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Foreword

It is my pleasure to write the foreword for the 37th Volume of Research Bulletin of The Institute of Cost Accountants of India. I believe this volume of Research Bulletin will definitely enrich the thought process of the readers and prospective researchers.

The economic development in India followed socialist-inspired policies for most of its independent history, including state-ownership of many sectors; extensive regulation and red tape known as "Licence Raj"; and isolation from the world economy. India's per capita income increased at only around 1% annualized rate in the three decades after Independence. Since the mid-1980s, India has slowly opened up its markets through economic liberalization. After more fundamental reforms since 1991 and their renewal in the 2000s, India has progressed towards a free market economy. A return to strong, sustainable growth is paramount to ensuring continued progress in reducing severe poverty, catching up and lifting living standards more generally. India needs to ensure now that stronger growth benefits all Indians.

In spite of having few life size successful examples, CSR in India is in a very nascent stage. It is still one of the least understood initiatives in the Indian development sector. It is followed by a handful of public companies as dictated by the very basis of their existence, and by a few private companies, with international shareholding as this is the practice followed by them in their respective foreign country. Thus the situation is far from perfect as the emphasis is not on social good but rather on a policy that needs to be implemented.

I hope the research articles presented in this volume will address varied issues and challenges of our economy and throw some light towards its effective solutions.

CMA Rakesh Singh

President

The Institute of Cost Accountants of India



Chairman's Communiqué

I am delighted to present the 37th Volume of Research Bulletin of The Institute of Cost Accountants of India. I hope this volume of Research Bulletin will be widely accepted amongst the learned readers.

India and other developing economies need to address poverty alleviation as well as sustainable routes to development, while addressing cost issues. Resource-efficient solutions will help companies contribute to this task, as well as add to their global competitiveness. Sustainability can drive cost savings through efficiencies, creating new markets and securing competitive advantage.

Small and medium entrepreneurs are poised to become big in the Indian markets. It is estimated that in value, the sector accounts for about 45 percent of manufacturing output and about 40 percent of total exports. In recent years, the SME sector has consistently registered a higher growth rate in India as compared to the growth rate of overall industrial sector. The major advantage of the SME sector is its employment potential at a low capital cost. The government and regulators have also recognized this fact and introduced various policy measures to help SMEs to grow spontaneously including activation of SME listing platform. No economy in the world can hope to survive without a robust SME ecosystem.

I must congratulate the fellow members of the **Research and Innovation Committee**, the esteemed members of the Review Board, the eminent contributors and the research team of the Institute for their wholehearted effort and support to publish this volume in time.

CMA Manas Kr. Thakur
Chairman, Research and Innovation Committee
The Institute of Cost Accountants of India



RESEARCH BULLETIN

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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A COMPARATIVE STUDY OF THE RELATIVE POSITION OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES) IN WEST BENGAL VIS-A-VIS THE NATIONAL SCENARIO

Bibekananda Raychaudhuri
Susanta Kanrar

Abstract:

Micro, Small and Medium Enterprises considered as the growth engine of Indian economy and is also applicable for all developing countries and underdeveloped countries where capital is scarce and labour is plenty. MSMEs sector provides maximum opportunities for both self employment and jobs outside the agriculture sector. In India, after agriculture this sector is the second largest employment provider; currently (as per Fourth Census) near about sixty million people are engaged in this sector. MSMEs sector can be registered or unregistered. Considering the high importance of MSMEs, current paper is trying to show the relative position of this sector in West Bengal vis -a -vis India. West Bengal occupies a predominant position so far as the development of micro, small-and medium enterprises is concerned. Main finding of the paper is that most of MSMEs are under proprietary business and in micro level, unregistered MSMEs sector are the major part of this sector; employment was many times more in unregistered MSMEs sector than in registered sector; West Bengal has less women entrepreneurs than in the National level, as per third and fourth censuses the growth rate of Registered MSMEs in West Bengal were negative, the main reason of sickness of this sector are lack of demand and shortage of working capital etc. This study is based on secondary sources of data.

Key Words : *MSMEs, Growth Engine, Self Employment, Developing Country, Districts industries centers, Shortage of Working Capital.*

I. INTRODUCTION:

Micro, Small and Medium Enterprises (MSMEs) considered as the growth engine of Indian economy and is also applicable for all developing countries and underdeveloped countries where capital is scarce and labour is plenty. Micro, Small and medium enterprises are the back bone of the economic development of the country, which concentrates to meet the local as well as the global demands in

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unique characters of the products and services. In India, these sectors performed well and spread all over the country according to the availability of resources and traditional methods. These sectors are performing in a constant manner even in the globalization era with the competitive advantages (**Paramasivan & Selvam (2013)**). Small and Medium Enterprises (SMEs) are a critical force — fuelling respective economics and employment, and re-shaping both government policies and corporate strategies. Globally SMEs comprises approximately 99% of all firms (**Acharyulu & Rajashekhar, 2010**) and employ between them about 125 million people in 132 economies (**MSME indicator, 2010**). SMEs have been one of the major planks of India's economic development strategy since independence and in today (**Dastane, 2012**). Contribution of MSMEs sector to developed countries is also remarkable. MSMEs Sector contributes significantly to the prime social objective of providing employment opportunities to millions of people across the country. This sector has been contributing significantly to industrial production, exports and national Gross Domestic Product. MSMEs Sector is a vital constituent of the total industrial sector. It is a dynamic and vibrant sector of the Indian economy. This Sector considered as a nursery for the development of entrepreneurial talent. Micro, Small and Medium Enterprises Sector account for nearly 90% of the industrial units in India. This sector accounts for near about 45 percent of the manufacturing output and 40 percent of export of the country. Near about 60 million people are engaged in over 26 million MSMEs units throughout the country. Over 6000 products ranging from traditional to high-tech items are being manufactured by this sector (SIDBI Report on MSME-2010 & MSME 4th census report). SSI sector is the cost effective ways of creating employment, spreading industry, catalyzing research and development and allowing entrepreneurial talent (**Pooja, 2009**). These sectors are a critical economic factor in poorer countries as well as the more developed economies in the world today (**Kishor, 2010**). Moreover it has emerged as a powerful tool in providing relatively larger employment for a given unit of investment, equitable distribution of wealth and removal of regional economic disparities (**Palaniappan, 2010**). MSMEs sector provides maximum opportunities for both self employment and jobs, outside the agriculture sector.

West Bengal occupies a predominant position so far as the development of micro, small-and medium enterprises is concerned. There are close to 25,13,303 number of MSMEs (Registered & Unregistered), which accounts for 9.63% of the total such units in the country. In terms of employment generation, the position of west Bengal in the country is second after Uttar Pradesh and nearly 70 lakh people are employed in West Bengal in MSMEs sector.

Before the year 2006 small scale sector included tiny and small industries but after



the year 2006 the scope of this sector has been extended to include medium enterprises. Now it is named as micro, small and medium enterprises (MSMEs). MSMEs sector can be registered or unregistered. Registration is required to be done with State Directorates of Industries/ Districts industries Centres.

II. OBJECTIVES OF STUDY:

The objectives of study are:

01. To find out the position of MSMEs Sector in West Bengal vis- a- vis at the National level.
02. To analyze the Entrepreneurship profile at state and the national level and
03. To analyze the gravity and the causes of sickness in MSMEs.

III. METHODOLOGY:

This paper is mainly based on secondary data and data are collected from various reputed web sites. Data from web sites like RBI, SIDBI, Prime minister task force, MSME enterprises etc are used to prepare the paper. Various related article, journal, Ph.d theses have been used to collect the data. A number of paper presented in the various national and international conference also have been used. Large numbers of books on MSMEs sector are also used; moreover various published journal, magazines, periodicals, news papers have also been used. Simple statistical techniques like ratio analysis, percentage analysis etc are used in this paper.

IV. PRIOR LITERATURE REVIEW:

A large number of literatures are available on MSMEs sector based on their high importance in economic development in developed, developing and under developed country. A brief review of such literatures is made here:

Ahmad, Nisar(1987) explores the various problems of small scale and cottage industries from the view point of micro and macro level in India with special reference to Jammu and Kashmir.

Jamuar, R.S (1992) in his study states the development of small- scale and cottage Industry in India and their role in Indian economy. He also discussed present position and problems of small-scale industry with special reference to industrial sickness, government policy and measure to develop small-scale and cottage industry.

PATEL,G. S (1996) in his doctoral thesis emphasizes the progress made by the commercial banks in the various components of the priority sector lending i.e. agriculture, small scale industries and other priority sector advances comprised of rural artisans, transport operators, education etc.



Nayak & Dey (1996) examine the productivity of SSI in Assam and seen that production and employment per unit were high in Ancillary units followed by SSI and SSE. It was also revealed that the increase in fixed investment had by and large positive correlation with per unit production and employment.

Desai, Vasanta (2000) in his study explains financial inadequacy is one of most important causes leading to sickness of small –scale units. He also mentioned that bank should provide expertise in guiding small entrepreneurs in their financial management problems and offer preventive assistance to them in case where sickness is anticipated.

Parekh, H.S (2004), in his study examine the role of financial institutions and state agencies in extending credit to small scale units and pin points their attitude of indifference in catering to the needs of the tiny units. He was the view that financial assistance has to attain their lending policies in consonance with the need of the small sector in general and smaller among the small-scale units in particular.

Sarkar, K. K (2005) in his study on alternative financing for SME an attempt has been made to examine the inadequacies of finance to the SSI/SME sector from traditional sources and accesses the feasibility of alternative sources.

Prasad, S. C (2006) reported that the flows of institutional finance are linked with the credit worthiness of the enterprise. Small enterprises, due to their small size and low capital base, generally find it difficult to satisfy the conditions laid down by the banks, particularly, in establishing the viability of the project, meeting collateral requirements and making timely repayment of loans and for this reason they do not find a place among the preferred clients of the banks.

Lalchandani, Neelu. H (2007) in his doctoral thesis states that in SSI there are no incentives for acquiring higher qualifications, employees should have to be continuously encouraged to ensure that their motivation level is maintained / improved which in turn will play a catalyst role to improve their productivity and as a consequence the profitability of the organization and employees are more likely to be motivated if they work in an environment in which they are valued for what they are and what they do.

Zindiye, S (2008) in his study discussed the various factors that affect the performance of Small and Medium Enterprises (SMEs) in the manufacturing sector of Harare, Zimbabwe and mentioned that shortage of finance, high inflation rate, lack of proper and adequate management as well as labour skill seriously affect the performance of SMEs sectors in Zimbabwe.

Pooja (2009) in his book on role of Small Enterprises in India states Small- scale



industries is one of the most cost – effective ways of creating employment, spreading, industry, catalysing research and development and allowing entrepreneurial talent grow.

A study conducted by Chakrabarty. K. C . (2010) States that with increasing competition, introduction of new products and stringent regulatory environment, the role of banks needs to change from mere lenders to partners in business. There is a need for greater participation of banks in the affairs of their constituents by convergence of credit services and non-credit services. The banks should not only provide differentiated products for MSMEs, but also provide counseling & guidance to new and established businesses, extending marketing support etc. Similarly, the Government and other institutions entrusted with development of the MSMEs sector need to focus providing an enabling environment, infrastructure and forward & backward linkages so that the credit function being discharged by the banks is adequately supplemented by their non credit functions.

Kadam & Laturkar (2011) in their study reported that Government of India & the RBI should be requested to direct commercial banks & financial institutions to provide information on sickness to the agencies like BIFR implementing the rehabilitation programme to facilitate them to take up appropriate action and Government should conduct special EDP's for training the entrepreneurs in financial aspects.

Kasilingam & Thirumaran (2012) tries to identify the factors influencing the entrepreneurial development of Small and Medium Enterprises and to assess the problems hindering the development of entrepreneurship and suggest suitable measures for their Small and Medium Enterprises development.

V. REGISTERED SSI / MSMES IN WEST BENGAL AND IN INDIA:

In the year of 1972-73 first small scale industries census has been initiated. As per first census report there were 139577 registered SSI units in India and at the same time there were 13,931 registered SSI units in West Bengal which was 9.98 percent of total SSI in India. The second all India SSI census was conducted in the year of 1987-88 and this census presented a figure of 5,82,368 SSI units in India . At the same time there were 45,954 SSI units in West Bengal representing 7.89 percent of total SSI units in India. This figure showed a growth rate of 317.24 percent at national level and 229.87 percent in West Bengal. The third census conducted in the year of 2001-02 showed the total number of SSI units grew to 13,74,974 at the national level and 42,148 at the state level. It is observed that West Bengal has about 3.06 percent of the total SSI units. Between second and third census it revealed that a growth of 136.10 percent at the national level and there were a negative growth of 8.82 percent at state level.



Latest fourth census was conducted in the year of 2006-07 and as per this census there are 15,28,347 MSMEs at national level and 41,019 MSMEs units at state level. Fourth census report shows that West Bengal has 2.68 percent of the total units. It is significant to note that the growth rate of MSMEs at the national level is 11.15 percent but at the same time West Bengal has a negative growth rate of 2.68 percent. Further relative study between third census and fourth census shows a decline growth rate at national level but it is negative growth rate in case of state level. Comparative relevant data of all four- census period has shown in Table-01.

Table-01
Registered SSI/MSMEs in West Bengal and in India

Census	SSI/MSMEs in West Bengal (number)	% of Increase/ (Decrease)	SSI/MSMEs in India (Number)	% of Increase/ (Decrease)	% of SSI/MSMEs in West Bengal to SSI/MSMEs in India
First	13,931	-----	139577	-----	9.98%
Second	45,954	229.87%	582368	317.24%	7.89%
Third	42,148	(08.82%)	1374974	136.10%	3.06%
Fourth	41,019	(02.68%)	1528347	11.15%	2.68%

The phenomenal rise in the number of registered units in the third census were mainly due to the implementation of Prime Ministers Rozgar Yojana (PMRY), launching of various infrastructure development schemes such as Industrial Estates, Development Areas/Development plots, etc. Similarly the decline trend in the number of SSI/MSMEs units at the fourth census period occurred due to a change in the policy and introduction of new Act. With the enactment of the MSMED Act , 2006 which came into force at the end of October 2006,, the system of SSI /MSMEs registration has been done away with and the new system of filing of Entrepreneurs Memorandum (EM) has been introduced. This can be considered as a part of new Liberalization policy of Government of India.

VI. UNREGISTERED MSMES IN WEST BENGAL AND IN INDIA:

Unregistered SSI/MSMEs sector are the major part of this sector. Most of entrepreneurs are not aware about registration procedure and benefits of registration. Up to second census only registered SSI units were covered but from third census both registered and unregistered units are considered for census. A detail of growth rate and related data of unregistered sector are shown in Table-02.



Table-02
Unregistered Working SSI/MSMEs in West Bengal and in India

Census	SSI/MSMEs in West Bengal (number)	% of Increase/ (Decrease)	SSI/MSMEs in India (Number)	% of Increase/ (Decrease)	% of SSI/MSMEs in West Bengal to SSI/MSMEs in India
Third	7,29,240	-----	91,46,216	-----	7.97%
Fourth	24,70,698	238.81%	245,49,910	168.42%	10.06%

In India a major part of SSI/MSMEs are not registered as revealed from Table-01 and Table-02 and most of SSI/MSMEs are in unregistered sector. In third census and fourth census total numbers of SSI/MSMEs in India are 105,21,190 and 260,78,256 out of this 86.93 percent and 94.13 per cent are unregistered. Fourth census result shows a growth rate 238.81 percent at state level and 168.42 percent at national level compared with third census result. State share of unregistered SSI/MSMEs are 7.97 percent and 10.06 percent in third and fourth census. One of the main reasons of the increase in the number of MSMEs between third census and fourth census is given of special privilege to MSMEs sector in the tenth five year plans. Tenth five year plan emphasized on availability of credit to MSMEs sectors, infrastructure development, modernization, various technological supports, export promotion, human resource development, entrepreneurial development etc.

VII. EMPLOYMENT GENERATED IN WEST BENGAL AND IN INDIA:

One of the major advantages of SSI/MSMEs sectors is its ability to create more employment by employing less capital compared to the large scale sector. For this reason SSI sector was the dream of our father of nation (Gandiji). More over only this sector can use the local resources and local talent in proper way. Central and State government are always placing high priority to this sector considering its high capacity to create employment opportunity. In India, after agriculture this sector is the second largest employment provider, currently (as per fourth census) near about sixty million people are engaged in this sector. A detail of employment in registered SSI/MSMEs sector is shown in Table-03.



Table-03
Employment Generated in Registered SSI/MSMEs in West Bengal and in India

Census	West Bengal (number)	% of Increase/ (Decrease)	India (Number)	% of Increase/ (Decrease)	% of Employment in West Bengal to SSI/MSMEs in India
First	1,76,198	-----	16,53,178	-----	10.66%
Second	3,11,838	76.98%	36,65,810	121.74%	8.51%
Third	2,54,809	(18.29%)	61,63,479	68.13%	4.13%
Fourth	3,62,227	42.16%	94,71,186	53.67%	3.83%

As per third and fourth census near about sixty one lakhs and ninety four lakhs people are engaged in registered sector at national level and at the same time near about two lakhs fifty thousand and three lakhs sixty thousand people are engaged at state level. A growth rate of 42.16 percent at state level and 53.67 percent at national level are observed in fourth census compared with third census. West Bengal's shares in employment are 10.66 percent, 8.51 percent 4.13 percent and 3.83 percent in first, second, third and fourth censuses which show a declining trend. It is also observed that State's growth rates are always below the national growth rate.

Employment in unregistered sector is also remarkable compared with registered sector. As per fourth census total number of person engaged in unregistered MSMEs in India is 502,57,039 and in West Bengal it is 54,66,337 . Compared with third census, the growth rate in employment in unregistered sector is 168.85 per cent at national level and 185.55 percent at state level. As per third and fourth census West Bengal's contribution to employment generation in the unregistered sector is 10.24 percent and 10.88 percent. Table-04 shows the position of employment in third and fourth census.



Table-04
Employment Generated in Unregistered SSI/MSMEs
in West Bengal and in India

Census	SSI/MSMEs in West Bengal (number)	% of Increase/ (Decrease)	SSI/MSMEs in India (Number)	% of Increase/ (Decrease)	% of SSI/MSMEs in West Bengal to SSI/MSMEs in India
Third	19,14,296	-----	186,94,433	-----	10.24%
Fourth	54,66,337	185.55%	502,57,039	168.85%	10.88%

By comparing between third census and fourth census it is clear that unregistered sectors are creating more employment opportunity than the registered sector at national and also in state level. As per third and fourth census unregistered sector creates three and five times more employment at national level and it is seven and fifteen times more at state level than registered sector, so state level performance is far better than national level.

