

# SEMCOM

## Management & Technology Review

A Study on Employee Retention Strategies and Its Impact on Employees Job Satisfaction in Selected Textile Units in Gujarat

**Dipal Patel**

An Analytical Study of Equity Share Book Value of Selected Cement Manufacturing Companies

**Subhash Joshi, Bhupendra Patel, Swaty Parab**

The Study of Price Behavior of Gold and Silver in India

**Kamini Shah, Priyanka Kansara**

“Comply or Explain” Approach of Corporate Social Responsibility in India

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# SEMCOM

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## Editorial

Warm Greeting to all Readers!

Once again it's a pleasure to present before you this issue of SMTR. Your valuable contribution is highly acknowledged.

India is passing through a transit where lot of economic reforms and technological interventions are taking place, which are for the healthy development of the nation. This has increased a tremendous scope for academicians to explore research areas. It is the teachers' responsibility to research out future implications of these reforms and make learners aware and prepared for developed India. The matter of pride is that this issue also contains variety of research papers ranging from Finance, Marketing, and HR to Economics, Banking, CSR, E commerce and IT.

A Study on Employee Retention Strategies and its impact on employees' job satisfaction is carried out research in the area of HR in Selected Textile Units of Gujarat. One more study focuses on perception of effectiveness of performance appraisal by employees working at different hierarchical levels in a Paint industry. Finance has always been researchable area at individual company levels as well as national level too. It asks for lot of analysis to be done. The issue presents an analytical study of equity share book value of cement industry, analytical case study of Pre and Post-Merger Performance with reference to a particular company, and presents analysis of risk and return of selected open ended equity mutual funds and evaluates financial health of MahanagarSevaSadan. Indian banking sector is experiencing strenuous operations and expecting positive transformation. Study on banking sector is crucial these days, and that too how rural areas are coping this change. This issue presents a study on problems faced by rural consumers availing banking services in rural areas. Another one is a comparative study on profitability of selected Indian private sector banks. The study of price behavior of gold and silver also discusses the current and relevant issue in the Indian bullion market. There are also few studies on various approaches to corporate social responsibility in India and export performance of India in BRICS Market. Women empowerment is also the burning issues of the country. Government is introducing lot of schemes to encourage woman entrepreneurship. This issue has two studies on institutional support in developing women entrepreneurship and Issues and Challenges with Mission Mangalam, an integrated poverty alleviation approach introduced by government of Gujarat. E –commerce boom pervades all around. The issue offers a research discourse on impact of E-commerce, especially online retail, on small offline businesses. Education is the only solution which will prepare the next generation to address these issues. IT intervention is the only solution. The issue also presents an innovative experiment of flipped classroom using techno-edutainment tools.

I invite academicians, managers, corporate people and industrialists to engage themselves in empirical research on current trends and their future effects. Share your opinions and apprehensions through writing which may further help induce more research deliberations.

Best Wishes....

Nikhil Zaveri



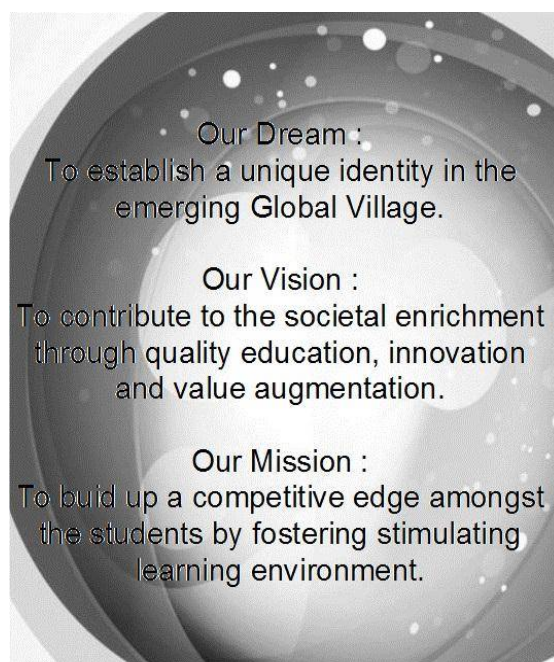
## About SEMCOM

Sardar Gunj Mercantile Cooperative Bank Ltd. (Anand) English Medium College of Commerce and Management (S G M English Medium College of Commerce and Management) popularly known as SEMCOM was established in the year 1997 with the aim/vision to impart quality education to students who desire to graduate in commerce, management and IT. The college has successfully completed 18 years. Its alumni has established themselves in various walks of life across the globe. The college has been established by Charutar Vidya Mandal (CVM), an educational trust with a vision to regenerate society through education. SEMCOM was set up with the generous donation of Rs. 35 lakhs against the total project cost of Rs. 150 lakhs by Sardar Gunj Cooperative Bank Ltd. (Anand) on self- finance basis keeping in mind the changing policy of the government in inviting private institutions to supplement the government's efforts in higher education. The college has an ISO Quality System since 2004, which upgraded to 9001:2008 in September 2009. The college is re-accredited grade "A" by NAAC with a CGPA of 3.01 on 4 point scale. The college, within a short span of time has made its presence felt in India and abroad.

*The college is affiliated to Sardar Patel University, Vallabh Vidyanagar.*

### Objectives / Goals

- ◆ To focus on integral development of students.
- ◆ To offer courses and programs in tune with changing trends in the society as a whole.
- ◆ To update the curriculum as per the need of the business and industry.
- ◆ To create unique identity in the educational world at the national as well as international level.
- ◆ To institutionalize quality in imparting education.
- ◆ To incorporate innovations on a continuous basis in the entire process of education at institutional level.
- ◆ To create platform for the students for exhibiting their talent and for development of their potentials.
- ◆ To generate stimulating learning environment for students as well as teachers.
- ◆ To build cutting edge amongst the students to withstand and grow in the competitive environment at the global level



# A Study on Employee Retention Strategies and Its Impact on Employees Job Satisfaction in Selected Textile Units in Gujarat.

Dipal R. Patel

## Abstract:

In this article I have studied about the various Human Resource (HR) practices that help employee retention and encourage employee commitment in the organization. Now a day's employee retention is one of the important tasks for the organizations due in this competitive world. It is an efficient and creative move forward towards the employee management who are considered to be 'greatest assets' to the company. To manage good talent and employee in the organization it requires a constant balance between the human aspirations and the strategic and financial needs of the business. Employee retention is a technique to maintain an effective workforce and at the same time meet operational requirements. Employee commitment is also very important for maintaining a highly talented and skilled workforce. If organization use and apply HR policies in proper manner in the organization, employee commitment can be improved to better performance, improving employee attitude/morale and reduced employees turnover, which is the goal of the HR practices. For managers, to have a happy passionate workforce will help in achieving individual and organizations performance. But manager's job is not only to hire best employees but also retain them in the organization. Most certainly one cannot retain all the best employees but can definitely reduce loss or reduce turnover. Reducing employee turnover is most significant for organizations and to maintain an ideal staff takes a lot of efforts and resources of the organization. Therefore, every organization must treat their employees as ends and not means to ends because they add value to the organization.

## Objective of the study:

1. To find employees overall satisfaction in the organization with reference to employee retention strategy in selected textile units
2. To study the satisfaction level achieved through facility provided to retain the employed in selected textile units.

## Scope of the study:

A study on human resource retaining problems of Textiles units, for this purposes the human resource retaining problems of selected units, have been examined from 2015. An attempt is made to identify human resource retaining problems of selected Textile Units.

## Research Methodology:

For this study purpose, the sample data is collected from primary sources and questionnaire was used for collecting data. The respondents of the primary data are the employees of the selected Textile units in Gujarat. The primary data were obtained based on demographic distribution and Employee Retention Strategies. Secondary data were also used for this study, relevant data and information has also been collected from Human resource management articles, review, research papers published in various journals or periodicals on the topic of study and information is collected in three parts like on the basis of Retaining Problems second one is on the basis of Textile Industry third one is on the basis of HR Practices.

## Data Analysis and Interpretation

The raw data which was collected with the help of the structured questionnaires was coded in the SPSS statistical software, to convert the raw data into a suitable form. Once the data was transferred into the software the data analysis was initiated. Different data analysis techniques have been used to get the meaningful outcome from the data. The statistical tools used are, descriptive statistics, "t" test, Analysis of Variance (ANOVA), etc. wherever applicable.

## Review of literature:

**Narang U.** analyzed in their article "HRM Practices –It's Impact on Employee Retention" (2013) that retention has been getting attention from academicians, researchers, and practicing HR managers. From this article it has been clearly observed that if employees get proper treatment in terms of working environment, rewards, superior support, and work-life balance than all this will help the workers to give their best to achieve the common goal for the organization.

**Dutta A. B. & Banerjee S.** observed in their research project "Study of Employee Retention" (2014) that retaining an important worker would demand the manager to accumulate the feeling of job security and job satisfaction into the mind of the workers. This helps in developing a way of loyalty and evolves a lot of economical and effective work force operating towards a much better productivity for the organisation, on balance human resource is additionally one in all the foremost valuable assets and which help the organization.

**Marathe S.** has found out in his paper "A Comparative Study of Job Satisfaction and its Impact on Employee Retention Practices in Chemical Industry at, Bharuch District" (2013) that retention is an important issue existing in current market situation that's why receiving attention from academicians, researchers and practicing HR managers. If employees are happy and satisfied with their job they will stick to company and perform



their best but if they are not satisfied with their work they try to leave the job or they cannot give their best.

**Umarji V.** in their article “Labour shortage problems ease partially for Surat textile mills” (2011) mentioned that around 40-odd textiles firms shut shops in Surat due to financial crisis, according to GS of Federation of Surat textile trades association that there is around 14000-15000 workers who lost their employment due to this and in total textiles provide employment to around 1.6 lakh workers.

**Sohail N., Muneer A., Tanveer Y. & Tariq H.** have reported in their work “losing your best talent: employee retention the dilemma of textile industry a case of textile sector” that all the companies of any size is having a problem of retention of their employees because they are leaving job for the better opportunity or for high salary. So from the article it has been observed that this is not the problem which is limited to the country but it is overall problem because these problems are faced in Pakistan.

**Karthikeyan M. & Sivakami P.** have examined in their paper “A study on Absenteeism of employees in selected textile industries in tirupur district of tamilnadu” that management needs to keep positive attitude towards absenteeism, even though it is impossible to get rid of absenteeism completely. The provision of various facilities to decrease absenteeism bound to involve important financial commitment for the management. The major reasons for absenteeism in the organization are the activities and policies of the organization. So absenteeism invisible but proves serious matter for the industry.

**Divya M.S. and Dr. Sreedhara T. N.** observed in their research paper “The relationship between reward system, motivation and job satisfaction and

its impact on employee retention: a study of non-governmental organizations” (2015) that the retention of efficient and talented employees is possible only when an organization implement best HR Practices. And in their article they clearly mentioned and found that assumption of reward and motivation, reward and job satisfaction, motivation and job satisfaction are having a vital relationship and all these concepts contributes to solve the employee retention problem.

**Dr. Pandey N. S. and Kavitha M.** analyzed in their article “job satisfaction of higher secondary school teachers in puducherry: an empirical Analysis” (2015) that higher secondary government school teachers are more satisfied in their relationship with different variables like working experience, salary, educational qualification with job satisfaction. They expect age factor do not conclude positive relationship with job satisfaction and in their article they find out that female teachers were more satisfied than the male teachers in the satisfactory level of working in higher secondary level.

**Pradhan S. A.** observed in his research project “HRD practices in drugs and pharmaceutical industry an indepth study of selected units in Gujarat” (2002) that observed units of pharmaceutical industry need to communicate the policies and practices more clearly to everyone in the organization. Author found that observed organizations had good counseling and feedback practice but there is also a requirement for social interaction of the workers to create a good bridge for communications and understanding each other for better development.

#### Weighted average mean Score

**Table: Mean Score of Satisfaction level on Employee Retention strategies**

Sr. No.	Employee Retention strategies	Highly Dissatisfied	Dissatisfied	Neither Satisfied Nor Dissatisfied	Satisfied	Highly Satisfied	Total Score	Mean Score	Mean Score Rank
	Rank	1	2	3	4	5			
1	Working Condition/ Environment	0	0	99	600	485	1184	4.23	2
2	Salary	0	0	36	236	1045	1317	4.70	1
3	Over time salary	0	32	402	432	110	976	3.49	5
4	Compensation paid to workers during layoffs or during any accident happened within the company	10	42	330	412	180	974	3.48	6
5	Company gives you time to improve the quality	6	36	105	388	620	1155	4.13	3
6	Give Advance to purchase vehicle or any other things	87	280	9	164	45	585	2.09	7
7	Loyalty towards the organization	12	6	75	700	325	1118	3.99	4
	Respondent for different Satisfaction Level	115	396	1056	2932	2810	7309		
	Total Responses							1960	
	Weighted Average Mean							3.73	



From the above table of employee retention strategies, Weighted Average Mean Score has been found that different employee retention strategies scored satisfied and in that Salary got highest mean score, then second one are Working Condition/ Environment, third one is Company gives you time to improve the quality and fourth is Loyalty towards the organization, fifth is Over time salary, sixth one is Compensation paid to workers

during layoffs or during any accident happened within the company and last one is Give Advance to purchase vehicle or any other things and in overall the different employee retention strategies scored satisfied with the Weighted Average Mean Score of 3.73.

**Table: Mean Score of Various Facilities to retain the employees**

Sr. No.	Various Facilities	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Total Score	Mean Score	Mean Score Rank
	Rank	1	2	3	4	5			
1	Company takes employee insurance?	115	226	156	0	0	497	1.78	6
2	Company help in filing tax, if u don't know the procedure or understand about tax	170	126	141	0	0	437	1.56	7
3	Job opportunities for family members	0	68	318	384	220	990	3.54	3
4	Fire Fighting technique is available	0	52	345	440	145	982	3.51	4
5	First Aid box facilities at work area is available	132	170	105	80	40	527	1.88	5
6	Respecting subordinates and co-workers	8	0	201	412	510	1131	4.04	2
7	Team work & co-ordination among co-workers	0	0	144	592	420	1156	4.13	1
	Respondent for different Agree/Disagree Level	425	642	1410	1908	1335	5720		
	Total Responses							1960	
	Weighted Average Mean							2.92	

### Interpretation:

From the above table of Various Facilities to retain the employees, Weighted Average Mean Score has been found that around four different facilities scored more then 3 mean score and they are namely Team work & co-ordination among co-workers, Respecting subordinates and co-workers, Job opportunities for family members and Fire Fighting technique is available and rest of the facilities are scored less than 2 which means they are not agree with that facilities in the industry. Overall

the Various Facilities to retain the employees scored 2.92 Weighted Average Mean Score.

### T-Test

**Table showing perception of employees to various factors based on marital status**

$H_{0b}$ : Marital status difference does not affect the employee retention strategy in textile industry.

$H_{1b}$ : Marital status difference affects the employee retention strategy in textile industry.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Working Condition/ Environment	Equal variances assumed	.505	.478	-.097	278	.922	-.011	.109	-.225	.204
	Equal variances not assumed			-.092	52.346	.927	-.011	.115	-.242	.221
Salary	Equal variances assumed	9.800	.002	-1.826	278	.069	-.167	.091	-.347	.013
	Equal variances not assumed			-1.516	48.395	.136	-.167	.110	-.389	.055

Over time salary	Equal variances assumed	.668	.415	.955	278	<b>.341</b>	.117	.122	-.124	.357
	Equal variances not assumed			1.017	57.656	.314	.117	.115	-.113	.347
Compensation paid to workers during layoffs or during any accident happened within the company	Equal variances assumed	.508	.477	.068	278	<b>.946</b>	.011	.158	-.301	.322
	Equal variances not assumed			.073	57.550	.942	.011	.149	-.287	.309
Company gives you time to improve the quality	Equal variances assumed	.558	.456	.484	278	<b>.629</b>	.082	.170	-.252	.416
	Equal variances not assumed			.516	57.757	.608	.082	.159	-.236	.401
Give Advance to purchase vehicle or any other things	Equal variances assumed	.002	.966	-.257	278	<b>.798</b>	-.047	.185	-.411	.317
	Equal variances not assumed			-.261	55.406	.795	-.047	.182	-.412	.317
Loyalty towards the organization	Equal variances assumed	9.319	.002	-1.900	278	<b>.058</b>	-.277	.146	-.565	.010
	Equal variances not assumed			-1.500	47.210	.140	-.277	.185	-.649	.094

### Interpretation:

From the above Table it has been inferred that marital status difference does not affect the various methods of employee retention such as Working Condition/ Environment, Salary, over time salary, Compensation paid to workers during layoffs or during any accident happened within the company, Company gives you time to improve the quality, Give Advance to purchase vehicle or any other things and loyalty towards the organization. It has been observed that p value is more than 0.05, so null hypothesis cannot be rejected. Hence, marital

status difference does not affect the methods of employee retention in textile industry.

### Table showing perception of employees to various Facilities to retain the employees based on marital status

**H<sub>0e</sub>:** Marital status difference does not affect the **Various Facilities to retain the employees** in textile industry.

**H<sub>1e</sub>:** Marital status difference affects the **Various Facilities to retain the employees** in textile industry.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Company takes employee insurance?	Equal variances assumed	5.799	.017	1.424	278	<b>.155</b>	.178	.125	-.068	.424
	Equal variances not assumed			1.515	57.590	.135	.178	.117	-.057	.413
Company help in filing tax, if u don't know the procedure or understand about tax	Equal variances assumed	1.528	.218	.223	278	<b>.824</b>	.029	.129	-.226	.284
	Equal variances not assumed			.207	51.746	.837	.029	.139	-.251	.309
Job opportunities for family members	Equal variances assumed	.619	.432	.570	278	<b>.569</b>	.087	.152	-.213	.386
	Equal variances not assumed			.535	52.103	.595	.087	.162	-.239	.412

Fire Fighting technique is available	Equal variances assumed	.223	.637	- 1.645	278	<b>.101</b>	-.223	.135	-.489	.044
	Equal variances not assumed			- 1.666	55.190	.101	-.223	.134	-.491	.045
First Aid box facilities at work area is available	Equal variances assumed	3.081	.080	-.503	278	<b>.615</b>	-.091	.180	-.445	.264
	Equal variances not assumed			-.605	65.669	.547	-.091	.150	-.389	.208
Respecting subordinates and co-workers	Equal variances assumed	6.937	.009	-.839	278	<b>.402</b>	-.132	.157	-.441	.177
	Equal variances not assumed			-.657	47.031	.514	-.132	.201	-.535	.272
Team work & co-ordination among co-workers	Equal variances assumed	.572	.450	- 2.338	278	<b>.020</b>	-.265	.113	-.488	-.042
	Equal variances not assumed			- 2.358	55.004	.022	-.265	.112	-.490	-.040

### Interpretation:

From the above Table it has been inferred that marital status difference does not affect the various Facilities to retain the employees in the organization except Team work & co-ordination among co-workers all other facilities such as Company takes employee insurance, Company help in filing tax, if you don't know the procedure or understand about tax, Job opportunities for family members, Job opportunities for family members, Fire Fighting technique is available, First Aid box facilities at work area is available and Respecting subordinates and co-workers. It has been observed that p value is more than 0.05, so null hypothesis cannot be rejected. Hence, marital status difference does not affect the methods of employee retention in textile

industry. And in the case of Team work & co-ordination among co-workers p value is less than 0.05, so null hypothesis can be rejected and that's why marital status difference affects the Team work & co-ordination among co-workers to retain the employees in textile industry.

### Analysis of Variation (Anova) Test

#### Table showing perception of methods of employee retention based on Age Group

**H<sub>0r</sub>:** Age difference does not affect the methods of employee retention in textile industry.

**H<sub>1r</sub>:** Age difference affects the methods of employee retention in textile industry.

Descriptive					ANOVA					
		N	Mean	Std. Deviation		Sum of Squares	df	Mean Square	F	Sig.
Working Condition/ Environment	18 to 25				Between Groups	1.193	4	.298	.719	<b>.580</b>
	26 to 35	149	4.21	.660	Within Groups	114.178	275	.415		(NS)
	36 to 45	18	4.28	.752	Total	115.371	279			
	46 to 55	20	4.25	.639						
	More than 55	3	3.67	.577						
	Total	280	4.23	.643						

Salary	18 to 25	90	4.71	.566	Between Groups	.206	4	.052	.173	<b>.952</b>
	26 to 35	149	4.70	.539	Within Groups	82.190	275	.299		<b>(NS)</b>
	36 to 45	18	4.61	.502	Total	82.396	279			
	46 to 55	20	4.75	.550						
	More than 55	3	4.67	.577						
	Total	280	4.70	.543						
Over time salary	18 to 25	90	3.48	.657	Between Groups	1.762	4	.441	.840	<b>.501</b>
	26 to 35	149	3.47	.776	Within Groups	144.181	275	.524		<b>(NS)</b>
	36 to 45	18	3.72	.752	Total	145.943	279			
	46 to 55	20	3.50	.513						
	More than 55	3	3.00	1.000						
	Total	280	3.49	.723						
Compensation paid to workers during layoffs or during any accident happened within the company	18 to 25	90	3.51	.824	Between Groups	1.922	4	.481	.546	.702
	26 to 35	149	3.43	.960	Within Groups	241.949	275	.880		<b>(NS)</b>
	36 to 45	18	3.67	.907	Total	243.871	279			
	46 to 55	20	3.45	1.146						
	More than 55	3	4.00	1.732						
	Total	280	3.48	.935						
Company gives you time to improve the quality	18 to 25	90	4.13	1.030	Between Groups	4.524	4	1.131	1.126	.344
	26 to 35	149	4.14	.952	Within Groups	276.101	275	1.004		<b>(NS)</b>
	36 to 45	18	3.78	1.166	Total	280.625	279			
	46 to 55	20	4.15	1.137						
	More than 55	3	5.00	.000						
	Total	280	4.13	1.003						
Give Advance to purchase vehicle or any other things	18 to 25	90	2.13	1.062	Between Groups	3.286	4	.821	.686	.602
	26 to 35	149	2.05	1.129	Within Groups	329.482	275	1.198		<b>(NS)</b>
	36 to 45	18	1.94	1.056	Total	332.768	279			
	46 to 55	20	2.40	1.046						
	More than 55	3	1.67	.577						
	Total	280	2.09	1.092						
Loyalty towards the organization	18 to 25	90	3.94	.928	Between Groups	1.632	4	.408	.538	.708
	26 to 35	149	4.05	.812	Within Groups	208.354	275	.758		<b>(NS)</b>
	36 to 45	18	3.78	1.060	Total	209.986	279			
	46 to 55	20	3.95	.887						
	More than 55	3	4.00	.000						
	Total	280	3.99	.868						



**Interpretation:**

From the above Table it has been inferred that age difference does not affect the various methods of employee retention such as Working Condition/ Environment, Salary, over time salary, Compensation paid to workers during layoffs or during any accident happened within the company, Company gives you time to improve the quality, Give Advance to purchase vehicle or any other things and loyalty towards the organization. It has been observed that p value is more than 0.05, so null

hypothesis cannot be rejected. Hence, age difference does not affect the methods of employee retention in textile industry.

**Table showing perception of methods of employee retention based on working experience**

**H<sub>0G</sub>:** Working experience difference does not affect the employee retention strategy in textile industry.

**H<sub>1G</sub>:** Working experience difference affects the employee retention strategy in textile industry.

Descriptive					ANOVA					
		N	Mean	Std. Deviation		Sum of Squares	df	Mean Square	F	Sig.
Working Condition/ Environment	Less than 2 Year				Between Groups	2.442	3	.814	1.989	<b>.116</b>
	2 to 4 years	27	4.04	.587	Within Groups	112.930	276	.409		(NS)
	5 to 10 years	135	4.30	.599	Total	115.371	279			
	More than 10 years	81	4.25	.681						
	Total	280	4.23	.643						
Salary	Less than 2 Year	37	4.57	.647	Between Groups	1.394	3	.465	1.584	<b>.194</b>
	2 to 4 years	27	4.74	.526	Within Groups	81.002	276	.293		(NS)
	5 to 10 years	135	4.76	.460	Total	82.396	279			
	More than 10 years	81	4.65	.616						
	Total	280	4.70	.543						
Over time salary	Less than 2 Year	37	3.32	.818	Between Groups	1.632	3	.544	1.041	<b>.375</b>
	2 to 4 years	27	3.63	.742	Within Groups	144.311	276	.523		(NS)
	5 to 10 years	135	3.51	.679	Total	145.943	279			
	More than 10 years	81	3.47	.743						
	Total	280	3.49	.723						
Compensation paid to workers during layoffs or during any accident happened within the company	Less than 2 Year	37	3.24	.925	Between Groups	2.424	3	.808	.923	<b>.430</b>
	2 to 4 years	27	3.56	1.086	Within Groups	241.448	276	.875		(NS)
	5 to 10 years	135	3.50	.888	Total	243.871	279			
	More than 10 years	81	3.52	.963						
	Total	280	3.48	.935						
Company gives you time to improve the quality	Less than 2 Year	37	4.30	.812	Between Groups	7.285	3	2.428	2.452	<b>.064</b>
	2 to 4 years	27	4.19	1.001	Within Groups	273.340	276	.990		(NS)
	5 to 10 years	135	4.21	1.003	Total	280.625	279			
	More than 10 years	81	3.88	1.053						
	Total	280	4.13	1.003						

Give Advance to purchase vehicle or any other things	Less than 2 Year	37	1.70	.878	Between Groups	6.525	3	2.175	1.840	<b>.140</b>
	2 to 4 years	27	2.11	1.121	Within Groups	326.243	276	1.182		<b>(NS)</b>
	5 to 10 years	135	2.17	1.076	Total	332.768	279			
	More than 10 years	81	2.12	1.177						
	Total	280	2.09	1.092						
Loyalty towards the organization	Less than 2 Year	37	4.03	.957	Between Groups	.870	3	.290	.383	<b>.766</b>
	2 to 4 years	27	4.11	.577	Within Groups	209.116	276	.758		<b>(NS)</b>
	5 to 10 years	135	3.94	.870	Total	209.986	279			
	More than 10 years	81	4.02	.908						
	Total	280	3.99	.868						

### Interpretation:

From the above Table it has been inferred that working experience difference does not affect the various methods of employee retention such as Working Condition/ Environment, Salary, over time salary, Compensation paid to workers during layoffs or during any accident happened within the company, Company gives you time to improve the quality, Give Advance to purchase vehicle or any other things and loyalty towards the organization. It has been observed that p value is more than 0.05, so

null hypothesis cannot be rejected. Hence, working experience difference does not affect the methods of employee retention in textile industry.

### Table showing Facilities to retain the employees based on Age groups

**H<sub>0</sub>:** Age difference does not affect the **Various Facilities to retain the employees** in textile industry.

**H<sub>1</sub>:** Age difference affects the **Various Facilities to retain the employees** in textile industry.

Descriptives					ANOVA					
	Age	N	Mean	Std. Deviation		Sum of Squares	df	Mean Square	F	Sig.
Company takes employee insurance?	18 to 25	90	1.73	.716	Between Groups	1.596	4	.399	.726	.575
	26 to 35	149	1.84	.754	Within Groups	151.229	275	.550		<b>(NS)</b>
	36 to 45	18	1.61	.698	Total	152.825	279			
	46 to 55	20	1.65	.813						
	More than 55	3	1.67	.577						
	Total	280	1.78	.740						
Company help in filing tax, if u don't know the procedure or understand about tax	18 to 25	90	1.54	.767	Between Groups	2.423	4	.606	1.038	.388
	26 to 35	149	1.61	.777	Within Groups	160.545	275	.584		<b>(NS)</b>
	36 to 45	18	1.33	.686	Total	162.968	279			
	46 to 55	20	1.40	.754						
	More than 55	3	2.00	.000						
	Total	280	1.56	.764						

Job opportunities for family members	18 to 25	90	3.40	.897	Between Groups	4.867	4	1.217	1.516	.198
	26 to 35	149	3.63	.925	Within Groups	220.776	275	.803		(NS)
	36 to 45	18	3.61	.778	Total	225.643	279			
	46 to 55	20	3.30	.733						
	More than 55	3	4.00	1.000						
	Total	280	3.54	.899						
Fire Fighting technique is available	18 to 25	90	3.33	.764	Between Groups	6.763	4	1.691	2.684	.032
	26 to 35	149	3.62	.851	Within Groups	173.222	275	.630		(S)
	36 to 45	18	3.72	.461	Total	179.986	279			
	46 to 55	20	3.25	.716						
	More than 55	3	3.67	.577						
	Total	280	3.51	.803						
First Aid box facilities at work area is available	18 to 25	90	1.76	.903	Between Groups	4.201	4	1.050	.929	.448
	26 to 35	149	1.95	1.129	Within Groups	310.910	275	1.131		(NS)
	36 to 45	18	1.67	.767	Total	315.111	279			
	46 to 55	20	2.05	1.234						
	More than 55	3	2.33	2.309						
	Total	280	1.88	1.063						
Respecting subordinates and co-workers	18 to 25	90	4.04	.947	Between Groups	.528	4	.132	.151	.962
	26 to 35	149	4.01	.930	Within Groups	240.040	275	.873		(NS)
	36 to 45	18	4.11	1.132	Total	240.568	279			
	46 to 55	20	4.10	.718						
	More than 55	3	4.33	.577						
	Total	280	4.04	.929						
Team work & co-ordination among co-workers	18 to 25	90	4.07	.667	Between Groups	.859	4	.215	.467	.760
	26 to 35	149	4.15	.672	Within Groups	126.513	275	.460		(NS)
	36 to 45	18	4.28	.752	Total	127.371	279			
	46 to 55	20	4.15	.745						
	More than 55	3	4.00	.000						
	Total	280	4.13	.676						

### Interpretation:

From the above Table it has been inferred that age difference does not affect the various Facilities to retain the employees in the organization except Fire Fighting technique is available all other facilities such as Company takes employee insurance, Company help in filing tax, if you don't know the procedure or understand about tax, Job

opportunities for family members, First Aid box facilities at work area is available, Respecting subordinates and co-workers and Team work & co-ordination among co-workers. It has been observed that p value is more than 0.05, so null hypothesis cannot be rejected. Hence, age difference does not affect the various Facilities to retain the employees in the

organization in textile industry. And in the case of Fire Fighting technique is available p value is less than 0.05, so null hypothesis can be rejected and that's why Age difference affects the Facility to retain the employees in textile industry.

**Table showing Facilities to retain the employees based on working experience**

**H<sub>04</sub>:** Working experience difference does not affect the **Various Facilities to retain the employees** in textile industry.

**H<sub>14</sub>:** Working experience difference affects the **Various Facilities to retain the employees** in textile industry.

Descriptives					ANOVA					
	Age	N	Mean	Std. Deviation		Sum of Squares	df	Mean Square	F	Sig.
Company takes employee insurance?	18 to 25	90	1.73	.716	Between Groups	1.596	4	.399	.726	.575
	26 to 35	149	1.84	.754	Within Groups	151.229	275	.550		(NS)
	36 to 45	18	1.61	.698	Total	152.825	279			
	46 to 55	20	1.65	.813						
	More than 55	3	1.67	.577						
	Total	280	1.78	.740						
Company help in filing tax, if u don't know the procedure or understand about tax	18 to 25	90	1.54	.767	Between Groups	2.423	4	.606	1.038	.388
	26 to 35	149	1.61	.777	Within Groups	160.545	275	.584		(NS)
	36 to 45	18	1.33	.686	Total	162.968	279			
	46 to 55	20	1.40	.754						
	More than 55	3	2.00	.000						
	Total	280	1.56	.764						
Job opportunities for family members	18 to 25	90	3.40	.897	Between Groups	4.867	4	1.217	1.516	.198
	26 to 35	149	3.63	.925	Within Groups	220.776	275	.803		(NS)
	36 to 45	18	3.61	.778	Total	225.643	279			
	46 to 55	20	3.30	.733						
	More than 55	3	4.00	1.000						
	Total	280	3.54	.899						
Fire Fighting technique is available	18 to 25	90	3.33	.764	Between Groups	6.763	4	1.691	2.684	.032
	26 to 35	149	3.62	.851	Within Groups	173.222	275	.630		(S)
	36 to 45	18	3.72	.461	Total	179.986	279			
	46 to 55	20	3.25	.716						
	More than 55	3	3.67	.577						
	Total	280	3.51	.803						



Respecting subordinates and co-workers	18 to 25	90	4.04	.947	Between Groups	.528	4	.132	.151	.962
	26 to 35	149	4.01	.930	Within Groups	240.040	275	.873		(NS)
	36 to 45	18	4.11	1.132	Total	240.568	279			
	46 to 55	20	4.10	.718						
	More than 55	3	4.33	.577						
	Total	280	4.04	.929						
Team work & co-ordination among co-workers	18 to 25	90	4.07	.667	Between Groups	.859	4	.215	.467	.760
	26 to 35	149	4.15	.672	Within Groups	126.513	275	.460		(NS)
	36 to 45	18	4.28	.752	Total	127.371	279			
	46 to 55	20	4.15	.745						
	More than 55	3	4.00	.000						
	Total	280	4.13	.676						

### Interpretation:

From the above Table it has been inferred that age difference does not affect the various Facilities to retain the employees in the organization except Fire Fighting technique is available all other facilities such as Company takes employee insurance, Company help in filing tax, if you don't know the procedure or understand about tax, Job opportunities for family members, First Aid box facilities at work area is available, Respecting subordinates and co-workers and Team work & co-ordination among co-workers. It has been observed that p value is more than 0.05, so null hypothesis cannot be rejected. Hence, age difference does not affect the various Facilities to retain the employees

in the organization in textile industry. And in the case of Fire Fighting technique is available p value is less than 0.05, so null hypothesis can be rejected and that's why Age difference affects the Facility to retain the employees in textile industry.

### Table showing Facilities to retain the employees based on working experience

**H<sub>0</sub>:** Working experience difference does not affect the **Various Facilities to retain the employees** in textile industry.

**H<sub>1</sub>:** Working experience difference affects the **Various Facilities to retain the employees** in textile industry.

