resources have universal application and utility in the lives of tribal people or a society.

TRANSITION IN THE USAGE OF FOREST RESOURCES FROM SUBSISTENCE TO COMMERCIAL

Recently, a great transition has been observed in the use and ownership of forest resources in the tribal society of the state. There has been colossal shift from subsistence level of consumption to commercial use of these resources. The various natural gifts or resources in the form of land, water, forest, flora and fauna, etc has been exploited, used or consumed in a commercial way due to the intervention of developmental activities of state and central government. Different publicity, awareness program and propagandas under aegis of NGOs and private sector are also responsible for the growing commercial interests among tribal population in forest resources and thereby, initiates paradigm shift in usages of forest resources from domestic to commercial. Moreover, commercialization of these resources is also because of growing awareness of market economy and its system among local tribes of the state. The price system of the monetary economy has reached to the doorsteps of the tribal village. The value of the various forest resources are measured in terms of money. Because of the urbanisation and rapid rises in urban population along with sharp market demands, vegetables which were used for domestic consumption like *Oyik, Rare, Papuk, Osik oyik, Onyor, Taka, Akshap,* and *Oiik* are sold in local markets with various ranges of prices in accordance with size and its quality as presented in Table B, C and D respectively. With the growing and widening of market system, the varieties of woods, bamboo & its products, cane & its products, thatch, leaves plate, t*ase*, wild mushrooms, flower broom and spectacular orchids have high demand in local as well as markets of nearby states like Assam in recent times. In addition, variety of medicinal plants that constituted traditional therapeutical system of tribesman of the state has assumed commercial importance of which Mishmi Teeta is very much popular. As a result, the state has been experiencing growing commercial interests on forest resources among indigenous population.

TABLE B: ECONOMIC VALUE OF FOREST RESOURCES (FLORA)

Category	Resources	Value (in Rs)
1. Vegetable	Oyik, Rare, Papuk, Osik oyik, Onyor, Taka, Akshap, Oiik, Ogiik, Oyin, Bamboo shoot, Tase, etc. Mushroom	Rs. 10/- Per bundle Rs. 200/- per kg.
2. Vegetation	a. Tree b. Bamboo c. Cane d. Taek e. Leaves plate (oko) f. Flower Broom	Rs. 350 per cft. Rs. 30/- per piece[1] Rs. 20 per piece Rs. 20 per piece Rs. 2 per piece Rs. 15 per kg[2]
3. Fruits	a. Buri b. Boglok c. Jackfruit d. Hichir	Rs. 20 per kg Rs. 20 per kg Rs. 20 per fruit Rs. 50 per kg
4. Root	a. yam (Ingin) b. Arum	Rs. 50 per kg Rs. 50 per kg

Source: Local market Doimukh/ Nirjuli, Papum Pare district, AP.

Local fruits and plant roots which have been indelibly attached with taste buds of various communities of this state which were consumed at domestic level happened to be sold at various local markets due to penetration of market system. *Buri, Boglok, Jackfruit, Hichir* and *yam (Ingin) and arum (enyi)* are some of the popular local fruits and plant roots which have started flooding local markets in the state and become highly demanded products. Hunting and fishing are very common among various tribes of the state. It is done for either domestic consumption or for social or cultural practices like community hunting on the eve of or during festivals. However, in recent times hunting of bear, monkey, dear, mongoose, squirrel, dove, wild cock, pigeon and fishing of varieties of fishes are more often done for commercial reasons than domestic purposes. Hunted wild animals and birds are of intense demand in the local market of the state. The cultural symbol of the various tribes of the state, the Mithun (Bos frontalis), a semi-wild animal becomes the most favoured animal for commercial consumption (Table-C). The growing urbanisation and market economy may be attributed to the present state of affairs. In some cases, some high profile people like politicians, top bureaucrats and businessman gives away a gun to hunter in consideration of a whole deer. However, due to government interventions in the form of various Acts and mandates, hunting and fishing activities are restricted to considerable level.

TABLE C: ECONOMIC VALUE OF FOREST RESOURCES (FAUNA)

Category	Resources	Average Value (in Rs)
1. Animals	a. Mithun b. Bear c. Monkey d. Dear e. Mongoose f. Squirrel g. Porcupine	Rs. 250 per kg or Rs. 40,000 per mithun. Rs. 200 per kg or Rs. 5000 per bear. Rs. 200 per kg or Rs. 2000 per monkey. Rs. 400 per kg or Rs. 5000 per dear Rs. 100 per head Rs. 100 per head Rs. 2000 per head
2. Birds	a. Dove b. Wild cock c. Pigeon d. Pirik	Rs. 50 per head Rs. 150 per kg Rs. 80 per head Rs. 150 per kg.
3. Fish	Tingir, Ngopi, Yircho, Ngobi, Orpe, etc	Rs. 250 per kg.

Source: Local market Doimukh/ Nirjuli, Papum Pare district, AP.

Fascinatingly, on realising the abundance of forest resources and rising market economy in the state, local people have even ventured out to sell soils, sand, sand gravels & pebbles and boulders to needy people in and outside the state. Few years back there was no system of selling these resources due to the fact that the community ownership prevails in the tribal society. It was considered an offence if any individual found selling the community property. However, the penetration of market system and growing importance of monetary economy intensified the commercialisation of these resources among the tribal people. Moreover, the state interventions in the form of developmental activities like construction of road, bridges, railways, big dams, industrial parks, urbanisation and other infrastructures, etc have ushered market economy and monetary system in the tribal society and thereby increased commercialisation of these forest resources (Table-D). The high profile trading and commercialisation of water resources in the form of hydro-electric power project also cannot be overruled in this respect.

TABLE D: ECONOMIC VALUE OF FOREST RESOURCES (LAND)

Category	Measures	Average Value (in Rs)
1.Land	Bigha or Metre sq.	Rs. 80,000 per bigha in rural areas or Rs. 1200 per sq metres in urban centres[3].
2. Sand	Per truck	Rs. 800/-
3. Stone chips 10 mm	Per truck	Rs. 2400/-
4. Sand gravels	Per truck	Rs. 200/-
5. Boulders	Per truck	Rs. 900/-
6. stone chips (processed)	Per truck	Rs. 8000/-

Source: Local market Doimukh/ Nirjuli, Papum Pare district, AP.

It is reflected from the Table B, C and D that there is handsome price for the various forest resources that leads to the commercial interest on these resources among the people in the state. The state is one of the store houses of hydropower resources in India. It is estimated that the state has a capacity to produce around 70,000 MW hydropower by its water resources. So far, the state government has signed a contract for around 40,000 MW to different companies at the price as shown in Table-E.

TABLE E: ECONOMIC VALUE OF FOREST RESOURCES (WATER)

Category	Measures	Average Value (in Rs)
1.Upto 215	MW	Rs. 1,00,000/- per MW
2. 216 and above	MW	Rs. 5,00,00/- per MW

Source: Liaison Officer, private power developer, Naharlagun, AP.

CAUSES OF TRANSITION

There are numerous reasons for the transition in the use of forest resources and its product from subsistence to commercial level. The Developmental policies drastically altered the relationship of tribal people with natural environment and its resources. Following are the prominent causes that lead to increase commercial interest on forest resources in Arunachal Pradesh.

1. DEVELOPMENTAL ACTIVITIES

It is utmost requirement of any nation or a state to take forward the developmental activities for its citizen. It has been observed that the central and state government have launched different developmental activities in Arunachal Pradesh during the last ten years or so to bring the tribal people to societal mainstream. The expansion of administrative centres like creation of new district, divisions, circles and construction of road, bridges, infrastructures, in remote areas of the state has brought the rural society and its resources to the limelight of the outsiders. The implementation of centrally sponsored schemes for rural development, the construction of dams, railway line, highways, etc. have enhanced the exploitation of forest resources thereby altering the tribal life. As a result the pattern and method of ownership and usage of the forest resources have changed and these resources becomes saleable private property.

2. PENETRATION OF MARKET ECONOMY

The traditional barter system has been replaced by modern market economy in the tribal society. The developmental activities brought every activities of the market economy in the value based or traditional based economy of the tribal society. It is the fact that every resource is measured in terms of money in market economy. The value system and social ownership of forest resources in the tribal society have been diluted by monetary economy. The forest resources that were considered as gift of nature and under the community ownership become the saleable property and a source of income for few individuals. It has also been observed that the market economy has changed not only the economic system but also the social system of the tribal society. The feeling of community or collective responsibility and system of exchange in social activities has been slowly disappearing in some way or other in tribal society. The bondage of relationship through social attitude and value system has greatly been affected by the market system through demand and supply. The various cultural practices of the indigenous tribal people like festivals, ornaments, sports, dance, etc becomes the saleable products and a sources of income through the so called 'tourism'.

3. INCREASING MIDDLE CLASS PEOPLE

The developmental activities have also brought many employment opportunities in the government or private sectors thereby increasing the earning capacity of the people. The monetary economy has reached to the door step of the remote tribal society. It has been observed that one family out of every three tribal family has a person who is employed in government sector and earning handsome income. There is also rise in business opportunities in the rural areas due to the developmental activities. Moreover, the private sectors have also brought many employment opportunities and thereby increase the number of earning population. As a result there is constant flow of monetary resources in the tribal society thereby increasing the purchasing power of the people.

4. CHANGE OF LIFESTYLE

Many changes have been observed in the life style of the tribal people in Arunachal Pradesh in recent time. These changes may be attributed due to the impact of the developmental activities, penetration of monetary system and the practices of the people of mainstream economy. The consumption pattern, standard of living and other way of life have changed due to the advancement of science and technology and modernnity. The people are more interested in purchasing the items from market than to cultivate or collect them. The changes have been observed in socio-economic and political life of the tribal people. There is a shift from socio-cultural value system to economic and market system in which economic value is given more importance than social value of an activities. As a result the relationship of the tribal people with their forest resources has also been altered.

5. INCREASING FLOW OF MONETARY RESOURCES

There has been substantial increase in the flow of monetary resources in the tribal society. The flow of monetary resources may be due to government job, developmental activities, business activity, local politics and windfall gains like compensation, etc. The developmental activities and the market system have brought classification in the tribal society into rich and poor or haves and have not. The feature of capitalist economy is observed in the state recently. The rich people who can manipulate resources become richer and richer and the poor people remain as poorer. However, these rich people become the source of income and livelihood for poor people in term of purchase of their commodity and services.

IMPACT ON ECONOMIC STATUS OF LOCAL PEOPLE IN THE STATE

Owing to intensive commercialization of myriad of forest resources, economic standings of many indigenous tribal families are on rise in the state. The commercialisation of wide ranges of floral resources in the form of vegetables, trees, medicinal plants, fruits, roots, etc at flourishing prices (Table-B) and faunal resources like animals, birds and fishes (Table-D) has immensely help the economic condition of the people. These resources are found to have sold at a very profitable price in the local market of various district, circles and sub-divisional headquarters. Moreover, the economic status of local merchants dealing sand, gravels & pebbles and boulders etc are exceedingly sound as their market extend to outside of the state with central organisation like BRO, Gammon, etc with high prices (Table-D). Most of them have *Pucca* residence to live in, motor vehicles of their own to drive, children pursuing studies at private schools or off the state, good accumulated saving at banks and better recognition in society. Of course, they are in receipt of even better medical facilities and amenities of life. The impact of the commercialisation of forest resources on the socio-economic lives of indigenous people are discussed in the following pages.

1. ECONOMIC LIFE

There is noticeable impact of commercialisation of forest resources on the economic life of the tribal people in the state. There is increased avenues for earning and self employment especially among the women folk and thereby enhanced the income of the household. The penetration of the market economy has brought changes in the ownership system of the resources and paved way for marketability of these resources. As such many tribal household attained self sufficiency in their economic life. Many of them have well established business in these resources. The timber business and supply of sand, pebbles and boulders to the big construction companies in private or government sector becomes highly preferred and profitable economic venture in recent time. As such, the penetration of market economy due to the intervention of state sponsored developmental activities has created ample opportunities for commercial activities in relation to the forest resources thereby increasing the employment and earning capacity of the indigenous tribal people of the state. As such, the various modern amenities like health care facility, education and other facilities are at the reach of tribal people. However, there is also a challenge from social and cultural front.

2. SOCIAL LIFE

There is inverse relationship between economic and social life of the people. The economic men emphasize more on skill and social men on value and attitude. The economic condition of a person plays an important role in determining social and value system of a person. Due to the introduction of market economy every piece of assets or resources and even activities becomes saleable property and measures in term of money in the state of Arunachal Pradesh. Hence, the people become an economic man that measures every resources and activities in term of monetary value. There is also an adverse affect on social value system and relationship. The traditional or cultural based economy gives more importance on relationship, attitude and character of the individual or an institution whereas the market economy rely more on benefit, profitability and performances. In fact, the tribal society is built on cultural ethos, social relationship and value system. The monetary economy has no place in the domain of tribal society. Hence, the upcoming of rapid commercialisation of forest resources under market economy posed great challenges to the tribal society of the state. Furthermore, developmental projects have seen large scale immigration of people from outside, in search of employment, thus distorting demography of the tribal society that may lead to conflict and destruction of tribal lifestyle.

IMPACT OF COMMERCIALIZATION OF FOREST RESOURCES ON ENVIRONMENT

The conservation of forest resources is of great importance for every country in the world today and it is a global issue for discussion in international level. In recent years, the depletion of forest resources has become a major concern for governments and organizations such as the United Nations (UN). Depletion of forest resources is of great concern for sustainable development as it has the ability to degrade current environments and potential to impact the needs of future generations. Due to the massive and unprotected commercialization of forest resources many valuable forest resources of the state are getting depleted every movement. Precious animals and plants species like wild cat, deer, elephant, tiger, bear, cane, bamboo, variety of timber trees etc are marketed illegally leading to even extinction of some endangered and rare flora and fauna. Rapid commercialization of these resources results in the loss of even natural habitat of different species and ecosystem throughout the state. Due to huge exploitation of forest resources in the state, rapid rises in temperature, decreases in rainfall and frequent cases of soil erosion have been evident in recent times. So, there is growing needs to create awareness among local populace of the state on sustainability of forest tree, bamboo, cane, vegetable, land, sand and gravels, etc so that present as well future generations equally takes benefits of valuable and precious forest resources. In doing so, general masses of the state should be made well acquainted with different legal acts and frameworks related to wild life and forest and also cost of not being abiding by these laws (penalties & fines). The impact on physical environment or forest resources are summarised below:

1. DEPLETION OF FOREST RESOURCES

There is a danger of depletion of forest resources. The massive exploitation of forest resources like flora, fauna and land due to the construction of roads, highways, dams, bridges, etc lead to the exhaustion of these resources. Recently, the land resources especially the boulders in the foothill region of the state are being exported to the neighbouring state for the construction roads and bridges. Moreover, the regular supply of logs, bamboo and its shoots, cane, vegetable, land products like sand, sand gravels, boulders, etc to the market add fuel to the issue. As a result there is possibility of extinction of many trees, grass, etc. in the forest of the state and the indigenous common people will not even get these resources for their domestic use or consumption.

2. EXTINCTION OF MANY FAUNAL RESOURCES

The hunting of wild animal and its sale in the local market is regular feature in the state recently. The wild cock, birds, deer, bear, boar, squirrel, etc and their skin and meat are highly demanded in the market. The fact that such activity is undertaken not only in domestic market but also as border trade to Tibet has been identified recently. The new cross border trade items called 'caterpillar fungus' has been identified in Mechuka region of the state, recently.

3. SOIL EROSION AND LAND SLIDES

The unprecedented problem of soil erosion and land slide during the rainy season in the state of Arunachal Pradesh may be attributed to the impact of commercial interest on land. The land becomes saleable property though there is no official recognition to it so far. The commercialisation of land near the road or urban centres and their exploitation leads to land slide. Moreover, the commercialisation of sands, sand gravels and boulders in the river beds causes soil erosion and loss of fertile land.

4. DANGER TO THE BIODIVERSITY RESOURCES

The massive exploitation and commercialisation of forest resources results in the loss of natural habitat and ecosystem that leads to the complete destruction of biodiversity in the state or region. There will be a loss of endangered species of flora and fauna and other microorganism that need for sustenance of biodiversity resources.

5. GLOBAL WARMING

The massive exploitation of forest and its resources leads to the rising of temperature of the earth. The constant use of the forest and its resources without sustainability leads to the reduction of this resource and thereby reducing the amount of oxygen and rainfall that ultimately affect human life.

CONCLUDING REMARKS

A state's forest resources determine its wealth, economic status and social prosperity and Arunachal Pradesh- the tribal state is not exception to this. State still to great extend depend on her vast forest resources which gives testimony of being underdevelopment as developed states have greater reliance on infrastructural capital for production. Indeed, Arunachal Pradesh has abundance of forest resources in the form animals, plants, trees, water, vegetable & fruits. She is also known for her vast amount of land resources like sand, sand gravels and boulders having strategic economic significance. Since time immemorial, tribal people of the state have been using these resources for only domestic consumption especially during festival, marriage, rituals and other socio-cultural ceremonies. However, in last few years the state has been experiencing tremendous changes from subsistence to commercial use of the forest resources among tribal people throughout the state. So, different forest based products ranging from hunted wild animals to wild medicinal plants have became regular feature of local markets. In recent times, these forest products which are known to have consumed at subsistence level are making entry into markets in a big way.

However, it has also beefed up alarm to government in one side and increased socio-economic status of local merchants in other side.

Thus, the growing commercial interest in these natural or forest assets among the tribal people have provided economic opportunity but environment and social challenges.

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SHORT SUCCINCT NOTES

[1] Local bamboo is sold at Rs. 100 per piece. Sliced bamboo is Rs. 35 per piece.
[2] Rs. 50 per processed bunch.
[3] The project like Trans Himalaya highway, hydro power project and Railways pay compensation @ Rs. 4000/- , Rs. 3500/- and Rs. 4300/- per sq. Meter.

AN ANALYSIS OF FACTORS AFFECTING ONLINE CONSUMER BUYING BEHAVIOR IN INDIA

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ABSTRACT

The purpose of this research paper is to study and examine the factors that influence a consumer's buying decision which is one of the central issues faced by the e-commerce industry. However, there is very less literature that has been published on the online buying behavior of the consumers as it is a complex topic and engages many factors that affect the buying process. The objective of this study is to find out the reason why the consumers shift or do not shift from the brick and mortar stores to the online retailing websites. The goal has been achieved using the theory of planned behavior in which the factors such as demographics, desired consequences, attitude, subjective norms and perceived behavioral control lead to the consumer intention to purchase and finally determines the online buying behavior. To examine these hypotheses 100 questionnaires dispersed among the citizens of Delhi, Bangalore and Jaipur. The people who filled the questionnaire are the customers of the online retail websites. Two tests that are ANOVA and t-test were used to investigate the hypothesis. The study identifies that the buying intension depends upon the gender, age, income and educational qualifications. Furthermore, consumer attitude, convenience, website design, time saving and security positively affected the online buying behavior of the consumers. This study can be well thought-out as an applied research from purpose perspective and descriptive-survey with regard to the nature and method.

KEYWORDS

e-business, online shopping, consumer buying behavior, consumer attitudes.

1. INTRODUCTION

Since the advent of e-commerce on business prospect, it has considerably transformed the way the seller and buyer transact goods and services. E-tailing permitted businesses to reach the consumers around the world. It has extended its reach and range by contribution a variety of choice and offering goods and services at a competitive price. In the last few years, India has made extraordinary growth in the e-business sector particularly in the business to customer (B2C) subdivision and is expected to see notable success in the near future. Continuously shifting lifestyles and high level of disposal incomes combined with the curiosity to buy mainly among the youth have been one of the success factors of e-commerce. One of the chief advantages for the success of e-commerce has been the growing reach and density of internet penetration in India. India has one of the largest web users data base with 73.9 million user of the internet. This approximation did not include mobile users and took into consideration only users over the age of fifteen who used the internet from a personal computer. Telecom Regulatory Authority of India (TRAI) calculated 164.81 million internet users in India as on March 31, 2013, with majority of them using the internet even from their cell phones. The convenience of accessibility of the internet is the chief reason for the expansion of e-commerce in India and has assisted it to reach larger heights.

In the past few years, there has been a remarkable change in the consumer behavior as there has been a shift from the brick-and-mortar stores to the online purchase retail industry. In the recent times, work in any field requires the use of internet to reduce the work load. The people who use internet are the potential customers of the e-commerce websites who will make purchases on these online retail stores for either flight tickets, shopping for goods, investing, hotel accommodation, journey deals, apparel, cosmetics and electronic goods etc. The influential factor responsible for the success or failure of any business is the trust that they gain of the customers (Koufaris Marios, 2004). The only factor stopping them to shop online is the issue regarding the security and privacy of their personal details as everyone is worried about the improper quality of goods, insecure payment system, and misuse of private information. A lot of information is available over the web through e-tailing allowing the consumers to know more about the product and determine the right price by comparing. This concept of e-tailing is prevailing and is unmatched which allows the customer to shop online by reducing the stress of waiting in the queue and confronting some irritating sales people. The only problem that it causes is with the fit as the customers cannot try the items. But this problem has also been taken care of by the companies as they have liberalized their return policies (MG Loganathan, 2012).

E-tailing also has its own set of challenges. Business rivals in the field of e-commerce are only a few mouse clicks away. Therefore, customers are able to match up to and differentiate competing goods and services with negligible expense of their private time or effort. The companies set competitive prices which reduces the profitability and fades away the brand loyalty (srinivasan, 2002).

There are a variety of payment options offered by the Indian players of the online retail market of which Cash on Delivery (COD) is a well accepted option. The payment method of COD has added a lot of momentum to the online shopping in India. Eventually, the people who used to purchase goods through credit cards also started using this method of COD for payment. The people who buy goods online for the first time do definitely fear disclosing their important information online (Mahlotra, 2014).

India is a very potential market for online retailing. Indians are regarded as one of the most online technology savvy customers on the planet. An online survey research conducted by Nielsen Global (Global Information and Media Company) found out that the maximum number of credit card users for online purchases is done by Indians accounting to 84 percent (NA, 2008). Another survey talks about the 70 percent Indians who have used internet in the last three months have bought flight or train tickets online. India has gained a lot of attention in the global market of e-commerce. The Foreign Direct Investment (FDI) in the ecommerce industry in the year 2012-13 has been around $1.3 billion. The FDI has a positive impact on the overall development of India only if it is provided with financial banking (K.R. Pillai, 2013). Long term investment in the e-commerce will help in improving the supply chain industry and offer a competitive price. On the other hand, if more and more FDI enters India through the foreign online retailers then they will act as a monopoly resulting in the downfall of both the local physical stores and the existing local online retailers.

2. LITERATURE REVIEW

In the past few years, a major change in the consumer behavior has been observed where the consumers shift from actual or physical stores purchasing behavior to internet purchasing behavior in the trade industry. The internet has become the new marketplace where people sell almost everything online. A distinguishing trait of setting up business over the internet is that dealings no longer necessitate the physical meeting of buyers and sellers as they can deal with each other at their screens (Pu, 2008). The e-commerce industry is at a boom as more and more retail giants are trying to sell their products online such as Wal-Mart, Tesco, and Carrefour etc. Selling online assures the potential entry of companies with low barrier, access to important information, and little or no transaction costs. With the help of this e-commerce website it has become very easy for the consumers to learn about different products and their prices across multiple retailers. The consumers can compare and learn about the new and updated products without even leaving their seat. 79% of the global e-commerce revenue share is contributed by the United States whereas Africa and Middle East Region collectively have the smallest share of about 3% of the global e-commerce revenue (R AlGhamdi, 2012).

2.1 CONSUMER ATTITUDE
A foremost issue affecting the buying behavior of the consumer towards online shopping is the consumer's attitude. A consumer behavior model tested in the actual market states that the consumer's judgment of the store's reputation and dimension were understood to shape consumer reliance on the retailer. The point of reliance was positively linked to the mind-set towards the store, and inversely correlated to the perception of the threats concerned in buying from that store (Sirkka L. Jarvenpaa, 2000). (A. Vellido, 2000) proposed a model in which nine features concerned with the buyers view towards online shopping were extracted. Amongst those features the risk from buying online was established to be the chief discriminator between consumers buying online and consumers not buying from the online websites. Further discriminating aspects were; control over, and ease of, the shopping procedure, affordability of goods, consumer service and simplicity of use of the online shopping site. Another model talks about the manner and shopping behavior of the buyer towards online shopping in general. This model proposed by Jarvenpaa & Todd (1997) talks about numerous indicators of buyers attitude which are put in four categories such as the worth of the product, the shopping experience, the quality of service provided by the online site and the risk sensitivity of online shopping.

2.2 CONVENIENCE
The rural India is a potential market for the online marketers as it constitutes 70% of the total population of India. In a survey conducted in July 2010-11 around 3,311 cities in India were involved in e-commerce of which 1,267 were non-metro cities (K. Meetei, 2013). As there is a shortage of the brick-and-mortar stores in the rural India, online retailing is attracting many brand aware customers. E-commerce has provided an opportunity for the people of rural India to consume the same quality of branded products that are used by the people of the urban areas or upper class people without any discrimination. These marketers are trying to provide information about the product on the internet in their regional languages as in India there are more than 700 languages spoken which will help to tap a wider market. As India has a vibrant cash financial system, cash on delivery is the most preferred option by the customers. This method ensures monetary security as they pay the cash in exchange of goods.

2.3 WEB DESIGN
Shopping at the traditional physical stores is entirely different from purchasing the goods online. The store atmosphere or ambience is entirely diverse in terms of the store's physical appearance, color and odor, type of music, volume and arrangement of the products whereas these features cannot be found in an online website. To compensate a physical store, the designing of the website should be taken care of by making it simple and very easy to understand and also by offering various services that will gain an advantage over the physical stores (Eighmey, 1997)

The first thing that attracts the customer looking at the website is the design characteristics of the website. Many a times the design of the webpage influences the purchase decision of the customer. The appearance of the homepage of the online retail site is one of the basic forerunners of consumer satisfaction. Other factors such as logical support, technological advancement and other information of the product are the antecedents of satisfaction. The business to consumer websites should have four key features to gain consumer satisfaction that is information quality, design of the website, safety of the personal card details and privacy (C. Ranganathan, 2002)

2.4 SECURITY
When a consumer has to purchase a product online, he perceives a certain level of risk concerned in choice of a specific brand or product and how to purchase it. Perceived risk is an imperative model in consumer behavior towards online shopping. It is a primary model in consumer behavior that entails that customer's experience pre-purchase ambiguity as to the kind and level of anticipated loss resulting from the purchase and use of a good (Mohammad Hossein Moshref Javadi, 2012). The goods that are purchased by the customers online are mostly the ones which do not require physical assessment. The perceived risk involved in purchasing these kinds of products is very less as the customer is well aware about the product whereas if the perceived risk is more in case of certain products then the customer will shift to the traditional retailers where they can physically see, touch and observe the product (R.A. Peterson, 1997). The a large amount commonly cited perceived risks concerned with online shopping includes monetary risk (example: is my personal information of debit or credit card secure?), merchandise risk (example: is the merchandise of the identical quality as shown on the internet?), handiness or convenience (example: if the product is not suitable then the easy return policy of the company?), and non-delivery risk (example: What if the merchandise did not reach me?) (Amit Bhatnagar, 2000).

2.5 ONLINE BUYING BEHAVIOR
The growing online market has over a millions of users worldwide. A potential customer becomes a real customer only if the marketers provide them with a good quality service which results in the expected customer satisfaction of customers (Oliver, 1980). The chief objective of the marketing model is the theory of customer satisfaction. Satisfaction is imperative to each customer as it reproduces an optimistic result because the goods used in the past were not satisfying and it resulted in the unfulfilled needs. Satisfaction considerably influences consumer's attitudes and their intention to buy certain goods. The excellent service or the quality of the online retailing sites are the prevailing factors to consumer satisfaction inside the online shopping surroundings. The quality of the service of an online retailing website depends on four features such as website blueprint, trustworthiness, consumer service and security and confidentiality (M. Wolfinbarger, 2003). These factors are suggested when discussing about the measurement of the online website's quality.

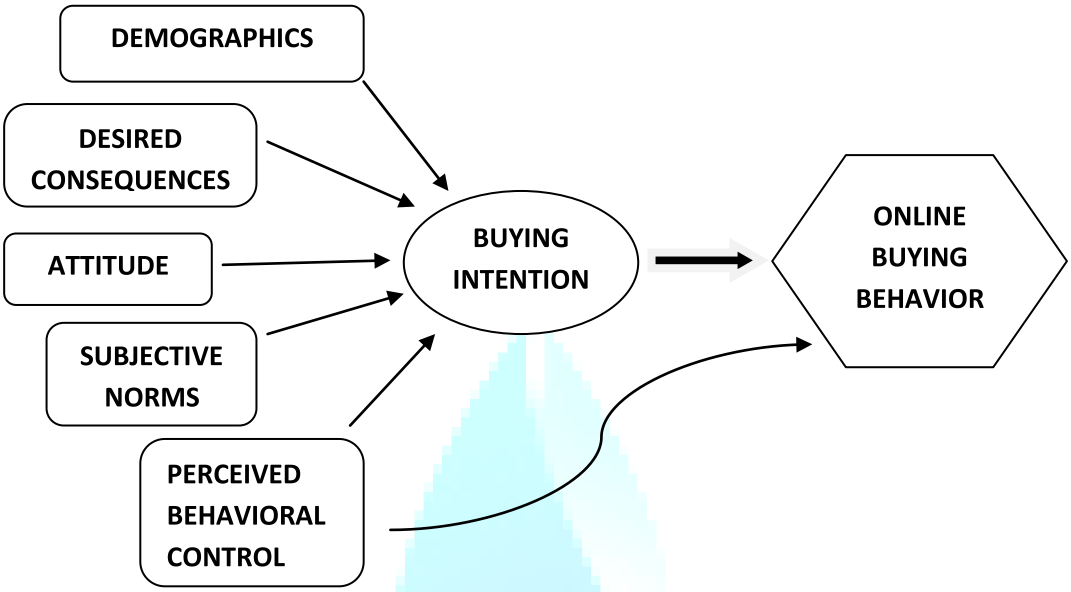
3. THE THEORY OF PLANNED BEHAVIOR
The TRA was developed after trying to study the difference between attitude and behavior. This TRA was linked to intentional behavior of individuals. Afterwards the behavior emerged as not wholly intentional and controlled which resulted in the accumulation of perceived behavioral control. Together the theory was known as the theory of planned behavior. The Theory of Planned Behavior (TPB) associates the beliefs of the consumer to their behavior and is designed to improvise the predictive behavior of the consumers. With the help of this theory we can actually determine how human behavior is guided.

The demographic factors such as age, gender, income level, educational qualification in the TPB explains that the behavior leads to the intention to buy a product and which results in the end purchase by a consumer. Also, the desired consequences of individuals accelerate the buying intention which also results in the purchasing of goods.

The attitude in the direction of the behavior is an individual's overall assessment of the behavior. This theory also states that at times a consumer's intension towards executing a behavior is also controlled by the normative social beliefs apprehended by the customer. Subjective norms are an individual's own guesstimate of the societal pressure to execute the objective behavior. TPB has one more determinant of Perceived Behavioral Control to identify behavior intensions. The human behavior is best predicted by people's intentions to carry out or not to carry out a particular behavior. Perceived behavioral control is the degree to which an individual feel that he or she would be able to pursue the behavior.

There are five factors that are used in this theory of planned behavior to identify the buying intension and online buying behavior of the consumers (Figure 1).

FIGURE 1: THEORY OF PLANNED BEHAVIOR



4. OBJECTIVES OF THE STUDY

1) To study the demographic profile of online shoppers in India.
2) To establish factors for customer shift from physical retail stores to online retail stores.
3) To identify the factors leading to positive consumer buying behavior.
4) To study online shopping behavior with reference to buying decision factors.

5. HYPOTHESIS

H1: The online shopping intention of men significantly differs with that of women.
H2: The online shopping intention of youth is significantly greater than other age groups.
H3: The online shopping intension does not depend upon income level.
H4: Consumer's attitude has no influence on positive online buying behavior.
H5: Convenience of purchase has no influence on positive online buying behavior.
H6: Design of the website has no influence on positive online buying behavior.
H7: Time saved has no influence on positive online buying behavior.
H8: Security has no influence on positive online buying behavior.

Independent variables in this study are:

- Consumer Attitude
- Convenience
- Website Design
- Time Saving
- Security

Dependent variables in this study are:

- Online buying behavior

6. RESEARCH METHODOLOGY

The purpose of the study is to analyze the factors that affect the consumer buying behavior towards online shopping in India. In this study, the method of pure research has been applied.
A quantitative research will be conducted with the help of conducting surveys. The descriptive research design is used in this research as conducting surveys falls under this category.
In this research the sampling design is made for the population of India, where the information will be collected from the respondents of the three different cities in India. The cities such as Delhi (tier-I), Bangalore (tier-I) and Jaipur (tier-II) are selected as the sampling design of India which are diverse in their population. Convenient sampling was done by mailing the questionnaires, online surveys or by getting the physical questionnaires filled. Sample size of the research is 100 respondents from Delhi, Bangalore and Jaipur. Data was collected for 128 respondents to come up with 100 usable response forms of people who have done online shopping in last 6 Months

7. DATA ANALYSIS METHOD

The demographic data will be analyzed using the basic statistical tool such as mean and the results will be displayed in a tabular form in order to analyze it. Analysis of variance (ANOVA) and 't' test are used to calculate the impact on online shopping behavior (dependent variable) on independent variables like consumer attitude, convenience, time saving, security and web design.
Starting from the demographic data, the male population has a more positive attitude towards online shopping with 68% males purchasing goods through e-commerce websites as compared to the females that is only 32% of total online shoppers. Therefore, the null hypothesis (H1) is accepted and alternate hypothesis is rejected. The youth respondents in the sample population are of age between 15 to 30 years which constitutes 55% of the e-shoppers population whereas the respondents of age group 30 to 45 years constitute 33% of e-shoppers population and the respondents of age group 45 and above constitutes only 12% of the e-shoppers population. Hence, the null hypothesis (H2) is accepted and the alternate hypothesis is rejected. The level of education also has a great impact on e-commerce as the students studying in high school comprise of 22% of e-shoppers, students pursuing bachelor degree represent 39% of e-shoppers whereas the individuals with qualification of master's degree comprise 26% of e-shoppers while only 13% of e-shoppers are represented by people holding a PhD and above. The income plays a vital role in the purchase of goods online as the people with a higher income group tend to purchase more actively online. The people with income less than 1 lakh rupees hold only 7% of the total share of e-shoppers, 28% of total e-shoppers represents people with income of 1 to 3

lakh rupees, people with income of 3 to 5 lakh rupees constitute 49% of the total share of e-shoppers whereas the people with income of 5 lakh rupees and more form 16% of the total e-shoppers. Hence, the null hypothesis (H3) is rejected and alternate hypothesis is accepted.

Almost 64% people have come to know about the e-commerce through friends and family while 13% came across advertisements whereas 23% got to know about online shopping through social media. Most used websites are flipkart and snapdeal.com comprising of 72% population followed by eBay, Jabong, Tradus, Myntra etc. 55% respondents buy products while shopping online, 60% people buy travel deals and travel tickets whereas 18% of individuals buy movie tickets online and only 8% respondents purchase deals online. 62% people have started to purchase online at least once in a month, 20% purchase online in every six months whereas 15% people purchase online twice in a month and only 3% people shop online occasionally.

TABLE 1: ANOVA FOR CONSUMER ATTITUDE RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	73.976	8	9.247	407.611	2.0567
	Residual	2.064	91	.023		
	Total	76.040	99			

Consumer attitude has eight factors which influence the online shopping behavior. The ANOVA table shows the value of F greater than the significance value which means that the null hypothesis is rejected. Also, it implies that the attitude has a positive relation with consumer buying behavior.

TABLE 2: COEFFICIENTS FOR CONSUMER ATTITUDE RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.016	.101		.157	.875
	I think purchasing online saves time	.186	.057	.189	3.261	.002
	Shop online at anytime of the day	-.051	.074	-.047	-.688	.493
	Shopping online is risky	-.088	.050	-.117	-1.744	.085
	Online shopping can surpass physical stores	.129	.055	.148	2.349	.021
	I will shop online only if the goods are cheaper	.030	.049	.031	.623	.535
	Online shopping offers Convenient delivery of products	-.014	.044	-.016	-.320	.750
	Online shopping offers a wide variety of choice of products	.805	.074	.825	10.855	.000
	I hesitate to share my credit/debit card details online	-.018	.049	-.026	-.367	.714

As we can see from the above table the ‘t’ value in the factors of attitude such as “shopping online at anytime of the day, shopping online is risky, convenient delivery of products and I hesitate to share my credit/debit card details online” is less than the significance value which implies that these factors are inconsistent with respect to the dependent variable that signifies a positive online shopping behavior. However, the factors such as “I think purchasing online saves time, online shopping can surpass physical stores, I will shop online only if the goods are cheaper and online shopping offers a wide variety of choice of products” the ‘t’ value is more than the significance value which implies that these factors are consistent with respect to the dependent variable that signifies a positive online shopping behavior. The cumulative value of the eight factors which jointly make consumer attitude is positive. The null hypothesis is rejected and alternate hypothesis is accepted that implies consumer attitude has a positive influence towards online shopping behavior.

TABLE 3: ANOVA FOR CONVENIENCE RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.509	4	17.377	252.783	2.4862
	Residual	6.531	95	.069		
	Total	76.040	99			

Convenience has four factors which influence the online shopping behavior. The ANOVA table shows the value of F greater than the significance value which means that the null hypothesis is rejected. Also, it implies that convenience has a positive relation with consumer buying behavior.