The main reason of increase in MSMEs and employment in MSMEs between third census and fourth census beside the reason mention in before, at national level is because of the inclusion of enterprises registered under section 2m(i) and 2m(ii) of factory act, which enhance the investment limit in original value of plant & machinery from Rs.1 crore to Rs.10 crore. Moreover most of entrepreneurs in our country are illiterate and the patterns of the organisation are mostly sole proprietorship. Their knowledge is also very poor about the registration procedure. The entrepreneurs are also afraid of bearing the cost of registration. Moreover they are afraid of the income tax department who will have free access of their income. This apart the registration procedure is also not very simple. This are some of the main reasons that most of the entrepreneurs prefer to remain in the unregistered MSME sector. This is also the reason for the rise in employment in the unregistered MSME sector in India.

VIII. OWNERSHIP PATTERN IN MSMEs IN WEST BENGAL AND IN INDIA:

As per fourth census the ownership pattern of MSMEs sector is broadly proprietary concern in nature, 90.07 percent at national level and 84.29 percent at state level followed by Partnership, Private co, Public .co, Co- operative and



others. State share in proprietary is 2.59 percent compared with national level. Share of co-operative nature MSMEs is lowest in national as well as at state level. Table-05 are showing details pattern of ownership at national and state level.

Table-05
Distribution of Working Enterprises by Type of Organization

-----	Proprietary	Partnership	Private Co	Public. Ltd. Co	Co-operative	Others	Total
West Bengal	36,461 84.29%	3,847 8.89%	2,204 5.09%	407 0.94%	156 0.36%	184 0.43%	43,259 100%
India	14,08,760 90.07%	62,723 4.01%	43,412 2.78%	8,392 0.54%	4,722 0.30%	35,962 2.30%	15,63,974 100%
% of West Bengal Share	2.59%	6.13%	5.08%	4.85%	3.30%	0.51%	2.77%

Sources: MSMEs Fourth Census (Registered sector),

Position of partnership in MSMEs in West Bengal (8.89%) is far better than in India (4.01%) and at the same time it is reverse in case of Private. Co. West Bengal share of MSMEs is 2.77 percent in national level. From the above table it is clear that most of MSMEs are under the sole proprietorship at the state as well as at the national level. In India there are no legal compulsions for formation of proprietary business. It can be formed and wiped out at any time based on the owner's sole decision. But in case of other forms of business there exist a number of legal compulsions. This other form of business also requires higher capital base than sole proprietorship business. These are some of the main reasons for the formation of sole proprietorship type of organization in India.

IX. Entrepreneurship Profile, Working Enterprises & Type of Enterprises in West Bengal and in India:

West Bengal is always recognized as an industrial developed state in the eastern India as also in India. Women constitute near about half of total India population and this ratio is more or less also applicable for West Bengal. Governments of West Bengal have taken many steps for women development and also for women entrepreneur development. Women position can more properly understand by observing how they are taking participation in production process. Women



participation in business has considered as a major indicator of gender development. Table -06 shows that in the Fourth census, with reference to the year 2006-07, women enterprises constituted only 15.27 percent at National level and in West Bengal the figure was much below only 7.33 percent, which is not a positive sign. West Bengal's share in national level for women entrepreneur is only 2.06 percent is not a good sign for women entrepreneur development in the state. Analysis of nature of activity (Table-06) shows that, at the All India level 67.09 percent of Registered MSMEs Units are engaged in Manufacturing / Assembly/ processing activity while it is 85.86 percent in West Bengal. Units engaged in repairing and maintenance at the national is 16.13 percent and in service sector it is 16.78 percent. It is 16.13 percent and 16.78 percent at state level. At the national and state level majority of the units are engaged in manufacturing activity. It is seen that MSMEs have a dominant place in the manufacturing sector of India. Manufacturing enterprises in number are leading in West Bengal and it also better than national level.

Table-06
Entrepreneurship Profile, Working Enterprises by Nature of Activity & Type of Enterprises in West Bengal and in India

-----	Entrepreneurship Profile		Working Enterprises By Nature of Activity (In Number)			Type of Enterprises (In Number)		
	Female	Male	Manufacturing/Assembly/Processing	Services	Repairing & Maintenance	Micro	Small	Medium
West Bengal	4,420 7.33%	38,840 92.67%	37,542 85.86%	1,699 4.07%	4,018 10.07%	41,420 95.75%	1,758 4.06%	81 0.18%
India	2,14,650 15.27%	13,49,320 84.73%	10,49,393 67.09%	2,62,369 16.78%	2,52,212 16.13%	14,84,768 94.94%	76,523 4.89%	2,683 0.17%
% of West Bengal Share	2.06%	2.88%	3.58%	0.65%	0.27%	2.79%	2.29%	3.02%

Sources: MSMEs Fourth Census (Registered sector),

Micro enterprises are the leader in India economy. At national level 94.94 percent MSMEs are under micro enterprises and in West Bengal it is 95.75 percent followed by small enterprises and medium enterprises. West Bengal's share in micro, small and medium enterprises in national level are 2.79 percent, 2.29 percent and 3.02 percent. Table-06 shows positions of West Bengal are more or less same with the national level.



X. EXPORT, CLUSTER, GROSS OUTPUT & ENTERPRISES BY OPERATION IN WEST BENGAL AND IN INDIA:

Table - 07 shows the position of export, cluster, Gross output and Enterprises status in west Bengal and in India. State Share of export is 3.17 percent as per fourth census. Number of cluster in West Bengal is only forty seven it representing only 1.92 percent. Gross output's share also not satisfactory comparing with national level and it is only 1.12 percent. Total number of working units, closed units and non traceable units are 43,259, 10,708 and 10,644 in West Bengal and they are representing 2.77 percent, 2.16 percent and 5.67 percent respectively.

**Table-07
Export, Cluster, Gross Output & Enterprises by Operation in West Bengal and in India**

-----	Export (Rs in Crores)	Cluster (Number)	Gross Output (Rs in Crores)	Enterprises by Status of Operation in		
				Working (Number)	Closed (Number)	Non Traceable (Number)
West Bengal	2153	47	1504.34	43,259	10,708	10,644
India	67914	2443	1,34,463.49	15,63,974	4,96,355	1,87,682
% of West Bengal Share	3.17%	1.92%	1.12%	2.77%	2.16%	5.67%

Sources: MSMEs Fourth Census (Registered sector),

XI. MSMEs BY SOURCES OF ENERGY IN WEST BENGAL AND IN INDIA:

Availability of power is not even in all states and based on availability of different types of power MSMEs sectors have formed or their operation are based on availability of power. MSMEs are mainly based on eight types of power and they are traditional to modern LPG/CNG based .From Table-08 it is observed that most of MSMEs sectors are based on electricity, 59.82 percent in state level and 67.07 percent at national level. Without power 20.50 percent MSMEs run in West Bengal and 24.25 percent at national level. Fire wood based MSMEs also found in modern day and their presence is much higher in state level than the national level. Table- 08 are clearing showing how the MSMEs are depended on different types of power at state level as well as at national level and states corresponding share.

Table-08
Distribution of Working Enterprises by Main Sources of Energy (In Number)

-----	No Power Needed	Coal	Oil	LPG/CNG	Electricity	Non-Conventional Energy	Traditional Energy/Fire Wood	Others	Total
West Bengal	8,889 20.50%	4,561 10.52%	1,266 2.92%	274 0.63%	25,935 59.82%	33 0.07%	1,583 3.65%	718 1.89%	43,359 100%
India	3,79,234 24.25%	24,793 1.58%	53,147 3.40%	6,639 0.42%	10,48,974 67.07%	2,904 0.19%	23,404 1.50%	24,879 1.59%	15,63,974 100%
% of West Bengal Share	2.34%	18.40%	2.38%	4.13%	2.47%	1.14%	6.76%	2.89%	2.77%

Sources: MSMEs Fourth Census (Registered sector),

XII. SICKNESS IN MSMES IN WEST BENGAL AND IN INDIA:

MSMEs sectors are facing number of challenges and their problems are multidimensional and mainly problems arises from Lack of demand, Shortages of working capital, Non-availability of raw material, Power shortage, Labour problems, Marketing problems, Equipment problems, Management problems etc. Financial inadequacy is one of most important causes leading to sickness of small –scale units in India (**Desai , 2000**). Under –utilization of capacity are mainly caused by shortage of working capital, lack of demand, non-availability of raw materials, technological obsolescence, absence of organized market channels, constraints of infrastructural facilities including power and deficient managerial and technical skills. With the emergence of WTO the problems of small-scale units are likely to rise further as they will be increasingly exposed to competition from foreign goods and from Multi – national companies (**Reddy, 2008**). One of the major causes of sickness in SSIs is marketing problem and Lack of demand (**Mathur & Sathish, 1999**)

Total number of sick units in west Bengal as per fourth census is 2,665 and at national level it is 58,411. West Bengal's share of Sick, Incipient Sick and Sick/Incipient Sick are 4.56 percent, 4.99 percent and 4.89 percent. Details positions of sick, Incipient sick are shown in Table-09.



Table-09
Number of Enterprises with Indebtedness and Characteristics of Sickness

-----	Sick* (Number)	Incipient Sick** (Number)	Sick/Incipient Sick*** (Number)
West Bengal	2,665	3,019	4,967
India	58,411	60,556	1,01,536
% of West Bengal Share	4.56%	4.99%	4.89%

*With erosion of net- worth by more than 50% or delay in repayment of institutional loan by more than 12 months.

** Decline in gross output over three consecutive years.

*** With erosion of net- worth by more than 50% or delay in repayment of institutional loan by more than 12 months or Decline in gross output over three consecutive years. (Sources: MSMEs Fourth Census (Registered sector)

The prevalence of sickness in SSI/MSMEs sector is a cause of concern. Third and fourth censuses are trying to find out the reason of sickness in this sector. Finding of two censuses in registered sector are depicted in Table-10.

Table-10
Reason of Sickness/Incipient sickness

Sl.No	Reasons	3 rd Census	4 th Census
01.	Lack of demand	71.60	41.94
02.	Shortages of working capital	48.0	20.49
03.	Non-availability of raw material	15.1	5.11
04.	Power shortage	21.4	5.71
05.	Labour problems	7.4	5.64
06.	Marketing problems	44.5	11.48
07.	Equipment problems	10.6	3.17
08.	Management problems	5.5	6.46

The total will exceed 100 % (in case of 3rd census), as some units reported more than one reason. Sources: MSMEs third & Fourth Census (Registered sector)

From above table it is clear that both the census mainly identified 'Lack of Demand' and 'Shortage of Working Capital' were the main reasons for sickness/ incipient sickness in the SSI/MSMEs Sector followed by other problems.



XIII. FINDING OF THE STUDY:

Major findings of the study are:

- a) As per the third All India Census, Growth of SSI Units in the registered sector declined from 317.24 percent to 136.10 per cent at the All India level. At the same time, in West Bengal there was a phenomenal decrease from 229.87 per cent to (08.82) per cent. All India growth rate further declined as per the Fourth census and state level growth was negative. This decline can be attributed to the changes implemented as part of the New Economic Policy. As per Fourth census MSMEs units in the unregistered sector of West Bengal has achieved higher growth rate than the National Level.
- b) Most of MSMEs are under micro enterprises and they are more than 90 percent at national and state level.
- c) According to the Second, Third and Fourth census growth rate of employment in the registered SSI/MSME sector at the National level declined. But in West Bengal, growth rate was positive in the second census which became negative in the third census and subsequently became positive in the fourth census. However the West Bengal showed a declining trend. This decline can be attributed to the impact of the New Economic Policies. In the fourth census the growth of employment in unregistered sector of SSI/MSME's is 168.83 percent at the National level and in West Bengal this is 185.55 percent.
- d) West Bengal has less women entrepreneurs than in the National level.
- e) Proprietary concerns dominate at the National and state level in the SSI/MSME sector, even though West Bengal has a strong partnership movement.
- f) Manufacturing is the major activity of SSI/MSMEs at the National level and state level and this shows that SSI/MSMEs have a strong presence in the manufacturing sector of India.
- g) Most of MSMEs are based on electricity but traditional wood based MSMEs are also observed even in the present day both in West Bengal and in India.
- h) As per third and fourth censuses, unregistered sector created three and five times more employment respectively at national level and it is seven and fifteen times more respectively at state level than registered sector.



- I) Sickness of SSI/MSMEs units is a major problem at the National and State level. Major causes of sickness, both at the national and state level, may be attributed to lack of demand, shortage of working capital and marketing problems.

XIV. CONCLUSION:

MSMEs play a significant role as the engine of growth of the Indian Economy. Biggest advantages of MSMEs sector are its ability to create more employment by employing less capital. Unemployment problem is a major problem in West Bengal as also in India. By properly developing this sector such problem can be overcome to some extent. At the same time women should be motivated and encouraged to start new enterprises, as around half of Indian population comprises of women. Women participation in business is not remarkable comparing to its total number. Government should give proper attention in this area. Growth rate of MSMEs in registered sector is much below in West Bengal than in the national level and it is negative for West Bengal in last two censuses. Sickness problem is an alarming problem in this sector and care should also be taken in this areas. Finally it can be said that for the overall economic development, development of MSMEs sector is essential for any economy - be it under developed or developed.



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AGRICULTURAL MARKETING PRACTICES: FARMERS PERSPECTIVES IN ADILABAD

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Abstract

Agriculture is still the largest economic sector and plays a significant role in the overall socio-economic development of India, and The monsoons play a critical role in the Indian sub-continent's agriculture in determining whether the harvest will be bountiful, average, or poor in any given year. The entire rainfall in the sub-continent is concentrated in the few monsoon months. The agriculture sector recorded satisfactory growth due to improved technology, irrigation, inputs and pricing policies. This paper explores the various facets of cultivation and marketing of different crops in Adilabad zone of Andhra Pradesh under the following heads. 1) number of years 2) total land 3) income per month 4) crops under cultivation 5) present and last year cotton area 6) reasons for increase in area 7) price the individual farmer getting and reasons for not getting market price. The results show that the Reliability Statistics Cronbach's Alpha is .982 and R value in Regression is .969 and R-Square value is .938 and KMO and Bartlett's Test Measure of Sampling Adequacy is .906 more than 0.5 which indicate statistically significant and Bartlett value is highly significant with .000. This is less than 0.05. The Extraction Sums of Squared Loadings are at 88 % which indicate 12 % data was extracted from the study which is nearly significant.

Key Words : *Cultivating, Labors, Farmers, Production, Marketing.*

INTRODUCTION:

Agriculture plays a pivotal role in the economy of Andhra Pradesh and the better Performance of this sector is vital for inclusive growth. Although its contribution to gross state Domestic product (GSDP) is around one-fourth; agriculture provides employment to nearly 60 per cent of the work force. Among the agricultural workforce, about 60 percent are registered as agricultural labour and the rest as cultivators.

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Andhra Pradesh is the fifth largest of Indian states both in terms of geographical area and population. The state is broadly divided into seven agro-climatic zones. Among them Adilabad comes under north Telengana, The rainfall in the district, in general increases from the south-west towards the north east. About 85% of annual rainfall is received during the south-west monsoon season. The normal Annual rainfall of the district is 1044.5 mm. Agriculture is the main occupation of the people in the district. The geographical area of the district is 4,004,035 acres (16,203.75 km²). The land used under different types is: forest land 42.8%, land put to non-agricultural uses 3.7% and Net agricultural area 35.4% out of which cotton, soya, jowar and redgram are main crops grown in the area.

Cotton, popularly known as “white gold”, is an important commercial crop not only in India but also in all the countries where it is under cultivation. While India has the largest area under cotton in the world (representing 20 to 25% of the global area), it ranks only second in terms of production after China. Cotton is an important cash crop in India and plays a significant role in the national economy. As an industrial crop, it supports millions of people through cultivation. When the GEAC (Genetic Engineering Approval Committee) of the Government of India Permitted the commercial release of BT cotton hybrids, a new chapter was added to Indian agriculture. On the one hand there were hopes that BT cotton would help reduce the pesticide use, increases the yield, and makes the cultivation of cotton more economical and environmental friendly. And on the other, there were serious apprehensions that this would harm the environment, soil, biodiversity, and perpetual dependence on transnational agrochemical and seed companies. A.P accounts for 12% of the total production of Cotton in the country. Cotton is predominantly grown in the districts of Guntur, Prakasam, Kurnool, Warangal, Adilabad, Khammam, Karimnagar and Mahabubnagar. These districts alone account for over 80% of the State production. Cotton occupies an important place in the agriculture sector of Adilabad district. Adilabad has got 27% area under cotton in all the Telengana districts put together and 16% of the area under cotton in the entire state. However the yields are not in accordance with the above ratios, which accounts to only 11.76% cotton production of Telengana districts and only about 5% of the states' total cotton production

Soya bean, popularly known as 'miracle bean' in India. Soya bean is the single largest oilseed produced in the World. Of the total 310-320 million tons of oilseeds produced annually, soya bean production alone stands at 170-180 million tons, contributing to over 55% of the global oilseed production. It is a comparatively new product in India and early seventies witnessed a major cultivation boom, with the state of Madhya Pradesh setting up the pace Madhya Pradesh is the soya bean bowl of India, contributing 80% of the country's soya bean production, followed



by Maharashtra and Rajasthan. Karnataka, Uttar Pradesh, Andhra Pradesh and Gujarat also produce the bean in small quantities. Apart from this, soybean cultivation is also picking up in the State mainly in Adilabad district of A.P. Soya crop is introduced in Adilabad in late 1990's and predominantly this has become an alternative crop to cotton, as Adilabad farmers are suffering from losses at every year agriculture department of Adilabad made efforts and suggested to farmers to sow soya since then farmers of the district are cultivating the crop.