Descriptives					ANOVA					
	Working experience	N	Mean	Std. Deviation		Sum of Squares	df	Mean Square	F	Sig.
Company takes employee insurance?	Less than 1 year	55	1.84	.764	Between Groups	3.470	4	.868	1.597	.175
	1 to 3 years	135	1.69	.707	Within Groups	149.355	275	.543		(NS)
	3 to 5 years	55	1.76	.719	Total	152.825	279			
	6 to 10 years	30	2.03	.809						
	More than 10 years	5	2.00	1.000						
	Total	280	1.78	.740						

Company help in filing tax, if u don't know the procedure or understand about tax	Less than 1 year	55	1.67	.818	Between Groups	2.459	4	.615	1.053	.380
	1 to 3 years	135	1.49	.732	Within Groups	160.509	275	.584		(NS)
	3 to 5 years	55	1.60	.735	Total	162.968	279			
	6 to 10 years	30	1.53	.819						
	More than 10 years	5	2.00	1.000						
	Total	280	1.56	.764						
Job opportunities for family members	Less than 1 year	55	3.31	.879	Between Groups	6.780	4	1.695	2.130	.077
	1 to 3 years	135	3.56	.935	Within Groups	218.863	275	.796		(NS)
	3 to 5 years	55	3.75	.821	Total	225.643	279			
	6 to 10 years	30	3.53	.860						
	More than 10 years	5	3.00	.707						
	Total	280	3.54	.899						
Fire Fighting technique is available	Less than 1 year	55	3.20	.704	Between Groups	8.449	4	2.112	3.386	.010
	1 to 3 years	135	3.53	.836	Within Groups	171.536	275	.624		(S)
	3 to 5 years	55	3.75	.751	Total	179.986	279			
	6 to 10 years	30	3.50	.731						
	More than 10 years	5	3.60	1.140						
	Total	280	3.51	.803						
First Aid box facilities at work area is available	Less than 1 year	55	1.73	1.027	Between Groups	1.874	4	.469	.411	.800
	1 to 3 years	135	1.91	1.096	Within Groups	313.236	275	1.139		(NS)
	3 to 5 years	55	1.96	1.071	Total	315.111	279			
	6 to 10 years	30	1.87	1.042						
	More than 10 years	5	2.00	.707						
	Total	280	1.88	1.063						
Respecting subordinates and co-workers	Less than 1 year	55	4.04	.981	Between Groups	1.236	4	.309	.355	.840
	1 to 3 years	135	3.99	.942	Within Groups	239.332	275	.870		(NS)
	3 to 5 years	55	4.11	.936	Total	240.568	279			
	6 to 10 years	30	4.07	.785						
	More than 10 years	5	4.40	.894						
	Total	280	4.04	.929						

Team work & co-ordination among co-workers	Less than 1 year	55	4.07	.634	Between Groups	2.266	4	.566	1.245	.292
	1 to 3 years	135	4.10	.679	Within Groups	125.106	275	.455		(NS)
	3 to 5 years	55	4.18	.748	Total	127.371	279			
	6 to 10 years	30	4.33	.547						
	More than 10 years	5	3.80	.837						
	Total	280	4.13	.676						

### Interpretation:

From the above Table it has been inferred that Working experience difference does not affect the various Facilities to retain the employees in the organization except Fire Fighting technique is available all other facilities such as Company takes employee insurance, Company help in filing tax, if you don't know the procedure or understand about tax, Job opportunities for family members, First Aid box facilities at work area is available, Respecting subordinates and co-workers and Team work & co-ordination among co-workers. It has been observed that p value is more than 0.05, so null hypothesis cannot be rejected. Hence, Working experience difference does not affect the various Facilities to retain the employees in the organization in textile industry. And in the case of Fire Fighting technique is available p value is less than 0.05, so null hypothesis can be rejected and that's why Working experience difference affects the Various Facilities to retain the employees in textile industry.

### Findings and Conclusions

From the data collected by structured questionnaire it has been found that nearly 85% of respondents fall between 18 and 35 age groups, around 68% respondents were having experience of more than 1 year and less than 5 years, 80% of respondents are from floor level, 85% of respondents are married, around 94% of respondents are having worked from 1 to 3 companies before this job, around 77 % of respondents are having experience of more than 5 years, most important finding is that 100 percent respondents are having education qualification up to 12<sup>th</sup> or 10<sup>th</sup> standard only and all the respondents are male, so it is inferred say that particular industry

is dominating by male with lower educational qualification.

Satisfaction level on Employee Retention strategies, Salary got highest mean score of 4.70, and in overall the different employee's retention strategies scored satisfied with the Weighted Average Mean Score of 3.73.

Among Various Facilities, around four different facilities to retain the employees scored more than 3 mean score and they are namely Team work & co-ordination among co-workers, Respecting subordinates and co-workers, Job opportunities for family members and Fire Fighting technique is available and rest of the facilities are scored less than 2 which means they do not agree with that facilities in the industry. Overall the Various Facilities to retain the employees scored 2.92 Weighted Average Mean Score.

Different Reasons for leaving the job are ranked by the respondents and on that basis Getting higher salary in other company is ranked first for the reason to leave the job, second one is Getting other job easily, third is Due to Residential address change, fourth rank is having differences of opinion with superior, then fifth is Quality of the production change, sixth rank is to go to native place during summer and last rank was given to working on the machine is unfavorable.

### T-Test

From the T-test it was revealed that marital status difference does not affect the various methods of employee retention such as Working Condition/ Environment, Salary, over time salary, Compensation paid to workers during layoffs or during any accident happened within the company,

Company gives you time to improve the quality, Give Advance to purchase vehicle or any other things and loyalty towards the organization in textile industry.

It has been inferred that marital status difference does not affect the various Facilities to retain the employees in the organization such as Company takes employee insurance, Company help in filing tax, if you don't know the procedure or understand about tax, Job opportunities for family members, Job opportunities for family members, Fire Fighting technique is available, First Aid box facilities at work area is available and Respecting subordinates and co-workers. So, it was found that marital status difference affects the only one facility, Team work & co-ordination among co-workers to retain the employees in textile industry.

#### **ANOVA TEST**

It was found that age group and working experience differences does not affect the various methods of employee retention such as Working Condition/ Environment, Salary, over time salary, Compensation paid to workers during layoffs or during any accident happened within the company, Company gives you time to improve the quality, Give Advance to purchase vehicle or any other things and loyalty towards the organization.

It could be inferred that age group and working experience differences does not affect the various Facilities to retain the employees in the organization such as facilities like Company takes employee insurance, Company help in filing tax, if you don't know the procedure or understand about tax, Job opportunities for family members, First Aid box facilities at work area is available, Respecting subordinates and co-workers and Team work & co-ordination among co-workers and only one facility like Fire Fighting technique is available in the company is affects to retain the employees in textile industry.

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# An Analytical Study of Equity Share Book Value of Selected Cement Manufacturing Companies

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## Abstract

The result of business carried on by the firms is the generation of surplus, after payment of tax and dividend. This amount builds the reserves of the company. The companies earning more profit have strong reserves. The amount of sales, profit margin and profit after tax can have influence on the surplus generated, which is transferred to reserves.

Increase in reserves appreciates capital (net worth). Sales, profit after tax as well as increase in reserves has impact on book value of the equity shares of a company. This paper studies effects of sales, net profit and net worth on the book value of equity shares.

## INTRODUCTION

Industry envisages production of goods and services for the satisfaction of the consumers. Increase in population and advancement of modern life gave rise for the demand of good housing and different types of commercial buildings. The basic requirement of construction industry is availability of cement. In India, setting up of Indian Cement Co. Ltd. by Tatas at Porbandar in 1913 was the origin of cement manufacturing industry. Similar plants were started by Katni Cement in 1914 and Killick Nixon in 1915. After independence, there has been phenomenal growth of this industry in India. Important centers of cement industry in India are: Bihar, Madhya Pradesh, Andhra Pradesh, Gujarat, Tamilnadu, Karnatak, Orissa, Rajasthan, Punjab, Kerala and West Bengal. Well-known names in cement industry are: ACC, Ambuja Cement, Tata chemical, Gujarat Siddhi cement, Sanghi Cement, Ultratech Cement, Birla Corporation, KCP, Madras Cement, Saurashtra Cement, Andhra Cement, India Cements, J K Lakshmi Cement and Binani Cement. Manufacturing cement has peculiarity of location of plant, large size of plant, heavy raw material, transportation and distribution and competitive pricing. For manufacture of 100 tons of cement, 160 tons of limestone, 38 tons of coal and 4 tons of gypsum are needed. Nearness of raw material source, plant capacity, production process, marketing and pricing are important business issues which have direct bearing on cost and profitability of cement manufacturing companies.

## BUSINESS PERFORMANCE, PROFITABILITY AND BOOK VALUE

Financial appraisal is an objective evaluation of the profitability and financial strength of a business unit. Profitability and productivity are the two yardsticks against which the performance of any business enterprise is judged. (1) The techniques of financial statement analysis are used for the purpose of financial appraisal. Therefore, financial appraisal is the process of scientifically making a relevant, comparative and critical evaluation of the profitability and financial health of a given firm through the application of the techniques of financial statement analysis. Financial statement analysis attempts to unveil the meaning and significance of the items composed in profit and loss account and the balance sheet so as to assist the management in the formulation of sound operating financial policies. (2) The analysis and interpretation of financial statements is an attempt to determine the meaning and significance of the financial data to check the performance in past, forecast for the future business performance and verifying the financial strength of the firm. In other words, financial analysis is the evaluation of a firm's past, present and anticipated future financial performance and financial condition. Its objectives are to identify the firm's financial strengths and weaknesses and to provide the essential foundation for financial decision making and planning. The methods of



analysis are horizontal analysis, vertical analysis, internal/external analysis and static/dynamic analysis. Various techniques of analysis are available. These are ratio analysis, trend analysis, cost-volume-profit analysis, leverage analysis, index analysis etc. Among all these, the technique of ratio analysis is superior due to the following reasons:

- 1) The absolute accounting figures reported in the financial statements do not provide a meaningful understanding of the performance and financial position of a firm. An accounting figure conveys meaning when it is related to some other relevant figure and/or information.
- 2) A ratio reflecting a quantitative relationship helps to form a qualitative judgement.

Ratio analysis helps inter-firm comparison.

- 3) In the regular exercise of assessment of performance using the tool of ratio analysis, over a period the management develops certain norms and parameters for performance. In this sense, the results of ratios when compared with the norms and benchmarks, provide clue to the problems.
- 4) The analysis of ratio can disclose relationships as well as basis of comparison which reveal conditions and trends that cannot be detected by an inspection of the individual components of the ratio.
- 5) Ratios can be used as a tool of communication of what has happened from one period to another period, to interested parties.
- 6) The results of critical ratios can be used as a measure of efficiency of the organization.
- 7) As stated by Peter Drucker (The Practice of Management), growth is the result of success. Growth can be result of superior performance. Ratios between various financial and accounting data can be used as managerial tools for providing

measurement of performance and for comparison against standards. Goals and targets, and the causes of significant super-performance and under-performance may be objectively determined.

Business organization is a system. Any business and/or financial event is always related to other events. It affects other events and/or being effected by other events. The activities and events happening in any area of a firm (business organization) is not autonomous, not isolated from the company's overall economy as well as not absolute in value. Therefore, the summary result expressed by a ratio on the basis of comparison of two or more relevant data is more relevant and reliable.

- 8) Balance sheet and Profit & Loss account provide heap of numerical figures in absolute terms. The figures are jumbled together in such a way that one cannot make out anything from the scattered jungle of absolute data. In order to make proper interpretation and derive some meaningful inferences, certain quantitative relationships have to be established between two or more figures. Absolute figures by themselves are mute and cannot speak out or reveal their significance. However, quantitative relationships when established can provide many qualitative clues for proper interpretation.
- 9) Since we live in the world of mathematics, there is a tremendous importance of Arabic figures contained in the financial statements. To exist in a business civilization based upon competition, profit economy and capitalism, it is crucial to take operational and strategic economic decisions based on mathematical data, displayed by year-end financial statements. Ratio analysis is an important tool in this context, which allows analysis and understanding of the message conveyed by mathematical figures.



Book value is an accounting concept. The difference between the book values of assets and liabilities is equal to shareholders' funds or net worth. Book value per share is net worth divided by number of equity shares. Since, the assets in the balance sheet are shown at historical cost, book value reflects historical cost. If the business is generating surplus, it is reflected in the value of share. The book value of a firm is based on the balance sheet value of owner's equity. It is also on record that overall growth and growth in dividend also has its impact on the book value of equity shares. Therefore, to understand book value of equity share and to explore the factors governing this value, effects of sales, profit and net worth on book value are analyzed. This is done with the help of ratio analysis. Book value of equity shares is based on the balance sheet value of owner's equity. Therefore, it is important to know as to which factors affect the owner's equity.

## **LITERATURE REVIEW**

A study conducted by P. Srinivasan titled "Determinants of Equity Share Prices in India: A Panel Data Approach" tries to examine the fundamental determinants of share price in India. The findings indicate that size is being a significant factor in determining the share prices of all sectors under consideration except manufacturing. Moreover, the book value per share positively influences the share prices of pharmaceutical, energy, IT & ITES and Infrastructure.

Anita & Pavitra Yadav conducted a study titled "INFLUENCE OF SELECTED FINANCIAL INDICATORS ON STOCK PRICE OF TATA MOTORS LTD." The purpose of the paper was to investigate the influence of book value per share, earning per share, market capitalization, price to book value and dividend yield on stock price of Tata motors Ltd. The results showed that stock price is significantly affected by the book value per share, price to book value and dividend yield.

## **RESEARCH METHODOLOGY**

### **Research Problem:**

The research question is to enquire as to which

factors decide the Book Value of equity share of a Company. It was decided to examine this issue for cement manufacturing companies. Profit is the surplus which is added to capital after the payment of tax and dividend. This will increase the amount/value of capital in the Balance sheet. Therefore, the analysis of increase/effect of sales, profit and net worth (original capital plus surplus profit, after tax and dividend) on the Book Value of equity share was undertaken.

### **Objectives of study:**

1. To study the effect of sales on book value.
2. To study the effect of net profit on book value.
3. To know the impact of net worth on book value.

### **Sampling Unit and Sample Size:**

It was decided to examine the factors having an impact on book value of cement manufacturing companies. A list of 10 cement companies has been prepared as per convenient sampling. These companies are well known cement manufacturing companies in India for which the required data is available.

### **Sources of data**

The study is based on secondary data. The required data is collected from the published annual reports of the companies for the period 2008 to 2014.

### **Statistical Tools**

The collected data is analyzed using ratio and regression analysis. The effect of absolute increase/decrease in book value is worked out arithmetically. Analysis of effect on increase/decrease in book value is done through regression analysis.

### **Limitations:**

1. The present study has constraints of time and money.
2. There may be chances of errors due to random sampling.
3. This study may not be an exhaustive one

owing to some limitations which are  
beyond the researcher's control.

The details of par value of equity shares, book value  
and sales of the companies covered under study are  
as follows.

#### PROFILE OF CEMENT COMPANIES

Name of the Company	Sales (Rs. Crores) (2008)	Net Profit (Rs. Crores) (2008)	Sales (Rs. Crores) (2014)	Net Profit (Rs. Crores) (2014)
1. A C C Ltd.	7848	1439	13108	1168
2. Ambuja Cements Ltd.	6813	885	11238	1496
3. Birla Cements Ltd.	1993	394	3478	130
4. India Cements Ltd.	3554	638	5034	000
5. J K Cement Ltd.	1458	265	3216	97
6. OCL India Ltd.	1309	10	2120	98
7. Prism Cement Ltd.	2401	102	5365	000
8. Shree Cement Ltd.	2440	260	6544	787
9. Ultratech Cement Ltd.	5484	782	23005	2144
10. The Ramco Cement Ltd.	2506	196	4238	138

#### PERFORMANCE OF CEMENT COMPANIES: 2008-2014:

study considering the revenue/sales and profit  
(profit after tax) is as follows:

The performance of the companies covered in the

Sales: 2007-08 to 2013-14:

Sr. No	Sales (Rs.Lacs) /Name of company	Rs. Lacs (2008)	Rs. Lacs (2009)	Rs. Lacs (2010)	Rs. Lacs (2011)	Rs. Lacs (2012)	Rs. Lacs (2013)	Rs. Lacs (2014)
1	A C C	784800	812300	856400	1070000	1263900	1247200	1310800
2	Ambuja Cement	681300	700600	825700	962800	1099500	1039100	1123800
3	Birla Cement	199300	216600	238500	243700	259700	299400	347800
4	India Cement	355400	382200	410100	397200	472300	521300	503400
5	J K Cement	145800	189000	224800	238300	289200	335100	321600
6	OCL India	130900	140300	152200	168400	166300	207300	212000
7	Prism Cement	240100	2630	298900	358900	484600	514900	536500
8	Shree Cement	244000	300600	402600	387900	647900	616900	657400
9	Ultratech Cement	548400	628600	772900	14961	2057700	2286200	2300500
10	The Ramco Cement	250600	270400	310600	296900	368700	438800	404000

Sr. No	Net Profit (PAT) (Rs. Lacs)/Name of Company	Rs. Lacs (2008)	Rs. Lacs (2009)	Rs. Lacs (2010)	Rs. Lacs (2011)	Rs. Lacs (2012)	Rs. Lacs (2013)	Rs. Lacs (2014)
1	A C C	143900	121400	112000	132500	106100	109600	116800
2	Ambuja Cement	88500	96300	126400	122900	129700	129500	149600
3	Birla Cement	39400	42300	55700	32000	23900	27000	13000
4	India Cement	63800	47800	35400	6800	29300	16400	000
5	J K Cement	26500	27100	22600	6400	17700	23400	9700
6	OCL India	1030	13800	16400	11400	3200	15600	9800
7	Prism Cement	10200	12700	25100	9600	000	000	000
8	Shree Cement	26000	37800	67600	21000	61800	100400	78700
9	Ultratech Cement	78200	100800	109300	100400	244600	265500	214400
10	The Ramco Cement	19600	20800	35400	21100	38500	40400	13800

### Data Analysis and Interpretation

**Sales v/s Book value: (increase over previous year: percent):**

No	Year/ Name of Company	2009 Sales	2009 B V	2010 Sales	2010 B V	2011 Sales	2011 B V	2012 Sales	2012 B V	2013 Sales	2013 B V	2014 Sales	2014 BV
1	A C C	118	109	139	156	125	111	118	102	69	105	98	105
2	Ambuja Cement	121	118	118	104	116	108	114	110	94	107	108	107
3	Birla Cement	125	153	119	117	123	115	123	115	126	109	115	109
4	India Cement	112	113	98	111	96	100	119	101	110	109	96	96
5	J K Cement	122	127	118	113	106	105	121	112	116	114	95	105
6	OCL India	107	115	108	123	110	111	98	103	125	115	102	107
7	Prism Cement	120	111	122	115	120	104	135	96	106	95	104	91
8	Shree Cement	158	244	128	112	96	108	167	138	95	141	106	123
9	Ultratech Cement	101	154	111	171	137	106	193	121	111	118	101	112
10	The Ramco Cement	116	111	94	108	86	111	124	118	119	116	97	104

**Net Profit v/s Book value: (increase over previous year: percent):**

No	Year/Name of Company	2009 Profit	2009 B V	2010 Profit	2010 B V	2011 Profit	2011 B V	2012 Profit	2012 B V	2013 Profit	2013 B V	2014 Profit	2014 B V
1	A C C	84	109	92	156	118	111	80	102	103	105	107	105
2	Ambuja Cement	109	118	131	104	97	108	105	110	99	107	116	107
3	Birla Cement	107	153	132	117	57	115	74	109	113	109	48	103
4	India cement	74	113	74	111	192	100	43	101	55	103	000	96
5	J K Cement	102	127	83	113	28	105	276	112	132	114	41	105
6	OCL Cement	134	115	119	123	70	111	28	103	487	115	62	107
7	Prism Cement	145	111	179	115	31	104	000	96	000	95	000	91
8	Shree Cement	145	244	179	112	31	108	294	138	162	141	78	123
9	Ultratech Cement	128	154	108	171	128	106	172	121	108	118	80	112
10	The Ramco Cement	106	111	170	108	59	111	182	118	104	116	34	104

**Net worth v/s Book value: (increase over previous year: percent):**

No	Year/ Name of Company	2009 Net worth	2009 B V	2010 Net worth	2010 B V	2011 Net worth	2011 B V	2012 Net worth	2012 B V	2013 Net worth	2013 B V	2014 Net worth	2014 B V
1	A C C	109	109	156	156	111	111	102	102	105	106	105	105
2	Ambuja Cement	118	118	104	104	110	108	109	110	108	107	107	107
3	Birla Cement	153	153	117	117	115	115	109	109	109	109	103	103
4	India Cement	113	113	111	111	100	100	101	101	102	103	95	96
5	J K Cement	127	127	113	113	105	105	112	112	114	114	105	105
6	OCL India	115	115	123	123	111	111	102	103	115	114	107	107
7	Prism Cement	111	111	115	115	103	104	95	96	95	95	92	91
8	Shree Cement	244	244	112	112	108	108	138	138	141	141	123	123
9	Ultratech Cement	154	154	171	171	106	105	121	121	118	118	112	112
10	The Ramco Cement	111	111	108	108	111	112	118	118	116	116	104	104

**Regression Analysis:**

No	Year/ Company	2009				2010				2011				2012				2013				2014			
		BV	Sales	NW	PAT	BV	Sales	NW	PAT	BV	Sales	NW	PAT	BV	Sales	NW	PAT	BV	Sales	NW	PAT	BV	Sales	NW	PAT
1	A C C	109	118	109	84	156	139	156	92	111	125	111	118	102	118	102	80	105	69	105	103	105	98	105	107
2	Ambuja Cement	118	121	118	109	104	118	104	131	108	116	110	97	110	114	109	105	107	94	108	99	107	108	107	116
3	Birla Cement	153	125	153	107	117	119	117	132	115	123	115	57	109	126	109	74	109	115	109	113	103	116	103	48
4	India Cement	113	112	113	74	111	98	111	74	100	96	100	192	101	119	101	43	103	110	102	55	96	96	95	0
5	J K Cement	127	122	127	102	113	118	113	83	105	106	105	28	112	121	112	276	114	116	114	132	105	95	105	41
6	OCL India	115	107	115	134	123	108	123	119	111	110	111	70	103	98	102	28	115	125	115	487	107	102	107	62
7	Prism Cement	111	120	111	145	115	122	115	179	104	120	103	31	96	135	95	0	95	106	95	0	91	104	92	0
8	Shree Cement	244	158	244	145	112	128	112	179	108	96	108	31	138	167	138	294	141	95	141	162	123	106	123	78
9	Ultratech Cement	154	101	154	128	171	111	171	108	106	137	106	128	121	193	121	172	118	111	118	108	112	101	112	80
10	The Ramco Cement	111	116	111	106	108	94	108	170	111	86	111	59	118	124	118	182	116	119	116	104	104	97	104	34
	Average	136	120	136	113	123	116	123	127	108	112	108	81.1	111	132	111	125	112	106	112	136	105	102	105	56.6

Year	BV	Sales	NW	PAT
2009	135.5	120	135.5	113.4
2010	123	115.5	123	126.7
2011	107.9	111.5	108	81.1
2012	111	131.5	110.7	125.4
2013	112.3	106	112.3	136.3
2014	105.3	102.3	105.3	56.6

#### Correlations

		BV	Sales
BV	Pearson Correlation	1	<b>.361</b>
	Sig. (2-tailed)		.482
	N	6	6
Sales	Pearson Correlation	<b>.361</b>	1
	Sig. (2-tailed)	.482	
	N	6	6

Correlation between BV and Sales is  $r = 0.361$

#### Correlations

		BV	NW
BV	Pearson Correlation	1	1.000
	Sig. (2-tailed)		.000
	N	6	6
NW	Pearson Correlation	1.000	1
	Sig. (2-tailed)	.000	
	N	6	6

Correlation between BV and NW is  $r = 1.000$

#### Correlations

		BV	PAT
BV	Pearson Correlation	1	.458
	Sig. (2-tailed)		.361
	N	6	6
PAT	Pearson Correlation	.458	1
	Sig. (2-tailed)	.361	
	N	6	6

Correlation between BV and PAT is  $r = 0.458$

#### Regression Analysis

##### Model Summary (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000(a)	1.000	1.000	.10976

a Predictors: (Constant), PAT, NW, Sales

b Dependent Variable: BV

#### ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	647.849	3	215.950	17925.597	.000(a)
	Residual	.024	2	.012		
	Total	647.873	5			

a Predictors: (Constant), PAT, NW, Sales

b Dependent Variable: BV

### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta	Tolerance	VIF	B	Std. Error
1	(Constant)	-.631	.676		-.934	.449		
	Sales	.011	.005	.010	1.970	.188	.733	1.365
	NW	.994	.005	.995	203.034	.000	.774	1.293
	PAT	.001	.002	.002	.428	.710	.664	1.505

a Dependent Variable: BV

### FINDINGS

- (1) Among all the companies covered in research, Ultratech Cement is having highest sales/revenue as well as highest net profit. OCL India is having the lowest revenue and J K Cement is having the lowest net profit during 2007 and 2014.
- (2) Average increase in Book Value of Equity shares (during the period 2007-2014) is as follows: ACC (33 %), Ambuja Cement (46 %), Birla Cement (39 %), J K Cement (42 %), OCL India (36 %), Shree Cement (48 %), Ultratech Cement (78 %) and Ramco Cement (42 %). In case of India Cements, it is constant throughout the period. For Prism Cement, it is negative.
- (3) Increase in net worth is highest for Ultratech Cement, Shree Cement, Birla Cement and A C C. It is lowest in case of India Cements and Prism Cement.
- (4) The highest book values of shares as on 31 March, 2014 are Shree Cement (Rs. 1,352/10), Ultratech Cement (Rs. 623/10) and ACC (Rs. 438/10).
- (5) Among all the companies covered in research, the successful companies are Shree Cement, Ultratech Cement, A C C and Ambuja Cement. Prism Cement and India Cement are very weak companies.
- (6) Sales/revenue as well as profit has no direct effect on the book value of shares.

This is even when, the surplus profit (after tax and dividend) increases/decreases the net worth. This is proved by the regression analysis done for this research.

- (7) As evidenced by regression analysis, net worth is directly influencing the book value of equity shares. ( $r = 1.000$ ).

### Conclusion:

The present study was conducted to understand book value of equity share and to explore the factors governing this value. It tried to analyze the effect of sales, profit and net worth on book value. From the table showing the sales and book value of various companies, it can be concluded that there is no direct relationship of sales on the book value. It can also be said that the net profit also does not affect the book value. There is no consistent rise or fall in the net profits or book value. It can be inferred from the study that only net worth has a direct impact on the book value of the company. The percentage increase in the net worth and book value of all the companies is exactly the same.

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# The Study of Price Behavior of Gold and Silver in India

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## Abstract:

The Multi Commodity Exchanges of India has been used for the purpose of trading as well as investment. The gold and silver have been known as a close substitute for one another, both being precious metals. Both gold and silver used as diversifying risk. The study focus on the price behavior of gold and silver in India. There are various economic factor, political factors affects the price of gold and silver. There is also correlation between prices of gold and silver. The use of various statistical tools the relationship between both the metals will be studied which will help the investors who will invest in gold and silver.

## Introduction:

### Gold:

Gold is one of the metals which is used as the symbol of wealth and provides basis for monetary policies. Gold is used as the part of investment. Investors generally buy gold as to hedge against various risks like economic, political or social risk. The market of gold is highly speculative as other markets due to the use of future contracts and derivatives. There are various ways of investing in gold like gold bars, gold coins, exchange traded products and gold certificates. India is a major importer of gold and global trends in pricing directly impact domestic prices. It is expecting a stimulus package by the US government to boost the economy which could lead to devalue the dollar and push up gold prices further. Because of economic slowdown and poorer returns of other asset classes, investors are turning to gold. The increased demand for gold in India is also predicted due to festive season. Consumers also buy gold when the wedding season approaches. In addition buying physical gold, Indian investors also take exposure to the precious metal through gold ETFs (Exchanges Traded Funds) that tracks the metal's prices or through gold equity mutual funds that invest in the share of gold companies.

### Silver:

Silver was used for the nation's coinage until it was discontinued in 1965. The 20<sup>th</sup> century market as an important economic function for silver that of an important economic function for the silver that of an industrial raw material. Many countries now issue silver bullion coins. The silver is sought as an appealing investment precious metal and also used as the industrial commodity. The investment in silver is done through silver bars, coins and rounds exchange traded products, etc.

Gold and silver both used as an investment vehicles as the economy of country is depend upon the balance of gold and silver they acquire. Moreover these commodities are also used for the purpose of trading through various exchanges. The commodities of gold and silver are available in different specifications like 1kg, 10gms, 10kgs, gold mini, gold HNI, silver mini, etc. Investors can easily invest in these contracts and have benefit of diversification. The prices of these commodities on different exchanges or in the physical market is largely depend upon various external factors like seasonal changes like festivals, marriages, etc, the changes in the government parties, industrial or commercial uses of them, or the market fluctuations and investors preferences. With the proper study of the prices of gold and silver, it is possible to invest and gain benefits from these type of investment avenues.

## Literature Review:

Nemavathi and Nedunchezian (2013) studied the impact of price behavior of gold commodity and gold ETF. According to study, the

precious metal's value is determined by inflation, interest rate and presence of lucrative alternative investment avenues in economy. With use of different statistical tools founded out that commodity gold has high risk compared to gold ETF. Commodity market is at top when volatility is very low. The commodities are less risky, but the performance of the product depends on the volatility of the market.

Prakash and Sundararajan (2014) studied the relationship between gold and silver. As gold and silver have been seen as close substitutes for one another, the prices of gold and silver plays similar dynamics. With the use of various factors which will affect the movement of gold and silver; the study revealed that gold is the best alternative source of investment. The prices of silver also have certain level of positive impact on gold price movements. In India, gold is very often used as a hedge against inflation, and seen as alternative asset for those having idle money for speculative purpose.

Ciner (2001) examined the long term relationship between gold and silver futures contracts traded on Tokoyo Commodity exchange. According to study gold and silver commodities have different economic uses and they are affected by different economic fundamentals. So, gold and silver markets should be approached as separate markets and the changes of gold and silver ratio should not be used to predict prices in future.

Dr. Sindhu (2013) conducted study on certain economic factors like exchange rate of US dollar with INR, crude oil, repo rate and inflation rate. Each of the factors is studied with the gold prices. Based on the study, he examined that there is inverse relationship between exchange rate and gold price; crude oil price affects gold price movement whereas repo rate and gold prices are interdependent and inflation also having direct relationship with gold prices.

Tiwari, Mundada and Sarkale (2015) studied the world wide trading of silver as commodity. The main focus of study was to identify various factors which affect the silver market which further give directions to investors, the time to invest in silver market. With the help of analysis they founded that the prices of silver usually moves closely with price

of gold and sometime silver gets more volatile than gold as many speculators found there is more leverage with silver than gold. Silver is also an industrial metal so many economic activity fluctuate the price of silver, since price of silver has been very volatile.

Jaiswal and Manoh (2015) conducted study on gold prices variations and its impact on commodity market in India. They covered various aspects attached to gold like its relevance, reasons for price fluctuations and impact on Indian economy in the times of gold crisis. They founded out that among all factors, inflation rate and US dollar affects the most to the gold price variations. As gold has acted as safe haven for investors, they tend to preserve some amount as gold portfolio. This is a key factor in fluctuations of gold prices.

#### **Objectives of the Study:**

- 1) To study the relationship between gold and silver in India.
- 2) To analyze different factors which affect the prices of gold and silver.
- 3) To predict the price trends for the investors in the gold and silver market.
- 4) To analyse the price volatility of gold and silver.

#### **Research Methodology**

- **Research Design:**

Research design is used to structure the research. For gaining more understanding regarding, the price behaviour of the gold and silver exploratory research design is used.

- **Sampling Plan:**

- **Sampling Method:** The sampling is based on judgement and availability of data.
- **Sampling Unit:** The commodities of gold and silver, and their prices.
- **Sample Size:** The prices of gold and silver for last 5 years (2012-16) available at Centre For Monitoring Indian Economy (CMIE) are analysed for the study.

• **Data Collection:**

For the study of price behaviour of gold and silver the secondary data used. The data would be collected from the journals, websites and CMIE database.

• **Data Analysis:**

Data analysis is done based on various statistical tools and tests.

**Limitations Of the Study:**

- 1) The data for the study considered monthly basis. So, it may not accurately define the fluctuations in market.
- 2) The analysis of data was mainly based on historical data.

**Data Analysis and Interpretation:**

**Regression Analysis**

Regression Statistics					
Multiple R	0.78667				
R Square	0.61884				
Adjusted R Square	0.58073				
Standard Error	7994.71				
Observations	12				

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1.04E+09	1.04E+09	16.23596	0.002402
Residual	10	6.39E+08	63915382		
Total	11	1.68E+09			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	253801	30268.05	8.385112	7.78E-06	186359.6	321242.441	186359.5938	321242.4
X Variable 1	-2.5829	0.641017	-4.02939	0.002402	-4.01118	-1.1546298	-4.011177989	-1.15463

In the above regression analysis the multiple R value is 0.78667 which shows that there is significant relationship between the gold prices and silver prices. Also the value of R squared is 0.61884 which shows the extent to which gold prices affects the gold prices. The significant value shows the clear relationship between both the variables.

**Correlation Analysis of gold and silver:**

Year	Correlation
2012	0.678887
2013	0.716508
2014	0.886336
2015	0.546526
2016	0.953663

The correlation analysis is used to test the relationship between two variables. The gold and silver both have the positive correlation which means that the movement of gold and silver moves together. If there is any change in the prices of gold either upside or downside, there is also change in the movement of prices of silver on the similar direction. So, with the help of the correlation analysis it is clear that the investor who is intended to invest in the gold can also have the similar price gain benefits while investing in the silver. Thus, the correlation analysis useful for the understanding that there is some relationship between the prices of gold and silver.

#### **Price Volatility Calculation:**

Gold:

Year	Mean	Sum of squared deviations	Volatility (%)
2012	-0.00998	0.00549738	2.235
2013	0.004491	0.020674	4.335
2014	0.007565	0.005698	2.275
2015	0.008394	0.0064226	2.41
2016	-0.02218	0.006341	2.815

Silver

Year	Mean	Sum of squared deviations	Volatility (%)
2012	-0.01043	0.02387	4.658
2013	0.02612	0.059432	7.350
2014	0.017258	0.024367	4.706
2015	0.02612	0.059431	7.358
2016	-0.03631	0.018154	4.763

The volatility is the study of changes of prices. The change may be on any side either it would be on upside or downside. The calculation of volatility is helpful for the understanding of price behavior in the commodity market. To calculate the volatility the historical approach has been used. It is observed that both the prices of gold and silver having volatility effect which means it will act as a good investment avenues for the investors who want to gain from the price changes effects.