TABLE 4: COEFFICIENTS FOR CONVENIENCE RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.048	.160		-.301	.764	-.366	.269
	The goods are delivered on time	-.241	.058	-.361	-4.119	.000	-.357	-.125
	Product details are available	.405	.098	.449	4.113	.000	.209	.600
	Shop at anytime of the day	.269	.065	.304	4.132	.000	.140	.398
	It is easy to compare different products	.577	.094	.578	6.113	.000	.390	.765

As we can see from the above table the ‘t’ value in the factor of convenience such as “the goods are delivered on time” is less than the significance value which implies that these factors are inconsistent with respect to the dependent variable that signifies a positive online shopping behavior. However, the factors such as “product details are available, shop at anytime of the day and it is easy to compare different products” the ‘t’ value is more than the significance value which implies that these factors are consistent with respect to the dependent variable that signifies a positive online shopping behavior. The cumulative value of the four factors which jointly make convenience is positive. The null hypothesis is rejected and alternate hypothesis is accepted that implies convenience has a positive influence towards online shopping behavior.

TABLE 5: ANOVA FOR WEBSITE DESIGN RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.277	4	15.319	98.583	2.4862
	Residual	14.763	95	.155		
	Total	76.040	99			

Website design has four factors which influence the online shopping behavior. The ANOVA table shows the value of F greater than the significance value which means that the null hypothesis is rejected. Also, it implies that website design has a positive relation with consumer buying behavior.

TABLE 6: COEFFICIENTS FOR WEBSITE DESIGN RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.102	.155		7.114	.000	.795	1.410
	Helps to search for the products easily	-.059	.178	-.065	-.333	.740	-.414	.295
	Helps in choosing the right product	.388	.117	.463	3.326	.001	.156	.620
	I believe the website should be made familiar before purchasing	.141	.156	.162	.900	.370	-.170	.451
	Information available about the quality of product	.326	.135	.360	2.405	.018	.057	.595

As we can see from the above table the 't' value in the factors of website design such as "helps to search for the products easily and I believe the website should be made familiar before purchasing" are less than the significance value which implies that these factors are inconsistent with respect to the dependent variable that signifies a positive online shopping behavior. However, the factors such as "helps in choosing the right product and information available about the quality of product" the 't' value is more than the significance value which implies that these factors are consistent with respect to the dependent variable that signifies a positive online shopping behavior. The cumulative value of the four factors which jointly make website design is positive. The null hypothesis is rejected and alternate hypothesis is accepted that implies website design has a positive influence towards online shopping behavior.

TABLE 7: ANOVA FOR TIME SAVING RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.972	3	21.324	169.636	2.71915
	Residual	12.068	96	.126		
	Total	76.040	99			

Time saving has three factors which influence the online shopping behavior. The ANOVA table shows the value of F greater than the significance value which means that the null hypothesis is rejected. Also, it implies that time saving has a positive relation with consumer buying behavior.

TABLE 8: COEFFICIENTS FOR TIME SAVING RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.687	.181		3.791	.000	.327	1.047
	Takes less time to purchase	.505	.084	.616	6.029	.000	.339	.671
	It does not waste time	.246	.100	.211	2.462	.016	.048	.444
	Less time to evaluate and select the products online	.108	.104	.124	1.033	.304	-.099	.315

As we can see from the above table the 't' value in the factor of time saving such as "less time to evaluate and select the products online" is less than the significance value which implies that these factors are inconsistent with respect to the dependent variable that signifies a positive online shopping behavior. However, the factors such as "takes less time to purchase and it does not waste time" the 't' value is more than the significance value which implies that these factors are consistent with respect to the dependent variable that signifies a positive online shopping behavior. The cumulative value of the three factors which jointly make time saving is positive. The null hypothesis is rejected and alternate hypothesis is accepted that implies time saving has a positive influence towards online shopping behavior.

TABLE 9: ANOVA FOR SECURITY RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.516	2	31.258	224.188	3.1111
	Residual	13.524	97	.139		
	Total	76.040	99			

Security has two factors which influence the online shopping behavior. The ANOVA table shows the value of F greater than the significance value which means that the null hypothesis is rejected. Also, it implies that security has a positive relation with consumer buying behavior.

TABLE 10: COEFFICIENTS FOR SECURITY RELATION TOWARDS ONLINE SHOPPING BEHAVIOR

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.792	.194		4.086	.000	.407	1.177
	I feel safe in purchasing online	.394	.095	.346	4.152	.000	.206	.582
	I only purchase from reliable websites	.453	.064	.592	7.095	.000	.326	.579

As we can see from the above table the 't' value in the factors of security such as "I feel safe in purchasing online and I only purchase from reliable website" is more than the significance value which implies that these factors are consistent with respect to the dependent variable that signifies a positive online shopping behavior. The cumulative value of the two factors which jointly make security is positive. The null hypothesis is rejected and alternate hypothesis is accepted that implies security has a positive influence towards online shopping behavior.

8. DISCUSSION

The theory of planned behavior stated five factors that are demographics, desired consequences, attitude, subjective norms and perceived behavior control which are used to support this research. The results of the demographic questions which were asked by the respondents through a questionnaire concluded that H1 and H3 are significantly supported. Thus, the men have considerably more online shopping intension then the women of India. Also, the youth of India that is from the age of 15 to 30 years has noticeably greater online shopping intension with respect to the other age groups. In these studies, online buying intension plays a vital role in attracting the consumers to purchase the goods online. The theory of planned behavior states that demographics lead to form intention to buy which results in the final purchasing of the goods. The income of the consumers is a major factor which is responsible to drive the purchasing of goods online. The results show that H2 is not significant and alternate hypothesis is accepted. People with a higher income tend to purchase more goods online whereas the people with lower income are likely to spend less on online retailing. Thus, the buying intension of the people is determined by income level.

The respondents were asked about their overall perception towards online retailing, where most of the people answered that they have a positive attitude towards online shopping. The factor of desired consequence of the theory of planned behavior stated that it leads to develop an intension which will at last result in the final purchase of the product. Thus, the people of India have an overall positive desired perception towards online shopping. Online buying behavior is mainly affected by the attitudes of the individuals. The results showed that H4 is not significant and the attitude of the consumer has a positive influence towards the online buying behavior. Consumer attitude which had 8 factors under it showed an overall positive level of significance. The majority of the people are influenced by the subjective norms to purchase goods online. In the data analysis the greater part of the respondents came to know about the online

shopping by their friends and families which means more people recommend online shopping to each other. The theory of planned behavior points out the relation of perceived behavior control towards the buying intension. As all of behavior are not intentional and some of it is controlled which can directly result in the online buying behavior.
The results of the hypothesis showed that H5, H6, H7, & H8 are not significant and have a positive influence on the online buying behavior. Convenience in case of online retailing is one of the deciding factors for a consumer to purchase a particular good or not looking at the level of service the retailer provides. The design of the website is very crucial when deciding about purchasing a product as it is the only place where the consumer looks at the product virtually and gets information related to the product. Also, the time saved plays an essential role in purchasing products online. If the websites search & ordering process is such designed to take less time it will accelerate the online shopping behavior. Lastly, security affects directly to the online buying behavior. The people feel insecure to share their private details such as credit/ debit card details which will hamper the online purchasing cycle. If the online websites are more secure and people develop trust in them then it will result in boosting the online purchasing power.

9. CONCLUSION
In this research we have examined a few factors that affect the online buying behavior of the consumers of India. A conceptual theory of planned behavior was used to study the factors that lead to the intension to purchase the goods online. A method of analysis of variance (ANOVA) was used to measure the significance level of each of the factors with respect to the online buying behavior. The results of the hypothesis testing indicated that attitude; convenience, website design, time saving and security have a positive influence towards the online shopping behavior. The men and the youth have significantly a greater online buying intension. Also, the buying intension depends upon the income level of the consumers.

10. LIMITATIONS
1. Only 5 factors are taken into consideration in the study due to time and cost constraints, there are large numbers of other factors that can be studied in the future.
2. Survey method was used in the research; other methods can be used to have a more in-depth view of the customers.
3. Result of the study cannot be generalized to other countries as all countries have different characteristics and behaviors.

11. FUTURE RESEARCH
1. Research is conducted in 3 cities; to have a larger representation study can be conducted on a wider scale to come to more exact figures.
2. Study has found the relationship between factors and online shopping behavior further research can be done on ordinal scale to rank the factors according to importance level in buying decision process.
3. To have more exact results separate research can be conducted for tier I, II, III cities as consumer behavior will differ with urbanization and varied lifestyle.

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ANNEXURE

QUESTIONNAIRE

Dear Respondent,
This questionnaire is prepared for the purpose to study "Factors Affecting the Consumer Buying Behaviour towards Online Shopping in India”. The information provided by you, will be kept confidential and used only for research purpose.
* Required
Gender:* o Male o Female
Age:* _____
Education:* _______________
Income:* _____________
Have you made an online purchase in the last 6 months?
- o Yes
- o No

How did you come to know about online shopping?
- o Friends & Family

- Advertisements
- Social media
- Other:____________

Which website do you prefer the most?

- Ebay
- Flipkart
- Snapdeal
- Jabong
- Tradus
- Myntra
- Amazon
- Other: ________

What do you prefer to shop online?

- Deals
- Travel deals & tickets
- Movie tickets
- Products

What is the frequency of the purchase?

- Once in a month
- Twice in a month
- Every 6 months
- Other:________

The questions are based on the consumer attitude about online shopping.

Please select one option

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I think purchasing online saves time					
2. Shop online at anytime of the day					
3. Shopping online is risky					
4. Online shopping can surpass physical stores					
5. I will shop online only if the goods are cheaper					
6. Convenient delivery of products					
7. online shopping offers a wide variety of choice of products					
8. I hesitate to share my credit/debit card details online					

The questions are based on the convenience in online shopping.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The goods are delivered on time					
2. Product details are available					
3. Shop at anytime of the day					
4. It is easy to compare different products					

The questions are based on the website design

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Helps to search for the product easily					
2. Helps in choosing the right product					
3. I believe the website should be made familiar before purchasing					
4. Information available about the quality of product					

The questions are based on time saving in online shopping

	Strongly disaagree	Disagree	Neutral	Agree	Strongly agree
1. Takes less time to purchase					
2. It does not waste time					
3. Less time to evaluate and select the products online					

Questions are based on the security in online shopping.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel safe in purchasing online					
2. I only purchase from reliable websites					

Overall perception towards online shopping behavior.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have a positive behavior towards online shopping					

Thank you for completing this survey questionnaire. If you have any further comments please write down below.

TABLE 1: DATA COLLECTION OF DEMOGRAPHIC FACTORS

FACTOR	CATEGORIES	FREQUENCY	COUNT	PERCENTAGE
Gender	Male	100	68	68%
	Female		32	32%
Age	15-30	100	55	55%
	30-45		33	33%
	45-60		12	12%
Education	High school	100	22	22%
	Bachelor Degree		39	39%
	Master Degree		26	26%
	Ph.D & above		13	13%
Income	Less than 1 Lakh	100	7	7%
	1-3 Lakh		28	28%
	3-5 Lakh		49	49%
	5 Lakh & above		16	16%

TABLE 2: DATA COLLECTION OF FACTORS AFFECTING CONSUMER BUYING BEHAVIOR

VARIABLES	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
CONSUMER ATTITUDE					
I think purchasing online saves time	2	8	18	56	16
Shop online at anytime of the day	1	5	13	59	22
Shopping online is risky	17	44	15	17	7
Online shopping can surpass physical stores	4	13	48	20	15
I will shop online only if the goods are cheaper	1	13	26	49	11
Online shopping offers Convenient delivery of products	4	19	24	44	9
Online shopping offers a wide variety of choice of products	2	8	10	59	21
I hesitate to share my credit/debit card details online	18	35	19	18	10
CONVENIENCE					
The goods are delivered on time	16	13	10	47	14
Product details are available	2	12	13	53	20
Shop at anytime of the day	3	6	29	38	24
It is easy to compare different products	1	13	10	62	14
WEBSITE DESIGN					
Helps to search for the products easily	2	15	26	45	12
Helps in choosing the right product	5	18	27	36	14
I believe the website should be made familiar before purchasing	2	21	17	47	13
Information available about the quality of product	3	15	18	54	10
TIME SAVING					
Takes less time to purchase	2	19	5	49	25
It does not waste time	1	8	27	59	5
Less time to evaluate and select the products online	4	17	9	61	9
SECURITY					
I feel safe in purchasing online	2	6	23	63	6
I only purchase from reliable websites	5	15	18	39	23
ONLINE SHOPPING BEHAVIOR					
I have a positive behavior towards online shopping	2	8	10	62	18

EVOLUTION OF INDIA'S TELECOMMUNICATIONS INDUSTRY

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ABSTRACT

Indian Telecommunications Industry has shown a tremendous growth in the past decade. Though most of the growth has come in the mobile industry, it was not always so. The industry was a controlled government monopoly. With the advent of the liberalization regime there was introduction of competition and private players in this segment. Setting up of the regulator further accentuated this process. In this background, this paper attempts to look the evolution of this industry with the changes that have taken place at the policy front. The separation of the incumbent government service provision in the wireline services and the foray of private players in the wireless services has created a unique balance that has helped the industry scale new heights. The tremendous growth of this sector has made it vital for the Indian economy. However, there is still substantial scope for this segment to grow. Though there has been lot of controversy surrounding this sector, primarily due to various political reasons, The National Telecom Policy 2012 can be attributed as a step in the right direction. By creating more competition and looking at the larger public benefit simultaneously, there can be still substantial growth in this segment.

JEL CLASSIFICATION
O14

KEYWORDS
telecommunication industry, telecommunication services.

SECTION I: INTRODUCTION AND DEFINITION

During the last two decades there have been dramatic changes in most aspects of the telecommunications industry. The industry has become more complex with increasing digitization, introduction of newer products and increasing inter-linkages between broadcasting, information technology and telecommunications industry. However, during most part of the 20th century the telecommunications industry was viewed as a 'natural monopoly'[1]. The telecommunications services were provided either by a secure monopolist or by a private regulated corporation or by a public enterprise (as in India).

For the purposes of the present analysis telecommunication services will refer to two-way transmission of information, including voice, text, audio and video, between parties that are not in physical contact with each other. Consumers purchase these services from companies, which include local, long-distance, wireless, cable and internet providers. Telephone services include local and long distance calls, wireless, voice mail, caller ID, directory assistance, etc. Cable services include cable TV services, DTH and IPTV services. Internet includes both broadband and dial-up connections as well as wireless services.

This paper has been further divided into six sections. Section II, charts out a brief history of India's Telecommunications Industry in the pre-reform era. While the telecommunications industry continued to be a government controlled monopoly in the pre-reform period, the industry was opened to competition from private players during the post-reform era. This has been analyzed in Section III. With the introduction of private players in the industry there was an increasing demand of a regulator as the private companies within and outside the industry felt that the provisions within the telecommunications industry were not equitable and heavily skewed in favour of the incumbent. This led to the formation of the regulator and changes in policy governing this sector (Section IV). Section V briefly, discusses changes in the policy, namely the license regime, in the telecommunications industry since the end of the 20th century. With changes in the license regime and a level playing field there was a phenomenal growth in this sector. This has been analyzed in Section VI. With increasing competition within the telecommunications industry an analysis of the market structure becomes imperative. This has been done in Section VII. Section VIII provides the concluding remarks.

SECTION II: BRIEF HISTORY

Telecommunications services in India were governed by the Indian Telegraph Act of 1885. For most part of the 20th century, the Indian telecommunications industry was a Post, Telephone and Telegraph (PTT) model. The Ministry of Posts and Telegraphs and its departments controlled the telecommunication services and the infrastructure. Investments in telecommunications came under the Five Year Plans, which gave low priority to telecommunications and classified it telecommunications utilities as a luxury. It was widely perceived that the *'aam aadmi'* had no urgent need for telephones and other telecommunications related services (considered to be elitist) and therefore investments in telecommunications was restricted to serve governments and few other essential needs.

To ensure that the telecommunication equipments came from faultless sources, the Ministry of Posts and Telegraphs set up three subsidiaries: Indian Telephone Industries (ITI) to make telephone equipment, Hindustan Teleprinters Limited (HTL) and Telecommunication Consultant India Limited (TCIL) – a consultancy. These were known as the State Owned Enterprises (SOEs). The long term consequence of this state monopoly was not beneficial for the consumers or potential consumers of telecommunication services. There was a long waiting list for telecommunication utilities and the government was not able to install telephones (Table 1.1). The telephone system began to expand rapidly only in the late 1980s when the ITI-Alcatel factory started delivering switches in larger volumes. In 1984 Centre for Development of Telematics (C-DOT) was set up as an R&D organization to develop electronic switches. In 1984 the government separated the telephone department and created Department of Telecommunications (DoT) on April 1, 1986, currently an arm of the Ministry of Communication and Information Technology.

[1] 'Natural Monopoly' is a type of monopoly that exists as a result of the high fixed or start-up costs of operating a business in a particular industry.

TABLE 1.1: TELEPHONE ADDITION AND WAITING LIST, 1982-1992

Year Ending 31st March	DELs[a] (million)	Waiting List (million)	Growth of DELs (%/yr)	Waiting List (months)[b]
1982	2.30	0.59	7.0	47.2
1983	2.47	0.66	7.4	46.6
1984	2.67	0.74	8.1	44.4
1985	2.90	0.84	8.6	43.8
1986	3.17	1.03	9.3	45.8
1987	3.49	1.12	10.1	42.0
1988	3.80	1.29	8.9	49.9
1989	4.17	1.42	9.7	46.1
1990	4.59	1.71	10.1	48.9
1991	5.07	1.96	10.5	49.0
1992	5.81	2.29	14.6	37.1

Notes
(a) Dialed Exchange Lines, equivalent to telephones.
(b) Waiting list at the end of the year, divided by average monthly additions to DELs in that year.

Source: Desai, A. V. (2006): "India's Telecommunications Industry".

SECTION III: INTRODUCING COMPETITION

Introduction of competition in the global telecommunications industry is a recent phenomenon. In the Indian telecommunications industry, the introduction of competition has primarily been due to changes in policy objectives i.e. from security to efficiency and from being a luxury item to being a good for mass consumption. The reforms in the Indian telecommunications industry began in 1991 when foreign investment was welcomed and exchange level switch manufacturing was opened to the private sector. Prior to 1991, DoT bought all its equipments from SOEs. In 1986, only customer-premises equipment i.e. handsets and office switchboards, were allowed for private manufacturers. However, the provision of telecommunication services was retained as a state monopoly. This was perceived to be an adequate strategy, keeping in line with the policies being followed globally.

The focus of the policy makers to improve foreign investment in equipment manufacturing did not help in the growth of telephone lines. Even though DoT accelerated the installation of new lines to counter the looming threat of private players, the waiting list failed to shorten as more and more people were encouraged to apply for telephones. Further reforms in the telecommunications industry, in response to this shortfall led to the rejection of emphasis on investments in manufacturing and in favour of enabling private investments in telecommunication services. Furthermore, there was also a change in the public policy as policymakers searched for methods to not only induce private investment but also to reduce costs[2].

When private players were first introduced in 1992, the objective of the policymakers was not to allow competition in basic services but instead to supplement it by providing premium services, like mobile services, at high prices and value-added services like fax, e-mail and radio paging. The revenue earned from the license fees and other charges on the private service providers was to be used by the state to accomplish the targets of the incumbent in providing universal services and high quality value-added services. DoT invited bids for cellular services in the four metros in July 1992. Applicants had to bid for the lowest rent and no objective criterion was specified. The license fee for the private operators were fixed at high rates (Table 1.2) and with the rentals and the security deposits being kept low, DoT was able to ensure that the call charges of the cellular operators would be a high multiple of wireline call charges[3].

Apart from the high license fees, the cellular operators also had to pay charges for carrying calls on the DoT network. They were given only one point of interconnection in a circle. So even if cellular operators had licence for two adjoining circles, their subscribers were charged trunk call rates for local calls between DoT and private operators if the point of interconnection was not in the same city. The interconnection charges created a kind of tariff barrier around the DoT network. However, it should also be kept in mind that the private players bid unrealistically high license bids, which resulted in their total costs exceeding revenues.

TABLE 1.2: LICENSE FEES PAYABLE BY CELLULAR SERVICE OPERATORS ANNUAL LICENSE FEES (Rs million)

ServiceArea	Year 1	Year 2	Year 3	Year 4-6	Year 7 onwards for each year
Bombay	30	60	120	180	240
Delhi	20	40	80	120	160
Calcutta	15	30	60	90	120
Madras	10	20	40	60	80

Source: Dossani, R. and S. Manikutty (2003): "An Institutional View", in R. Dossani (ed.), *Telecommunications Reforms in India*, Delhi: Viva Books, pp 43-71.

The outcome of this bidding process got entangled in legal hassles, with some of the applicants whose applications were rejected going to the courts. This gave DoT the opportunity to delay the entry of private players for some years. The entire legal process ended in October 1994 with the first cellular services in the metros starting in August 1995. On the other hand, the finance ministry argued that DoT's resources needed to be supplemented by private investment in order to improve India's low teledensity[4]. Two committees were set up to study private entry in basic services – one by the finance ministry done by ICICI and another by DoT headed by G. Murthy. The ideology of both these committees formed the basis of the National Telecom Policy announced in 1994.

In January 1995, tenders were invited from private players to participate in the basic services. One of the primary objectives of this was to maximize revenues for the state as the highest bidder was to be chosen. However, arbitrariness was shown by DoT in the licensing process and in the awarding of contracts resulting in multiple court cases. However, neither DoT nor any of its functionaries were held accountable for their mistakes[5]. When the bids were invited the waiting list for telephones was more than two years. By the time the private players could provide service, the waiting list had fallen under a year and was shrinking rapidly (Table 1.3). DoT's investment also rose dramatically from US $ 600 million in 1991 to US $ 3 billion in 1997-98[6]. Again the interconnection charges imposed by the DoT were one-sided. Some companies bid very high amounts and secured licenses and later backed out when contracts were awarded. All these taken together meant that the operations of the private wireline service providers had become unviable even before it started. Only two basic operators started functioning by end of 1998 and four by the year 2000.

[2] For details see The National Telecom Policy 1994, Section 6.
[3] For details see Desai (2006).
[4] Teledensity is defined as the number of wireline phones in use for every 100 individuals living within an area.
[5] For details see Dossani, R. and S. Manikutty (2003): "An Institutional View", in R. Dossani (ed.), *Telecommunications Reforms in India*, Delhi: Viva Books, pp 43-71.
[6] Chowdhary, T. H. (1998): 'Politics and Economics of telecom liberalization in India", *Telecommunications Policy*, Vol. 22, No. 1.

TABLE 1.3: ROLLOUT OF TELEPHONE LINES (DOT & MTNL), 1990-96

	Financial Year Ending 31st March						
	1990	1991	1992	1993	1994	1995	1996
Number of lines (000)	4,589	5,074	5,810	6,797	8,026	9,795	11,978
Waiting list (000)	1,713	1,961	2,290	2,846	2,497	2,153	2,277
Number of new lines (000)	415	485	736	987	1,229	1,769	2,183
Waiting list (months)[d]	50	49	37	35	24	15	13

Note (d): New lines installed during the year divided into the waiting list and multiplied by 12.

Source: Desai, A. V. (2006): "India's Telecommunications Industry".

SECTION IV: FORMING OF THE REGULATOR AND NEW TELECOM POLICY

The communications ministry asked ICICI to study the setting up of a regulator in May 1993, with the report being submitted in January 1994. A bill to set up a regulator on the basis of the ICICI report was drafted and passed in January 1997. A five member Telecom Regulatory Authority of India (TRAI) was set up in March 1997 through an act of the Parliament[7]. However, the provisions of the TRAI were ambiguously defined. Though it was given certain functions to perform, precisely how it was to perform these functions was not clearly stated. The functioning and adjuration of TRAI was challenged by both, the incumbent as well as the private players in the courts as and when the respective party was affected by TRAI's adjuration. In several instances the courts ruled that TRAI's powers were just recommendatory and not binding on the government.

The private operators did not pay their license fees. The cellular operators had defaults totalling Rs 20 billion and the wireline operators Rs 7 billion. Among their guarantors were Bank of America, Deutsche Bank, ABM Amro, etc. A solution – either liquidation or relief – was becoming unavoidable. DoT was keen to cash their guarantees and asked the private operators whether their licences should not be forfeited if they did not pay. The government pre-empted this move and constituted the Group on Telecommunications, designed to overcome the monopoly of DoT over telecom policy. It issued the New Telecom Policy, which superseded the National Telecom Policy issued in 1994, on March 31, 1999 (NTP-1999). The government set up a Telecom Disputes Settlement and Appellate Tribunal (TDSAT) to hear appeals against the directions of TRAI and adjudicate disputes. Appeals from TDSAT would go directly to the Supreme Court. The ordinance also freed TRAI and TDSAT from audit by the Comptroller and Auditor General (CAG). It also brought DoT under TRAI's directive powers and gave statutory instructions to the government to consult TRAI on matters relating to licensing. Furthermore, in January 2000 the government introduced an amendment to the TRAI act that changed the institutional structure of TRAI and went a long way in overcoming some of the earlier shortcomings of TRAI, especially in dealing with the incumbent[8].

TRAI made sweeping changes to the tariff structure of DoT[9]. This allowed for a more level playing field in the provision of telecommunication services, especially the cellular services. In accordance with the NTP-1999, changes were made to facilitate the participation of private players in international long distance telephony, thereby ending the monopoly of Videsh Sanchar Nigam Limited (VSNL)[10]. In September 1999 the operational function of providing telecommunication services was separated from DoT into a Department of Telecommunication Services (DTS). Later DTS was corporatized into Bharat Sanchar Nigam Limited (BSNL) in October 2000. Unlimited number of Fixed Service Providers (FSPs) was allowed from January 2001 and was put on par with the state owned incumbent.

One of the important changes that the NTP-1999 made was that it allowed the Cellular Mobile Service Providers (CMSPs) to move from a license fee regime to a revenue sharing regime. CMSP operators were required to pay a one-time entry fee. The entry fee and the basis for selection of additional operators would be recommended by TRAI. Apart from the one time entry fee, CMSP operators were required to pay licence fee based on a revenue share. All circle operators were required to pay 2.8-2.9 years' license fee at the old rates (some operators, who had won extremely cheap bids, were required to pay up to 6.6 times their license fees). Table 1.4 summarizes the license fees that cellular operators had initially bid and what they actually paid. Once the operators had paid this, they were allowed to migrate to a proportional change on their revenue.

Private wireline operators were allowed to give CDMA cellular services[11]. The call charges of wireline operators were required to be same as that of DoT's wireline services, which was much below than that of CDMA operators. However, by January 2001 the wireline operators' share was made equal to those of cellular operators, when the latter was allowed to give WLL connections[12]. The private operators were also no longer required to route intracircle calls through DoT and MTNL. The private operators were allowed to build their own network within their circle boundaries. DoT and MTNL were allowed to enter the mobile business. The price cuts introduced by them intensified the price competition among cellular operators.

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[7] Telecom Regulatory Authority of India Act, 1997.

[8] The Telecom Regulatory Authority of India (Amendment) Ordinance, 2000.

[9] TRAI, (1998).

[10] After the formation of DoT the government corporatized two businesses, telephone in the metros and international traffic, as an experiment. Consequent of this, in 1986 two businesses were separated from the ministry – Mahanagar Telephone Nigam Limited (MTNL) was set to manage telecommunications in Delhi and Bombay (now Mumbai) and Videsh Sanchar Nigam Limited (VSNL) to run international telecommunication services.

[11] CDMA stands for Code Division Multiple Access and is a technology to provide cellular services. Another form of technology used to provide cellular access is GSM (originally Groupe Speciale Mobile, later abbreviated as Global System of Mobile Communication.

[12] Wireless in Local Loop (WLL) is a term for the use of a wireless communications link as the last mile connection for delivering plain old telephone service (POTS) and/or broadband Internet to telecommunications customers. In the Indian context it was considered as a telephone that was not portable and stayed at the same place.

TABLE 1.4: FEES PAID BY CELLULAR OPERATORS FOR MIGRATION TO THE REVENUE SHARING REGIME, 1999 (Rs. million)

Circle	Name of Operator	License Fee Bid	License Fee Accepted	Years
HP	Bharti Telenet	149.6	149.6	2.9
Gujrat	Birla AT&T	17941	17941	2.9
Maharashtra	Birla AT&T	16577	16577	2.9
Tamil Nadu	BPL Cellular	8360	8360	2.9
Maharashtra	BPL Cellular	14630	16577	2.8
Kerala	BPL Cellular	5170	5170	2.9
Haryana	Escotel	2458.6	2400	2.9
Kerala	Escotel	3848.3	5170	2.9
UP(W)	Escotel	4062.1	4062.1	2.9
Gujarat	Fascel	12292.5	17941	2.8
Karnataka	Modicom	13930	13930	2.8
Punjab	Modicom	12660	12660	2.8
AP	J.T. Mobile	10010	10010	2.9
Punjab	J.T. Mobile	9145	12660	3.9
Karnataka	J.T. Mobile	13200	13930	2.7
Bihar	Koshika Telecom	1365.3	1365.3	0
Orissa	Koshika Telecom	892.2	892.2	0
UP(E)	Koshika Telecom	2108.8	2108.8	0
UP(W)	Koshika Telecom	2582.1	4062.1	0
Assam	Reliance Telecom	13.2	13.2	2.9
Bihar	Reliance Telecom	26.4	1365.3	6.6
HP	Reliance Telecom	13.2	149.6	2.9
MP	Reliance Telecom	56.1	510	2.9
Northeast	Reliance Telecom	13.2	19	6.4
Orissa	Reliance Telecom	26.4	892.2	6.6
WB	Reliance Telecom	420	420	2.9
MP	RPG Cellcom	510	510	2.9
Rajasthan	Hexacom	1610	3820	2.8
Northeast	Hexacom	19	19	6.4
Haryana	Aircel Digilink	2400	2400	2.9
Rajasthan	Aircel Digilink	2100	3820	2.9
UP(E)	Aircel Digilink	2100	2108.8	6.6
Tamil Nadu	Srinivas Cellcom	4500	8360	0.5
AP	Tata Cellular	8580	10010	2.8
Metros				
Delhi	Bharti	--	80-160	6.1-12.3
Delhi	Sterling	--	80-160	4.4-8.8
Bombay	BPL	--	120-240	3.7-7.4
Bombay	Hutchison Max	--	120-240	3.5-7.0
Calcutta	Modi Telstra	--	60-120	2.6-5.2
Calcutta	Usha Martin	--	60-120	2.2-4.4
Madras	RPG	--	40-80	2.6-5.2
Madras	Skycell	--	40-80	2.6-5.2

Source: Desai, A. V. (2006): "India's Telecommunications Industry", Sage Publications, New Delhi.

The cellular operations became profitable as a result of the changes in policy brought about by the NTP-1999. As stated earlier, the price cut introduced by the incumbent in the mobile business intensified the price competition among cellular operators. However, this essentially favoured the large operators who could realize network economies and access to finance to order equipment in bulk. The smaller players operating in one or two circles and those who did not have access to large amount of funds were eliminated. Thus, the market share of those few operators who had the money to buy licenses increased and there was increased concentration in the telecommunications industry. By 2002, amongst cellular operators, five groups – Bharti, Hutchison, Reliance, Escorts and Idea – held 45 of the 55 cellular licenses. Six houses – Bharti, Reliance, Idea, Tatas, Escorts and Hutchison – held 66 of the 84 wireline licenses[13]. Most of the mergers and acquisitions occurred after the telecommunication companies had solved their liquidity problems. Network economies and economies of scale were the primary factors that drove these deals, which meant that a larger network carrier while carrying more of its calls passed on fewer to other networks.

SECTION V: CHANGE IN THE LICENSE REGIME

By the beginning of the 21st century, technological developments were removing the boundaries between different industries – telecommunications, radio, television and Internet – which were separately defined earlier, leading to their convergence. Convergence was something that was not given importance in the New Telecom Policy of 1999. However, in 2000, government drafted a Convergence Bill which was meant to replace the previous legislations and sought to combine the licensing functions of DoT and regulatory function of TRAI under one regulator. The Planning Commission set up a working group on convergence in 2000. But it limited itself to expansion of government intranet and its use for e-governance during the Tenth Plan (2002-07).

Concerns over the conditions under which fixed telephone service licenses would be merged with the cellular licenses created apprehensions over unified licensing. It essentially became a contest between the GSM operators who were dependent on foreign capital and CDMA operators who had their own deep pockets. As per the NTP-1999, wireline operators had been allowed to provide CDMA cellular services within a Short Distance Charging Area (SDCA). In February 2003, the action of the regulator in the Reliance Infocomm's case was in effect removal of SDCA restrictions for an additional license fee. Since, such a removal was unfair to the cellular operators who had entered in the same circle in the 1999 auction, TRAI proposed a penalty for migration to full cellular service[14]. The recommendations were accepted by DoT in November 2003 and with their implementation all licenses were converted to combined licenses for wireline, CDMA and GSM cellular. This was the first stage of universal licensing.

[13] TATAs and Birla merged their cellular networks to form Idea. However, TATA retained its wireline services.
[14] TRAI. (2003b).

The second stage of the universal licensing exercise covered activities of national and international long-distance services[15]. An all India license covering basic, cellular, national long-distance, international long-distance, global mobile personal communication by satellite, cable television, direct to home satellite television, Internet telephony and TV and broadcasting services could be purchased for Rs 1.07 billion, plus a component that would vary with the area where the service was being provided. While the basic telecommunications operators favoured high entry barriers to national and international long-distance services, the smaller GSM operators desired lower entry barriers. The GSM operators argued that the proposed long distance fee would not encourage competition. While the previous fee of Rs 1.25 billion was amortised over 20 years, the current fee needed to be amortised over five years. Also bundling of national and international long-distance service fee into one fee preclude smaller operators to opt for either service. GSM operators also wanted the foreign direct investment limit to be raised to 74 percent to allow then the resources to compete with the cash rich single license long-distance operators.

There was a dramatic change in the attitude of DoT as regards favouring competition in telecommunications sector. While earlier DoT was in favour of keeping the license fee at Rs 1,25 billion (GSM operators were arguing against an amount of Rs 1.07 billion), on November 10, 2005, it issued a press statement pronouncing the policy for second round of licensing process, which respected the concerns of the GSM operators[16]. The license fee for the national long distance service was reduced from Rs 1 billion to Rs 25 million and the license fee for the international long distance service was reduced from Rs 250 million to Rs 25 million. The licenses for international and national long distance services were unbundled and the total license fee was reduced from Rs 1.25 billion to Rs 50 million. Second, the requirements of net worth and paid up capital, which were Rs 25 billion and Rs 2.5 billion respectively, were each brought down to Rs 25 million. Third, the annual revenue share license fee was brought down from 15 to 6 percent. Thus, the change in the licensing regime was essentially a way to provide GSM operators greater access to finance as this had been the segment that had contributed significantly in the growth of telecommunications sector.

An important catalyst of the growth of the telecommunications industry (discussed in the next section) in India has been the easing of the licensing requirements of the mobile telecommunication operators. With surplus spectrum from defence requirements available for the industry, new licenses were issued for the 2G wireless services and spectrum was auctioned bringing revenue to the government. While TRAI had issued a consultation paper for the issuance of 3G licenses in June 2006, but due to various political reasons the auction got delayed and happened in April 2010. While the auctions added immensely to the government coffers, the spectrum bandwidth auctions are not likely to have a positive impact on the growth of this sector. The 3G auctions also marked the first time that spectrum auctions and issuance of license was separated. There were lots of controversies around this process with matters ending up in different courts of India. As such, this aspect requires deeper analysis, which is beyond the scope of this analysis.

SECTION VI: GROWTH IN THE TELECOMMUNICATIONS INDUSTRY

One of the important reasons for the growth and spread of the telecommunications industry in India has primarily been due to technological advances, especially the advances made in data transfer through fibre optics and increasing and efficient use of wireless technology. As long as transmission was through wires, last mile[17] costs were so high that no competitor could lay a parallel network to compete with the incumbent. Meaning competition in the telecommunications industry arrived after the advent of wireless services and the increasing demand of Internet services. Wireless services removed the last mile hurdle. As the subscriber base increased, the cost of connecting a cellular subscriber decreased to levels much below that of wireline services, under the same circumstances.

India has emerged as one of the fastest growing telecommunications market in the world. With 957.61 million subscribers at the end of September 2014, it is the second largest network in the world after China[18]. It is also the second largest wireless network in the world. Most of this growth has been due to the expansion in the provision of wireless services due to their convenience and affordability. Table 1.5 shows the network expansion by the public sector units as well as by the private operators. While there has been a modest growth in the network expansion done by the PSUs, the same by the private operators has been considerably higher. The private telecom network overtook the network expansion done by the PSUs in 2006. The subscriber base of wireline services was 24.41 million by September 2014[19]. It has been declining since 2007 as the demand for wireline telephones have reduced due to the increasing shift towards the wireless segment (Table 1.6). As evident from Table 1.6, there has been a phenomenal growth in the wireless segment with the number of wireless subscribers reaching 930.20 million by September 2014[20].

The structure and composition of telecommunications growth has undergone a substantial change in terms of wireline and wireless telephones and public-private participation. As stated earlier, the growth in the wireless segment has been phenomenal, with the wireless segment growing at a compounded annual growth rate (CAGR) of around 50% since 2004. The share of wireless telephones has increased from 46.54% in 2004 to 97.14% in September 2014. The private sector is now playing a crucial role in the expansion of telecommunication services. The share of private sector in total telephone connections is now 88.41% in September 2014 as against 5% in 1999[21].

TABLE 1.5: GROWTH OF TELECOM NETWORK (PSUs + PRIVATE)

Year ending March	PSUs' Telecom Network (in lakh)	Rate of Growth of PSUs' Telecom Network (%)	Pvt. Telecom Network (in lakh)	Rate of Growth of Pvt. Telecom Network (%)	Total Network (in lakh)
1997	145.4	-	3.4	-	148.8
1998	178	22.42	8.8	158.82	186.8
1999	215.9	21.29	12.2	38.64	228.1
2000	265.9	23.16	20.2	65.57	286.1
2001	324.4	22.00	38.5	90.59	362.9
2002	381.58	17.63	68.06	76.78	449.64
2003	431.71	13.14	114.46	68.18	546.17
2004	464.83	7.67	300.56	162.59	765.39
2005	520.88	12.06	462.85	54.00	983.73
2006	610.84	17.27	810.08	75.02	1420.92
2007	713.9	16.87	1344.76	66.00	2058.66
2008	795.49	11.43	2209.43	64.30	3004.92
2009	895.46	12.57	3401.79	53.97	4297.25
2010	1058.71	18.23	5154.09	51.51	6212.8
2011	1206.02	12.21	7203.26	28.45	8483.28
2012	1302.71	7.42	8210.75	12.27	9513.46
2013	1301.66	-0.08	7679.07	-6.92	8980.2
2014	1200.52	-8.42	8129.63	5.54	9330.2

Source: DoT, Annual Reports, Various Years.