REVIEW OF LITERATURE:

Andhra Pradesh Human Development, Report 2007, says the performance of agriculture has not been satisfactory since the early 1990s. There is a need to focus on root causes of farmers' suicides in the state. Indebtedness of farmers should be reduced by improving institutional credit and steps should be taken to improve viability of farming. K. Samu, 2010, in his report says once again Vidarbha is topped in the farmer suicides cases. As compared to previous years, the number has gone down yet it is to be decreased. S. Harpal Singh, (2004), says for the farmers in Adilabad district, year 2004 has been a year of hardships. Starting from monsoon failure, the issue of remunerative price for the produce has been of extreme concern to them. The gravity of the remunerative price issue is such that a protest every other day at the market committee yards by cotton farmers had become a norm. Dr. Nawab Ali says that engineering interventions in the form of technology facilitates in maximizing the agriculture productivity and profitability. Pratap S. Birlhal says Indian agriculture is dominated by small farmers, by diversifying into high value agriculture appears to be a plausible option. Dilip Reddy says in his paper made an attempt to study on analyzing the relationship of spot prices of soybean and Soya oil with the future prices and also the market integration using econometric models. Dr. Ganapathi 2009 says the magic number 60000 crores still the plight of the Indian farmer today is unenviable. Majority of them are still under the clutches of private moneylenders. The farmers are not able to repay the loan to the banks and local money lenders. Many of them migrate to industrial towns and settle there facing many difficulties in their daily life. Matin Qaim, Arjunan Subramanian, Gopal Naik, 2006 explain the main factors influencing the agronomic and economic outcomes. A study conducted by S. Manickam, K. N. Gururajan and N. Gopalakrishnan, 2007, Central Institute for Cotton Research, Regional Station, Coimbatore, India says Bt cotton technology does not harm non-target beneficial insects; besides reduction in production cost, increase in profit, reduced farming risk and improved economic outlook for cotton are the highlights of this novel technology. Mayee, C.D., P. Singh, Punit Mohan and D.K. Agarwal. 2004, in his study planned to know the efficiency of organic manures in conjunction with chemical fertilizers on seed cotton yield and yield contributing characters. Morse, S., Bennett, R., & Ismael, Y. (2007), Results



suggest that in Bt adopting households have significantly more income from cotton than do non-adopting households. R.B. Barwale, V.R. Gadwal, Usha Zehr, and Brent Zehr, 2004 conducted his study for six years and the trials conducted prior to commercialization clearly established the superior performance of Bt-cotton. Isa mirza, 2008, in this paper looked at BT cotton and its implementation by farmers in warangal district and talked about the growing concern about the safety and viability of GM crops. Ghosh P K. 2001, studied the details of the development of Bt-cotton, safety studies, field performance, opposition it faced, problem of illegal Bt-cotton and the prospects of this technology in India are outlined in this article. Ross King well, 2002, in this paper explores challenges for broad acre farm managers. Issues of particular relevance to Western Australian farm managers are emphasized. Key market, environmental, technical, structural and social challenges and their implications for farm managers are discussed. Kimle, K. L. and M. L. Hayenga, (1993), as studied about the structural changes in the agriculture input like equipments, seeds, fertilizers and effect of those in output or production. Daberkow, S., and W. McBride, has mentioned about the Precision farming technologies have been commercially available since the early 1990s, but the pace of adoption among U.S. farmers has been modest. This study examines the relationship between the adoption of diagnostic and application techniques of precision farming and sources of information available to farmers about precision farming. K. L. and M. L. Hayenga, (1993), has studied about the structural changes in the agriculture input like equipments, seeds, fertilizers and effect of those in output or production. Daberkow, S., and W. McBride, as mentioned about the Precision farming technologies have been commercially available since the early 1990s, but the pace of adoption among U.S. farmers has been modest. This study examines the relationship between the adoption of diagnostic and application techniques of precision farming and sources of information available to farmers about precision farming.

RESEARCH METHODOLOGY:

Scope of the study:

This paper focuses on the agriculture marketing practices from Farmer's Perspective in Adilabad zone (Andhra Pradesh, India).

Research questions:

- Is there any increase/decrease in land size of farmers under cultivation?
- What are the major crops and ratio of crops among cultivation?
- Are the farmers getting market price or not?
- What are the reasons for not getting the market price?
- What is the major source of income?



- What is the minimum/maximum number of acres in cultivation?

Objectives:

The objectives of this paper are:

- To examine the reasons for crop variations in the area.
- To explore the trends of cultivating and marketing of various crops.
- To examine whether farmers are getting market price or not.
- To analyze the cropping pattern of various crops.
- To examine the pricing pattern for various crops.

Methodology:

The data was collected from 75 farmers of Adilabad zone through questionnaire constituting the sample frame which was through direct personal interview. It is in this context, that a research study has been undertaken to study the agriculture marketing practices from farmer's perspective” in Adilabad district.

Reliability - Scale: All variables

Table.1 : Reliability Statistics

Cronbach's Alpha	Number of Items
.982	9

Table.1.1 : Item Statistics

	Mean	Std. Deviation	Number of respondents
Number of years total land	3.00	1.263	75
income per month	3.15	1.182	75
crops under cultivation	2.28	1.203	75
last year cotton area	1.83	.860	75
present year cotton area	3.07	1.057	75
reasons for increase area	2.95	1.102	75
price you got	2.20	1.263	75
reasons for not getting market price	3.04	1.058	75
	2.01	1.020	75

Table.1.2 : Scale Statistics

Mean	Variance	Std. Deviation	N of Items
23.52	88.577	9.412	9



INFERENCE:

The variables considered for the analysis are number of years, total land, income per month, crops under cultivation, cotton area previous and present years, reasons for not getting expected market price. The data has been collected through structured questionnaire from 75 farmers and analyzed through SPSS. Mean and standard deviation has been calculated for all these variables individually and overall.

The Mean of the number of years stood at 3 and standard deviation 1.263 implies that on an average, the farmer has cultivable experience of 3 years with high variation indicating more inconsistency in the behavior of cultivation among the farmers.

The average income per month of the farmers stood at 2280 with a standard deviation of 1.203, implies that the farmer has an average income of 2280 with a standard deviation of 1.203 this once again evinces that the farmer has a low average income with high variations.

The average cultivable land stood at 3.15 with standard deviation of 1.18, it is understood from the total land cultivated, that the farmers on an average are cultivating more than 3 acres with moderate variations. The inconsistencies in the total land under cultivation are not very high therefore the farmers under study are able to cultivate more than 3 acres, though the other factors are not supporting favorably. It has been examined that the crops under cultivation by the farmers is 1.83 with standard deviation of 0.86, indicates that on an average every farmer cultivating 2 crops with more consistency. The cotton area under cultivation last year as well as present year on an average per farmer is 3.07 acres and 2.95 acres respectively with a standard deviation of 1.057 and 1.102. It can be inferred that the cotton area has been consistently maintained by the farmers for the last 2 years with the moderate variations among the farmers. It is understood from the calculations of overall standard deviation of 9 variables which is calculated at 9.412 that there was good consistency among variables examined.

CROSSTABS

H_{01} = There is no significance relation between number of years and crops under cultivation (**Rejected**)

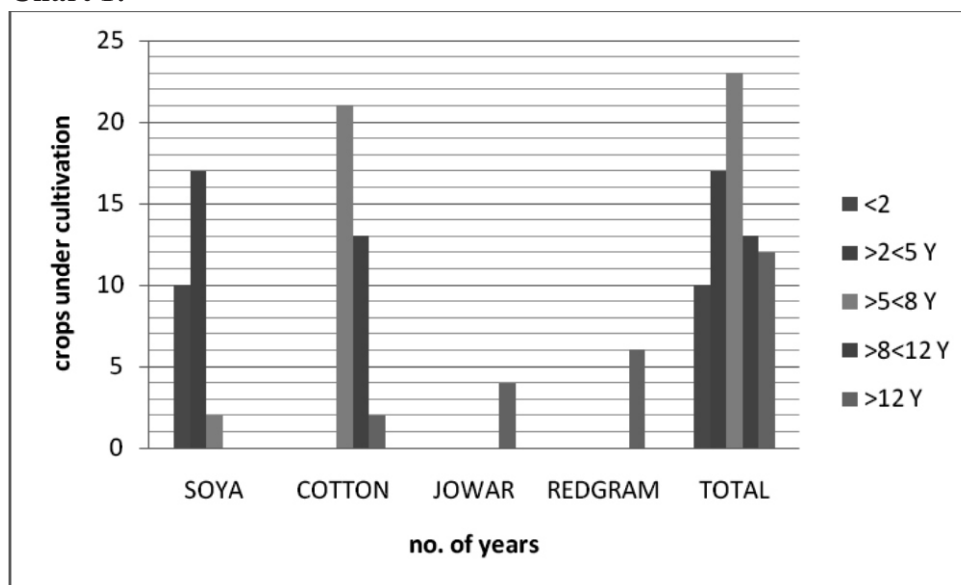


Table.2 : Number of years * Crops under Cultivation- Cross tabulation

		crops under cultivation				Total
		Soya	Cotton	Jowar	Red gram	
number of <2 years	Count	10	0	0	0	10
	% within number of years	100.0%	.0%	.0%	.0%	100.0%
>2<5 years	Count	17	0	0	0	17
	% within number of years	100.0%	.0%	.0%	.0%	100.0%
>5<8 years	Count	2	21	0	0	23
	% within number of years	8.7%	91.3%	.0%	.0%	100.0%
>8<12 years	Count	0	13	0	0	13
	% within number of years	.0%	100.0%	.0%	.0%	100.0%
>12 years	Count	0	2	4	6	12
	% within number of years	.0%	16.7%	33.3%	50.0%	100.0%
Total	Count	29	36	4	6	75
	% within number of years	38.7%	48.0%	5.3%	8.0%	100.0%

The above statistical information has been depicted in the following chart number 1.

Chart 1:



**Table.2.1 : Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	125.501 ^a	12	.000
Likelihood Ratio	123.851	12	.000
Linear-by-Linear Association	54.537	1	.000
N of Valid Cases	75		

(a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .53.)

INFERENCE:

It is understood from the above table that the major crops under cultivation in the study area are soya, cotton, red gram and jowar. It is understood that 29 farmers are cultivating soya and 36 farmers are cultivating cotton constituting the 38.7% and 48.0% of soya and cotton farming in the sample area. These two crops are predominately sown by the farmers. Jowar and red gram are the other two crops which have the major share constituting 5.3% and 8%. Only 4 farmers of jowar and 6 farmers of red gram are in the sample area. It is also understood that more than 17 farmers have an experience of cultivating the soya >2<5 years followed by 10 farmers cultivating soya for <2 years. When it comes to cotton, 21 farmers have an experience of cultivating cotton >5<8 years where as another 13 farmers have an experience of cultivating cotton for >8<12 years where as another 2 farmers have an experience of cultivating cotton for >12 years. when it comes to jowar, only 4 farmers have an experience of cultivating for more than 12 years. It is surprising to note that no farmer is having an experience of <12 in jowar cultivation under sample study. The similar trend has been observed in red gram cultivation 6 farmers have an experience of cultivating the crop for more than 12 years under the sample study though the number of farmers are less in number who are cultivating jowar and red gram but their observation can be taken as unique and representative of the universe for drawing the conclusions with respect to the crops jowar and red gram.

The chi-square test has been applied between the crops under cultivation and number of years of cultivation and found that there is a significant association between number of years and crops under cultivation and the null hypothesis formulated that there is no significant association between the two is rejected. To explain further the significant association between the two is due to the erratic behavior of the agriculture in Telengana region due to rainfall and irrigation sources, land use pattern and also the financial conditions of the farmers. It is understood that in certain years, only certain crops were dominating and hence there is a significant difference between crops under cultivation among various years.



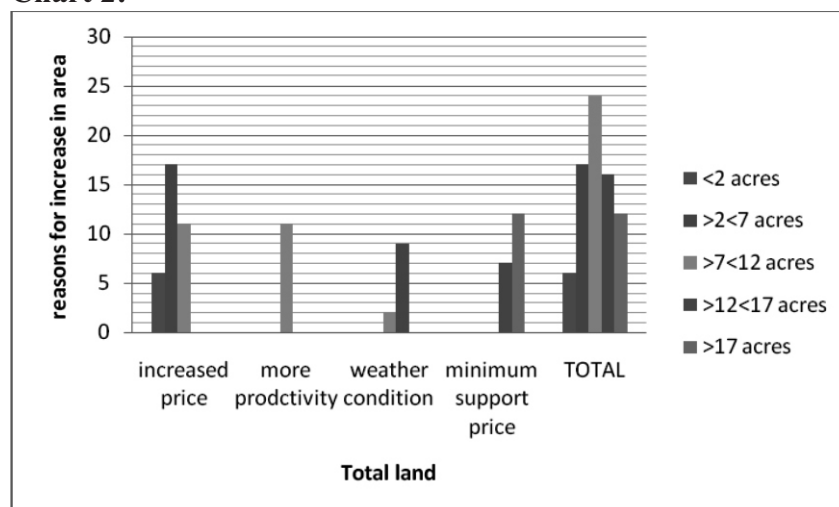
H_{02} = There is no significance relation between total land and reason for increase area under cultivation. **(Rejected)**

Table.3 : Total Land * Reasons for Increase Area Cross tabulation

		reasons for increase area				Total
		Increased price	More productivity	Weather conditions	Minimum support price	
total land	<2 acres	Count 6 100.0%	Count 0 .0%	Count 0 .0%	Count 0 .0%	6 100.0%
	>2<7 acres	Count 17 100.0%	Count 0 .0%	Count 0 .0%	Count 0 .0%	17 100.0%
	>7<12 acres	Count 11 45.8%	Count 11 45.8%	Count 2 8.3%	Count 0 .0%	24 100.0%
	>12<17 acres	Count 0 .0%	Count 0 .0%	Count 9 56.3%	Count 7 43.8%	16 100.0%
	>17 acres	Count 0 .0%	Count 0 .0%	Count 0 .0%	Count 12 100.0%	12 100.0%
Total		Count 34 45.3%	Count 11 14.7%	Count 11 14.7%	Count 19 25.3%	75 100.0%

The above statistical information has been depicted in the following chart number 2.

Chart 2:



**Table.3.1 : Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	116.342 ^a	12	.000
Likelihood Ratio	124.238	12	.000
Linear-by-Linear Association	58.018	1	.000
N of Valid Cases	75		

(a. 15 cells (75.0%) have expected count less than 5. The minimum expected count is .88.)

INFERENCE:

The above table replicates the statistical inference pertaining to total land and reasons for increase in area under cultivation. Some of the interesting observations have made by investigating 75 farmers in the sample area. The total land under cultivation has been classified into 5 categories such as <2 acres, >2 <7 acres, >7 <12 acres, >12 <17 acres and >17 acres. The reasons for increase in cultivable area have been spelt out into four dimensions such as increased price, more productivity, whether conditions and minimum support price.

It is understood that six farmers have cultivated in <2 acres for a reason of increased prices, 17 farmers have cultivated in <2 >7 acres and 11 farmers have cultivated in >7 <12 acres for the same reason of increased prices. 11 farmers have cultivated in >7 <12 acres for a reason of more productivity, 9 farmers have cultivated >12 <17 acres for a reason of weather conditions followed by 7 farmers for a reason of minimum support price. It is also researched that 12 farmers have cultivated >17 acres for a reason of minimum support price. On the whole minimum support price is the determining factor followed by increase in market prices time to time are the deciding factors in increasing land under cultivation.

Some farmers also increase the land under cultivation giving weightage to productivity and weather conditions.

Chi- square test has been applied to examine whether there is a significant difference between the total land under cultivation and the reasons for increase in area with the following null hypothesis formulated.

Null hypothesis: there is no significant association between total land under cultivation and reasons for increase in area.

Since the calculated value is greater than the tabulated value as shown in the above



calculations, it is concluded and inferred that there is a significant association between the total land under cultivation and the reasons specified. It is further explained that the extent of irrigation in the region of Telangana is price sensitive and weather sensitive. Farmers are also farming specific based on high productivity and fertility. Farmers are choosy in increasing cultivable lands, more over the productivity with a prefect correlation of minimum support price will have a positive impact on farmers economic conditions even though, the farmers increases the cultivable land, the low productivity, bad weather conditions and adverse price mechanism disappoints the farmers and as a result big farmers converts into small farmers in a phased manner. Therefore the null hypothesis formulated is said to be incorrect and rejected.

H_{03} = There is no significance relation between crops under cultivation and reason for increase in the area under cultivation. **(Rejected)**

Table.4 : crops under cultivation * reasons for increase area Cross tabulation

			reasons for increase area				Total
			Increase in price	More productivity	Weather condition	Good support price	
Crops-under cultivation	Soya	Count	29	0	0	0	29
		% within crops under cultivation	100.0%	.0%	.0%	.0%	100.0%
	Cotton	Count	5	11	11	9	36
		% within crops under cultivation	13.9%	30.6%	30.6%	25.0%	100.0%
	Jowar	Count	0	0	0	4	4
		% within crops under cultivation	.0%	.0%	.0%	100.0%	100.0%
	Red gram	Count	0	0	0	6	6
		% within crops under cultivation	.0%	.0%	.0%	100.0%	100.0%
Total		Count	34	11	11	19	75
		% within crops under cultivation	45.3%	14.7%	14.7%	25.3%	100.0%

The above statistical information has been depicted in the following chart number 3.

Chart 3:

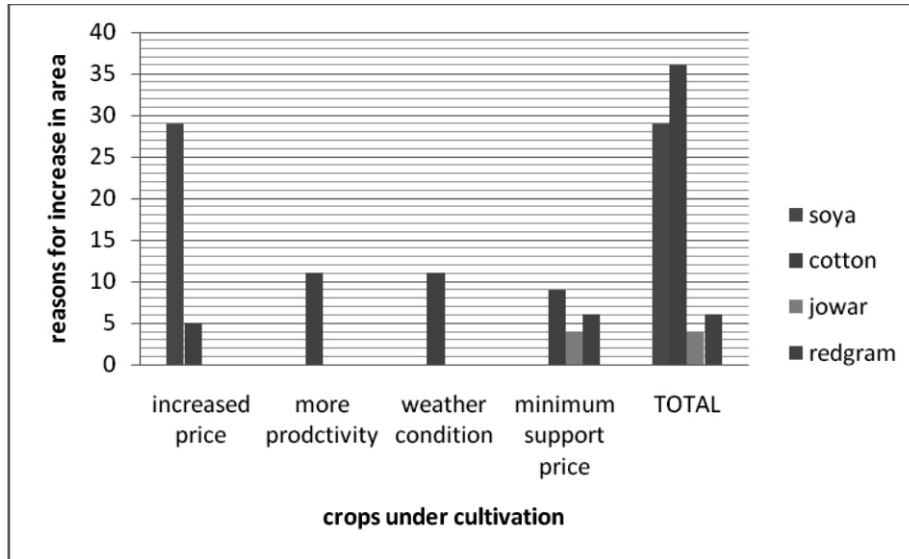


Table.4.1 : Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	143.403 ^a	9	.000
Likelihood Ratio	143.374	9	.000
Linear-by-Linear Association	63.572	1	.000
N of Valid Cases	75		

(a. 11 cells (68.8%) have expected count less than 5. The minimum expected count is .48.)