#### **Findings:**

- The prices of gold and silver is having relationship. As per the Regression analysis it is clear that the prices of silver is affected by the prices of gold. The value of R squared gives the clear indication.
- Based on Regression analysis, it is clear that there is a relationship between prices of gold and silver, the further analysis of correlation gives the idea that the prices of gold and silver both having positive relationship. Hence, the gold price increases the silver prices are also increases. Both the gold and silver move in the same direction.
- The correlation of gold and silver prices also gives the indication that both gold and silver prices are correlated but there will be some kind of fluctuations in their prices. These random fluctuations are called the volatility. The volatility calculations indicates that the gold and silver prices are fluctuating the most, either on upside or on downside. The fluctuations in the silver prices are more than the fluctuations in the gold prices. So, investors can benefits from both the side price movements.
- The gold prices are fluctuated because of many reasons like consumer's demand as gold jewellery, the changes in dollar, gold reserve requirement, monetary policy of government, supply of gold, etc. All such factors are responsible for the changes in the prices of gold in the market.
- The prices of silver are changing mainly because of industrial, commercial and consumer demand, short selling, silver also used as the hedging instruments, traders of silver also affect the price. Thus, these are the related factors which are responsible for the silver price movements.
- Gold and silver both used as an alternative investment avenues when there is price wars in the market in other investment options, and this will help the investors to diversify their portfolio in a better manner.

- It is found that generally investors would like to invest in silver in a huge quantity. These will give perfect market competition for the buyers as well as seller.
- According to analysis of prices in gold and silver, the investor should follow the pattern of the previous years as the trend may repeat because many a times it is observed that during the time of festival or marriage the prices of such commodities are increases and during some slack seasons it is on low scale. So, investor would take the benefit of such price movements.

### **Conclusion:**

With the help of the detailed study, it is clear that the investor should invest in gold and silver to diversify their portfolio. Both the commodities are also traded on recognized stock exchanges as well as over the counter. The exchanges provide the futures contract for the commodities. With help of proper understanding and analysis the future contract will act as the best hedge for the investors. The prices of gold and silver both are related to each other so it is not possible to use both for the same investment purpose, but investor should combine them differently with other investment options so that if price of any other investment avenue will get depreciated, this will provide the benefit and losses can be minimized. The gold and silver will also be used as the safety purposes as it will give appreciation of value in future course of time and it can be used as the collateral for any loan or other financial aids. Thus, based on study and analysis it can be conclude that the investment in gold and silver will be beneficial to investor but investment in gold will give short term price benefits as compared to silver, but investor should analyze each factor before investing.

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## “Comply or Explain” Approach of Corporate Social Responsibility in India

Ramroop Sharma

### Abstract

Discourse on Corporate Social Responsibility (CSR) is increasing in India. The Companies Act, 2013 has enacted CSR regulation and CSR has been mandated since 1<sup>st</sup> April, 2014. Recently it was reported in the media that companies which have not fully complied with CSR, must deposit the unspent amount of CSR to government. Government through CSR regulation wants companies to partner in growth and development of the economy, thereby offering advantages to society and stakeholders. Regulators expect companies to adhere with CSR as a mandatory norm. However, some companies may not fully comply with CSR because the CSR regulation prescribes “comply or explain” approach. So there are important managerial implications. This paper gives a glimpse of CSR in India, apart from studying CSR practices of 36 Nifty 50 companies for the year 2015-16 based on secondary data. **Results show that a majority of companies have not complied with CSR spending.**

### Introduction

In wider perspective, CSR has been defined by the Companies (Corporate Social Responsibility Policy) Rules, 2014, accordingly, "Corporate Social Responsibility (CSR)" means and includes but is not limited to (i) Projects or programs relating to activities specified in Schedule VII to the Companies Act 2013 or (ii) Projects or programs relating to activities undertaken by the board of directors of a company (Board) in pursuance of recommendations of the CSR Committee of the Board as per declared CSR Policy of the company subject to the condition that such policy will cover subjects enumerated in Schedule VII of the said Act.<sup>1</sup> Definition of CSR may vary across organisations and economies. The World Bank Council for Sustainable Development has defined CSR as "Corporate Social Responsibility is the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large."<sup>2</sup> Hill et al. (2007) defined CSR as “the economic, legal, moral, and philanthropic actions of firms that influence the quality of life of relevant stakeholders.”<sup>3</sup> As far as CSR regulation is concerned, according to **Section 135 of the Companies Act, 2013**, every company having net worth of rupees 500 crore or more, or turnover of rupees 1000 crore or more or a net profit of rupees 5 crore or more during any financial year shall constitute a CSR Committee of the Board and shall spend 2% of average net profit of preceding three financial years as per provisions of Clause (a) of sub section (1) of Section 381 and Section 198 on CSR activities as laid down by the Act.<sup>4</sup> CSR Committee shall comprise three or more directors, of which at least one director shall be an Independent Director. The CSR Committee shall decide the activities to be undertaken by the company as specified in Schedule VII of the said Act. Further, the CSR Committee will suggest expenditure on CSR and monitor CSR Policy from time to time. The Board, after considering such recommendation shall approve the CSR Policy and disclose its contents on the company's website. The Board shall ensure that the CSR activities included in CSR Policy are actually undertaken by the company. Activities specified in Schedule VII of the Companies Act, 2013 are viz., (i) eradicating extreme hunger and poverty; (ii) promotion of education; (iii) promoting gender equality and empowering women; (iv) reducing child mortality and improving maternal health; (v) combating human immunodeficiency virus, acquired immune deficiency syndrome, malaria and other diseases; (vi) ensuring environmental sustainability; (vii) employment enhancing vocational skills; (viii) social business projects; (ix) contribution to the Prime Minister's National Relief Fund or any other fund set up by the Central Government or the State Governments for socio-economic development and relief and funds for the welfare of the Scheduled Castes, the Scheduled Tribes, other backward classes, minorities and women; and (x) such other matters as may be prescribed. Notification dated the 24th October, 2014



clarifies that contribution to the Swach Bharat Kosh set-up by the Central Government for the promotion of sanitation and contribution to the Clean Ganga Fund setup by the Central Government for rejuvenation of river Ganga will also be treated as part of CSR expenditure. Apart from the Companies (Corporate Social Responsibility Policy) Rules, 2014, the Companies (Corporate Social Responsibility Policy) Amendment Rules, 2015 and the Companies (Corporate Social Responsibility Policy) Amendment Rules, 2016 are also to be adhered.<sup>5</sup>

## **Review of Literature**

### **International Context**

Al-Smadi and Almsafir (2015) found there exists the significant positive relationship between CSR and corporate financial performance.<sup>6</sup> Hence, community, environmental, employee's relationship and products can enhance the financial performance. Kim et al. (2014) support the idea that managers operating in a strong CSR-oriented corporate culture show a lower tendency to hide bad news, leading to lower stock price crash risk.<sup>7</sup> Further, they found that the mitigating effect of CSR on future stock price crash risk is significant only when firms have less effective governance (for e.g., lower corporate governance ratings and lower shareholder rights) and a lower level of long-term institutional ownership. Malik (2014) asserted that firms which align social goals with company goals, where CSR is used as a strategic tool to maximize value, and firms with better CSR performance have greater potential to increase shareholder value as well as the value of other stakeholders.<sup>8</sup> Gonçalves et al. (2013) have empirically examined that the market takes social disclosure into account when pricing the shares of companies.<sup>9</sup> Additionally, the market is anticipatory in pricing the cost of capital. Their results show a negative relationship between the cost of equity and level of social disclosure, indicating that the Brazilian stock market has a semi-strong form of market efficiency. However, such social disclosure must be a long-term exercise to enable analysts follows the decisions made over time. Carroll and Shabana (2010) posit that the impact of CSR on financial performance of firm is not always positive.<sup>10</sup> Instead; firms should

understand the circumstances of the different CSR activities and pursue those activities that demonstrate a convergence between the firm's economic objectives and the social objectives of society.

### **Indian Context**

Sharma and Agarwal (2016) revealed that the CSR spending in the year 2014-15 as a percentage of profit after tax of the Indian public and private banks is not equal to 2%.<sup>11</sup> Sharma (2016) ascertained that in the year 2014-15, only 30% companies complied with mandatory CSR.<sup>12</sup> This compliance was just by 20% companies in the year 2012-13 when CSR was voluntary. Similarly, Ramesh and Mendes (2015) reported that only 15% companies had spent beyond 2% on CSR in the year 2012-13.<sup>13</sup> Gautam and Singh (2010) found that around 49% companies out of 500 largest Indian companies were reporting on CSR practices.<sup>14</sup> Jain (2014) opines that CSR policy may turn out to be a boon for both the companies as well as the society, boosting equitable and sustainable growth.<sup>15</sup>

### **Research Problem**

It has been observed from review of literature that CSR practices are beneficial for company, society, stakeholders and the nation. Also, it is apparent that companies are not fully complying with CSR. One possibility is that the Companies Act, 2013 prescribes “comply or explain” approach for CSR. Problem is that some companies may not comply with CSR seriously and therefore may explain. Hence, there is need for the study.

### **Research Objectives**

To understand concept of CSR.

To assess compliance with CSR spending by sample companies.

### **Research Methodology**

#### **Sampling Method**

Purposive sampling technique was used for the sample. The sample companies are pertaining to different sectors comprising NIFTY 50.<sup>16</sup> Of 50 companies, ten companies (Bank of Baroda, BHEL, Bosch, Cipla, GAIL, Grasim Ind, HCL

Techno, Hero MotoCorp, Idea Cellular, SBI) were excluded because they could not yet publish their annual reports for the year 2015-16 by 23<sup>rd</sup> August, 2016. Four companies viz., PNB, Sun Pharma, Tata Motors and Vedanta cited reason that they had suffered loss in previous financial year(s), hence were not subject to compliance with CSR and were excluded.

### **Sample**

Sample consists of 36 companies which were members of the NIFTY 50.

### **Sample Period**

The year 2015-16 is considered as sample period.

### **Source and Type of Data**

Annual reports of companies were downloaded from website of sample companies for assessing and analysis of CSR practices. Secondary data were considered from annual report on CSR.

### **Tools for Data Analysis**

Data analysis was done with the help of classification, tabulation, per cent. Z test, a test of proportion was also used for the study.

### **Operational Terms**

**CSR Regulation:** CCR regulations mean provisions of Section 135 and Schedule VII requirements of the Companies Act, 2013. It also includes the Companies (Corporate Social Responsibility Policy) Rules, 2014 and the Companies (Corporate Social Responsibility Policy) Amendment Rules, 2015 and 2016.

**Compliance with CSR:** Adherence of CSR provisions as mentioned in CSR regulation above.

**Compliance with CSR Spending:** Spending 2% of average net profit of 3 preceding financial years as per provisions of Clause (a) of sub section (1) of Section 381 and Section 198 of the Companies Act, 2013 on CSR.

### **Research Findings**

#### **Statistical Test**

According to the nature of data collected, it was decided to adopt Single-Sample Tests involving proportions.

Z score was calculated using the following formula, Blalock (1960).<sup>17</sup>

$$Z = \frac{p_s - p_u}{\sqrt{p_u q_u / N}}$$

Where  $p_s$  = Percentage of actual number of companies demonstrating full compliance.

$p_u$  = Percentage of standard / null hypotheses, i.e., a majority as meaning greater than 50 per cent, **hence** 0.501.

$q_u = 1 -$

### **Hypothesis Testing**

Companies are required to comply with CSR regulation and henceforth spend on CSR once they meet the criteria mentioned in the introduction section. Such compliance facilitates business in many ways, instances of which can be evidenced from review of literature section.

The following null hypothesis is tested to pursue the objective of the study.

$H_1$ : There exists no compliance with provision of 2% spending on CSR in a majority of the companies.

Computation of Test Statistic of  $H_1$ :

$$Z = \frac{0.50 - 0.501}{\sqrt{[(0.501)(0.499)]/36}} = -0.001 \div 0.0833 = -0.01$$

A normal distribution table will show that a Z score of -0.01 would occur approximately 49.6 percentage of the time by chance if the assumptions were true and as it is more than the significance level of 2 per cent, we fail to reject the null hypothesis. This implies that evidence is not strong enough to establish that there exists compliance with provision of 2% spending on CSR in a majority of the companies.

### **Suggestions and Managerial Implications**

Reporting and disclosure of annual report on CSR must be included as an annexure to the Board report and all matters related to CSR should be mentioned in such an annexure as prescribed by CSR

regulations, 2014. Deviating from this, in case Coal India Limited, annual report on CSR is not part of Board Report. Hindustan Unilever Limited has made disclosure and composition of CSR Committee in corporate governance report. ITC Limited, Tata Steel Limited, Tata Consultancy Services Limited have not given a link to CSR activities in their annual report on CSR. ITC Limited has mentioned “sustainability” along with CSR Committee. Similarly, Reliance Industries Limited has mentioned as “CSR and Governance Committee.” NTPC Limited and Power Grid Corporation of India Limited did not have Independent Directors in composition of their CSR Committees due to delays in their appointment. Yes Bank Limited has disclosed two different amounts of CSR spending. Managers being steward of interests of stakeholders must ensure that reporting and disclosure of CSR practices should be uniform and in the manner as codified in CSR regulations, 2014. Moreover, a majority of companies have not complied with CSR probably due to the reason that CSR regulation provide “comply or explain” approach or companies had long-term projects which could not get completed within the required time frame. Therefore, managers should choose short-term projects on CSR or else they can contribute to the Prime Minister's National Relief Fund or any other fund set up by the Central Government or the State Governments for socio-economic development and relief and funds for the welfare of the Scheduled Castes, the Scheduled Tribes, other backward classes, minorities and women to achieve CSR compliance.

#### **Utility of the Research**

The research will be useful to the companies. It will also be useful to regulators in modifying CSR regulation or taking corrective action on companies not complying with CSR. It also contributes to CSR literature and thereby is beneficial to the research community, and most importantly to other stakeholders.

#### **Limitations of the Study**

Results of the study should be considered in the view of limitations such as sample size, and period of the study.

#### **Scope for Further Research**

Study of non-quantitative reporting and disclosures practices of CSR is one possibility.

#### **Conclusion**

There does not exist strong evidence that even a majority of companies are complying with provision of 2% spending on CSR. The attention of regulator is warranted to amend CSR regulation suitably or take action for non-compliance with CSR. One possibility is to do away with “comply or explain” approach of CSR and make it “comply” with CSR approach.

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www.zeetelevision.com

**Table 1: Sample Companies Comprising Nifty  
50 as at 31.3.2016#**

Sr. No.	Companies	Sr. No.	Companies
1	ACC Limited <sup>§</sup> *	19	ITC Limited *
2	Adani Ports and Special Economic Zone Limited*	20	Kotak Mahindra Bank Limited
3	Ambuja Cements Limited <sup>§</sup> *	21	Larsen & Toubro Limited*
4	Asian Paints Limited*	22	Lupin Limited
5	Axis Bank Limited	23	Mahindra & Mahindra Limited*
6	Bajaj Auto Limited*	24	Maruti Suzuki India Limited*
7	Bharat Petroleum Corporation Limited	25	NTPC Limited*
8	Bharti Airtel Limited	26	Oil and Natural Gas Corporation Limited
9	Cairn India Limited	27	Power Grid Corporation of India Limited
10	Coal India Limited*	28	Reliance Industries Limited*
11	Dr. Reddy's Laboratories Limited	29	The Tata Power Company Limited*
12	Hindalco Industries Limited*	30	Tata Steel Limited*
13	Housing Development Finance Corporation Limited	31	Tata Consultancy Services Limited
14	HDFC Bank Limited	32	Tech Mahindra Limited*
15	Hindustan Unilever Limited*	33	Ultra Tech Cement Limited
16	ICICI Bank Limited	34	Wipro Limited*
17	IndusInd Bank Limited	35	Yes Bank Limited
18	Infosys Limited	36	Zee Entertainment Enterprises Limited

<sup>§</sup> Companies financial year ends on 31.12.2015.

# Source: Business Standard, Ahmedabad, 1st April 2016, p. 12.

\* Companies have complied with CSR.

**Table 2: Compliance with CSR Spending**

Provision	CSR Rules Or Clause/Sub Section/Section of The Companies Act, 2013	No. of Companies (%) for the year 2015-16	
		Compliance	Non-Compliance
At least 2% as CSR expenditure (2% of average net profit of 3 preceding financial years)	Rule 2 (f), 7, and Annexure 4 of CSR Rules 2014 and Section 135 (5) of the Companies Act, 2013	18 (50%)	18 (50%)

Source: Gleaned from annual reports.

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# Vegetables Export Performance of India in BRICS Market - A Revealed Competitive Advantage

Waheeda Thomas

## Abstract

BRICS association is emerging as a powerful force in the world economic scenario. India is one of the important contributors in BRICS nations. India is one of the leading producers of vegetables in the world. BRICS market provides great opportunity for increasing member nation's export. Present study looks at the composition and compounded growth of vegetables export from India to Brazil, China, Russia and South Africa. The study looks into the performance of vegetables export in the BRICS Market using Revealed Competitive Advantage and Revealed Symmetric Competitive Advantage methods of measurement of export performance.

## Introduction

India is getting ready to host 8<sup>th</sup> BRICS meeting at Goa in the October 2016. Mutual trade development is one of the significant expectations from this association. The acronym **BRICS** is for an association of five major emerging national economies viz **Brazil, Russia, India, China** and **South Africa**. The group was initially known as BRIC. After inclusion of South Africa in 2010 it is called BRICS. The acronym **was first used in 2001 by Goldman Sachs in their Global Economics Paper, "The World Needs Better Economic BRICS"** on the basis of econometric analyses. The paper projected that the economies of Brazil, Russia, India and China would individually and collectively emerge as world's largest economies in the next 50 years. The study asserts that India and China will be the leading suppliers of manufactured goods and services and Brazil and Russia would dominate the supply of raw materials. BRICS countries have the potential to form a powerful economic bloc. BRIC has also become a generic marketing term to refer to these five emerging economies.

**BRICS is not** an Organization or a World Institution. It is just an annual grouping or association or summit between these countries. This formal grouping started after the meeting of the Leaders of Russia, India and China in St. Petersburg on the margins of G8 Outreach Summit in 2006. It was formalized during the 1st meeting of BRIC Foreign Ministers on the margins of **United Nations General Assembly in New York in 2006**. The 1<sup>st</sup> Summit was held in Yekaterinburg, Russia, in June 2009. BRIC was expanded into BRICS with the inclusion of South Africa at the BRIC Foreign Ministers' meeting in New York in September 2010.

This group includes five major developing economies of the world; represent over 43 per cent of world population. All five members are in the top 25 of the world by population of which four are in the top 10. The five nations have a combined nominal Gross Domestic Product equivalent to approximately 25 per cent of the gross world product (Novotsi Ria 2016). BRICS countries contribute 17 per cent to the world trade. Sustainable economic cooperation and trade development has been the focus in all the 7 summits of BRICS countries so far. India's total merchandise export to BRICS countries during these 10 years of association has increase from 2031 million USD to 27571 Million USD experiencing a compound growth of 29.8 per cent India is second largest producer of vegetables in the world.

India is second largest producer of vegetables in world. Creation of Agricultural Processing Zones and export promotion measures have provided impetus to this employment oriented sector. India's output of fruits, vegetables and spices, is estimated to be 283.4 million tonnes (MT) in 2015-16 (IBEF 2016).



## Review of Literature

Export competitiveness of fresh vegetables from India is increasing Vanitha S. M. et al (2013), especially Onion and Peas. With encouraging foreign trade policy of government of India specialized agency like Agricultural and Processed Food Products Export Development Authority (APEDA), and agro processing reforms in the country there has been an increase in the fresh as well as processed vegetables export.

Concept of revealed comparative advantage has been used by several studies. Most of these studies have used data on export shares. Analysis of pattern of comparative advantage of industrial countries for the period 1953 to 1971 conducted by Balassa in 1977. Yeats (1997) studied index of revealed comparative advantage in conjunction with the changes in the regional orientation of exports. Richardson and Zhang (2001) and Yue (2001) used Balassa index of RCA for the United States of America to study the patterns of variation across time and changes in China's export pattern. Competitiveness of Hungarian agriculture vis-à-vis EU using four indices of revealed comparative advantage is assessed by Ferti and Hubbard (2002).

## Objectives of the Study:

- (1) Magnitude of growth of vegetable export of India in BRICS nations viz Brazil, China, Russia and South Africa
- (2) Temporal changes in the export composition of vegetables in this region and
- (3) Revealed export competitiveness of vegetables in this region

## Data and Methodology

Present study uses data pertaining to the period 2009 to 2013. The data on the value of exports of vegetables for India and the world were compiled electronic databases of Directorate General of Commercial Intelligence and Statistics (DGCIS) and Food and Agriculture Organisation and BRICS Joint Statistical Publication 2015. All the values of exports have been referred in US dollars. To study the composition of exports of vegetables percent shares were worked out in the value of exports.

Compound annual growth rate is computed to examine the trends in vegetables export. The growth rates were calculated for the period 2009 to 2013. The Export Performance Ratio (EPR), as suggested by Balassa (1965), has been used to indicate the comparative advantage of India's export of vegetables in BRICS Market. Since this is revealed by the observed pattern of trade flows, it is called Revealed Comparative Advantage (RCA). Some studies measures RCA at the global level ( Vollrath, 1991), others at a sub-global or regional level (Balassa's original index), and while some others evaluates the measurement as bilateral trade between two countries or trading partners. Present study uses Balassa's (1965) measure of relative export performance by country and commodity, defined as a country's share of world exports of a commodity divided by its share of total world exports. The RCA is measured using post-trade data.

The index for country i commodity j is calculated as follows:

$$RCA_{ij} = (X_{ij}/X_{wj}) / (X_i/X_w)$$

Where

$X_{ij}$  = Country i's export of commodity j in BRICS Market

$X_{wj}$  = World export of commodity j in BRICS Market

$X_i$  = Total agricultural export of country i in BRICS Market

$X_w$  = World agricultural export in BRICS Market

If RCA is greater than unity, the country has the comparative advantage and if RCA is less than unity then country has comparative disadvantage. However, it should always be adjusted to make it symmetric (KeldLaursen 1998). The index has been made symmetric and was obtained as  $(RCA-1)/(RCA+1)$ . This measure ranges from -1 to +1 and the measure is labelled as 'Revealed Symmetric Comparative Advantage' (RSCA).

Since the RCA gives an output which cannot be compared on both side of 1. Dalum et. al. (1998); laursen (1998); Widodo (2009) have obtained revealed symmetric comparative advantage (RSCA), this measure ranges from - 1 to 1, that is

formulated as:

$$RSCA_{ij} = (RCA_{ij} - 1) / (RCA_{ij} + 1)$$

The magnitude index of  $RSCA_{ij}$  about zero up to one ( $-1 \leq RCA_{ij} \leq 1$ ).

When  $RSCA_{ij}$  index of country  $i$  above zero is to be comparative advantage for product  $j$ , and is  $RSCA_{ij}$  index of country below zero is to be comparative disadvantage for product  $j$ .

### Findings and Discussion:

India is one of the largest producers of vegetables in the world. This present great opportunities for the exports of fresh fruits and vegetables as well as the

exports of their processed products. Foreign Trade Policy of India has created a favorable environment for last one and a half decade for boosting Indian Agricultural Exports especially the exports of horticultural products. As shown in table 1, compounded growth of area harvested for vegetables for India during the study period is 0.9 per cent which is less than 1.4 per cent for the world. As against that production shows a CAGR of 4.2 per cent and that of world is only 1.9 per cent. India is not only the highest producer of vegetables but also has one of the highest yields. CAGR for vegetables yield that of 7 times higher than the world CAGR during the study period.

**Table 1: Vegetables Production**

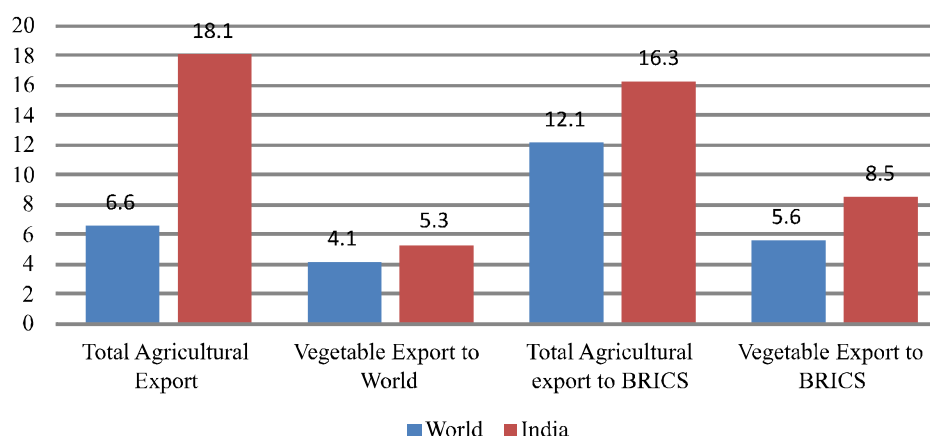
Year	Area harvested (Hectares)		Production in tones		Yield Hg per Hectare	
	World	India	World	India	World	India
2009	1996414	123329	37759057	397126	307357	5035267
2010	2073892	126400	38912445	426837	303273	5578035
2011	2123432	127116	40285174	443982	319285	5945696
2012	2176261	129318	41352511	470218	321909	6352433
2013	2164272	130310	42169088	508776	319968	6723067
CAGR	<b>1.4</b>	<b>0.9</b>	<b>1.9</b>	<b>4.2</b>	<b>0.7</b>	<b>4.9</b>

Source: Researcher's Calculation.

Growth of Vegetable export of India vis a vis world and agricultural export of India as shown in figure 1. CAGR value for all the export variables related to India are higher than world. Agricultural export of India has compounded growth of 18.1 per cent whereas world Agricultural export has grown by 6.6

per cent. Vegetables export growth of India is higher than world vegetable export growth. Growth rate of agricultural export of India to the BRICS market is less than world market. However, growth of India's vegetables export to BRICS Market is better than that of world market.

**Figure 1: Compound Annual Growth Rate (Values in Per cent)**



### Demand for Vegetables in BRICS Market:

Analysis of demand for vegetables in BRICS market reveals that it has increased during the study period. Compounded growth in Brazilian demand is 16.2 per cent, China 9.8 per cent, South Africa 11.3 per cent and Russian demand lowest of all i.e., 5.1 per

cent. As seen in table 2 India's share in the total demand for vegetables in Brazil market has increased from 3.4 per cent to 4 per cent. Russian market too shows a rise from 7.2 per cent to 8.4 per cent between 2009 to 2013. For South Africa except for the year 2013 the rest of the year's performance is stable.

**Table 2: India's Share in Import of Vegetables by BRICS Nations (Values in Per cent)**

Year	Brazil		China		Russia		South Africa	
	Total Demand	India's Share	Total Demand	India's Share	Total Demand	India's Share	Total Demand	India's Share
2009	61634	3.4	26524	0.9	410831	7.2	34718	8.9
2010	93525	3.2	35895	1.0	452148	5.6	46761	10.4
2011	116583	4.3	37725	0.7	548458	6.6	54226	8.3
2012	111313	4.6	42173	1.5	501097	6.9	56735	8.3
2013	151532	4.0	46504	1.0	552283	8.4	65954	6.9
CAGR	16.2		9.8		5.1		11.3	

Source: Researcher's Calculation.

### Direction of Vegetables Export in BRICS Market:

Country wise direction of vegetables exported in BRICS market is shown in table 3. Russia market has the largest capacity to absorb Indian vegetables followed by Brazil. South African market though

fluctuating in demand is higher than China. Percentage share of vegetables export in Brazilian market has increase from 6.2 per cent to 11.0 per cent during these 6 years. Russian market has shown a downward trend from 84 per cent in 2009 to 80.0 per cent in 2013.

**Table 3: Direction of vegetables export in total merchandise export in BRIC Market (Value in Per cent)**

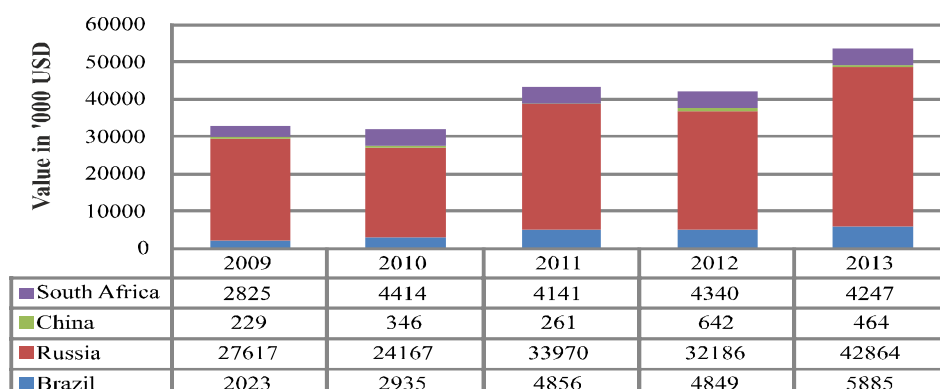
Sr No	Countries	2009	2010	2011	2012	2013
1	Brazil	6.2	9.2	11.2	11.5	11.0
2	Russia	84	75.8	78.6	76.6	80.2
3	China	0.7	1.1	0.6	1.5	0.9
4	South Africa	8.6	13.9	9.6	10.3	7.9

Source: Researcher's Calculation.

China is ranks number one in production of vegetables in the world. India's vegetable export is insignificant as its share is less than 2 per cent of the total vegetable export of India in BRICS market.

Figure 2 shows the value of export in these markets. Figure 2 presents the direction of India's vegetable export to BRICS market.

**Figure 2 - Direction of Vegetables Export in BRICS Market**



### **Composition of Vegetables Export in BRICS Market:**

Composition of vegetables export in BRICS market

as given in table 4 shows, that India is exporting fresh vegetables, dehydrated vegetables and preserved vegetables.

**Table 4: Composition of India's vegetables export in BRICS Market**

Commodities	2009	2010	2011	2012	2013
Vegetables in vinegar	50.8	34.3	44.8	48.2	55.6
dehydrated Vegetables	32.4	48.0	40.9	39.5	35.5
Fresh Vegetables nes	0.1	0.1	1.5	0.4	0.1
Vegetables, fresh or dried products nes	0.1	0.1	0.1	0.0	0.0
Vegetables, homogenized preparations	0.1	0.0	0.1	0.0	0.0
Preserved frozen Vegetables	1.1	4.8	2.2	0.9	0.6
Vegetables, temporarily preserved	15.4	12.8	10.4	11.0	8.2

Note: nes stands for not specified elsewhere.

Source: Researcher's calculation.

Share of vegetables in vinegar which increased the shelf life of the vegetables is highest. Vegetables in vinegar, dehydrated vegetables and vegetables, temporarily preserved together 98 to 99 per cent during the study period. These products are the output of agro processing firms which have received support by the government of India and state government. Export strategies of India's current Foreign Trade Policy are pro exporters. They include simplification of export documentation procedures through the introduction of online or on-spot documentation facilities as well as the introduction of Special Focus Initiatives for Agriculture exports sector.

Special schemes initiated by the government for the benefits of agri-exports sector include Vishesh Krishi Upaj Yojana, meant to boost the exports of fresh fruits, vegetables, and flowers, and their processed products. Exporter categorization scheme based on performance is a star rating is given to each exporter based on his performance. Target Plus scheme of Government of India for top performing exporters - a duty free credit based on incremental exports.

### **Revealed Competitive Advantage and Revealed Symmetric Competitive Advantage:**

It is evident from table 5 that India has comparative advantage in export of vegetables in BRICS market all throughout the study period. The RSCA index for

all the six year is above zero indicating that India has revealed symmetric comparative advantage in export of vegetables in BRICS market.

**Table 5: Indian Vegetable Export RCA and RSCA in BRICS Market**

Year	(X <sub>ij</sub> /X <sub>wj</sub> )	(X <sub>i</sub> /X <sub>w</sub> )	RCA	RSCA
2009	5.9	2.2	2.7	0.5
2010	4.5	2.5	1.8	0.3
2011	5.4	2.7	2.0	0.3
2012	6.2	2.7	2.3	0.4
2013	6.9	2.7	2.5	0.4

Source: Researcher's Calculation

Being a member nation of BRICS association India enjoys a favorable position amongst Brazil, Russia and South Africa. Thus increasing demand in these markets can be strategically targeted for further market penetration. China too is competing for same market.

### **Limitations of the Study:**

Present study only focuses on the vegetables export in BRICS market for a period of six years from 2009 to 2013 due to non availability of international data from 2014 to 2016.

### **Future Scope of the Study:**

Comparative analysis of India and its competitors in BRICS market and fresh and processed vegetables export in BRICS markets can be conducted.

### **Conclusion:**

The composition, volume, and direction of vegetables export have shown a positive trend for overall BRICS market. Country wise Russian

market for India is saturating. Brazil is the potential market. Chinese share is too low. Share of processed vegetables in this market is very high. Indian vegetables enjoy a competitive advantage in BRICS markets.

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## Perception of effectiveness of performance appraisal by employees working at different hierarchical levels in a Paint manufacturing firm at Gujarat

Yashasvi Rajpara, Malay Patel

### Abstract

It is a regular practice to measure effectiveness of Performance appraisal in the western context. However, this particular topic has not been extensively researched in Indian context. Moreover, the prior literature on this subject in Indian context are largely measuring effectiveness of performance appraisal between two or more organization in same industry or different industry.

However, here an attempt is been made to study perception of effectiveness of performance appraisal among the employees working in the same organization at different hierarchical levels. The organization selected for this study is a paint manufacturing firm at Gujarat.

Thus, the study involves two objective which is proposed to be studied

- Is existing Performance Appraisal system a worthwhile tool and does it help to develop employees?
- What are the different perceptions of employees towards effectiveness of performance appraisal working at different hierarchical level in the same organization?