15 TRAI. (2004a); TRAI. (2004b) and TRAI. (2005a).
16 DoT. (2005).
17 The last mile is the final leg of delivering connectivity from a communications provider to a customer.
18 TRAI, Press Release No. 09/2015.
19 *Ibid*.
20 *Ibid*.
21 *Ibid*.

The policymakers have given an important consideration in improving teledensity as an indicator of telecommunications penetration in the country. However, teledensity as a measure of telephone density is not accurate, especially in the urban areas where households and individuals may have access to more than one telephone. However, the policymakers can be excused for this as for the most part of the 20th century teledensity in India was very low (Table 1.7), with some improvements being showed when private players were allowed to provide telecommunication services. Nonetheless, there has been a remarkable improvement in teledensity in the last decade (Figure 1.1), with the values exceeding the targets set by the NTP-1999[22]. However, one glaring fact that comes out of Figure 1.1 is the rural-urban division in telecommunication services' penetration in the Indian economy.

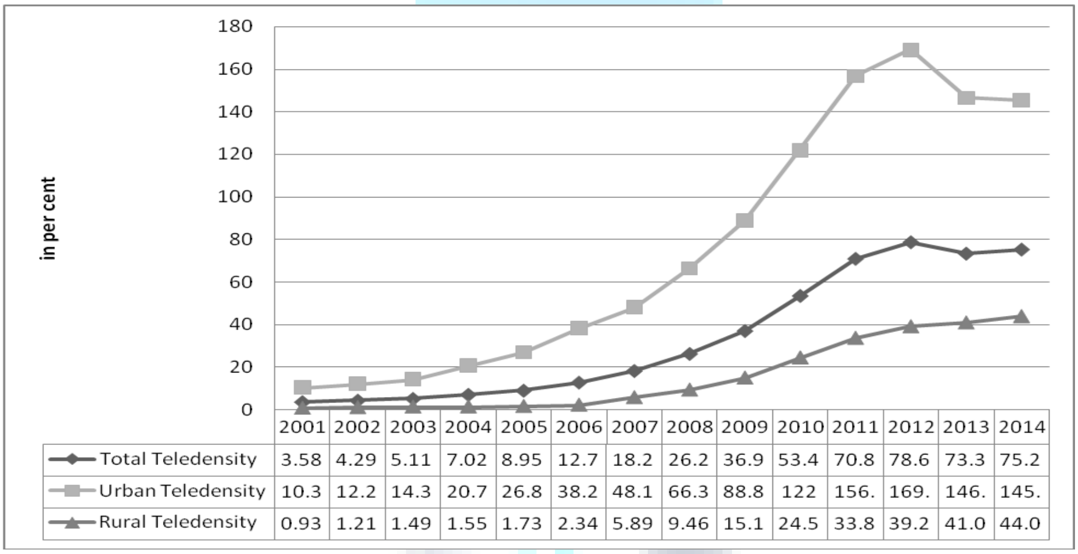
TABLE 1.6: WIRELINE SUBSCRIBERS AND WIRELESS SUBSCRIBERS (in millions)

Year ending 31st March	Wireline Subscribers	Wireless Subscribers[a]
1997	4.54	0.34
1998	17.8	0.88
1999	21.61	1.2
2000	26.65	1.88
2001	32.71	3.58
2002	38.29	6.68
2003	41.33	13.3
2004	40.92	35.61
2005	41.42	56.95
2006	40.23	101.86
2007	40.77	165.09
2008	39.41	261.08
2009	37.97	391.76
2010	36.96	584.32
2011	34.73	811.60
2012	32.17	919.12
2013	30.21	867.81
2014	28.50	904.52

Source: DoT, Annual Reports, Various Years.

Note (a): Wireless Subscribers includes WLL.

FIGURE 1.1: TELEDENSITY IN INDIA



Source: DoT, Annual Reports, Various Years

TABLE 1.7: TELEDENSITY IN INDIA, 1951-1981, 1991-2000 (percent)

Year	Teledensity
1951	0.04
1961	0.08
1971	0.18
1981	0.31
1991	0.60
1992	0.67
1993	0.77
1994	0.90
1995	1.07
1996	1.28
1997	1.53
1998	1.85
1999	2.20
2000	2.66

Source: Ghosh, S. (2003): "The Policy Agenda", in R. Dossani (ed.), *Telecommunications Reforms in India*, Delhi: Viva Books, pp 25-34.

[22] NTP-1999 had set a target of 15 to be achieved by 2010.

SECTION VII: EVOLVING MARKET STRUCTURE

As has been stated earlier, there has been phenomenal growth in the wireless segment of the Indian telecommunications industry. Movement to the revenue sharing regime combined with the increasing price competition in the wireless segment has meant that the smaller players were not able to compete with the bigger service providers and hence most of them sold out. There was thus, consolidation and increased concentration, with a few private operators owning the bulk of the licenses. The introduction of universal licensing regime in the Indian telecommunications industry has resulted in entry of new players in the market. Even then the market share in both, the GSM and the CDMA sections has few players who control the bulk of the market. The service providers have employed different business innovations to keep the loyalty of their customers.

Tables 1.8, 1.9 and 1.10 depict the market share of the wireless service providers, the GSM service providers and the CDMA service providers respectively. The tables show that while there has been an increase in the number of service providers, especially in the GSM segment, the market share of the newer entrants are very low and the bigger players have been able to maintain control of a reasonably high share of the market. This is accentuated more in the CDMA segment. While the market shares of the top 5 wireless service providers have come down over the years (Table 1.8) (top 3 for the GSM and CDMA operators – Table 1.9 and 1.10), they still remain to be quite high. This clearly points out to an oligopolistic kind of market structure. We thus, have an oligopolistic market structure in the Indian telecommunication industry, especially in the wireless segment with intense price competition, resulting in the fact that the tariffs in the Indian telecommunications industry are one of the lowest in the world. Time and again it has been observed that whenever, a new service provider enters the market; there has been a price war among the players leading to further reduction in tariffs. There has been a reduction in the Average Revenue Per User (ARPU[23]) in both the GSM as well as the CDMA segments[24]. In the wireline segment it is the incumbent which has the largest market share. BSNL and MTNL had a market share of 67.67% and 11.45% in the wireline subscriber base by end of March 2013, while all the five private operators have a share of 20.88%[25].

TABLE 1.8: MARKET SHARE OF WIRELESS SERVICE PROVIDERS (YEAR ENDING MARCH) (%)

Service Provider[b]		2006	2007	2008	2009	2010	2011	2012	2013
Bharti	Bharti	21.72	22.49	23.74	23.97	21.84	19.99	19.72	21.69
BSNL	BSNL	19.58	18.77	15.62	13.31	11.89	11.32	10.72	11.66
Reliance	Reliance	19.21	16.96	17.54	18.55	17.53	16.72	16.65	14.17
Vodafone (earlier Hutch)+BPL	Vodafone[c]	18.53	16.66	17.4	17.55	17.29	16.58	16.37	17.56
Idea+Spice	Idea[d]	10.32	10.14	10.8	10.98	10.92	11.03	12.26	14.01
Top 5		89.36	85.02	85.1	84.36	79.47	75.64	75.72	79.09
Tata	Tata	5.38	9.7	9.32	8.96	11.29	10.98	8.89	7.65
Aircel	Aircel	2.9	3.34	4.06	4.72	6.32	6.76	6.81	6.92
Others (MTNL, HFCL, Shyam Telelink, Loop, Sistem, Unitech, S.Tel, Videocon, Etisalat, Uninor)	Others	2.37	1.94	1.5	1.94	0.89	6.63	8.58	6.34

Source: Compiled from TRAI, Annual Reports, Various Years.

Note (b): The second column reflects either the acquired or the merged entities.
(c): Vodafone was earlier called Hutch which acquired BPL services.
(d): Idea acquired Spice.

TABLE 1.9: MARKET SHARE OF GSM SERVICE PROVIDERS (YEAR ENDING MARCH) (%)

Service Provider[e]		2006	2007	2008	2009	2010	2011	2012	2013
Bharti	Bharti	28.3	30.83	32.17	31.6	26.66	25.23	22.27	19.72
BSNL	BSNL	24.8	22.77	18.79	15.71	13.22	12.55	11.61	11.32
Vodafone (earlier Hutch)+BPL	Vodafone[f]	24.14	22.84	24.19	23.13	21.07	19.27	18.48	16.37
Reliance	Reliance	2.75	2.81	3.64	6.73	9.69	11.51	11.91	16.65
Idea+Spice	Idea[g]	13.44	13.9	14.64	14.47	13.33	12.82	13.85	11.03
Aircel	Aircel	3.77	4.57	5.51	6.22	7.7	7.05	7.69	6.81
Other (MTNL, Loop, Tata, S.Tel, Videocon, Etisalat)	Other	2.8	2.28	3.24	2.14	8.32	11.57	14.19	17.61
Top 3		77.24	76.44	75.15	70.44	61.06	57.32	54.60	52.74

Note: (e), (f) and (g) same as (b), (c) and (d) respectively.

Source: Compiled from TRAI, Annual Reports, Various Years.

TABLE 1.10: MARKET SHARE OF CDMA SERVICE PROVIDERS (YEAR ENDING MARCH) (%)

Service Provider		2006	2007	2008	2009	2010	2011	2012	2013
Reliance	Reliance	73.56	55.15	56.71	55.71	53.06	48.27	53.33	52.44
Tata	Tata	23.15	35.89	35.58	37.16	36.95	37.47	27.56	27.49
BSNL	BSNL	2.34	7.95	6.7	5.76	5.82	4.92	3.81	3.66
HFCL	HFCL	0.29	0.34	0.44	0.41	0.31	0.25	0.24	0.24
MTNL	MTNL	0.53	0.45	0.41	0.32	0.29	0.21	0.03	0.02
Other (Sistema, Shyam Telelink)	Other	0.14	0.22	0.16	0.6	3.57	8.88	15.03	16.15
Top 3		99.05	98.99	98.99	98.63	95.83	94.62	95.92	96.08

Source: Compiled from TRAI, Annual Reports, Various Years.

SECTION VII: CONCLUDING COMMENTS

The contour of reforms in the Indian telecommunications industry was essentially one where the new players were allowed to provide services in an entirely new segment – the wireless segment, which did not come in conflict with the incumbent's provision of basic services. Segregation of market segments of the incumbent and the private players is one of the important features of the reform process. The reforms in Indian telecommunications were designed to build an oligopolistic form of market structure. The number of players who were issued licenses in different circles was kept small so as not to challenge the monopoly of the incumbent. Thus, while the incumbent was initially limited to the wireline segment, the private players were more concentrated in the wireless segment (even though they had licenses to provide wireline services, the business was not perceived to be profitable). This has continued in the present scenario, albeit in a different form. Even though the licensing conditions have changed, the private telecommunication companies have to incur huge investments over the years in garnering licenses and radio spectrum in different circles. Moreover, there is duplication in setting up of infrastructure. These investments are huge sunk costs

[23] ARPU is a measure used primarily by consumer communications and networking companies, defined as the total revenue divided by the number of subscribers.
[24] TRAI, Performance Indicator Reports, Various Issues.
[25] TRAI, Annual Report, 2013.

that are undertaken by the private players. They are often inclined to create excess capacity in providing network services (equipped capacity) in order to be competitive in this oligopolistic structure.

One important aspect of the Indian telecommunications industry has been the disparity between the rural and the urban areas. It is starker when we look at the penetration of internet and broadband services and availability of value added services compared to the urban areas. The recently announce National Telecom Policy 2012 looks to rectify such differences. The objectives of the NTP 2012 aim at creating a balance between the different segments of this sector. The main thrust of NTP 2012 is the focus on the multiplier effect that growth in the telecommunications sector will have on the Indian economy with due importance being given to the development and availability of telecommunication services at cheaper rates in the rural areas. With a saturation coming in most of the metros with respect to the growth of the telecommunication services, the semi-urban and rural areas have become the main focus of the private operators. However, it still remains to be seen how far NTP 2012 will help in the proper diffusion of telecommunication services throughout India.

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STUDENT AWARENESS OF EDUCATION LOANS AS A SOURCE OF FINANCING: A STUDY OF BELGAUM CITY, KARNATAKA

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ABSTRACT
As human capital development is essential factor for sustainable growth, there is need for speedy implementation of Education loan schemes and should cover large population in both rural and urban areas to enhance skill development. With the growing awareness towards education, educational loans provided by scheduled commercial banks and private banks have proved to be an integral source of financing higher and professional education The present study is carried out in Belgaum City of Karnataka regarding the students' awareness about education loans as a tool of financing. The aim of the study is to examine the students awareness about education loans with respect to various features like guidelines of scheme, rate of interest, source of information, source of funding, type of bank, influencing factor to avail education loan, reasons to avail education loan, satisfaction level with bank schemes, awareness about online application option.

KEYWORDS
education loan, higher education financing, student awareness.

INTRODUCTION
Education is a reflection of a good civilization. Since time immemorial, human civilization has progressed by innovation in education spreading awareness in the society and removing the blanket of ignorance. We need education system that may eradicate illiteracy and may provide the common man an access not only to basic education but also to higher and technical education. With the growing awareness towards education, educational loans provided by scheduled commercial banks and private banks have proved to be an integral source of financing higher and professional education. Education loans are easily available from various banks in India and this is encouraging more and more students to take up higher education despite their financial shortcomings.

According to the Census Data 2011, India is heavily overpopulated with a population of 121,01,93,422 which means India today is a powerhouse of talent of 121,01,93,422 plus. But this tremendous powerhouse can be compared to rocks, which need to be polished to be transformed into diamonds. At the time of Independence, India's literacy rate stood at 14% and in 1991 it was 52.21%. According to Census 2001, it was 64.8% and presently (2011) it is 74.04%. As a part of the tenth Five year Plan (2002–2007), the central government of India outlined an expenditure of 65.6% of its total education budget of 438.25 billion (US$8.33 billion). According to UNESCO, India has the lowest public expenditure on higher education per student in the world. Although the country targeted towards devoting 6% share of the GDP towards the educational sector, the performance has definitely fallen short of expectations. Only because of student loans, most of the students are able to achieve their higher education goals. The students need not ask for monetary help from others while they continue their education. Student loans come to their rescue in meeting with the essential college fees and other educational expenses. The student may be able to repay the loan borrowed after he gets a job after completion of his studies. His pride also is improved when he is able to repay his loan properly. His credit rating also improves.

The objective of this paper is to study the awareness about education loan amongst students as a source of financing amongst the representative sample of students from the city of Belgaum, Karnataka. This paper also attempts to study the satisfaction level of students who have availed education loans from the stated sample.

REVIEW OF LITERATURE
The Review Committee on National Policy on Education,(NPE) 1986 recommended introduction of institutional loans, while raising fees in higher education sector, as a strategy for releasing pressure on the government kitty. Though it agreed that such an arrangement is the need of the hour, yet it mentioned that educational loans do involve certain problems in India. They were mentioned as- Psychologically, people are against loans. Credit markets are not developed.

Dr.Harsh Gangadhar (2011) has done a study on educational loan schemes by scheduled commercial banks in Chandigarh in India. He has highlighted absence of previous studies on education loan schemes in India.

Dr Ruchi Malhotra, Dr. Rekha Goel, Aarti Dewan (July , 2013) studied the students perception regarding student financing as a case study in Palwal and Faridabad District of Haryana. They concluded that Respondents prefer bank whenever they require loan for education purpose and the rate of interest on such loans is the main reason which attracts them.

Jayandhala B G Tilak critically reviewed the experience of implementation of the National loan scholarship scheme and concluded that present student loans make little contribution to either the efficiency or equity of higher education in India.

Vibhuti Patel has studied the challenging area of financing higher education , plan allocation for higher education and gender implications of privatization of education and concluded that there is issue of gender bias in education.

Rakesh Tiwari and Dr Bimal Anjum have made an attempt to explore role of educational loans for the development of Human capital in India. The paper recommends enchancing the utility of educational loans to improve access and employability of the students.

Dr Babli Dhiman and Dr Ashok Khurana have studied whether the educational loans are beneficial for students , educational institutions or for the banks and concluded that the scheme is beneficial for all the parties concerned.

R Srinivasan and Dr Debabrata Das have studied the practices followed by banks in selecting beneficiary students, problems faced by the applicants , background of the problematic borrowers and steps taken to overcome these problems.

RESEARCH METHODOLOGY
To achieve the objectives, the following research methodology is adopted. Data is collected both from primary as well as secondary sources. Primary data is collected from 100 students (respondents) randomly. A self administered questionnaire was distributed to the respondents to collect data on the various criteria of study.

DISTRIBUTION OF SAMPLE

Course	Engineering	Doctorate	Diploma	MBA	Degree	Total
No. of Students	20	19	13	27	21	100

Socio Demographic Characteristics of the Sample students:
Ratio of Male to Female – 54 Male and 46 female
Age range – 18 years to 26 years

Mean Age – 21.7 years
Geographic Area – Belgaum North-48 students and Belgaum South-52 students
Education level – pursuing Professional courses.

TABLE 1: DISPLAYING THE VARIABLES AND FINDINGS OF 100 STUDENTS SURVEYED RANDOMLY

Criteria/ variable	Findings		
Awareness of Education loans	76 students are aware of education loans as a source of financing	24 Students are unware of education loans as a source of financing	
Range of Course fees	68 students (Rs 5000- Rs 50,000)	20 Students (Rs 50,000-Rs 1,00,000)	12 Students (Rs 1,00,000 – Rs 5,00,000)
Availing of Education loans	32 students availed education loan	68 students did not avail education loan	
Source of Funding education	38 students – Education loans	57 students – Own funds	3 students- partly owned and partly borrowed funds 2 students – Private lenders
Influencing factor for availing education loans (From 32 Students)	20 students – family as influencing factor	5 students – Banker as influencing factor	4 students – Advertisement as influencing factor 3 students – Friends and agents
Satisfaction level of students with banks	14 students- Highly satisfied 8- Satisfied	6-Neither satisfied nor dissatisfied,	3- Not satisfied, 1- Highly dissatisfied.

FINDINGS AND DISCUSSION

1) Research reveals that majority of the students (76%) were aware about education loan as a source of financing but most of the students are not aware about the online facility for applying education loan.
2) Students who are studying in professional courses with high fee structure like MBA, MCA, and Doctorate will avail education loan. These students are targeted customers. Students do not prefer education loan where course expenditure is less than Rs 50,000.
3) The study says that more than half of the sample size (57 students) is depending on the own funds for their studies followed by education loan and partly own and education loan. Very less number of students depends on the private lenders for financing their education.
4) Most of the students will be influenced by the family to take education loan, followed by advertisement, banker and friends.
5) While applying for the education loan the students will look for low rate of interest, followed by services provided by banks.
6) It was found that most of the students are satisfied with their “Bank Services”.

SUGGESTIONS AND CONCLUSION

Majority of the students are unaware of the guidelines of the education loan scheme and the rate of interest charged on these loans. Further very few students are aware about the online mode of applying for education loans. Only few students are influenced by the advertisement to take education loan, so banks should focus to educate about their schemes to concern families because more number of students are influenced by family to take education loan. Most of the students are highly satisfied with services provided by syndicate bank. Bank should keep on increasing their performance. The Govt. of Karnataka has announced interest subsidy to the banks on the loans sanctioned to the students securing admission for professional courses like Engineering, Medical, under Govt. selection process. The interest over and above 5% will be reimbursed by the Govt. Further in the interim budget 2013-14, the centre announced interest waiver on education loans taken before March 31, 2009. The benefit passed onto students in the State is likely to be around Rs. 700 crore with the SBI borrowers alone benefitting around Rs. 250 crores. It is suggested all the eligible students should avail this benefit.

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EFFECT OF CAPITAL STRUCTURE ON PROFITABILITY OF LISTED MANUFACTURING COMPANIES IN SRI LANKA

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ABSTRACT

Capital structure is one of the most complex areas of financial decision making due to its interrelationship with other financial decisions variables. Capital structure is the composition of debt and equity capital that comprise a firm's financing its assets and can be rewritten as the sum of net worth plus preferred stock plus long-term debts. The problem statement to be analyzed in this study is: Does capital structure affect the listed manufacturing companies in Sri Lanka? The study sample consists of 12 Manufacturing companies listed in Colombo stock Exchange . Net profit ratio is used to measure the profitability. Debt equity ratio, Long term loans to total asset and short term loan to total assets ratios are used to measure the capital structure of the companies. Applying correlations and fixed effect 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 .

KEYWORDS

Capital Structure , Long term liabilities, Net profit ratio, Colombo Stock Exchange.

1. INTRODUCTION

The capital structure is defined as the mix of debt and equity that the firm uses in its operation. The capital structure of a firm is a mixture of different securities. In general, firms can choose among many alternative capital structures. For example, firms can arrange lease financing, use warrants, issue convertible bonds, sign forward contracts or trade bond swaps. Firms can also issue dozens of distinct securities in countless combinations to maximize overall market value (Abor, 2005(. Firms can use either debt or equity capital to finance their assets. The best choice is a mix of debt and equity. In the case where interest was not tax deductible, firms' owners would be indifferent as to whether they used debt or equity, and where interest was tax deductible, they would maximize the value of their firms by using 100% debt financing (Azhagaiah and Gavoury, 2011). The use of debt in capital structure of the firm leads to agency costs. Agency costs arise as a result of the relationships between shareholders and managers, and those between debt holders and shareholders (Jensen and Heckling, 1976). The pecking order hypothesis suggests that firms are willing to sell equity when the market overvalues it (Myers, 1984; Chittenden et al., 1996). This is based on the assumption that managers act in favor of the interest of existing shareholders. Consequently, they refuse to issue undervalued shares unless the value transfer from "old" to new shareholders is more than offset by the net present value of the growth opportunity. It can be concluded that new shares are only issued at a higher price than that imposed by the real market value of the firm. Therefore, investors interpret the issuance of equity by a firm as signal of overpricing. If external financing is unavoidable, the firm will opt for secured debt as opposed to risky debt and firms will only issue common stocks as a last resort (Abor, 2005).

This study examines the relationship between capital structure and profitability of the Sri Lankan manufacturing firms. The literature cites a number of variables that are potentially associated with the profitability of firms. In this study, the selection of exploratory variables is based on the alternative capital structure, profitability theories and previous empirical work. The choice can be limited, however, due to data limitations.

LITERATURE REVIEW

Velnampy (2012) analyzed the relationship between capital structure & profitability of listed banking industry in Sri Lanka. . They found that there was a negative relationship between debt to equity and return on equity. Further the results suggest that 89% of the total assets in the banking sector of Sri Lanka wre represented by debt.

Nirajini and Praia (2013) have done a research on" impact of Capital structure on financial performance of the Trading companies in Sri Lanka'. They found there was a positive relationship between capital structure and financial performance . and also capital structure is significantly affect on gross profit, net profit and ROCE .

Anansasayanan et al (2013) analyzed "The determinant of leverage of the listed companies in Sri Lanka; An empirical Study . The purpose of present study was to investigate the determinants of leverage (or capital structure) decision of Sri Lankan firms based on a panel data set over a period of five years from 2007-2011 comprising of 60 companies. This study examined the impact of five firm specific factors – firm size, firm growth rate, profitability, and asset tangibility, on the leverage decision of listed companies in Sri Lanka. The results showed that financial leverage of Sri Lankan firms is influenced by firm size, firm growth rate and profitability .This study contributed to the literature on the factors that influence financial leverage of the firm.

Modigliani and Miller (1958) have a theory of "capital structure irrelevance" where argue that financial leverage does not affect the firm's market value with assumptions related to homogenous expectations, perfect capital markets and no taxes.

Sarkar and Zapatero (2003) find a positive relationship between leverage and profitability. Myers and Majluf (1984) find firms that are profitable and generate high earnings are expected to use less debt capital comparing with equity than those that do not generate high earnings.

Sheel (1994) showed that all leverage determinants factors studied, excepting firm size, are significant to explain debt behavior variations. Gleason, et al., (2000) Using data from retailers in 14 European countries, which are grouped into 4 cultural clusters, it is shown that capital structures for retailers vary by cultural clusters. This result holds in the presence of control variables. Using both financial and operational measures of performance, it is shown that capital structure influences financial performance, although not exclusively. A negative relationship between capital structure and performance suggests that agency issues may lead to use of higher than appropriate levels of debt in the capital structure, thereby producing lower performance. Graham (2000) integrates under firmspecific benefit functions to estimate that the capitalized tax benefit of debt equals 9.7% of firm value. The typical firm could double tax benefits by issuing debt until the marginal tax benefit begins to decline.

METHODOLOGY

The purpose of this research is to contribute towards a very important aspect of financial management known as capital structure. Here the relationship between capital structure practices and its effects on profitability of 12 Listed Manufacturing companies for a five year period from 2008 to 2012 will be examined.

VARIABLE OF THIS STUDY

Independent and dependent variables of the selected sample firms for the period of study

I. DEPENDENT VARIABLE (PROFITABILITY VARIABLE)

Net profit ratio (NPR) is a popular profitability ratio that shows relationship between net profit after tax and net sales. It is computed by dividing the net profit (after tax) by net sales.

II. INDEPENDENT VARIABLE (CAPITAL STRUCTURE VARIABLES)

- Debt to Equity Ratio: A measure of a company's financial leverage calculated by dividing its total liabilities by stockholders' equity. It indicates what proportion of equity and debt the company is using to finance its assets.
- Total debt to total assets: A metric used to measure a company's financial risk by determining how much of the company's assets have been financed by debt. Calculated by adding short-term and long-term debt and then dividing by the company's total assets.
- Short term debt to total: This key ratio describes the relationship between current assets and the company's total assets.

III. CONTROLLED VARIABLE

Firm Size: firm size is measured by taking the natural logarithm of the total assets.
Non-debt tax shield (NDTS) is defined as a ratio of total annual depreciation to total assets.
Capital intensity ratio: Capital intensity ratio of a company is a measure of the amount of capital needed per Rupees of revenue. It is calculated by dividing total assets of a company by its sales. It is reciprocal of total asset turnover ratio.
Tangibility is measured as a ratio of net fixed assets divided by total assets.

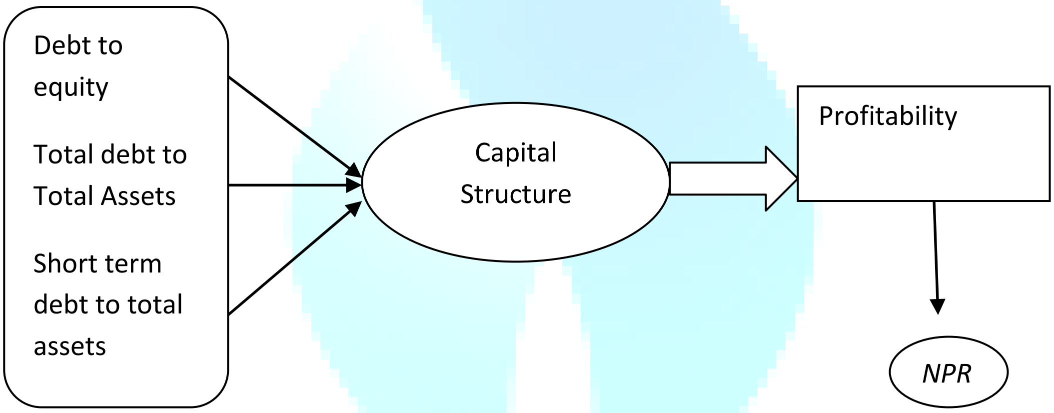
RESEARCH HYPOTHESES

The following Hypotheses were formulated
H1: There is significant relationship between Debt to equity and profitability.
H2: There is significant relationship between short term debt to total asset to Profitability
H3: There is significant relationship between long-term debt to total assets and profitability

CONCEPTUALIZATION

After the careful study of review of literature , researcher developed the following conceptual model.

FIG. 1



Source: Developed By researchers

STATISTICAL TECHNIQUE USED IN THIS STUDY

This paper uses panel data set over a period of five years between 2008-2012 to investigate the effect of capital structure on profitability of Manufacturing companies listed in CSE . The fixed
effects test is employed to test the hypotheses. The fixed effects regression equation can be expressed as:

MODEL 01

***Profit i* t = α i + β1 De/Eq i t+ β2 Size i t+ β3 Tan i t+ β4 NDTs t + β5 Capital inten i t + ε i t**

Where i =1, 2, 3,..., 12 for the sample companies
t = 1, 2, 3, 4, 5 (time period).
α is the intercept of the equation
β1, β2, β3, β4, β5 = are the coefficients for the five explanatory variables in the model.

MODEL 02

***Profit i* t = α i + β1 LD/TA i t+ β2 Size i t + β3 Tan i t + β4 NDTs t + β5 Capital inten i t + ε i t**

Where i =1, 2, 3,..., 12 for the sample companies
t = 1, 2, 3, 4, 5 (time period).
α is the intercept of the equation
β1, β2, β3, β4, β5 = are the coefficients for the five explanatory variables in the model.

MODEL 03

***Profit i* t = α i + β1 STD/TAt i t+ β2 Size i t + β3 Tan i t + β4 NDTs t + β5 Capital inten i t + ε i t**

Where i =1, 2, 3,..., 12 for the sample companies
t = 1, 2, 3, 4, 5 (time period).
α is the intercept of the equation
β1, β2, β3, β4, β5 = are the coefficients for the five explanatory variables in the model.

RESULTS AND DISCUSSION

TABLES 01: INDUSTRY AVERAGE OF RELATED VARIABLES IN THIS STUDY

Year	Long Termto Total Assets Ratio	Short Term Total Debt Ratio	Equity/Debt	CapitalIntensity	Tangibility	NonDebtTaxShiled	Profitability	Firmsize
2008	0.1015	0.405	0.506	1.23	0.458	0.0039	0.0097	9.08
2009	0.1339	0.3394	0.473	1.326	0.480	0.00075	0.0005	9.32
2010	0.1317	0.315	0.438	1.2329	0.462	0.1020	0.10177	9.620
2011	0.10737	0.388	0.520	1.4282	0.433	0.056	0.0733	9.01
2012	0.0997	0.341	0.440	1.362	0.492	0.0762	0.0842	9.72

(Source : Published Data By CSE)

Table 01 shows the Average figures of Variables from 2008 to 2012 relating in this study. When we see the long term debt to total assets ratio, while in 2008 Industry average was 10.15% and , in 2012 This ratio declined to 9.97%. This reflects that long term debt financing has reduced. In 2008 Short tern to total asset ratio was 0.405 but in 2012 this value was .341 . In 2008 Average short term to total assets ratio is 40.4%, in 2012 this ratio has declined as 34.12%. Reason for this deduction is deduction of short term assets to financing total assets.

While Debt to Equity ratio in 2008 is .506 and in 2012 this ratio has also declined as. 4407. This reveals that companies has utilized the equity as source of financing its assets. The range of the capital intensity ration is 1.23 to 1.42. The need of the capital required for this period has increased. When we see the tangibility ratio, in 2008 this ratio is 0.45, in 2012 this value increases as 0.49. In 2008 the non debt tax shield is 0.0039. It increases as 0.076 in 2012. Companies average net profit in 2008 is 0.97% , this ratio increases as 8.42 in 2012.

The following figure represents the trend of the industry related above variables in this study from 2008 to 2012.

TABLE 02: CORRELATION MATRIX

Variables	Debt/Equity	Long term debt to Total assets	Short term debt to total assets	Non tax shield	Firm Size	Tangibility	Capital Intensity	Profitability
Debt/Equity	1	.545**	-.296*	-.271*	-.114	.318*	.076	-.317*
Long term debt to Total assets		1	.560**	-.389**	-.201	.121	.093	-.300**
Short term debt to total ass			1	-.216	-.073	-.171	.129	-.237
Non tax shield				1	.264*	.112	.275*	.945**
Firm Size					1	.202	.389**	.257
Tangibility						1	.383**	-.007
Capital Intensity							1	.163
Profitability								1

*Correlation significant at the 0.05level

**Correlation significant at the 0.01 level.

Table 02 shows the Pearson correlation summary between the variables used in this study. According to this results, the co-efficient value between the debt to equity to Profitability is .317. This is significant at 5%level. This reveals that debt to equity ratio increases , that will reduce the profitability .

The correlation co-efficient value of the Long term to total assets ratio to profitability is -0.317. This is also significant at 1% level. This reflect increasing the utilization of long term debt ratio will reduce the profitability of the companies.

The correlation coefficient value between the short term loan to total assets ratio and the profitability ratio is -0.237. This is not significant. This results support for existing literatures such as Velnampy et al (2012) and Booth et al (2001)

TABLE 03: REGRESSION RESULTS MODEL 01

Variables	Co efficient	t Value	sig
Constant	0.046	4.064	.000
Debt Equity	-0.024	-.413	.061
Non Tax shield	.965	20.917	.000
Firm Size	.056	1.209	.232
Capital intensity	-0.012	-2.080	0.043
Tangibility	-0.087	-1.847	0.071
R2 .913			

Table 04 shows the regression results of the Regression model 01.In this model debt to equity ratio is the independent variable. Profitability ratio is considered as dependent variable. According to the summary , Beta value for the debt to equity ratio is -0.024 and the p Value is 0.061. This is significant at 10 % level. So Hi is accepted. That is Debt to equity ratio significantly impact on the profitability of Listed Manufacturing companies in Sri Lanka. Firm size has a positive impact on leverage .The relationship between non tax shield , firm capital intensity and tangibility are significantly impact o profitability. .

TABLE 04: REGRESSION RESULTS MODEL 02

Variables	Co efficient	t Value	sig
Constant	0.019	3.051	0.004
Total Debt to Total Assets ratio	-0.022	-.752	.455
Non Tax shield	.933	19.641	.000
Firm Size	0.55	1.207	.233
Capital intensity	-.012	-2.127	.038
Tangibility	-.046	-2.059	0.045
R2 .893			

Table 04 shows the regression results of the model 02. According to the summary of table 04 Beta value of total debt to total assets ratio is -0.022 and the p value is 0.0455. So total debt to total assets ratio significantly impact on profitability of the Manufacturing companies. This is significant at 5 % level. So H2 is accepted. That is Debt to equity ratio significantly impact on the profitability of Listed Manufacturing companies in Sri Lanka. .The relationship between non tax shield , firm capital intensity and tangibility are significantly impact on profitability.

TABLE 05: REGRESSION RESULTS MODEL 03

Variables	Co efficient	t Value	sig
Constant	.018	3.883	.000
Short Term debt ratio	-.076	-1.735	.089
Non Tax shield	.954	21.630	.000
Firm Size	.060	1.343	.185
Capital intensity	-.119	-2.636	.011
Tangibility	-.094	-1.999	.051
R2 .905	-.076	-1.735	.089

Table 05 shows the regression results of the model 03. According to the summary of table 05 Beta value of total short term debt to total assets ratio is -0.076 and the p value is 0.089. So short term debt to total assets ratio significantly impact on profitability of the Manufacturing companies. This is significant at 10 % level. So H3 is accepted. That is short term debt to total asset ratio significantly impact on the profitability of Listed Manufacturing companies in Sri Lanka. .The relationship between non tax shield , firm capital intensity and tangibility are significantly impact on profitability.

CONCLUSION

This paper examined the impact of the capital structure on profitability of manufacturing companies listed in Colombo stock exchange. The results of the study based on the fixed effect estimation show that the variables in the model 01 Model 02 and Model 03: Debt to Equity , Long term debt to Total assets and short term debt to total assets have strong significant influence on firm's profitability. This paper support for existing literatures such as Velnampyet al (2012) and Raheman, A., B (2007) The objective of an investment is to maximize the wealth of owners. In order to achieve this objective investors should select the shares of companies which have higher profitability. Therefore the findings of this research will help investors in selecting profitable shares by considering their capital structure and to maximize their return. Companies can alter their capital structure according to their needs. The findings of this study will also help to companies to determine the optimum leverage which maximizes their profitability. By increasing their profitability companies can also increase the market values of their shares.

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AN EVALUATION OF THE ECONOMIC AND FINANCIAL CAPACITY OF INDIGENOUS UNDERWRITING FIRMS FOR MARINE RISKS AND INVESTMENT COVER IN NIGERIA

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ABSTRACT

This study is conducted to evaluate the financial capacity of indigenous marine underwriters to adequately cover marine risks in Nigeria. The insurance award approach as used by Hopkins was adopted to achieve this objective. Data were collected from the Underwriters' past claims settlement record. Hypotheses were set to test all the data collected using the ordinary Least Square method of regression and t-test for the difference of means method was also used in the data analysis. The test showed an acceptance of the null hypotheses to conclude that the local marine insurance underwriters lacked the economic and financial capacity adequately to cover the marine risks and to settle insurance claim in Nigeria. Recommendation was made based on the research findings.

KEYWORDS

Evaluation, financial capacity, indigenous, investment, underwriting.

INTRODUCTION

Maritime transport operation like other modes of transport operation are associated with risk of hazards such as fire, accident, collision, marine pollution, cargo theft, oil spills, piracy, among others. The occurrence of these risks and others leads to possible damages which in turn diminishes the value or cause total loss of the economic value of marine investment and property (Egerue, 2003). The near unpredictability of safety and security of maritime investments and operation necessitates the protection and cover of these investments against maritime risks, perils and hazards, to avert total or partial loss in the value of maritime assets. To do this, an effective risk management mechanism is needed to cushion the effect of economic losses of varying magnitude that could occur to marine investments.

In the words of Irukwu (1993), marine underwriting serve as the most effective risk management mechanism in the marine industry for limiting financial liability that maritime stakeholders could suffer through loss or damage to the investment. Marine Insurance Act (M.I.A. 1906 S.1) explained the concept of marine underwriting as a business contract where an underwriter (insurer) agrees in consideration for premium (money) paid to him by a party (insured) with insurable interest in a marine adventure to indemnify the insured financially, against economic losses suffered by him, on the occurrence of the marine risk/peril he insured against.