INFERENCE:

The data pertaining to crops under cultivation and reasons for increase in area of cultivation has been depicted in the above table. 29 farmers were sowing soya for an enhanced prices time to time were as when it comes to cotton an equal number of farmers constituting 11 each cultivated lands for the reason of more production and good weather conditions. Similarly 9 farmers for the good support price and 5 farmers for the enhancement of prices time to time. 4 farmers have cultivated jowar for the reason of good support price and 6 farmers have cultivated redgram for the same reason of minimum support price.

Chi-Square test has been applied to know the significant association between crops under cultivation and reasons for increase in area of cultivation with the following Null Hypothesis.



Null hypothesis: there is no significant association between crops under cultivation and reasons for increase in area.

It is calculated that the chi-square value is greater than the tabulated value and concluded that there is a significant association between the two. It is understood that the various crops in the region of Telengana significantly differs from one another in the extent of area of cultivation. All the crops were not uniformly observed when it comes to extent of cultivation.

soya, cotton were the predominant crops sown by the majority of farmers where as jowar and red gram are sown by less number of farmers, this particular tendency in the present study also supports the general tendency of the Telengana region. The major reasons for not opting redgram and jowar cultivation by the farmers are that, these crops gives low productivity in the region as well as the weather conditions are not well suited, more over marketing and minimum support prices could not favor the farmers to sustain in the turbulent agriculture environment.

Therefore the proposed null hypothesis is said to be rejected.

H_{04} = There is no significance relation between total land and reason for not getting market price. **(Rejected)**

Table.5: Total land *Reasons for not getting market price -cross tabulation

	Reasons for not getting market price				Total
	Less Exports	damaged material	less purchases By govt	don't know	
Total land <2 acres within total land	6 100.0%	0 .0%	0 .0%	0 .0%	6 100.0%
>2<7 acres within total land	17 100.0%	0 .0%	0 .0%	0 .0%	17 100.0%
>7<12 acres within total land	6 25.0%	18 75.0%	0 .0%	0 .0%	24 100.0%
>12<17 acres within total land	0 .0%	7 43.8%	9 56.3%	0 .0%	16 100.0%
>17 acres within total land	0 .0%	0 .0%	3 25.0%	9 75.0%	12 100.0%
Total within total land	29 38.7%	25 33.3%	12 16.0%	9 12.0%	75 100.0%

The above statistical information has been depicted in the following chart number 4.

Chart 4

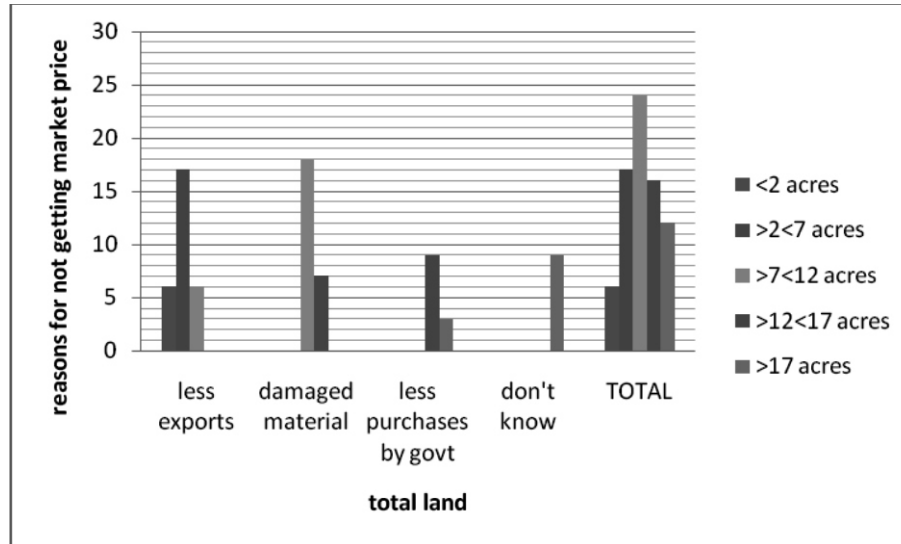


Table.5.1 : Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	130.628 ^a	12	.000
Likelihood Ratio	129.770	12	.000
Linear-by-Linear Association	59.284	1	.000
N of Valid Cases	75		

(14 cells (70.0%) have expected count less than 5. The minimum expected count is .72.)

INFERENCE:

The information pertaining to the total land and reasons for not getting market price has been collected and presented in the following table. The cultivated land has been classified into 5 clusters such as <2 acres, >2 <7 acres, >7 <12 acres, >12 <17 acres and >17 acres of cultivation. The reasons for not getting market price has been classified into less exports, damaged material, less purchases by government and do not know.

6 farmers who are cultivating <2 acres felt that less exports are the prime reason for not getting market price, 17 farmers who are cultivating >2 <7 acres too opined that less exports are the reasons for not getting market price. When it comes to farmers category >7 <12 acres that the reasons for not getting market price is the damaged material followed by less exports. Farmers category cultivating in >12 <17 acres have different reasons. 9 farmers were opined that less purchases by government, 7 farmers were opined that damaged materials are the basic reasons



for not getting market price. When it comes to farmer's category cultivating in >17 acres, 3 farmers opined that less purchases by government is the reason for not getting market price, where as 9 farmers expressed that they do not know any specific reason for not getting market price.

Chi- Square test has been applied between total land and reasons for not getting market price by formulating the following null hypothesis.

Null Hypothesis: there is no significant association between the extent of land under cultivation and reasons for not getting market price.

Since the calculated value is greater than the tabulated value, it is concluded that there is a significant association between the two. Various reasons of not getting the market price were closely encountered with extent of cultivation of land by the farmers. The reason behind this is that exports, damaged material are dependent of number of acres of cultivation. Greater the cultivable land and yield, greater the exports and damaged material and vice-versa. Therefore the proposed null hypothesis is said to be incorrect and rejected.

H_{05} = There is no significance relation between income per month and crops under cultivation. **(Rejected)**

Table.6 : Income per Month * Crops under Cultivation Cross tabulation

		crops under cultivation			
		Soya	Cotton	Jowar	Red gram
income per month	<2000 Count	25	0.0%	0.0%	0.0%
	Rs % within income per month	100.0%			
	>2000 Count	4	17	0	0
	<5000 Rs % within income per month	19.0%	81.0%	.0%	.0%
	>5000 Count	0	16	0	0
	<8000 Rs % within income per month	.0%	100.0%	.0%	.0%
>8000 <11000	Count	0	3	4	2
	Rs % within income per month	.0%	33.3%	44.4%	22.2%
>11000	Count	0	0	0	4
	Rs % within income per month	.0%	.0%	.0%	100.0%
Total		29	36	4	6
		38.7%	48.0%	5.3%	8.0%

The above statistical information has been depicted in the following chart number 5.

Chart 5:

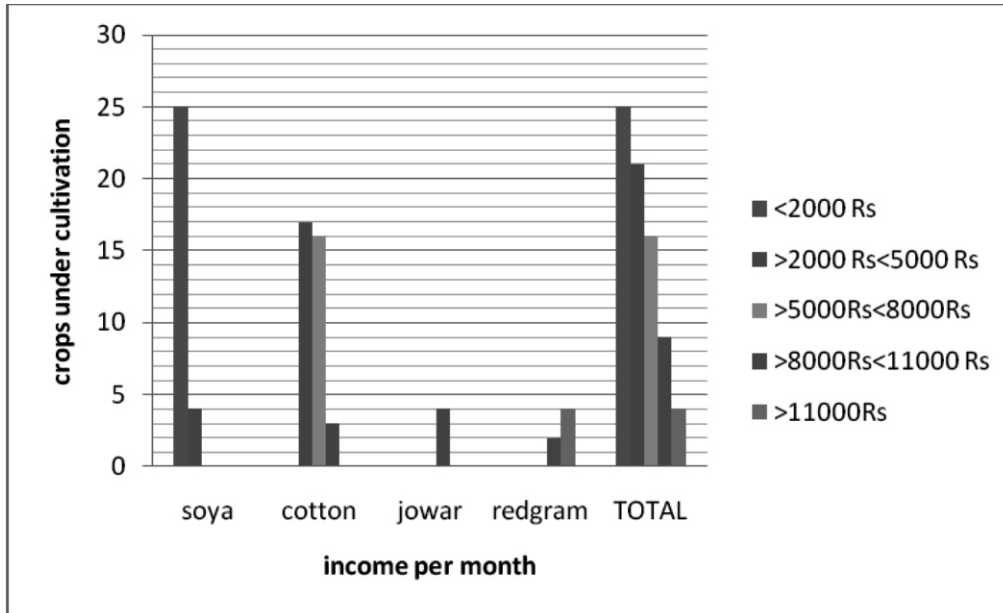


Table.6.1 : Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	144.602 ^a	12	.000
Likelihood Ratio	122.169	12	.000
Linear-by-Linear Association	59.451	1	.000
N of Valid Cases	75		

(a. 14 cells (70.0%) have expected count less than 5. The minimum expected count is .21.)

INFERENCE:

The data pertaining to income per month and crops under cultivation has been depicted in the following table. The income per month has been classified under 5 categories such as <200 Rs, >200 <500 Rs, >500 <800 Rs, >800 <1100 Rs and >1100 Rs. Crops under cultivation observed as usual are soya, cotton, jowar and redgram. It is understood that 25 farmers who are cultivating soya exclusively are getting < 200 Rs per month. 17 farmers who are cultivating cotton and 4 farmers who are cultivating soya are of the opinion that they are getting >200 <500 Rs per month.

Another 16 farmers under investigation who are cultivating cotton exclusively are



of the opinion that they are getting >500 <800 per month. 4 farmers cultivating jowar and 3 farmers cultivating redgram are also investigated and they were getting monthly income of >800 and <1100 per month. No farmer is cultivating any of these four crops fetching them a monthly income of Rs.1100 per month.

The Chi-Square Test has been employed to know the association between the Income per month and crops under cultivation by formulating the following Null Hypothesis.

Null Hypothesis: There is no significant association between income per month and crops under cultivation.

Since the calculated value is greater than the tabulated value, there is a significant association between income per month and crops under cultivation. It is understood that very few farmers were getting monthly income of Rs.>800 by cultivating cotton, jowar, redgram. No farmer is getting greater than 800 by cultivating Soya. Most of the farmers did not cultivate Jowar, Redgram at all. Therefore, it is understood that farmers were getting low income to moderate income by cultivating Soya and Cotton in the Region of Telangana and therefore there is a significant association between income per month and crops under cultivation. Hence, the proposed null hypothesis is said to be incorrect and rejected.

Table.7: Correlation

	Number of years	Total land	Crops under cultivation
Number of years pearson correlation sig.2 tailed (N)	1 75	.960** .000 75	.858** .000 75
Total land pearson correlation sig.2 tailed (N)	.960** .000 75	1 75	.836** .000 75
Crops under cultivation pearson correlation sig.2 tailed (N)	.858** .000 75	.836** .000 75	1 75

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

The above statistical information has been depicted in the following diagram number 6 and 7.



Diagram6:

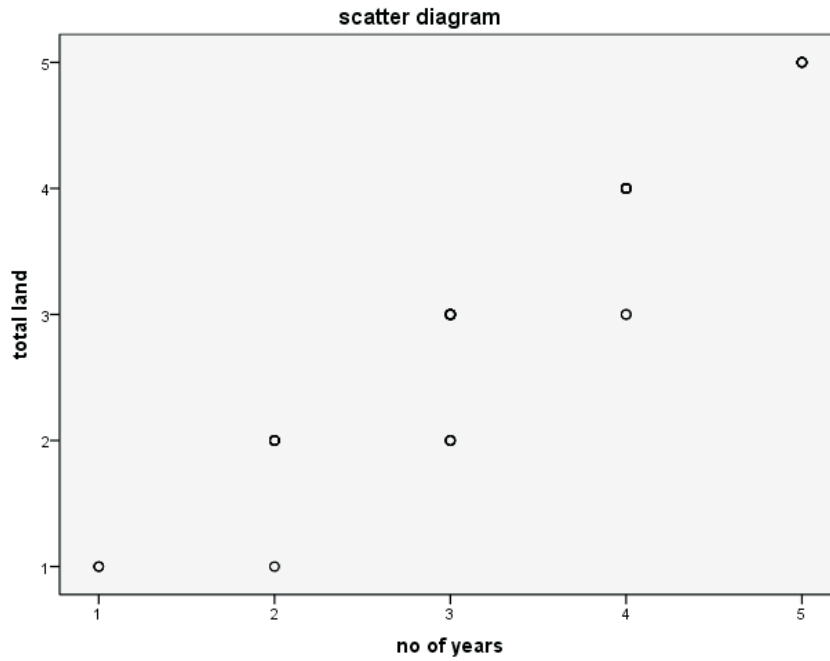
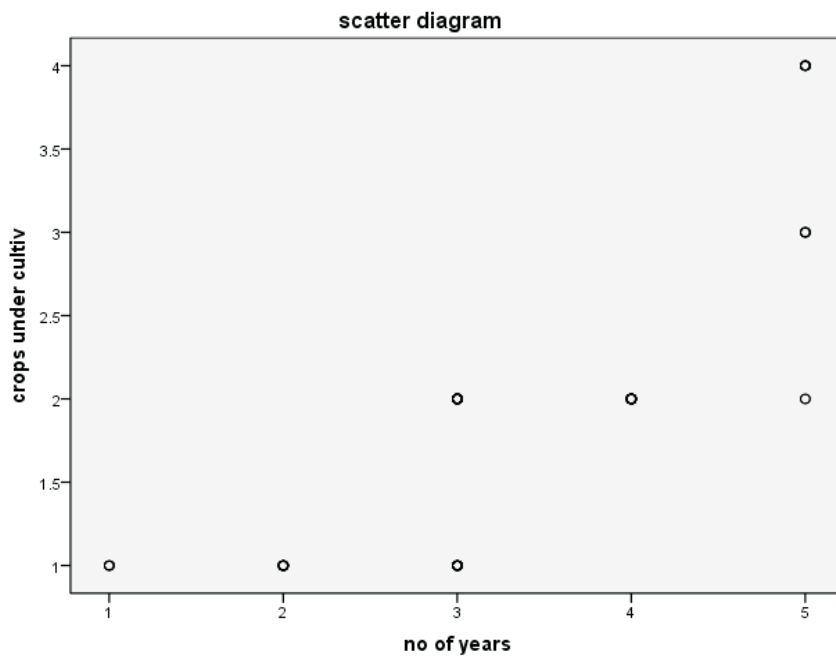


Diagram7:



**INFERENCE:**

From the above calculations of multiple correlation, it can be inferred that when number of years are observed as dependent and total land and crops under cultivation are independent variables, the values 'r' were calculated at .960 and .858, it is understood that for all the years of study, the total land and crops under cultivation are positively correlated at high degree, which indicates that the land use pattern was maximum with optimum crops under cultivation in all the years of study.

When total land was observed as dependent and number of years and crops under cultivation was taken as independent variables, the correlations were calculated at .960 and .836, implies that number of crops under cultivation didn't significantly differ over a period of time. Therefore there was a positive correlation between crops under cultivation and number of years. It can also be inferred that the cultivable land also has maintained at the reasonably high levels for all the years under study with the number of crops under observation.

A correlation was also calculated by assuming crops under cultivation as constant variable and number of years and total land as independent variables and the 'r' values calculated are .858 and .836, the cultivable land as explained earlier was maintained at higher levels for all the years of observations with the number of years under cultivation. This is further explained that number of years and extent of land didn't significantly differ and was maintained at optimum levels for all the years of study.

Table.8: Regression-Model Summary

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.969 ^a	.938	.934	.303

(a. Predictors: (Constant), reasons for increase area, crops Under cultivation, no of years, income per month)

The above statistical information has been depicted in the following diagram number 8 and 9.