### Introduction

Performance appraisal is regarded as the most important function of human resource management (Selvarajan and Cloninger, 2008; Smither and London, 2009). Earlier studies have revealed that effective performance appraisal system is the sign of integral component of effectiveness of human resource management of an organization (Zapata-Phelan et al., 2009). It is a regular practice to measure effectiveness of Performance appraisal in the western context. However, this particular topic has not been extensively researched in Indian context. Moreover, the prior literature on this subject in Indian context are largely measuring effectiveness of performance appraisal between two or more organization in same industry or different industry.

However, here an attempt is been made to study perception of effectiveness of performance appraisal among the employees working in the same organization at different hierarchical levels. The organization selected for this study is a paint manufacturing firm at Gujarat.

Thus, the study involves two objectives :

- Is existing Performance Appraisal system a worthwhile tool and does it help to develop employees?
- What are the different perceptions of employees towards effectiveness of performance appraisal working at different hierarchical level in the same organization?

### Review of Literature

#### • What is Performance Appraisal ?

“What is expected to be delivered by an individual or a set of individuals within a time frame. What is expected to be delivered could be stated in terms of results or efforts, tasks and quality, with specification of conditions under which it is to be delivered” (Kumari & Malhotra, 2012, p.78).

#### • Performance Management and Performance Appraisal

Performance Management can be defined as a systematic process for improving organisational performance by developing the performance of individuals and teams (Armstrong, 2006). Walters (1995) defined Performance Management as the 'process of directing and supporting employees to work as effectively and efficiently as possible in line with the needs of the organisation'. Williams (2002) believes the notion of Performance Management is creating a shared vision of the aims and purpose of the organisation, helping each individual employee to understand and recognise their part in contributing to them, and thereby managing and improving the performance of both individuals and the organisation.



Performance Appraisal plays a crucial role in Performance Management Systems; it is normally the medium behind which the organisational goals and objectives are translated into an individual's objective. It also remains the prime way of discussing and acting on the development of the individual (Fletcher, 2004)

- **Effectiveness of Performance Appraisal**

Effective performance appraisals are commonly associated with clear goals that are attached to specific performance criteria and are well-accepted by both appraiser and appraisee' (Mustapha & Daud, p.158). All effective performance appraisals include elements such as linking appraisal to rewards, the supervisor and employee working together to identify goals, performance goals clearly defined, feedback given to the appraiser on their effectiveness and compliance with legal requirements (Rankin & Kleiner, 1988).

- **Employee Perception**

'The success of any HR intervention in organisation is heavily dependent on employees perception of that intervention' (Rahman & Shah, 2012, p.11).

Employees' thoughts of performance appraisal systems could be as important to the continuing success of the system as reliability and validity (Dipboye and Pontbriand, 1981). Employee perceptions of the fairness of their performance appraisals are useful in determining the success of performance appraisal systems (Erdogan, Kraimer & Liden, 2001).

### **Research Methodology**

The study is primarily carried out to study the perception of effectiveness of performance appraisal among the employees working in the same organization at different hierarchical levels. The organization selected for this purpose is a paint manufacturing firm in Gujarat. To investigate this study further we have conducted quantitative analysis .Thus through quantitative analysis and data collection tools we have decribed quantitative analysis between performance appraisal and employees perception.

- **Type of Data**

In this study, primary as well as secondary data have

been used for investigating effectiveness and perception of performance appraisal within a paint manufacturing company in Gujarat. The secondary data was used to know what prior researchers have concluded about performance appraisal and employee perception. The secondary data primarily helped in providing theoritical investigation of research problem. On the other hand, primary data basically facilitated empirical investigation about the effectiveness of performance appraisal and its influnece on employee performance within a paint manufacturing company in Gujarat.

- **Data Collection Method**

In this particular study, survey method was used for collecting primary data from employees of paint manufacturing company in Gujarat. For collecting primary data, close ended questionnaire was used. Most of the Statements in the Questionnaire had a 5-Point scale ranging from Great Extent, Very Little, Little, To an Extent, No. The Questionnaire had a total 32 Close-ended Questions and 1 Open ended Questions and it is divided into 5 parts.

The Pattern of the Questionnaires was;

Part A Comprises of the Personal information of the Executives and Managers.

Part B Comprises of the Present Appraisal System followed at Paint Manufacturing Company in Gujarat, This has 4 parts in it and they are :-

Part B1:- Is About the opinion of the Present System from Executives and Managers.

Part B2:-Importance and Relevance of the Criteria to Performance Appraisal.

Part B3:- Characteristics of a successful Performance Appraisal System.

Part B4:- About Overall Performance Appraisal System at Paint Manufacturing Company in Gujarat and a open ended question to have suggestions from the Managers and Executives.

- **Sample and Population**

For data collection, survey technique was used in this study. For this reason, a sample was used in the study. This sample was selected from different departments and from hierarchial level in the same. This sample was selected from a Paint

Manufacturing unit situation in Gujarat state of India, Due to Organization's undisclosed policy we were not permitted to use name of this organization. To know about the performance appraisal system, the study was taken among the Executives and Workers from two departments which are more process oriented- Production department and Paint Packaging department. The total strength of this two department was 300 employees. As the population is large, the sample was restricted to 100 which forms 33.3 % of the total population. Here convenient probability sampling was taken as the two sample departments selected were identical in size (150 members each in production & in paint packaging department) Further, the sample of 100 comprised of 50 members from Production department and 50 members from Paint Packaging department. In the sample size of 50 from the each department – 25 members from each department belonged to two different hierarchical level (25 Executives and 25 Workers). Scope of the study was limited to single Paint manufacturing company in Gujarat.

- **Time Frame of Study**

The study of Performance appraisal system at a selected paint manufacturing company in Gujarat, was taken in month of February'2016.

- **Demographic Variables**

To systematically study the effectiveness of performances appraisal in a selected Paint manufacturing company we took below mentioned demographic variables to propose our hypothesis

- o Department- Production and Paint Packaging Department
- o Hierarchical Level- Executives and Workers
- o Age Group
- o Number of Years in Present Position

- **Statistical Techniques**

The collected data was scrutinized and edited. The edited data was analyzed using the software “Statistical Package for Social Sciences” (SPSS) and meaningful conclusions were arrived by Correlation .Before conducting Correlation, Factor Analysis was done, so that proposed Hypothesis can be tested against the selected demographic variable

within the same organization.

- **Hypothesis of the study**

**H<sub>1</sub>:** There is significant difference in the opinions of employees from two departments towards the Report Writing (RW) & Progress.

**H<sub>2</sub>:** There is significant difference in the opinions of employees from two departments towards the Improvement in Performance.

**H<sub>3</sub>:** There is significant difference in the opinions of employees belonging to two different Job Hierarchical level towards the Promotion & Working Culture (WC)

**H<sub>4</sub>:** There is significant difference in the opinions of employees belonging to two different hierarchical level towards the Objectivity & Performance Appraisal.

**H<sub>5</sub>:** There is significant difference in the opinions of employees belonging to two different age groups towards the Report writing & Progress.

**H<sub>6</sub>:** There is significant difference in the opinions of employees belonging to two different age groups towards the Improvement in Performance.

**H<sub>7</sub>:** There is significant difference in the opinions of employees and their Tenure in the present position towards the Report writing (RW) & Progress.

**H<sub>8</sub>:** There is significant difference in the opinions of employees and their Tenure in the present position towards the Promotions & Working Culture (WC)

**Research Analysis**

In this study, response rate of 98% was achieved that was adequate to analyse results, to analyse effectiveness of appraisal. In this study, statistical analysis methods were used to get empirical evidence about impact of performance appraisal on employee performance and perception.

Initially we carried out the factor analysis to link the closely related factors from the questionnaire.

The explanatory factor analysis is used in order to identify the various factors of Effectiveness of Performance Appraisal. Principal Component's analysis is employed for extracting factors. Orthogonal rotation with Varimax is applied. The

Latent root criterion is used for extraction of factors. As per it, only the factors having latent roots or Eigen values greater than one are considered significant; all the factors with latent roots less than one are considered insignificant and disregarded.

In interpreting factors, a decision was made regarding the consideration of the factor loadings which are worthwhile for analysis. A factor loading represents the correlation between an original variable and its factor. After a factor solution has been obtained, in which all variables have a significant loading on a factor, then some more meaning to the pattern of factor loadings is assigned. Variables with higher loadings are considered more important and have greater

influence on the name and label selected to represent a factor. Greater emphasis is placed on those variables with higher loadings. These variables have been assigned a name or a label to a factor that accurately reflected the variables loading on that factor. The name or label is not derived or assigned by the factor analysis computer program, rather, it is intuitively developed by the researcher based on its appropriateness for representing the underlying dimension to a particular factor. All the factors have been given appropriate names on the basis of variables represented in each case. The statements and factor loadings (commonalities) have been summarized in table

**Table. 1 Rotated Component Matrix for Factor Analysis**

Rotated Component Matrix(a)	Component			
	1	2	3	4
Linkage with additional work assignment	0.589			
report writing system helps in monitor progress in your job	0.565			
Linkage with efforts put in	0.562			
report writing helps in giving feedback in case of deficiencies	0.538			
report writing system gives you sense of participation in management	0.527			
report writing helpful in job rotation among officers				
Linking of Report writing with Rewards/Transfer		0.718		
Linking Report Writing with individual capacity with basic level of responsibility		0.552		
Report Writing improves performance		0.522		
Strictness of Superior		0.508		
Linkage with responsibility				
Linking report writing with additional work or responsibility				
Periodicity of Appraisal				
report writing helps in cultivating good cooperation working			0.713	
Linkage with actual work done			0.659	
Linkage with promotions and rewards			0.575	
goals set are realistic and attainable				
report writing helps in reduce your work related difficulties				
report writing helps in improving communication				
promoting competition between individuals				
Achieving objectivity (Rate give)				0.645
Bias by an Individual for PA				0.547
Evaluation of Present Appraisal				0.517
Eigen Values	2.470	2.449	2.421	2.201
% of Variance	9.881	9.797	9.685	8.806
Cumulative %	9.881	19.677	29.362	38.167

There are four factors each having Eigen value exceeding one. Eigen values for five factors are 2.470, 2.449, 2.421, and 2.201. The index for the present solution accounts for 38.167 % of the total variations for the appraisal. It is a pretty good extraction because we are able to economize on the number of choice factors), from 31 to 4 factors. The percentage of variance

explained by factors one to four are 9.881, 19.677, 29.362, and 38.167 respectively.

Large commonalities (factor loadings) indicate that a large number of variance as been accounted for by the factor solutions. Varimax rotated factor analysis results for performance appraisal evaluation of employees as shown in the

above table which indicate that after 4 factors are extracted and retained the, commonalty is 0.589 for variable1, 0.565 for variable 2 and so on. It means that

approximately 58.5% of the variance of variable1 is being captured by 4 extracted factors together.

Table. 2 Naming the Factors

Naming factors			
<b>Report Writing &amp; Progress</b>	Linkage with additional work assignment	0.589	Factor 1
	report writing system helps in monitor progress in your job	0.565	
	Linkage with efforts put in	0.562	
	report writing helps in giving feedback in case of deficiencies	0.538	
	report writing system gives you sense of participation in management	0.527	
<b>Improving Performance</b>	Linking of Report writing with Rewards/Transfer	0.718	Factor 2
	Linking Report Writing with individual capacity with basic level of responsibility	0.552	
	Report Writing improves performance	0.522	
	Strictness of Superior	0.508	
<b>Work Culture &amp; Incentives</b>	report writing helps in cultivating good cooperation working	0.713	Factor 3
	linkage with actual work done	0.659	
	linkage with promotions and rewards	0.575	
<b>Objectivity &amp; PA</b>	Achieving objectivity (Rate give)	0.645	Factor 4
	Bias by an Individual for Performance Appraisal (PA)	0.547	
	Evaluation of Present Appraisal	0.517	

#### Correlation between Employee's demography & the Factors derived from Factor Analysis

One way analysis of variance has been used to find the significant association variables of demography and the factors which were derived from factor analysis out of 16 possible hypothesis which were proposed 8 hypothesis had an positive correlation, the analysis was done at 5 % significance level (95 % confidence level).

#### Inference from the Analysis

**H<sub>1</sub>:** There is significant difference in the opinions of employees from two departments towards the Report Writing

(RW) & Progress is positively correlated with a value of 0.0153. Thus, it denotes that employees working in different department in the Paint Company have different view point for Report Writing and its Significance.

**H<sub>2</sub>:** There is significant difference in the opinions of employees from two departments towards the Improvement in Performance is positively correlated with a value of 0.0175 that means opinion of the employees for improving performance is



totally different in both departments in the Paint Company.

**H<sub>3</sub>:** There is significant difference in the opinions of employees belonging to two different Job Hierarchical level towards the Promotion & Working Culture (WC) is positively correlated with a value of 0.007 that means opinion of the employees for Promotions and Working Culture is different among Executives and Workets at the Paint Company.

**H<sub>4</sub> :** There is significant difference in the opinions of employees belonging to two different hierarchical level towards the Objectivity & Performance Appraisal is positively correlated with a value of 0.013 that means opinion of the employees for Objectivity & Performance Appraisal is different among Executives and Workers at the Paint Company.

**H<sub>5</sub> :** There is significant difference in the opinions of employees belonging to two different age groups towards the report writing & progress is positively correlated with a value of 0.048 that means opinion of the employees for Report Writing & Progress is different among employees

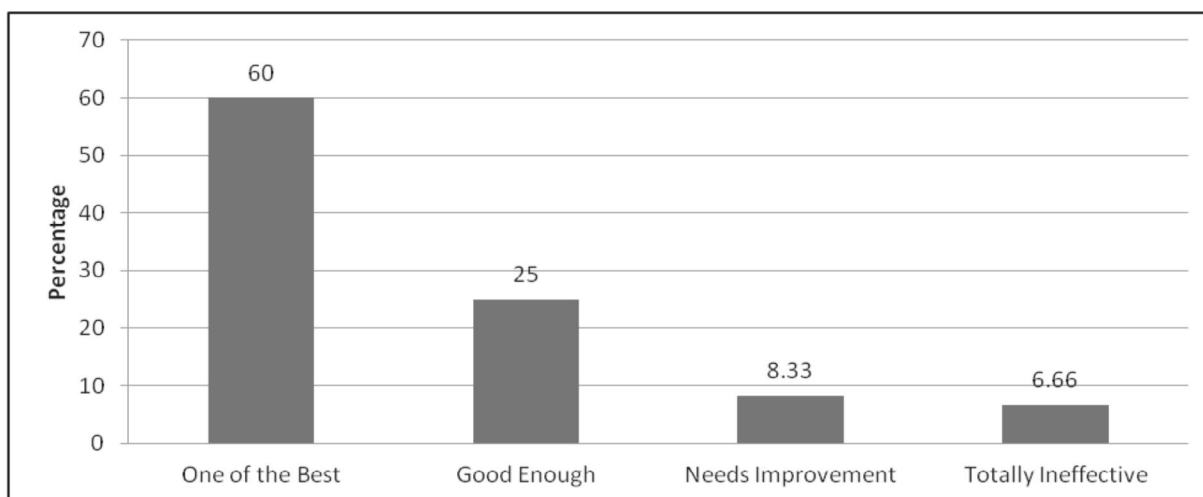
belonging to different age groups.

**H<sub>6</sub> :** There is significant difference in the opinions of employees belonging to two different age groups towards the Improvement in Performance is positively correlated with a value of 0.020 that means opinion of the employees for Improving Performance is different among employees belonging to different age groups.

**H<sub>7</sub> :** There is significant difference in the opinions of employees and their Tenure in the present position towards the Report writing (RW) & Progress is positively correlate with a value of 0.028 that means opinion of the employees for Report Writing & Progress is different based on his service at the current position.(Tenure of service)

**H<sub>8</sub> :** There is significant difference in the opinions of employees and their Tenure in the present position towards the Promotions & Working Culture (WC) is positively correlated with a value of 0.034 that means opinion of the employees for promotions & working culture is different based on his service at the current position.

**Table : 3 Overall Opinion of the Employees for the Present Appraisal System at the Paint Company in Gujarat**



### **Conclusion**

The Performance Appraisal has influenced employees to improve their performance. The study shows that as the employees come to know about their strength and weakness and develop strategies to make changes in their performance and changes has been made viz, communication, interpersonal relationship, responsiveness to change planning and organizing ability and commitment and dedication.

Performance Appraisal is the an important tool for motivating and improving employee performance, unfortunately due to political issues it is hardly utilized fully. Also, it is found that employees perception towards appraisal is different based on his age, tenure, hierarchical level, departments therefore it is required to give proper training and understanding to the employees at every stage of appraisal. Close supervision in this regard can also be useful.

Performance appraisals can be improved by careful development of an appropriate appraisal instrument, by training raters to use the system properly and by providing feedback to raters as to how well they are performing their appraisal and development functions with their own subordinates. While giving Performance feedback which is necessarily given to subordinate, supervisors must ensure that the feedback is credible, specific and constructive and is accompanied by concrete examples of good or poor performance. They should also allow an appropriate degree of participation and assure that goals for future performance are set properly.

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# A Study on Problems Faced by Rural Consumers Availing Banking Services in Selected Rural Areas of South Gujarat

Suresh Machhar

## Abstract:

In India there are 6, 40,867 villages and 68.84% of population resides in rural areas that offer a huge potential to the economy (Census 2011). Banking sector in India being the forefront of the economy has ventured into many innovative services to cater the need of these non-urban residents. This study is conducted to identify the major problems faced by rural consumers while availing banking services in selected rural areas of Gujarat. Necessary data are collected from 200 rural respondents of South Gujarat region. The data has been tested through Cronbach alpha, Chi square test, KMO test and factor analysis. It is found that inefficient services, non responsiveness of bank staff, inconvenient services and unreliability are major problems faced by rural consumers. From Varimax rotation matrix it is observed that inefficient services of banks is the major problem factor faced by consumers which include variables like majority rural consumers are not aware about all types of banking services, required banking services is not available and there is lack of cooperation from bank staff. Study also revealed that there is a significant difference in rural consumers having various occupation and age and problems faced by them while availing banking services.

## 1. INTRODUCTION:

The Financial Services is the backbone of service sector. This is important not only for the banking sector but for the Indian economy as a whole. This is so because banking is a catalyst and life of modern trade and commerce. It is an integral part of all the businesses and social activities. This rapid transformation of services in the banking system has led to the evolution of a highly competitive and complex market where there is a continuous refinement of services. Hence the increased role of banking in India's economic development on the one hand and the changes in the business climate on the other has put increased pressure on them. These changes are compelling the banks to reorganize themselves in order to cope with the present conditions.

Banking in India is generally fairly mature in terms of supply, product range and reach, even though reach in rural India still remains a challenge for the private sector and foreign banks. In terms of quality of assets and capital adequacy, Indian banks are considered to have clean, strong and transparent balance sheets relative to other banks in comparable economies in its region. Currently in India total branches is observed across population groups with 6000 per branch in urban areas and 24000 in rural areas.

The urban and rural branches per population data is given into following table:

Table: 1: Rural & Urban Banking at Glance					
Group	Population (Crore)	Branches (in 000)	Per Branch Population (in 000)	Share of Deposits	Share of Advances
Rural	83 (68 %)	34 (37%)	24	9%	8%
Urban	38 (32%)	59 (63%)	6	91%	92%
<b>Total</b>	<b>121</b>	<b>93</b>	<b>30</b>	<b>100</b>	<b>100</b>
(Source: Census 2011 & RBI Banking Statistics – Handout Dec`11 )					

The concept of consumer satisfaction is critical for banks for not only attracting more consumers but also to make them loyal consumer of the bank. A highly satisfied and delighted consumer is a vital non-financial asset for a bank in this age where quality consumer services are the measures for the future of a bank.

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## **2. Literature Review:**

The Narasimham Committee (1991) observed that the productivity and efficiency of banking system have suffered, its profitability has been eroded and its portfolio quality has deteriorated. Consumer service has been poor, work technology out dated and transaction costs are high. In the process several banks have themselves become weak financially and unable to meet the challenges of a competitive environment. The committee added that branch is the cutting edge of banking industry where there is direct interface with the depositor and credit consumer. It is the functioning of the branch that shows the measure of efficiency in respect of consumer services.

Levesque and McDougall (1996) analyzed that the performance of the service provider on core and relational dimensions of service is an important driver for consumer satisfaction in retail banking. However, in a non-western context, the link between the core and the relational dimensions of service and consumer satisfaction has yet to be established empirically.

Angur, *et. al.*, (1999) examined the applicability of alternative service quality measure in the Retail Banking industry in India. They conducted their research on the consumers of two major banks in India. They used SERVQUAL model to measure the overall service quality. They found that all the dimensions were not equally important in explaining variance in overall service quality. The result indicated that responsiveness and reliability seem to be the most important dimensions followed by the empathy and tangible dimensions; whereas, assurance appeared to be the least important dimension. Finally, they concluded that SERVQUAL was the best measure of service quality in banking industry.

N Vijayratantam and N Suguna Kumar (2001), in "Consumer service in commercial bank in the new

era" studied the importance of consumer focus. They found that between 1950-60, the focus was on serving the consumer; between 1960-80, the focus was on satisfying the consumer; during 1980-90 the focus was on pleasing the consumer; during 1990-2000 focus was on delighting a consumer and beyond 2000, the focus has been on retaining the consumer.

Hasanbanu (2004) studied the consumer service in rural banks. He found that the rural consumers are not aware of the purpose for which loans are available and how they can avail them. Consumers generally do not know the complete rules, regulations and procedures of the banks because the bank personnel do not take interest in educating their consumers.

Muris Cicic, Nernad Brkic and Emir Agic (2004) have revealed that the main factors determining students' bank selection decision are reception at the bank, friendliness of the bank personnel, low service charge, ease of opening current account and confidence in bank management.

Andaleb and Conway (2006) have determined the factors that play role for consumer satisfaction in the restaurant industry by using regression model and found that responsiveness of the front line employees followed by food price and quality are the key factors for satisfaction. But physical design and appearance of the restaurants are not significant in this regard.

Nalini Prava Tripathy (2006) in her study on "A Service Quality Model for Consumers in Public Sector Banks" has remarked that the banks have shifted from "Product-centric model" to a "Consumer centric model" because consumer satisfaction has been considered as the key determinant of business growth. In this context, she has made an attempt to analyze the factors that are necessary in influencing the investment decision of the consumers of the public sector banks and also suggested suitable marketing strategies to attract consumers.

Sudesh (2007) analyzed that poor service quality in public sector banks is mainly because of deficiency in tangibility, lack of responsiveness and empathy. Private sector banks, on the other hand, were found

to be more reformed in this regards. Above all, the foreign banks were relatively close to the expectations of their consumers with regard to various dimensions of service quality. Further, the study revealed that there existed service quality variation across demographic variables, and suggested that management of banks should pay attention to potential failure points and should be responsive to consumer problems.

Jean-Michel Sahut (2008) has analyzed the key factors affecting the adoption of e-wallets by using the Technology Acceptance Model. The key factors of success of this payment method are security, anonymity of transactions, the cost of transactions as well as the plurality of functions (payment, travel card, e-key for building access etc).

Safiek Mokhlis et al., (2008) state that the bank selection decision is based primarily on nine selection criterion. They are secure feeling, ATM service, provision, proximity, branch location, non-people influential, attractiveness and people influences.

Vimi Jham and Kaleem Mohd Khan (2008) in "Consumer satisfaction in the Indian banking sector" a study conducted amongst five Indian banks, aimed at identifying consumer satisfaction variables which lead to relationship building, and developing a conceptual framework of relationship marketing practices in Indian banks by capturing the perspectives of consumers with regard to their satisfaction with various services. The study further concluded that in today's competitive environment relationship marketing is critical to corporate success of banking business.

Mokhlis, Salleh and Mat (2009) have conducted an empirical study on bank selection criteria used by single and multiple bank users in Malaysia. Attractiveness, branch location, ATM service, financial benefits, and secure feeling make the difference between single and multiple bank users. Mostly female students have been found engaged in multiple banking habits.

Hanudin Amin and T. Ramayah (2010) have conducted a study to identify the relationship among attitude, service form, perceived security, privacy and intention to use SMS banking.

Maran Marimuthu et al., (2010) has found that cost-benefits, service delivery, convenience, friends' influence have significant relationships with the acceptance of Islamic banking.

Rao and Sharma (2010) have come across that employees' courtesy, parking facility, loyalty program, brand name, security system and low charges are the most important factors for bank selection decision. Motivation for the consumers to select their banks are responsiveness, value added services and convenience, zero balance, speedy service, and good rate of interest etc.

Mohammad and Alhamadani (2011) found that tangibles, reliability, responsiveness, assurance and empathy had significant influence on consumer satisfaction and also concluded that the service quality was an important antecedent of consumer satisfaction.

Katirchioglu, Tumer and Kilinc (2011) have investigated the bank selection criteria of consumers in Romania and have found the Automated Teller Machines (ATM) to be the most important selection criterion. In addition, availability of telephone and internet banking, confidentiality of bank consumer record, reputation and image of the bank, presentable appearance of the bank staff and number of branch office are also important aspect to the consumers.

Maiyaki (2011) has identified the factors that affect retail banking consumers' bank selection and preference decision. Here, bank's total asset and availability of larger branch network have a great influence in bank selection decision whereas attractiveness of bank's branches, loan charges are less influential. But attractive loan charge is found insignificant in this study due to religious belief of the consumers.

Shaher, Kasawneh and Salem (2011) have used factor analysis technique to find out factors related to bank performance and found bank characteristics as the most important factor and other factor as the least important factor.

### **3. Objectives of the Study:**

1. To identify the major problems factors faced by rural consumers availing banking services in rural areas of South Gujarat.

2. To examine the impact of demographic factors of rural consumers on problems faced by them availing banking services in rural areas of South Gujarat.

### **3.1 Hypothesis of the Study:**

- **H<sub>0</sub>:** There is no significant difference between demographic factors of rural consumers such as gender, age, income, occupation and problems faced by them.
- **H<sub>1</sub>:** There is a significant difference between demographic factors of rural consumers such as gender, age, income, occupation and problems faced by them.

## **4. Research Methodology:**

### **4.1 Need for the Study:**

The views of various committees and researches reviewed in this paper prove that good consumer service is very important for retention of existing consumers and also for expanding the consumer-base. Various committees have given various norms and also some researches have been conducted to study the changing dimensions of consumer in

banks. However, different universe and different time periods of study always lead to new knowledge about the new issue.

Similarly, this paper concentrates on problems faced by individual rural consumers with regarding banking services provided in selected rural areas of **South Gujarat**.

### **4.2 Profile of Universe of the Study:**

South Gujarat region comprises of seven districts (Bahruch, Dang, Narmada, Navsari, Surat, Tapi and Valsad). Out of 07 districts 4 districts are having tribal population. For this study Dang and Narmada districts is selected.

### **4.3 Sampling Technique:**

Quota sampling and convenience sampling method is used for selecting the sample. In the first step South Gujarat region divided into different districts, then districts divided into talukas. In last step respondents selected conveniently form selected talukas.

### **4.4 Sample Size of the Study:**

A total sample of 200 respondents is taken. The division of sample given in following table:

<b>Table: 2 : Classification of Sample</b>		
<b>Region</b>	<b>Taluka Name</b>	<b>Sample Size</b>
South Gujarat	Dang	100
	Narmada	100
<b>Total Sample Size</b>		<b>200</b>

### **4.5 Methods of Data Collection:**

Primary data was collected with the help of structured close ended questionnaire. In which 15 problems statements related to the banking services asked to respondents on five point scale.

## **5. Data Analysis & Interpretation:**

Respondents' profile as given in following table gives a detailed description of the respondents' demographic variables like gender, age, and occupation and income.

<b>Table: 3 : Profile of Respondents</b>			
<b>Demographic Factor</b>	<b>Category</b>	<b>Frequency (N=200)</b>	<b>Percentage</b>
<b>Gender</b>	Male	120	60.00
	Female	80	40.00
<b>Age Group</b>	Less Than 18	20	10.00
	18-40	110	55.00
	41-60	50	25.00
	More Than 60	20	10.00



<b>Occupation</b>	Farmer	80	40.00
	Job	40	20.00
	Business	20	10.00
	Daily Worker	40	20.00
	Student	20	10.00
<b>Income (Per year)</b>	up to 25000	116	58.00
	25001-50000	24	12.00
	50001-100000	22	11.00
	100001-200000	20	10.00
	more than 200000	18	09.00

In the table number 3 it can be observed that 60% were male and 40% respondents were female. 55% respondents belong to age group 18-40 years, 25% respondents belong to age group 41-60 years and 10% respondents' were less than 18 years of age and only 10% respondents belongs to more than 60 years of age. As per occupation category 40% respondents were farmers, 20% respondents doing job, 10% respondents having their own business, 20% respondents were daily workers and 10% respondents were students. As per income wise classification 58% respondents income was less or

equal to Rs. 25,000 per year, 12% respondents income between Rs. 25,001- 50,000 per year, 11% respondents income between Rs. 50,001-1,00,000 per year, 10% respondents income between Rs. 1,00,001-2,00,000 per year and only 9% respondents income was more than Rs. 2,00,000 per year.

#### 5.1 Reliability Test:

To assess the reliability of the instruments, the Cronbach (1981) alpha coefficients was calculated and reported in following table:

<b>Table : 4 : Reliability Statistics</b>	
<b>Cronbach's Alpha</b>	<b>No. of Items</b>
<b>0.765</b>	<b>15</b>

Cronbach's is a coefficient of internal consistency. It is commonly used as an estimate of the reliability of a psychometric test for a sample of awesomeness. In the table 4 it can be observed that Cronbach's alpha value for 15 statements is 0.765 which indicated that reliability of all 15 statements was quite high. Thus, it can be concluded that the measures used in the present study are valid and reliable.

#### 5.2 Factor Analysis:

Factor Analysis is a data reduction statistical technique that allows simplifying the correlational relationships between a number of continuous variables (Rao and Sharma). Principal component analysis is a variable reduction procedure. It is useful when anyone obtains data on a number of variables (possibly a large number of variables), and believes that there is some

redundancy in those variables. In this case, redundancy means that some of the variables are correlated with one another, possibly because they are measuring the same construct. Because of this redundancy, one believes that it should be possible to reduce the observed variables into a smaller number of principal components (artificial variables) that will account for most of the variance in the observed variables.

Because it is a variable reduction procedure, principal component analysis is similar in many respects to exploratory factor analysis. In fact, the steps followed when conducting a principal component analysis are virtually identical to those followed when conducting an exploratory factor analysis. However, there are significant conceptual differences between the two procedures



### 5.2.1 KMO and Bartlett's Test

Table : 05: KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.704
Bartlett's Test of Sphericity	Approx. Chi-Square	2356.691
	Df	105
	Sig.	.000

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) for individual variance was studied and it reveals that there is sufficient correlation among all the variables. To test the sampling adequacy Kaiser-Meyer-Olkin MSA is computed which is found to be **0.704** and it indicates that sample is good enough and can be used for further analysis. The overall significance of

correlation matrices is tested with Barlett's Test of Sphericity .It provides support for the validity of the factor analysis of the dataset. The above Table shows that the sample is appropriate and significant for the study.

### 5.2.2 Extraction Method: Principal Component Analysis

Table no.: 06 : Communalities for Problems faced by Rural Consumers		
Statements	Initial	Extraction
Customers are not aware about all banking services	1.000	.640
Require banking services is not available	1.000	.583
Bank staff having poor proximity	1.000	.556
There is a lack of co-operation from bank staff	1.000	.582
No proper guidance given by bank	1.000	.627
No regularity in functioning of bank	1.000	.602
There is no enough trained staff	1.000	.576
Lack of guarantee on performance	1.000	.624
There is a hidden costs on services	1.000	.681
Poor governance of complaints	1.000	.732
Bank offered limited services	1.000	.611
Bank staff response is poor	1.000	.599
The bank staff behaviour is Rude	1.000	.820
The policy of bank is not fully transparent	1.000	.552
The bank timing is inconvenient	1.000	.570

The proportion of variance in any one of the original variables, which is being captured by the extracted factor, is known as communality (Nargundkar, 2002). Communalities Table tells us that after seven factors are extracted and retained in rotated component matrix the communality is 0.640 for variable 1, 0.577 for variable 2 and so on.

### 5.2.3 Rotated Component Matrix:

Loading on factors can be positive or negative. A negative loading indicates that this variable has an inverse relationship with the rest of the factors. The higher the loading the more important is the factor (Rao & Sharma). However, Comrey (1973) suggested that anything above 0.44 could be considered salient, with increased loading becoming more vital in determining the factor.

Factor analysis was conducted with varimax rotation to examine how the selected measures loaded on expected constructs. Seven factors were recovered from the analysis with Eigen value greater than 1. The Eigen values represent a partition of the total variation in the multivariate sample. They sum to the number of variables when the principal components analysis is done on the correlation matrix. As per the table number 7 Eigen values for five factors are 3.922, 3.651, 3.290, 2.680, and 1.473. The total cumulative variation explained by factor analysis is 70.562 %. The first factor explained 16.661% of total variance; whereas the second factor 16.112%, the third factor 15.356%, the fourth factor 12.980%, and the last factor explicated 9.453% of total variance.

<b>Table No. : 07 : Rotated Components Matrix for Problems faced by Rural Consumers with Eigen values and Cumulative Variances</b>					
<b>Statements</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>	<b>Factor 5</b>
Customers are not aware about all banking services	.784				
Require banking services is not available	.705				
There is a lack of co-operation from bank staff	.683				
No proper guidance given by bank		.783			
No regularity in functioning of bank		.756			
Bank staff response is poor		.732			
The policy of bank is not fully transparent			.657		
Bank offered limited services			.592		
The bank timing is inconvenient			.561		
Poor governance of complaints				.751	
There is a hidden costs on services				.580	
Lack of guarantee on performance				.568	
The bank staff behaviour is Rude					.883
Bank staff having poor proximity					.762
There is no enough trained staff					.703
<b>Eigen Value</b>	3.992	3.651	3.290	2.680	1.473
<b>Variance Explained (%)</b>	16.661	16.112	15.356	12.980	9.453
<b>Cumulative Variance Explained (%)</b>	16.661	32.773	48.129	61.109	70.562

[Rotation Method: Varimax with Kaiser Normalization]

#### **Factor Naming:**

##### **Factor 1: Inefficient Services**

Inefficient services factor is including major problems faced by the rural consumers such as majority rural consumers are not aware about all types of banking services, required banking services is not available and there is lack of cooperation from bank staff, these all problems leads to inefficiency of

banks services, So this factor is named as “Inefficient Services”.