Ihegborow (2002), observed that the practice of marine insurance in Nigeria was introduced in the 19th century by British Businessmen and Colonial Masters to cover and protect. European Business interests transiting through the Atlantic ocean to Nigeria. Thus, for over fifty years, insurance and underwriting firms in Nigeria were wholly or partially owned by the British. Marine insurance cover arranged for British businesses over this period were placed in London through Lagos based banks, (Ihegborow, 2002). Between 1921 and 1949, all insurance companies doing marine underwriting business in Nigeria were wholly owned by the British with no Nigerian interest until 1950 when four (4) partly owned Nigerian underwriting companies joined the market dictating the trend of its development. It was after independence in 1960, Irukwu (2003) opined that it was in the years between 1961 and 1973 that real growth in both public and private indigenous underwriting business was witnessed in the industry, following the oil boom which resulted in increased Government revenue.

Owuallah (2002), posited that the bid by the Nigerian Government to encourage local content development and reposition the local insurance firms to compete favourably with the foreign firms in the underwriting of import and export cargoes motivated the Nigerian Government to insert the cargo insurance policy into Section 14 (3) of the National Shipping Decree 1987 which stipulates that all public sector contracts for importation and exportation of goods shall be on free on board (f.o.b.) and cost, insurance and freight (c.i.f.) contracts respectively. The clear policy intent is that local insurance and underwriting firms will cover such contracts to enable them develop their capability, remain in business and help reduce the flight of foreign currency caused by the need to insure such contracts with foreign firms abroad. The policy however, did nothing to make private import and export be insured with the local firms until in 1997, when the Insurance Decree No. 2, Section 76 provided that all imports into Nigeria shall be on cost, insurance and freight basis only, thus recommending that both public and private sector import contracts be made with insurers registered in Nigeria under the Degree (Owuallah, 2002).

The above provisions of the Shipping Decree 1987 and Insurance Decree 1997 were consolidated by the Insurance Act 2007 which, apart from establishing a new capitalisation base for all local insurance firms doing business in Nigeria, provided, for the maintenance of technical reserve for all types of insurance business of the indigenous underwriting firms to enable them meet liabilities and claims, (Insurance Act 2007). In the marine underwriting business between 25% and 45% of the total marine premium collected is to be maintained for cargo and hull risks respectively (Insurance Act 2007). Recapitalisation exercise of 2007 also saw the merger of several local firms in order to build up capacity to adequately cover all classes of trade in practice including marine trade and to strengthen the confidence of the Nigeria public and private sector in the local underwriting industry as an import subsector of the financial sector, to contribute to national economic development.

Over the years, however, the economic capacity of the local underwriting firms to adequately cover and meet marine insurance liabilities and claims in Nigeria has continued to remain in doubt in spite of Government efforts through legislation and control to create confidence and improve the financial strength and capacity of the industry.

This doubt in the financial ability of the indigenous insurers to adequately settle marine claims is evident in the disinclination of the major oil companies, mostly those operating in the upstream sector of oil and gas industry to grant oil lifting and carriage contracts to indigenous shipping companies/carriers whose vessels and voyages are insured by local underwriting firms. The foremost excuse for such reluctance is because the local underwriters are suspected to lack the financial strength and capacity to adequately cover oil and gas operations and oil lifting going on at the sea and as such, the possibility of adequate indemnity for the oil companies in the occurrence of the insured risk, is uncertain. Irukwu, (2006), observed that while oil companies doubt the financial capacity of local underwriting firms to adequately cover oil lifting and marine risks, they demand membership of indigenous ship-owners/shipping companies in the foreign protection and indemnity (P&I) club and obtain P&I cover for the vessels as a precondition for their involvement in the oil lifting trade. Membership of foreign

P&I clubs however, involve huge financial requirement in foreign currency and strict registration conditions, which appears to be very hard for most local carriers to contain.

The above position of the oil companies has not only put the indigenous ship-owners at disadvantages in the carriage of Nigerian originating oil cargo, it has also put the local underwriters at disadvantage in the insurance and cover of Nigerian maritime trade and operations. It has at the same time violated all the insurance and shipping policies and laws aimed at strengthening the shipping and local underwriting industries. It has further made a mess of Government effort for economic and local content development in both subsectors, thus the need to evaluate the financial capacity of local insurance firms to meet marine claims in Nigeria.

METHODOLOGY

This evaluation is carried out by formulating a hypothesis thus: The indigenous underwriters in Nigeria do not have the financial capacity to adequately cover marine risks given their technical reserve.

SOURCES OF DATA

Study employed secondary sources of data as collected from the following sources:

1 Nigerian insurer's Digest, 2011 and 2012 editions.
2 Central Bank of Nigeria (CBN) publications, statistical bulletin and economic research seminar papers
3 Insurance Department of Finance and Economic Development
4 Research and Development, Nigeria Re-insurance Corporation, Lagos.

PROCEDURE FOR DATA ANALYSIS

The technical reserve for marine insurance business of local underwriters and the marine claims/liabilities over the years from 1996 to 2010 were obtained and analyzed using simple (Excel=-) regression analysis and supported by use of difference of means analysis. t-test was utilized in each case, to test the validity of the null hypothesis $H_{0,}$ while annual increments in both technical reserve and claims were subjected to t-test in order to test the validity of the hypothesis.

OPERATIONAL DEFINITION OF VARIABLES/HYPOTHESIS TESTING

The study is concerned with the evaluation of the economic and financial capacity of indigenous underwriting firms to adequately cover marine risks in Nigeria.
Since the capacity of underwriters to settle marine claims depends on the firms financial reserve kept for all known and anticipated marine risks and liabilities. Capitalisation being a policy requirement of Government must be kept with the Government regulatory institutions, should underwriting firms face stress in the process of meeting claims on any class of business. Therefore, the capitalisation fund was treated as a constant (K) and it was assumed that the underwriters' financial capacity to meet marine claims 'Y' is dependent on technical reserve 'X' for marine risks covered by the underwriters.

HYPOTHESIS TESTING

Ho = The indigenous underwriting firms in Nigeria do not have the economic and financial capacity to adequately cover their marine risks.
(a)Here, the independent variable is the technical reserve for marine risks covered by the underwriters, denoted by 'x'.
(b) The dependent variable is the Underwriters' financial capacity to meet marine claims denoted by 'Y' and
(c) The capitalization is treated as a constant 'K'.
Mathematically, therefore, we assume that there is a linearity of relationship between the two and propose that:
$Y = a + bx$.
Y = Marine claims, x = technical reserve.

RESLTS AND DISCUSSION

INTRODUCTION

This Section presents the necessary data set for the study, the result and discussion of the test carried out to support the argument transformed into hypothesis. As stated earlier, secondary data were mainly employed as sourced from the Central Bank of Nigeria, National Bureau for Statistics (NBS) publications and the Research and Development Department of Nigerian Re-insurance Corporation and the Insurance of the Ministry of Finance and Economic Development. For orderly presentation, this section shall fall into subsections of data presentation, analysis, result and discussion.

DATA PRESENTATION

Here, we present the data used in the analysis. As stated, only secondary data were used as sourced from the four main organisations explained above.

TABLE 1: TECHNICAL RESERVE FOR MARINE BUSINESS OF LOCAL UNDERWRITING FIRMS AND MARINE CLAIMS IN NIGERIA (1996-2010)

YEAR	N000 X	N000 Y
	Technical Reserve	Marine Claims
1996	508,997	236,686
1997	725,273	287,284
1996	300,123	299,484
1999	979,794	306,653
2000	1 035,128	342,404
2001	1, 504,688	56,627
2002	2, 189,104	735,142
2003	2, 701,571	725,760
2004	3, 177,566	1,020,135
2005	3, 624,508	1,336,774
2006	2, 199,609	10,493,410
2007	2, 634,248	1,904,230
2008	3, 819,455	3,185,000
2009	5, 602,532	4,185,600
2010	7, 447,350	2,965,170
TOTAL	**38,450,350**	**28,451,359**

DATA ANALYSIS AND TESTING OF HYPOTHESIS

TABLE 2: RESULT OF OUTPUT ON REGRESSION ANALYSIS OF DATA ON TABLE 1

REGRESSION STATISTICS	
Multiple R	0.395514351
R Square	0.156431602
Adjusted R	0.091541725
Standard E	2595411.183
Observation	15

ANOVA

	df	SS	MS	F	Significance F
Regression	1	1.6239E+13	1.6239E+13	2.410724	0.14450438
Residual	13	8.75701E+13	6.73616E+12		

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	144231.912	1312671.183	0.10987665	0.914185	-2691621.77	2980085.593	-2691621.77	29980086
X Variable	0.769767207	0.495776154	1.55265073	0.144504	-0.30129206	1.840826471	-0.30129206	1.840826

TABLE 3: RESULT FOR PAIRED TWO SAMPLES t-TEST

	Variable 1	Variable 2
Mean	1896753.267	2276690.067
Variance	7.41494E+12	1.95755E+12
Observations	15	15
Pearson Correlation	0.395514351	
Hypothesized Means Difference	0	
df	14	
t stat	-0.583539771	
P(T<=t) one-tail	0.284406261	
t Critical one-tail	1.761310136	
P(T<=t) two-tail	0.558812523	
t Critical two-tail	2.144786688	

TABLE 4: OUTPUT OF RESULT OF ANALYSIS OF DIFFERENCE OF MEANS SPSS VERSION 17 (2013)

TABLE 4.1: PAIRED SAMPLE CORRELATIVE

		N	Correlation	Sig.
Pair 1	Technical Reserve 'X'			
	Marine Claim 'Y'	15	0.355	0.237

PAIRED SAMPLE T-TEST

Paired Differences								
	Mean difference	Std deviation	Std error Mean	95% Confidence interest of difference		t	df	Sig.(s-tailed std error mean)
Pair Technical Reserve 'X'		15		Upper	Lower			
Marine Claim 'Y'	374136.133	2617850.127	675925.996	1275050.946	1624385.213	0.38	14	0.800

TABLE 4.2: PAIRED SAMPLE STATISTICS

		Mean	Std deviation	N	Std error mean
Pair 1	X	227 669.07	1399125.009	15	361 252.524
	Y	189 6763.267	2713531.309	15	700630.771

TABLE 5.1: RESULT FOR ANNUAL INCREMENT IN MARINE TECHNICAL RESERVE AND MARINE CLAIMS

Year	Annual Increment in Technical Reserve X' (N000)	Annual Increment in Claims Y' (N000)	Average Increment in Resserve X'/n	Average Increment in Claims y'/n	Annual Ratio of Reserve to Claim X/Y
1996	-	-	773035.3	869473.1	2.15
1994	216, 276	50598	773035.3	869473.1	2.52
1998	(425 150)	12200	773035.3	869473.1	1.00
1999	679671	7169	773035.3	869473.1	3.20
2000	55 334	35751	773035.3	869473.1	2.98
2001	469 560	341 844	773035.3	869473.1	326.57
2002	1153716	174 515	773035.3	869473.1	2.98
2003	512 467	(9382)	773035.3	869473.1	3.72
2004	475, 995	294 375	773035.3	869473.1	3.12
2005	446, 942	316 639	773035.3	869473.1	2.71
2006	(142 4899)	9156636	773035.3	869473.1	0.21
2007	434 639	(8589180)	773035.3	869473.1	1.38
2008	1185207	1280770	773035.3	869473.1	1.12
2009	1733077	1371600	773035.3	869473.1	1.01
2010	4482585	(1591430)	773035.3	869473.1	1.83
Total	11,595529	13042097	-	-	-

Note: Authors Calculations * the figures in bracket indicate a decrease from preceding years technical reserve or claim

TABLE 5.2: RESULT OUTPUT FOR TWO SAMPLE t-TEST STATISTICS

	Variable 1	Variable 2
Mean	931578.3571	849680.5
Variance	5.81186E+12	1.34704E+12
Observations	14	14
Pearson Correlation	-0.177507486	
Hypothesized Mean Difference	0	
df	13	
t Stat	0.107324324	
P(T<=t) one-tail	0.458085171	
t Critical one-tail	1.770933396	
P(T<=t) two-tail	0.916170342	
t Critical two-tail	2.160368656	

DISCUSSION OF RESULT AND FINDINGS

From table 2, the emerging estimating equation from the regression is: Y = 144231.912 + 0.770x. This represents the quantitative relationship showing the dependency nature of marine claims on marine insurance technical reserve over the years covered by the study and can be used by marine underwriters for future planning and forecasting. The coefficient of correlation is 0.3955, indicating that approximately, 40% association exists between the two variables. The coefficient of determination 'R' squared is 0.1564. This shows that only about 16% of total variation in marine claims is explained by technical reserve for marine claims over the period.

DECISION RULE

The t-test (two-tailed) showed an average technical reserve of 227 6690.067 Nigerian Naira (NGN) per annum over the period covered by the study and the average (mean) marine claims of 1896753.267 Nigerian Naira (NGN) per annum over the same period. The t-value (t-stat) is – 0.58353977 and t-critical (two-tailed) is 2.14478668 while the p-value is 0.56881252. since t-critical is greater than t-stat (t-value), we accept the null hypothesis H_0 and conclude that over the period covered by the study, technical reserve kept by marine insurance underwriters has not significantly covered marine claims in Nigeria. This confirms the loss of confidence in the ability of underwriters to adequately cover marine claims in Nigeria, hence the refusal by oil companies to enter into oil lifting contracts with ship-owners who are only covered by indigenous underwriters.

The analysis on Table 3 using difference of means showed the same result as above. The t-test statistics with 14 degrees of freedom showed a t-value of 0.258, p-value of 0.800 at $\propto$-value of 0.05.

Since $p>\propto$, 0.800>0.05, we accept H_0, supporting the earlier test which confirms that indigenous underwriters have not been able to significantly settle marine claims using the technical reserve they maintained for marine businesses over the years covered by the study.

Table 4.1: Ratio analysis and incremental average shows that for all the years covered by the study, technical reserve ratio to claims is greater than or equal to 1 except in the year 2006 when it was less than 1. The indication is that for individual years, except in 2006, reserve for marine risks was able to settle claims, though not significantly on the average. The mean increment in technical reserve is 773035.3 while mean (average) increment in marine claims over the same period is 869473.1, indicating that on the average increment in technical reserve over the period could not cover annul increment in claims over the same period. t-test statistics of Table 4.2 shows a t-value, t-stat of 0.1073, t-critical of 2.1603 and p-value of 0.9161

Since t-critical is greater than t-stat, we again accept hypothesis H_0 and conclude that annual increment in technical reserve for Maine risks of indigenous underwriters could not significantly cover the annul increments in marine claims and liabilities over the years covered by the study.

CONCLUSION

It is evident from the findings that indigenous underwriters over the years lack the financial capacity to adequately cover marine risks as a result, they could not adequately settle marine claims as shown by the technical reserve they had over the years to cover marine businesses. This has denied Nigeria the much needed economic gain for its development as foreign P&I clubs and shipping lines dominate oil lifting and marine underwriting business in Nigeria.

RECOMMENDATION

The Provisions of the Insurance Decree No.2 of 1997 (Section 24) which states thatthe technical reserve for marine insurance claims of 25% for cargo and 45% for hullpolicies which are enshrined in subsequent Insurance Acts in Nigeria, should be given upward review to give commercially enabling environment to importers, exporters and also give more investment confidence to stakeholders in the nation's maritime industry

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HOUSEHOLD SAVING BEHAVIOR IN JIMMA ZONE OF OROMIA REGION, ETHIOPIA

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ABSTRACT

The objective of this study was to examine how saving habit is related to household characteristics. The study was mainly conducted using primary data collected using a questionnaire survey conducted with 346 samples selected household heads in Jimma Zone and employed a descriptive statics for data analysis. The result showed that household heads in Jimma zone maintain a saving in various forms. The saving habit showed a statically significant relationship with socio demographic characteristics, personal financial planning and homeownership.

KEYWORDS

Household saving behaviour, saving habits, Jimma Zone.

1. INTRODUCTION

1.1. BACKGROUND OF THE STUDY

Ethiopia is the second-most populated country in Africa with more than 90 million people. It is among the low-income sub-Sahara African countries and has been known of poverty for a number of years.

The existing literature has increasingly showed the importance of savings in the livelihoods of households in rural sub Saharan Africa (Chowa, 2006). Saving is important in improving the well-being and serves as a security at the times of shocks for the households. Given the difference in economic, social, demographic and other reasons, there should be substantial variation in the households saving behavior. Therefore understanding the nature of household saving behavior is critical in designing policies to promote savings and investment.

Household savings as well as national savings are important to maintain high level of investment which is the key determinant of economic growth. Hailesellasie, Abera and Baye (2013) state that saving is an important factor for the economy and for citizens of the country. The development in saving habits of a given society will have an impact on the economic development of a country in general and on the financial well-being of the individuals in particular. Countries having higher level of saving rates will reduce the burden of foreign debt and domestic investments will be financed by using the domestic saving. The saving made by the individuals will be channeled by the financial intermediaries to fund the investments to be made domestically. Those investments will benefit the nation by increasing productivity, creating employment opportunity and increase the economic growth at large.

The average saving rate of Ethiopia to GDP is 9.5% which is, the worst saving rate in the world as compared to newly industrialized Asian economies which have a better saving rate in the world Hailesellasie, Abera and Baye (2013). The average saving rate of sub-Saharan African countries were 17% which is still higher than that of Ethiopia's saving rate. Tsegabirhan (2010), also stated that Ethiopia's rate of domestic saving was very low even compared to sub-Saharan Africa standard. Therefore Ethiopia's saving rate was the lowest from the rest of the world.

Hence developing countries like Ethiopia should take a lesson from successful Asian countries. According to (Tsegabirhan, 2010), the average saving rate in the newly industrialized Asian economies has remained greater than 30 percent, except during the recent crisis years when it decreased to about 29 percent. Compared with the newly industrialized Asian economies, Ethiopia has a long way to go to increase the saving and investment rates.

An improvement in the level saving was a key for the individuals' welfare and for the economic development of the nation. This will be achieved by designing appropriate strategies to increase the saving habits of the society. For the purpose of developing saving habits in the study area, the current saving behavior of the society must be known. The study tried to find out the peoples saving behavior, which will help policy makers and regulators to devise appropriate strategies in order to increase the level saving among population.

Therefore, the general objective of the study is to investigate the saving behavior of households in Ethiopia particularly in Jimma Zone. The research will extensively rely on primary data which was collected from the sample households of Jimma Zone.

1.2. STATEMENT OF THE PROBLEM

Understanding the nature of household savings behavior is critical in designing policies to promote savings and investment (Muradoglu and Taskin, 1996). Households' saving is important to insure financial security of households and serves as insurance at the time of shocks. But given the differences in the demographic, social, economic environment and other factors of the households, there should be substantial variation in the household saving behavior. Most of the empirical literature that analyzed household savings behavior concentrated on aggregate savings. Unlike the previous studies done in the rest of the world, the proposed study aims at examining the household savings behavior in Ethiopia particularly in Jimma Zone by conducting household survey.

Long-term economic growth requires capital investment in infrastructure, education and technology, for example, as well as in factories, business expansion, and so forth and the main domestic source of funds for capital investment is household savings. Consistently high savings rates over time in a particular country can translate into funds being available for this long-term growth. In addition, higher levels of household savings allow a larger portion of a country's overall debt to be financed internally.

Further the economic growth of a country is determined by the amount of household savings among other things. This can be evidenced by highly developing countries of south Asian countries in which their economic growth are fueled by highest saving rates.

The allocation of available income into spending and saving is one of the most important economic decisions made by a household.This decision might be affected due to demographic,social, economic and other factors.Even if low saving rates have been seen in Ethiopia, little attention is given to find the behaviors and determinants of saving. Therefore it is important to study the saving behavior of the households of Ethiopia particularly in Jimma Zone which have its own implication for policy makers.

After completion, the research gives answer for the following research questions.

1. Do households in Jimma zone have a saving habit?
2. What is the type of saving institutions used by the households?
3. Is there a relationship between socio demographic features of households and their saving habit?
4. Is there a relationship between saving habit and personal financial planning?
5. Is there a relationship between saving habit and access to credit?
6. Is there a relationship between saving habit and homeownership?

1.3. OBJECTIVES OF THE STUDY

GENERAL OBJECTIVE

The general objective of the study is to investigate the saving behavior of households in Jimma zone of Oromia Region, Ethiopia.

SPECIFIC OBJECTIVES

The specific objectives of the study are as follows:

- ✓ To find out whether households in Jimma zone have a saving habit.
- ✓ To identify the saving institutions used by the households.
- ✓ To examine the relationship between socio demographic features of households and their saving habit.
- ✓ To examine the relationship between saving habit and personal financial planning.
- ✓ To investigate the relationship between saving habit and access to credit.
- ✓ To investigate the relationship between saving habit and homeownership.
- ✓ To provide the necessary recommendations.

1.4. SIGNIFICANCE OF THE STUDY

While conducting this survey research, the researcher believes that various stakeholders will benefit from its findings. This can be explained as follows.

Doing research on household saving is important for policy makers and serves as an input for them. It is also important for banks and microfinance institutions to learn about the saving behavior of the households in the study area so that those institutions can mobilize deposits from those households as they will learn the saving behaviors of the households. In addition, the research will serve as a reference and gives a clue for other researchers. The recommendations given by the researcher is also important for the policy makers and financial institutions.

2. REVIEW OF RELATED LITERATURE

Study of saving and related topics has been subject of research by many researchers in the past. They have concluded several factors affecting saving behavior in different regions of the world based upon analysis of time series and cross sectional data. The findings from some of recent studies, so far, reviewed are presented hereunder.

Muradoglu and Taskin (1996) investigate the difference in household savings in industrial and developing countries by using household data from the U.N. System of National Accounts and supported the view that the household savings behavior of the industrial and developing countries is not identical. The study indicated that, in industrial countries, the saving rate of households increased with an increase in permanent income. Yet, as permanent income increases, households in developing countries tend to change their spending patterns in favor of consumption rather than increasing their saving rates.

Cheng, Hisatoshi and Wenxing (2006) have made analysis on saving behaviors in urban china. Empirical results based on household survey in Shangai from urban china analyzed using a regression analysis indicated that not only the transitional income, but also permanent income has a positive impact on savings. In addition, the propensity to save in single households was significantly lower than that of married ones. And household heads that are not married and live with their parents do have higher propensity to save. The study also identified that saving to providing for old age and providing for children educations were the most frequently cited reasons of saving.

Chowa (2006) investigated saving performance among participants in a matched – saving program in Uganda, modeled after the Individual Development Accounts (IDAs) in the United States. The study has taken a sample of 145 participants in the program. And the result from one way ANOVA revealed that saving performance was significantly different between men and women, married and unmarried, and between different levels of educational status.

Kibetet.al (2009) examined determinants of household savings of smallholder farmers, entrepreneurs and teachers in rural areas of Kenya. Data for the study were collected using a survey of 359 sample farmers, entrepreneurs and teachers using a multistage sampling technique from seven rural administrative divisions of Nakuru district. The result showed that household income, nature of businessmen occupation, gender, and education level of household head positively influenced the saving behavior of the rural households; whereas access to credit, age, and dependency ratio negatively influenced household saving. The study also indicated that interest on savings does not motivate saving amongst rural households of Nakuru district.

Sabri and MacDonald (2010) have made a study on Savings behavior and financial problems among college students: The role of financial literacy in Malaysia. The objective of their study was to identify and compare savings behavior and the financial problems of students and, to explore the influence of financial literacy on savings behavior and financial problems. Sample students were selected randomly from 11 universities and 2,519 students were completed the questionnaire. The result from ANOVA indicated that those students with higher financial knowledge were better in savings behavior, while those students with greater influence from socialization agents and late exposure in their childhood consumer experience were less likely to engage in savings behavior. The result of multiple regression also indicated that financial literacy has a positive effect on the saving behavior and female students are better in their saving behavior than those of male students.

Basit, Bashir and Farooq (2010) made investigation on how savings differ among various earner groups (labor class, job holder, business class and farmers' class households) in Pakistan. For the purpose data were collected from a sample of 376 respondents, from rural and urban areas of Multan district and employed a multiple regression analysis. The result of the study indicated that the age and income of all earner group has a positive relationship with saving; whereas the children's educational expenditure have negative relationship with saving for all earner groups. The result also revealed that education showed a positive impact on labor class savings; in contrast, it showed negative impact on the household savings among job holders, business class and farmers' class.

K. Pailwaret. al (2010) made a micro-level study on the impact of membership of financial institutions on rural households saving. The study was conducted based on the primary data collected from full scale sample survey conducted in five villages and two suburban areas of National Capital Region, India. The result of hierarchal regression analysis indicated that income, location and membership in some of the financial institutions like, banks, insurance, and membership of informal financial institutions have a significant positive influence on the saving; whereas dependency ratio have a significant negative influence on the saving.

Rehman, Zahir and Bashir (2010) studied on households saving behavior of Multan district in Pakistan. For the purpose data from a survey of 293 sample respondents were analyzed using a multivariate regression. The results of the study revealed the fact that educational status of the heads in the household, children's educational expenditures, family size, liabilities, marital status, and value of a house showed a significant negative influence on the household savings. Yet Spouse participation in economic activity, total dependency rate, total income of household, size of land holdings has a positive significant relationship with household savings. The result also showed that household savings positive but insignificant relationship with age and insignificant negative relationship with age squared.

J. Turnham (2010) conducted a study on the attitudes to savings and financial education among low-income populations by using data collected from 18 focus group discussions. And based on findings of the study, it was suggested that educating low-income and vulnerable populations about financial concepts is important to enhance saving behavior, for the fact that efforts should focus on behavioral changes, particularly strengthening discipline around savings and spending, may be more effective for promoting long-term financial well-being.

Timerga, Gotu and Alem (2011) examined the saving habits of employees at Debre Birhan Town in North Shoa of Ethiopia. The conclusions in the study were based on statistical analysis of data collected from a sample of 490 employees selected from private and government organizations in the town. The result of the study revealed that the number of dependent family member, the rate of inflation, distance from home to work place, recreation cost, housing expense (housing rent) and expenditure were found to have negative influence on saving habits; whereas, job satisfaction, the provision of transport service by employers, level of education, membership of saving association, and marital status showed a positive influence on saving habit of employees. The study also indicated that gender, religion, ethnicity, credit access in the sector, living at Debre Birihan town, income satisfaction, interest rate were not significant predictors of saving habits of employees

Tesfamariam (2012) investigates the determinants of saving behavior rural households in Tigrai. For the purpose data was collected using a survey of 120 sample rural household savers from eight financial cooperatives in Tigrai Regional state, Ethiopia. The result of regression analysis indicated that women save more than men. It was also found that income, amount of money borrowed and years of being in cooperative membership positively influence saving; whereas family size, educational status, age and interest charged on loan affected saving negatively. The study also identified accessing loan from cooperatives and having money for emergencies, planning to own a home are the dominate purpose of saving stated by rural household with membership in financial cooperatives.

Gabriela (2012) has made an empirical analysis on preferred saving instruments of the Romanian households. The study revealed that lack of financial education; residence area and absence of trust in the banking system determine the concentration of saving in cash. The educational level does not influence the decision of using modern saving instruments but financial education was one of the determinants for using modern saving instrument.

Teshome et. al (2013) made a study on the saving behaviors among rural household in East Hararghe Zone, Oromia Regional State, Ethiopia using a survey data collected generated from 700 sample households. The result of the tobit model, employed for data analysis, showed that household head education level, livestock holdings, access to credit service, income, investment, training participation, contact with extension agents, forms of savings and saving motives were found to have significant influence on the amount of households savings.

Hailesellasie, Abera and Baye (2013) have made assessment of saving culture among households in Ethiopia. 544 households were selected from Addis Ababa, Hawassa and Mekelle using non proportional quota sampling technique and employed chi square and other descriptive statistics for data analysis. The result revealed that females are better in saving than males, educational level affects saving positively, households who have not their own home saved more than house owners, increase in the level of income will also increase saving, saving of widowed and married households were better than unmarried ones, increase in the number of dependents will increase savings and age affects saving negatively. The study also found that the cause of poor saving include: lack of appropriate saving products, lack of incentive to save, low interest rate, high inflation and others.

N.S. Mahdzan and S. Tabiani(2013) have made an exploratory analysis on the impact of financial literacy on individual saving in the context of Malaysia. A total of 192 samples were taken conveniently. The Probit regression model employed to analyze data collected from a convenient sample of 192 respondents reveled that financial literacy, saving regularity, gender (being men), number of children (having more children would lead to feel more responsible for their children's future); income, increase in age, and educational level positively influenced the probability to have a saving

Hagos and Michael (2014) made a study on the determinants of household saving in North Gondar Zone, Amhara Regional State, Ethiopia. The study was based on data collected from a sample of 604 households elected from the districts of Gondar, Dembia and Dabat. A Tobit regression model used to analyze major determinants of household savings indicated that low income, inflation, low interest rate, cultural background, education, social affairs and unemployment are the major factors contributing for low household saving. In addition, the economic analysis shows that income, age, sex (being women), marital status, forms of institutions used for saving and frequency of getting money were found to be significant determinants of household savings in the study area.

Gupta and Kaur (2014) have conducted a study on the financial literacy among micro entrepreneurs in Kangra district of India. Descriptive research was conducted by taking 87 sample respondents randomly. The result of the study shows that micro entrepreneurs in the study area have low financial skills. This was concluded because of the respondents having deficient record keeping practices, poor cash management, improper saving habits and lower level of awareness regarding different financial products and instruments..

3. RESEARCH METHODOLOGY

3.1. INTRODUCTION

This section presents the research methodology and methods employed to conduct the study. The section includes: the study area and period, target population, source of data, method of data collection, sampling technique and sample size, and method of data analysis.

3.2. STUDY AREA AND PERIOD

The study was conducted in Jimma Zone of Oromia Regional State, Ethiopia.Jimma Zone is one of 13 zones in Oromia Region.Jimma Zone is bordered on the south by the southern nations, nationalities and peoples region, the northwest by Illubabor, on the north by East Welega and on the northeast by South Shewa; part of the boundary with East Shewa is defined by the Gibe River. The study was conducted from October, 2013 to September, 2014.

3.3. TARGET POPULATION

The study was conducted on households saving behavior in Ethiopia particularly in Jimma Zone. And the target population of the study was the households heads found in Jimma Zone. The study focused on household heads for the fact that household heads are mostly responsible for the management of financial matters of the family, which makes the data more representative of the entire family. The primary data for the study was collected from the house hold heads.

3.4. SAMPLE SIZE

Use of sampling can save time and money (economical) and enable the researcher to obtain detailed information as the number of sample unit is fairly small, these can be studied intensively and elaborately. For the purpose of the study, the sample size was taken based on the following formula.

$$n = \frac{(z)^2 * (p)(q)}{(d)^2}$$

Where

p = sample proportion, q = 1- p

z = the value of the standard variate at a given confidence level

n = sample size

d = acceptable margin of error for proportion being estimated

The value of p = 0.5 (q = 1-p) in which case the sample size will be the maximum and the sample will yield at least the desired precision. This will provide the most conservative sample size (Kothari, 2004). By allowing an error margin of 5% with 95% confidence interval, the required sample size was 384.Even though the total questionnaires were filled, only 346 were usable.

3.5. SAMPLING TECHNIQUE

Obviously, if the population to be studied is large and infinite it is very difficult to undertake a census survey. Therefore, taking sample (sampling) is necessary. Sampling technique is a method by which the samples will be drawn from the total population. To make the samples representative of the total population, a multi-stage sampling was used. Firstly, 6 woredas were randomly selected out of 18 woredas in Jimma Zone.Then; equal numbers of household heads were randomly selected from each of the selected woredas.

3.6. METHOD OF DATA COLLECTION

The study was mainly conducted using primary data. Basically in any field of research, selection of data collection method depends on the nature and type of research, the type of data. Accordingly, primary data was collected by using structured questionnaire from the sample household heads. Primarily, the questions were prepared in English language and converted to local languages (Afan Oromo and Amharic). To collect data from respondents a trained data collectors, who speak the three languages used in the data collection instrument, conducted a face to face interview with sampled household heads.Moreover, secondary data relevant to the study were collected through a review and analysis of documents and related literatures, including, journal articles, conferences papers and other materials.

3.7. METHOD OF DATA ANALYSIS, PRESENTATION AND INTERPRETATION

After gathering the data from the respondents, the researcher classified and coded the data according to their similarity to make it suitable for analysis. Then, the data entered to computer software, SPSS version 20, used to perform the data analysis. The study followed descriptive statistics to univariately describe the study variables and inferential statistical techniques (Correlation coefficient and Pearson Chi Square) to explore the relationship saving habit having with explanatory variables of saving behavior identified based on the review of related literatures. , were used to achieve the research objectives.

4. RESULT AND DISCUSSION

This section presents the results of data analysis and discussion of findings made in light of the reviewed literatures.

4.1. DESCRIPTION OF STUDY VARIABLES

The variables under study include respondents' characteristics and other factors relevant to explain household saving behavior, and indicators of saving behavior drawn from the review of related literatures. This subsection of the analysis used frequency tables to describe the variable one by one, and the relationship each having with saving behavior analyzed using a chi square statistical analysis of association will discussed under 4.2 to answer the basic research questions.

4.1.1. DEMOGRAPHIC CHARACTERISTICS

Table 1, below presented sample household in the study classified by gender, age, education, and marital status.

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Variables	Category	Frequency		Valid Percent
		Counts	Percentage	
Gender	Male	272	78.6	78.6
	Female	74	21.4	21.4
	Total	346	100.0	100.0
Age	20 – 24	16	4.6	4.6
	25 – 29	19	5.5	5.5
	30 – 34	26	7.5	7.5
	35 – 39	62	17.9	17.9
	40 – 44	117	33.8	33.8
	45 – 49	65	18.8	18.8
	Above 50	41	11.8	11.8
	Total	346	100.0	100.0
Educational Level	Illiterate	33	9.5	9.5
	Only reading and writing	185	53.5	53.5
	Up to grade 10	71	20.5	20.5
	Grade 10 and certificate	10	2.9	2.9
	Diploma	22	6.4	6.4
	Diploma & Certificates	14	4.0	4.0
	Bachelor Degree	5	1.4	1.4
	Masters and above	2	0.6	0.6
	Others	4	1.2	1.2
	Total	346	100.0	100.0
Marital Status	Married	286	82.7	82.7
	Single	36	10.4	10.4
	Widowed	6	1.7	1.7
	Divorced	18	5.2	5.2
	Total	346	100.0	100.0

Source: own computation from survey data

Table 1 showed that of the total sample 78.6% were male and the remaining 21.4% of them were female. Observations from table 1 also indicated that most of the respondents (70.5%) fall in the age category of 35 – 49, whereas 17.6% of the respondents were below the age of 35 and those aged above 50 accounted only 11.8 % of the sample. It was also shown on table 1, of the total sampled, household heads, 9.5% of the respondents were illiterate (they couldn't read and write), 53.5% have only reading and writing skills, 20.5% have learned up to grade 10, 2.9% of them completed grade 10 with certificate, 6.4% of them hold a diploma, 4% of them have diploma with certificate, 1.4% of them have first degree, 0.6% of them have master and above and the remaining 1.2% of them have other educational status. Finally we can conclude that the educational level of the sampled household heads were very low.The above table indicates the marital status of the respondents. For the purpose of the study, marital status was classified as married, single, widowed and divorced. From the total sampled household heads, 82.7% of the respondents were married, 10.4% of them were single, 5.2% were divorced and the remaining 1.7% was widowed.Thus from the table we can understand that most of the respondents are married.

4.1.2. FAMILY CHARACTERISTICS

'*A household is composed of either a) a group of people (adults and/or children) living in the same dwelling space who each acknowledge the authority of the same person or couple as the head(s) of household or b) a lone individual.' (OECD, 2013: p.11)*Family size and number of dependents family members are considered as household characteristics which could have a bereaving on saving behavior. The frequency count in table 2 and 3 below presented the sample household classified by their household characteristics.

TABLE 2: FAMILY SIZE

Family Size	Frequency	Percent	Valid Percent
1	26	7.5	7.5
2	15	4.3	4.3
3	50	14.5	14.5
4	67	19.4	19.4
5	73	21.1	21.1
6	49	14.2	14.2
7	36	10.4	10.4
8	16	4.6	4.6
9	7	2.0	2.0
10	2	0.6	0.6
11	2	0.6	0.6
12	2	0.6	0.6
13	1	0.3	0.3
Total	346	100.0	100.0

Source: own computation from survey data

Table 2, above showed indicated that 7.5% of households were single size families. 1, 4.3% of them have 2, 14.5% have family size of 3, 19.4% have family size of 4, 21.1% have family size of 5, 14.2 have 6, 10.4% have 7, 4.6% have 8 and 4.1% of them have family size of above 8. Most of the respondents (79.6%) have the family size of 3 to 7. The average family size of the sampled respondents was 4.78 with the standard deviation of 2.11. The median and mode of the family size was 5 with the minimum family size of 1 and the maximum family size of 13.