Diagram8:

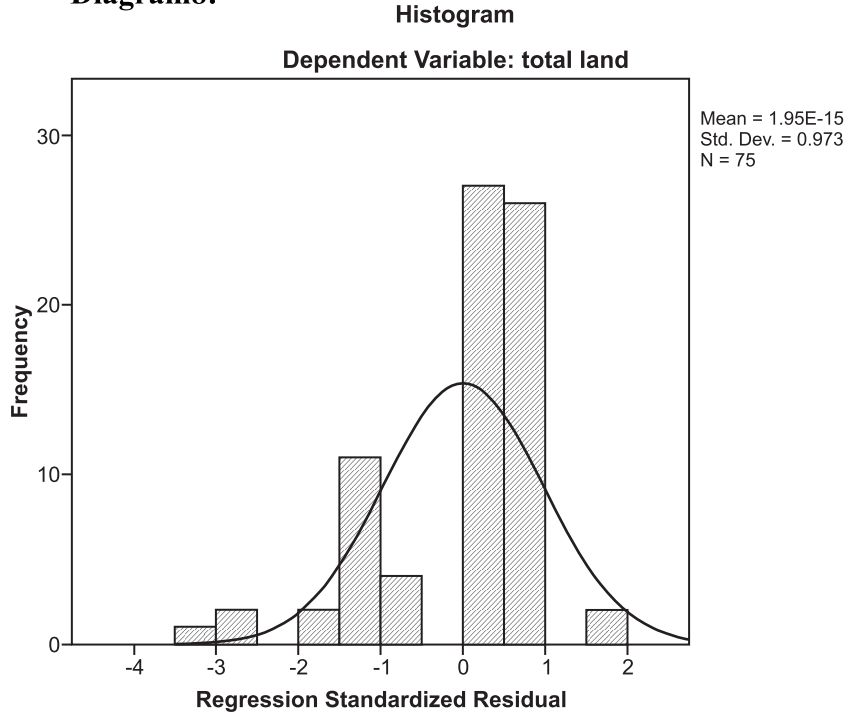


Diagram9 :

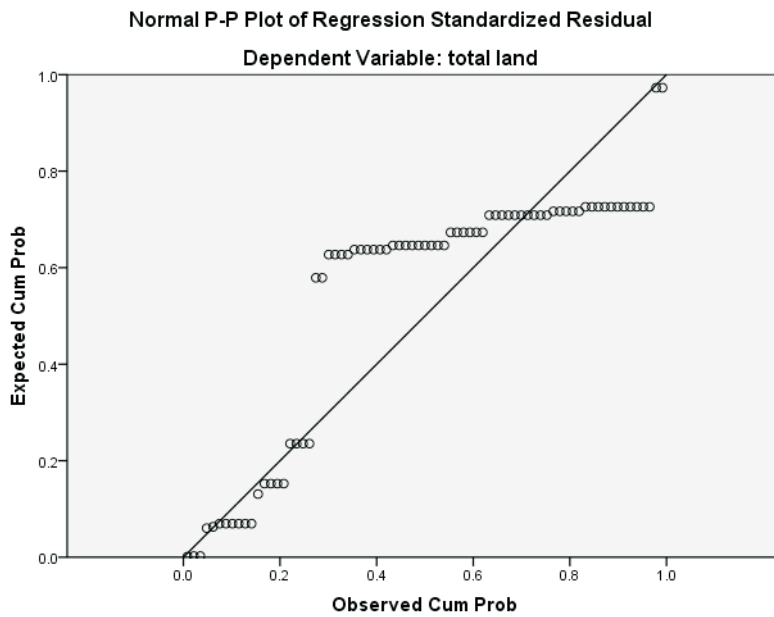




Table.9: ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	96.981	4	24.245	264.929	.000 ^a
Residual	6.406	70	.092		
Total	103.387	74			

(a. Predictors: (Constant), reasons for increase area , crops under cultivation, no of years, income per month
 b. Dependent Variable: total land)

Table.9.1: Coefficients

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.
	B	Std.error	Beta		
1 (Constant)	.622	.100		6.227	.000
no of years	.617	.082	.659	7.542	.000
income per month	.414	.113	.422	3.683	.000
crops under cultivation	-.144	.095	-.105	-1.514	.135
reasons for increase area	-.004	.072	-.004	-.049	.961

(a. Dependent Variable: total land)

From the above table the following conclusions can be drawn

- 1) The regression table summarizes model performance through the following statistics R: represents the multiple correlation coefficients with a range between -1 and +1. Since the R value of 0.969 is close to 1 total land has a high positive relationship with number of years, income per month, crops under cultivation, and reasons for increase in area.

R-square: represents the coefficient of determination and ranges between 0 and 1. Since R-square value is 0.938

- 2) The model summary table describes the regression sum of squares and residual sum of squares. Since the regression sum of squares value 96.981 and residual sum of squares value is 6.406 further a sig. value of 0.000 < 0.05 indicates a significant R squared.

The regression equation for the above data is

$$\text{Total land} = 0.622 + .617(\text{No. of years}) + 0.414(\text{income per month}) - 0.144(\text{crops under cultivation}) - 0.004(\text{reason for increase area})$$



This equation can be used to predict the value of total land for given values of dependent variables.

FACTOR ANALYSIS

Table.11 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.906
Bartlett's Test of Approx. Chi-Square Sphericity	1205.67
	5
Df	36
Sig.	.000

INFERENCE:

Before proceeding for factor analysis firstly checking with the test of eligibility by KMO- Bartlett's test where KMO value is 0.906 which is statistically significant for further analysis for factors and Bartlett's value is less than .05 which provoke researcher to do factor analysis.

Table11.1: Total variance explained

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	%of variance	cumulative%	Total	%of variance	cumulative%
Dimension 1	7.945	88.280	88.280	7.945	88.280	88.280
2	.366	4.070	92.350			
3	.213	2.362	94.711			
4	.167	1.851	96.562			
5	.141	1.565	98.128			
6	.059	.653	98.780			
7	.056	.621	99.401			
8	.029	.318	99.719			
9	.025	.281	100.000			

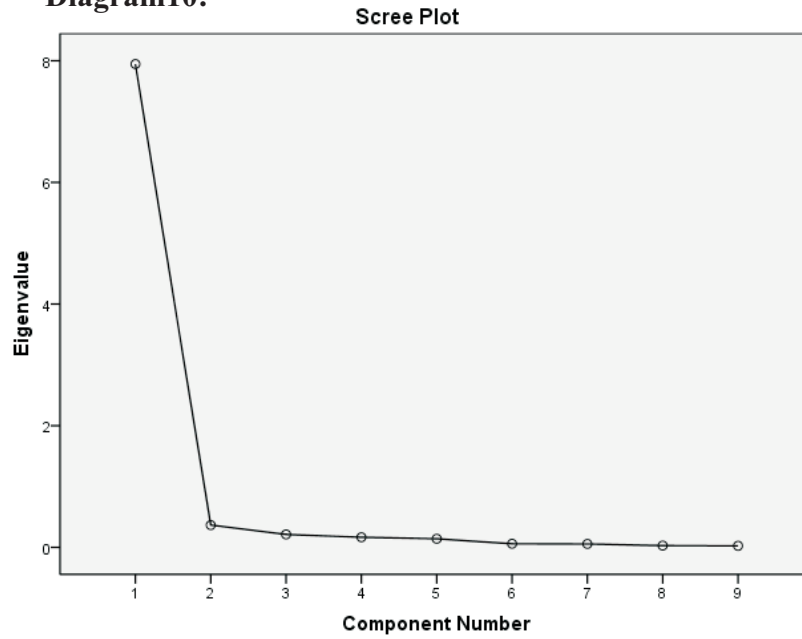
(Extraction method: Principle component Analysis)

Factor : The initial number of factors is the same as the number of variables used in the factors analysis however not all 9 factors will be retained .from the above table only the first 1 factors will be retained.

Initial Eigen values: Eigen values are the variances of the factors.

TOTAL : This column contains the Eigen values .The first factor will always account for the most variance (and hence the highest Eigen value)

Diagram10:



In The screen plot graph the Eigen values against the factor number, values in the first two columns of the tables are high and From the third factor on, you can see that the line is almost flat this shows that the each successive factor is accounting for smaller and smaller amounts of the total variance.

Table.12 : Component Matrix^a

	Component
	1
no of years	.964
total land	.961
reasons for increase area	.937
income per month	.973
crops under cultivation	.914
last year cotton area	.975
present year cotton area	.923
price u got	.842
reasons for not getting market price	.959

(Extraction Method: Principal Component Analysis.)
a. 1 components extracted.

Table.13:

Factor .No	Factor Name
1	Last year cotton area



The output of factor analysis is obtained by requesting principle components analysis. In the table 11.1, 12 and 13, we have the output of the factor analysis, the final statistics comprising the communality for all the 9 variables, and the Eigen values of all factors having Eigen values of 1 or more than 1.

Looking at table 12, The analysis revealed that out of 9 factors, 4 factors number of years, total land, income per month and last year cotton area, their components are .964, .961, .973, .975 are nearly co-related hence we have reduced the number of variables from 9 to 4. The first factor represents last year cotton area in the final list of factors, which is 88% of the variance in the data table 11.1 of total variance explained. The last year cotton area influencing more than all other factors which reflect that farmers are highly experienced in cultivating cotton as they are cultivating it year on year and more over they know the pro's and con's in utilization of land, water, fertilizers in time for more productivity, and the nature of land (black soil) also supports more towards that particular cotton crop.

Now as for the second influencing factor average income per month reflects that the farmers are satisfied with present income and yield by this particular crops which are motivating them to invest more on this crops. Also are happy with the demand for these major crops in the market and encouraging them to continue with same crops for the better profits.

The third and fourth factors seem to be proportionate and balanced factors which are number of years and total land. The highly experienced farmers and the total land they are cultivating taught them of optimum utilization of resources like land, labor, fertilizers, which are contributing to more profit if the weather conditions are favorable to them.

Hence from the above component matrix it may be observed that the following factor last year cotton area, income per month, number of years and total land, highly influence the agriculture marketing practices from farmers perspective in Adilabad zone.

LIMITATIONS OF THE STUDY:

- The sample was a representative of only one particular village Bhoraj in Adilabad district of Andhra Pradesh.
- Due to uneducated Sometimes Unwillingness and unable to fill data by respondents.
- Lack of time on the part of respondents.
- Future researcher could generate a bigger sample size with more number of areas.

RESULTS & FINDINGS:

- There is an Inconsistency in the behavior of cultivation among the farmers.
- The farmers on an average are cultivating more than 3 acres with moderate variations.



- The two crops soya and cotton are predominately sown by the farmers.
- The minimum support price is the determining factor followed by increase in market prices time to time are the deciding factors in increasing land under cultivation.
- The reasons of not getting the market price were exports, damaged material are dependent of number of acres of cultivation. Greater the cultivable land and yield, greater the exports and damaged material and vice-versa.
- No farmer is cultivating any of these four crops (soya, cotton, jowar, redgram) fetching them a monthly income of Rs.1100 per month.
- Most of the respondents were doing agriculture in between 6 years and 15 years.
- The manpower price for the current year is around 200 Rs to 250 Rs.
- The manpower price for the previous 2 year is around 100 Rs to 150 Rs. So the increase in price is becoming burden to agriculturist.
- The major reasons for the increased price are due to increased labor programs (eg: work at home program, government programmes like roaj ghari yogana.).
- One of the surprising facts that most of the agriculturists have said is due to increased labor programs the laborers are not showing interest in doing work in fields.
- So this indicates that an increased labor program is showing effect on the agriculturist.
- Most of the farmers feel that government programs are doing damage to agriculturist.
- Farmers feel that the compensation to the increased prices is not sufficient.
- It is surprising to know that above 15 acres farmers are decreasing the cultivation land and small farmers are increasing.

CONCLUSION:

The central government's role is in formulating policy and providing financial resources for agriculture lacks. The government administers prices of essential commodities does not protect farmer's interests. The agriculture policy must accelerate all-round development and economic viability of agriculture in comprehensive terms. Farmers must be provided the necessary support, encouragement and incentives. It must focus both on income and greater on-farm and off-farm job and livelihood opportunities. There should be more support from the government to increase the earnings of the individual farmers and should bring polices which would benefit the farmers.



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A STUDY ON THE PERFORMANCE OF SELECT OPEN-ENDED DIVERSIFIED EQUITY FUNDS IN INDIA

Samyabrata Das

Abstract

Mutual fund industry in India has witnessed stupendous quantitative growth, particularly since 1990s, in terms of Assets Under Management (AUM) which grew manifold since 1964, the year of inception of mutual fund business in India. In this study, twenty four open-ended diversified equity funds of seven Asset Management Companies (AMCs) have been chosen which are in existence for more than ten years as on 30th September 2012. The main objective of the study is to analyze the performance of the chosen funds in the line of risk- return parameters. The study is based on secondary. Measures such as average annualized return, annualized standard deviation, Sharpe Ratio, Treynor Ratio, Jensen alpha, beta, r-squared, and return from “Systematic Investment Plan” (SIP) are employed for the purpose of judging the overall performance of the chosen funds with respect to their benchmarks and the performance of most of the funds is found to be satisfactory.

Key Words : Mutual fund, AUM, AMC, Sharpe Ratio, Treynor Ratio, SIP

I. INTRODUCTION

Indian mutual fund industry has witnessed spectacular quantitative and qualitative growth over the last decade because of favourable economic and demographic factors and investor-friendly regulatory environment. Mutual funds are dynamic financial institutions which, by mobilizing savings and investing the same in the capital market, play a pivotal role in an economy. In this way, it establishes a link between savings and the capital market (Singh, 2006). Mutual fund is a fund established in the form of a trust by a sponsor to raise monies by the trustees by way of selling units to the public under different schemes with the purpose of investing the collected monies in different securities. It is a special type of investment institution which acts as investment conduit (Krishnamurthi, 1997). A mutual fund is nothing but a diversified portfolio of stocks, bonds, or other securities, which is managed by a professional money manager or by a management team (Fredman and Wiles, 1997). According to the Association of Mutual Funds in India (AMFI), a mutual fund is a trust that pools the savings of a number of investors who share a common financial goal.

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The quantitative growth of the mutual fund industry across the globe has been phenomenal, especially since 2000. The same is true for India also. The following Table 1 will substantiate this fact:

**Table 1: Worldwide Total Net Assets of Mutual Funds
(\$ US Million, year-end)**

Continent	2005	2006	2007	2008	2009	2010	2011
World	17757360	21808884	26131494	18920057	22952806	24699170	23779874
Americas	9750205	11470489	13423089	10581988	12585776	13586843	13513324
Europe	6002310	7803877	8934861	6231116	7545535	7903389	7220298
Asia & Pacific	1939251	2456492	3678325	2037536	2715234	3067323	2921277
Africa	65594	78026	95229	69417	106261	141615	124976
Country							
US	8891108	10397935	12001463	9603649	11120153	11820650	11621595
UK	547092	755163	897460	504681	729141	854413	816537
Japan	470044	578883	713998	575327	660666	785504	745383
India	40546	58219	108582	62805	130284	111421	87519
China	N/A	N/A	434063	276303	381207	364985	339037

Source: Investment Company Fact Book, 2012

By structure, mutual funds can be of three types: open-ended funds, close-ended funds and interval funds.

Open-ended funds have perpetual existence and a flexible corpus which is ever changing. Investors are free to buy and redeem any number of units of such funds at any point of time at applicable Net Asset Value (NAV). Liquidity is the main benefit of these funds (Krishnamurthi, 1997). In the US, open-ended funds are known as mutual funds, while in the UK unit trusts are called mutual funds. British investment trusts and US close-ended funds are equivalent and they are not treated as mutual funds in those countries. However, in India, no such differentiation is made, and both open-ended and close-ended funds are recognized as mutual funds. The salient features of open-ended funds are: (a) freedom of entry and exit at any point of time (in India, however, lock-in period of three years exists for Equity Linked Savings Scheme (ELSS)), (b) purchase and sale of units at applicable NAVs, and (c) no fixed capitalization. Open-ended funds emerged as clear winners in all the countries. In India, the reasons for spurt in these funds are



poor performance of public sector close-ended funds, dismal performance of assured return schemes, and aggressive role of private sector fund houses in popularizing open-ended funds (Sadhak, 2003).

Equity funds are those funds which invest predominantly in equity and equity-related instruments. In India, mutual funds, in order to be classified as equity funds, must invest at least 65% in domestic (Indian) equity. Diversified equity funds invest in the stocks of companies belonging to different sectors and industries. No single stock or sector dominates the portfolio. These funds are less risky because they offer adequate diversification. However, investment pattern of these funds may differ because of the perception of different fund managers. Some funds may prefer to invest entirely in large-cap stocks as a result of which liquidity increases and risk reduces further; while some may invest in large-cap as well as mid-cap stocks. Again, some may prefer to take more risk by investing the major portion in mid-cap and small-cap stocks.

II. REVIEW OF LITERATURES

The study of **Barua and others (1991)** revealed that “Master Share” scheme of UTI performed better in terms of systematic risk, but not in terms of total risk. **Barua & Varma (1991)** found the performance of 'mastershare' during 1987-1991 satisfactory. **Sarkar and Majumdar (1994)** concluded that the returns generated by the chosen five mutual fund schemes were not superior to the market in general. **Shah and Thomas (1994)** observed that most of the schemes (except one) out of 11 performed poorly in terms of returns. **Jambodekar (1996)** found that income schemes and open-ended schemes are more preferred than growth schemes and close-ended schemes. **Jayadev (1996)** found unsatisfactory diversification and insignificant selectivity and timing skills of the schemes. **Sethu (1999)** came up with the conclusion that mutual funds are not able to earn excess returns. **Gupta (2001)** found that the chosen 73 schemes were not adequately diversified and risk and return of the schemes were not in line with their investment objectives. **Rao and Ravindran (2003)** have found that most of the mutual fund schemes were able to satisfy investor's expectations by giving excess returns over expected returns based on both premium for systematic risk and total risk. **Sehgal and Jhanwar (2008)** have noticed significant evidence of stock selective abilities of Indian fund managers. **Tripathy (2008)** observed that the fund managers of 31 ELSS schemes were not able to generate returns in excess of the market and in some cases; their market timing was in the wrong direction. **Shitole and Thyagarajan (2012)** observed that most funds were able to provide market related returns, and many schemes outperformed their respective benchmark indices. **Sharpe (1966)** evaluated the performance of 34 open-ended



mutual funds from 1944 to 1963 and observed that good performance of the funds was very much associated with low expense ratio. But no significant relationship was observed between the fund size and its performance. **Treynor and Mazuy (1966)**, while examining the performance of 57 mutual funds, did not find any statistical evidence that fund managers were able to anticipate the market movements in advance. **Jensen (1968)** examined the performance of 115 mutual funds and concluded that there were no statistical evidences which can prove that the fund managers were able to forecast the prices of securities well enough to recover fees and research expenses. **Friend and Vickers (1970)** found that mutual funds, on the whole, have not showed any superior performance than the random portfolios. **Reilly (1982)** observed inadequate portfolio diversification amongst the funds. **Ippolito (1992)** observed that selection of funds and schemes by investors is guided by the past performance of the funds and money generally flows into the winning funds.. **Dahlquist et al (2000)** found that small equity funds, low fee funds, and in some cases, fund with good past performance managed to show good performance. **Zekri (2005)** compared the performance of socially responsible funds with randomly selected conventional funds and found no significant differences between the two in terms of the attributes like assets held, degree of portfolio diversification, and variable effects of diversification on investment performance.

III. RESEARCH QUESTIONS

The present study addresses the following research questions:

- (1) Do fund managers have superior stock picking ability?
- (2) Are the funds aggressive/defensive with respect to their benchmarks?
- (3) What is the degree of diversification?
- (4) Is the return from “Systematic Investment Plan” (SIP) satisfactory?
- (5) Does the fund size have any impact on its cost?
- (6) How is the performance of the chosen open-ended diversified equity schemes in India?

IV. OBJECTIVE OF THE STUDY

The main objective of the study is to analyze the performance of select open-ended diversified equity funds of the chosen AMCs in the line of risk-return parameters.