##### **Factor 2: Non-responsiveness of Staff**

Second important factor as per the rural respondents is non-responsiveness from bank staff which is covering problems such as no proper guidance given by bank staff, there is no regularity in functioning of bank and there is very poor response on customer

request. These all problems indicated less responsiveness from bank staff. So this factor is named as “Non-responsiveness of Staff”.

### **Factor 3: Inconvenient Services**

As per the rural respondents third important factor is inconvenient services which are including problems such as bank policies are not fully transparent, bank timing is not convenient and banks offered limited services. These all problems lead to inconvenience to rural consumers. So this factor is named as “Inconvenient Services”.

### **Factor 4: Unreliability**

As per the rural respondents fourth important problem being faced is that banks are unreliable, included problems such as poor handling of consumer's complaint, lack of guaranty on consistent services and hidden charges on various services offered by banks. These all problems indicated that banks are not reliable. So this factor has been named as “Unreliability”.

### **Factor 5: Impoliteness**

As per the rural respondents fifth important factor is impoliteness of bank staff, included problems such as bank staff behaviors is rude, less nearness from bank staff and inefficient trained staff for dealing with rural consumers. These all problems indicated that bank staff behaviors is impolite towards rural consumers. So this factor is named as “Impoliteness”.

### **5.2.4 Hypothesis Testing:**

A Chi-square test is a statistical test commonly used for testing independence and goodness of fit. Testing independence determines whether two or more observations across two populations are dependent on each other that is, whether one variable helps to estimate the other. In the following table the results of Chi-square test of demographic variables are shown in following table:

<b>Table:8: Chi-square test</b>				
	<b>Gender</b>	<b>Age</b>	<b>Occupation</b>	<b>Income</b>
Chi-Square(a)	36.520	46.560	6.300	9.500
Df	1	3	4	4
p-value	.063	.231	.000	.003
Comment	Not Significant	Not Significant	Significant	Significant

From the above table it can be observed that p-value for respondent's gender and age is greater than significance level 0.01 and 0.05. So, here null hypothesis is not rejected and it can be inferred that there is no significant difference between respondent's age and gender and problems faced by them in selected rural areas of South Gujarat region. Where as in case of occupation and income p value is less than significant level (0.05), so null hypothesis is rejected and it can be inferred that there is a significant difference respondent's occupation and income and problems faced by them in selected rural areas of South Gujarat region.

### **6. Conclusion:**

Banking sector is the most prominent and competitive sector in rural India. Various banks are

working so hard to stay ahead of their competitors by providing efficient services to the rural consumers. On the basis of the analysis, it can be concluded that major problem factor faced by rural consumers is *inefficient services of banks is the major problem factor faced by consumers* which include variables like majority rural consumers are not aware about all types of banking services, required banking services is not available and there is lack of cooperation from bank staff. So, the banks should try solved out above mentioned problems immediately. Other important problems factors faced by rural consumers are non responsiveness of bank staff, inconvenient services, unreliability on bank transactions and staff and impolite behavior of bank staff. Banks should train their employees well to dealing with rural consumers In other words; it

amounts to empowering employees to exercise responsibility, judgment and creativity in responding to rural consumers' problems. Analysis also indicated there is no significant difference between demographic factors of rural consumers such as gender and age and problems faced them in selected rural areas of South Gujarat region.

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# Institutional Support in Developing Women Entrepreneurship

Joe Mary George, Sanjay Ajmeri

## Abstract

Women have gained increasing attention from their family, society, nation and worldwide due to their untiring and unequalled efforts for their different roles like daughter, sister, wife, mother, friend, mentor, bread winner, entrepreneur, leader, politician, educationalist, engineer, astronaut, socialist, or in the area entertainment, cosmetics, etc from ages.

When women constitute 50% of the total population, how can we ignore their contribution and involvement for the economic development of the nation? No country can talk about sustainable development or economic development without actively involving women. The remaining half of the population alone cannot meet the economic or sustainable development of any country. The history and literature says that women have been participating in the economic activities but they faced many problems. They faced two types of problems, general problems faced by any entrepreneurs and specific problems related to women.

According to our first prime minister Pandit Jawaharlal Nehru, "When Women move forward, the family moves, the village moves and the Nation moves."

The various supportive organisations have realized the truth and started extending their possible supports for the development and promotion of women entrepreneurship.

Today there are many supporting and favorable environment for women entrepreneurs from government, financial institutions, banks, women associations, non-government organisations, shelf help groups, corporate business houses, etc.

## Introduction to women entrepreneurship

"Behind every successful man there is a woman", this saying equally contributes for the economic development of any country.

"You can tell the condition of a nation by looking at the status of its women" - Jawaharlal Nehru.

Definition by the Government of India, "An enterprise owned and controlled by a women having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated by the enterprise to women."

The Indian economy has been witnessing a drastic change since mid-1991, with new policies of economic liberalization, globalization and privatization initiated by the Indian government.

## Research problem

**Women entrepreneurs are suffering from two types of problems, specific problems related to women and general problems suffered by any entrepreneurs. Women entrepreneurs mostly suffer from formalities and procedures in startup, financial, marketing, technical, training and development, etc.**

**This paper focuses on the role of institutions in providing a supportive and favorable environment for women entrepreneurs thereby removing the obstacles in the process of their entrepreneurship.**

## Objectives of the study

1. To review the institutional assistance and support for women entrepreneurs.
2. To understand the importance of institutional support in developing women entrepreneurs.
3. To know the effectiveness of the institutions supporting women entrepreneurs.
4. To identify the government initiatives and support for the development of women entrepreneurship

## Methodology

The study is focused towards the secondary data collected from research articles available from different sources like journals, publications, books and websites related to women entrepreneurship.

## Literature review

Anshuja Tiwari (2014) examines and highlights the role of financial institutions in the development of women entrepreneurship. She points out the high complexities encountered by women in availing benefits from



these institutions and their unawareness about these EDPs as reasons for their less resorting to such resources. Though EDPs play a vital role in women entrepreneurship, most of the women are dissatisfied with these EDPs because of their delayed attitudes.

Dr. B Someshwar (2014) in his research article discusses a few Government Schemes aimed at empowering women. He finds that the government policies for the rural women help either to start income generating activities independently or give at least hundred days employment for the rural women. He points out that still there is no or less awareness about the government policies among the rural people in general and among rural women in particular. Hence, the voluntary organization and Non-Governmental Organizations have to act to increase the awareness among the rural women about the government policies.

Dr. Mu. Subrahmanian (2011) finds that there are various institutions in the financial sector that extend their maximum support in the form of incentives, loans, schemes etc. but all woman entrepreneur are not aware of all the assistance provided by the institutions. Moreover women are not found to be eager to find out the access to cater to their needs in the financial and marketing areas. In spite of the mushrooming growth of associations, institutions, and the schemes from the government side, women are not enterprising and being dynamic to optimize the resources in the form of reserves, assets, mankind or business volunteers.

Sneha Srinivasan (2014) attempts to reexamine how better efficiency and optimum utilization of resources can lead to include women in the developmental process. She discusses how Government of India has been framing policies to encourage women entrepreneurship across the country. She talks about various programs introduced by the Central Government to promote employment opportunities among women. She effectively examines if empowering women economically will lead to sustainable and inclusive development.

Dr. Ajay Sharma, Ms. Sapna Dua and Mr. Vinod Hatwal (2012) study the impact on women empowerment through micro entrepreneurship

development and SHGs. They find that that MSME helps to generate employment for a number of people within their own social system, particularly in rural areas. They enumerate some of the advantages and opportunities availed by MSME for women.

Mrs. Savita Kumari (2012) in her research tries to identify the problems faced by women entrepreneurship in India, measures taken by the government to encourage women entrepreneurship and also focuses light on the solutions of the problems such as lack of education, male dominated society, family ties, problem of finance, scarcity of raw materials and stiff competition.

Government initiatives and schemes for women entrepreneurship development

Right from the beginning of the planning in India, women received due attention from the Government. The government initiatives and various schemes for women entrepreneurship development are described below.

1. In order to address issues relating to social and economic advancement of women, the Department of Women and Child Development (DWCD) under the Ministry of Human Resource Development has been implementing various schemes. It has implemented the scheme of 'Condensed courses for education and vocational training' and 'Distance Education Program for Women' supplementing the efforts of the department of Education.

2. The National Policy for Empowerment of Women was adopted in the country in 2001 with the ultimate objective of ensuring women their rightful place in society by empowering them as agents of socio-economic change and development. Empowerment of Women is therefore an important approach adopted in the Tenth Five Year Plan (2001-07) for development of women. To this effect a National Plan of Action for Empowerment of Women, with a view to translating the National Policy of Empowerment of Women into acting in a time bound manner, was adopted as a priority agenda for action during 2003-04 for the DWCD.

3. Two important schemes namely Saarna Shiksha Abhiyan and Mahila Samakhya are being implemented by Department of Education as a

special effort to stretch the reach of education especially to the girl child.

4. Swayamsidha is an integrated project for the development and empowerment of women through Self Help Groups (SHG's) with emphasis on covering services, developing access to micro-credit and promoting micro-enterprises. The most important component of the programme is formulation, implementation and monitoring of block specific composite projects of four or five years duration through Project Implementing Agencies (PIA), which may be any appropriate government or non-government agency, nominated by the State Governments. So far 52,016 SHG's have been formed under the project out of 650 blocks allotted so far.

5. Swa-shakti Project earlier known as the Rural Women's Development and Empowerment Project, was sanctioned in October 1998 as a centrally sponsored scheme to be implemented in the states of Bihar, Chattisgarh, Gujarat and Uttar Pradesh for a duration of five years with an outlay of Rs. 186 crore. The project aims at enhancing women's access to resources for better quality of life through the use of drudgery and time reduction devices, health, literacy and imparting skills for confidence enhancement and income generating activities. So far 17,647 Self Help Groups have been formed under the project against the target of 16000 SHGs'. The project is supported jointly by the World Bank and the International Fund for Agricultural Development (IFAD)

6. Support to Training and Employment Programme for Women (STEP) The programme seeks to provide updated skills and new knowledge to poor asset less women in eight traditional sectors of employment, namely, agriculture, animal husbandry, dairy, fisheries, handlooms, handicrafts, khadi and village industry and sericulture. The scheme is being implemented through public sector organisations, state corporations, cooperatives, federations and voluntary organisations, which have been in existence for a minimum period of three years. Eleven projects were sanctioned during 2003-04, which is estimated to benefit 16,350 women.

7. Swawlamban: The objective of this scheme is to provide training and skills to women to facilitate

them to obtain employment or self-employment on a sustainable basis. Some of the trades where training is imparted include computer programming, medical transcription, electronic assembling, consumer electronics repair, radio and television repairs, garment making, handloom weaving, handicrafts, secretarial practice, community health work and embroidery. During 2003-14, 463 proposals were approved, benefitting 71,240 women.

8. Rashtrya Mahila Kosh (RMK): It is also known as the National Credit Fund for Women was set up as a registered society under the Societies Registration Act, 1860 on March 30, 1993 with a view to facilitate credit support of micro-finance to poor women to start income generating activities such as in dairy, agriculture, shop-keeping, vending and handicrafts. In 2003-04, an amount of Rs. 25 crore was sanctioned through RMK benefitting about 32,765 women.

9. Prime Minister Rojgar Yojana and EDPs were introduced to develop entrepreneurial qualities among rural women.

10. Women in agriculture' scheme was introduced to train women farmers having small and marginal holdings in agriculture and allied activities.

11. To generate more employment opportunities for women KVIC took special measures in remote areas.

12. Women co-operatives schemes were formed to help women in agro-based industries like dairy farming, poultry, animal husbandry, horticulture etc. with full financial support from the Government.

13. Several other schemes like integrated Rural Development Programs (IRDP), Training of Rural youth for Self employment (TRYSEM) etc. were started to alleviate poverty. 30-40% reservation is provided to women under these schemes.

14. Trade Related Entrepreneurship Assistance and Development (TREAD) scheme was launched by Ministry of Small Industries to develop women entrepreneurs in rural, semi-urban and urban areas by developing entrepreneurial qualities.

15. Women Component Plan, a special strategy adopted by Government to provide assistance to

women entrepreneurs.

16. Swarna Jayanti Gram SwarozgarYojana and Swaran Jayanti Sekhari RozgarYojana were introduced by government to provide reservations for women and encouraging them to start their ventures.

17. New schemes named Women Development Corporations were introduced by government to help women entrepreneurs in arranging credit and marketing facilities.

18. Schemes like Mahila Udyam Nidhi, Micro Credite Scheme for Women, Mahila Vikas Nidhi, Women Entrepreneurial Development Programmes, and Marketing Development Fund for Women are initiated by State Industrial and Development Bank of India (SIDBI) has introduced following schemes to assist the women entrepreneurs.

Under Mahila Vikas Nidhi grants loan to women are given to start their venture in the field like spinning, weaving, knitting, embroidery products, block printing, handlooms handicrafts, bamboo products etc.

19. Self-employment of women are introduced by government which include Development of Women and Children in Rural Areas (DWCRA), Small Industry Service Institutes (SISIs), State Financial Corporations, National Small Industries Corporations, District Industrial Centres (DICs)

#### **Organisations supporting women entrepreneurs**

The followings are some of associations or institutions which have played pivotal role for growth and development of women entrepreneurs:

##### **1. SIDBI (Small Industries Development Bank of India)**

It was established on 2<sup>nd</sup> April 1990. (Under an Act of Indian Parliament) This organization has introduced two special schemes for small scale industries by women. These are:

- Mahila Udyam Nidhi
- Mahila Vikash Nidhi
- Micro Credit Scheme
- Women Entrepreneurial Development Programme
- Marketing Development Fund for Women

##### **2. SIDO (Small Industries Development Organization)**

It was established in October 1973. The primary objective of this organization is to conduct various programmes including Entrepreneurship Development programme for women.

##### **3. CWEI (consortium of women entrepreneurs of India)**

It was formed in the year 2001 with the basis objective of providing technological up gradation facilities to women entrepreneurs. It is a voluntary organization consisting of NGOs, SHGs various voluntary organizations and individual business enterprises. It also extends technological up gradation facilities, in the sphere of marketing and export support.

##### **4. WIT(Women India Trust)**

The promoter called **Kamila Tyabji** has taken initiative for establishment of this trust in 1968 with the objective to help women entrepreneurs.

##### **5. SEWA Self Employed Women Association)**

It is a trade union of women which was registered under Trade Union Act, in 1972. The primary objective of this organization is to empower women entrepreneurs in rural sector.

##### **6. SHGs. (Self Help Groups)**

It is regarded as an association consisting of small group of self employed women entrepreneurs either from rural or urban areas. The primary objective of SHG is to take care as welfare of its associated members. It provides financial assistance as welfare of its members through financial institutions and non-government organizations.

##### **7. FIWE(National Bank for Agriculture and Rural Development)**

It is an autonomous organization. The primary objective of this organisation is to provide liberal credit facilities to women entrepreneurs.

#### **Research findings**

Taking into account the above data and looking to the present actual scenario of women entrepreneurship that prevails in India, it is in no way an exaggeration to say that we have failed to realize the full potentialities of most of the schemes carved out for the enhancement of the women entrepreneurial aspects. Though there has never

been a complete policy or plan failure, schemes and plans fail to achieve their fixed objectives. In fact, it is not the plan that fails every time. There are other factors also that fail the plans or schemes. Most of these plans and schemes lack systematic long term planning. Systematic need-based help should be availed in place of casual help on the basis of 'political' considerations. Again, too many schemes are also not the yardstick of progress. Schemes which are not feasible practically should either be rectified or be done away with. Financial resources should be diverted to more practical and result oriented plans. Efforts are needed to bring sufficient awareness about the schemes and plans among the women of all strata of society. Separate endeavors are needed to encourage them to take full advantages of available schemes enhancing entrepreneurship among women. A whole new mechanism is required to enable women to face other problems that they face in their family and in the society just because of their being women.

#### **Utility of the research**

This research work will help to know the initiatives taken by the institutions supporting women entrepreneurship and create further awareness among the women entrepreneurs about the availability and existence of such support facilities for them.

#### **Scope for further research**

The scope of further research is very wide. Further research will be carried out to know the beneficiaries (women entrepreneurs) of institutions supporting women entrepreneurs and entrepreneurship in the state of Gujarat.

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# Impact of E-commerce (Online Retail) on Small Businesses in Gandhinagar: Offline Retailers' Perspective

Jigna Trivedi, Bindiya Soni

## Abstract

The E-commerce sector has witnessed unprecedented growth in recent years. Factors such as rapid technology adoption, increasing use of devices such as smart phones and tablets, access to the internet through broadband, 3G/4G, favored demographics and a growing internet user base have all contributed to this growth. Indian customers prefer shopping through E-commerce platforms as against the traditional formats due to its attributes of ease of shopping, good discounts, social media integration, cash on delivery mode of payment etc. Because of this, the retailers in the offline segment are heavily affected. This paper is an attempt to look in to the perspective of the small business owners towards the E-commerce phenomenon. It, specifically, analyses the impact of online retailers on various parameters related to their businesses such as performance, marketing strategies, availability of merchandise, customer service etc. Besides, it also investigates the response strategy of the shop owners towards online retail. The findings suggest that-commerce affects the retailers especially who are dealing in electrical and electronics goods, furniture and sports goods. Retailers explained that show-rooming is for inquiry but the purchase orders are often online. To sustain in the internet world, retailers are advised to be Omni-present (online and offline) and eventually cast the presence in m-shopping too.

## Introduction

Technology plays a pivotal role in enhancing the quality of services provided by the businesses. One such technology which has brought information revolution in the society is, Internet Technology. This is regarded as the third wave of revolution after agricultural and industrial revolution (Gangeshwer, 2013). E-commerce stands for electronic commerce. It means dealing in goods and services through the electronic media and internet. There is no single definition of E-commerce, it means only commercial activity which is performed or linked to or supported by electronic communication (Mitra, 2013). E-commerce refers to a method of conducting business through electronic means rather than through conventional physical means. It is replacement of 'brick and mortar' stores to 'click and buy' from virtual stores (Desai, 2015).

Micro, Small and Medium Enterprises (MSMEs) are considered to be the engine for economic growth and development as they contribute to the employment generation and reduce the poverty by empowering the people at the bottom of the pyramid. Many consultants across the word, believe that the era of internet and E-commerce is the most exciting time for such businesses to operate. For India, a new trend has been witnessed, wherein many such small businesses are taking the E-commerce route to start new businesses. The Indian government initiatives such as "Make in India", 'Skill India' and 'Digital India' enable the MSMEs of the country to tap the potential of E-commerce opportunities.

Adoption of E-commerce offer significant advantages to the businesses including, reduced cost, better margins, improved market access and improved customer experience of shopping online. However, as per the proceedings of 11<sup>th</sup> IRF International Conference, adoption of E-commerce involves lots of engagement in to digital activities such as online registration, electronic billing and payment facilities, tracking of deliveries and customer support, etc. For many entrepreneurs, these may be perceived to be an extra burden preventing MSMEs from exploring this opportunity. Besides, lack of exposure or awareness about latest developments in the field of technology and E-commerce, often infuses many misconceptions about E-commerce (Sengupta, 2016).

In this context, the present paper is an attempt to investigate the impact of E-commerce on the small businesses in Gandhinagar city. Since, the E-commerce firms such as Flipkart, Amazon, E-bay, Snapdeal and many more; are offering attractive offers such as huge discounts, wide selection base, cash on delivery option, option to return the merchandise, convenience, flexibility etc.; the retailers having presence in the offline segment are badly affected. Due to the impact of E-commerce, they have started deploying a variety of business practices such as developing mobile app, selling through this app, heavy discounts round the year, being more



customer friendly etc. Through this research, the impact and the response strategies of the small businesses in the selected areas have been addressed.

### **Literature Review**

The E-commerce sector in India has come a long way since its beginning. The market has matured and new players with innovative models have entered the market space. Many academicians and researchers have contributed to the growing interest in this field. Conceptual studies and macro surveys (Industry level) for E-commerce mainly focus upon the factual information on growth of the sector, rate of adoption, historical evolution, role of E-commerce in business, factors encouraging the use of E-commerce (facilitators), the effect of E-commerce on transaction cost, benefits and shortcomings, SWOT analysis, issues and challenges pertaining to the sector, future of E-commerce business in India etc.

#### **Since the present study considers the impact of E-commerce on small businesses, the following section reviews specific studies in this regard.**

Cloete (2002) studied the acceptance and adoption of E-commerce by small businesses in the Western-Cape Province of South-Africa. As per the findings, manufacturing businesses South Africa have not yet adopted sophisticated E-commerce procedures and are unlikely to do so, unless some organisational incentives or government assistance are offered. Similar to this study, MacGregor et al (2006) studied the reasons for adoption of E-commerce by small businesses in B2B and B2C segment. As per the findings the 14 factors were divided in to two groups named market forces and internal business for B2C segment and three groups namely marketing, market forces and internal business for B2B segment.

MacGregor and Vrazalic (2006) conducted an exploratory study of regional small businesses in Sweden to understand the E-commerce adoption barriers and to determine if there are any differences in the level of importance assigned to different barriers by males and females. As per the results, the E-commerce was perceived as too difficult to implement or unsuitable to the business. The white males rated the difficulties of implementing E-commerce as more important, while the females

indicated more concern about the unsuitability of E-commerce.

David et al (2007) provided an overview of case studies of firms that used-commerce as a part of their business strategy. The purpose was to give the reader insights into alternative applications of E-commerce and its potential to increase sales, reduce costs, improve customer services, supply chain management and efficiency of operations. The review covered industry level surveys focusing on rates of adoption, factors encouraging E-commerce use, roles of E-commerce in the businesses, perceptions of the benefits from and shortcomings of the E-commerce activities; case studies conducted by researchers at universities and government agencies and case studies published by private (commercial) E-commerce service providers. Similarly, El-Gohary (2010) systematically reviewed and categorised the published literature in the field of E-Marketing from the small businesses' perspective. The gaps suggested that there is a need for conducting research to investigate the relationship between implementing E-Marketing and small businesses performance.

Onojaefe and Ukpere (2009) developed a theoretical framework for the effective use of information and communication technology by small businesses in South Africa, based on an examination of stakeholders' interests and the need for social harmony between and amongst partners. As per this model, the important business opportunities associated with the Internet can be successfully grasped provided adequate technical and managerial skills are ensured for mutual benefits from technology investments by partners.

Pease and Rowe (n.d.) developed three case studies of SMEs located in Hervey Bay, a regional area in Queensland to identify the factors leading to their adoption of E-commerce, their use of E-commerce and to consider the success or otherwise of these businesses as a consequence. The findings suggested that the use of the internet from the perspective of organisations cited in this paper was limited largely to 'one-on-one interaction via web pages'. Effectively the web was used as a support tool and was not used to its full capacity.

Hasan and Muljadi (n.d.) conducted a survey to study the impact of E-commerce on SMEs in Australia. They found that Australian SMEs were ready to embrace the new technologies to support E-commerce and most of them already applied it in their business system. All the respondents believed that E-commerce really brings a lot of benefits to their business.

Ivanov (2012) conducted a qualitative research to describe the drivers for E-commerce adoption and investigated the barriers and benefits faced by the companies when starting the process of implementation. As per the findings, Swedish companies had relatively well-developed E-commerce strategies as compared to other countries. The major benefits of E-commerce adoption were improved internal efficiency and increased information exchange. Finkle et al (2000) examined the opportunities and challenges posed by the use of E-commerce to small businesses and entrepreneurs. The researchers observed that while there is always a room for new innovative ideas and products on the B2C side of E-commerce, the low barriers to entry and increasing level of competition would drive prices and profits down, making it increasingly difficult to survive.

From the above literature review, it may be observed that majority of the studies, on adoption of E-

commerce and its impact on small-businesses, have been largely conducted in international context. The national level empirical research work in this area is far and few between. To add to this gap, these studies have not addressed the response framework by the small businesses to survive in the cut throat competition. The present study exclusively analyses the impact of E-commerce on small businesses and presents the response action of the small business owners in the city of Gandhinagar.

### **Research Objectives**

The research analysed the impact of E-commerce on the small businesses in the city of Gandhinagar. However, the specific objectives of the study are stated as below:

- To analyze the demographic variables of the small businesses and relate them with the impact of E-commerce.
- To understand the existing practices of the businesses to generate and increase the sales.
- To analyze the perceptions of the small business owners towards the impact of E-commerce on their businesses.
- To investigate the response strategies of these owners towards online retailers.

### **Research Methodology**

Following table describes the research methodology of the study.

**Table 1: Research Methodology**

<b>Parameters</b>	<b>Details</b>
<b>Research Design</b>	Descriptive Method
<b>Sampling Method</b>	Non-Probability Convenience Sampling
<b>Sample Size</b>	70
<b>Sampling Duration</b>	January 2016 to February 2016
<b>Sampling Area</b>	Gandhinagar
<b>Sampling Unit</b>	Retail Outlets
<b>Sampling Element</b>	Outlet Owners (Shopkeepers)
<b>Research Approach</b>	Survey
<b>Research Instrument and Contact Method</b>	Questionnaire- filled through personal visit
<b>Data Collection</b>	Primary and Secondary
<b>Data Processing and Management</b>	Microsoft Excel and Statistical Package for Social Sciences (SPSS) 19
<b>Data Analysis</b>	Frequency Distribution and Cross Tabulation
<b>Descriptive Statistics</b>	mean (X), median (M), mode (Z), standard deviation (SD), Minimum and Maximum, Garret Ranking
<b>Inferential Statistics</b>	Kruskall Wallis Test and Chi Square Test of Independence

*(Source: Authors' Compilation)*

### Analysis and Findings

The forthcoming discussion focuses on the aspect of type of organization, type of business, monthly turnover, sales outlet, sales strategies, E-commerce effect, post E-commerce impact and response to online retail.

#### Type of Organization

Majority of the retailers (76%), adopted Sole Proprietorship Concern, while the remaining Private Limited Structure (17%) and Partnership set-up (7%) to run their businesses. It may be inferred that 'one man authority- Sole Proprietorship' was the most preferred type of organization among the small businesses of Gandhinagar city, as it provides lot of freedom and autonomy to run the business. This form of structure facilitates quick decision making. Private limited structure was also preferred as the number of members is restricted. In the qualitative discussion it was noted that generally family business units formed private limited companies, in which the

directors were close net family members.

#### Type of Business

The survey was carried out amongst retailers who operated in various business segments such as Electronics and Electrical Gadgets (12%), Beauty and Personal Care (17%), Jewelry (17%), Accessories (3%), Groceries (17%), Furniture (17%) and Sports Goods business (17%) respectively. From the secondary sources of information, it was learnt that these were the business that faced the utmost heat from online shopping platform. The number of questionnaires targeted per business was 12, unfortunately, in the segment of Electronics and Electrical Gadgets and Accessories; the response rate was not cent percent.

#### Monthly Turnover

To elicit response on the quantum of Sales Turnover, an optional question was put in the questionnaire. The analysis of the same is presented in Table 2.

**Table 2: Monthly Turnover (Amount in Rs.)**

Particulars	Mean	Median	Mode	SD	Minimum	Maximum
Electronics and Electrical Gadgets	418750	425000	300000	96130	300000	550000
Beauty and Personal Care	222083	225000	250000	85532	50000	400000
Jewellery	308182	300000	150000	152435	150000	600000
Groceries	231667	167500	150000	195638	100000	800000
Furniture	286364	100000	100000	315318	50000	1000000
Sports Goods	90000	80000	70000	37719	60000	200000
Overall	<b>254632</b>	<b>200000</b>	<b>150000</b>	<b>192670</b>	<b>50000</b>	<b>1000000</b>

(Source: SPSS Output)

From table 2, it may be observed that Jewelry, being the value buy item, is dearer, so the highest average turnover was noted in the segment when compared across other sectors. Highest modal turnover was noted in electronics and electrical gadgets segment, as these are life easing equipment. Minimum turnover was depicted in the case of beauty and personal care products; as such products are not so costlier as compared to items of other categories.

#### Type of Business and Selling Method

A multiple choice, dichotomous question was asked to study how retailers sold their products with the options; through retail outlet, website and mobile

app. Analysis of positive response is as under (Table 3).

**Table 3: Business and Selling Method**

Type of Business	Retail Outlet	Website
Electronics and Electrical Gadgets	89	11
Beauty and Personal Care	100	0
Jewellery	100	0
Accessories	68	32
Groceries	100	0
Furniture	75	25
Sports Goods	63	37

(Source: SPSS Output)

From table 3, it may be inferred that majority of the surveyed retailers operated in brick and mortar formats only. This shows that they were yet to prepare themselves for E-tailing. Beauty and Personal Care retailers, jewelry retailers and groceries retailers exclusively operated from the physical stores.

Further, a Chi-Square test was applied to check the association between the type of business and offline or online retail outlet.  $H_0$ : There is no association between the type of business and sales outlet.  $H_1$ : There is an association between the type of business and sales outlet. At the  $\chi^2(6, N=70) = 27.17, p=0.00$  it may be inferred that there is an association between the type of business and sales outlet.

In the qualitative discussion it was learnt that beauty care products and groceries are in the category of fast moving consumer goods so retailers felt that the

products are often purchased by customers intermittently, for which E-tailing is not required. Jewelers opined that it is very difficult to go online for real jewelry (as it is usually made as per order), as it involved huge investments and imitation jewelry often provided low margin, so it is not motivational to go for its E-tailing. Retailers of other segments are found to be active with the current pace of E-commerce business, as they have launched website to promote the business. There was not a single respondent in any of the above mentioned segments, who was using mobile App for widening the reach and thereby the sales of their product.

#### **Sales Strategies**

An ordinal question was asked to know the strategies that retailers adopted to increase their sales. Garrett ranking technique was applied to study the response.

**Table 4: Garrett Ranking Table for the Sales Strategy**

Schemes	Score	Rank
Discount on Bulk Purchase	61.60	1
Freebies and Gifts on Purchase	61.33	2
Discount in Festive Season	60.04	3
Discount Coupons for Redemption	59.66	4
Buy 1 Get 1 Free Scheme	49.37	5

*(Source: Computation from Excel and SPSS)*

From table 4, it may be inferred that retailers preferred to offer quantity discounts only. It was learnt that providing discounts on bulk purchase was the most feasible strategy as it helped the retailers to clear the stock and generate the cash readily. Introduction of the 'Buy 1, Get 1' free scheme is not at all favoured by the retailers as they opined that customers perceived the goods to be of very inferior quality if they offered a free good.

#### **Impact of E-commerce**

A dichotomous question was asked to elicit response on how the E-commerce platform affected the brick and mortar stores. Brick and mortar stores retailers dealing in Electronics and Electrical Gadgets (E&E-19%), Beauty and Personal Care Products (B&P-17%), Accessories (Acc-6%), Furniture (Fur-28%) and Sports Goods (Spo-31%) admitted the fact that E-commerce does affect their business. Jewelry and Groceries retailers denied on any impact cast by E-commerce platform.

Again, a Chi-Square test was run to check the association between the type of business and the impact created by E-commerce business.  $H_0$ : There is no association between the type of business and effect of E-commerce.  $H_1$ : There is an association between the type of business and effect of E-commerce. At the  $\chi^2(6, N=70) = 44.15, p=0.00$  it may be inferred that there is an association between the type of business and effect of E-commerce. As discussed earlier, Electronics and Electrical Gadgets, Beauty and Personal Care Products, Accessories, Furniture and Sports Goods were impacted due to presence of online retailers.

#### **Postmortem of Post E-commerce Impact**

An attempt was made to note the impact of E-commerce business on brick and mortar structure retail outlets. The analysis of the same is mentioned below in the table 5.



**Table 5: Impact on Business (Percentage)**

Statements	E&E Gadgets	B&P	Acc	Fur	Spo
Decrease in mean turnover (past 2 years)	10	9	10	5	9
Increase in discount rates	10	13	10	8	11
Demand for discount even before purchase	9	11	10	11	11
Necessity to stock varied varieties	9	13	5	9	11
Post sales personalized service	5	5	10	4	10
Necessity for advertisement of enterprise	8	7	5	11	11
Providing free home delivery	1	7	10	8	11
Increase in window shopping	9	2	10	9	2
Increase in 'show-rooming'	10	4	5	10	10
Perception of online ordering entails huge discount	9	11	10	10	11
Traditional people avoid online shopping	9	13	10	10	1
Negative effect on adoption of Predatory pricing	10	7	10	7	2

(Source: SPSS Output)

From table 5, it may be observed that retailers in the Electronics and Electrical Gadgets segment felt that after the arrival of online players in the retail market, their existing businesses faced the problems of decrease in turnover, increase in discount rates, and increase in show-rooming and predatory pricing. Sellers of Beauty and Personal Care products faced the problems of increase in discount rates and felt the necessity of stocking varied varieties of items. Retailers who were dealing in accessories also felt the heat of declining turnover, increase in steep discount rates, that to before purchase. Furniture mart retailers expressed that customers made a condition to purchase only if the huge discount were offered. They felt the need to advertise and go online. Footfalls were

not for purchase but it was just for 'show-rooming' as customers perceived that online ordering entailed huge discount. Customers wandered in the showroom to check out the quality of the product, talk about the availability of discounts if any and to check-out the physical attributes of the product. Once the information is collected from the showroom, the order was placed online due to incentive of discounts. Retailers dealing in sports goods also had a same opinion like other retailers.

#### **Response to Online Retail**

Measures to fight the E-commerce drive was probed in the questionnaire through a Likert scale question, based on the scale of 5 to 1 from Strongly Agree to Strongly Disagree, respectively. The analysis of the same is mentioned below in Table 6.