TABLE 3: NUMBER OF DEPENDENTS

Number of Dependents	Frequency	Percent	Valid Percent
0	52	15.0	15.0
1	37	10.7	10.7
2	89	25.7	25.7
3	96	27.7	27.7
4	56	16.2	16.2
5	14	4.0	4.0
6	2	0.6	0.6
Total	346	100.0	100.0

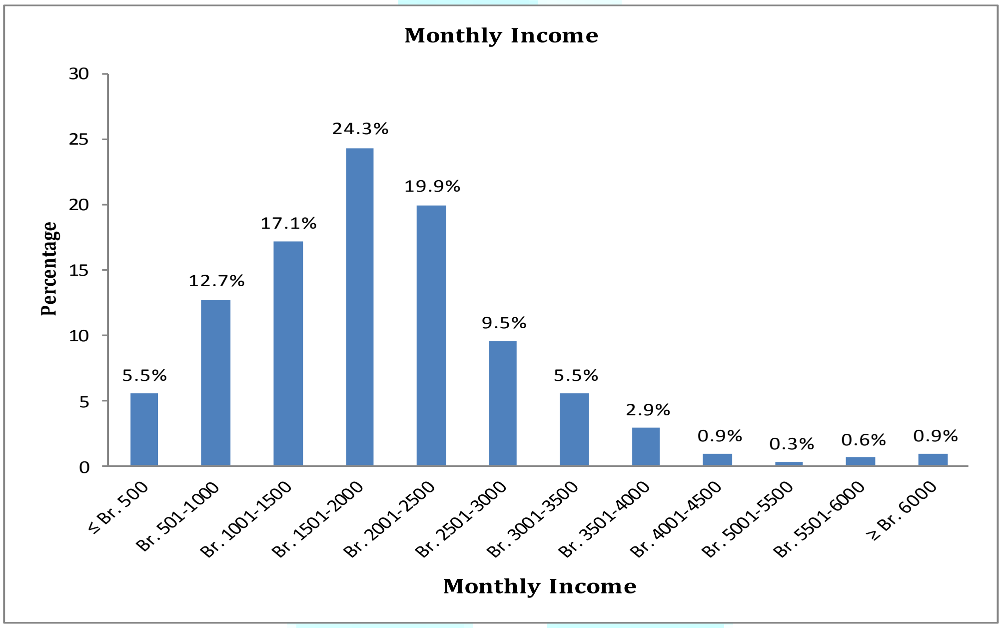
Source: own computation from survey data

The number of dependents in the sample households on table 3showed that 15% have no dependent. Yet majority (53.4%) had 2 to 3 dependents. The mean number of dependents was 2.34 with the standard deviation of 1.4. The median and mode was 2 and 3 respectively with the maximum number of dependents of 6 and minimum of 0.

4.1.3. HOUSEHOLD INCOME AND EXPENDITURE

The level of household income measured in a categories scale ranging from the lowest amount of 500 Ethiopian Birr, which is equivalent to USD 25, to a maximum of 6000 Birr, which is equivalent to USD 300, per month and the regularity of income inflow as well as the item on which the household spends most in a month were taken as relevant variables. And the results are presented below.

FIG. 1



Source: own computation from survey data

The above figure showed the monthly income of the respondents. And observation on the bar chart revealed that only 5.5 % and 0.9 % of the sample respondents categorized under the lowest and highest income bracket respectively. And only 5.5% of the respondents fall under the monthly income of birr 3001 to 3500 category, which nearly represent household around the medium income earning groups. The chart also indicate respondents under 1501-2000 monthly income group accounted largest proportion of the sample (24.3%) followed by 19.9% of the respondents having a monthly income of birr 2001 to 2500, 17.1% of the respondents under a monthly income of birr 1001 to 1500, 12.7% of the respondents. This indicates that most of the respondents were found at lower income level.Most Literatures, so far reviewed, evidenced the positive effect of income having on saving (Kibet et. al (2009), K. Pailwar et. al (2010), Basit, Bashir and Farooq (2010); thus the result in this respect appeared worrisome. In addition to level of income, earning a reliable and regular income also found to have positive influence on saving and the result with respect of this factor is summarized in table 4 below.

TABLE 4: REGULARITY OF INCOME

Income regularity	Frequency	Percent	Valid Percent
Regularly	77	22.3	22.3
Irregularly	269	77.7	77.7
Total	346	100.0	100.0

Source: own computation from survey data

Income regularity was intended to show whether the respondent earn income on a regular interval period or not. And the observation on table 4, identified majority (77.7%) as irregular income earners and only 23.3% were regular income earners.

Table 5, below, also indicated the items on which respondents spend most of their income.

TABLE 5: ITEMS FOR WHICH RESPONDENTS SPEND MOST OF THEIR INCOME

Items	Frequency	Percent	Valid Percent
Food items	327	94.5	94.5
Ceremonial purpose	1	0.3	0.3
Recreation	1	0.3	0.3
Farming inputs	5	1.4	1.4
Housing purpose	2	0.6	0.6
Other purpose	10	2.9	2.9
Total	346	100.0	100.0

Source: own computation from survey data

Table 5, showed the items on which most of their incomes were spent. From the total respondents, most of the respondents (94.5%) spend most of their income on the food items. 2.9% of them spend most of their income on other purposes, 1.4% of the respondents spend most of their income on farming inputs and the remaining 0.3%, 0.6% and 0.3% spend most of their income on ceremonial purpose, housing purpose and on recreation respectively.

4.1.4. ACCESS TO CREDIT

Respondents were asked whether they have taken credit or not previously. The respondents were also asked about the source and purpose of credit. If the purpose of credit were for consumption, it is expected to affect negatively but if the purpose were to generate income, it is expected to influence saving positively by keeping other factors constant. Other researchers like Timerga, Gotu and Alem (2011), Kibetet. al (2009) and Teshome et. al (2013) have considered access to credit as one of the independent variable while studying about saving.

TABLE 6: RESPONDENTS TAKEN CREDIT PREVIOUSLY OR NOT

	Frequency	Percent	Valid Percent
Yes	78	22.54	22.54
No	268	77.46	77.46
Total	346	100.0	100.0

Source: own computation from survey data

The above table showed whether the respondents have taken credit or not previously. From the total respondents, 22.54% of them have taken credit previously whereas 77.46% of the respondents haven't taken credit previously.

TABLE 7: SOURCES OF CREDIT

Sources of Credit	Frequency	Percent	Valid Percent
From formal financial institutions	37	10.7	47.4
From informal ones	40	11.6	51.3
From both	1	.3	1.3
Total	78	22.5	100.0

Source: own computation from survey data

The above table shows the source of credit for those respondents who have taken credit previously. From those who have taken credit previously, 51.3% of the respondents have taken credit from the informal source of credit, 47.4% of them have taken from the formal source of credit and the remaining 1.3% of the have taken from both formal and informal source of credit.

TABLE 8A: PURPOSE OF CREDIT

Purpose of Credit	Frequency	Percent	Valid Percent
Consumption	7	2.0	9.0
Ceremonial purpose	8	2.3	10.3
Agricultural inputs	6	1.7	7.7
Other	57	16.5	73.1
Total	78	22.5	100.0

Source: own computation from survey data

The respondents who have taken credit were asked the purpose of credit. As it was shown on the table, from the respondents who have taken the credit, 9% of they have taken the credit for the purpose of consumption, 10.3% have taken for the purpose of ceremonial purpose, 7.7% have taken for the purpose of agricultural inputs and 73.1% of them have taken for other purposes

4.1.5. PERSONAL FINANCIAL PLANNING

Recent studies evidencing a positive relationship between financial literacy and financial behavior including, saving, has been increasing. Of the review in this paper, for example, N.S. Mahdzan and S. Tabiani (2013),Sabri and MacDonald (2010) and Fazli and Maurice (2010) identified financial literacy to have implication on saving of individuals. Though financial literacy is not directly measured in the current study, household personal financial planning practice, their knowledge of daily expenditures were considered, assuming the fact that those who plan their spending and track daily expenditure to have better financial literacy, which in turn would have positive association to saving habit. Moreover, household contact with extension agents in agriculture, and/or health that educate the community with management of resource in the household was used as a variable to represent household exposure to education related to financial planning and saving. The descriptive results of these three variables are presented in the following three tables.

TABLE 8B: RESPONDENTS HAVING SPENDING PLAN

	Frequency	Percent	Valid Percent
Yes	146	42.2	42.2
No	200	57.8	57.8
Total	346	100.0	100.0

Source: own computation from survey data

The above table shows whether the respondents have spending plan or not. Spending plan was assumed to have a relationship with the saving habits. From the total respondents, 57.8% of them have no spending plan, whereas the remaining 42.2% of the respondents have spending plan.

TABLE 9: RESPONDENT'S KNOWLEDGE OF THEIR DAILY EXPENSES

knowledge of their daily expenses	Frequency	Percent	Valid Percent
Yes	264	76.3	76.3
No	82	23.7	23.7
Total	346	100.0	100.0

Source: own computation from survey data

The above table shows whether the respondents know their daily expenses exactly at the end of the day or not. From the total respondents, 76.3% of the respondents exactly know their daily expenses at the end of the day whereas the remaining 23.7% of the respondents do not know exactly their daily expenses at the end of the day.

TABLE 10: CONTACT WITH THE EXTENSION AGENTS

	Frequency	Percent	Valid Percent
Yes	85	24.6	24.6
No	261	75.4	75.4
Total	346	100.0	100.0

Source: own computation from survey data

Contact with the extension agents was assumed to improve the living standard of the society. The above table shows that 24.6% of the respondents have contact with the extension workers whereas 75.4% of the respondents have no contact with the extension workers.

4.2. SAVING BEHAVIOR

The saving behavior of household heads is the dependent variable in the study, which was measured using several items taken from previous studies. The factors include: (1) saving habit, which quests respondents to self-report whether they feel that they have a saving habit, (2) Saving regularity,which intended to classify those having a saving habit in to five categories based on their saving regularity, (3) the purpose of saving which measure and classify savers based on why they maintain saving, and (4) which type of saving mechanism savers follow also used to classify respondents based upon usage of formal and informal saving product, as well as to identify proportion of those using only informal saving products and approaches.

TABLE 11: SAVING HABITS

Have saving habits or not	Frequency	Percent	Valid Percent
Yes	306	88.4	88.4
No	40	11.6	11.6
Total	346	100.0	100.0

Source: own computation from survey data

The above table shows the saving habits of the respondents from their income. Respondents were asked whether they have saving or not from their income. From the total sample household heads, 88.4% of them were savers from their income and the remaining 11.6% of them were non-savers. This suggested majority do have some form of saving which is a favorable finding compared to previous studies that reported that people in least developing countries in general and Ethiopia in particular hardly have savings. Further, the study tried to classify those households with savings based on the regularity of saving habit, as shown on table below.

TABLE 12: SAVING REGULARITY

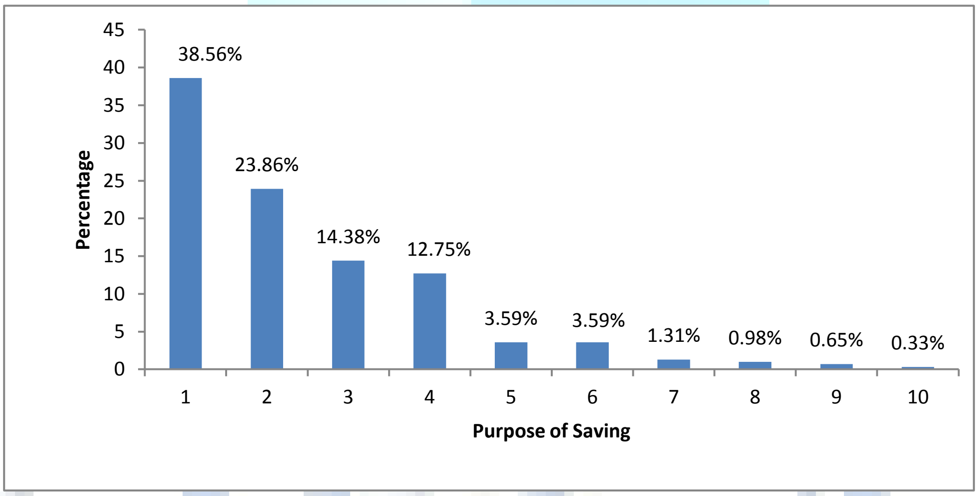
	Items	Frequency	Percent
1	I save a fixed amount regularly in a savings account	26	7.5
2	I put something aside periodically, but decide on the amount according to the financial circumstances	139	40.2
3	I put something aside when I have something left over to save	141	40.8
4	I do not save because I do not have enough financial scope to do so	40	11.6
Total		346	100.0

Source: own computation from survey data

Observation from the above table indicted that, 7.5% of the respondents save a fixed amount regularly, 40.2% saves regularly but the amount to be saved depends up on the financial circumstances and the remaining 40.8% saves when something left over to save (those are irregular savers).

Saving could be maintained for various reasons. Mahdzan & Peter Victorian quoted various literatures that identified four main aspects of saving motives are *"– precautionary motives (Hubbard et al., 1995), life-cycle motives (Modigliani & Brumberg, 1954), bequest motives (Bernheim, Shleiferand Summers, 1985), and wealth accumulation or profit motives (Keynes, 1936)"*To assesses the saving motive of households in Jimma Zone, respondents were asked to identify their major motive for saving and the results are summarized in the bar chart below.

FIGURE 2: PURPOSE OF SAVING



1. For children education
2. To prepare for unexpected expense
3. To own a home
4. Others
5. Use after retirement
6. No specific purpose, to save for security
7. To leave as an inheritance
8. To purchase durable consumer goods
9. Holidays/vacation saving motive
10. To remodel a house

Source: own computation from survey data

The above figure shows the purpose of saving of the respondents. From the total savers, 38.56% of them save for the purpose of children education, 23.86% of them saves to prepare for unexpected expense, 12.75% of them saves for other purposes, 3.59% of them saves to use after retirement and 3.59% of them have no specific purpose for saving.

People save using various methods, such as saving product from formal or informal financial service providers, just by keeping cash at home or by converting money into a form of real asset. Having the most frequently responded purpose of saving in the sample, using a formal saving product in the financial institution which creates an opportunity to earn interest and ensure safety appeared commendable.

The saving product used by households in the study area presented on table 13, below.

TABLE 13: HAVING AN ACCOUNT FROM THE FINANCIAL INSTITUTIONS

Institutions	Frequency	Percent	Valid Percent
Bank	100	28.9	28.9
Insurance	1	0.3	0.3
Microfinance	19	5.5	5.5
Iquib (ROSC)	45	13.0	13.0
Iquib and others	70	20.2	20.2
I don't have	111	32.1	32.1
Total	346	100.0	100.0

Source: own computation from survey data

The respondents were asked about if they have an account from the above listed institution. From the total respondents, 32.1% of the respondents have no linkage with the above listed institutions, 28.9% of the respondents have an account from the bank, 20.2% of the respondents the respondents will use Iquib and others, 13% of the respondents use Iquib only and 5.5% of the respondents have a linkage with the microfinance only.

4.3. HOME OWNERSHIP

Ownership of home might have implication on saving in different ways. In one way home owners are expected to be savers because it was considered that the expenditure on the house rent will be directed to saving. In the other way non home owners are expected to save to have their own home. Hailesellasie, Abera and Baye (2013) have considered home ownership as one variable while assessing saving culture of households in Ethiopia.

TABLE 14: OWNERSHIP OF HOME BY THE RESPONDENTS

	Frequency	Percent	Valid Percent
Yes	229	66.2	66.2
No	117	33.8	33.8
Total	346	100.0	100.0

Source: own computation from survey data

The respondents were asked about home ownership. From the total number of the respondents, 66.2% of them have their own home whereas the remaining 33.8% of the respondents have not.

4.8. RELATIONSHIP OF SAVING HABIT AND DEMOGRAPHIC CHARACTERISTICS

4.8.1. RELATIONSHIP BETWEEN SAVING HABIT AND DEMOGRAPHIC FEATURES

TABLE 15: ASSOCIATION OF GENDER WITH SAVING HABITS

Chi-Square Tests						
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1.005[a]	1	.316	.412	.209	
Continuity Correction[b]	.636	1	.425			
Likelihood Ratio	.953	1	.329	.412	.209	
Fisher's Exact Test				.311	.209	
Linear-by-Linear Association	1.002[c]	1	.317	.412	.209	.094
N of Valid Cases	346					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.55.
b. Computed only for a 2x2 table
c. The standardized statistic is 1.001.

Among the total sampled household heads, the proportion of male and female with savings was 89.3% and 85.1% respectively. This indicates that there is no difference in saving habits based on the gender of the respondent. The result of chi square test also revealed that there is no significant relationship of gender and saving habits.

TABLE 16: CORRELATION OF AGE WITH SAVING HABITS

			Age	Saving Habits
Spearman's rho	Age	Correlation Coefficient	1.000	.291**
		Sig. (2-tailed)	.	.000
		N	346	346
	Saving Habits	Correlation Coefficient	.291**	1.000
		Sig. (2-tailed)	.000	.
		N	346	346

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

Spearman's rho correlation was used to test the relationship between the age and saving habits of the respondent. It indicates that the age of the respondents was significantly related to the saving habits with spearman's rho correlation coefficient of $r = 0.291$ and p-value $< .001$.The result indicates that as the age of the individual increase the probability of engaging themselves on saving will increase. The study conducted by Basit, Bashir and Farooq (2010) and N.S. Mahdzan and S. Tabiani (2013) also found that age has a positive relationship with that of saving habits.

TABLE 17: CORRELATION OF EDUCATIONAL LEVEL WITH SAVING HABITS

			Educational level	Saving habits
Spearman's rho	Educational Level	Correlation Coefficient	1.000	.082
		Sig. (2-tailed)	.	.129
		N	346	346
	saving habits	Correlation Coefficient	.082	1.000
		Sig. (2-tailed)	.129	.
		N	346	346

The above table shows the association of educational level with the saving habits. The test of Spearman's rho correlation indicated that the correlation of educational level with saving habits was insignificant having correlation coefficient r=.082 and p-value=.129 (the p-value is far greater than 0.05).Hailesellasie, Abera and Baye (2013), Kibetet. al (2009) and Teshome et. al (2013) revealed that educational level have a positive impact on the saving habits whereas Rehman, Zahir and Bashir (2010) and Tesfamariam (2012) found that educational level have a negative influence on the saving habits.

TABLE 18: CORRELATION OF SAVING HABITS WITH FAMILY SIZE

			Saving Habits	Family Size
Spearman's rho	Saving Habits	Correlation Coefficient	1.000	.213**
		Sig. (2-tailed)	.	.000
		N	346	346
	Family Size	Correlation Coefficient	.213**	1.000
		Sig. (2-tailed)	.000	.
		N	346	346

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

The test result of spearman's correlation indicates that family size have a significant positive relationship with saving habits. But the relationship was weak having correlation coefficient of r = 0.213 and p-value < .001. This shows that as the number of family member increases, households tend to engage themselves on savings. But the study conducted by Rehman, Zahir and Bashir (2010) and Tesfamariam (2012) found that family size will influence the saving habits negatively.

TABLE 19: CORRELATION OF NUMBER OF DEPENDENTS WITH SAVING HABITS

			saving habits	Number of dependents
Spearman's rho	saving habits	Correlation Coefficient	1.000	.194**
		Sig. (2-tailed)	.	.000
		N	346	346
	Number of dependents	Correlation Coefficient	.194**	1.000
		Sig. (2-tailed)	.000	.
		N	346	346

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

As it was shown on the above table there is a significant relationship between the saving habit and the number of dependents. The relationship was significant at 1% confidence level having Spearman's correlation coefficient of r = 0.194 with the p-value < 0.001. This shows that as the number of dependents increases, households tend to engage themselves on savings. The study conducted by Hailesellasie, Abera and Baye (2013) and Rehman, Zahir and Bashir (2010) also found that there is a significant positive relationship between number of dependents and saving. To the contrary, Timerga, Gotu and Alem (2011), Kibetet. al (2009) and Pailwar et. al (2010) found that the number of dependents have negative relationship with the saving habits.

TABLE 20: CORRELATION OF INCOME WITH SAVING HABITS

			Saving Habits	Income
Spearman's rho	saving habits	Correlation Coefficient	1.000	.352**
		Sig. (2-tailed)	.	.000
		N	346	346
	income	Correlation Coefficient	.352**	1.000
		Sig. (2-tailed)	.000	.
		N	346	346

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

The relationship of income with the saving habits was tested by using Spearman's rho correlation coefficient. The test indicated that income was significantly related to saving habits of the respondents having correlation coefficient of r = 0.352 and p-value<0.001. This might show that as income increases, the households saving habits will increases. Many researchers (For Example: N.S. Mahdzan and S. Tabiani (2013), Rehman, Zahir and Bashir (2010), Tesfamariam (2012), Hailesellasie, Abera and Baye (2013), Teshome et. al (2013), K. Pailwar et. al (2010) and Kibet et. al (2009)) revealed that households income have a significant positive impact on the households saving habits

TABLE 21: THE RELATIONSHIP OF SPENDING PLAN WITH SAVING HABITS

Chi-Square Tests						
	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	33.017[a]	1	.000	.000	.000	
Continuity Correction[b]	31.090	1	.000			
Likelihood Ratio	47.630	1	.000	.000	.000	
Fisher's Exact Test				.000	.000	
Linear-by-Linear Association	32.922[c]	1	.000	.000	.000	.000
N of Valid Cases	346					

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.88.

b. Computed only for a 2x2 table

c. The standardized statistic is 5.738.

Among the total sampled household heads, the proportion of households having spending plan and not having spending plan with savings was 100% and 80% respectively. This indicates that household heads having spending plan were better in their saving status than household heads that have no spending plan. The chi-square test ($\chi2$=33.017, p-value < 0.001) revealed that there is statistically significant difference between household heads having spending plan and household heads that have no spending plan in their saving.

TABLE 22: THE RELATIONSHIP OF KNOWLEDGE OF DAILY EXPENSES WITH SAVING HABITS

Chi-Square Tests						
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	14.169[a]	1	.000	.000	.000	
Continuity Correction[b]	12.719	1	.000			
Likelihood Ratio	12.410	1	.000	.001	.000	
Fisher's Exact Test				.001	.000	
Linear-by-Linear Association	14.128[c]	1	.000	.000	.000	.000
N of Valid Cases	346					

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.48.

b. Computed only for a 2x2 table

c. The standardized statistic is 3.759.

Among the total sampled household heads, 92% of the household heads who have knowledge of their daily expenses at the end of the day have saving habitsbut from those households who have no knowledge of their daily expenses only 76.8% have saving habits. This indicates that household heads that have knowledge of their daily expense were relatively better in their saving status than household heads that have no knowledge of their daily expenses. The chi-square test ($\chi2$=14.169, p-value < 0.001) revealed that there is statistically significant difference between household heads who have knowledge of their daily expenses and household heads who have no knowledge of their daily expenses in their saving status.

TABLE 22: CONTACT WITH THE EXTENSION AGENTS AND SAVING HABITS

			saving habits	contact with the extension agents
Spearman's rho	saving habits	Correlation Coefficient	1.000	.004
		Sig. (2-tailed)	.	.946
		N	346	346
	contact with the extension agents	Correlation Coefficient	.004	1.000
		Sig. (2-tailed)	.946	.
		N	346	346

The correlation of contacts with the extension agents and saving habits was shown on the above table. The result of Spearman's rho correlation indicated that there no relationship between contacts with the extension agents and saving habits with the correlation coefficient nearer to zero. But the study conducted by Teshome et. al (2013) on the saving behaviors among rural household in East Hararghe Zone, Oromia Regional State, Ethiopia showed that contact with the extension agents have a significant positive influence on the amount of households savings

TABLE 23: THE RELATIONSHIP OF CREDIT WITH SAVING HABITS

Chi-Square Tests						
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5.862[a]	1	.015	.015	.008	
Continuity Correction[b]	4.928	1	.026			
Likelihood Ratio	7.195	1	.007	.011	.008	
Fisher's Exact Test				.015	.008	
Linear-by-Linear Association	5.845[c]	1	.016	.015	.008	.007
N of Valid Cases	346					

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.02.
b. Computed only for a 2x2 table
c. The standardized statistic is 2.418.

Among the total sampled household, the proportion of households who have taken credit and not taken credit with savings was 96.2% and 86.2% respectively. This indicates that household heads that have taken credit previously were relatively better in their saving status than household heads that have not taken credit previously. The chi-square test ($\chi2$=5.862, p-value = 0.015) revealed that there is statistically significant difference between household heads who have taken credit previously and household heads who haven't taken credit previously in their saving status.

TABLE 24: CORRELATION OF REGULARITY OF INCOME WITH SAVING HABITS

			Saving Habits	Income Regularity
Spearman's rho	saving habits	Correlation Coefficient	1.000	-.107*
		Sig. (2-tailed)	.	.048
		N	346	346
	Income Regularity	Correlation Coefficient	-.107*	1.000
		Sig. (2-tailed)	.048	.
		N	346	346

. Correlation is significant at the 0.05 level (2-tailed).

The relationship of regularity of income with the saving habits was tested by using Spearman's rho correlation coefficient. The test indicated that even though the relationship was weak, regularity of income was significantly related to saving habits of the respondents having Spearman's rho correlation coefficient of r = - 0.107 and p-value<0.05. This revealed that non regular income earners are better in developing saving habits than that of the regular income earners.

TABLE 25: ASSOCIATION OF MARITAL STATUS WITH SAVING HABITS

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	12.823[a]	1	.000	.001	.001	
Continuity Correction[b]	11.282	1	.001			
Likelihood Ratio	10.707	1	.001	.001	.001	
Fisher's Exact Test				.001	.001	
Linear-by-Linear Association	12.786[c]	1	.000	.001	.001	.001
N of Valid Cases	346					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.94.
b. Computed only for a 2x2 table
c. The standardized statistic is 3.576.

While feeding the data to SPSS, marital status have the category of married, single, divorced and widowed. But for the purpose of analysis, it was re-coded as married and other (single, divorced and widowed). Among the total sampled household, the proportion of married and non-married households with savings was 91.3% and 75% respectively. This shows that households who are married were better in saving habits than the other type of marital status. The chi square test ($\chi2$=12.823, p-value = 0.001) revealed that there is statistically significant difference between married households heads and households having other type of marital status. Many researchers (For example: Cheng, Hisatoshi and Wenxing (2006), Hailesellasie, Abera and Baye (2013), Hagos and Michael (2014) and Timerga, Chowa (2006), Gotu and Alem (2011)) confirmed that marital status have a positive impact on the saving habits of the households.

TABLE 26: RELATIONSHIP OF HOME OWNERSHIP WITH SAVING HABITS

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	16.629[a]	1	.000		
Continuity Correction[b]	15.211	1	.000		
Likelihood Ratio	15.630	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	16.580	1	.000		
N of Valid Cases[b]	346				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.53.

b. Computed only for a 2x2 table.

From the total sampled households that have their own home, 93.4% of them have saving habits whereas from those non home owners 78.6% of them have saving habits. This indicates that household heads that have their home are better in their saving status compared to those who haven't their own home. The chi-square test (χ^2=16.629, p-value < 0.001) revealed that there is statistically significant difference between household who have their own home and household who haven't their own home their saving status.To the contrary, the study made by Hailesellasie, Abera and Baye (2013) revealed that households who have not their own home have better in their saving status than home owners. But Timerga, Gotu and Alem (2011) found that housing expense (housing rent) influence the saving habits negatively.

5. CONCLUSION

The study was conducted on household saving behavior of Jimma zone in Oromia regional state of Ethiopia. Even though the level of income was low, 88.4% of the respondents have saving habits. The major motives of saving in the study area were for children education, for unexpected expenses and to own a home. The result of the study revealed that age, family size, number of dependents, income, having spending plan, having knowledge of daily expenses at the end of the day, credit and marital status (being married) have a positive relationship with the saving habits whereas regularity of income and ownership of home have a negative relationship with the saving habits. Gender of the households and contact with the extension agents has no significant relationship with saving habits.

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AN EMPIRICAL ANALYSIS OF FACTORS AFFECTING WLB OF EMPLOYEES IN SERVICE SECTOR

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ABSTRACT

*Service Sector can be understood as the portion of the economy that produces intangible goods. Work-Life Balance (WLB) is a concept that aims at proper prioritizing between *work and your personal **life. At the core of an effective WLB definition are the two key everyday concepts that are relevant to each of us. They are Daily Achievement & Enjoyment, ideas almost deceptive in their simplicity. The paper aims at finding out the factors under the two variables-Organizational and Personal, that affect WLB of a service sector employee. Information on the same is gathered with the help of primary data collected through self-designed questionnaire and secondary data. The degree of stress, the reasons of stress at different management levels, impact of stress (physiological, psychological) is different. On the basis of literature review it is found that service sector employees face higher stress than manufacturing sector for various reasons; direct customer interaction playing major role. Sampling frame includes different level employees from Retail sector, Education sector, Banking & Insurance sector and Hospitality sector.*

KEYWORDS

WLB, Service Sector, Organizational factors, Personal Factors, Family Imbalance.

1. INTRODUCTION

The term "Work-Life balance" is as old as 1956, although its usage in everyday language was in vogue for a number of years. Interestingly, programs on work-life existed as early as 1930. The reason was then also perhaps the same i.e. each role individual paly, whether personal or professional have different set of demands. Striking a balance between professional and personal commitment is today's common dilemma.Stress at work is a ubiquitous and multifaceted phenomenon (Lazarus, 1993) that is costly for organizations because it contributes to expensive voluntary turnover (Villanueva & Djurkovic, 2009). Work stress can be a particular problem in customer-oriented fields because employees often experience conflicting demands of the company, supervisors, and customers, and these conflicts create dissonance for employees (Ruyter, Wetzels, & Feinberg, 2001).

Investigation into the nature and dimensions of work stress among employees is the first step in the management of this aspect of work (Cooper & Payne, 1988). WLB has very high importance on the total well-being and hence productivity and entire business growth. WLB is all about people having a measure of control over when, where and how they work. According to Jim Bird, CEO of Worklifebalance.com1, "Work-life balance is meaningful achievement and enjoyment in everyday life." The primary way companies can help facilitate work-life balance for their employees' is through work-life programs and training. Achievement and enjoyment at work is a critical part of anyone's work-life balance. Furthermore, achievement and enjoyment in the other three quadrants of one's life (e.g. family, friends and self) is critical as well. Multiple problems sprout up and make the management of the individual, the family, the organization and the society all the more complex. According to ILO (1986) "It is recognized world-wide as a major challenge to individual mental and physical health, and organizational health." Although stress includes both good and bad aspects but it is not necessarily bad. Robbins and Sanghi (2006) also contributed "Stress is typically discussed in a negative context, it also has a positive value. It is an opportunity when offers a potential gains."

Service Sector can be understood as the portion of the economy that produces intangible goods. According to the U.S. Census Bureau, the service sector primarily consists of truck transportation, messenger services and warehousing; information sector services; securities, commodities and other financial investment services; rental and leasing services; professional, scientific and technical services; administrative and support services; waste management and remediation; health care and social assistance; and arts, entertainment and recreation services.

In words of Boswell and Olwan "increasingly sophisticated and affordable technologies have made it more feasible for employees to keep in contact with work." Work Life Balance has important consequences for employees- help to build attitude towards their organization.3.

2. LITERATURE REVIEW

In this section, a review of selected research work (sector wise) conducted in this subject matter is mentioned.

In a research, Hughes and Bozionelos (2007) observed that work-life imbalance was not only a source of concern, but also that it was the major source of dissatisfaction for participants. To establish and illustrate the levels of awareness of work-life balance policies within the surveying profession in Australia and New Zealand, Wilkinson (2008) conducted a research. It was concluded that the consequences of an imbalance between work and personal or family life is emotional exhaustion, cynicism and burnout.

Guek et al (1991), indicated that women reported more work interference in family than men, despite spending about the same number of hours in paid work as men. Although women spent more hours in family, they reported some level of interference in work.

Alan Felstead (2007) in his research on "opportunities to work at home in the context of Work-Life Balance" finds work-life balance & Family friendly employment is much in vogue among politicians and business leaders.

Skinner and Pockock (2008) investigated the relationship between Workload, work schedule control, work hours and their fit with preferences and work life conflict among full time employee N=887). It was found that the strongest association with work life conflict was demonstrated by work overload followed by work schedule control and work hours fit. Time Based work life policies, procedures and interventions were found necessary but not sufficient, for addressing work life conflicts.

2.1 RETAIL

2.1.1 Moncrief et al (1997) have examined the precursors and consequences of salesperson job stress. According to authors, there are a number of organizational variables including met expectations, role conflict, role ambiguity, job satisfaction, organization commitment and intention to leave which influence job stress.

2.1.2 Low et al (2001) have studied the antecedents and outcomes of salesperson burnout with special reference to Australia. They found that intrinsic motivation, role ambiguity and role conflict are significant antecedents of burnout and performance is the outcome. Crooker et al (2002) have studied the relationship between life complexity an dynamism that affect work-life balance. The authors have explained individual value systems on the relationship between life complexity and work-life balance.

2.1.3 Moore (2007) conducted a research to compare work-life balance issues workers and managers of an MNC. It was concluded that many of the managers are not able to achieve work-life balance.

2.2 BANKING & INSURANCE

2.2.1 Carmeli (2013), examined the extent of which senior managers with high emotional intelligence, employed in public sector organizations develop positive attitudes behavior & outcomes. Results show senior managers who had high emotional intelligence were more likely to be effectively control work-family conflict than those who have low emotional intelligence.

2.2.2Sundar, Sundarraj, Ashok kumar (2011), indicated that despite job security and strong welfare measures protect in private sector banks and opportunity for qualification upgradation by women employees it is the fear of promotion that keeps the women folk to continue to languish in lower cadres buut the plight of women folk in new generation banks is different in that they do not have a job security and their pay is performance linked. Study revealed that women executives in Private sector banks are found to be more knowledgeable about work, maintain a cordial relationship with customers and have positive attitudes towards work.

2.2.3 Modi, Chima (2011), examined the extent to which Work Life Balance policies and practices are a reality for employees in Banking Sector. The study also examined if there were any barriers and reasons for mutual adoption of Worklife balance policies in Nigerian Banking sector. The study suggested an urgent need to communicate clearly the banks WorkLife Balance policies and practices to its employees, to raise awareness further and improve the knowledge and understanding of relevant policies.

2.2.4 Shariq Abbas, Vandana Premi (2011), tried to look at the awareness, attitude perceived importance and formalization of WorkLife Balance policies in Banking sector, both Private and Public sector banks. Findings suggest that employees perceive flexible working arrangements as most important WorkLife balance policy; nonetheless say the perceptions towards the implementation of Work life balance in their organizations are negative. The study also revealed that the extent formalization of work life balance policies in Public and Private sector banks had no written documents for the same in both the systems.

2.2.5 Lalaitha Kumari (2012) in her study emphasized that each of the work life Balance factors on its own is a salient predictor of job satisfaction and there is significant gap between male and female respondents with job satisfaction with reference to various factors of Work life balance. The result of the study had practical significance for human resource managers of especially banks to improve staff commitments and productivity along with designing recruitment and retention of employees.

2.3 EDUCATION

2.3.1 Vartha Raj & Vasantha (2012) studied the WorkLife balance of working women in service sector. They specified that the ultimate performance of its employees which inturn depends on numerous factors. The relationship between personnel and professional life can be achieved through emotional intelligence.. Better emotion management is necessary in order to accomplish objective of life.

2.3.2 Gururaja, Umesh Maiya, Elsa Sanatombi Devi, Anice George (2013), conducted descriptive Survey among 67 nursing faculty towards their perceptions and attitude towards Quality of Work life showed that majority 58(86.57%) experienced well balanced Work life, 9(13.43%) expressed moderately work-life and none of them rated under poor work life balance. Data regarding job satisfaction showed that majority 35 (52.24%), had moderate job satisfaction and 32 (47.76%) had high job satisfaction. The correlation between Work life balance and job satisfaction showed positive correlation (r=0.77) which can be inferred saying that high quality of Work life balance will improve job satisfaction.

2.4 HOSPITALITY

2.4.1 Alam Sageer, Dr. Sameena Rafat, Ms. Puja Agarwal (2012) studied various variables that are responsible for employee satisfaction such as Organization development, Job security, Work task, Policies of compensation and benefit and opportunities etc in hospitality sector.The Study concluded that an organization should develop strategies that strengthen the work environment and increase the employee morale and employee satisfaction to enhance employee performance and productivity, which ultimately results in high profits, customer satisfaction as well as customer retention. And suggested the various ways by which one can improve employee satisfaction.

3. NEED FOR WLB IN CHOSEN SECTORS (RETAIL SECTOR, EDUCATION SECTOR, BANKING & INSURANCE SECTOR AND HOSPITALITY SECTOR)

3.1 Taking Banking as a sector for instance, let's understand the various stressors that exist: organizational and extra organizational. A large part of the banking system was brought under direct government control in 1969. Nationalization of banks brought with it a shift in focus towards optimizing social benefit and spatial coverage of banking services with commercial viability only as a sustenance factor. In view of the hectic work schedules and heavy workload, banking employees find it challenging to strike work life harmony. In other words, the conventional domestic obligations cast additional strain on employees. The strains further may result in guilt of not performing duties on either end and create disturbance in employee leading to loss of productivity. The nature of job in banking sector is too much risky. There is operational risk involved in transactions which always put pressure on employees. The employees in return feel job insecurity which causes great stress on them.

3.2 Similarly, in Retail sector all one gets to hear most often is "targets to achieve and their deadlines to be met". Following incentives are undoubtedly worth working for but the pressure that surmounts on one is simply a stressor. Owing to paucity of time, a retail worker is unable to give adequate time to his family and it's here that dis-equation begins. This field has its own charm and identity, which is different from other fields of specializations. Due to attractive remuneration package, extensive traveling involved and target-driven performance incentives, many ambitious candidates enter into sales and get success. This field is most suitable for aggressive, extrovert, result-oriented persons, who like extensive traveling and meeting people. This field of employment has been usually dominated by male aspirants. However, due to opening of markets and attraction for sound remuneration, many female incumbents have started entering into Retail. The question here is are both the genders equal in facing the right balance problem or is there some difference and if there is the what are those factors?

3.3 Coming to Education sector, those were days when one curriculum could be stretched and repeated time and again, over years without any alteration. So once prepared, lessons plan were iterated every time. But with the advent of smart education and MOOC programme, there is a pressure to update the curriculum every time. This cannot be done on whims and fancies but only after a detailed research and brainstorming exercise on what is the affordability factor of institute or university in upgrading oneself.

3.4 Although there exists general agreement that addressing and reducing stress in the hospitality industry is not only a noble goal, but is capable of resulting in expense reductions for employers (Cooper & Dewe, 2008), the nature and quantity of hospitality employee stress is not fully understood. Research regarding stress in the hospitality industry remains an understudied topic with rich potential for positively affecting peoples' lives. Only by understanding the specific triggers of stress can workers be helped to effectively alleviate it.

4. STATEMENT OF THE PROBLEM

4.1 The two kind of factors that affect one's WLB- Organizational and extra organizational factors: Are these same across all the four chosen sectors.