V. DATASOURCE AND RESEARCH METHODOLOGY

Data are obtained from the official websites of seven fund houses, websites of



Bombay Stock Exchange (BSE) and National Stock Exchange (NSE), AMFI website, Investment Company Fact Book, various reports, and articles published in financial dailies, finance-based magazines and periodicals.

This study on the performance of open-ended diversified equity funds is based on twenty four funds from seven AMCs, namely, HDFC, Reliance, ICICI Prudential, Birla Sun Life, UTI, SBI, and Franklin Templeton. These seven AMCs were selected on the basis of Assets Under Management (AUM) (> INR40000 crore) as on 30th September, 2012. Here, the criterion for selection of funds was to select those funds which are in the industry for more than ten years and have AUM of more than INR 250 crore as on 30th September, 2012. Four funds from HDFC, two from Reliance, two from ICICI Prudential, three from Birla Sun Life, four from UTI, four from SBI, and five from Franklin Templeton meet the above norm. Further, the funds are not similar in corpus as well as in investment style. The chosen time period is a mixture of several bull and bear phases witnessed by the Indian capital market. The month end NAVs, under “Growth” option, of each fund have been obtained from the official websites of the AMCs, Blue Chip (<http://bluechipindia.co.in>), and Personal FN (<http://www.personalfn.com>). The month end closing values of the respective benchmarks of the funds have been obtained from the official websites of Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). The monthly returns of the funds and their benchmarks over the period of study have been computed. The average annualized risk-free rate is taken as 8% for the purpose of the study. It is the rate offered by Public Provident Fund (PPF) scheme for a long period of time from March, 2003 to November, 2011 and most part of the time frame chosen for the purpose of the study falls during that period. For the purpose of calculating returns from 'Systematic Investment Plan' (SIP), it is assumed that INR 1000 is invested at the end of each month at respective closing NAVs of the funds.

Monthly returns of the funds (R_p) and of their benchmarks (R_b) are calculated as follows:

i. $R_p = (\text{NAV}_t - \text{NAV}_{t-1}) / \text{NAV}_{t-1}$

ii. $R_b = (\text{Value}_t - \text{Value}_{t-1}) / \text{Value}_{t-1}$

Averages of R_p and R_b are taken and annualized in order to have average annualized return figure for 3-year, 5-year, 7-year, and 10-year time frame. Likewise, average annualized Standard Deviation of the funds (SD_p) and their respective benchmark indices (SD_b) have been computed to measure total risk. Traditional measures like Sharpe Ratio, Treynor Ratio and Jensen alpha were applied to understand risk-return relationship of the funds.

Further, measures like R-squared (R^2) or coefficient of determination and beta



were used to understand the relationship of the fund with its benchmark and to have an understanding of the extent of market risk.

VI. ANALYSIS AND FINDINGS

Before analyzing the performance of the chosen schemes, it is worthwhile to look into some key portfolio statistics of the schemes.

Table 2: Fund Snapshot

SL NO	FUND	AUM (INR in crore) as on 30/09/2012	BENCHMARK	STOCK (%)	BOND (%)	CASH (%)
1	BSL ADVANTAGE (BSLADV)	287	BSE 200	99.6	0	0.4
2	BSL EQUITY (BSLEQ)	730	BSE 200	96.9	0	3.1
3	BSL FRONTLINE EQUITY (BSLFLEQ)	2854	BSE 200	98.9	0	1.1
4	FI OPPORTUNITIES (FIO)	313	BSE 200	98.9	0	1.1
5	FI PRIMA PLUS (FIPP)	1834	S&P CNX 500	93	0.1	7
6	FL PRIMA (FIP)	717	S&P CNX 500	95	0.1	4.9
7	FRANKLIN INDIA BLUECHIP (FIBC)	4583	BSE SENSEX	92	0	7.9
8	HDFC CAPITAL BUILDER (HDFCCB)	466	S&P CNX 500	91.3	5.8	3
9	HDFC EQUITY (HDFCEQ)	9887	S&P CNX 500	99.7	0.5	-0.2
10	HDFC GROWTH (HDFCGR)	1226	BSE SENSEX	98.2	1.9	-0.1
11	HDFC TOP 200 (HDFCT200)	11591	BSE 200	99.7	0.3	0.1
12	ICICI PRU TOP 100 (ICICIPT100)	374	S&P CNX NIFTY	95.9	0	4.1
13	ICICI PRU TOP 200 (ICICIPT200)	481	BSE 200	95.1	0	4.9
14	RELIANCE GROWTH (RELGR)	5479	BSE 100	97.1	0	2.9
15	RELIANCE VISION (RELV)	2050	BSE 100	99.1	0	0.9
16	SBI MAGNUM CONTRA (SBIMC)	2667	BSE 100	95.6	0	4.4
17	SBI MAGNUM EQUITY (SBIMEQ)	807	S&P CNX NIFTY	96.1	0	3.9
18	SBI MAGNUM GLOBAL (SBIMGL)	901	CNX MIDCAP	91.8	0	8.2
19	SBI MAGNUM MULTIPLIER PLUS (SBIMMP)	1114	BSE 200	98.3	0	1.8
20	TEMPLETON INDIA GROWTH (TIGR)	679	BSE SENSEX	96.1	0	3.9
21	UTI EQUITY (UTIEQ)	2114	BSE 100	95.9	1.3	2.7
22	UTI MASTER VALUE (UTIMV)	637	BSE 200	97.3	0.3	2.4
23	UTI MASTERPLUS'91 (UTIMP)	846	BSE SENSEX	98.1	1.2	0.7
24	UTI MASTERSHARE (UTIMS)	2363	BSE 100	97.6	1.9	0.5

Source: Mutual Fund Insight, Volume X, No 2, 2012



It is observed that 100% funds have equity exposure in excess of 90% and 79.17% (19/24) funds have equity component of more than 95%. On an average, equity holding of the funds stood at 96.55%. Average debt holding is 0.56% and only 1 fund has debt in excess of 5%. Cash component is also negligible and average cash holding stood at 2.90% and only 3 funds have cash component exceeding 5%. Debt component gives cushion at adverse times. Cash may be profitably utilized during market downturns.

1. Average Annualized Fund Return (Rp) and Average Annualized Benchmark Return (Rb)

The following table depicts the summary result:

Table 3: Average Annualized Fund Return (Rp) and Average Annualized Benchmark Return (Rb)

	Rp				Rb			
	3Y	5Y	7Y	10Y	3Y	5Y	7Y	10Y
AVERAGE	8.53	8.91	16.46	25.71	5.18	6.73	15.02	22.84
MINIMUM	2.86	4.06	12.92	16.18	4.83	5.98	14.31	21.57
MAXIMUM	13.35	13.75	19.62	32.62	7.40	8.84	15.71	26.63
Rp> Rb (No. of funds)	21	19	19	18				
Rp< Rb (No. of funds)	3	5	5	6				

Computed by the researcher

Average annualized returns generated by the funds are more than their respective benchmarks in all the periods. The same can be said about maximum returns but minimum returns show the complete reverse picture. Throughout the period more funds have outperformed their benchmark indices. For example, 87.50% (21) funds have managed to outperform their benchmarks in 3-year return, 79.17% (19) funds in 5-year and 7-year period, and 75% (18) in 10-year period.

2. Annualized Standard Deviation of the funds (SDp) and their benchmarks (SDb)

Standard Deviation (SD), one of the widely used measures of risk, is used to measure the total risk. The lower amount of SD is always preferable as it signifies lower amount of risk. The gist is presented in Table 4:



Table 4: Annualized Standard Deviation of Funds (Sdp) and their Benchmarks (SDb)

	SDp				SDb			
	3Y	5Y	7Y	10Y	3Y	5Y	7Y	10Y
AVERAGE	17.94	29.22	27.58	26.95	19.54	31.36	29.24	27.91
MINIMUM	15.96	24.71	23.86	24.20	19.28	29.49	27.67	26.29
MAXIMUM	20.60	35.33	32.61	31.58	21.18	35.18	32.62	31.43
SDp<SDb (No. of funds)	18	20	19	17				
SDp> SDb (No. of funds)	6	4	5	7				

Computed by the researcher

It is observed that average of annualized SD generated by the funds is less than that of their respective benchmarks in all the periods. The same can be said about minimum SD but maximum SD shows the mixed picture. Throughout the period, more funds have outperformed their benchmark indices. For example, 75% (18) funds have managed to outperform their benchmarks in 3-year SD, 83.33% (20) funds in 5-year period, 79.17% (19) funds in 7-year period, and 70.83% (17) in 10-year period.

3. Risk-Return Possibilities

Taking together R_p , R_b , SD_p , and SD_b , the following possibilities may arise, as shown in Table 5:

Table 5: Risk-Return Possibilities

Possibility	R_p, R_b	SD_p, SD_b	Risk	Return	Situation
1	$R_p > R_b$	$SD_p > SD_b$	High	High	Aggressive
2	$R_p > R_b$	$SD_p < SD_b$	Low	High	Most desirable
3	$R_p < R_b$	$SD_p < SD_b$	Low	Low	Conservative
4	$R_p < R_b$	$SD_p > SD_b$	High	Low	Worst

Risk-return situation of the funds is shown below:

Table 6: Risk-return Situation of the Funds

	3Y	5Y	7Y	10Y
Aggressive	6	3	4	5
Most desirable	15	16	15	13
Conservative	3	4	4	4
Worst	0	1	1	2

Computed by the researcher



It is observed that 8 (33.33%) funds are able to satisfy the most desirable criterion throughout the entire period (3-year, 5-year, 7-year, and 10-year time frame). 62.50% funds have satisfied the most desirable condition in 3-year period, 66.67% funds in 5-year period, 62.50% funds in 7-year period, and 54.17% funds in 10-year period.

4. Risk adjusted Return: Sharpe Ratio and Treynor Ratio

Sharpe Ratio (SR), also known as reward-to-variability ratio, indicates the fund's additional return over and above the risk-free return and the total risk of the fund, measured in terms of SD. It is expressed as:

$SR_p = (R_p - R_f) / SD_p$, where, SR_p = Sharpe Ratio of the fund, R_p = Average annualized fund return, R_f = Average annualized risk-free return, SD_p = Standard Deviation of the fund.

Treynor Ratio (TR), also known as reward-to-volatility ratio, is expressed as:

$TR_p = (R_p - R_f) / \beta$, where, TR_p = Treynor Ratio of the fund, R_p = Average annualized fund return, R_f = Average annualized risk-free return, β = Systematic risk of the fund.

The summary results are shown in Table 7:

Table 7: Sharpe Ratio (SR_p) and Treynor Ratio (TR_p) of the Funds

	SR _p				TR _p			
	3Y	5Y	7Y	10Y	3Y	5Y	7Y	10Y
AVERAGE	0.03	0.03	0.31	0.66	0.75	1.02	9.30	19.52
MINIMUM	-0.28	-0.13	0.17	0.27	-5.63	-4.31	5.03	9.43
MAXIMUM	0.33	0.17	0.44	0.86	7.97	5.75	13.10	25.69
>0	15	15	24	24	15	15	24	24
<0	9	9	0	0	9	9	0	0

Computed by the researcher

Average SR_p and average TR_p for all the periods are positive which signifies that returns generated by the chosen funds are in excess of risk-free rate. Average of these ratios increases with time signifying that risk-adjusted return of the funds increase with the increase in time. 62.50% (15) funds show positive SR and TR in 3-year period and 5-year period. 100% of the funds show positive SR and TR in 7-year and 10-year periods implying that risk-adjusted return of the funds increases with the increase in time period.



5. Jensen alpha, beta, and R-squared

Jensen alpha is expressed as:

$$\text{Alpha} = R_p - [R_f + \text{Beta} * (R_b - R_f)]$$

Where, Alpha= Differential return earned by the fund out of the ability of the fund manager in selecting correct stocks; Beta= Systematic risk of the fund/scheme

This measure recognizes the efficiency of the fund manager in superior stock picking. A positive alpha value signifies positive stock selection ability on the part of the fund manager; and a negative alpha value suggests poor stock picking by the fund manager. Beta measures the systematic risk associated with the fund which exists because of the variability in the market return. The extent of diversification which is used to reduce the degree of unique/unsystematic risk is measured by R squared. There exists inverse relationship between the degree of diversification and the degree of unique risk. The value of RSQ ranges between 0 and 1. RSQ value of 1 implies completely diversified portfolio having zero unique risk.

The summary of the above measures is presented below in Table 8:

Table 8: Jensen Alpha, Beta, and R-squared

Particulars	ALPHA				BETA				R-SQUARED (RSQ)			
	3Y	5Y	7Y	10Y	3Y	5Y	7Y	10Y	3Y	5Y	7Y	10Y
MINIMUM	-2.48	-2.81	-1.99	-4.76	0.67	0.77	0.79	0.83	0.75	0.91	0.89	0.63
MAXIMUM	6.93	6.99	5.78	10.23	1.04	1.00	0.98	0.98	0.99	0.98	0.97	0.96
AVERAGE	3.04	2.05	2.04	4.28	0.88	0.91	0.91	0.91	0.92	0.95	0.94	0.89
POSITIVE	21	19	20	22								
NEGATIVE	3	5	4	2								
<1					22	24	24	24				
>1					2	0	0	0				
>0.85									21	24	24	20
<0.85									3	0	0	4

Computed by the researcher

Average alpha of the funds is positive throughout the period. 87.50% funds have generated positive alpha in 3-year period, 79.17% funds in 5-year period, 83.33% funds in 7-year period, and 91.67% funds in 10-year period. Average beta of the funds is less than 1 during the entire period. 91.67% of funds have beta less than 1 in 3-year period, and 100% funds in 5-year, 7-year and 10-year period. Average RSQ value is 0.89 or more during the entire period. 87.50% funds have RSQ value > 0.85 in 3-year period, 100% funds in 5-year and 7-year period, and 83.33% funds in 10-year period.



6. Returns of the Funds from “Systematic Investment Plan” (SIP)

SIP returns of the funds are given in Table 9:

Table 9: Returns of the Funds from “Systematic Investment Plan” (SIP)

	3Y	5Y	7Y	10Y
AVERAGE	5.91	10.52	10.35	17.85
MINIMUM	1.57	5.99	5.59	11.42
MAXIMUM	9.82	14.58	13.38	23.45
>8% p.a.	4	19	20	24
<8% p.a.	20	5	4	0

Computed by the researcher

It is observed that average SIP return increases with the increase in time period which signifies that SIP is a good instrument of creating wealth in the long run. Minimum as well as maximum SIP returns for all the periods are positive which implies that capital of the investors is very much protected under SIP. 79.17% funds have generated SIP return in excess of risk-free rate in 5-year, 83.33% funds in 7-year period, and 100% funds have done the same in 10-year period. Only in case of 3-year period, 16.67% funds have managed to generate returns in excess of risk-free rate. This also signifies that SIP is a strong long term instrument for wealth creation.

7. Relationship between Fund Size and Cost

The chosen funds are ranked according to their average fund size (measured in terms of Net Assets) and average cost (in terms of expense ratio) of five years (2007-2011). Spearman's rank correlation reveals the following result in Table 10:

Table 10: Correlations between Fund Size and Cost

		NET ASSETS	EXPENSE RATIO
Spearman's rho	Correlation Coefficient	1.000	-.903**
	Sig. (2-tailed)	.	.000
	N	24	24
	Correlation Coefficient	-.903**	1.000
	Sig. (2-tailed)	.000	.
	N	24	24

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

Computed by the researcher



It is observed that there exists very high negative correlation between the net assets and cost and the same is also statistically significant which implies that funds having large corpus are able to lower the cost to a great extent.

8. Overall Performance:

Overall performance of the funds against their benchmarks is analyzed with the help of 6 measures, namely, average annualized return (Rp-Rb), annualized standard deviation (SDp-SDb), Sharpe Ratio (SRp-SRb), Treynor Ratio (TRp-TRb), Jensen alpha, and SIP return (SIPp-SIPb) for 4 different time periods (3-year, 5-year, 7-year, and 10-year). As such, altogether 24 (6 measures*4 time periods) parameters are used to judge the overall performance of the chosen funds. The findings are summed up hereunder in Table 11:

Table 11: Overall Performance of the Chosen Funds

No. of times Outperformed	No. of times underperformed	No. of Funds	Name of Funds
24	0	8	BSLFLEQ, FIBC, FIPP, HDFCCB, HDFCGR, HDFCT200, ICICIPT100, SBIMMP
23	1	3	HDFCEQ, ICICIPT200, UTIEQ
22	2	3	SBIMEQ, SBIMGL, RELV
21	3	1	RELGR
19	5	3	BSLEQ, FIP, TIGR
18	6	1	UTIMS
15	9	1	UTIMV
13	11	1	UTIMP
10	14	1	SBIMC
9	15	1	FIO
6	18	1	BSLADV

Computed by the Researcher

It is observed that 87.5% (21) funds have outperformed their benchmarks in more than 12 (50%) times and 79.17% funds have done so in 19 or more times. So, it can be said that the overall performance of most of the funds is satisfactory.

VII. CONCLUSION

Based on research questions, the findings can be summed up as follows:

- (1) It is evident from Jensen alpha values (Table 8) that most fund managers have superior stock picking skill in different time periods.
- (2) From the beta values (Table 8) it is quite clear that the funds are defensive in comparison to their benchmarks.



(3) RSQ value measures the degree of diversification and RSQ value closer to 1 signifies that the funds are well diversified. From Table 8 it is observed that RSQ values of most of the funds are close to 1. It means that the fund managers have done justice to the name and objective of these funds.

(4) SIP return figures (Table 9) suggest that most of the funds have been able to deliver satisfactory SIP return (>8% per annum) in 5-year and 7-year period. SIP return for 10-year period is very much satisfactory since all the funds generated SIP return in excess of the risk-free rate.

(5) Fund size has inverse relationship with cost (Table 10). As such, funds having large corpus are better placed than small sized funds so far as expense ratio figures are concerned.

(6) It is evident from Table 11 that overall performance of most of the chosen funds is satisfactory in comparison to their respective benchmarks.

VIII. LIMITATIONS OF THE STUDY

Like other studies, this study is not free from limitations. Some of the limitations are mentioned below:

(1) The period of study involves three year, five year, seven year and ten year time frame ending on 30th September, 2012 while most of the funds have been in existence for much more than the chosen time frame.

(2) The study has considered few traditional measures to analyze the performance of the chosen mutual funds.