**Table 6: Descriptive Statistics of Response to Online Retail**

Statement	Mean	Std. Deviation
Sales below Maximum Retail Price (Competitive Pricing)	3.43	1.33
Adoption of uniform "Omni Channel" presence	3.50	0.93
Website Development	3.37	0.92
Integration of Private Labels with Big Online Retailers	4.06	3.64
Expansion in Tier-II and III Cities	4.20	0.84
Launching of Mobile App	3.63	0.10
Use of social media for promotion	3.93	0.77
Providing unparalleled customer service	4.01	0.77
Promote online and offline sales	3.86	1.03

(Source: SPSS Output)



From table 6, it may be inferred that as the mean ratings are above 3 and nearer to 4, retailers admitted the fact that quick adoption of various strategies would assist them to sustain their business. The SD of less than 1 exhibited consensus in the reply of all the surveyed retailers and also depicted the socially acceptable behaviour norms.

In order to understand the differences in the opinions of the retailers dealing in various segments such as Electronics and Electrical Gadgets, Beauty and Personal Care, Jewelry, Accessories, Groceries,

Furniture and Sports Goods; a Kruskal Wallis test was administered. As the data for the responses to E-Commerce was not normally distributed, it was not possible to apply parametric test.

*H<sub>03</sub>: There is no significant difference in the opinion of different retailers with respect to the response to online retail channel. H<sub>3</sub>: There is a significant difference in the opinion of different retailers with respect to the response to online retail channel.*

**Table 7: Test Statistics for Kruskal Wallis**

Statements	Chi-Square	df	Asymp. Sig.
Sales below Maximum Retail Price (Competitive Pricing)	51.34	6	0.00
Adoption of uniform "Omni Channel" presence	38.36	6	0.00
Website Development	34.36	6	0.00
Integration of Private Labels with Big Online Retailers	28.24	6	0.00
Expansion in Tier-II and III Cities	17.11	6	0.01
Launching of Mobile App	30.49	6	0.00
Use of social media for promotion	12.71	6	0.05
Providing unparalleled customer service	8.71	6	0.19
Promote online and offline sales	13.77	6	0.03

*(Source: SPSS Output)*

From table 7, it may be noted that the asymptotic significant *p*-value in majority of the cases was less than 0.05, so the Null Hypothesis *H<sub>03</sub>* stands rejected, that is there is a significant difference in the opinion of the retailers of with respect to the response to online retail channel. The reason of significant difference depends on the type of business in which the retailers are involved. Only in the case of providing unparalleled customer service the *p*-value is more than 0.05, so the *H<sub>03</sub>* was not rejected. Hence, it may be concluded that as far as the customer service is concerned, the retailers of all the segments unanimously agreed that they had to offer extraordinary customer service in order to attract new customers and retain the existing customers.

### Conclusion

E-tailing does affect the small brick and mortar stores. Retailers dealing in the segment of Electronics and Electricals gadgets, Furniture and Sports Goods face the problems of higher footfalls not being converted into effective sales. Show-

rooming by customers is done to gather preliminary information about the product, feel its aesthetic attributes and purchase is conditioned only if heavy discount demand is fulfilled. Retailers admitted that the customers inquire offline and buy online, thus, E-tailing snatches away their pie of income. Beauty and personal care, Groceries and Jewellery retailers do not readily feel the heat of E-tailing. But the retailers are sceptical if the same scenario is likely to continue in future. It is advisable for retailers to either launch their website or tie up with other promotional website which can promote their product. Online and offline presence will enhance visibility of the product and thereby its purchase. Success of online presence can be eventually extended to launching of mobile app, in order to promote m-shopping.

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# Profitability Of Selected Indian Private Sector Banks: A Comparative Analysis

Manisha Bhavsar, R K Patel

## Abstract

Banks are the most important financial institutions of any economy. They are as important as heart in a human body. The health of the economy depends on the health of its banks, and the banks' health is determined by the profits that they earn. As any other business, profits are imperative for the survival and growth of banks. This paper is an attempt to compare the profitability of three new private sector banks established in the post reforms period viz. ICICI Bank, HDFC Bank and Axis Bank. The study has been conducted for a ten year period from 2004-05 to 2013-14. The secondary data regarding the profitability ratios of these banks has been drawn from RBI publications. The study reveals that HDFC Bank was the best of the three banks in terms of profitability on most of the parameters, though its cost of borrowings was the highest. Axis Bank had the highest return on equity. Banks should try to improve their profitability by increasing their incomes and improving their asset quality. It is also suggested that the government and the RBI should frame policies that help banks to grow and to be more profitable.

## Introduction

Banks are the most important financial institutions of any economy. They are as important as heart in a human body. The health of the economy depends on the health of its banks, and the banks' health is determined by the profits that they earn. As any other business, profits are imperative for the survival and growth of banks.

The Indian commercial banking structure consists of public sector banks, private sector banks, foreign banks and regional rural banks. Public sector banks consist of the State Bank of India and its associate banks, and nationalized banks. Private sector banks consist of old private sector banks which have been in existence since long, and new private sector banks which came into existence after the banking reforms in the early 1990s.

Profitability of banks can be measured by relating profit to a number of important variables. Banks calculate various ratios related to profitability and the RBI publishes them annually. A study of these ratios helps understand the profitability of banks and thereby the effectiveness of the management and its contribution to maximisation of shareholders' value. Indian banks, both public sector as well as private sector, have been earning profits continuously year after year. Strict regulations of the Reserve Bank of India (RBI) and conservative approach of banks have actually helped Indian banks maintain their profitability. This paper is an attempt to compare the profitability of three new private sector banks established almost simultaneously in the post reforms period viz. ICICI Bank, HDFC Bank and Axis Bank.

The rest of the paper has been divided into five sections. Section II provides a brief review of the studies related to the profitability of Indian banks. Section III states the objectives of this paper. Section IV describes the methodology adopted for this paper. Section V describes the analysis of the profitability of banks and its results. Section VI describes the summary and conclusion of the paper.

## Literature Review

Many studies have been undertaken by researchers to understand the profitability of Indian banks and various factors affecting profitability. A summary of a few of them is mentioned below. Bodla and Verma (2006) used step-wise multivariate regression model on financial data of all 27 public sector banks from 1991-92 to 2003-04 and identified that the variables like non-interest income, operating expenses, provisions and contingencies and spread have significant relationship with net profits. Ramachandran and Kavitha (2009) studied the profitability performance of all Indian scheduled commercial banks viz. the SBI group, the nationalized banks and the private banks, for a period of 10 years from 1996-97 to 2005-06 using step-wise multiple regression analysis. They suggested that profitability of banks can be increased by minimising

establishment expenses, generating more non-interest income, enhancing deposit mobilization, improving credit-deposit proportion, introducing innovative branch administration, controlling NPAs, monitoring important ratios, introducing modern marketing strategies and prudential disclosure of financial information. Singh (2010) applied linear regression analysis to the data of 35 sample banks for the period 2003-04 to 2008-09 and concluded that bank specific parameters like asset quality, expenses and other income generating activities affect bank profitability but size of the bank does not. So far as macroeconomic determinants are concerned, profitability of a bank is significantly affected by the GDP of the country in which it is operating, but not by inflation. Viswanathan, Ranganatham and Balasubramanian (2011) estimated the relative importance of advances, investments, deposits and other income in predicting profits using data of 11 public sector banks, 10 private banks and 5 banks of SBI Group for the period 1995 to 2009. Bhadury (2012) undertook a detailed study of the different aspects of other income component of various bank groups – public, private and foreign - during post liberalization period from 1991 to 2010, and concluded that expansion of other income generating activities is a profitable proposition for all banks, though not in the same proportion.

### Objectives

The objectives of this paper are to study and compare the profitability of the three new private sector banks established almost simultaneously in the post reforms period viz. ICICI Bank, HDFC Bank and Axis Bank.

### Methodology

The paper studies important ratios showing the profitability of banks such as Return on assets, Return on equity, Return on advances, Return on investments, Cost of deposits, Cost of borrowings, Cost of funds and Ratio of operating profit to total assets. The study has been conducted for three new private sector banks viz. ICICI Bank, HDFC Bank and Axis Bank for a ten year period from 2004-05 to 2013-14. The secondary data regarding the profitability ratios of these banks has been drawn from the RBI publication “Statistical tables relating to banks in India”. Descriptive statistical methods have been used to compare the profitability of banks.

### Analysis And Results

Profitability of banks can be measured by relating profit to a number of important variables. Some such key ratios are Return on assets, Return on equity, Return on advances, Return on investments, Cost of deposits, Cost of borrowings, Cost of funds and Ratio of operating profit to total assets. These ratios for three new private sector banks viz. ICICI Bank, HDFC Bank and Axis Bank have been analyzed and the results have been presented below.

#### (1) Return on assets

This ratio shows the net profit of the bank as a percentage of its total assets. The return on assets of the banks for the study period have been presented in Table No. 1.

**Table No.1: Return on Assets (%)**

Year	ICICI	HDFC	AXIS
2004-05	1.59	1.47	1.21
2005-06	1.30	1.38	1.18
2006-07	1.09	1.33	1.10
2007-08	1.12	1.32	1.24
2008-09	0.98	1.28	1.44
2009-10	1.13	1.53	1.67
2010-11	1.35	1.58	1.68
2011-12	1.50	1.77	1.68
2012-13	1.70	1.90	1.70
2013-14	1.78	2.00	1.78
Average	1.35	1.56	1.47
SD	0.26	0.24	0.25

During the study period, HDFC Bank with an average 1.56% return on assets was the most profitable bank. Axis Bank with an average 1.47% return was the second best whereas ICICI Bank with an average return of 1.35% was the least profitable of the three banks.

During these 10 years, profitability of all the banks has steadily improved, with the highest return on assets in the year 2013-14 for all the banks. However, all the banks witnessed lowest returns during the years 2007 to 2009. The low standard deviation confirms that the return on assets has been close to the average return on assets and almost similar during all the years for all the banks ranging between 1% and 2%.

#### (1) Return on equity

This ratio shows the net profit of the bank as a percentage of its equity. The return on equity of the three banks for the study period have been presented in Table No. 2.



**Table No. 2: Return on Equity (%)**

Year	ICICI	HDFC	AXIS
2004-05	18.86	18.45	18.81
2005-06	14.33	17.74	18.28
2006-07	13.17	19.46	20.96
2007-08	11.63	17.74	17.60
2008-09	7.80	17.17	19.12
2009-10	7.96	16.30	19.15
2010-11	9.65	16.74	19.34
2011-12	11.20	18.69	20.29
2012-13	13.10	20.34	18.53
2013-14	14.02	21.28	17.43
Average	12.17	18.39	18.95
SD	3.15	1.51	1.04

During the study period, Axis Bank was the most profitable bank of the three with an average 18.95% return on equity. HDFC Bank was close behind with an average 18.39% return on equity. However, ICICI Bank lagged behind with average return on equity of only 12.17%.

ICICI Bank saw a lot of fluctuations in its return on equity during the 10 year period, with the return as high as 18.86% in 2004-05, dropping down to 7.8% in 2008-09 and then recovering back to 14% steadily in 2013-14. The high standard deviation confirms it too. Axis Bank had the highest return on equity of 20.96% during 2006-07 and the lowest 17.43% during 2013-14, showing a decreasing profitability. The return on equity of HDFC Bank reduced slowly during the initial years and touched a low of 16.3% in 2009-10, but then recovered gradually to 21.28% in 2013-14.

#### **(1) Return on advances**

This ratio depicts interest earned on advances and bills as a percentage of total advances made by the bank. The return on advances of the three banks have been presented in Table No. 3.

**Table No. 3: Return on Advances (%)**

Year	ICICI	HDFC	AXIS
2004-05	8.77	7.68	7.84
2005-06	8.59	8.91	8.06
2006-07	9.41	10.57	9.13
2007-08	10.72	12.62	9.83
2008-09	10.06	14.96	10.57
2009-10	8.70	10.77	8.59
2010-11	8.26	10.56	8.43
2011-12	9.42	11.89	9.85
2012-13	10.05	12.33	10.45
2013-14	9.99	11.68	10.28
Average	9.40	11.20	9.30
SD	0.76	1.92	0.97

HDFC Bank was the most profitable bank with return on advances averaging to 11.2% during the study period. ICICI Bank with an average return of 9.4% on its advances ranked second while Axis Bank was marginally behind with an average of 9.3%.

HDFC Bank witnessed large variations in the return on advances. It was only 7.68% in 2004-05, reached a high of almost 15% in 2008-09, plummeted to 10.56% in 2010-11 and increased thereafter to 12.33% in 2012-13. A standard deviation of 1.92 suggests the same. For ICICI Bank as well as Axis Bank, the return on advances fluctuated between 7.84% and 10.72%, with the highest returns in the years 2007-08 and 2008-09 respectively.

#### **(1) Return on investments**

This ratio shows interest earned on investments made by the bank as a percentage of its total investments. The return on investments of the three banks have been presented in Table No.4.



**Table No. 4: Return on Investments (%)**

Year	ICICI	HDFC	AXIS
2004-05	4.75	6.79	7.60
2005-06	6.05	6.84	7.03
2006-07	6.13	6.98	6.74
2007-08	7.37	7.18	6.94
2008-09	6.90	7.41	7.63
2009-10	5.77	6.78	6.70
2010-11	6.19	7.22	6.94
2011-12	6.58	7.72	7.74
2012-13	6.65	7.48	7.49
2013-14	6.63	7.77	7.34
Average	6.30	7.22	7.21
SD	0.68	0.35	0.37

HDFC Bank with an average return of 7.22% on its investments during the study period was the most profitable bank. Axis Bank was marginally behind with an average of 7.21%. ICICI Bank ranked third with 6.3% return on investments.

HDFC Bank and Axis Bank were almost at par as regards return on investments with ranged from 6.70% to 7.77% during these 10 years with very little variation, as even suggested by the low standard deviation. ICICI Bank, however, saw a return as low as 4.75% in 2004-05 which increased to 7.37% in 2007-08, and then remained between 6% and 7%.

#### (1) Cost of deposits

This ratio shows interest paid by the bank on its total deposits as a percentage of its deposits. A lower cost shows higher profitability. The cost of deposits for the study period have been presented in Table No. 5.

**Table No. 5: Cost of Deposits (%)**

Year	ICICI	HDFC	AXIS
2004-05	3.87	3.32	4.06
2005-06	4.41	3.38	4.32
2006-07	5.89	4.34	5.02
2007-08	7.21	5.18	5.11
2008-09	6.82	6.58	6.06
2009-10	5.48	4.51	4.42
2010-11	4.71	4.27	4.54
2011-12	5.95	5.57	5.95
2012-13	6.16	6.01	6.35
2013-14	5.72	5.74	5.79
Average	5.62	4.89	5.16
SD	0.99	1.05	0.78

HDFC Bank with its lowest cost of deposits at an average of 4.89% has been ranked first with regards to profitability. Axis Bank with an average cost of deposits of 5.16% has been ranked second while ICICI Bank with the highest cost at an average of 5.62% has been ranked last amongst the three banks.

The cost of deposits with HDFC Bank varied from a low of 3.32% in 2004-05 to a high of 6.58% in 2008-09, and again from a low of 4.51% in 2009-10 to 5.74% in 2013-14. The cost of deposits with Axis Bank was 4.06% in 2004-05, which gradually increased to 6.06% in 2008-09, then dropped to 4.42% in 2009-10 and again increased with the highest cost of 6.35% in 2012-13. ICICI Bank too had cost of deposits at a low of 3.87% in 2004-05 which increased to 7.21% in 2007-08 and then remained between 5% and 6%. All the three banks had high cost of deposits during the period 2008-09 and then during 2012-13.

#### (1) Cost of borrowings

This ratio shows the interest paid by the bank on its total borrowings as a percentage of its borrowings. Lower cost means higher profitability. The cost of borrowings of the three banks have been presented in Table No. 6.

**Table No. 6: Cost of Borrowings (%)**

Year	ICICI	HDFC	AXIS
2004-05	10.33	5.86	10.69
2005-06	10.44	9.68	11.60
2006-07	10.49	17.07	13.01
2007-08	10.90	13.61	12.52
2008-09	8.74	13.02	8.89
2009-10	6.49	7.14	5.62
2010-11	6.76	9.94	5.03
2011-12	6.81	12.03	5.94
2012-13	6.53	10.32	6.41
2013-14	6.55	9.95	6.86
Average	8.40	10.86	8.66
SD	1.86	3.07	2.91

With an average of 8.4%, ICICI Bank had the lowest cost of borrowings and has been ranked as the most profitable bank. With an average cost of borrowings of 8.66%, Axis Bank has been ranked second, while HDFC Bank has been ranked third with an average of 10.86%.

There have been large fluctuations in the cost of borrowings of all the three banks. The cost of borrowings of ICICI Bank was the highest at 10.9% in 2007-08, which then decreased and remained around 6.5 to 7% during the later years. Axis Bank had the highest cost of 13% in 2006-07 and the lowest 5% in 2010-11. From a low of 5.86% to a high of 17%, HDFC Bank has witnessed huge fluctuations in the cost of borrowings. The cost was 9.95% in 2013-14.

#### (1) Cost of funds

This ratio shows the cost of funds of the bank. It shows total interest paid by the bank on its deposits as well as its borrowings as a percentage of the total amount of deposits and borrowings. The lower the cost of funds, higher the profitability. The cost of funds of the three banks for the study period have been presented in Table No. 7.

**Table No. 7: Cost of Funds (%)**

Year	ICICI	HDFC	AXIS
2004-05	5.66	3.56	4.34
2005-06	5.70	3.87	4.75
2006-07	6.74	4.90	5.61
2007-08	7.94	5.54	5.62
2008-09	7.31	6.93	6.32
2009-10	5.79	4.69	4.55
2010-11	5.37	4.65	4.59
2011-12	6.24	6.07	5.95
2012-13	6.29	6.42	6.36
2013-14	5.99	6.16	5.95
Average	6.30	5.28	5.41
SD	0.77	1.06	0.73

HDFC Bank with the lowest cost of funds averaging 5.28% has been ranked first as regards profitability. Axis Bank was a close second with 5.41% average cost of funds. ICICI Bank with a higher cost of 6.3%

has been ranked third in terms of profitability.

A high standard deviation suggests that the cost of funds of HDFC Bank varied hugely from 3.56% to 6.93%, with the highest cost in 2008-09. Later, however, the cost remained between 6 and 6.5%. The cost of funds of Axis Bank remained between 4.34% and 6.36% during these 10 years. The cost of funds of ICICI Bank was the highest at 7.94% in 2007-08 and the lowest 5.37% in 2010-11. All the banks had the highest cost of funds during the years 2008-2009.

#### (1) Ratio of operating profits to total assets

This ratio shows the operating profit of the bank as a percentage of its total assets. The ratio of operating profits to total assets of the three banks for the study period have been presented in Table No. 8.

**Table No. 8: Ratio of Operating Profit to Total Assets (%)**

Year	ICICI	HDFC	AXIS
2004-05	2.02	2.87	1.83
2005-06	1.86	3.17	2.27
2006-07	1.97	3.11	2.06
2007-08	2.14	3.36	2.43
2008-09	2.29	3.27	2.90
2009-10	2.62	3.17	3.19
2010-11	2.35	3.09	3.03
2011-12	2.32	3.05	2.81
2012-13	2.57	3.10	2.97
2013-14	2.93	3.22	3.17
Average	2.31	3.14	2.67
SD	0.31	0.13	0.46

HDFC Bank was the most profitable bank with operating profits to total assets being the highest at an average 3.14% during the study period. Axis Bank ranked second with an average of 2.67% and ICICI ranked third with an average of 2.31%.

With very little variation, HDFC Bank maintained operating profits at 2.87% to 3.36% of total assets during the entire 10 year period, with the highest in the year 2007-08. Axis Bank had operating profits at 1.83% of total assets in 2004-05, which increased to

3.17% of total assets in 2013-14. The highest was 3.19% during the year 2009-10. ICICI Bank earned operating profits at 1.86% of total assets in the year 2005-06, which steadily increased to 2.93% in the year 2013-14. The ratio of operating profits to total assets of all banks has continuously improved over these 10 years.

### (1) Ratio wise rank

On the basis of the above profitability ratios, the three banks have been given ranks which are presented in Table No. 9.

**Table No. 9: Ratio-wise Rank**

	ICICI	HDFC	AXIS
Return on Assets	3	1	2
Return on Equity	3	2	1
Return on Advances	2	1	3
Return on Investments	3	1	2
Cost of Deposits	3	1	2
Cost of Borrowings	1	3	2
Cost of Funds	3	1	2
Ratio of Operating Profit to Total Assets	3	1	2

HDFC Bank has been ranked first on 6 out of 8 ratios. It has been ranked second as regards return on equity and third as regards cost of borrowings.

Axis Bank has been ranked first as regards return on equity. However, it ranked second on 6 out of 8 ratios. For return on advances, it ranked third.

ICICI Bank ranked first with the lowest cost of borrowings. For return on advances, it ranked second. On all other 6 ratios, it ranked third.

### Summary And Conclusion

The study analyses and compares the profitability of three large banks in the private sector, which started their operations almost around the same time as a part of the banking reforms in India. The study reveals that HDFC Bank was the best of the three banks in terms of profitability on most of the parameters viz. return on assets, return on advances, return on investments, cost of deposits, cost of funds and ratio of operating profit to total assets. However, its cost of borrowings was the highest. Axis Bank can be given the second rank in overall profitability. However, it had the highest return on equity. ICICI Bank can be ranked third among the three banks with regards to overall profitability. It, however, had the lowest cost of borrowings. It can also be

observed that profitability ratios of all the banks have improved year after year. However, increasing cost of funds is a matter of concern. Banks should try to improve their profitability further by increasing their incomes and improving their asset quality. It is also suggested that the government and the RBI should frame policies that help banks to grow and to be more profitable.

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# Analytical Study of Pre and Post-Merger Performance – A Case study of Lupin Ltd

Jayesh Pandya, Mamta Hindocha

## Abstract

In this era of cut throat competition companies with small capital are bound to join hands with financially strong companies and thus Mergers and Acquisitions are increasing in current period. Lupin Limited, based in Mumbai, is one such pharmaceutical company that grew fast from the time that it was established in the 1968, both in developing generic drugs and in research. Lupin Pharmacare Limited and Lupin Herbal Limited together with Novodigm Limited, wholly owned subsidiaries of the Company stood amalgamated with the Lupin Ltd Company on a going concern basis effective from May 27, 2010

The study is undertaken with the objectives to evaluate and examine Profitability, Liquidity, Long term financial strength and correlation between liquidity and profitability of Lupin Ltd prior to merger and after merger for selected period. The Period of study is from 2006-2016. The merger completion year 2011 (2010-2011) was denoted as year 0. For the purpose of analysis several Ratios were calculated for Pre and Post merger period. Hypothesis tested by applying Paired T test. Finally, it is concluded that Merger of Lupin Ltd with Lupin Pharmacare Limited and Lupin Herbal Limited together with Novodigm Limited has positively affected the profitability and slightly declined liquidity which is not significant.

## 1. Introduction

During last few decades, corporate world has faced many changes due to globalization, deregulation and technological development. In order to deal with this situation companies adopt several changes to survive and grow.

In this era of cut throat competition companies with small capital are bound to join hands with financially strong companies and thus Mergers and Acquisitions are increasing in current period. Other than these companies are also involving in other corporate restructuring activities like joint ventures, Takeovers, Assets Acquisitions, Divestitures, and Equity carve out etc. in order to develop further.

## 2. Profile of Lupin Ltd

[<https://successstory.com/companies/lupin-limited,lupin ltd story>]

The growth of the pharmaceutical industry that began in India in the mid-20<sup>th</sup> century gave rise to many new pharmaceutical companies, some of which grew globally soon. Lupin Limited, based in Mumbai, is one such pharmaceutical company that grew fast from the time that it was established in the 1968, both in developing generic drugs and in research

Lupin Ltd is the 2<sup>nd</sup> largest pharmaceutical company in India, 14<sup>th</sup> largest producer of generic drugs in the world. It is also the fastest growing generic pharmaceutical company in South Africa.

Under Sections 391-394 of the Companies Act, 1956, Lupin Pharmacare Limited and Lupin Herbal Limited together with Novodigm Limited, wholly owned subsidiaries of the Company ('transferor companies'), stood amalgamated with the Company on a going concern basis effective from May 27, 2010, pursuant to the scheme sanctioned by the Honourable High Court of Judicature at Ahmedabad vide its order dated May 6, 2010. The said amalgamation was accounted for under the "Pooling of Interests" method as prescribed by the Accounting Standard 14. The aim of amalgamation was development of business and reaping the benefits of synergies and reduction in cost.

## 3. Objective of the Study:

1. To evaluate the profitability of acquirer company during pre and post-merger period.
2. To examine the Liquidity of acquirer company during pre and post-merger period.
3. To evaluate long term financial strength of acquirer company during pre and post-merger period.
4. To analyze correlation between liquidity and profitability of acquirer company during pre and post-merger period.



#### 4.0 Research Methodology:

##### 4.1 Methodology

The study is based on secondary data collected from annual reports of the company. The other required data has been extracted from various websites, books, journals and newspapers.

##### 4.2 Period of study

The Period of study is from 2006-2016. The merger completion year 2011 was denoted as year Zero . Year 2006, 2007, 2008, 2009, 2010 are considered pre-merger deal years; year 2011 is considered as Merger deal year, and year 2012, 2013, 2014, 2015, 2016 are taken as post deal years.

##### 4.3 Research Hypotheses

To test the objectives mentioned above, the following hypotheses were formulated:

1. **H0:** Mergers have no impact on Net profit ratio of acquiring firms.  
**H1:** Mergers have impact on the Net profit ratio of acquiring firms.
2. **H0:** Mergers have no impact on Return on capital employed of acquiring firms.  
**H1:** Mergers have impact on the Return on capital employed of acquiring firms.
3. **H0:** Mergers have no impact on Current ratio of acquiring firms.  
**H1:** Mergers have impact on the Current ratio of acquiring firms.
4. **H0:** Mergers have no impact on Interest coverage ratio of acquiring firms.  
**H1:** Mergers have impact on the Interest coverage ratio of acquiring firms.
5. **H0:** Mergers have no impact on Debt equity ratio of acquiring firms.  
**H1:** Mergers have impact on the Debt equity ratio of acquiring firms.

##### 4.4 Tools and Techniques of Analysis:

The collected data has been analyzed using accounting tools like ratio analysis as well as statistical tools like mean, standard deviation,

coefficient of variation (CV) and T test.

#### 5.0 Data Analysis and Findings

##### 5.1 Net profit Margin [NP Ratio]

NP ratio is a measure of net profit margin in relation to sales. It expresses the overall efficiency of the business .Any business organization should have sufficient margin so as to provide adequate return to the shareholders. The ratio is calculated as follows:

$$\text{Net Profit Margin} = \text{Net Profit} / \text{Sales} \times 100$$

As revealed by Figure 1, NP Ratio shows overall Increasing trend in pre-merger period, from 2006 onwards up to 2010 from 11.38% to 17.83% except in 2009 where NP Ratio declined to 14.39% from 17.43% in 2008. However in post-merger period too NP Ratio was increasing from 2012 to 2016 from 14.94% to 25.58% except slight decline noticed in 2015 to 24.58% from 25.99% in 2014 .As per Table no 1 and 2, Average NP Ratio in post-merger period was 21.76%, highly improved as compared to pre-merger period where it was 15.27%

The higher co-efficient of variation of 23.39% during the post-merger period as compared to 17.06 % during the pre-merger period indicates that the ratio fluctuated more during the post-merger period.

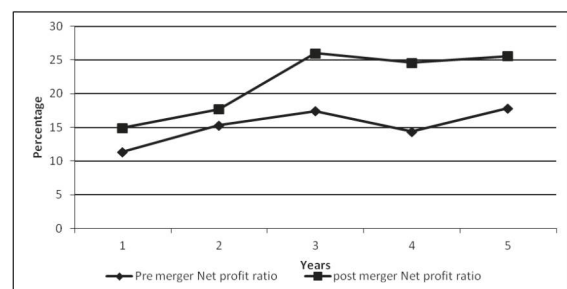


Figure 1 -Net profit ratio

##### 5.2 Return on capital employed [ROCE]

Return on Capital employed measures return on funds employed by the business. It indicates the efficiency of the business in utilization of funds entrusted to it by owners and long term creditors. Higher the ratio greater the



efficiency of the management of the firm in utilizing the funds entrusted to them. The ratio is calculated as follows:

$$\text{Return on Capital Employed} = \frac{\text{Operating Profit (EBIT)}}{\text{Capital employed}} \times 100$$

As exhibited by Figure 2, Return on capital employed shows increasing trend in pre-merger period, from 2006 onwards up to 2010 from 12.09 % to 18.92% except in 2009 where Return on capital employed declined to 17.51% from 21.75% in 2008. However in post-merger period, Return on capital employed increased from 2012 to 2016 from 23.87% to 32.97% except in years 2015 and 2016 where it declined to 34.69% and 32.97% from 42.94% in 2014. As per Table 1 and 2, Average Return on capital employed in post-merger period was 33.49%, highly improved as compared to pre-merger period where it was 17.93 %

The Co-efficient of variation of pre-merger period and post-merger period is almost nearer , 20.08% in pre-merger period and 20.24% in post-merger period which shows return on capital employed fluctuated at a same degree in both periods.

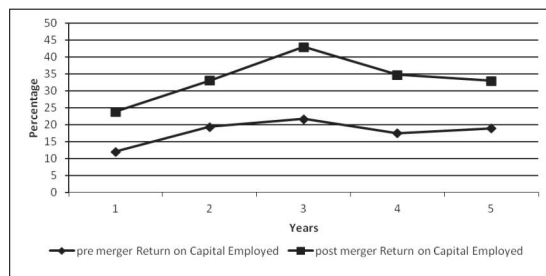


Figure 2 - Return on capital employed

### 5.3 Current Ratio [CR]

This ratio measures solvency of company in short term. Current assets are those assets which can be converted in to cash within a year. Current liabilities and provisions are those liabilities which are payable within a year. It is calculated as follows:

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

As revealed by Figure 3, Current ratio shows fluctuating trend in pre-merger period ranging between 1.97 and 3.61 from 2006 to

2010. However current ratio in post period shows increasing trend except in last year where it slightly declined. Current ratio increased from 1.49 times in 2012 to 3.89 in 2015 and declined to 3.15 times in 2016. As per Table 1 and 2, Average Current ratio in pre-merger period 3.05 was high as compared to post merger period 2.79.

The higher co-efficient of variation of 36.05% during the post-merger period as compared to 21.40 % during the pre-merger period indicates that the ratio fluctuated more during the post-merger period.

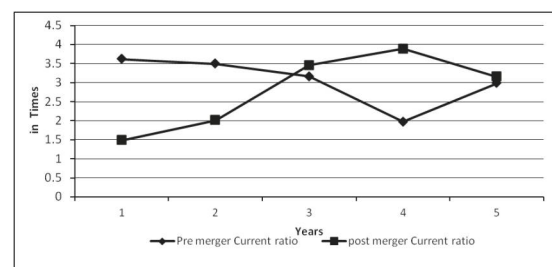


Figure 3 - Current ratio

### 5.4 Interest coverage Ratio [ICR]

It reveals the number of times interest covered by the profits available for interest. It is a measure of security of return available on debt. It is calculated as follows:

$$\text{Interest coverage ratio} = \frac{\text{Profit before interest and tax}}{\text{Interest}}$$

As depicted by Figure 4, Interest coverage ratio is increased during pre-merger period except for 2009. It has increased from 6.59 times to 23.97 times from 2006 to 2010 except decline noticed in year 2009 to 10.35 times. Similarly increase too noticed in post-merger period from 34.03 times in 2012 to 654.54 times in 2015 which again declined to 263.25 times in 2016. As per Table 1 and 2, Average Interest coverage ratio in post-merger period was 230.24 times, significantly high as compared to 13.17 times in pre-merger period.

The higher co-efficient of variation of 110.41% during the post-merger period as compared to 51.52 % during the pre-merger period indicates that the ratio fluctuated more during the post-merger period.

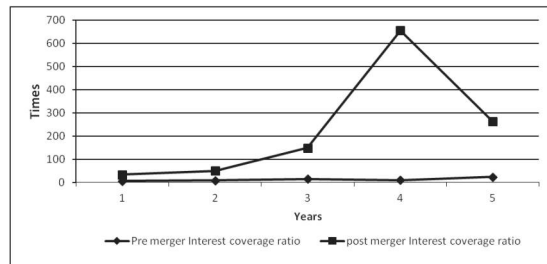


Figure 4 - Interest coverage ratio

### 5.5 Debt Equity Ratio [DE ratio]

The ratio indicates the relationship between loan funds and net worth of the company, which is known as gearing. The higher the gearing, the more volatile return would be received to shareholders. The ratio is calculated as follows:

$$\text{Debt Equity ratio} = \frac{\text{Long term debts}}{\text{shareholders fund.}}$$

As exhibited by Figure 5, Debt equity ratio shows declining trend in pre-merger period. It reduced from 1.417191 in 2006 to 0.358345 in 2010. However it further decline in post-merger period from 0.097 in 2012 to 0.018 in 2016. As per Table 1 and 2, Average Debt equity ratio in post-merger period was 0.047 which is significantly low as compared to pre-merger period where it was 0.834.

The higher co-efficient of variation of 67.18% during the post-merger period as compared to 47.12 % during the pre-merger period indicates that the ratio fluctuated more during the post-merger period.

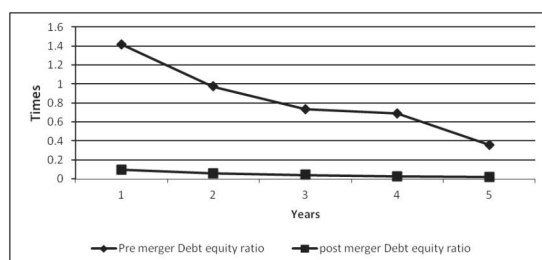


Figure 5 - Debt equity ratio

### 6.0 Liquidity V/S Profitability

Profitability concept signifies the operational efficiency of an organization by value addition through the utilization of resources i.e. men, materials, money and machines. It refers to a situation in term of efficiency in utilization of

resources to maximize profit. Whereas liquidity means the ability of the organization to realize value in money, and its ability to pay cash for the obligations that are due for payment. There is an inverse relationship between profitability and liquidity.

As compared to pre-merger period Average Current ratio is declined in post-merger period. Average Current ratio in pre-merger period 3.05 was high as compared to post merger period where it amounted to 2.79. However Average Net profit and Average Return on capital employed increased in post-merger period as compared to pre-merger period. Average NP Ratio in post-merger period was 21.76%, highly improved as compared to pre-merger period where it was 15.27 %. Average Return on capital employed in post-merger period improved to 33.49% as compared to that of pre-merger period where it was 17.93%.