5. OBJECTIVES OF STUDY

5.1 To explore stressors (organizational and extra organizational) in various chosen sectors i.e. Hospitality, Education, Banking & Insurance and Retail.
5.2 To examine the similarities and differences between stressors prevailing in various sectors.
5.3 To zero down and suggest common and unique measures across various sectors for designing training program to maintain WLB.

6. HYPOTHESES

6.1 Null- Stressors are same across all sectors and hence tolerance measures are same.
6.2 Alternate- Stressors are different across all sectors and hence tolerance measures are different.

7. RESEARCH METHODOLOGY

Employee Performance has been taken as dependent variable. Moderating variables are lack of administrative support, excessive work demand, problematic customer relations, riskiness of job, poor interpersonal relationships, misfit with organization, no part in decision making, physical exertion, job insecurity, frequent transfers, role conflict. And job stress has been taken as an independent variable.

After gathering the two kind of stressors from review of literature these were formulated on statements on five point rating scale.A self designed questionnaire was used in gathering the information.

8. RESULTS AND DISCUSSIONS

After analyzing the information gathered through questionnaire and literature review following is the list of findings:

8.1 Two categories of stressors work on any individual : Organizational and extra-organizational stressor.

8.1.1 Organizational stressor: emerge from reasons related to organization or job assigned to individual.

8.1.2 Extra organizational stressors – It refers to the factors that are more personal and related more to individual.

8.2 Standing hours which acts as a physical stressor affects almost all employees in retail and education sector.

8.3 Changes in life and number of dependents act as major extra-organizational stressors.

8.4 Stress seems to be almost equal between genders though for different reasons.

8.5 Customer Dealing is a stressor with almost all employees across all sectors leaving education sector.

8.6 Most of the employees are satisfied with their job yet are stressed owing to one or other stressor.

8.7 Discussions ::Benefit from WLB

8.7.1 EMPLOYER'S BENEFIT

8.7.1.1 There will be a reduction in Absenteeism rates and lateness.

8.7.1.2 Work life balance paves a way for increased employee morale and commitment.

8.7.1.3 It helps in reduction in stress and improved productivity.

8.7.1.4 It leads to the attraction of Skilled Employee.

8.7.1.5 The policies of work life balance assists to decrease in Employee Turnover.

8.7.1.6 It provide for Lower Recruitment and Training Cost

8.7.1.7 It increases Return on Investment as Employee Stay for a Longer period.

8.7.2 EMPLOYEE'S BENEFIT

8.7.2.1 Work life balance policies provide the ability to manage work and individual commitments.

8.7.2.2 It leads to improved personal and family relationships.

8.7.2.3 It guides to have increased focus, motivation and job satisfaction knowing that the family and work commitments are being met.

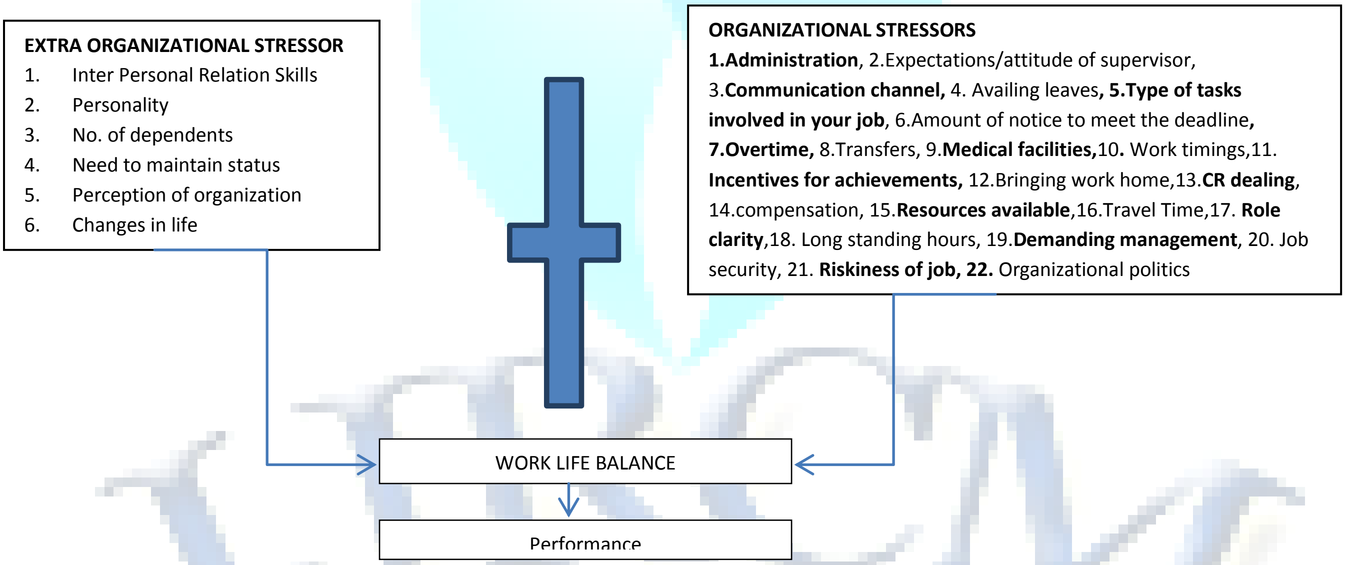
8.7.2.4 It leads to less distraction.

8.7.2.5 Paving a way for high morale and motivation.

8.7.2.6 Directs towards increased in job security due to organizational support through work life balance policies.

9. FINDINGS: CONCEPTUAL MODEL

FIG 1: ORGANIZATIONAL & PERSONAL STRESSOR AND EMPLOYEES' WLB AND ITS RELATION WITH PERFORMANCE



10. SUGGESTION

After clubbing the various factors and summarizing the papers studies in the process, following steps are suggested to different organizations to develop a work-life balance strategy.

Every organization will find its own way of dealing with work-life balance issues. However, those organizations that respond most successfully to these issues tend to follow a similar path, and to work in partnership with their employees and their representatives. They will typically set up a working group of employee, union and management representatives, to guide them along this path.

The following checklists outline the key steps in developing work-life balance practices in a business or organization.

Step 1 – Get management support and the right people on board.

- Identify the motivation for your organization to develop a work-life balance strategy.
- Assess whether this is an appropriate time for addressing these issues.
- Elicit support from senior management.
- Consult the relevant unions on the best way to go about developing a strategy.
- Appoint a working group to manage the project.
- Communicate to the entire organization about the project and what is involved.

Step 2 – Find out about what's happening now, and what the issues are for your organization and your workforce
- Gather any information – formal and informal –that is currently available on work-life balance issues in your organization.
- Check which policies, provisions and practices you already have to assist with work-life balance and find out what staff and managers know about them.
- Identify the areas where you already know there are issues, or that you think it would be useful to explore.
- Develop and implement a communications strategy appropriate to the way you plan to assess needs.
- Plan, conduct and analyze an employee needs Assessment survey.
- List and prioritize the key work-life balance issues in your organization.

Step 3 – Identify the possible solutions
- List the possible solutions.
- Review what other employers are doing.
- Consult relevant managers, staff and unions on the most appropriate solutions for your organization.
- Assess the relevant options.
- Select the best 'package' of options to make up your strategy.
- Develop an action plan.
- Get sign-off or commitment from key stakeholders.

Step 4 – Implement the strategy
- Develop and implement a communication strategy.
- Implement the initiatives through an action plan.
- Set some measures for your initiatives and a timeframe for reviewing them.

Step 5 – Measuring and maintaining progress
- Monitor and evaluate the initiatives. Adjust the initiatives if needed.
- Maintain work-life practices.
- Make it part of the culture of your organization.

11. CONCLUSION
Both these types of stressors act on an individual in different intensity depending upon the conditions that prevail in the organization and in personal life. Across different sectors all the factors are found to affect the individual and hence, if an organization needs to retain talent, it cannot do away by ignoring the personal front of an employee.

The concept of work-life balance is based on the notion that paid work and personal life should be seen less as competing priorities than as complementary elements of a full life. It is important for employers to support work-life balance to comply with legal requirements that afford working parents the right to request to work flexibly, to promote equality of opportunities by ensuring that staff with caring responsibilities is not disadvantaged in the workplace, and to widen access to paid work and career opportunities.

12. LIMITATION
12.1 Sample size is too small to make the result generalized.
12.2 Not many organizations could be contacted for data collection.
12.3 Statistical tool is not applied which could have been.

13. SCOPE FOR FURTHER RESEARCH
The study aims to find out various factors that affect Work Life Balance of employees in service sector. Now these factors may be as simple as 'proximity' or may be as typical as 'perception'. Stock of these factors surely can help the organizations to be vigilant about the dos and dont's for the employees in order to let them strike WLB. Attrition too can be controlled by keeping such factors in mind , which can save organizations a good amount of money. This paper presents the results of the study on organizational polices and provisions regarding work-life balance of the employees, which was carried out among a cross-section of leading corporate entities in India (secondary information for MNC extracted from their websites) representing service sector consisting of Educational, Retail, Hospitality and Banking & Insurance sector. The results reveal the commonalities and differences in work-life balance provisions across the four sectors. This information shall be useful to various cross organizations in picking up cues to formulate the relevant policies.

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PROSPECT AND POTENTIAL OF RURAL TOURISM IN BODHGAYA

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ABSTRACT

This paper examines the prospect and potential of rural tourism in Bodhgaya. Although there is phenomenal growth of religious tourism in Bodhgaya, as it is one of the most prominent Buddhist pilgrimage sites but the rural tourism was never given any priority. The scheme of rural tourism was started by the Ministry of Tourism in 2002-03 with the objective of highlighting rural life, art, culture and heritage at rural locations and in villages which have core competence in art, craft, handloom, textiles and natural environment. Bodhgaya is a small town of international renown with immense religious and cultural significance. The competitive advantage of Bodhgaya lies in the fact that it is one of the most prominent Buddhist pilgrimage sites and also houses a UNESCO World Heritage site within its boundaries. In addition, the proximity to Gaya, Rajgir and Nalanda offers further potential for development of the town as a bustling tourist hub. The city has potential to develop manufacturing units allied to tourism like making of handicrafts and artifacts. Rural tourism can develop win-win situation for this city, and generates increasing benefits to its rural areas in terms of rural productivity, economy, employment generation and conservation of rural environment and culture.

KEYWORDS

Bodhgaya, Rural tourism, UNESCO, Ministry of Tourism, Heritage, Pilgrimage, BTMC, BSTDC.

INTRODUCTION

Bihar's antiquity is evident from its name, which is derived from the ancient word "VIHARA". It is indeed a land of monasteries, Hindu, Buddhist, Jain, Muslim, and Sikh shrines abound in this ancient land where the India's first major empires rose and fell. This article helps to examine the prospect of rural tourism in Bodhgaya which is located in Gaya District of Bihar. It is the place where Lord Buddha attained enlightment more than 2500 years ago. It is a small town surrounded by many small villages. The famous Mahabodhi temple which is a UNESCO World Heritage site attracts lakhs of tourists every year and large population comprising foreign tourists. Among all Indian states, Bihar is the one most intimately linked to the Buddha's life, resulting in a trail of pilgrimages which have come to be known as the Buddhists circuit. Bodhgaya is the spot where Lord Buddha attained enlightment, and is the most important of the main four pilgrimages sites related to the life of Gautam Buddha. . Bihar and Uttar Pradesh along with the government of India are entering in to a dialogue with International Finance Corporation (IFC) to promote their Buddhist heritage in South East Asian countries. Although in Bihar, tourism was never seen as a potential business, but from last one decade government is giving importance to this sector. The number of tourist visiting Bihar has doubled between 2007 and 2012. As for the latest report, while close to 10 million tourist visited Bihar in 2007. The number doubled to 20 million in 2012. In 2014, the tourist influx in Bihar is expected to rich closed to 25 million. As the economy of Bodhgya is largely driven by tourism and agriculture, rural tourism can be better prospect to benefit local community economically and socially.

The motivation behind of this article is based on the scheme, that ministry of tourism has recently implemented to promote rural tourism as the primary product to spread tourism and its socio-economic benefits to rural and its new geographic reason in India. The Primary beneficiaries are rural communities (Especially women and unemployed youth), PRI representatives, tourists etc . Rural tourism includes a range of activities, services and amenities provided by farmers and rural people to attract tourists to their area in order to generate extra income for their business. The rural tourism is another kind of sustainable tourism that exploits resources in rural regions, causes little or no harmful impact and generates increasing benefits to rural areas in terms of productivity, employment, conservation of the rural environment and culture, improved distribution of wealth and a suitable way of adapting traditional believes and values to modern times.

OBJECTIVES OF THE STUDY

Some of the main objectives of the study are as follows:-

- To understand the potential and prospect of rural tourism in Bodhgaya.
- To find the key issues involved in the development of rural tourism in Bodhgya.
- To find out the impact of rural tourism in Bodhgaya in terms of employment generation, rural productivity and tourist inflow.
- To indentify the challenges and opportunities to implement rural tourism in Bodhgaya.
- To find out the extent to which rural tourism contributes to the economy of the Bodhgaya.
- To identify the essential element for development of rural tourism in Bodhgaya.
- To find out the extent to which rural tourism increases the foreign exchange at Bodhgaya.

RESEARCH METHODOLOGY

The proposed research work is confined to the **Bodhgaya**, which is divided into **19** wards and had a population of **38,439** of which 19,908 are males while 18,531 are females (census 2011). The research methodology involves both the desk research and the field research. This is an **exploratory** study, which attempts to analyze various factors that affect rural tourism in **Bodhgaya**. The study analyzes the responses provided by the **tourists, local people, Hospitality** and **tourism personals**, who are working in government and private organizations. The study also analyzes to see perceptions, preference and satisfaction of respondents in contrast of implementation of policy rural tourism in Bodhgaya.The two basic technologies used for the research, i.e., **observation method** and **survey method**. A literature survey was conducted to indentify the domains and to find out the items to be generalized for the study. **Primary data** was conducted through a set of standard **questionnaire** (both open ended and close ended). The **sample** was selected **randomly** and the respondents were personally interviewed by the researcher. Additional discussions were also organized with the officials of the **BSTDS**, **BTMC** personals and **Hospitality** experts to understand the issues related to rural tourism and its implementations. The **empirical** data was collected to understand the market potential for rural tourism to evaluate its positive and negative impact on the society. The survey was conducted with the **random sampling** method.

RURAL TOURISM IN INDIA

Definition:- *"Any form of tourism that showcases the rural life, art, culture and heritage at rural locations, thereby benefiting the local community economically and socially as well as enabling interaction between the tourists and the locals for a more enriching tourism experience can be termed as rural tourism."*

The scheme of Rural Tourism was started by the Ministry of Tourism in 2002-03 with the objective of highlighting rural life, art, culture and heritage at rural locations and in villages which have core competence in art, craft, handloom, textiles and natural environment. The intention was to benefit the local community economically and socially as well as to enable interaction between tourists and local population for a mutually enriching experience. The promotion of village tourism was also aimed towards generating revenue for rural communities through tourist visits, which may stop exodus from rural to urban areas. Rural

Tourism can be harnessed as a strategy for rural development. The development of a strong platform around the concept of Rural Tourism is definitely useful for a country like India where almost 74 percent of the population resides in its 7 million villages. On the other hand, the growing trend of urbanization has led to falling of income levels lesser job opportunities leading to desertion of villages. Rural Tourism could be a solution to this. The basic concept of rural tourism is to benefit the local community through entrepreneurial opportunities, income generation, employment opportunities, conservation and development of rural arts and crafts, investment for infrastructure development and preservation of the environment and heritage. Rural tourism will bring people of different cultures, faiths, languages and life-styles close to one another and it will provide a broader outlook of life. It will not only generate employment for the people but it can also develop social, cultural and educational values. In Asia, especially in India, rural tourism in its true form is relatively new. The potential for rural tourism to be a major force in rural economic development resulting in poverty alleviation is yet to be realized to the fullest extent. Tourism growth potential can be harnessed as a strategy for Rural Development. The development of a strong platform around the concept of Rural Tourism is definitely useful for a country like India, where almost 74% of the population resides in its 7 million villages. Rural Tourism is one of the few activities which can provide a solution to these problems. Besides, there are other factors which are shifting the trend towards rural tourism like increasing levels of awareness, growing interest in heritage and culture and improved accessibility, and environmental consciousness.

POTENTIAL OF RURAL TOURISM IN BODHGAYA

Bodhgaya is a small town of international renown with immense religious and cultural significance. Bodhgaya consist of 198 Villages and 18 Panchayats . Tetaria Khurd is the smallest Village and Mocharim is the biggest Village. To develop Bodhgaya as an international tourist destination it is important to preserve its cultural heritage by providing all basic infrastructure service to its citizens and tourists in an eco-friendly way and develop other prospect of tourism. The town has seen high growth rate of especially in the last three decades with the population doubling in the last two decades. As, the economy of this town largely depends upon tourism and agriculture, it is utmost important to develop other means of employment .Rural tourism in Bodhgaya not only diversify the concept of tourism, but also generates increasing benefits to its rural areas in terms of rural productivity, economy, employment generation and conservation of rural environment and culture. As, this town is surrounded by many small villages rural tourism can develop a win-win situation for this city. It can be promoted by making aware local community with its important and by implement certain rural activities such as,

- Promoting Buddhist arts , Antiques and crafts.
- Promoting local festival such as Buddha Mahotsava, Kalchakra puja , Buddha Jayanti , Nyingma festival , International Buddhist conclave , etc .
- Promoting local culture inform of dance and drama.
- Farming .
- Promoting rural lifestyles.
- Promoting local sports and other activities.

CONCLUSION

Rural tourism can be harnessed as strategy for development of villages in Bodhgaya. The development of a strong platform around the concept of rural tourism is definitely useful for this place, where almost 85 percentage of its population resides in rural area. Rural tourism can bring various benefits to this place in terms of employment, foreign exchange better food, education and infrastructure development. As the local community largely depends on agriculture, rural tourism can be additional source of income. As against conventional tourism, rural tourism has certain typical characteristics, like, it is experience oriented, the locations are sparsely populated, it is predominantly in natural environment, it meshes with seasonality and local events and is based on preservation of culture heritage and tradition. It is utmost important to involve local community, as without their involvement we cannot develop this place a tourist hub. We have to make them understand about their roles and contribution and how they will be benefited. Bohgaya is an international tourist place where millions of tourist visits every year. Therefore, it is important to preserve its natural environment. Rural tourism not only preserves Bodhgaya's natural environment, culture and heritage but also leads to economic development, infrastructure development and employment generation. It will promote harmony and understanding and helps to retain the tourist for longer period of time. Rural tourism can develop win-win situation for this city, and generates increasing benefits to its rural areas in terms of rural productivity, economy, employment generation and conservation of rural environment and culture.

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VERTICAL PRICE TRANSMISSION BETWEEN CEREALS AND BREAD AND OTHER PREPARED FOODS: DOES PRICE STABILITY IN CEREALS MARKET STABILIZES PRICE OF BREAD AND OTHER PREPARED FOODS?

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ABSTRACT

Nowadays, food inflation is a common phenomenon that Ethiopia is experiencing. The soaring food price is expected to affect food security of especially the majority poor households. Bread and other prepared foods are among the major food items facing this problem for which demand is higher and consumers are much responsive to the price change, as the situation intends to affect the livelihood of the majority of the people. Hence, it seems indispensable to take appropriate measures targeted on the stability of prices of these commodities. Price stability measures, so far, focus on grain market. These measures are expected to be efficient if they are also able to stabilize prices of processed commodities such as bread and other prepared foods. This can be realized if the markets for agricultural commodities are coordinated with that of processed commodities. Hence, the purpose of this paper was to establish the extent to which cereals market is efficiently coordinated with market of bread and other prepared foods, in Addis Ababa. In order to figure out this, secondary data of monthly price series were extracted from the Central Statistical Agency for the period from September, 1996 to April, 2012 (having 188 observations). The data were analyzed using Johansen's and Juselius co-integration test and vector error correction model coupled with other descriptive approaches. The findings of the study reveal that price of cereals and bread and other prepared foods are co-integrated; however, there is an asymmetry in price transmission between the prices of the two categories of commodities implying that policies targeted on the stability of prices of grains such as cereals does not efficiently stabilize prices of processed commodities like bread and other prepared foods. Hence, additional measures are required to bring about stability in price processed commodities.

KEYWORDS

Price stability, Bread and Other Prepared Foods, Cereals, Market Coordination, Price Transmission.

INTRODUCTION

The rising food prices in recent years is a global issue. In Ethiopia, since 2005, the rise in food prices has been tremendous. It has been 15.1% in 2006, 28% in 2007, 57.4% in 2008 and stands at 36.4% in 2009. The non-food price index has also been rising since 2000, but is relatively stable compared to the food price index (FPI). In 2007-2008, the food prices increase in Ethiopia accounted for almost 62% of the total inflation. Generally, the consumer price index (CPI) and FPI are highly correlated with about 57 percent of consumption expenditure spent on food (Jema et al, 2011). In Ethiopia, prices of food items surged by 47.4 percent, while the non-food inflation increased by 27.8 percent in July 2011 as compared to the prices of July 2010. The common feature is that the prices of almost all commodities have risen in the same period. The 47.4 percent increase in food index is due to increases in the prices of Cereals (42.1 percent), Pulses (82.1 percent), Bread and Other Prepared Food (19.5 percent), Meat (32.2 percent), Milk, Cheese and Eggs (36.2 percent), oils and Fats (90.2 percent), Vegetables and fruits (25.3 percent), Spices (45.4 percent), Potatoes, Other Tubers and Stems (44.4 percent), Coffee and Tea Leaves (104.8 percent), Other Food Items (9.5 percent), Milling Charge by (15.8 percent), and Food Taken Away from Home (33.3 percent) (CSA, 2011).

This dramatic increase in food prices and its consequences has remained an issue of policy makers, donor agencies, economists, and the society at large. The traditional economic theory asserts that inflation will have redistributive effect by imposing 'inflation tax' and can hurt particularly the lower income groups and those people whose income is relatively less flexible (Jema et al, 2011). As cited in Jema et al (2011), Zhu (2008) noted that the rising food and energy prices significantly impact people of all countries; however, the social unrest occurring in some developing countries shows that the survival of the local poor is threatened. Food price inflation affects poor people's purchasing power. It has an income effect on household budgets and also increases the risk. Inflation stands as a "Poor Man's Tax". Poor people are disproportionately affected because they spend a larger proportion of their income on food. Rising food prices, thus decrease the real income of the most vulnerable people, with serious nutritional and health consequences.

Analysis of food inflation for different income groups, in South Africa, shows that poor households experienced higher inflation rates than wealthier. At its peak in October 2002, poor households were confronted with year-on-year food inflation of 23.1% , while richer households only experienced food inflation of 19%. The benefit to the poor of the recent lower prices for most staple foods is reflected in a food inflation rate of 3.35% compared to that of richer households of 4.21% (Anonymous, n.d.).

Addis Ababa is one of the most affected regions, in Ethiopia, by the current food price soaring. In Addis Ababa, the food inflation was estimated to be about 19.6% in 2006 and 27% in 2007 which is the highest of all the regions of Ethiopia. In terms of price variability, Addis Ababa was ranked third with price variability rate of 14.9% next to Harari (19.1%) and Gambella (15.9%), in 2008. Due to the price soaring, households in Addis Ababa, Harari and Dire Dawa face relatively higher consumption loss as compared to other regions (Ulimwengu et al, 2009). Consequently,the food security of poor households of the region is expected to be adversely affected (WFP, 2009). In order to ensure the food security, as a response to the rising of food prices, different policies are being recommended. According to Mondiale (2008), policy interventions can be divided into three broad classes: (i) interventions to ensure household food security by strengthening targeted safety nets; (ii) interventions to lower domestic food prices through short-run trade policy measures or administrative action, and (iii) interventions to enhance long-term food supply.

In Ethiopia, in order to mitigate the impact of rising food prices, the Government assistance programs have been expanded to urban areas with an introduction of the urban grain market stabilization program in 2007. The program started initially in Addis Ababa, and then expanded to cover 12 urban centers namely:

Bahar Dar, Gondar, Dessie, Kombolcha, Mekele, Adigrat, Dire Dawa, Harar, Awassa, Nazareth and Jimma, reaching out to a total of over 800,000 households who bought wheat grain at subsidized prices. The Government continued with the program from mid-August 2008 in a different form and sold 150,000 MT of wheat to wholesalers, consumers, millers and traders at *Birr* 3.5 per kg on a first come first served basis, removing the coupons or ration cards system (WFP, 2009).

Such policy intervention directly affects prices of certain types of commodities (i.e. Grains) for a while, and later, may indirectly affect the prices of other commodities (processed), as well, if there is efficient market integration. If there is no or little integration (coordination) in the markets, the reduction in prices of the grains, such as cereals, as the result of the policy interventions, has nothing to do with prices of domestically processed commodities like breads and other prepared foods which are purchased and consumed by a majority of the people; hence, no or few changes are observed on the livelihood of final consumers. Even when the markets are co-integrated but do not show symmetry in price transmission (in such a way that fall in the price of the grains is not reflected in the price of the processed commodities), the problem still persists. A well-functioning input and output markets may assure vertical integration and coordination functions. However, this may not be the case in developing countries like Ethiopia, where market imperfections are usually prevalent.In cognizant of this, this study deals with the extent to which cereals markets are integrated with bread and other prepared food items, in Addis Ababa. Hence, the question we raise here is that whether stability in the prices of cereals can stabilize prices of bread and other prepared foods, in Addis Ababa.

Bread and other prepared foods are expected to be purchased for consumption by a majority of the people, for which, a small change in price can significantly alter the livelihood of the people, especially the poor. Hence, if livelihood of the poor should be improved through pro-poor policies, more emphasis should be given to price stability of such kinds of commodities. Bread and other prepared foods, according to the report of the Central Statistical Agency (2011), include bread, "enjera" – Teff mixed, "dabo – ambasha", "dabo – sheleto", bread - wheat (bakery), biscuits and others. The major inputs for production of these commodities are cereals. Hence, as breads and other prepared foods and cereals markets are expected to be interrelated, policies enacted for stabilizing prices of cereals may intend to be reflected in the prices of bread and other prepared foods. In other words, if there is efficient market integration, prices of bread and other prepared foods can be stabilized through stability of prices in cereals market.

OBJECTIVES OF THE STUDY

The major objective of the study was to establish the extent to which cereals market is efficiently coordinated with market of bread and other prepared food. More specifically ,the study was undertaken;

1. To assess the extent of the short-term and long-term association between the prices of cereals and bread and other prepared foods, in Addis Ababa.
2. To indicate the type of causality existing between prices of these products
3. To examine the efficiency of the market through analysis of symmetry/asymmetry of price transmission between these markets.

METHODOLOGY

This study was conducted making use of secondary data extracted from the Central Statistical Agency. The data are time series having 188 observations of monthly recorded price series of cereals and bread and other prepared foods, in Addis Ababa, for the period from September, 1996 to April, 2012. The data were analyzed using descriptive and quantitative (time series econometric) approaches. The descriptive analysis deals with the comparison of trend of price movements for the two categories of commodities. This involves graphical presentation of the price series and comparison of price variations using the F-statistic and coefficient of variation. With regard to the time series econometric approach, co-integration tests and a Vector Error Correction Model (VECM) were used which intend to show how markets of cereals and bread and other prepared foods are integrated. Generally, the time series econometric approach involves the following steps:

i) Test of stationarity of the two price series using an Augmented Dickey Fuller test
ii) Test of co-integration of the two price series using Johansen and Juselius' (1990) approach
iii) Analysis of the manner of causality between the two price series
iv) Analysis of symmetry/asymmetry of price transmission between the two markets

MODEL SPECIFICATION

TEST OF STETIONARITY (UNIT ROOT)

It is often *expected* that price levels exhibit non-stationary covariance, which may lead to autocorrelation problems in the price response functions. This may result in spurious regression when we estimate the relationship between the price series. Hence, the unit root test was undertaken to know if the monthly market prices are stationary or not, using an Augmented Dickey Fuller test. This is done to pretest each variable and to determine its order of integration (Verbeek, 2004).

If we express the two prices (cereals' price and bread and other prepared foods' price) as an autoregressive process of order one as:

$P_t^C = \alpha + \beta P_{t-1}^C + \varepsilon_t$ and $P_t^B = \rho + \theta P_{t-1}^B + v_t$ .... (1)

Where

P_t^C is price of cereals

P_t^B is price of bread and other prepared foods

α, β, ρ, and θ are constants

ε_t and v_t are error terms

The Augmented Dickey-Fuller test involves regressing the first difference of these price series on own lagged values and testing for stationary or non-stationarity.

$$\Delta P_t^C = \delta + \gamma P_{t-1}^C + \sum_{t-1}^{t} \Delta P_{t-1}^C + \varepsilon_t$$

$$\Delta P_t^B = \sigma + \phi P_{t-1}^B + \sum_{t-1}^{t} \Delta P_{t-1}^B + v_t$$

Where: $\gamma = \beta - 1$ and $\phi = \theta - 1$ .... (2)

Based on the above stetionarity test, the following hypotheses were derived as

HO1: Cereals price series have a unit root or are non-stationary

HO2: Bread and other prepared food price series have a unit root or are non-stationary).

If the variables are non-stationary, then the co-integration test will follow.

TEST OF CO-INTEGRATION

In the second step of our econometric approach, we examine the existence of cointegration between the two variables in our VAR system. In simple words, we search for the existence of the number of co-integrated vectors, r, within Johansen and Juselius' (1990) framework. Using their technique, we implement a k-dimensional VAR of the following form:

$$P_t = \mu + \sum_{j=1}^{k} \Pi_i P_{t-1} + e_t. \qquad \text{......................................(3)}$$

Where P_t is a (2 x 1) vector matrix of the cereals and bread and other prepared foods prices, respectively; and e_t are Gaussian residuals. The VAR in Equation 3 can be re-parameterized into a VECM form as:

$$\Delta P_t = c + \Pi P_{t-1} + \sum_{j=1}^{k-1} B_j \Delta P_{t-j} + \varepsilon_t \qquad \text{.......................... (4)}$$

Where ∏ is a (2x2) matrix of long-run and adjustment parameters, B_j is a (2x2) matrix of the short-run parameters, $\mathcal{E}_t$ is the vector of residuals and j is the number of lags. Following Johansen's procedure, the co-integration relationship between prices was examined under equation 4, where each price is a function of its own lagged values and the lagged values of the other price series. The trace and maximum eigenvalue statistics are used to determine the rank of ∏ and to reach a conclusion on the number of co-integrating equations, r, in our bivariate VAR system.

ANALYSIS OF DIRECTION OF CAUSALITY

In the third stage of our approach, we have to define the direction of causality between the two variables. Therefore, we implement a complete dynamic Granger–Engle VECM test of the following form (as indicated in Reziti and Panagopoulos, 2008):

$$\Delta P_t^B = \mu_1 + \sum_{i=1}^{n1} \beta_b \Delta P_{t-i}^B + \sum_{i=1}^{n2} \beta_c \Delta P_{t-i}^C + п_1 Z_{t1-1} + e_{t1} \quad \text{..................... (5)}$$

$$\Delta P_t^C = \mu_2 + \sum_{i=1}^{n1} \beta_b \Delta P_{t-i}^B + \sum_{i=1}^{n2} \beta_c \Delta P_{t-i}^C + п_2 Z_{t2-1} + e_{t2} \quad \text{...................... (5')}$$

Where Z_{t1-1} and $п_1 Z_{t2-1}$ are adjustment or error correction terms whereas $п_1$ and $п_2$ are their respective coefficients and the β are short-run coefficients.
Hence, the hypotheses derived from the proposed model specifications were:
(a) $п_1 \neq 0$ and $п_2 \neq 0$ (a feedback long-run relationship between the two variables)
(b) $п_1 = 0$ and $п_2 \neq 0$ (price of bread and other prepared foods causes the price of cereals in the long-run)
(c) $п_1 \neq 0$ and $п_2 = 0$ (price of cereals causes the price of bread and other prepared foods in the long-run)
For testing the three alternative options, a weak exogeneity test is implemented according to Johansen's (1992) methodology.

ANALYSIS OF SYMMETRY/ASYMMETRYOF PRICE TRANSMISSION

In this point, we have already adjudicated on the focal point of causality between the examined variables (assume that the cost of cereals causes the cost of sugar and other prepared foods), and we go to the last step of the estimation for the being of a symmetry price transmission in the examined market with the aid of an asymmetric ECM. In general, as indicated in Minot (2011), the Error Correction Model, including many lags, can be presented as shown by equation 5. That is;

$$\Delta P_t^B = \mu + \sum_{i=1}^{n1} \beta_b \Delta P_{t-i}^B + \sum_{i=1}^{n2} \beta_c \Delta P_{t-i}^C + пZ_{t-1} + e_t \quad \text{....................... (6)}$$

Given the above equation, the procedure of testing for asymmetry price transmission requires the creation of dummy variable from the error correction term, Z_{t-1} for positive and negative adjustments to shocks. Splitting the error correction term into positive and negative components (i.e. positive and negative deviations from the long-term equilibrium as Z_{t-1}^+ and Z_{t-1}^-) makes it possible to test for asymmetric price transmission according to Meyer and Von Cramon –Taubadel, (2004). Hence, the equation of symmetry analysis can be stated as:

$$\Delta P_t^B = \mu + \sum_{i=1}^{n1} \beta_b \Delta P_{t-i}^B + \sum_{i=1}^{n2} \beta_c \Delta P_{t-i}^C + п^+ Z_{t-1}^+ + п^- Z_{t-1}^- + e_t \quad \text{........... (7)}$$

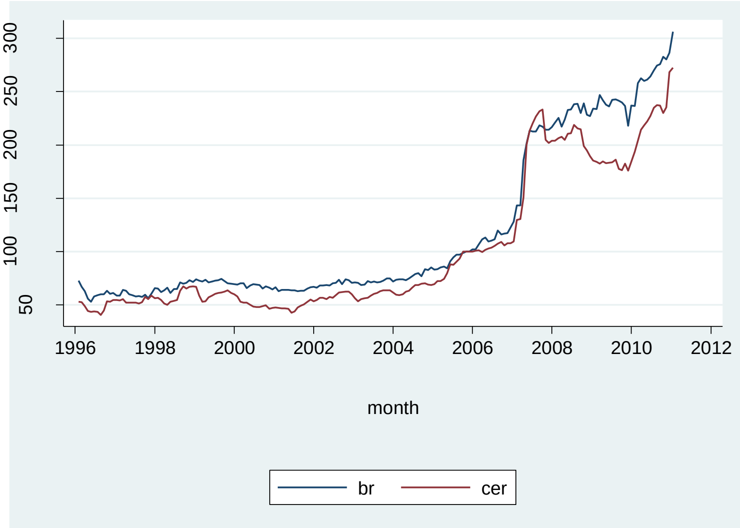
Where Z_{t-1}^+ measures the movement towards equilibrium by the price of bread and other prepared foods when there is a positive shock to cereals price (or an increase in cereals price) and Z_{t-1}^- measures the movement towards equilibrium by the price of bread and other prepared foods when there is a negative shock to cereals price (or a decrease in cereals price).
The null hypothesis in the test for asymmetry is that the response by price of bread and other prepared foods is the same whether the shock or the deviation is positive or negative in cereals price i.e. the coefficients of Z_{t-1}^+ and Z_{t-1}^- are not statistically different from each other. Symmetric price transmission is rejected if $п^+$ and$п^-$ are significantly different from one another, which can be evaluated using an F-test. A Joint F-test is used to determine the symmetry or asymmetry of the price transmission process at a 0.05, 0.01 or 0.1 level of significance (Acquah and Onumah, 2010). In general, the test for the null and alternative hypothesis can be written as:
a) Ho: $п^+ = п^-$ (i.e. price transmission is symmetric)
b) Ha: $п^+ \neq п^-$ (i.e. price transmission is asymmetric)

RESULTS AND DISCUSSION

DESCRIPTIVE ANALYSIS

As an insight to our point of interest, this descriptive analysis tries to show how the prices of bread and other prepared foods and cereals are associated using visual presentation. In addition, in this section, comparative analysis of variation of the two price series is reported. The trends of prices of cereals and bread and other prepared foods is presented using figure 1. Generally, the visual presentation of figure 1 indicates that there is a strong association between the prices of bread and other prepared foods and cereals, for the period between 1996 and 2012. As indicated by the figure, the price series shows an almost similar trend of movements.

FIGURE 1: TRENDS OF PRICE OF CEREALS AND PRICE OF BREAD AND OTHER PREPARED FOODS



However, the figure indicates that the price of bread and other prepared foods relatively shows smother trend of continuous rise, whereas the price of cereals has relatively more ups and downs. It is common to see seasonal increase and fall of agricultural products. As cereals are primary products of the agricultural sector, we usually observe fall in their price during the wet season (when the weather condition is favorable); and a rise in their price during dry season (when the weather condition is unfavorable). But this may not be the case for processed products like bread and other prepared foods.

The figure shows that for a rise in the price of cereals, the price of bread and other prepared foods also rises almost in all cases. But this is not necessarily true when the price of cereals falls. For instance, for the period between 2000 and 2002, the price of cereals shows a slight decrease where; at the same period, the price of bread and other prepared foods does not show any tendency to fall. Between 2002 and 2008 when the price of cereals rises continuously, so does the price of bread and other prepared foods. Between 2008 and 2010, by the time the government provides subsidies of provision of grains with lower price for households in Addis Ababa, the price of cereals has shown a significant fall; but at the same period, the price of bread and other prepared foods does not show such a fall. This may somehow diagnose the presence of asymmetry in price transmission.

As additional information, comparative analysis of the overall trends of the variation in the two price series was made using the F-statistics and Coefficient of variation. The estimation result of the F-statistics and Coefficient of variations is presented using table 1. Table 1 shows that the standard deviations of price of bread and other prepared foods and that of cereals are 74.12 and 65.65 whereas standard errors of the two price series are 5.41 and 4.79, respectively. As indicated in the table, the value of the F-statistic is 1.2748 which is greater than the tabulated value (1.26), implying that we should reject the null hypothesis that the extents of variations of the two price series are the same, at the 5 % level of significance.