(3) The benchmarks of the funds as on 30th September, 2012 are assumed to be the benchmark throughout the period of study. The change of benchmark, if any, between the study periods is not taken into consideration.

(4) Mergers and Acquisitions (M&A) between the schemes and the same between the fund houses are not taken into consideration.

(5) The effect of change in fund managers is not considered.

IX. SIGNIFICANCE OF THE STUDY

The present study has its own significance. The results of the study are expected to be relevant in many respects. The findings of the study should provide a platform for understanding the performance of the chosen open-ended diversified equity funds of different AMCs. Such an analysis in the present scenario will help all the stakeholders associated with mutual funds industry in India to arrive at decisions.

X. SCOPE FOR FURTHER RESEARCH

Due to time and resource constraints, all aspects of mutual funds could not be



looked into elaborately. So, further research in the following areas could be considered as an extension of the present study:

- ❖ A comprehensive study can be conducted to highlight the position of the Indian mutual fund industry with other developing countries or with countries in the South East Asia including China.
- ❖ Research can be carried out on investor's perception towards investment in mutual funds.
- ❖ An in-depth analysis can be made on the impact of expense ratio on fund performance.
- ❖ A comparative study between actively managed equity funds and passively managed equity funds can be undertaken.
- ❖ A detailed study on investor behaviour and portfolio preference in metro/urban/semi-urban/rural area can be an area of research.



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**A STUDY ON THE SYNOPTIC ACCOUNT OF THE PRICING POLICY
FOLLOWED BY THE ERSTWHILE STATE OWNED
TELECOMMUNICATION SERVICES IN INDIA**

D Selvaraj

Abstract

The telecom service was started originally to cater to the needs of the administration of the Government. The latter on the services were opened up for the use of the general public. Telecom is recognized as the means for accelerating the distribution of the fruits of the economic growth to all the regions including remote and inaccessible areas in the country. Yet the main objective remained the same, till independence and also for few decades thereafter; until it was realized that telecom development is a must for economic development.

Key Words : Telecom, DoT, Telecom Tariff

1. INTRODUCTION

Telecom is now accepted as a basic infrastructure along with power and transportation for the growth of national economy. Telecom is also recognized as the means for accelerating the distribution of the fruits of the economic growth to all the regions including remote and inaccessible areas in the country.

Traditionally telecom' sector structure, based largely on state monopolies. Historically, the process of expansion of the telecom network was rather slow being owned and managed by the Government. The telecom service was started originally to cater to the needs of the administration of the Government. The latter on the services were opened up for the use of the general public. Yet the main objective remained the same, till independence and also for few decades thereafter until a realization came that telecom development is a must for economic development

In 1994, the Government announced the National Telecom Policy (NTP-1994), which included as its objectives, ensuring availability of telephone on demand, providing fixed line telephones services at affordable prices and provide private sector participation in the Telecom sector. An independent Regulatory Authority, the TRAI was formed in 1997, which was entrusted with the power to regulate tariff for telecom services. The Regulatory Body was strengthened by amending the TRAI Act in 2000. A separate body known as Telecom Dispute settlement and

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the adjudications Tribunal of India (TDSAT) to adjudicate the disputes between service providers and between service providers and Licensing Authority was formed in 2000.

In October 2000, the DoT, which was functioning as a monopoly Department under the Government of India for more than a century was converted as BSNL, a Company registered under the Companies Act 1956 and allowed to operate as one of the operators in the telecom Sector.

The DoT was following its own policy on tariff and free to prescribe, modify and revise it under the powers conferred on it in the Indian Telegraph Act 1885. It also followed its own policy on pricing over the last one-century and all the requirement of funds for investment needs were met by generating internal resources.

2. THE OBJECTIVE OF THE STUDY.

The major objective of the study is to analyze /examine/ review the Pricing policy adopted by the erstwhile State owned Department of Telecommunications in India from time to time since Independence in order to arrive at a conclusion as to the nature of pricing policy adopted by the Government Department until it ceases its monopoly status in 2000. The major objective of the study has further been divided into two minor objectives, which are explained below.

- (a) To analyze and give a synoptic account of the Telecom pricing scenario prevailing in the regime of the erstwhile State owned Telecom Department in the country.
- (b) To analyze and find out (i) the status and role of the telecom sector in the country (ii) to review the tariff structure that were in existence and examination of its evaluation (iii) to link the tariff and revenue parameters to the overall investment requirements of the Department of Telecom. (iv) to spell out the anomalies in the telecom tariff that were in force during the said period. (v) to discuss the policy issues adopted by the Telecom Department in pricing.

The structure of this research paper therefore, is as follows.

- (I) Status of telecom sector in India till its liberalization up to 2000
- (ii) Analysis of the tariff structure that were in force up to 2000,
- (iii) The role of Tariff and revenue parameters in internal resource mobilization.
- (iv) Anomalies of the tariff structure that were in vogue
- (v) Policy issues in telecom tariff during the period of its monopoly status.



3. STATUS OF TELECOMMUNICATIONS SECTOR IN INDIA

The magnitude of the investment is an approximate indicator of the growth in a sector. The Table-1 indicates that the successive plan periods since Independence have witnessed steady increases in the outlays. However, on a comparison of the telecom investment as a percentage of GDP, the figures point to a low percentage. In 1971, while the figure stood at 0.16 percent, its marginal increase in it was arrived at 0.18 percent in 1981 and in the nineties, it was 0.59 percent. The evidence of the status of the telecom sector may be seen in Table-2

Table-1 -Gross investment in telecom services at current prices.			
Year ended 31 st March	Gross Investment – Total for Telecom.	GDP at Factor Cost	Share of Telecom to GDP percent
1	2	3	4
1971	919	569540	0.16
1981	2596	1301760	0.18
1991	22142	5109540	0.41
1992	27875	5890860	0.44
1993	39019	6732210	0.53
1994	47436	7813450	0.56
1995	58159	9170580	0.59
1996	72313	10732710	0.63
1997	75302	12435460	0.56
1998	86461	13901480	0.57
1999	94503	15981270	0.54
2000	125323	17619320	0.66

Source:Govt. of India, Dept. of Telecom, Indian Telecom Statistics of various years.



Plan	Period	Total outlay Actual	Communications Outlay	Percent of communications Outlay to total outlay.
1	2	3	4	5
I	1951-56	1960	47	2.4
II	1956-61	4672	66	1.4
III	1961-66	8577	164	1.9
AP	1966-69	6624	159	2.4
IV	1969-74	155779	415	2.6
V	1974-78	28653	781	2.7
AP	1978-80	22950	519	2.3
VI	1980-85	109646	2722	2.5
VII	1985-90	225010	8123	3.6
AP	1990-91	61518	3040	4.9
AP	1991-92	65856	3632	5.5
VIII	1992-97	434100	25110	5.8
IX	1997-2002	859200	47280	5.5
X	2002-2007	1525639	98968	6.5

Source: Govt. of India, Department of Telecom, Indian Telecom Statistics of various years.

It could be seen from the above tables that there was considerable expansion in the telecom network in the country. However, the under investment in the telecom sector led to the following constraints.

- (i) Low density and low penetration of Direct Exchange Lines (DELs)
- (ii) Degree of excess demand of DELs – with demand far outstripping supply.

The low penetration/ tele-density of DELs in India could be seen from the Table-3



Table-3. Telephone per 100 populations in selected countries.					
SL NO.	Country	1990	1995	2000	ACGR (percent of Telephone)*
1	2	3	4	5	6
1	USA	53.54	60.73	111.79	12.18
2	Canada	55.80	59.85	103.75	10.01
3	Germany	47.43	51.33	131.66	17.14
4	UK	44.58	50.18	135.83	18.54
5	France	47.26	56.01	117.89	13.69
6	Hongkong	40.72	53.25	143.96	19.77
7	Israel	34.00	41.69	128.42	23.62
8	Japan	43.24	49.61	118.48	15.88
9	Italy	36.97	43.33	131.08	20.50
10	Switzerland	52.90	63.43	144.17	15.09
11	Australia	38.40	49.25	109.48	15.59
12	New Zealand	46.45	47.34	107.62	15.64
13	Korea (Repub)	28.32	41.24	110.64	18.60
14	Iran (IR)	3.69	8.60	20.10	16.89
15	Brazil	6.01	8.51	38.51	30.72
16	China	30.60	3.30	24.77	41.39
17	Indonesia	NA	1.69	6.57	26.90
18	India	0.57	1.07	5.11	33.16
19	Sri Lanka	NA	1.14	7.99	39.18
20	Bangladesh	NA	0.24	0.83	24.84
21	Nepal	NA	0.41	1.39	24.74
22	Pakistan	NA	1.67	2.89	11.97
World		NA	12.29	32.96	19.48

Source: Govt. of India, Department of Telecom, Indian Telecom Statistics of various years.

**Annual Compounding Growth Rate.*

The above set of features may broadly point to the fact of limited access to DELs, for the population is an equally important consequence of under investment reflects in the capacity and technology parameters that characterize the status of



the telephone network in the country. The statuses of equipped capacity, DELs and waiting list for selected years have been given in

Table-4. Equipped capacity, Number of telephones (DELs) and waiting list.(All Fixed lines)			
(Figures in Millions)			
Year ended 31st March	Equipped Capacity	DELs	Waiting List
1948	-	0.08	0.03
1951	0.12	0.10	0.03
1961	0.41	0.33	0.00
1971	1.19	0.98	0.31
1985	3.31	2.90	0.84
1986	3.68	3.17	1.03
1987	3.99	3.49	1.12
1988	4.33	3.80	1.29
1989	4.80	4.17	1.42
1990	5.27	4.59	1.71
1991	5.82	5.07	1.96
1992	6.78	5.81	2.29
1993	7.97	6.80	2.85
1994	9.80	8.03	2.50
1995	12.03	9.80	2.15
1996	14.63	11.98	2.28
1997	17.74	14.54	2.89
1998	21.26	17.80	2.71
1999	26.05	21.59	1.98
2000	32.77	26.51	3.68
2001	39.91	32.44	2.92
2002	46.66	37.70	1.69
2003	50.80	40.02	1.81

Source: Govt. of India, Department of Telecom, Indian Telecom Statistics of various years.



The most pervasive consequence of under investment in telecom Sector was the systematic persistent phenomenon of excess demand. The magnitude of supply-growth-demand gap at the All India level had exceeded the gap as shown in the Table-5. The main reason for not meeting the demand was the paucity of funds needed for investment. The DoT, being a Government Department had to depend on internal resources and budgetary support from the Government. As the budgetary support had virtually become nil from the mid eighties, the DoT had to depend on internal resources for its investment requirement. This necessitated for the DoT to follow a tariff policy, which can, not only sufficient to meet the cost of operation but also bring some surplus to meet the investment needs. It is concluded therefore, the pricing policy adopted by DoT is not related to the economic principles of fixing prices.

Table-5. Supply and Demand for Telephones. (Fig. In Millions)

As on 31 st March	No. of DELS (Supply)	Yearly Growth	Waiting List	Total Demand (Demand)	Yearly Growth	Ratio of Supply to Demand percent
1	2	3	4	5	6	7
1985	2.90	-	0.84	3.74	-	77.54
1986	3.17	9.31	1.03	4.20	12.30	75.48
1987	3.49	10.09	1.12	4.61	9.76	75.70
1988	3.80	8.88	1.29	5.09	10.41	74.66
1989	4.17	9.73	1.42	5.49	7.86	75.96
1990	4.59	10.07	1.71	6.30	14.75	72.86
1991	5.07	10.46	1.96	7.03	11.59	72.12
1992	5.81	14.60	2.29	8.10	15.22	71.73
1993	6.80	17.04	2.85	9.65	19.14	70.47
1994	8.03	18.08	2.50	10.53	9.12	76.26
1995	9.80	22.04	2.15	11.95	13.48	82.00
1996	11.98	22.24	2.28	14.26	19.33	84.01
1997	14.54	21.37	2.89	17.43	22.23	83.42
1998	17.80	22.42	2.71	20.51	17.67	86.79
1999	21.59	21.29	1.98	23.57	14.92	91.60
2000	26.51	22.79	3.68	30.19	28.09	87.81
2001	32.44	22.37	2.92	35.36	17.12	91.74
2002	37.70	16.21	1.69	39.39	11.40	95.71
2003	40.02	6.15	1.81	41.83	6.19	95.67

Source: Govt. of India, Department of Telecom, Indian Telecom Statistics of various years.

Note: Total demand is equal to the Number of DEL i.e. supply (i.e. demand met) plus waiting list i.e. the demand yet to be met.



The magnitude of wait-listed telephone is ample proof of the implicit potential demand for access. The potential demand itself may be seen as a growing number as then the annual rate of growth would witness.

It is perhaps, this dominant characteristic in the market or telecom Services that has led to the pricing mechanism designed to ration the demand for DELs through a differentiated way of schemes linked to the waiting time that is the premium for the acquisition of a DEL until the mid nineties.

That the under investment in the telecom sector is evident. The reasons being the low priority accorded to telecom, which is, reflected in its declining share vis-à-vis other sectors of the economy like Power, Transport, Irrigation and Agriculture etc. The percentage of allocation to various sectors in the National Five Year Plans is furnished in Table-6.

Five year Plans	Years	Agriculture	Irrigation	Power	Transport	Communications
1	2	3	4	5	6	7
VII	1985-90	5.84	7.48	28.44	13.35	3.91
IX	1997-02	4.90	6.50	25.90	13.90	5.50
X	2002-07	3.90	12.00	47.00	26.30	11.50

Source: Five-Year Plan Documents of Department of Telecom, Govt. of India of the relevant Five year Plan period.

The magnitude of funds available for investment is a function of revenues earned from various telecom services, and therefore, it is desirable to analyze the source of telecom revenues. The Table-7 amply indicates that earnings from telephones constitute nearly 80 percent of total



Table -7. Telecom Revenue by source. (Figures Rupees in Crores)

Year ended 31 st March	Telephone	Telegraph	Telex	Leased Line Services	Misc Revenue	Total Revenue
1	2	3	4	5	6	7
1981	564.74	51.69	56.13	19.56	-2.10	657.80
1982	659.36	58.55	70.92	19.38	-4.58	769.54
1983	806.56	74.99	82.08	22.89	-2.79	937.83
1984	920.07	85.12	84.06	35.49	18.75	1086.07
1985	997.93	93.84	97.03	94.04	18.76	1242.63
1986	1103.55	94.21	114.91	43.57	16.96	1307.86
1987	1051.00	126.64	66.62	47.70	22.81	1238.23
1988	1486.07	119.41	73.93	48.40	32.30	1657.87
1989	2094.95	101.30	106.24	60.70	37.20	2358.59
1990	2476.54	93.36	125.92	82.36	52.80	2777.48
1991	3049.52	81.44	139.31	160.00	70.83	3458.93
1992	3659.29	77.85	125.10	158.67	67.01	3998.32
1993	4369.38	66.86	126.99	84.68	90.40	4693.82
1994	5827.01	73.10	140.03	270.45	202.97	6267.99
1995	7274.41	71.69	126.27	221.99	128.35	7653.72
1996	9093.12	75.13	99.77	217.48	151.26	9676.24
1997	10935.01	66.04	73.11	263.64	563.56	12185.89
1998	12970.37	60.14	149.03	239.09	927.19	14590.31
1999	15329.55	71.43	59.12	199.15	425.21	17637.52
2000	16491.11	58.60	30.25	183.18	493.12	18628.59

Source: Govt. of India, Department of Telecom, Indian Telecom Statistics of various years.

Further, it is seen that due to the divergence of the rates of return in telecom organizations, given the nature of the market segment that they cater, limit the availability of funds with DoT for future expansion.

4. ANALYSIS OF TELECOM TARIFFS.

In this Para, various features, basis and changes of tariff from time to time for various categories of telecom services are analyzed



Major features of Telecom Tariffs:

A typical tariff contains three elements.

(i) An installation Charge:

This is paid when the service (telephone, telex etc.) is first installed. The charge may be related to the distance between subscriber's premises and the local exchange or to the amount of installation work required. It may also vary according to the size of the local telephone network or according to the category of the subscriber.

(ii) A Rental charge:

This may be in the form of a periodic subscription/rental charged on a monthly, quarterly, or annual basis. The amount may also vary according to the size of local network and the type of subscriber. It depends equally on the subscriber equipment selected and whether the exchange is automatic or manually operated. This is the cost meant to recover the initial expenditure incurred in providing the service, which is not the capital expenditure. This is a fixed charge.

(iii) A call charge:

This is essentially a volume charge and depends on the duration / destination of the call, time of day, whether self dialed or obtained through operator etc.

The elements for tariff in the domain of telephone tariffs are as follows.

- (a) Deposit at the time of registration.
- (b) Non-reimbursable fee for initial connection.
- (c) Bimonthly rentals depending upon exchange capacity.
- (d) Charges for local calls (inclusive of STD in excess of free calls)
- (e) Charges for national and international manual trunk calls.
- (f) Miscellaneous charges.

There are in addition, two systems on which telephone tariffs are charged. They are:

(a) **Flat Rate:** under this system, the subscriber has to pay a fixed monthly rental irrespective of the number of calls made. Although one advantage of the flat rate system is the stability of revenue, by encouraging subscriber to make the maximum use of the telephone putting a severe load on exchange equipment.

(b) **Measured Rate:** In this system, the subscriber is charged a higher fixed rental but was allowed a specified number of free calls. In addition, for charging rental, the telephone systems were graded according to their capacity.



The rationale for the above are derived from the fact that in the larger networks the utility of a telephone and its need to the subscriber are admittedly greater. In addition, the externalities associated with subscriber's connectivity to a larger "club" enhance its value. Further, as the cost of equipment, operation and administration also increase with the size of the exchange – it would only be reasonable that rentals be fixed (higher) to cover the (higher) charges relating to equipment exclusive to the subscriber. The call charges are variable revenue in nature. It increased when the usage is increased. When the usage is increased, the local call charges are supposed to come down, due to operation of economies of scale. Converse is the pricing policy adopted by DoT. It charged at more rates when the usage is more that is a premium for using more services.

5. STRUCTURE OF TELEPHONE TARIFF.

The structure of the telephone tariffs has been characterized by the following specific features.

(I) Telephone:

(a) Features: Telephone rentals and the local call charges have been mainly divided into two categories, measured rate and flat rate system. In the former, consisting of rentals, free calls, local call tariffs, and the rates are determined across differentiated exchange sizes. In the flat rate system, the rationale is to impose exclusively rental tariffs, applicable to small size exchange.