So, one of the observation noticed that due to decline in liquidity as indicated by decrease in Current ratio in post-merger period there is improvement in profitability indicated by increase in Net Profit ratio and Return on capital employed in post-merger period.

Further analysis is done by measuring correlation between liquidity and profitability in pre-merger period and post-merger period by considering variables Current ratio as liquidity indicator and its effect on profitability by considering Net profit ratio as its indicator. Correlation coefficient in pre-merger period was -0.17075 however in post-merger period it resulted to 0.94137. So it could be interpreted that in pre-merger period correlation is observed to be negative however correlation was positive in post-merger period. Thus increase in liquidity has improved profitability on the contrary, which is a result of positive effect of merger.

### 7.0 Testing of Hypothesis:

For the purpose of Testing the Hypothesis already mentioned in the preceding pages, The 't' values for the different ratios is calculated and shown in the table as follows:

Ratios	Calculated T	Calculated T [ignoring negative sign]
Net Profit ratio	-4.3169	4.3169
Return On Capital Employed	-9.4116	9.4116
Current Ratio	0.347063	0.347063
Interest coverage ratio	-1.91539	1.91539
Debt equity ratio	4.856409	4.856409
Table value [two tailed] (5% level of significance)	2.776	2.776

### Hypothesis -

1. **H0:** Mergers have no impact on Net profit ratio of acquiring firms.

**H1:** Mergers have impact on the Net profit ratio of acquiring firms.

In case of Net profit ratio T calculated value is more than table value i.e.  $4.3169 > 2.776$ , thus **H1 is accepted**. Thus we can conclude that merger had significantly affected Net Profit ratio of acquiring company.

2. **H0:** Mergers have no impact on Return on capital employed of acquiring firms.

**H1:** Mergers have impact on the Return on capital employed of acquiring firms.

In case of Return on capital employed, T calculated value is more than table value i.e.  $9.4116 > 2.776$ , thus **H1 is accepted**. Thus we can conclude that merger had significantly affected Return on capital employed of acquiring company.

3. **H0:** Mergers have no impact on Current ratio of acquiring firms.

**H1:** Mergers have impact on the Current ratio of acquiring firms.

In case of Current ratio, T calculated value is less than table value i.e.  $0.347063 < 2.776$ , thus **H0 is accepted**. Thus we can conclude that merger had not significantly affected Current ratio of acquiring company.

4. **H0:** Mergers have no impact on Interest coverage ratio of acquiring firms.

**H1:** Mergers have impact on the Interest coverage ratio of acquiring firms.

In case of Interest coverage ratio, T calculated value is less than table value i.e.  $1.91539 < 2.776$ , thus **H0 is accepted**. Thus we can conclude that merger had not significantly affected Interest coverage ratio of acquiring company.

5. **H0:** Mergers have no impact on Debt equity ratio of acquiring firms.

**H1:** Mergers have impact on the Debt equity ratio of acquiring firms.

In case of Debt equity ratio T calculated value is more than table value i.e.  $4.856409 > 2.776$ , thus **H1 is accepted**. Thus we can conclude that merger had significantly affected Debt equity ratio of acquiring company.

Finally we can observe that out of totally five tests, Net Profit Ratio, Return on Capital employed and Debt equity ratio found to be significantly affected due to merger of acquiring company however other two i.e. Current ratio and Interest coverage ratio are not significantly affected due to merger.

### 8.0 Conclusion

From the above analysis of different ratios in pre and post-merger period we can conclude that profitability is significantly improved on account of merger as indicated by high increase in Net profit margin and Return on capital employed. On the other side Current ratio declined in post-merger period as compared to pre-merger period but it's not significant. Thus liquidity is not declined significantly but profitability increased significantly which denotes cause could be a merger. However Debt Equity ratio also declined in post period which is considered significant by T Test so we may

again conclude that even though there is decline in gearing, profitability is improved significantly only as a result of merger. On the other hand Interest coverage ratio improved though insignificant in post-merger period as compared to pre-merger period as a result of improvement in profitability and decline in Debt Equity ratio. Analysis is also done by ascertaining correlation between Profitability and Liquidity, it is interpreted that in pre-merger period correlation is observed to be negative however correlation was positive in post-merger period. Thus in post-merger period increase in liquidity has improved profitability on the contrary, which is a result of positive effect of merger.

To sum up discussion it is concluded that Merger of Lupin Ltd with Lupin Pharmacare Limited and Lupin Herbal Limited together with Novodigm

Limited has positively affected the profitability and slightly declined liquidity which is not significant. Thus Merger is fruitful for Lupin Ltd.

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# A Study on Analysis of Risk And Return of Selected Open Ended Equity Mutual Funds

Hetal Tandel, Adwitiya Acharya

## Abstract:

With the reforms of economy, industrial policy, public sector and financial sector, the economy has been opened up and many developments has taken place in the money market and capital market. Mutual fund sector has also occupied an important place in the financial market. The study was conducted to evaluate the performance of selected mutual funds schemes of 05 years – 2011 year to 2016 year. There were 42 companies out of which 164 schemes are related to open ended equity mutual fund scheme from which 50 schemes were selected based on AUM having more than INR 1200 crore size. The first part of the study focused on the overall development of mutual fund sector in world and in India at large. Mutual Fund is a topic which is of enormous interest not only to researchers all over the world, but also to investors. Mutual funds as a medium-to-long term investment option are preferred as a suitable investment option by investors. However, with several market entrants the question is the choice of mutual fund. The study focus on the performance of mutual funds by using three models i.e. Sharpe, Treynor and Jensen. The result shows that performance of the majority of sample mutual fund schemes are outperform the market benchmark indexes in term of Treynor and Sharpe ratio based on historical quarterly returns.

## Overview of Mutual fund in India

The first introduction of a mutual fund in India occurred in 1963, when the government of India launched unit trust of India (UTI). Until 1987, UTI enjoyed a monopoly in the Indian mutual fund market. Then a host of other government controlled Indian financial companies came up with their own funds. These included state bank of India, Canara bank and Punjab national bank. This market was made open to private players in 1993, as a result of historic constitutional amendments brought forward by the then congress led government under the existing regime of LPG. The first private sector fund to operate in India was Kothari Pioneer, which later merged with Franklin Templeton. SEBI is the regulator of mutual funds. In 1996, SEBI formulated the mutual fund regulation which is comprehensive regulatory framework.

Despite being available in the market less than 10% of Indian households have invested in mutual funds. A recent report on mutual fund investments in India published by research and analytics firm, Boston Analytics, suggests investors are holding back from putting their money into mutual funds due to their perceived high risk and a lack of information on how mutual funds work

## Current scenario of mutual funds

The Indian mutual fund industry has shown relatively slow growth in the period FY 10-13 growing at a CAGR of approximately 3.2 %. Average (AUM) stood at INR 8,140 billion as of September 2013. However, AUM increased to INR 8,800 billion as of December 2013. In comparison to global markets, India's AUM penetration as a percent of GDP is between 5-6 percent while it is around 77 percent for the U.S, 40 percent for Brazil and 31 percent for South Africa.

Despite the growth of Mutual Fund Industry, penetration levels in India are low as compared to other global economies. Assets under management as a percentage of GDP is less than 5% in India as compared to 70% in the US, 67% in France and 37% in Brazil. The industry has grown in size and manages total assets of more than \$30351 million. Of the various sectors, the private sector accounts for nearly 91% of the resources mobilized showing their overwhelming dominance in the market. Individuals constitute 98.04% of the total number of investors and contribute US \$12062 million, which is 55.16% of the net assets under management. The Indian mutual funds retail market, growing at a CAGR of about 30%, is forecasted to reach US\$ 300 Billion by 2015.

Income and growth schemes made up for majority of Assets under Management (AUM) in the country. At about 84% (as on March 31, 2008), private sector Asset Management Companies account for majority of



mutual fund sales in India. Individual investors make up for 96.86% of the total number of investor accounts and contribute 36.9% of the net assets under management. The ₹ 7.2 trillion Indian Mutual Fund Industry is revisiting its business model to be in sync with the new norms put in place by the capital market regulator, the Securities and Exchange Board of India, or SEBI. India has 36 asset management companies (AMCs) and at least some of them are planning to start their own distribution business instead of selling funds through third-party distributors. Among other things, they plan to cut distributors' commission by 25-30 basis points (bps) and shift their focus from

frequent churning of funds to managing money for the longer term. One basis point is one-hundredth of a percentage point.

Out of the 32 Crore employed Indians, only 2.5% are investors. Many investors, particularly youth mostly having the dispensable income opt for mutual funds to enter into the securities market indirectly. Hence, potential investors in mutual funds need evaluation not only by financial institutions but also by academicians so that they can make a right choice in their investment decisions.

**Table 1: Showing market share of leading mutual funds (basis AUM) as of 2013**

Mutual funds companies	Market share (%)
Axis mutual fund	2%
DSP Blackrock	4%
Kotak Mahindra	4%
IDFC	5%
Franklin templeton	5%
SBI	7%
HDFC	13%
Reliance	12%
ICICI Prudential	10%
Birla sun life	9%
UTI	9%
Others	20%

Source: <https://www.amfiindia.com/>

## FACTORS THAT INFLUENCE THE PERFORMANCE OF MUTUAL FUND

The performances of Mutual funds are influenced by the performance of the stock market as well as the economy as a whole. Few of the factors can be summarised as below:

### Expense Ratio

A mutual fund's EXPENSE RATIO is the most important fee to understand. And is made up of the following: The investment advisory fee or management fee is the money used to pay the manager(s) of the mutual fund. This is usually taken annually as a percentage of the fund's assets.

Administrative costs are the costs of record keeping, mailings, maintaining a customer service line, etc. These are all necessary costs, though they vary in size from fund to fund. Distribution fee: This fee is spent on marketing, advertising and distribution services.

Only one third of all equity, mutual funds provided returns greater than the S&P 500, and that was before fees and expenses which range from 0.5% to 2.0% and 2.0%, respectively. After adjustments were made for the riskiness of a fund, mutual funds were reported as being able to perform up to the market 37 on gross returns, but were

underperforming, as compared to the market, after the various expenses were factored in. Many analysts suggested that the average 1.3% expense ratio of mutual funds and the need for the retainment of cash as the culprits of such underperformance.

### **Risk**

Risk can be a great ally when trying to estimate the reward potential of a stock investment. The greater the stock volatility, or risk, the greater also is the reward. There are several new risk measurements that give guidance for selecting mutual stocks that provide higher returns for lower risk.

### **Time Horizon**

The time horizon of an individual will also influence the performance measures he/she will look at more closely. If you are investing for less than four years, you need a fund with consistent performance, so all your money will be there when you need it. You also do not have time to earn back a large commission charge on the front end. Conversely, if you plan to invest your money for 30 years, neither consistency nor load is very important: you have plenty of time for the market to recover. With a long-term horizon, your biggest enemies are poor performance and high annual expenses, both of which can erode that all-important compounding.

### **LITERATURE REVIEW**

Dr. P. Bhuvaneshwari, Dr. M. Selvam (2011) Analysis of Risk and Return Relationship of Indian Equity (Dividend) Mutual Fund: The study found out that out of thirty Five sample schemes, eleven showed significant t – values and all other twenty four sample schemes did not prove significant relationship between the risk and return. Ms. M.V. Subha Ms. S. Jaya Bharathi (2007) An Empirical Study on the Performance of Select Mutual Fund Schemes in India: The empirical results reported here indicated a mixed performance of Sample schemes during the study period. The Sharpe Ratio indicates good performance by majority of the scheme, while in terms of Treynor ratio only few schemes show good performance. The Jensen's measure, alpha is positive for 98% of the funds which shows that the funds are generating good

returns. Sahil Jain (2012) Analysis of Equity Based Mutual Funds in India: In this paper an attempt has been made to analyse the performance of equity based mutual funds. A total of 45 schemes offered by 02 private sector companies and 02 public sector companies, have been studied over the period April 1997 to April 2012 (15 years). The analysis has been made using the risk-return relationship and Capital Asset Pricing Model (CAPM). The overall analysis finds that HDFC and ICICI has performer better, UTI an average performer and LIC the worst performer which gave below- expected returns on the risk-return relationship. Shakeela Naz, Atta Ul Mustafa, Arslan Mukhtar, Saqib Nawaz (2015) Risk Adjusted Performance Evaluation of Balanced Mutual Fund Schemes in Pakistan :The analysis has been made on the basis of mean return, beta risk, total risk, Sharpe ratio, Treynor ratio, Jensen Alpha and Fama's decomposition measure. The empirical results reveal that average returns of selected portfolio are below from market returns, mix trend of risk in selected schemes and overall defensive beta values. In short results indicate underperformance of most of schemes during selected span of study. N.S.Santhi, Dr. K. Balanaga Gurunathan (2009) Risk and return analysis of equity linked savings schemes of mutual funds in India: It is found that no fund performed well during the entire study period. All the schemes follow the same patten in its return and moves along with the stock market index S & P CNX NIFTY. Invariably all the fund has given negative return during 2008-09 but it is higher than stock market index. The average return of all the schemes is higher and average risk is lower than the benchmark S & P CNX NIFTY. Werner-Ria Murhadi (2010) Performance Evaluation of Mutual Funds in Indonesia: The result found out that only four mutual funds have a good performance in market timing and four mutual funds have a good performance in stock selection. Both methods have a good indicator to reflect mutual funds performance. Bilal Nafees , Salman Ahmad Zeeshan Ahmad khan (2013) The results show that capital market portfolio is more risky than open end mutual fund index. The results determined from statistical measures and ARCH and GARCH also show that closed end funds are more risky than open end and capital market. Mangers need to be more proactive to select superior stocks to avoid volatility

in returns. Dr. N K Satyapal Sharma, Ravi Kumar (2013) **Analysis Of The Risk And Return Relationship Of Equity Based Mutual Fund In India:** In this paper an attempt has been made to analyse the performance of equity based mutual funds. A total of 15 schemes offered by 2 private sector companies and 2 public sector companies, have been studied over the period April 1999 to April 2013 (15 years).

### Objectives of the study

The study covers the following objectives:

- To analyse the performance of selected equity mutual fund schemes based on risk and returns relationships & compare the performance of selected schemes with benchmark index to see whether the scheme is outperforming or underperforming the benchmark
- To examine the performance of selected mutual fund schemes by using portfolio performance evaluation models namely Sharpe, Treynor and Jensen.
- To determine the relationship between equity mutual fund return and benchmark index return.

### Hypothesis

H0: There is no relationship between selected equity mutual fund scheme return and benchmark index return

### Methodology:

This study is an empirical research conducted with an attempt to analyse the risk and return relationship of Open Ended Equity Funds

### Sample design:

There were 42 companies out of which 164 schemes are related to open ended equity mutual fund scheme from which 50 schemes were selected based on AUM having more than INR 1200 crore size.

### Sources of data:

The data were collected from various websites of Mutual Fund companies, fund AMCs, AMFI, mutual fund India and NSE etc. The NAVs of the sample mutual fund schemes have been collected on daily basis over a period of 5 years. S&P CNX NIFTY has been used as a benchmark for performance evaluation of different schemes and provides the time series data over a fairly long period of time. Further, five Years NSC of post office have been used for risk free rate for Open Ended Equity Funds in India

Table 2: Showing Framework of Analysis:

Sr.no	Statistical Tool	Description
1	Standard Deviation	Standard deviation measures the fund's internal volatility or historical volatility from its average returns. A fund with higher standard deviation is considered as more risky because the returns may change in either direction quickly at any moment.
2	Beta	It basically indicates the level of volatility associated with the fund as compared to the benchmark. The success of beta is heavily dependent on the correlation between a fund and its benchmark.
3	Return	the quarterly returns are computed as: $\text{Return} = (\text{NAV}_t - \text{NAV}_{t-1}) / \text{NAV}_{t-1}$ . For the benchmark index, the return is calculated as: $\text{return} = (\text{Index}_t - \text{Index}_{t-1}) / \text{Index}_{t-1}$
4	R-square	R-squared measures the relationship between a portfolio and its benchmark.
5	Sharpe Ratio	The Sharpe Ratio measures the fund's excess return per unit of its risk (i.e. total risk). $\text{Sharpe} = \frac{R_p - R_f}{\sigma_p}$
6	Treynor Ratio	Treynor ratio measures the relationship between fund's additional return over risk-free return and market risk is measured by beta. $\text{Treynor} = \frac{R_p - R_f}{\beta_p}$
7	Jensen's Alpha	This measure involves evaluation of the returns that the fund has generated in relation to the returns actually expected out of the fund given the level of its systematic risk. The surplus between the two returns is called Alpha. $R_p - R_f = \alpha + \beta (R_m - R_f) + \epsilon_p$
8	Fama's Decomposition	It decomposes the selectivity returns of funds into net selectivity and diversification. a) Risk-Free return $R_f$ b) Compensation for systematic risk $\{\beta (R_m - R_f)\}$ c) Compensation for inadequate diversification $(\sigma_p / \sigma_m - \beta)$ d) Net Superior returns due to selectivity $(R_p - R_f) - (\sigma_p / \beta_m) (R_m - R_f)$

**Table 3: Showing Data Analysis and Interpretation**

Sr. No	Scheme	Average Return(Quarterly)	Standard Deviation	Beta
1	Reliance equity opportunities fund	3.8357338	9.9262586	1.3282514
2	Birla sun life equity fund	3.0097	10.103	1.3557
3	Birla sun life frontline equity fund	2.893529	7.591967	1.085577
4	Birla sun life midcap fund	3.75266	11.19588	1.441633
5	Birla sun life top 100	3.108648	8.119315	1.138336
6	DSP equity fund	2.672608	10.00912	1.332024
7	DSP midcap fund	5.624745	13.01578	1.568513
8	DSP small and midcap fund	4.203347	12.84864	1.596783
9	DSP tiger fund	2.289865	12.58132	1.621188
10	DSP top 100 equity fund	2.134521	7.937148	1.100578
11	Franklin blue chip fund	2.282483	6.533087	0.924208
12	Franklin flexi cap fund	3.138061	8.391362	1.1548
13	Franklin high growth companies fund	4.297522	9.969049	1.362327
14	Franklin prima fund	4.724799	10.05617	1.354535
15	Franklin prima plus fund	3.483853	7.423322	1.01548
16	Franklin smaller companies fund	5.575878	11.35167	1.539897
17	HDFC equity fund	2.512351	10.17218	1.395641
18	HDFC midcap opportunities fund	4.880309	10.78544	1.383939
19	HDFC top 200	2.220241	9.017235	1.251587
20	ICICI prudential top 100 fund	2.723858	7.618932	1.053078
21	ICICI prudential focused blue chip equity fund	2.742412	6.533407	0.931279
22	ICICI prudential dynamic plan	2.794565	7.77608	1.049025
23	ICICI prudential value discovery fund	4.595083	10.7937	1.457389
24	IDFC equity fund	1.529088	6.721763	0.977691
25	IDFC sterling equity fund	3.617624	10.34288	1.315707
26	Kotak 50	2.429705	6.522067	0.89475
27	Kotak select focus fund	3.274781	7.979116	1.082938
28	L and T equity fund	2.615048	7.68084	1.068887
29	Mirae asset opportunities fund	3.449177	8.042943	1.136721
30	Reliance growth fund	2.893624	10.39453	1.380554
31	Reliance mid and small cap fund	4.34106	12.3459	1.520481
32	Reliance regular savings fund	3.014184	10.61569	1.427167
33	Reliance small cap fund	5.994222	14.08174	1.663015
34	Reliance top 200 fund	3.06701	9.323617	1.31523
35	Reliance vision fund	2.419862	10.84059	1.470599
36	Sundaram select midcap	4.445902	11.3046	1.454546
37	UTI blue chip flexi cap fund	2.032955	6.974095	1.003136
38	UTI dividend yield fund	1.760302	6.818202	0.923395
39	UTI equity fund	2.943477	7.251913	1.023929
40	UTI midcap fund	5.076444	11.61934	1.47085
41	UTI opportunities fund	2.488348	6.519486	0.901375
42	UTI unit scheme 1986 fund	2.317326	6.734083	0.940488
43	SBI emergency business fund	4.336773	9.333181	1.082558
44	SBI magnum equity fund	2.638556	6.861063	0.980231
45	SBI magnum global fund	4.608457	8.864877	1.142478
46	SBI magnum midcap	5.157473	10.98198	1.417641
47	SBI magnum multiplier fund	3.323203	8.646096	1.19839
48	SBI contra fund	2.020625	4.76018	1.173336
49	SBI bluechip fund	3.261174	7.774368	1.106884
50	Axis equity fund	2.650587	6.995591	0.978177
<b>Market</b>	<b>S&amp;P CNX Nifty</b>	<b>1.525638</b>	<b>6.840324</b>	<b>1</b>

### Calculated by Authors

An analysis of Table 3 reveals that in case of all Equity option schemes of Diversified funds have earned higher returns (average quarterly returns) in comparison to their benchmark portfolio returns. Reliance small cap fund (14.08174) has highest value of standard deviation, which means that this fund is the most risky. Although, DSP midcap fund

(13.01578), DSP small and midcap fund (12.84864), DSP tiger funds (12.58132) are the funds with higher risk.

It is clear from the third column of table that Reliance small cap Fund has highest value of fund  $\beta$  (1.663015) which means this fund co-varies the most with respect to the market return.

Table-4: Performance of funds-Sharpe, Treynor Jensen's measure and Fama's Decomposition

Sr.No	Scheme	Sharpe ratio	Rank	Treynor ratio	Rank	Jensen ratio(alpha)	Rank	Fama
1	DSP midcap fund	0.268885	5	2.23125	3	4.439851	2	4.64021
2	Franklin smaller companies fund	0.303997	1	2.240979	2	4.373834	3	4.44553
3	Reliance small cap fund	0.274769	4	2.326631	1	4.86597	1	5.10309
4	SBI magnum global fund	0.280146	2	2.173746	4	3.168214	10	3.26021
5	SBI magnum midcap	0.276132	3	2.139099	5	3.882153	4	3.99473

### Compiled by Authors

The above table depicts the performance of funds measured through Sharpe, Treynor and Jensen's model of portfolio evaluation. A high and positive Sharpe Ratio shows a superior risk-adjusted performance of a fund while low and negative Shape Ratio is an indication of unfavourable performance. Generally, if Sharpe Ratio is greater than the benchmark comparison, the fund's performance is superior over the market and vice-versa. Top performing fund schemes as per Sharpe ratio analysis were Franklin smaller companies fund, SBI magnum global fund, SBI magnum midcap, Reliance small cap fund, DSP midcap fund. Treynor ratio measures the relationship between fund's additional return over risk-free return and market risk is measured by beta. In the context of Treynor measure, it is revealed from the table that 49

schemes, out of 50 had outperformed the benchmark. Reliance small cap fund growth is the top performer of the equity schemes. Results of Jensen measure revealed that 49 out of 50 schemes have showed positive alpha which indicates superior performance of the schemes and 1 scheme had negative alpha. Among the entire schemes higher alpha was found with Reliance small cap fund (4.86597), DSP midcap fund (4.439851), Franklin smaller companies fund (4.373834), SBI magnum midcap (3.882153), and UTI midcap fund (3.833015). In Fama's decomposition the positive value shows superior stock selection skill of the managers in this table most of funds are positive. Here negative values show that managers of all selected schemes showed poor stock selection skills during the whole period and only one fund is in negative value.

Table-5: Showing Regression Analysis

Variable	R squared	Prob(F-statistic)	( $\beta$ ) Cnx Nifty	T- statistic Cnx Nifty
DSP midcap fund	0.305419	0.014132	1.363022	0.0141
Franklin smaller companies fund	0.861028	0	1.539897	0
Reliance small cap fund	0.652579	0.000017	1.663015	0
SBI magnum global fund	0.777148	0	1.142478	0
SBI magnum midcap	0.779694	0	1.417641	0

Calculated by Authors



### Hypotheses:

**H0:** There is no relationship between selected equity mutual fund scheme Return and benchmark index return.

The above table depicts the output of the Ordinary Least Square (OLS) method to show the relationship and impact of the Benchmark (cnx nifty) on mutual fund schemes Returns. Through regression analysis we can prove that Returns of selected mutual fund schemes are related with the Benchmark return (cnx nifty). At 5% critical value 50 mutual fund schemes return shows favourable condition. F-statistics of 50 mutual fund Schemes Returns is less than 0.5 so Null hypotheses is rejected and it shows that there is relationship between selected equity mutual fund scheme Return and benchmark index return

### Findings and conclusion:

The study was undertaken to analyse the performance of equity funds and how it has performed as compared to the benchmark-CNX Nifty. The study was divided into the performance analysis of the funds and the selection ability of the fund managers whether they have the superior selectivity skills and that's has helped them to earn superior returns above then the average returns of benchmark.

The study also focused on identifying the relationship, if any, exists between the equity fund scheme returns and the CNX Nifty returns and the impact (contribution) of the independent variable (index) on the fund's performance.

The result shows that performance of the majority of sample mutual fund schemes are outperform the market benchmark indexes in term of Treynor and Sharpe ratio based on historical quarterly returns. The reasons of outperformance of the funds that fund managers are efficient. They are diversifying the funds indifferent stocks which are generating higher returns. Fama's measure revealed that mostly mutual fund schemes have reported positive net selectivity indicating superior stock selection of the fund managers.

Mutual fund managers also outperform the Market through their superior security selection and timing. The analysis shows that Indian Asset Management

Company has been able to beat their benchmarks on the average. One of the studies is that only open ended growth oriented equity schemes have been analysed for the sample mutual funds. Future research may attempt to investigate and compare the balanced or income oriented schemes with equity oriented schemes.

The investors can select Franklin smaller companies fund, SBI magnum global fund, SBI magnum midcap, Reliance small cap fund, DSP midcap fund, UTI midcap fund. SBI magnum global fund and SBI magnum midcap Funds as they have performed better than benchmark.

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## **Women Entrepreneurship: Issues and Challenges with special reference to Mission Mangalam**

**Preethi Luhana, Sarvesh Trivedi**

### **Abstract:**

Entrepreneurs are the most important and critical actors in any economy. Through innovation and creation, they promote private sector development and drive economic growth. The policy and institutional framework by Government has developed entrepreneurial skills, providing vocation education and training has widened the horizon for economic empowerment of women. However, women constitute only one third of the economic enterprises. The paper highlights the issues and challenges faced by such women entrepreneurs with reference to Mission Managalam, a unique initiative by Government of Gujarat. The paper talks about implementation and benefits derived by women entrepreneurs and to suggest the solutions for challenges faced by women entrepreneurs.

### **Introduction**

From Nineties, it has been observed that the Emergence of women Entrepreneurs and their contribution in National Economy is noteworthy. Yet some social, cultural and Economic constraints are restricting the development of women entrepreneurship. Though women entrepreneurship is a recent phenomenon in our country, it proposes great future of India. To equip women with training and skills may help women to assert their identities and contribute towards Nation's Economic Development. Previously women's initiative towards entrepreneurship were confined to traditional typical businesses only but if more women's professional energies are diverted in the field of engineering, electronics and other such arenas. There is a need that women in business inculcate in them entrepreneur qualities such as taking decisions, accepting challenges, seeking aim, demonstrating enthusiasm etc. which can be transmitted into them by undertaking skill development programmes.

Entrepreneurs are the most important and critical actors in any economy. Through innovation and creation, they promote private sector development and drive economic growth. Creating a conducive ecosystem for entrepreneurship is vital to propel economies to a higher level of growth. The involvement of the women while encouraging entrepreneurship is an obvious phenomenon.

Social Responsibility is the basic nature to women entrepreneurs. Women have been relegating an effective role as an entrepreneur not only due to their sufferings for being an entrepreneur, but also because they are seen as a significant driver of entrepreneurship owing to their inimitable role in the family. In order to establish corporate sustainability, the development of women entrepreneurship has been crucial.

Women can be and should be empowered and encouraged through entrepreneurship. The labor force is the major place where women's participation should take place.

According to the Global Entrepreneurship Monitor, there are countries like Panama, Thailand, Ghana, Ecuador, Nigeria, Mexico and Uganda where women take part in business at rates equal to men whereas in some countries they barely take part at all.

Even when women are active business owners, they do not reach their potential: women own almost three in ten American firms, yet employ only 6% of the country's workforce and account for barely 4% of business revenues. Entrepreneurship provides the most powerful weapon to empower women economically to upgrade the community and the Nation. Yet it is estimated that globally there are only roughly 9.34 million women owned formal Small and Medium Enterprises in over 140 assessed

countries, which is approximately one third of all SMEs. As per the Business Report 2014 and survey conducted by IFC, women owned enterprises contribute 3.9% of Industrial output and employ over 8 million people. About 98% women owned enterprises are micro enterprise. The bulk of these businesses, 78% are in the service sector. The societal and economical set up in India has traditionally been patriarchal, thereby providing power to the men to dominate women. Women were thus considered to be weaker and a dependent group. They are recognized as the subordinates and follower of the decisions taken by male members of the family. The movements headed by women for attaining different rights like rights to vote, rights to attain equal education etc. later on led to change the traditional set up in the modern era. The women achieved the rights of equality in education and this helps increase their educational status. The economic empowerment helped in women's stake in decision making. Indian females comprise 45% of its population. According to the World Economic Forum's (WEF) Global Gender Gap Report 2014, Indian women spent an average of 352 minutes per day on unpaid work whereas men spent 52 minutes. Women seeking and finding employment in paid jobs outside the home do not have anything to do even with this model. According to the same WEF report, India's women make up slightly over a third of the workforce, get paid just over half of what men get for similar work.

### **Mission Mangalam**

Gujarat has witnessed a growth rate of 11.5% for five years ending March 2009. Along with the remarkable economic progress, Gujarat as a state is well aware of the importance of inclusive growth. To harness the multiple growth opportunities arising out of the positive developmental strides made by Government of Gujarat, on the occasion of the Golden Jubilee Year celebration of Gujarat State starting from 1st May 2010; Gujarat Government announced 'Mission Mangalam' - as an integrated poverty alleviation approach in a demand driven convergence mode. 'Mission Mangalam' aims to bring the critical mass of resources to address poverty by creating a single platform for stakeholders like Banks, Industry Partners, Micro Finance Institutes and Skill Imparting Institutions, etc. to deliver desired outcomes. While building

social business enterprises, the concept of 'Mission Mangalam' envisages integration of Self Help groups and their federations into the value chain of investors. Around 24 lakh women who are currently active under 2 lakh SakhiMandals / Self Help Groups (SHGs) are in the state are managing to the tune of Rs.1000 crores through bank linkage. Having made such a remarkable achievement, the Government looks forward to work towards the following parameters:

- Financial literacy for women, so that they can make informed choices.
- Universalization of SHGs by ensuring that each BPL household has at least one member in a SHG.
- Build federations of SHGs, and register them as formal institutions
- Set up MIS and innovative Monitoring systems

The five basic guiding principles of Mission Mangalam are:

- Leveraging upon Industry partnerships and corporate MoUs, 'the firm' goes to the community rather than people migrating to the firm.
- Improving demand and quality of rural products, thereby creating a market for these in urban segments.
- Inclusion of modern technology and processes which result in inverting the economies of scale.
- Linking local initiatives to international markets.
- Mass empowerment through ownership of assets (means of production) with producers / producer groups.

The guiding principles are based on facts viz:

- Companies have strong forward linkages but require facilities for large volume production. These companies do not have the capability to produce high volume products such as garments, honey, salt, etc. These backward linkages are provided by the Self Help Groups / Producer Groups.
- Companies would have substantial cost saving since self-help groups receive both Revolving Fund and capital Subsidy for



undertaking economic activities.

### **Strengths of Mission Mangalam**

- Readily organized manpower network comprising of more than 2 lakh SHGs and 25 lakh members evenly spread across the whole state. These are being federated, trained, imparted financial literacy and linked with micro finance from banks.
- Huge credit mobilization potential of these SHGs of more than 10,000 crores. These SHGs can avail low interest credit from banks to the tune of about rs.5-10 lakh per SHG for viable income generation activities.

### **Research Methodology:**

#### **Objectives of the Study:**

1. To examine the growth & development of micro-financing (in relation to Mission Mangalam) in villages like Rajupura, Gamdi, Vadod and Kasor in Anand district & its relevance to the whole of state.
2. To evaluate the impact of SHG participation on women entrepreneurs.
3. To find out the benefits and challenges faced by women entrepreneurs under Mission Mangalam
4. To offer valuable suggestions for boosting up women entrepreneurship.

**Scope of the Study:** The present study is aimed at analyzing the reasons for being an entrepreneur and

challenges in terms of SHGs members and the role of SHGs in the development of women empowerment in Anand District. The findings of the study will throw light on certain broad features of the Mission Mangalam and would help to formulate better plans.

### **Sampling Unit and Sample Size:**

The present study proposes to cover the SHGs in Anand district and respondents were selected according to Purposive Sampling Method.

### **Sources of data**

**Primary Data:** Primary data was collected from 112 respondents from different villages such as Rajupura, Vadod, Gamdi and Kasor in Anand. The sample is inclusive of representatives as well as members of the SHGs and the secondary data has been collected from magazines, reports, newspapers and websites

### **Statistical Tools**

The collected data has been analyzed with the tool Like Garrett Mean score.

### **Limitations:**

1. The present study has constraints of time and money.
2. There may be chances of errors due to random sampling.
3. The respondents were from Anand district only and therefore may not give the same result as on a national scale.

### **Data Analysis and Interpretation**

**Table 1: Demographic Profile of Respondents**

Demographic Variables	Category	Frequency	Percentage
<b>Age Group of Respondents</b>	Under 30 Years	49	43.75
	31-50 years	49	43.75
	Above 50 years	14	12.5
<b>Role</b>	Member	88	78.57
	Representative	21	18.75
	Animator	03	2.68
<b>Type of family</b>	Joint	86	76.79
	Nuclear	26	23.21
<b>Size of family</b>	Small	38	33.93
	Medium	43	38.39
	Large	31	27.68
<b>Occupation.</b>	Self-Employed	39	34.82
	Agriculture	62	55.36
	Non-Agriculture	11	9.82
<b>Monthly Income</b>	100-1000	25	22.32
	1000-2000	22	19.64
	2000-3000	15	13.39
	Above 3000	50	44.64



The above demographic profile depicts 43.75% respondents were between the age group of 30- 40 years Most of them families (76.9%) with the spouse as the head of the family and having 4 members. In all the families there was single person who was

earning but the dependents were in the ratio of 51.09%. 90.4% of the families were associated with SHGs for more than 3 years. 22.32% families had monthly saving between Rs 1000-2000.