TABLE 1: VARIANCE RATIO TEST AND COEFFICIENT OF VARIATION OF THE TWO PRICE SERIES

Variables	Observations	Standard Error	Standard Deviation
Price of bread and other prepared foods	188	5.405939	74.1225
Price of cereals	188	4.787927	65.64874
Combined	376	3.631327	70.41405
f = 1.2748 CV_{br} = 0.63 Degree of freedom = 187, 187	CV_{cer} = 0.65		

Source: own computation, 2014

As indicate in the table the coefficients of variation of the two price series are 0.65 and 0.63 for cereals and bread and other prepared foods, respectively. This indicates that, given the difference in the variations in the two price series as shown by the F-statistics, the value of the coefficients of variation show that the price of cereals is relatively highly variable than that of bread and other prepared foods. This may imply that price of bread and other prepared foods changes (show variation) mostly for upward movements in the price of cereals; and it seems to remain unchanged (or shows little change) for downward movements in the price of cereals. This may also be another sign of the presence of asymmetry in price transmission. Whatever the case may be, in order to be sure, this will be dealt briefly using our quantitative analysis, in the following session.

TIME SERIES ECONOMETRIC ANALYSIS

As suggested in the methodology section, the following tests includes four major steps such as test of stationarity, test of co-integration, test of direction of causality and test of symmetry/asymmetry of transmission between the two price series.

TEST OF STATIONARITY (UNIT ROOT TEST)

Here, the study was carried out to recognize whether the stated variables have unit roots or not and to find out their co-integration. In this case ,price of bread and other prepared foods was found to be stationary in level (see Table 2). On the other hand,even if the price of cereals was found to be non-stationary in level, it was found that stationary in the first difference. MacKinnon approximates p-values of Z (t) of the price of bread and other prepared foods and price of cereals are 0.9982 and 0.9849, respectively.

TABLE 2: AUGMENTED DICKEY FULLER TEST FOR UNIT ROOT OF PRICES OF BREAD AND OTHER PREPARD FOODS AND CEREALS

Commodities	Bread and other prepared foods	Cereals
Intercept	-0.0610553 (0.7533127)	0.390208 (0.8107799)
Price in level	0.010097* (0.0057866)	0.0035443 (0.007087)
P-value	0.083	0.618
L	3	4
First diff of price	0.0111053 (0.0774733)	0.3459581*** (0.0758849)
P-value	0.886	0.000
MacKinnon approximate p-value for Z(t)	0.9982	0.9849

Source: Own computation, 2014

The respective P-values of the prices in level are 0.083 and 0.618, respectively. This shows that price of bread is stationary in level, at the 10 % level of significance, whereas the price of cereals is non-stationary in level. The P - value of the lagged prices of cereals was found to be 0.000 implying that it is integrated of order one, at the 1 % level of significance. The overall implication of the stationarity test is that there is the possibility of a long - run relationship (co-integration) between the two price series, in their first difference.

TEST OF CO-INTEGRATION BETWEEN THE TWO PRICE SERIES

So as to test for co-integration, the study must first specify how many lags to include. According to Nielsen, (2001) the methods implemented in lag-order selection statistics for VARs and VECMs can be used to determine the lag order for integration. Consequently, the lag-order selection statistics (*LR, FPE,* AIC, HQIC and SBIC) were computed. All these statistics show the same result that four lags should be used in the estimation of the co-integration equation (see appendix 3).

Once the number of lags has been determined, the Johansen and Juselius' (1990) framework was implemented to determine the number of co-integrating equations. The estimation result is presented in table 3. This estimation was carried out to determine the rank of the co-integration matrix. As indicated in the table, we reject the hypothesis that there is no integration between the price of bread and other prepared foods and price of cereals (i.e. r = 0). Because both the trace and the max statistics are greater than their respective 5% critical values when r = 0. That is, 27.9555 > 15.41 and 25.4321> 14.07. But, we don't have any evidence to reject the hypothesis that the number of co-integrating equations are not more than one since both the statistical values are less than their respective 5% critical values when r ≤ 1 (i.e. 2.5235< 3.76 for both). Hence, we can ensure that there is one co-integrating equation between the two price series.

TABLE 3: RESULT OF JOHANSEN' TESTS FOR CO-INTEGRATION OF THE PRICE SERIES

Rank	Eigenvalue	Trace		Max	
		Statistics	5% critical value	Statistics	5% critical value
r = 0	------	27.9555	15.41	25.4321	14.07
r ≤ 1	0.12909	2.5235*	3.76	2.5235*	3.76
r ≤ 2	0.01362	-----------	---------	--------	--------
Number of obs = 184 Lags = 4					

Source: own computation, 2014

ANALYSIS OF THE DIRECTION OF CAUSALITY BETWEEN THE TWO PRICE SERIES

Regarding to the direction of causality , the finding ascertains that there is co-integration between the price of cereals and the Price of bread and other prepared foods. The test was analyzed using Engel Granger - Vector Error Correction Model to identify which price causes the other (see Table 4). We can see also that the coefficients of the adjustment parameters have the correct signs implying that there is a rapid adjustment towards equilibrium. The negative sign of coefficient of the adjustment parameter for bread and other prepared foods indicates, when price of bread and other prepared foods is higher or far away from the equilibrium, it has to fall towards the equilibrium over time. On the other hand, the positive sign of coefficient of the adjustment parameter for price of cereals shows that when the price of bread is higher, price of cereals should also increase in order to keep the equilibrium.

Table 4 shows that, in our estimation of the VECM, there are two types of parameters of interest; including the adjustment and the short-run coefficients. The adjustment parameter on price of bread and other prepared foods (i.e. $adjustment_b$) has a coefficient of -0.0536712 and P-value of 0.047 implying that it is significant at 5% level of significance. Similarly, the adjustment parameter on price of cereals (i.e. $adjustment_c$) has coefficient of 0.0800781 and P-value of 0.004, implying that it is significant at the 1% level of significance. This indicates that we have two directions of causality. In other words, price of cereals causes the price of bread and other prepared foods at 5% level of significance; and price of bread and other prepared foods causes the price of cereals at 1% level of significance.

TABLE 4: RESULT OF ESTIMASSION OF VECM

Dependent variables	Independent variables	Coefficient	Standard error	P-value
ΔPbread	$adjustment_b$	-.0536712	.0270183	0.047
	$\Delta Pbead_{t-1}$	-.0555175	.0868105	0.522
	$\Delta Pbread_{t-2}$	.0324904	.0959266	0.735
	$\Delta Pbread_{t-3}$	-.1053331	.0969207	0.277
	$\Delta Pcereal_{t-1}$	.1685079	.0832081	0.043
	$\Delta Pcereal_{t-2}$	.1655613	.0938607	0.078
	$\Delta Pcereal_{t-3}$	-.0647687	.0800592	0.419
	$Constant_b$	.8899076	.4237824	0.036
ΔPcereal	$adjustment_c$	.0800781	.0275673	0.004
	$\Delta Pbead_{t-1}$	.430545	.0885747	0.000
	$\Delta Pbread_{t-2}$	.1779711	.0978761	0.069
	$\Delta Pbread_{t-3}$	.1232005	.0988904	0.213
	$\Delta Pcereal_{t-1}$	.1634589	.0848991	0.054
	$\Delta Pcereal_{t-2}$	-.0821261	.0957682	0.391
	$\Delta Pcereal_{t-3}$	.1382783	.0816863	0.090
	$Constant_c$	.5964483	.4323947	0.168
No. of obs = 184 R-sq chi2 P>chi2 Pbread 0.1780 38.12231 0.0000 Pcereal 0.3276 85.75719 0.0000				

Source: own computation, 2014

Estimates of the short-run parameters also witness the direction of causality. In this regard, as indicated in table 4, the first and the second lag differences of price of cereals ($\Delta Pcereal_{t-1}$ $\Delta Pcereal_{t-2}$) on price of bread and other prepared foods, have coefficients of 0.1685079 and 0.1655613 with P-values of 0.043 and 0.078, respectively. This shows that short-run effects of change in price of cereals on price of bread and other prepared foods are significant, at 5% and 10% levels of significance. Similarly, coefficients of the first and the second lag differences of price of bread and other prepared foods are 0.430545 and 0.1779711 with P-values of 0.000 and 0.069; implying that they are significant at 1% and 5% level of significance.

According to the result, comparatively, the significance of both coefficients of the adjustment parameters and the short-run parameters indicates that, relatively, price of bread and other prepared foods affects the price of cereals at a higher rate than that of the effect of price of cereals on price of bread and other prepared foods. This implies that sellers of cereals are relatively much responsive for the change in price of processers' products (bread and other prepared foods) than the responsiveness of the processors for the change in the price of cereals. In other words, the market is relatively, much led by processers of bread and other prepared foods than sellers of cereals. This has its own implication on symmetry/asymmetry of price transmission or efficiency of the market. This is dealt in brief in the next section.

ANALYSIS OF SYMMETRY/ASYMMETRY OF PRICE TRANISMISSION BETWEEN THE TWO PRICES

This part deals with analysis of efficiency of the market in terms of symmetry/asymmetry of price transmission between the two categories of products. This analysis was undertaken in such a way that adjustment parameters of our estimation result of the VECM were decomposed into positive and negative adjustments; thereby test of equality of variation of the adjustment parameters was carried out using F-statistic.

In the preceding sessions, it was indicated that there are two ways of directional of causality between the two price series. Accordingly, adjustment parameter of each case was decomposed to make the test of the F-statistic. Table 5 shows the estimation result of the variance ratio test of positive and negative adjustments for bread and other prepared foods. This shows the long-run effect of change in the price of cereals on the price of bread and other prepared foods, when price of cereals causes price of bread and other prepared foods.

In this case, existence of symmetry price transmission refers to the situation that the magnitude of the effect of increase in the price of cereals (on the price of bread and other prepared foods) is equal to that of the fall in price of cereals. If this happens, the market is said to be efficient. But, in most developing countries, where market infrastructures are not well developed, this situation hardly exists. Rather, it is expected that sellers of the final product (bread and other prepared foods) are more responsive to the increase in price of major inputs (cereals) than the fall in price of cereals. This is what we meant by asymmetric price transmission. The empirical result of this analysis also reveals that there exists asymmetry in price transmission between the two price series, as shown in table 5.

TABLE 5: VARIANCE RATIO TEST OF POSITIVE AND NEGATIVE ADJUSTMENTS FOR BREAD AND OTHER PREPARED FOODS

Variables	Observations	Standard Error	Standard Deviation
Positive adjustments	155	0.1487147	1.851483
Negative adjustments	29	0.1471106	0.7922149
Combined	184	0.1453679	1.971866
F = 5.4620CVp = 1.05			
Degree of freedom = 145, 28 CVn = 0.95			

Source: own computation, 2014

Table 5 presents estimation result of the test of symmetry/asymmetric price transmission. In the table, it is shown that standard deviation and standard errors of the positive adjustments are 1.851483 and 0.1487147, respectively, with 155 observations; whereas that of the negative adjustments are 0.7922149 and 0.1471106, respectively, having 29 observations. The hypothesis to the test of the F-statistic is that the ratio of the two standard deviations is equal to one, given their respective number of observations. The result of the estimation of the F-statistic was found to be 5.4620. This result of the F-statistic is much higher than that of the value (i.e. F = 2.17) above which we reject the null hypothesis at the 1% level of significance. Therefore, we reject the null hypothesis that the ratio of the standard deviations is unitary; implying that there is an asymmetric price transmission.

In this case, the result shows that, coefficients of variation of positive adjustment (CVp) and negative adjustment (CVn) are 1.05 and 0.95, respectively; where the variation of positive adjustment is higher than that of negative adjustment. The implication is that producers of bread and other prepared foods are much responsive and reactive to increase in price of cereals (inputs) than the fall in price of cereals. This indicates that the market of cereals and bread and other prepared foods (between sellers of cereals and processers) is inefficiently integrated.

The other case is when the price of bread and other prepared foods causes the price of cereals. Table 6 indicates a variance ratio test of positive and negative adjustments for cereals. This shows the effect of change in the price of bread and other prepared foods on price of cereals. As indicated in the table, standard deviation and standard errors of the positive adjustments are 3.296223 and 0.2868993, respectively, with 132 observations; whereas that of the negative adjustments is 2.032846 and 0.281905, respectively, having 52 observations. In this case, the result of estimation of the F-statistic was found to be 2.6292. This result of the F-statistic is higher than that of the value (i.e. F = 1.73) above which we reject the null hypothesis at the 1% level of significance. Therefore, we again reject the null hypothesis that the ratio of the standard deviations is unitary; implying that there is an asymmetric price transmission.

TABLE 6: VARIANCE RATIO TEST OF POSITIVE AND NEGATIVE ADJUSTMENTS FOR CEREALS

Variables	Observations	Standard Error	Standard Deviation
Positive adjustments	132	0.2868993	3.296223
Negative adjustments	52	0.281905	2.032846
Combined	184	0.2545031	3.452248
F = 2.6292		CVp = 1.42	
Degree of freedom = 131, 51		CVn = 1.35	

Source: own computation, 2014

As indicated in table 6, coefficient of variation for positive adjustments (i.e. 1.42) is higher than that of the negative adjustments (i.e. 1.35). This also reveals that sellers of cereals are much responsive to an increase in the price of bread and other prepared foods than a decrease in the price of bread and other prepared foods. Therefore, in both cases, the findings of this investigation shows that the market between cereals and bread and other prepared foods is not efficiently integrated; implying that price stability in the cereals market may not have anything to do with the price of bread and other prepared foods.

CONCLUSION

In Ethiopia, recent statistical reports show that higher rate of food inflation is a common phenomenon which intends to adversely affect the livelihood of especially the majority poor group. Bread and other prepared foods are among the commodities experiencing the continuous rise of prices even if the magnitude is relatively lower compared to other commodities. As bread and other prepared foods are expected to be purchased by a majority of the people, instability or a continuous rise of their prices can significantly affect the living conditions of specially the poor households.

In cognizant of the adverse impact of the food inflation on the livelihood of especially the poor, the government is taking different measures. These measures usually focus on stability of prices of grains (such as cereals). If there is efficient market co-ordination, price stability in the grains/cereals market is expected to stabilize prices of processed products such as bread and other prepared foods. Taking this into consideration, this study was undertaken to figure out whether the market for cereals and bread and other prepared foods are efficiently coordinated there by price stability in cereals market can also stabilize prices of bread and other prepared foods, in Addis Ababa. To this end, both descriptive and time series quantitative analyses were carried out.

The Result of the descriptive analysis shows that price series of these commodities is moving together showing the possibility of co-integration between prices of these two categories of commodities, as indicated by the graphical presentation. However, the graphical presentation also indicates that there seems to be a great association between prices of these commodities for the rising segment of price of cereals than that of the fall in the price of cereals. Test of equality of variation between the two price series, using F-statistic and coefficients of variation, also indicates that the variation in the price of cereals is significantly higher than that in the price of bread and other prepared foods. Given this, we may suspect that much of the variation in the price of bread and other prepared foods are brought about for the rising segment of price of cereals than for the fall in prices of cereals.

In order to confirm this precisely, time series quantitative analysis was undertaken using a test of co-integration and VECM. The result of the quantitative analysis shows that there is co-integration between the two price series, as indicated by Johansen's and Juselius test of co-integration. Given this, the VECM indicates that there is a simultaneous causality between the two prices, implying that price of cereals cause price of bread and other prepared foods as well as the price of bread and other prepared foods causes the price of cereals.

Taking this into consideration, test of symmetry/asymmetry price transmission was carried out in both cases (when the price of cereal cause prices of bread and other prepared foods, and when the price of bread and other prepared foods causes the price of cereals) decomposing adjustment parameters of our VECM into positive and negative. Result of test of the F-statistic and coefficients of variation, for both cases, reveals that there is asymmetric price transmission between the two categories of commodities. In other words, the quantitative analysis confirms that markets of the two categories of commodities are not efficiently coordinated.

The implication of this study is that processors of bread and other prepared foods much react to a rise in the price of cereals than for a fall in the price of cereals, in Addis Ababa. The same holds true for sellers of cereals for the change in the price of bread and other prepared foods. Therefore, we can conclude that efforts which are being made to stabilize price grains in general and prices of cereals in particular may not stabilize prices of processed commodities such as bread and other prepared foods. In fact, it is common to observe the continuous rise in price of processed commodities even when there is a seasonal fall in price of agricultural products; due to the absence of efficient vertical coordination in the market. Thus, price stability measures targeted on certain types of commodities should accompany with mechanisms to coordinate the markets if there should be stability in the prices of all food items.

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APPENDICES

Appendix 1: Estimation result of the test for determination of number of lags for bread and other prepared foods before the test of stationarity

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 Selection-order criteria
 Sample:  5 - 188                            Number of obs      =      184
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lag	LL	LR	df	p	FPE	AIC	HQIC	SBIC
0	-1053.79				5581.65	11.4651	11.4722	11.4826
1	-571.901	963.78	1	0.000	29.9696	6.23806	6.25222	6.273*
2	-571.899	.00495	1	0.944	30.2964	6.2489	6.27015	6.30132
3	-567.966	7.8662*	1	0.005	29.3458*	6.21702*	6.24535*	6.28691
4	-567.945	.04102	1	0.839	29.6601	6.22767	6.26308	6.31503

APPENDIX 2: ESTIMATION RESULT OF THE TEST FOR DETERMINATION OF NUMBER OF LAGS FOR PRICE OF CEREALS BEFORE THE TEST OF STATIONARITY

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 Selection-order criteria
 Sample:  5 - 188                            Number of obs      =      184
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lag	LL	LR	df	p	FPE	AIC	HQIC	SBIC
0	-1031.25				4368.93	11.2202	11.2272	11.2376
1	-597.432	867.64	1	0.000	39.5547	6.51556	6.52973	6.55051
2	-586.205	22.454	1	0.000	35.3934	6.4044	6.42565*	6.45682*
3	-586.146	.11763	1	0.732	35.7575	6.41463	6.44296	6.48452
4	-583.612	5.0681*	1	0.024	35.1664*	6.39796*	6.43337	6.48532

APPENDIX 3: ESTIMATION RESULT OF THE TEST FOR DETERMINATION OF NUMBER OF LAGS BEFORE THE CO-INTEGRATION TEST BETWEEN THE PRICE SERIES

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Selection-order criteria
Sample: 5 - 188 Number of obs = 184

lag	LL	LR	df	p	FPE	AIC	HQIC	SBIC
0	-1765.77				758489	19.2148	19.229	19.2498
1	-1141.96	1247.6	4	0.000	899.692	12.4778	12.5203	12.5826
2	-1107.39	69.127	4	0.000	645.394	12.1456	12.2164*	12.3203*
3	-1105.14	4.5017	4	0.342	657.812	12.1646	12.2637	12.4092
4	-1095.68	18.92*	4	0.001	619.958*	12.1052*	12.2327	12.4198

APPENDIX 4: ESTIMATION RESULT OF TEST OF STABILITY OF THE VECM USING EIGENVALUE STABILITY CONDITION (IN TABULAR PRESENTATION)

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. vecstable, graph
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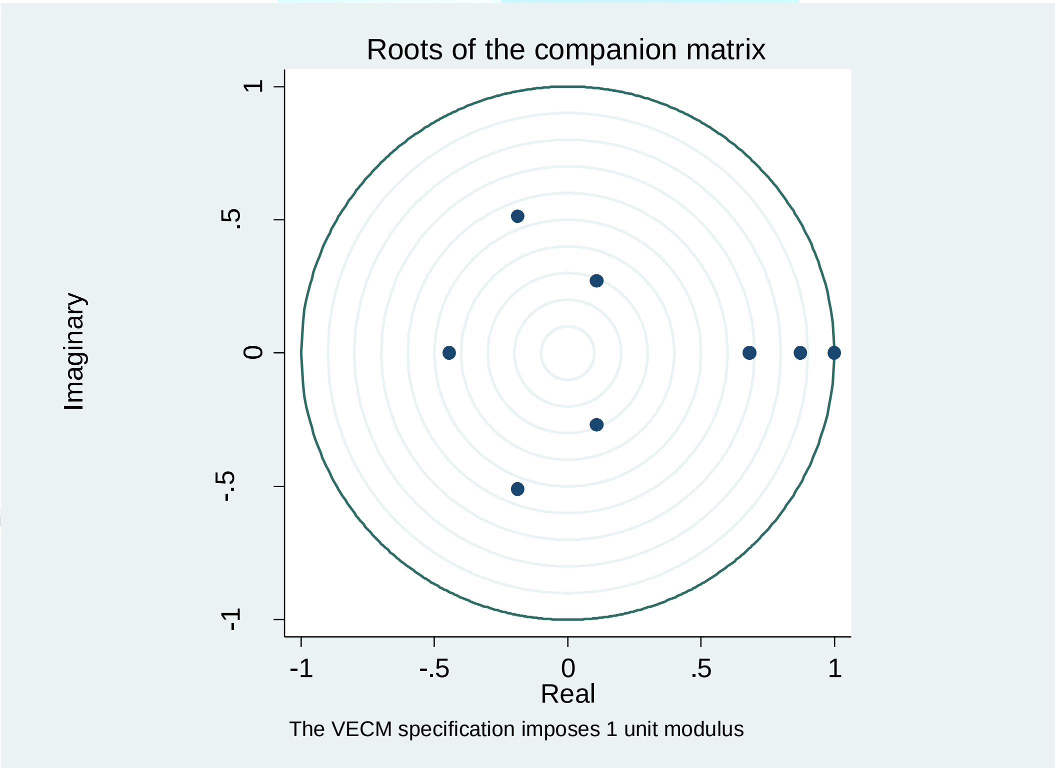
Eigenvalue stability condition

Eigenvalue	Modulus
1	1
.8723794	.872379
.68167	.68167
-.1871302 + .5108432*i*	.544039
-.1871302 - .5108432*i*	.544039
-.4429789	.442979
.1080103 + .2698145*i*	.290631
.1080103 - .2698145*i*	.290631

The VECM specification imposes a unit modulus.

APPENDIX 5: TEST OF STABILITY OF THE VECM IN GRAPHICAL PRESENTATION



SERVICE MARKETING INNOVATION: A PARADIGM SHIFT (A CASE STUDY OF INDIAN BANKING SYSTEM)

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ABSTRACT

India is considered among the top economies in the world, with tremendous potential for its banking sector to flourish. The last decade witnessed a significant upsurge in transactions through ATMs, as well as internet and mobile banking. Financial Institutions are entering in the new business areas due to many mergers and acquisitions taking place in this sector. They are offering more diverse services now in a bid to retain the existing customers. The business organizations are looking at ways and means to streamline their business and to cut down the processing charges. On the other hand customers are looking online access to avail faster and more efficient ways of doing business. The Commercial Banks in India are the highly trusted organizations for customers. They have very successfully adopted many changes in their functioning. Now, there is a high degree of competition among the banks, especially after globalization and entry of more Private and Foreign banks. But the banks will have to adopt a full-fledged marketing strategy to ensure customer satisfaction for its survival and growth. Marketing scope prevailing in banking sector is being considered under the service marketing framework in this new business approach. The transition from one phase to another has largely been influenced by the dynamics of three critical factors – the players, the playing fields and the regulator. This paper examines and measures the quality of services provided by the Commercial Banks in India. Now the expectation of the customers is very high and the commercial banks in India will also have to adopt the service marketing concepts in their day to day working for their survival and growth.

KEYWORDS

Globalisation, liberalization, banking perceptiveness, service marketing, demographic, intense competition.

INTRODUCTION

SERVICE MARKETING

The Service industry forms a backbone of Social and Economic development of a region. It has emerged as the largest and fastest growing sectors in the world economy, making higher contribution to the global output and employment. Its growth has been higher than that of Agriculture and Manufacturing sectors. It is a large and most dynamic part of Indian Economy both in terms of employment potential and contribution to National Income.

It covers a wide range of activities, such as trading, transportation and communication, financial, real-estate and business services as well as community, social and personal services. The various sectors that combine together to constitute service industry in India are:

- Trade
- Hotels and Restaurants
- Railways
- Other Transport & Storage
- Communication (Post, Telecom)
- Banking
- Insurance
- Dwellings, Real Estate
- Business Services
- Public Administration; Defence
- Personal Services
- Community Services
- Other Services

Banks in India have traditionally offered mass banking products. In the past banks in India were having little to do besides accepting deposits at rates fixed by the Central Bank and to lend money on the basis of a formula and rates stipulated by RBI. Prime Lending Rate was the benchmark for interest on the lending products. But PLR itself was, more often than not, dictated by RBI. Further, remittance products were limited to issuance of drafts, telegraphic transfers, bankers' cheques and internal transfer of funds.

REVIEW OF LITERATURE

The concept of Service Marketing in the Banking Sector has been the subject of many studies and research endeavors among the scholars throughout the world. Some of the relevant studies are being presented here.

Ghani et. Al. (2011) concluded that that the contribution of services to total growth is higher than industry's contribution. In poor countries, services and industry have contributed more to growth than in rich countries.

Ejaz Ghani (2010), Economic Advisor, South Asia Region, World Bank expressed that the globalization of services provides alternative opportunities for developing countries to find niches, beyond manufacturing. As the services produced and traded across the world expand with globalization, the possibilities for all countries to develop based on their competitive advantage expand Patnaik.U.C. et.al (2006) assessed the marketing efforts of the State Bank of India. He concluded that though the bank has taken up some measures to improve the quality of its employees and customer service at branches but its pricing are willing under competition without any regard to costs and it is yet to give due emphasis to its promotional measures.

Shankar (2004) concluded that focus on customer is not to be viewed as just a business strategy but should become the corporate mission. The challenge for banks is in the areas of people changing their beliefs and attitudes, technology and competition.

Shanti Sarup. K. (2004) found that for delivering quality service, it is imperative to have customer orientation as a culture in the bank. Customer orientation builds long term relationships resulting in customer satisfaction and cash flows to the banks.

Mukherjee *et al* (2003), presented the development of a theoretical framework for measuring the efficiency of banking services, taking into account physical and human resources, service quality and performance. Expenditures on quality improvement efforts and the impact of service quality on financial outcomes have long intrigued researchers.

Gadkari (1977) examined the critical success factors and stressed that excellence in customer service and high level of customer satisfaction will remain elusive goals even with the induction of the state of the art technology and competitive pricing of products if the employees at the grass root level are not committed to these goals.

Given this background, it is interesting to evolve the concept of Service Marketing more vigorously for the customers of Indian Banking Sector. In quest of an answer, the present study is undertaken to fill the gap.

NEED FOR STUDY
The important factors that establish the need for Service Marketing in Indian Banks are detailed below:
- Intense Competition
- Changes in Banking Sector
- Well Informed Customers
- No Brand Loyalty
- Improved Customer Retention

OBJECTIVE OF THE STUDY
The main objectives of this study are:
1. To analyze the present position of Service Marketing in Public Sector and Private Sector banks in India.
2. To examine the operational features of banks in India.
3. To examine the quality elements in the working of banks in India.
4. To offer suggestions on implementation of Service Marketing Approach in Indian Banking Sector.

RESEARCH METHODOLOGY
- Sample Design: The universe of the study is Indian Banking Industry. The Indian Banking Industry has been divided into three major bank groups i.e. Public Sector Banks, Private Sector Banks and Foreign Sector Banks.
- Survey of Concerning literature
- The Experience Survey of 150 Bank Customers from Public, Private and Foreign Sector Banks in the State Capital Region of Ranchi.
- Sampling Unit: Customers from different age groups, gender, locations, income levels, families and educational backgrounds.
- Sampling Method: Convenience Sampling.
- Nature of Data: Primary as well as secondary data were collected from respondents and from journals, internet sites and from previous research related to the service in banking sector.
- Method of data collection: Personal interview with respondents.
- Type of questionnaire: Structured questionnaire with suitable scaling.
- Type of questions: Open ended, close ended, Likert scale and multiple choice questions.
- Pre-testing of questionnaire: It was done among selected respondents on judgment basis and corrections were made in the questionnaire, wherever required.
- Percentage, weighted average and graphs.

RESULT AND DISCUSSION
Part 1: The research into "the concept of Service Marketing in Indian Banking Industry' has been done in two parts as explained in the Research Methodology Section. The first part of empirical study had included the existing perception of service marketing concept explained by some of the management gurus which is very important for the organizations, staff, the customers and nation as a whole and its implication on the overall business of the banks in India.

IMPORTANCE OF SERVICE SECTOR IN INDIA
Also known as the tertiary sector, the development of a country's services sector is an indicator of its economic development. India's services sector is a vital component of its economy, as it presently accounts for around 60 per cent of its gross domestic product (GDP). It has matured considerably during the last few years and has been globally recognised for its high growth and development.

The growth in the services sector in India is expected to be around 5.6 per cent in FY 15 owing, particularly, to the growth in the IT sector. The services sector in India comprises a wide range of activities, including trading, transportation, communication, financial, real estate and business services, and community, social and personal services.

CONCEPT OF SERVICE MARKETING
A service is an activity or benefit that one can offer to another that is essentially intangible and does not result in the ownership of anything. This attribute of service is referred to by Mr. Philip Kotler, well known authority on marketing. Another management guru Mr.Shostack has elaborated the intangible character of services. He states that services are those separately identifiable, essentially intangible activities which provide want satisfaction and are not essentially tied to the sale of a product or another service. Mr. Bessom proposed that for the consumer services are activities offered for sale that provide valuable benefits or satisfactions. The concepts on 'services' by the various authorities mentioned above have the following implications.
- Services are by a large activities or they are services of activation rather things.
- As a result services are intangible.
- They take place in the interaction between the customer and service provider which means that services are produced and consumed simultaneously.
- Customer has a role to play in the production process as the services are provided in response to the problems of customers as solution.

IMPLICATIONS OF SERVICE CHARACTERISTICS
The special characteristics of services like intangibility, indivisibility, heterogeneity and ownership have led to a wider dimension of marketing than the normal 4 Ps of marketing services. Now the marketing should be looked into 7 Ps viz. Product, Price, Place, Promotion, People, Physical evidence and process of service delivery system. The service Characteristics, Implications and Marketing Strategy can be correrelated as mentioned in the undernoted table:

Service Characteristics	Implications	Marketing Strategy
1. Intangibility	Difficult to judge quality and value in advance sampling is difficult. Relativley difficult to promote.	Use brand names. Focus on benefits. Use personalized service. Develop reputation.
2. Inseparability	Involves presence of performer/producer-sale is direct. Limited sale of operations.	Learn to work in larger groupts. Work faster. Train more service performers.
3. Hetrogeneity	Standardization of quality is difficult.	Careful selection and training of personnel. Define behaviour norms. Machanie and automate. Maximum possible operation.
4. Perishability	Cannot be stored. Demand fluctuation poses a problem.	Advisable to match between supply and demand by a price reduction season wise.
5. Ownership	Customer has access to service but no ownership of facility or activity.	Impress advantages of non-ownership such as Easier Payment Service.

STEPS IN SERVICE PLANNING

The task begins at the corporate level with a statement of objectives. This statement leads into a detailed market and competitive analysis, addressing each of the markets in which the firm is involved or thinking of entering. Paralleling this step is a resource allocation analysis, requiring definition and appraisal of the firm's resources and how they are being allocated, as well as identification of additional resources that might reasonably be obtained. This pair of steps can be thought of collectively as a form of SWOT analysis, identifying strengths, weaknesses, opportunities and threats on both the marketing and operational / human resources fronts. Each leads to a statement of assets. The undernoted figure outlines the key steps involved in planning and creating services, emphasizing the need for managers to relate market opportunities to deployment of their firm's resources: physical, technological and human.

IMPLEMENTATION OF SERVICE MARKETING IN INDIAN BANKS

The Foreign Sector Banks and Private Sector Banks have already incorporated the concept of Service Marketing in their working. Thanks to competition from these banks, Public Sector Banks have also started to effect some visible changes in their day to day working. The concept of service marketing includes new products, placement, price and promotion in their business development plan; they have taken a 360 Degree turn. Public Sector Banks are sharpening their products and services while reasserting their strengths to cater to younger, savvier customers. From swank waiting rooms to glitzy lobbies and better service, they're pulling out all stops to attract customers. And they are conveying this through aggressive advertising. Some examples are quoted below :

State Bank of India has not let up its pace ever since it first ventured into aggressive advertising with its "Surprisingly SBI" campaign in 2005. Now, they are advertising their heritage by stating that it served some of India's best known personalities – among them Rabinder Nath Tagore and Dr. Rajendra Prasad – in their time. "The Banker to every Indian".

Another PSU Bank IDBI has been running the second round of its highly noticed 'Not just for the big boys' ad campaign featuring little boys and elephants. It has tried to establish itself as a bank not just for the big corporate but also for the SMEs and retail businesses.

Since 2005, a number of PSU Banks have gone in for revamps ranging from identity and image makeovers to an expansion of services. S.B.I, Corporation Bank, Bank of Baroda, Allahabad Bank, Union Bank, Canara Bank and OBC, to name a few.

MARKETING APPROACH TO BANKING SERVICES

Marketing of banking services is a device to maintain commercial viability and an approach to market the services profitably. It is a method to energize orientation. It is a managerial approach to excel competition. The marketing approach in bank services consists of the following elements :-

- To identify the financial requirements of the customers.
- To develop appropriate banking products and services to meet the requirements of the customer.
- To determine the fair and competitive prices for the products/services developed.
- Advertisement of the products and services to the existing and potential customers
- To set up suitable distribution channels and bank branches.
- Continuous focus on forecasting and research of future market needs.

In the wake of electronic banking the perception of bank marketing requires a new vision. The marketing of banking services relates to giving right direction to banks visa-a-vis multidimensional benefits to the different segments using the services of banks. The quality of services has undergone a major change due to the use of sophisticated technologies by the banking organizations. The holistic concept of management has made marketing of banking services a device to establish a balance between the commercial and social consideration often considered to be a balance between two opposite wings.

SERVICE MARKETING AND NEW DEVELOPMENTS IN INDIAN BANKING SECTOR

- Specific identification of Marketing Personnel and the desire to pick up MBAs through campus placements.
- Staff, especially at front end retained to deal with customer needs quickly, efficiently and pleasantly.
- Computerisation and Air-conditioning of branches.
- Simplification of systems and services to make transactions faster. This enabled quicker disbursement of loans, for example. Long queues, complex paperwork, multiple visits to the bank are the things of the past.
- Uniform look and feel at branches. Something MNC Banks introduced.
- Launch of new products and services.
- Online banking, multiple ATM services beyond cash withdrawals, online payment by instant debit to your internet banking account. Also, online transactions such as insurance premiums, mobile bills, ticket bookings, credit card payments and shopping etc.
- Focused customer acquisition and retention. SBI has a three-pronged strategy – customer retention in metros, customer acquisition and retention in smaller cities and towns and customer acquisition in rural India.
- Product personalization through cross selling. For instance, loans against insurance or insurance linked deposit schemes.
- Proactive sales with trained personnel approaching customers either on phone or when they visit the branch.
- Greater variety of loan products – retail, automobile, housing, SME and trade loans.
- Introduction of Single-window banking.
- Easy, even proactive availability of information on products and services through on the ground executives and literature at branches.

Part 2 : Primary Data : Personal Interview of 150 customers from Public Private, and Foreign Sector Banks in the National Capital Region of Delhi

ANALYSIS AND FINDINGS

TABLE 1: SAMPLE DESCRIPTION

Demographics	% (Respondents)
AGE	
Less than 30	20
Less than 35	18
36-40	15
41-45	32
Above 45	15
GENDER	
Male	58
Female	42
QUALIFICATION	
Metric	8
HSC	10
Graduation	32
Post Graduation	28
Professional	22
OCCUPATION	
Student	12
Government Employees	18
Private Employees	16
Business/Trade	14
Professional	10
Housewife/ (Part time-jobs)	13
Agriculture	12
Others	5
FAMILY NATURE	
Joint	38
Nuclear	62
Location	
Urban	60
Semi-urban	24
Rural	6
MARITAL STATUS	
Single	31
Married	69
FAMILY STRUCTURE	
Bachelor	24
Newly Married Without children	22
Married with Dependent children	24
Married with Independent Children	16
Married with No children	8
Others	6

TABLE 2: NATURE OF COMPETITION IN THE BANKING INDUSTRY

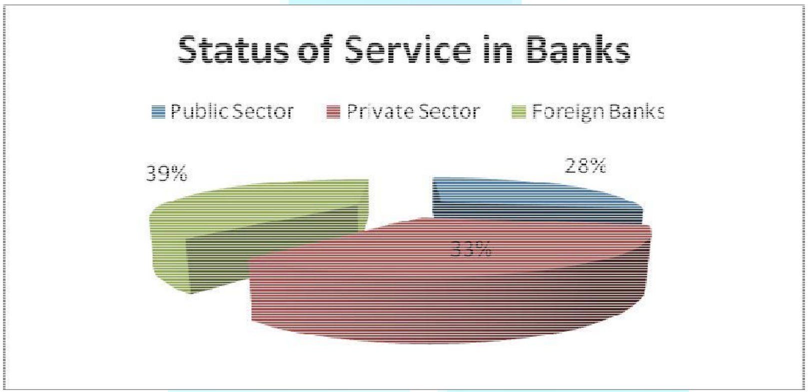
Indicator	Pre-1991	Post-1991 (Fin. Sector Reforms)
Customer Service	Governed by Committee Reports & Law.	Consciously practiced as a way of banking.
Customer Feedback	Based on regulator's guideline/complaints/suggestions.	Willingly being practiced.
Product Innovation	Minor variations of vanilla products.	New products with Value additios.
Tools	Manual	Technology driven
Delivery Channel	Branch Network	More alternative like ATMs, Phone, banking, Internet banking, mobile banking, DSAs.
Pricing	Price = Cost + Profit	Profit = Price - Cost
Orientation	Inward looking	Outward looking
Status of the customers	Slave to theBank	King : because more banks approaching
Branch ambience	Resembld erstwhile Government offices.	Aims to simulate super-Market buying experience.