**Table No 2: Reasons for becoming a women entrepreneur**

Sr No	Reasons	Garett Mean Score	Rank
1	Innovative thinking	33.54	13
2	Self-identity and social status	42.2	9
3	Education and qualification	37.5	10
4	Support of family members	53.8	4
5	Role model to others	49.9	6
6	Success stories of friends and relatives	54.2	3
7	Bright future of their wards	36.9	11
8	Need for additional income	55.4	2
9	Family occupation	56.6	1
10	Government policies and procedures	51.2	5
11	Freedom to take own decision and be independent	47.3	7
12	Employment generation	45.7	8
13	New challenges and opportunities for self-fulfillment	32.1	12

The following table shows the reasons for rural and urban women becomes an entrepreneurs with the help of Garrett Ranking Analysis. It is clear from Table 3 that, among the rural women entrepreneurs, Majority of the rural women entrepreneurs select the business because of their family occupation, it has been obtained first rank (Garrett Mean Score 56.6),

second rank (Garrett Mean Score 55.4) has been obtained by need for additional income, third rank (Garrett Mean Score 54.2) has been obtained by success stories of friends and relatives, fourth rank (Mean Score 53.8) has been obtained by support of family members.

**Table No 3: Challenges faced by being an entrepreneur**

Sr No	Challenges	Rank	Garett Mean score
1	Personal challenges	3	56.32
2	Social challenges	1	58.56
3	Financial challenges	2	56.89
4	Marketing challenges	5	55.12
5	Managerial challenges	6	51.89
6	Technological challenges	4	55.78
7	Competition challenges	7	49.50
8	Lack of mobility challenges	8	50.21
9	Educational challenges	9	45.11
10	Accounting challenges	11	44.07
11	Lack of Law knowledge	10	45.71

The following table shows that challenges being faced by a women entrepreneur is mostly the social changes which is accompanied by personal and financial challenges too. The least mean value is for the accounting challenge which much women have

not given due importance.

### **Conclusions and Suggestions**

On the basis of the above mentioned problems faced by women entrepreneurs and various other problems too, there is a provision of a number of solution measures to overcome the aforesaid problems. Good start-up opportunities to accelerate and start a business. A need is, therefore, felt for a change in their attitude towards entrepreneurship as a career, their perceptions regarding their contributions towards economic development, their inherent skills in managing resources and overall development of their competencies as business persons. It has been experimentally tested and proved that entrepreneurial qualities, skills, attitudes and perceptions can be instilled and developed through a judicious mix of training interventions, counselling and guidance.

To create enabling environment to motivate women entrepreneurship, some required policy recommendations may be summed up here including those that emerged from national consultation on the same.

- Access to educational facilities
- Access to finance
- Access to basic infrastructural facilities
- Access to technological researches and advancements
- Government support
- Easy access to markets
- Supporting organization to promote startups- initiatives and risk bearing other measures
- It is the dire need of the modern economy and society to establish technology centers to
- Provide assistance and dissemination of technology to women entrepreneurs. Special
- Weight age should be given to women entrepreneurs who take the initiative to adopt modern technology by the credit and financial institutions.

Attempts should be made to generate plans and policies to promote women entrepreneurship while special efforts are needed to facilitate unrestricted opportunities for women in investment in capital assets, human capital and other productive assets.

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## Financial Health of Vadodara Mahanagar Seva Sadan

Bhavin Rajput, P. K. Rathod

### Abstract:

India is the second largest in terms of population around the world and it has also a second largest urban system, so effective and efficient management is very difficult. Urban local bodies work as the root of development but urban system suffers from operational issues such as poor revenue collection, unsustainable debt burden and lack of financial management capacity. For that it is important first to take a step back and need to analyse performance of previous years for the improvement of the present situation. Main objective of this paper is to analyse the financial health of the urban local body i.e. Vadodara Mahanagar Seva Sadan (VMSS) for the last five year's data from 2008-09 to 2012-13. To assess the financial health of the VMSS, the researcher has used statistical analysis, percentage analysis, growth rate analysis etc. for major revenue income and expenditure of different years. The analysis of variance statistic has been used for comparison among four zones. The study concluded good financial health of VMSS which enables it to take up big future projects. Growth rate of tax and non-tax revenue indicates one way of establishing credit worthiness but need to diversify on the basis of zone wise accounting as well as controlling all income and expenditure instead of central controlling by VMSS.

### Introduction

India is one of the largest democratic country in the world and also the second highest in population around the world. According to 2011 census total population of India is 1,210,193,422. It is the seventh-largest country by area i.e. 3,287,590 km. So it is very difficult to control or manage all these things.

For that The Indian Constitution provides three administrative levels; specifically the union government, state government, and the local government. This study highlights local-self-government. It is the best example of democracy, people can understand problems and needs of society. So one can say that charity begins at home that means development starts from local level i.e. district level then state level and then national level. It works as root of the country's growth and development. Local self-government further divided into two parts:

- (1) Rural Area/ Village Area; and
- (2) Urban Area

The local bodies constituted for local planning, development and administration in the rural areas are referred as Rural Local Bodies (Panchayat) and the local bodies, which are constituted for local planning, development and administration in the urban areas are referred as urban local bodies (Municipalities).

This paper focuses on urban areas, i.e. Management of Municipal Corporation. It suffers from many problems related to administration, finance, and town planning and so on. Financial strain is undoubtedly heavy in Municipal Corporation. There are many services that municipal corporation needs to provide like supply of hygienic water, building up new roads, garbage collection and dispose of, maintenance of health facilities at certain level and so on. To cope up with this situation Municipal Corporation has limited income sources. The income & expenditure structure of Municipal Corporation is dominated by revenue income & expenditure. Thus revenue incomes and expenditures play major role in financial management of Municipal Corporation.

### REVIEW OF LITERATURE

Literature review is not only surveys what researches have done in the past on research topic but it also appraises, encapsulates, compares, contrasts and correlates various scholarly books, research articles and other relevant sources that are directly related to current research. R.L. Khanna (1967) in his book discussed about the growth and structure of municipal government and organization of municipal authority. He listed 14 defects and deficiencies in the municipal services in India and makes

12 recommendations for improving municipal personnel administration in India. A working paper by Mihir R Bhatt (1999) indicated the idea of conducting an annual performance assessment of services of Municipal Corporation. N. M. Makandar and I. K. Mulla (2013) published his paper with the main objective to evaluate the financial health of Belgaum City Corporation and Bellary City Municipal Corporation for the period of five years. They examined the trends in major revenue sources and expenditures of municipalities. The study concluded that it would be desirable for city corporations to get into the process of monitoring their own performance in terms of net surpluses or deficits on a regular basis. Sita Sekhar & Smita Bidarkar (1999) wrote an article on a comparative study of the municipal budgets of five large cities in India - Ahmedabad, Bangalore, Chennai, Mumbai and Pune over a six-year period of time, giving useful insights into resource mobilisation and utilisation, allocation patterns and trends in important sources of revenue and expenditure on important sectors across five cities.

### OBJECTIVES OF THE STUDY

The main objective is to evaluate the financial health of VMSS for the period of five years. Following are the workable objectives.

- To compare the revenue expenditures among the four zones of VMSS
- To study the trends in major revenue sources and expenditures of VMSS and assess their fiscal position.
- To study the growth rate of revenue incomes and expenditures.
- To make suggestions for improvement in financial health of VMSS

### HYPOTHESES OF THE STUDY

**H<sub>0</sub> = (Null Hypothesis)**

There is no significant difference in total revenue expenditure among four zones of VMSS

**H<sub>1</sub> = (Alternate Hypothesis)**

There is significant difference in total revenue

expenditure among four zones of VMSS

### RESEARCH METHODOLOGY

The data have been collected through secondary sources using annual reports of municipal corporations. The data have been also collected from the chief auditor and account officers of VMSS through their personal interview. The data has been analysed using percentage and statistical analysis. Parameters for the purpose of analysis are revenue incomes and revenue expenditures. Comparisons of these parameters among different zones of VMSS using ANOVA has been done. The data analysis and conclusion have been drawn at 5% level of significance.

### ABOUT VMSS

Vadodara is very often known as the cultural capital of Gujarat. The geographic spread of the city is 159.95 sq. kms. (Approx.) having population of 16,66,495. The VMSS has been established in July 1950 under the Bombay provincial corporation act 1949 for the civic infrastructure and administration of the city.

As per the section 63 and 66 of the Bombay Provincial Municipal Corporation Act, the VMSS is responsible for certain obligatory and discretionary services. For administrative purpose the city is divided into 28 wards and these wards are classified in 4 zones- east, west, north and south having Approx. 31,122 population per ward. VMSS has introduced the accrual based accounting system; presently, a mix of cash based system and accrual based system is being followed. The system involves the revenue function (receipt of taxes, charges, loans and grants) and the expenditure function (release of funds against establishment, works and supplies). The corporation maintains its accounts in the form of funds; the income and expenditure items are indicated under each fund account. There is a municipal general fund under which the normal income and expenditure (revenue and capital) items are listed.

**Financial Position of VMSS during the last five years from 2008-09 to 2012-13**

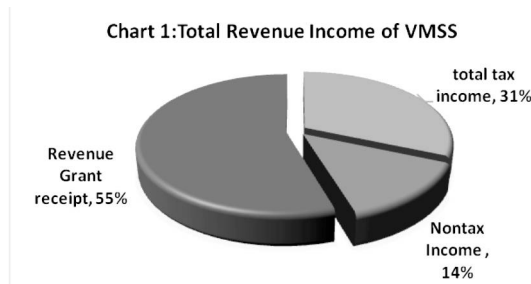
**Municipal Revenue Structure of VMSS**



The revenue base of VMSS can broadly be classified into:

- Tax Income
- Non-tax Income
- Grant-in-aid

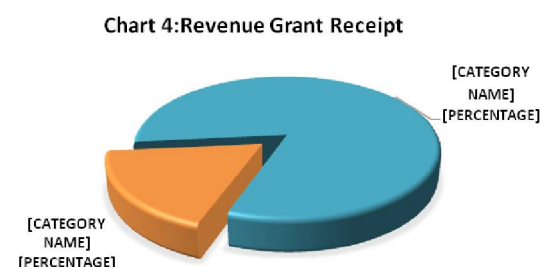
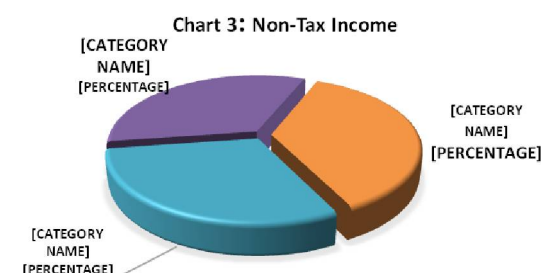
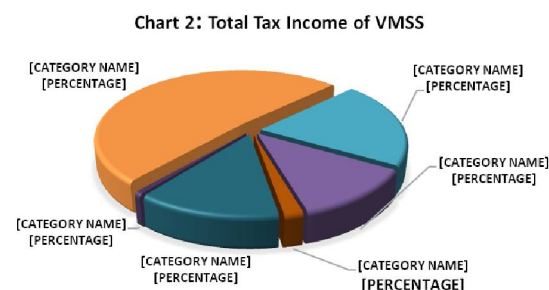
#### Average Revenue of VMSS for the Five Years i.e. 2008-09 to 2012-13:



Source: Computed from income and expenditure statement

Chart 1 indicates average percentage of total revenue income from 2008-09 to 2012-13. It realises from the past five years average that total revenue income was generated 31% from tax income, 14% non-tax income and 55% revenue grant income.

#### Detail chart about total revenue income:



Source: Computed from income and expenditure statement

Chart 2, 3, and 4 indicate the percentage of revenue income i.e. from tax income, non-tax income and grant receipts from 2008-09 to 2012-13.

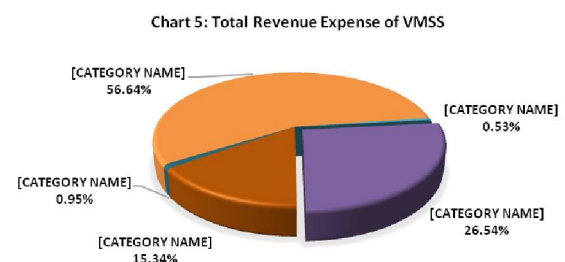
**Tax Income:** Tax income is 31% from the total revenue and chart 2 above shows detailed bifurcation of tax. From the 31% of tax revenue 15.81% general tax from total revenue i.e. 51% from total tax income. Like that water charges indicates 21% from the total tax income. So it covers 6.51% of 31% total revenue income. Conservancy tax and professional tax are almost alike i.e. 12% and 13% respectively. In the same way other tax and solid waste management charges are also alike in the percentage i.e. 1% and 2% from the total tax revenue.

**Non-Tax Income:** It covers 14% from the total revenue income of the VMSS. That is 14% divided into three parts: rent and interest of assets, special act and miscellaneous. If total non-tax income is to be considered as hundred percentage, then it shows 30%, 37%, 33% percentages respectively.

**Other Revenue Grant Receipts:** Majority revenue incomes are coming from grant that is 55% of total revenue of corporation. From that large revenue comes from Octroi reimbursement and it shows 82% of total grant receipts. Around 45.10% from total revenue receipts of the VMSS. Other grant receipts is only 18% from the grant income which covered 9.90% of total revenue receipts of VMSS.

#### Municipal Expenditure Structure of VMSS

- Establishment
- Contingency
- Maintenance
- Primary Education

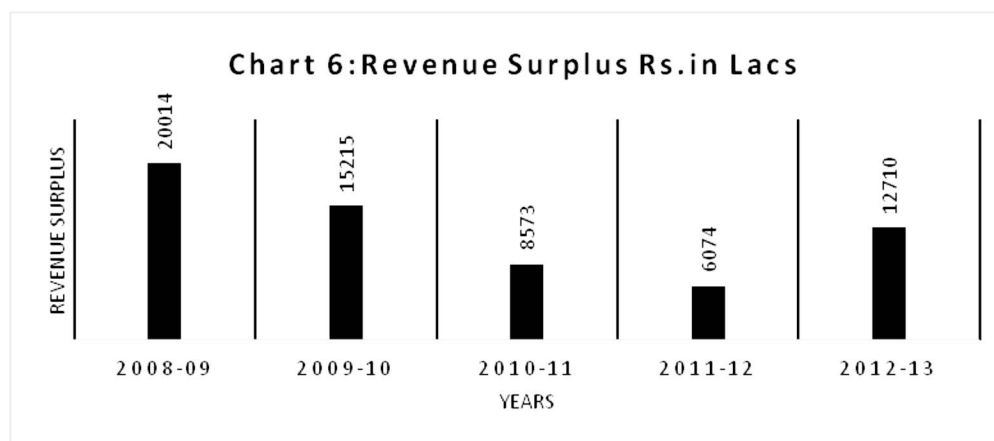


Source: Computed from income and expenditure statement

Chart 5 indicates that from the total revenue income VMSS spent 56.64% highest in establishment that is

for infrastructure and development of the city. Then 26.54% for the repairs and maintenance. 15.34% income is consumed for primary education. Partial amount 0.53% and 0.95% for contingency and loan charges respectively.

**Revenue Surplus for the Five Years i.e. from 2008-09 to 2012-13**



Source: Computed from income and expenditure statement

Chart 6 above indicates that the financial position of VMSS is good as no deficit has been seen in the past five years. It shows surplus through five years but in

decreasing trend. Highest surplus was in 2008-09 Rs. 20,014 lakhs and it decreased to Rs.6074 lakhs in 2011-12 and increased to Rs. 12,710 lakhs in 2012-13. So average surplus was Rs.12, 517.20 lakhs for the past five years from 2008-09 to 2012-13.

**Growth Rate Analysis of Major Financial Components of VMSS**

<b>Table 1: Growth Rate of Total Revenue Expenditure (Rs. in lakhs)</b>								
<b>Years</b>	<b>East Zone</b>		<b>South Zone</b>		<b>West Zone</b>		<b>North Zone</b>	
	<b>Value</b>	<b>Growth</b>	<b>Value</b>	<b>Growth</b>	<b>Value</b>	<b>Growth</b>	<b>Value</b>	<b>Growth</b>
2008-09	350.85	---	420.25	---	300.95	---	348.75	---
2009-10	387.9	10.56	424.15	0.93	490.75	63.07	453.35	29.99
2010-11	467.45	20.51	461.5	8.81	590.45	20.32	535.85	18.20
2011-12	440.35	-5.80	465.15	0.79	592.3	0.31	535.2	-0.12
2012-13	783.85	78.01	1379.55	196.58	957.25	61.62	735.7	37.46
<b>Average</b>	486.08	25.82	630.12	51.78	586.34	36.33	521.77	21.38
<b>S.D.</b>	172.50	36.44	419.45	96.61	238.86	31.13	142.09	16.38

Source: Computed from budgeted data of VMSS

Table 1 indicates the growth rates of revenue expenditure for the period of five years from 2008 - 2009 to 2012 - 2013 for four zone of VMSS.

Growth rate of revenue expenditure for east zone increased up to 2012-13 except 2011-12. It is indicated by 5.80 percent negative growth rate

and highest percentage growth rates was 78 percent in the year 2012 - 2013 compared to the previous year with the average growth rate 25.82 percent. For the south zone of VMSS, growth rate found uneven throughout the five years. In the year mentioned with high growth rates, there was a tremendous rise found in expenditure with 196.58 percent of growth. The average growth rate of expenditure was 51.77 percent.

West zone was not that consistent in expenditure during the period. With the variation of 0.31 percent in the year 2011 - 2012 to 61.62 percent in the year 2012 - 2013. The average growth rate of expenditure was 36.33 percent from the period

2008 - 2009 to 2012 - 2013. North zone shows highest growth in five years was 37.46 percent and lowest minus 0.12 percent 2011-12 and 2012-13 respectively. The Standard deviation is very high.

#### Mean Comparison of Total Revenue Expenditure across all four Zones of VMSS using One Way ANOVA.

Table 2: Summary

Groups	Count	Sum	Average	Variance
East Zone	5	2430.4	486.08	29757.937
South Zone	5	3150.6	630.12	175940.547
West Zone	5	2931.7	586.34	57052.8855
North Zone	5	2608.85	521.77	20190.4682

Table 3: ANOVA

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	62373.8264	3	20791.2755	0.29393003	0.829197	3.238872
Within Groups	1131767.35	16	70735.4594			
Total	1194141.18	19				

Source: Computed

Table 2 and 3 show the mean comparison of total revenue expenditure across all four zones of VMSS. The above table indicates mean values with the help of one way analysis of variance statistics. Total revenue expenditure of VMSS was alike for the five years period from 2008-2009 to 2012 - 2013. The F-value 0.2939 is not found to be significant as p-value is 0.829197. So by accepting the above assumption, it can be inferred that there is no significant difference between mean values of total revenue expenditure amongst East Zone Rs.486.08 lakhs, South Zone Rs. 630.12 lakhs, West Zone Rs.586.34 lakhs and North Zone Rs.521.77lakhs of VMSS.

Total revenue expenditure zone wise divided into two parts: revenue expenditure and revenue capital expenditure. Revenue expenditure was more than ninety percent and very less contribution of revenue capital expenditure in total revenue expenditure of each zone.

Revenue expenditure includes general expenses related to drainage, cleaning, roads, foot path, bridges etc. Revenue capital expenditure includes water system, market establishment and construction work etc.

Table 4: Growth Rate of Total Revenue of VMSS (Rs. in lakhs)

Years	Value	Growth
2008-2009	49458	---
2009-2010	56126	13.48
2010-2011	53569	-4.56
2011-2012	56378	5.24
2012-2013	66825	18.53
<b>Average</b>	56471.2	8.18
<b>S.D</b>	6421.39	10.10

Source: Computed from income and expenditure statement

Table 4 indicates growth rate of total revenue of VMSS for the period of five years from 2008-2009 to 2012-2013. Overall growth rate, during this period has been shown by taking average growth rate of all consecutive years. The variation in the growth rates for VMSS is found 13.48 percent in the year 2009-2010 18.55 percent in the year 2012-2013. It also shows negative growth rate 4.56 percent in 2010-11. Standard deviation 10.10 indicates non-homogeneity in the growth rate of total income in VMSS. Looking to the growth rate data average growth rate was calculated 8.18 percent during the year 2008-2009 to 2012-2013.

### Major Component of Income

**Table 5: Growth Rate of Tax & Non- Tax Income of VMSS Rs. in lakhs**

Years	Tax Income		Non-Tax Revenue Income	
	Value	Growth	Value	Growth
2008-2009	15701	---	5373	----
2009-2010	16132	2.75	6495	20.88
2010-2011	16412	1.74	5082	-21.76
2011-2012	18749	14.24	6335	24.66
2012-2013	21930	16.97	15732	148.33
<b>Average</b>	17784.8	8.92	7803.4	43.03
<b>S.D</b>	2601.49	7.81	4473.36	73.29

Source: Computed from income and expenditure statement

Table 5 shows the growth rate of income from tax& non-tax revenue income for the period from 2008-2009 to 2012- 2013. Growth rate varies from 2.75 percent to 16.97 percent in VMSS for the year 2009-2010 and 2012-2013 respectively in tax income. Average growth rate in income from tax of VMSS was 8.92 percent. Standard deviation also remained 7.81percent so deviation is low. Growth rate of

revenue receipt is an indication of healthy state of finances of municipal corporations. Growth rate was negative varies 21.76 percent to 148.33 percent in VMSS for the year 2010-2011 and 2012-2013 respectively in non-tax income. The average growth rate 43.03 percent. Standard deviation shows 73.29 percent. So it indicates highly non-homogeneity in the growth rate of total income of VMSS becauseof the high increased in 2012-13

### Major Component of Expenses

**Table 6: Growth Rate of Establishment, Repair & Maintenance Expense & Primary Education Expense of VMSS (Rs. in lakhs)**

Years	Establishment		Repair and Maintenance		Primary Education	
	Value	Growth	Value	Growth	Value	Growth
2008-2009	14823	----	9559	-----	4661	-----
2009-2010	23112	55.92	10579	10.67	6849	46.94
2010-2011	26002	12.5	10757	1.68	7890	15.2
2011-2012	28741	10.53	12392	15.2	8304	5.25
2012-2013	31787	10.6	15049	21.44	6006	-27.67
<b>Average</b>	24893	22.39	11667.2	12.25	6742	9.93
<b>S.D.</b>	6483.46	22.37	2145.87	8.31	1469.82	30.73

Source: Computed from income and expenditure statement

Table 6 shows the growth rate of establishment expenditure, repair & maintenance expense and primary education expensefor the period from 2008-2009 to 2012-2013.

In establishment growth rate varies from 55.92 percent to 10.60 percent in VMSS in the year 2009 - 2010 and 2012 -2013 respectively. Average growth

rate of establishment of VMSSis 22.39 percent.

Establishment expenditure includes salary & wages, allowances, reimbursements, employee welfare, terminal benefits and other employee costs.

In repair & maintenance expense: Growth rate varies from 10.67 percent to 21.44 percent in VMSS in the year 2009-2010 and 2012-2013 respectively. Average growth rate of VMSS is 12.25 percentage and standard deviation shows 8.31 percentage.

In primary education: Growth rate varies from 46.94 percent to -27.67 percent in VMSS in the year 2009-2010 and 2012-2013 respectively. It clearly indicate that expenses on primary education gradually decline. Average is only 9.93 percentage and standard deviation 30.73 percentage. So the deviation is very high.

**Table 7: Growth Rate of Income over Expenditure (Rs. In Lakhs)**

Years	Value	Growth
2008-2009	20014.00	-----
2009-2010	15215.00	-23.98
2010-2011	8573.00	-43.65
2011-2012	6074.00	-29.15
2012-2013	12710.00	109.25
<b>Average</b>	12517.20	3.12
<b>S.D</b>	5490.65	71.25

Source: Computed from income and expenditure statement

Table 7 shows the growth rate of income over expenditure for the period from 2008- 2009 to 2012 - 2013. Growth rate varies from -23.98 percent to 109.25 percent in VMSS in the year 2009-2010 and 2012-2013 respectively. Average growth rate of VMSS was 3.12 percentage.

It shows high fluctuation in growth of income over expenditure i.e. surplus and standard deviation shows 71.25 percent. So the deviation is also high but in the year 2012-13 as compare with other financial year financial condition of VMSS was good.

## CONCLUSION

The revenue income and expenditure sides of municipal finance are analysed in terms of the growth rate and their average in terms of percentage for five years are used. VMSS earned less amount from tax and more from non-tax and grant income in the total revenue. Growth rate of tax and non - tax revenue indicates one way of establishing credit worthiness. More than fifty percentage allocated for establishment from the total revenue expenditure of VMSS. So Municipal corporations are expected to render a minimum level of services to the citizens in order to ensure providing a minimum standard of living to the citizens but zone wise expenditure is very

less from the total revenue expenditure of VMSS as a whole. The working of zone is limited up to revenue expenditure. All zones maintain their separate account but they only maintain whatever they get from central level and how it to be utilised so the work is just related to the cashier. They maintain their revenue expenditure from whatever is received in budget allocation. Thus zone is more dependent on budget also. There is a need to diversify on the basis of zone wise accounting as well as controlling all income and expenditure instead of central controlling by VMSS. With an average surplus of Rs 12,517.20 for the past five year i.e. (2008-09 to 2012-13). VMSS is poised to have a large surplus in the future to take up new capital works.

The analysis of municipal finances reveals that VMSS are generating small revenue surplus with low resources gaps. More than that, they are spending less than required for providing a minimum level of civic amenities. This apparent contraction is on account of some of the design issues of inter government system under which the urban local bodies are not independent in functioning and decision making i.e. control over staff, raising of revenue and expenditure and accessing debt, which points to the decentralization yet to come in true sense.

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## Flipped Classroom : Teaching Inception of Techno - Edu - Tain Tool With Relating To SWOC

Urvi Amin

### Abstract:

In global era education reform derived in the form of flipped classroom for value generation. Flipped classroom generates skill based learner who are able to cope up in external environment with their efficiency and skill based learning in SWOC condition. This concept provides real true and fair value of education to the society. Researcher tried to develop different flipped classroom tools and techniques which generate value among learner and develop their dimension of self-independence. Flipped classroom methodology adopts qualitative dimension, contemporary awareness, adoption of latest trend setting pattern to fulfill societal aspect of CSR.

### Introduction

From stone era to S6 human needs something which makes his life easy and added value to the society. Related practical exposure to the education is fundamental need of now days where gen y is able to relate themselves. In GLOCAL era, education methodology needs to change and adopt some sophisticated and psychological upgradation among young minds. Traditional method of education is not able to generate interest and zest of learning among gen Y which generates only degree holder but not skill efficient minds. With adoption of flipped classroom it is possible for future philanthropic quality among mind sets. This paper focuses on flipped classroom methodology for young mindsets and tools utilized in flipped classroom. Apart of this flipped classroom method and tools, researcher focuses on accounting treatment for the same.

### Section: I What is SWOC

The website <http://www.uoguelph.ca/vpacademic/avpa/outcomes/analysis.php> acknowledges SWOC as “A SWOC analysis is a strategic planning tool that can be used during the curriculum assessment and review process to make informed decisions based upon collective input from multiple stakeholders.”

SWOC model focuses on improving efficiency of organization in such a way that would be helpful for management to convert their threat to challenges. To deal with SWOC, researcher focus on flipped classroom pedagogy for student which enhance their skills and sharpen their potential to deal with contingent situation.

### Section :II Flipped Classroom

#### Definition of flipped classroom:

Inception of flipped classroom happened in the year 1940's with technological updating. To study movement of technological movements enabled the magnification and duplication of information at an economical low cost. To utilize technology such way which would be useful for mass gave birth to flipped technology.. A technological change overcomes with the physical barriers and provided free flow of information. This changes are ideological movement seeks to remove the man made barriers.

The website <http://chronicle.com> acknowledges, “ flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter.”

According to Abeysekera & Dawson, “Flipped classroom is an

instructional strategy and a type of blended learning that reverses the traditional educational arrangement by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom. In a flipped classroom, students watch

online lectures, collaborate in online discussions, or carry out research at home and engage in concepts in the classroom with the guidance of the instructor.”

Problem based learning methods, can be much more effective to give them practical exposure and learn real life fundamental knowledge properly.

Table 1: Restricted definition of the flipped classroom. <sup>1</sup>		
Style	Inside Class	Outside Class
Traditional	Lectures	Practice Exercises & Problem Solving
Flipped	Practice Exercises & Problem Solving	Video Lectures
Table 2: Broader definition of the de-facto flipped classroom.		
	Inside Class	Outside Class
	Questions & Answers	Video Lectures

#### **Literature review :**

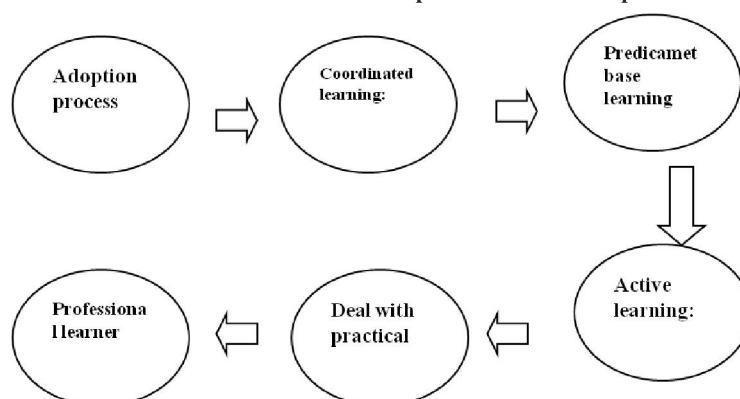
Tomlinson (2001) reveal the thought with adoption of flipped classroom concept independent study develop skill building and structured independence among student become possible in scientific manner. Along with this his study focuses on the new dimension needful for the professional students at the global scenario.

Fisher and Frey (2008) explained with the structured techniques and skills to learn the fundamentals with practical exposure. In this stage, the initial differentiation can be introduced and group work in a different practical situation. Such practical learning will helpful for them in posses'

information, process for that and also guide them, develop their skills as a entrepreneur. Working with small groups leads into collaborative learning, which provides students with peer support and allows for discussion before moving onto independent tasks.

Rakow ( 2007) assessed in his research paper that Formative assessment, through informal techniques such as discussion and questioning or formally with pre-assessment tests, is frequent in the differentiated and independent learning classroom. Pre-assessments are key to knowing what students already know, what they are interested in, and their learning style, which can assist in differentiating students and assignments.

#### **Section : III Process of Flip classroom concept**



**Adoption process :**

Flip classroom adopt basic fundamental concept of learning theoretical concept with practical exposure. Input- processing – undertaking- corresponding categories for teaching – and dimension content would focus most in this case.

**Coordinated learning:**

In this group task or activity provided to selected group for better learn or understand concept. With this effective team building, sportsmanship spirit, group dynamics develop among individual which provided them prospect to deal with favorable or unfavorable situation or circumstances with group members in efficient manner which is most scientific learning process.

**Predicament base learning :**

According to Hemlo- Silver any study should follow characteristic which would be preferred for the student to explore their own hidden potentials. Flexible knowledge, effective problem solving skill, self-direction learning skill, effective collaboration skill, and intrinsic motivation would be given more importance for practical learning.

**Active learning:**

Combination of all dimensions provides practical exposure to the learner. With this learning learner decision making power, innovative thought process, creativity adoption such skills develop among them. Problem base learning develop among them insight to focus on solution based ability. Problem base learning is directly linked with the active learning process. An individual think with different perception and able to know his own ability to react on such dimensions.

**Deal with practical :**

Risk, uncertainty, forecasting skills develop among mind chew which direct them in positive era of thinking. Internal ability of them gives exposure to deal with coping with external environment. Knowledge information process becomes part of their leaning process

**Professional learner :**

In this process of learning learner is able to know in which field he has efficiently to deal with. Along with them professional learning and dealing with practical world is becomes possible for him. Close

watch of mentor shape and reshape their potential which boosts confidence among them.

**Section :IV TOOLS FOR FLIPPED  
CLASSROOM**

**APPRENTICE GRACIOUS :**

Providing practical training to learner with directly related them with industry and so young minds are able to know dynamics needed for industrial survival. Institute need to tie up with different industries to give exposure to students. Institute should provide such ground to evaluate and boost personal development of the individual.

**RELATED RESEARCH WITH PRACTICAL  
ASPECT :**

Some opportunities should be provided to mentor for updating their own knowledge. It should be mandatory for all teachers to attend refresher courses, be aware of educational software. Field based seminars, research publications, peer publication should be encouraged by management which supports teachers and when teachers have latest knowledge on fingertip they are able to train minds with new updates. This is considering as stewardship principal and charity principal social responsibility.

**UTILISATION OF TECHNICAL GADGETS:**

It is new phase of learning which should be added to syllabus. Learner should be give opportunity to excess their own technological tools like mobile, laptop in to their study. Give a new opportunity to student to excess their gadget and use it in meaningful manner. All updates and instruction should be given and updated only on their gadget which make them user friendly with the gadget and not use it only for entertainment purpose. Such direction and diverted minds will give new techno diversified output to the society.

**EDU-TAIN MENT ACTIVITY :**

Flipped classroom not only focus on philanthropic development among students but also focus on cultural activity related to art, music, drama. Such practices would also give encouragement to student

to relax and reflect their inner emotion what they feel and their perception towards societal changes.

#### Section :V FUTURE SPAN FOR DEVELOPMENT

This technique gives new phase of learning and develop SWOC concept in education system in innovative way. This system would be most suitable for post-graduation study. It would also be possible to introduce one paper in graduation study for development of potential among students. This technique needs full for the real vision, which would convert their threat into challenges and deal efficiently in any contingent situation. This concept is contradictory than the traditional thought process. Researcher suggests the need for futuristic approach by the management and make it ubiquity for the new phase of learning.

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