FIG. 1: SATISFACTION LEVEL OF THE CUSTOMERS WITH THE BANK SERVICES

Source: Department of Statistics

In the above table, the satisfaction level of the customers has been discussed. We can observe that customers always provide some grade to the level of services they are offered. They keep an objective in their mind and rate accordingly. The internal grading system could be applied within the company or the organisation. We can observe that 42 percent of the respondents have rated the services as Very Good and 14 percent as below the level of good service.

FIG. 2: EXCELLENT STATUS OF SERVICE IN BANKS

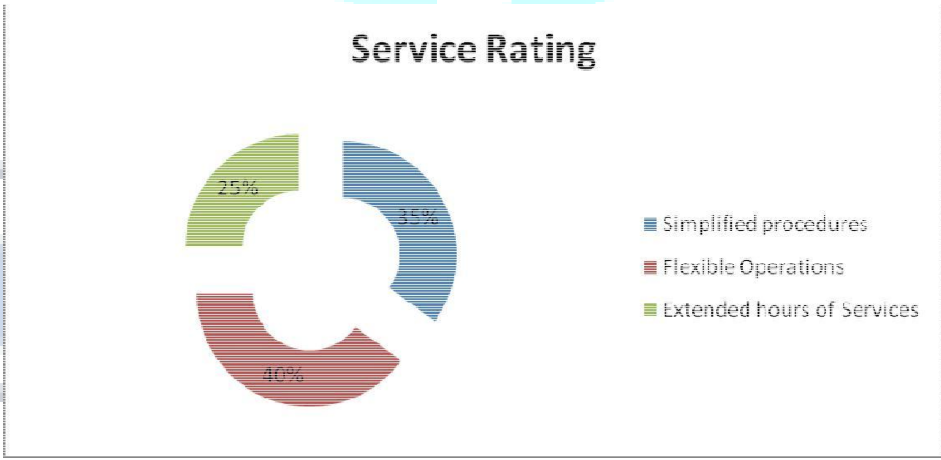


Source: Department of Statistics

Banks are trying to achieve the excellent status. Today, the banks will have to tray their level best to hold the customers with them by providing the best service. Now, the banks are not just the clearing houses, but are the best marketable places too. Foreign Sector banks have realized this fact long ago and they have been providing the best

services as per the requirement of their customers. It can be observed from the above analysis that 39 percent of the surveyed customers have given excellent position to Foreign banks, 33 percent to Private Sector Banks and 28 percent to Public Sector Banks.

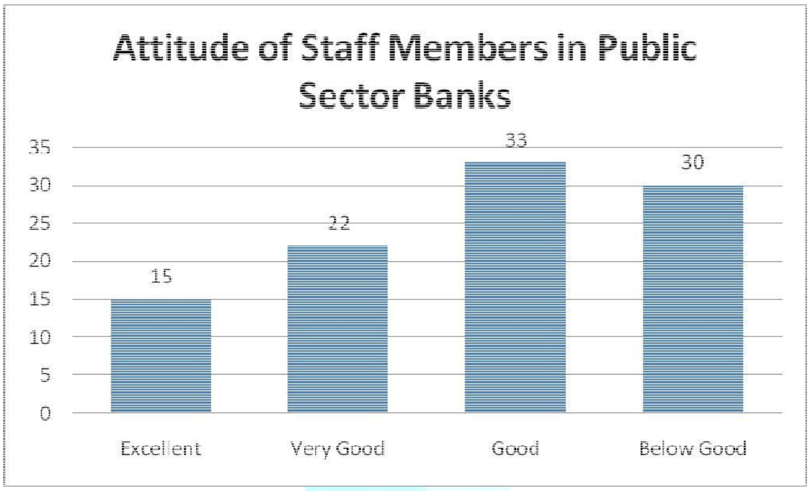
FIG. 3: PREFERENCE OF BANK SERVICE



Source: Department of Statistics

The competitive scenario has made banks to provide customized products and services. Customers have many options today. Banks will have to improve their scores on negative factors. Nowadays, flexibility in operations plays an important role for attracting the interest of bank customers. We can observe from the above table that 40 percent of the surveyed customers want the concept of flexible operations and 35 percent have conveyed that they want the simplified procedures in the banks.

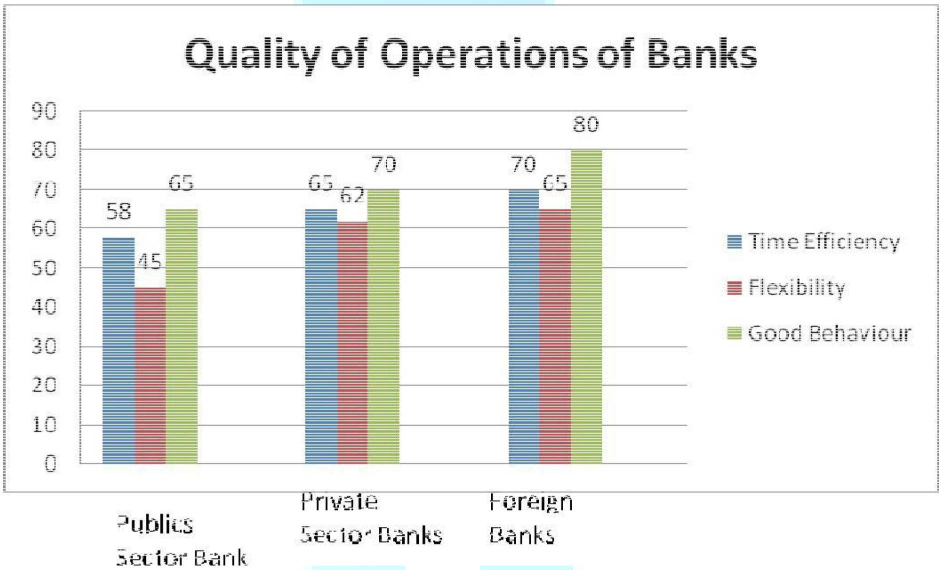
FIG. 4: ATTITUDE OF STAFF MEMBERS IN PUBLIC SECTOR BANKS



Source: Department of Statistics

The responses on the attitude of the staff members have been depicted in this table. It plays an important role in the satisfaction level of the customers. Banks are not only service providers but also solution providers to the customers. Employees are required to have maximum awareness in this regard. Excellent report has been given by 15% of the respondents. Though the Public Sector Banks which used to have a negative impact about the customer service role, but are changing very fast role in determining the quality of operations of banks.

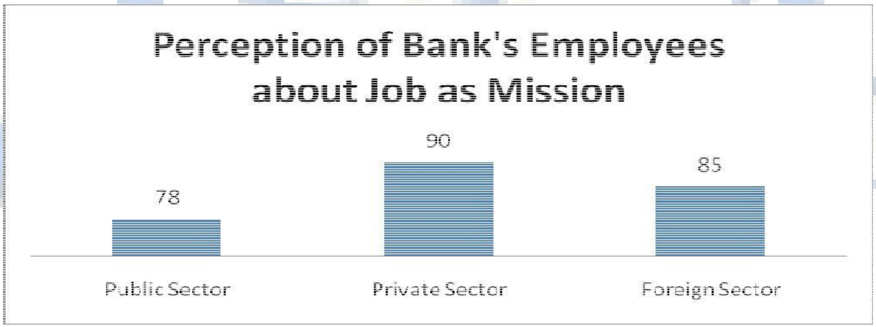
FIG. 5: QUALITY OF OPERATIONS OF PRIVATE BANKS



Source: Department of Statistics

Foreign Sector and Private Sector Banks are more flexible towards the customers. The customers get more attention of the staff there. Though, Public Sector Banks have also improved a lot but they are still trailing behind these Banks. This table shows the level of quality in the operations of Bank Service in India. Banks may fix an internal standard level of quality. The interest of the customers should be taken at the center of scale. The customers want flexibility and good behavior from the bankers. Flexibility plays a very important

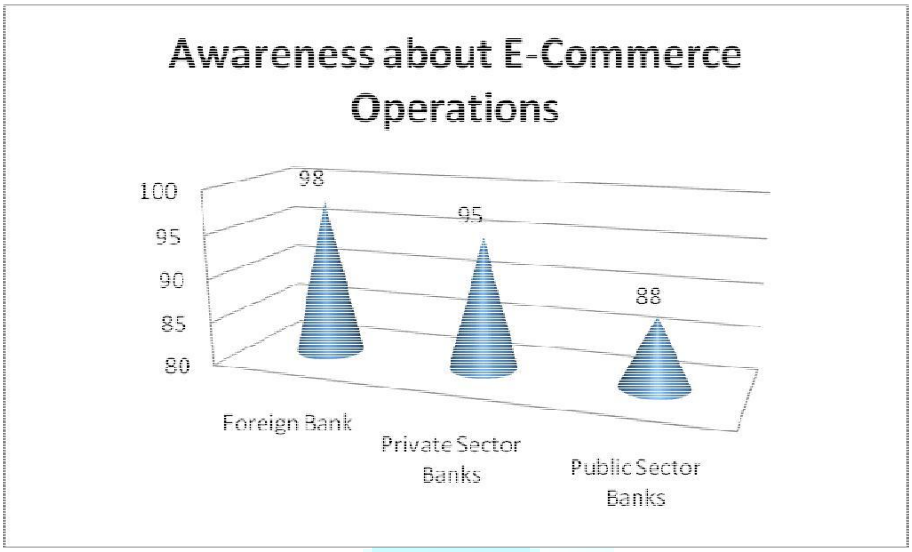
FIG. 6: PERCEPTION OF BANK'S EMPLOYEES ABOUT JOB AS MISSION



Source: Department of Statistics

In today's competitive business environment employees are supposed to take their jobs as a Mission. The casual approach is not going to help them in survival. This is necessary not only for the survival and growth of the organizations but for the employees also. It has been observed from the analysis of data, which is shown in the above table that Private sector employees (90%) consider their job as a Mission. Though, the Public Sector Banks are improving very fast (78%) but still the customers feel that the Foreign Sector and Private Sector Bank are more aware about this aspect of customer service.

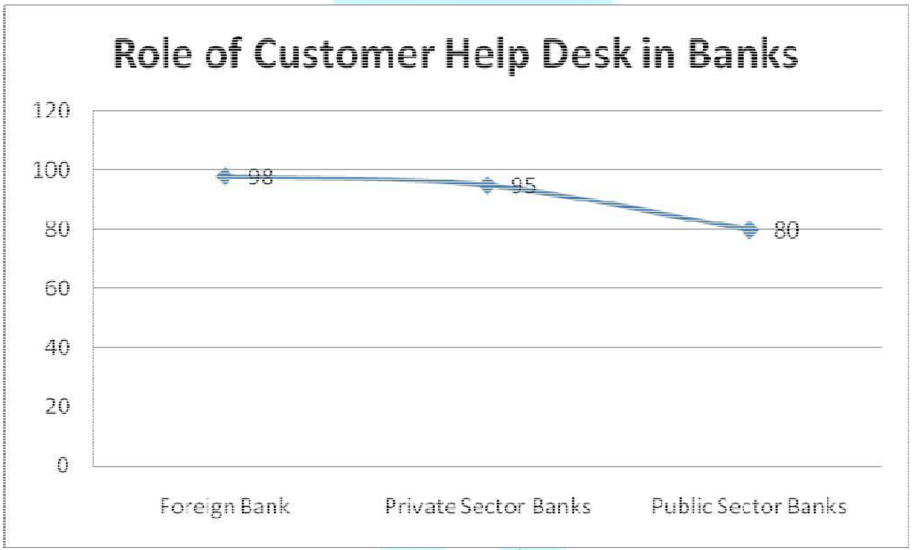
FIG. 7: AWARENESS ABOUT E-COMMERCE OPERATIONS



Source: Department of Statistics

Technology plays a very important role in business today. Banking technology is becoming rich day by day. Banks are trying to adopt these technologies. The changes can be observed easily from the working of the banks in India. E-commerce has taken over the prime place in today's banking business. We can observe that Foreign Banks with 98% score and Private Sector Banks with 95% score are leading in this aspect of service marketing. The Public Sector Banks (88%) have also improved a lot in this category by adopting the latest technology but still more is required.

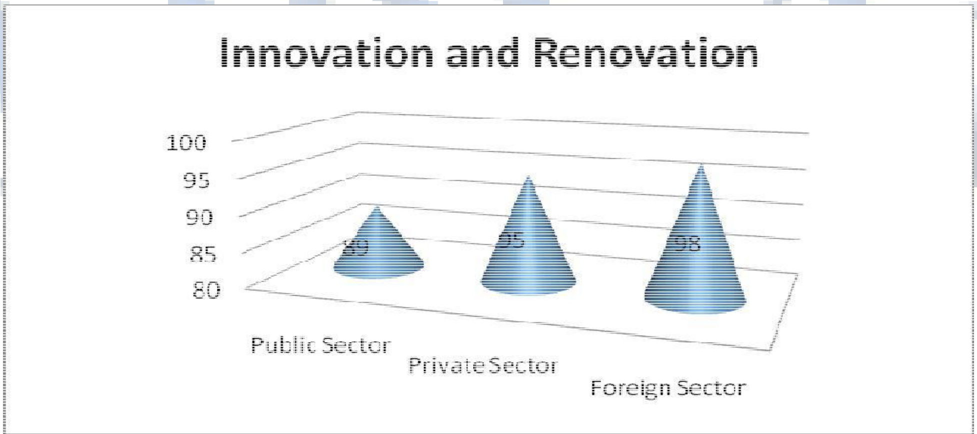
FIG. 8: ROLE OF CUSTOMER HELP DESK IN BANKS



Source: Department of Statistics

The customers expect immediate attention and help from the bank employees. In today©s banking, the role of information desk has become very important. Customers may require some assistance in various transactions, in which help desk should be able to provide promptly with dignity and honour. It can be observed from the above table that Foreign Banks with 98% score are heading the list followed by Private Sector Banks with 95% score. The Public Sector Banks (80%) also have changed their interiors like Foreign & Private Sector Banks and have provided for Customer's Help Desk in each branch.

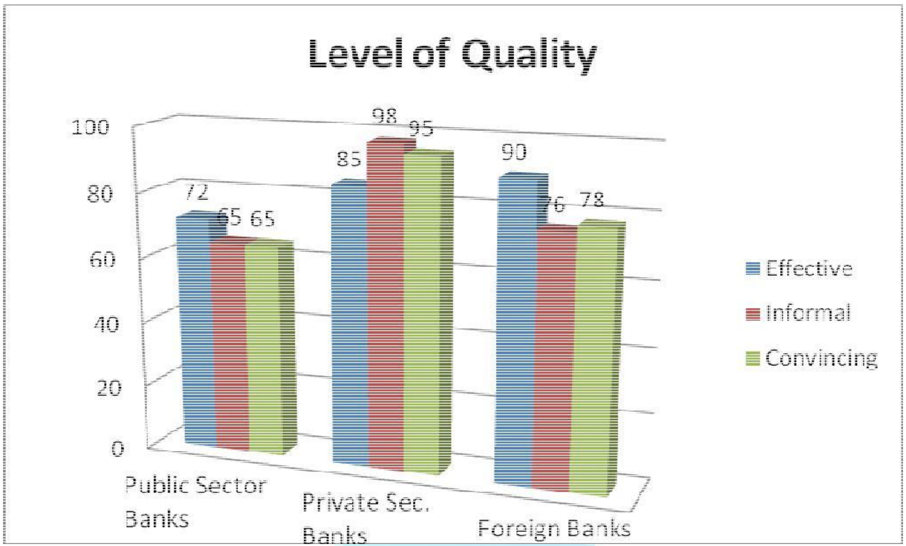
FIG. 9: CONCEPT OF INNOVATION AND RENOVATION IN BANKS



Source: Department of Statistics

Now, innovation and renovation are the keys of success in Service Marketing. Innovation in operations and renovations in the set up is must in today's business scenario. The customers want innovate products and services. The provision of all the financial services under one roof is the concept of modern banking. The banks are adopting different techniques to retain the customers. We can observe from the above table that Foreign Banks (98%) are leading in this aspect also and closely followed by Private Sector Banks (95%). The Public Sector Banks have scored 89% from the surveyed block.

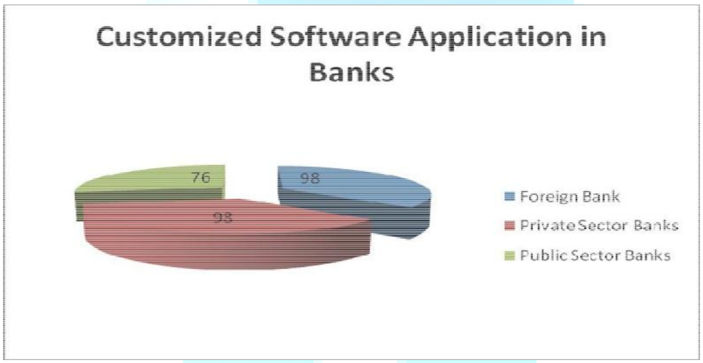
FIG. 10: LEVEL OF QUALITY IN BANK SERVICE



Source: Department of Statistics

Communication system is the effective tool for customer information and persuasion. The Financial Institutions are spending a lot of money on research to enable them to add new features in the customer service. The mood and the tastes of the customers are very important factors for the success of the communication system. From the analysis of the date, we can observe that customers prefer an informal rather than a formal atmosphere/ communication system.

FIG. 11: CUSTOMIZED SOFTWARE APPLICATION IN BANKS



Source: Department of Statistics

Today many advanced customized software are being used by the commercial banks in India. Most of the banks have adopted these to enable them to match with the practice at global level. We can observe from the analysis of the collected data that Foreign Sector Banks with 98% score are leading the table in this aspect also. The Private Sector Banks are also very close with 98% score. The Public Sector Banks with 76% are at the bottom of the table. They will have to use more customized software to compete with the foreign and private sector banks.

FINDINGS AND CONCLUSIONS

These are based on the study conducted under Phase One and two as explained above :

- Foreign Sector Banks have been rated as excellent followed by Private Sector and Public Sector Banks in India.
- Simplified procedure and flexibility are very important features of Service Marketing in Indian Banks.
- Attitude plays a very important role in service marketing organizations.
- Public Sector Banks are also catching up the Foreign Sector and Private Sector Banks as far as the latest technology is concerned.
- The Banks are no more just the clearing houses but have become marketable places now.
- The banks will have to diversify their business. The concept of all financial services under one roof is very essential in today's business environment.
- The competitive scenario has made banks to learn many concepts of Service Marketing but still there is a lot of scope for innovation.
- Help desk plays an important role in customer service and can be used more effectively with the help of latest technology, which is a very good tool of service marketing.
- The Banks should employ the specialized officers for Marketing, Finance and PROs for rendering efficient service. The concept of Campus recruitment be applied more aggressively.
- Innovation is required in every aspect of banking operation.
- The banks will have to use the concepts of service marketing to gain global
- position. The use of customized software in the market is essential in this regard.

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A CASE STUDY OF SAHARA INDIA PARIWAR SCANDAL (WITH REFERENCE TO ETHICAL AND GOVERNANCE ISSUES INVOLVED)

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ABSTRACT
The paper studies the Sahara India Pariwar scam. The two companies of Sahara group naming Sahara Group Companies Sahara India Real Estate Corporation limited (SIRECL) and Sahara Housing Investment Corporation (SHIC) were raising thousands of crores from the public without informing SEBI. The paper discusses how these two companies could raise so much of money without following the prescribed rules and regulations and how did SEBI come to know about the wrongdoings of these two companies. I have also studied what action was taken by Supreme Court in this particular case. Most importantly the paper studies the corporate governance issues in the group which lead to such big scam

KEYWORDS
Sahara Group, SIRECL, SHIC, Corporate Governance.

INTRODUCTION
Sahara India Pariwar which is an Indian conglomerate having its headquarters in Lucknow, India was founded by Subroto Roy in 1968 with a capital of Rs 2000 with one small office having a table and two chairs, one Lambretta scooter and a staff having one clerk and a runner boy. Sahara India Pariwar started its journey with 42 depositors in all and a single establishment but today there are 6.1 crore depositors associated with the group through 1707 establishments all over the nation and Sahara group is now considered as one of the fastest growing business groups in the country. The group has wider interests in Finance, Infrastructure & Housing, Media & Entertainment, Tourism & Hospitality, Consumables, Manufacturing and Services & Trading. The company follows a unique profit sharing pattern which is 35% of profit goes towards Company's Net owned fund, 25% goes towards Social Development activities and 40% is meant for the welfare of Kartavyayogi workers because the company believes in collective sharing and caring.

WHAT ACTUALLY HAPPENED?
In 2010, two Sahara Group Companies Sahara India Real Estate Corporation (SIREC) SIRECL which was originally incorporated as public limited company under the Companies Act named Sahara India "C" 3 Junxion Corporation Limited on 28.10.2005 and its name was changed name to SIRECL on 7.3.2008 and Sahara Housing Investment Corporation (SHIC) were raising funds by issuing unsecured OFCDs by way of private placement without giving any advertisement to general public. The amount which was raised by issue of unsecured through private placement was 25,781.37 crore .It is unfortunate and shocking to hear that both of these companies were raising thousands of crores from the public but SEBI was not fully aware of why they were doing so or what they were doing with the collected money. Before going for such an issue the company is expected to file a request with SEBI, get it approved and then start the collection of public money. However, it wasn't the case with these two companies of Sahara.
It was a sudden incident, when Mr. Abraham who was the Director of SEBI until July 2011 was reviewing the Draft Red Herring Prospectus (DRHP) to raise equity for real estate company Sahara Prime City Ltd through an initial public offering (IPO) through which he came to know that these two companies were raising huge amounts of money from the public through optionally fully convertible debentures. Then SEBI started finding out what actually was cooking in Sahara India.

TIMELINE OF EVENTS
- **On January 4, 2010:** A note written in Hindi was sent to National Housing Bank by Roshan Lal, a resident of Indore, in which he requested the bank to look into the housing bonds issued by two companies naming Sahara India Real Estate Corporation and Sahara Housing Investment Corporation which the companies of Sahara India. Being a chartered accountant, he wrote in the note that the bonds issued by these two companies to large number of investors were not issued according to the rules. As the National Housing Bank did not have the authority to investigate the allegation, so the letter was forwarded to regulator of capital markets i.e Securities and Exchange Board of India, or Sebi.
- **November 24, 2010:** The promoters and directors of two Sahara group companies naming Sahara India Real Estate Corporation and Sahara Housing Investment Corporation were restricted by SEBI from raising any capital through the issue of securities: either equity shares, convertible debentures or any other securities.
- **December 13, 2010:** Sahara India challenged the order of SEBI before the Lucknow bench of the Allahabad High Court where SEBI was ordered not to take action until an order would be passed by the court.
- **4 January 2011:** SEBI filed a petition in Supreme Court to stop two firms from raising the capital from investors but it was rejected. But SC empowered SEBI to ask for information from Sahara and issue advertisements to inform investors that the issue is under investigation.
- **7 January 2011**: A public notice was issued by SEBI on OFCDs
- **10 January 2011:** SEBI published an advertisement warning the investors that it will not be able to redress the grievances of the investors on OFCDs. Sahara India Real Estate sends a legal notice to Sebi.
- **18 January 2011:** The Reserve Bank of India also warned the investors against putting money in Sahara group companies' deposits and cautioned citizens to verify the name of the company before investing in it. RBI also warned that it does not guarantee the repayment of deposits accepted by SIFCL or any other company in that group.
- **7 April 2011:** Allahabad High Court vacated the stay and wherein Sahara decided to move to. Supreme Court. Sahara Group filed a petition in the Supreme Court for challenging the order of Allahabad High Court, and the court asked Sahara to give full details of investors who participated in its fundraising exercise with SEBI. Sahara also accused SEBI of defaming it.
- **May 2011:** SEBI was directed by Supreme Court to SC to proceed with its investigation into financial instruments used by two Sahara group companies to raise money from the public.
- **23 June 2011:** The two Sahara companies - Sahara India Real Estate Corp and Sahara Housing Investment Corporation were directed SEBI to refund Rs 24,000 crore to investors.
- **15 July 2011:** Later Sahara appealed in Supreme Court saying that SEBI has no jurisdiction. SC directed Sahara to approach SAT against SEBI's order on OFCDs

- **18 Oct 2011:** SEBI's order against Sahara entities was upheld by SAT.
- **4 November 2011:** Sahara moved to Supreme Court against SAT order.
- **9 January 2012:** SAT order was stayed by Supreme Court directing two companies to refund around Rs 17,400 crore to their investors and asked the two companies to give the details of their assets and liabilities.
- **January 2012:** Sahara group companies were given three weeks' by supreme court to either choose between two courses to secure the investments made by the public in the OFCD scheme where it asked the companies to either give sufficient bank guarantee or attach properties worth the amount for which a review petition was filed by Sahara.
- **May 2012**: Supreme court is informed by Senior counsel Fali Nariman (appearing for Sahara India Real Estate Corp) informed supreme court that since there was no complaint from any investor, SEBI could not have taken up this issue of Sahara Group of companies raising funds through OFCD.
- **June 2012**: Supreme Court was informed by SEBI that real estate division of Sahara India Pariwar without complying with the norms of Market regulator had no right to mobilise Rs.27,000 crore from investors through optionally fully convertible debentures i.e OFCD .
- **August 2012**: Sahara India Real Estate Corporation Ltd. (SIRECL) and the Sahara Housing Investment Corporation Ltd. (SHICL) were directed by Supreme Court to refund over Rs. 24,400 crore
- **5 October 2012:** For the seeking the review of verdict given by supreme court on 31 august where Sahara was directed to return to investors Rs.17,400 crore with 15 percent interest that it had mopped up through Optionally Fully Convertible Debentures (OFCDs) in 2008 and 2009 the Sahara group moved the Supreme Court.
- **19 October:** A petition was filed by SEBI with Supreme Court for non compliance by Sahara.
- **27 November:** Sahara moved to SAT against SEBI for non acceptance of documents.
- **29 November**: SAT rejected the plea.
- **30 November:** Sahara appealed supreme court for SAT's order
- **31 November:** SAT order was upheld by Supreme Court.
- **December 5, 2012:** The Sahara Group got a temporary reprieve from the SC. The Supreme Sahara group was asked by the apex court to refund Rs 24,000 crore to its three crore investors in nine weeks time. The Supreme Court asked market regulator SEBI to accept their pay order of Rs.5,120 crore as part payment of the investors' money they had collected through optionally fully-convertible debentures (OFCD) and rest of the remaining amount would be deposited in two instalments. The court told that Sahara sum of Rs.10, 000 crore would be deposited by Sahara in the first week of January next year and the balance amount in the first week of February.
- **8 January 2013:** Sahara missed the repayment deadline which was set up by SC. The company failed to deposit the second instalment amount with market regulator. It was required to submit Rs 10,000 crore by January first week. The Supreme Court also dismissed the Sahara group's plea for a review of its verdict directing two Sahara firms to refund around Rs 24,000 crore to their investors with 15 per cent interest.
- **6 February 2013:** An order was issued by SEBI for attaching the bank accounts and other properties of the group after companies failed to pay remaining two instalments and later summons were issued for personal appearance of Sahara chief Subroto Roy and other three directors before it.
- **6 March 2013:** Sahara approached special appellate tribunal against SEBI move to attach properties. SEBI sort for the arrest of the Sahara Chief Subroto Roy. SEBI also said that most of records provided by Sahara were untraceable, implying several accounts were fictitious.
- **12 March:** SAT denies interim relief to Subroto Roy.
- **July 2013:** SEBI filed a contempt petition against Sahara in SC. Says Company flouting SC direction to make refund.
- **November 2013:** Subroto Roy was barred by Supreme Court from leaving country.
- **April 2013:** The Lucknow bench of the Allahabad High Court sort a response from Sahara India and its chairman Subroto Roy on a PIL filed by them against SEBI for denigrating them. Sahara Chief Subroto Roy however responded to this and said that his group had repaid Rs 20,000 crore to its investors and it was the market regulator which was delaying repayments. He also added that the Securities and Exchange Board of India (SEBI) should refund the balance Rs 5,000 crore already deposited with it to remaining investors.
- **October 2013:** The Supreme Court directed the Sahara Group to give SEBI the original title deeds of its assets worth Rs.20,000 crore as a guarantee towards the payment of investors money.
- **February 26 2014:** A non-bailable warrant was issued by the supreme court against Sahara group chief Subroto Roy for failing to appear before it in person as directed at the last hearing of the court. Roy was also given the time till March 4 to comply with the court's order. On the warrant of Supreme Court the Uttar Pradesh police arrested him on 28 February 2014, in a dispute with Market Regulator - SEBI.
- **March 2014:** On Mar 25, a fresh proposal was submitted by the Sahara to the supreme court in which it offered to pay group to pay Rs. 20,000 crore in five instalments to SEBI for the refunds to investors. In its previous proposal Sahara said that the company would pay 2,500 crore within three days from the day on which the proposal would be accepted by the apex court and rest in form of three instalments of Rs.3,500 crore each by 30 June, 31 September (an apparent typographical error made by the company) and 31 December, and the remaining amount of Rs.7,000 crore by 31 March of next year. SC said Sahara group Chief Subroto Roy could free himself out of Tihar Jail on bail only after paying Rs 10,000 crore. But Subrata Roy's lawyer on Mar 27, 2014 told the Supreme Court that the amount is very high which is why the company could not deposit the Rs 10,000 crore as surety for bail. This meant that Subroto Roy would have to stay in jail till his next hearing.

LEGAL ASPECTS OF SAHARA-SEBI's CASE

Sahara and SEBI's point of view:

1. *Sahara* claimed that OFCD's which they issued were **hybrids** i.e., neither shares nor debentures i.e OFCD's are neither shares nor debentures but are convertible debentures which doesn't come within the purview of SCR Act as well as SEBI Act.

SEBI's judgment was that although OFCD's are hybrids i.e., neither shares nor debentures but hybrids are securities. OFCD's are debentures by name, nature and description. Definition of debenture under section 2(12) of the Companies Act, 1956 includes 'other securities'. 'Securities' as defined in section 2(45AA) of the Companies Act, 1956 includes hybrids. Therefore hybrids fall within the definition of debentures and provisions of sections 67 and 73 of the Companies Act would apply.

2. *Sahara* India said that as per the the Unlisted Public Companies (Preferential Allotment) Rules 2003 unlisted private companies can make preferential allotment through private placement by passing a special resolution without any restriction on the number as per the section 67(3) of the Companies Act and without requiring listing of such OFCDs on a recognized stock exchange. The company argued that OFCD's were issued only to select persons (in contra distinction to the general public) and therefore, it was not a public issue irrespective of the number.

SEBI's judgment was that even if special resolution was passed for any further issue of capital to person other than shareholders, it can only be subjected to the provisions of Section 67 of the Company Act, that is if the offer is made to fifty persons or more, then it will have to be treated as public issue and not a private placement. In the case of these two companies issue of OFCD's was a public issue and not a private placement as the offer was made to more than 50 persons i.e to more than 3 Crore people through more than 10 Lakhs agents and more than 2900 branches. Moreover documents produced by the company do not show any relationship Sahara Group had with the investors.

3. *Sahara* argued that section 73 of companies act is not mandatary for a company and it applies to only those companies who intend to list itself no company can be forced to get listed on a stock exchange.

But *Supreme Court* made the judgment any issue of securities which is made to more than 49 persons as per Sec 67(3) of the Companies Act, the intention of the companies to get listed does not matter at all and Sec 73 (1) is a mandatory provision of law which companies are required to comply with. Section 73(1) of the Act casts an obligation on every company intending to offer shares or debentures to the public to apply on a stock exchange for listing them. Such companies have no option but to list their securities on a recognized stock exchange since once they invite subscription from over 49 persons the legal obligation of listing follows.

4. The *Sahara* companies contended that they were not listed with any stock exchanges and were not subjected to any rule / regulation / guideline / notification / directions of SEBI. Further, the companies did not intend to get the OFCD's listed on any stock exchange in India and therefore would not fall under sections 55A(a) or 55A(b) of the Companies Act, 1956. Therefore, the issuance of these OFCD's was not to be administered by SEBI but by the Central Government or ROC.

The *Supreme Court* held the judgement that although the intention of the companies was to make the issue of OFCDs look like a private placement, but it become a public issue instead of a private placement when such securities are offered to more than 50 persons. Section 67(3) clearly states that when any security is offered to and subscribed by more than 50 persons it will be deemed to be a Public Offer and therefore SEBI will have jurisdiction in the matter and the issuer will have to comply with the various provisions of the legal framework for a public issue.

CORPORATE GOVERNANCE ISSUES INVOLVED IN THE CASE

1. MONEY LAUNDERING: In 2008, the two companies of Sahara group naming Sahara India Real Estate Corporation Limited (SIRECL) and Sahara Housing Investment Corporation Limited (SHICL) started raising funds by issue of Optionally Fully Convertible Debentures (OFCD's) to 'friends, associates, group companies, workers/employees and other individuals associated/affiliated or connected in any manner with Sahara Group of Companies' by way of private placement, for which these two companies didn't give any advertisement to general public. The OFCD's were of varying tenures - 48 months, 60 months and 120 months. Between April 2008 and April 2011, Rs. 40,000 Crores was collected by both the companies from about 3 Crores of investors through more than 10 Lakhs agents and more than 2900 branches. This was biggest IPO ever in Indian markets as compared to that of Coal India in whose size was about Rs.15,000 Crores and the next biggest public offer subsequently was that of Bharti Infratel of about Rs.4,500 Crores in December 2012. In the form of a "Private Placement" the amount was collected from about 30 million investors without complying with the requirements applicable to the public offerings of securities.

2. ILLEGAL ISSUE OF SHARES: The funds were raised by these two companies through OFCDs after filing RHPs (Red Herring Prospectus) with the Registrar of Companies, although as per the rules they were required to take permission from SEBI as the issue of securities was made to more than 50 investors. 'The securities were issued to more than 3 crore investors without getting it sanctioned from SEBI between 25 April 2008 and 13 April 2011. And neither had they filed their RHP with SEBI.

3. FAKE INVESTORS: Sahara group companies didn't have proper records of the identity of the investors from whom they collected crore of rupees. The two companies, Abraham alleged, intended to rotate money between group companies. Though the OFCD instruments were issued in the name of the two companies, cheques were sought in the name of Sahara India. It was also found by SEBI that out of 20,000 sample depositors to whom SEBI asked for applying the refund of the money which they invested in the two companies, only 68 investors out of so many investors reverted back i.e less than 1%.Moreover no formal record or description of the scheme was found by SEBI.

4. FAKE ADDRESSES: Many of the addresses of the investors which were given to SEBI were fictitious and could not be located. Justification which was given to SEBI by the Sahara group regarding the fake addresses was that the companies' small and poor investors had to change their address frequently due to exigencies of work and poverty. Sahara India Real Estate Corporation Ltd (SIRECL) was asked by the Supreme Court to prove the "genuineness" of all its investors. The list of the names of the investors which was submitted by the two companies had the name 'Kalawati' 5,984 times on the list, similar names appeared against different locations. 'Jaipur, Nagpur, Maharashtra' and Aurangabad Lucknow UP' mentioned as addresses instead of giving the full address Moreover SIRECL gave the list of investors to the Securities and Exchange Board of India (SEBI) in a CD protected with high-level security encryption. It felt that the company was preventing the market watchdog from doing any analysis or sorting of data

5. DUBIOUS ROLE OF REGISTRAR OF COMPANIES: The role of ROC in the entire episode was critical because without raising the basic questions it cleared the proposal. The net worth of both the companies was negligible. Equity capital of SIREC was only Rs 10 lakh and had a negative net worth at the time of issue of securities while the net worth of SHIC was around Rs 10 lakh. Even then both the companies thought of raising Rs 20,000 crore each. Its like applying for a bank loan of Rs 20,000 crore with only Rs 10 lakh as contribution. No bank would accept such a proposal, but unfortunately ROC allowed the Sahara Group companies to raise such a huge amount. Moreover ROC didn't the draft RHP given by two companies to SEBI as it was a public issue and hence violated Circular dated 1.3.1991 issued by the Department of Company Affairs, Government of India.

6. LACK OF TRANSPARENCY: The two companies of Sahara group naming Sahara Housing Investment Corporation (SHIC) & Sahara India Real Estate Corporation (SIREC) had floated OFCDs to raise about ₹24000 crores between March 2008 and September 2009. On 24^{th} November 2010, the two Sahara companies were barred by SEBI from raising money from the public through OFCDs (Optionally Fully Convertible Debentures), as they were raising huge amount without complying with the norms public issue laid down by SEBI. Both the companies didn't follow any measures for investor protection neither they made the necessary disclosures. According to SEBI, it was a lack of transparency on the part of both the companies as these two companies deliberately did not give the information relating to the issues.

7. POLITICAL LINKS OF SUBROTO Roy: It can also be said that Subroto Roy has friends form the political spectrum and he was also close to Mulayam Singh Yadav and his Samajwadi Party. But before Mulayam, there was close to Vir Bahadur Singh, an author-politician from the Congress stable, who was also from Gorakhpur. So his strong contacts may have helped him to commit such a big fraud.

8. INFLATED VALUE OF LAND: on 4 January 2012, Sahara group companies, Sahara India Real Estate Corporation (SIREC) and Sahara Housing Investment Corporation (SHIC), filed an affidavit Supreme Court in which they disclosed market values of some of these real estate assets by saying that they had enough underlying assets to pay back investors. But it was found during investigation that the value of the property purchased was shown from Rs 62 crore to Rs 1,436 crore on its books i.e they showed the inflated value. The Sahara group grossly overvalued some of its real assets in order to show that it could meet its Rs 24,000 crore liabilities.

9. VIOLATION OF GUIDELINES: SEBI found that the two companies of the Sahara group violated DIP Guidelines and the ICDR Regulations as discussed as below:

- Failure to file the draft offer document with SEBI;
- Failure to mention the risk factors and provide the adequate disclosures that is stipulated, to enable the investors to take a well informed decision.
- Denied the exit opportunity to the investors.
- Failure to lock-in the minimum promoters contribution.
- Failure to grade their issue.
- Failure to open and close the issue within the stipulated time limit.
- Failure to obtain the credit rating from the recognized credit rating agency for their instruments.
- Failure to appoint a debenture trustee
- Failure to create a charge on the assets of the company.
- Failure to create debenture redemption reserve, etc."

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