Given the excess demand for telephone access, the DoT since 1949 initiated an advance deposit rate regime under the Own Your Telephone (OYT) scheme, which while initially based on a lump sum deposit for major metropolis cities. This was streamlined in 1971 in grades deposits according to exchange size. The OYT schemes ensured therefore, a premium on access through shorter waiting periods.

(b) Basis: The basis of Telephone charges is characterized by two distinctive features, First, recognition of differentiated tariff structure between rural and urban areas (with the former reflecting itself in lower charges for flat rate small sized exchanges). Secondly, the rationale has been essentially in accordance with the ability to bear tariffs without a precise ascertainment of either benchmark costs on demand elasticity concern for the tariffs had mainly been based on budgetary consideration of raising revenue. The "ability bear tariff" policy was followed with a view to reduce the burden on poor masses in using the service. Accordingly lower rental without any call charges were allowed to rural subscribers. At the same time, the urban subscribers were forced to pay more by way of increased rental charges and call charges.



The tariff of rental charged by DoT to subscribers from 1979 to till date are depicted in Table-8

Table-8. Rental according to size of Exchange capacity (No. of Lines)				
Year	Exchange Capacity(Lines)	Annual Rental	Free calls	Local Call Tariffs.
Quarterly Rental				
1979	<10,000	125	250	30 Ps per calls and 40 Ps for calls > 1750
	10,000 – 29,999	150	250	
	30,000 – 99,999	175	250	
	10,000 and above	200	250	
1980	<10,000	125	250	251 –1750 @ 30 Ps per call. 1751-5000 @ 40Ps per call. > 5000 -50 Ps per calls.
	10,000 – 29,999	150	250	
	30,000 – 99,999	175	250	
	10,000 and above	200	250	
1981	<10,000	125	250	251 – 500 @ 40Ps per call > 5000 @ 50 Ps per call
	10,000 – 29,999	150	250	
	30,000 – 99,999	175	250	
	1,00,000 and above	200	250	
Bi-monthly rental				
1982	As Above	200	200	201-3000@ 40Ps per call. > 3000 @ 50 Ps per call.
1986	As Above	200	275	276-2000 @ 60Ps per call > 2000 @ 80 Ps per call
1988	< 100	125	275	276-2000 @ 80 Ps per call & 2001-5000 @ Re 1.00 per call > 5000 @ 1.25 per call
	100 – 999	140	275	
	1000-9999	160	275	
	10,000-29,999	200	275	
	30,000-99,999	250	275	
	1,00,000-2,99,999	300	275	
	3,00,000 & above	330	275	
1990	<100 lines	100	150	151-1000 80 Ps per call > 1000 calls @ 1.10 per call.
	100- ,1000	150	150	
	1000-<30,000	200	150	
	30,000 < 1 lakh lines	250	150	
	1 lakh lines & above	330	150	
1993	<100 lines	100	150	151-500 @ 0.80 per call 500-1000 @ 1.00 “ 1001-2000@1.25 2000 and above @1.40 “
	100- ,1000	150	150	
	1000-<30,000	200	150	
	30,000 < 1 lakh lines	275	150	
	1 lakh –299999	360	150	
	3 lakhs and above	380	150	

Source: Govt. of India, DoT, Indian Telecom statistics of various years read with Compilation on “Telecom Tariff at a Glance” by Venkataraman.S, RR. Pharm Pack P. Ltd, Chennai, 2003.



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From the Table- given, above the following inferences is drawn.

- (a) There were no uniform policy setting tariff for rentals.
- (b) The local call tariff was revised periodically with the sole aim of generating revenue.
- (c) The telephone bill payable by a common subscriber based on the tariff existed in various years reveals that the tariff which were in force prior to 1999 are on the higher side when compared to the cost price.

(iv) Long distance Calls.

Features: Trunk calls have essentially been determined by three factors – distance slabs, and time of usage and category of calls.

Basis:

(a) The fundamental basis of tariffs for long distance calls had been based on the principle of (i) Creation and formation of unit free Zones. (ii) Charging plan. The unit free Zone is identified with Tehsil boundaries having an area of 800-2000 Sq. Kms. These unit free Zones are then merged to form Long distance charging Areas (LDCA's) being long distance charging areas is co-terminus with the revenue district within a state.

Once LDCA's, Laces are identified, the charging plan works out as follows.
Laces

- Calls terminating and originating within a LDCA are categorized as short distance calls.
- For calls between contiguous to LDCA's, charges are at a point-to-point basis depending on the radial distance between trunk exchanges.
- For calls in non-contiguous LDCA's – the rates differ, area to area i.e. radial distance between long distance charging areas.

(b) Time of use has been split into three main categories, with differentiated pulse rates. Table-9 shows the Trunk call tariff that was in existence since 1974



Table-9. Trunk Call Tariff per unit of 3 (Three) minutes in various years.(Tariff in Rupees)

Sl. No	Radial distance Between two Exchanges (KMs)	1974	1976	1980	1981	1983	1986	1988	1990	1993
1	2	3	4	5	6	7	8	9	10	11
1	Up to 20	0.25	0.5	1.00	1.00	1.00	2.00	2.00	2.00	5.00
2	21-50	1.00	2.00	2.00	2.00	2.00	4.00	4.00	5.00	8.00
3	51-100	2.00	4.00	4.00	4.00	4.00	6.00	8.00	15.00	20.00
4	101-200	4.00	6.00	6.00	8.00	8.00	12.00	16.00	25.00	30.00
5	201-500	7.00	10.00	10.00	12.00	12.00	18.00	27.00	45.00	50.00
6	501-800	-	-	-	-	-	-	-	-	65.00
7	501-1000	11.00	16.00	16.00	16.00	20.00	30.00	36.00	55.00	65.00
8	Above 1000	15.00	20.00	20.00	20.00	24.00	36.00	45.00	75.00	-
9	801-1200	-	-	-	-	-	-	-	-	85.00
10	Above 1200	-	-	-	-	-	-	-	-	90.00

Source: Compiled from "Telecom Tariff at a Glance" by Venkataraman.S, RR Pharm Pack P.Ltd, Chennai, 2003.

Remarks: Classification of calls.(i)Urgent Calls: Twice the rate of ordinary calls. (ii) Most immediate Calls: Four times of the rate of ordinary calls. (iii) Lightening Calls: Eight times of the rate of ordinary calls.

6. TRAFFIC AND REVENUE PARAMETERS IN INTERNAL RESOURCE MOBILIZATION

After analyzing the tariff pattern and structure from various years, an attempt is now made to analyze traffic and subscriber characteristics of usage and consequent revenue generation. An attempt is also made to link revenue receipts within the funding pattern of the perspective plan of DoT.

The calling pattern characteristics of subscribers indicate that the total number of metered calls emanating from four metropolitan cities of Bombay, Delhi and Calcutta and Madras constitute a substantial percentage of total number of metered calls. The total number of metered calls as in 1998-99 of the four cities accounted for 4535.87 million calls out of the 14642.72 million metered calls, which work out to 31 percent of the total volume of the traffic.

An interesting aspect of the analysis is of the subscriber calling pattern for which data are available for cities, indicates that a consistent pattern of a small



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proportion of subscribers makes a large number of calls as could be seen from Table-10

(For 1989-90 - Seven Cities, For 2001-01-28 Telecom Districts including Metros.)

Sl No.	Call Slabs	Percentage of Subscribers		Percentage of Calls	
		1989-90	2000-01	1989-90	2000-01
1	NIL	2.86	6.50	-	-
2	1 - 275	29.80	17.07	3.31	1.64
3	276 - 500	21.27	28.96	5.89	8.08
4	501 - 1000	20.30	20.86	10.61	12.31
5	1001 - 1500	8.62	9.15	7.76	9.29
6	1501 - 2000	4.53	4.93	5.76	7.08
7	2001 - 2500	2.65	2.97	4.36	5.51
8	2501 - 3000	1.76	1.93	3.55	4.39
9	3001 - 4000	2.17	2.32	5.52	6.65
10	4001 - 5000	1.29	1.33	4.23	4.92
11	5001 - 7000	1.51	1.45	6.58	7.10
12	7001 - 10000	1.16	1.02	7.12	7.06
13	Above 10000	2.05	1.49	35.31	25.99

Source: Govt. of India, Department of Telecom, Indian Telecom Statistics 1991 and 2002.

The source of revenue coming from various forms is furnished in the Table-11.

Year	Rental including Misc charges, shifting, installation etc.	% to the Total Revenue	Local Call Charges Including STD Calls	% to the Total Revenue	Trunk Call Revenue	% to the Total Revenue	Total Revenue From all Sources.
1	2	3	4	5	6	7	8
1982-83	273.92	34	330.56	41	203.02	25	807.50
1983-84	307.25	34	355.88	40	235.10	26	898.23
1984-85	334.51	33	412.99	41	254.94	25	1005.44
1985-86	367.90	33	489.31	43	269.32	24	1126.53
1986-87	430.62	32	629.50	46	304.17	22	1364.29
1987-88	486.28	26	1023.65	54	390.08	20	1900.01
1988-89	711.85	27	1476.60	56	443.39	17	263.18
1989-90	734.13	24	1852.03	60	477.86	16	3064.02
1990-91	867.74	24	2267.86	62	550.90	14	3686.50
1991-92	979.71	22	2874.91	65	597.65	13	4452.27

Source: Govt. of India, DoT, Indian Telecom Financial Statistics 1990 & 1993

Note: The figures shown from 1986-87 onwards include MTNL.



The International trend showing the income from telephone, installation and rentals per line of selected countries could be gauged from the figures shown in Table-12

Table-12 Status of Telecom services for having Larger Network.				
(Figures in US \$ as in 1998, per annum)				
Countries	Installation	Local Call	Revenue Per line	Investment Per Line
1	2	3	4	5
India	22	0.02	284	135
China	226	0.01	235	207
UK	164	0.2	1128	7453
Korea	71	0.03	5.33	396
Low income countries	93	0.08	391	166
World	109	0.09	871	215

Source: From World Telecom indicators-1998/GOI, DoT, Perspective Plan for Telecom Services 2000-2010.

A comparison, in general of various parameters where India differed to other countries regarding the issues of pricing are listed in Table-13 below.

Table-13 Comparison of various parameters on Telecom Pricing with other countries. ¹			
Sl. No.	Parameters	Distinction	Remarks
01	Type of subscribers	A broad -differential Pricing between commercial and residential subscribers was followed	By cross subsidizing , the household sector benefited.
02	Subscription Charges.	Lower than developed countries, but comparable with underdeveloped countries.	India had one of the highest ratios of subscription cost of per capita income in the World
03	Distance based tariff structure	Growing incidence of lowering of distance based tariff structure across the globe.	India was attempting to adhere to distance based tariff structure less related to tariff. Japan on the other hand , was flattening the tariff structure by keeping it independent of the distance of call transmission.

International Subscribers Dialing (ISD) rates applicable to India are comparable with those of most Countries in that period. ISD rates were being reduced in most of the developed Countries during that period.



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The average revenue per DEL, p.m. in 1985-86, 1990-91 and 1998-99 were Rs 303/- Rs 562/- and Rs 843/- respectively.

Thus in the overall analysis it is seen that the traffic factors that generated a substantial fraction of total revenue (from telephones) are

- Long distance calls
- Metro cities
- Small proportion of subscribers
- Trade/commercial oriented usage.

The impact of the above on the position of revenue indicates that approximately 65 percent of the revenue emanates from local call charges including STD as shown in the Table-14 and the percentage of this revenue had increased from 41 percent in 1982-83 to 65 percent in 1991-92.

The point to be considered is whether the given trend of revenue generation was sufficient to meet the budgetary requirements in the Plan periods. The Table-14 shows that the magnitude of internal resource generation constitutes of 80 percent of the total outlay.

Table-14. Financial outlays and funding for 9th and 10th Plan						
Source	8 th Plan		9 th Plan		10 th Plan	
	Rs. Crores	% to the Total	Rs. Crores	% to The Total	Rs. Crores	% to The Total
Outlay	19700		69856		132420	
Internal Resources	15500	79	56933	82	132420	100
Market Borrowing	3000	21	12923	18	-	
Budgetary Support	Nil		Nil		Nil	

Source: Govt. of India, DoT Perspective Plan for Telecom Services (1970-2007)

7. RESULT AND CONCLUSION.

7.1 Tariff Structure:

From the above discussions, the following conclusion is drawn on the tariff structure of DoT existed up to 1999

- (i) Telecom Tariffs include a deposit at the time of registration, a non reimbursable fee for initial connections, bi-monthly rentals whose amount depends on the capacity of the local network size, charges for local calls (in excess of free calls), charges for national and international calls, charges for manual trunk calls and miscellaneous charges (including one year rental



being kept as a deposit). The basis for this structure of tariff could not be inferred.

- (ii) Two systems for charging tariffs were used, a flat rate and a measured rate. Under the former, the subscribers had to pay a fixed monthly rental irrespective of the number of calls made. In the latter, the subscriber was charged a lower rental plus a usage charge per call. This system was followed not because of cost relation but for budget and financial requirements.
- (iii) STD calls were metered and charged according to the specified formula based on the time when the call is made and the distance covered by the calls. This pattern was used as a means of getting higher revenue. Higher the distance, higher the tariff, which is not relevant in these days of technological innovation where distance is not relevant to fixing telecom pricing worldwide.
- (iv) Tariffs have normally focused on revenue and social objectives.
- (v) The tariff shows a sharp rise in tariffs as distance increases. Moreover, there were escalating tariffs, i.e. higher the number of calls made by the user, the higher is the tariff.
- (vi) Rental was subsidized in general. Even the highest rental charged was significantly below the estimated rental that will cover costs.
- (vii) The tariff structure had multiple slabs based on distance, time and usage.
- (viii) Bi-monthly subscription charges vary with the size of the exchange. There were 7 price slabs for subscription charges.
- (ix) Per unit charges varied with the distance, usage and time of the day when a call is made.
- (x) For domestic calls there were 8 distances based price slabs and 2 time zones. In addition, there were 4 usage-based pricing slabs with a higher variable charge for higher usage.
- (xi) There was no difference in the tariff for commercial and residential subscribers. Installation charges were also the same across the board for all user categories.
- (xii) Deposit schemes vary based on the time taken to install a telephone line (Tatkal schemes and OYT etc.).

7.2. The principles followed in Tariff regulated by TRAI.

Though the independent regulator, the TRAI came into being in 1997, the first tariff order, the Telecom Tariff Order (TTO) 1999 was notified and followed with effect from May 1999. (The DoT was corporatized with effect from 01-10-2000)



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The TRAI felt at the time of notification of the TTO that historically, the local call charges and rentals had been kept below cost in the interest of affordability and were cross subsidized by long distance charges and it is difficult to alter a tariff structure based on above consideration all of a sudden.

Further, the TRAI observed that, with such a tariff structure, a small subscriber base provides majority of the revenue, and if competition were allowed, the new entrant would initially focus mainly on this small base of subscribers who account for higher revenue. This will make it difficult for the incumbent to sustain its revenue surplus and subscriber base.

With the view to mitigate the burden of adjustment on the incumbent and to maintain a level playing field for all service providers a need was felt by TRAI to re-balance tariffs for basic services i.e. to increase rent / local call charges and decrease long distance call charges. The TTO 1999 was spread over three years.

As it is mandatory for all the telecom operators to follow the Tariff prescribed by the TRAI, including the Government owned BSNL, the tariff structure/aspects fixed by TRAI has not been gone into details.

8. CONCLUSION:

It is concluded from the above study that the tariffs were revised periodically by the DoT by making changes in the charges for rentals, free calls, call charges etc. No clear justification for making these changes could be gauged from the pattern of modifications made. It shows that there were demands for investment and these demands were met by raising internal resources. By taking this point of evidence, in the absence of any spelt out policy by the DoT, we can draw a conclusion that the pricing policies followed by DoT in all the decades until the TRAI prescribed the first Telecom Tariff Order (TTO) in 1999 was focused on revenue and social objective and not related to the economic principles of fixing prices, that is merely it was an “Administered pricing mechanism”.

End Notes:

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**BOUNDS OF CORPORATE THEORY : DEVELOPMENT PROCESS,
PRINCIPLES, PRACTICES AND DEVIATIONS**

P Chattopadhyay

Abstract

Corporate theory is concerned with defining irrationally behind the formation of companies which complies a whole greater than the sum of its parts. This development process lends support to what the Chief Justice of American Supreme Court underlined as a corporate citizen distinct from the entire body of other stakeholders. This was in early eighteenth century much before the solemn state. Corporate theory has many elements that practically defined successful team effort.

Key Words : *Corporate, Theory, Discrete Personality, Collective Capital, Managerialism.*

DEVELOPMENT PROCESS

Development of the joint stock companies has had a long, bumpy and belligerent history, the dramatis personae being the law makers, law courts and the concerned members of the public constituting a triangle of forces that witnessed over time several changes in the foci depending on the pushes and pulls exerted by each of the players. The expanding horizons of the British empire and the Industrial Revolution in Great Britain heralded by the Steam Engine, as also the opening up of the respective economies, triggered a large number of opportunities on different fronts. The prosperity of trade and industry was profound but for cashing in on the opportunities a huge quantum of investment had to be garnered to benefit from, them[1].

It was impossible for a few to muster such gigantic requirements of capital both within Great Britain and overseas. More importantly, it was found essential to raise capital from widely scattered sources, may be in small quantities from each source but adding up to a huge total. While entrepreneurs were on a fund raising spree, it was found essential to ensure deployment of means not only to guarantee the safety of capital employed, but also to ensure proper deployment of such capital, garnered from wide-spread sources[2].

Both propriety and efficiency thus mattered significantly. The members of the public themselves often had a rather contrasting motivation seeking to benefit

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from investing in the joint stock companies springing up in large numbers and vanishing into thin air after collecting large sums from the people at large. Adam Smith whose seminal work, *The Wealth of Nations*, appeared in 1776, did not believe in companies as a discrete form of enterprise and his comments centred on what he called co-partnery [3]. His adverse comments on the company as a discrete form derived strength from what was going on in his time.

The Bubble Act of 1720[4] sought to protect the all and sundry investors; the Act had a tenure of one hundred five years before it was repealed in 1825. The background of the joint stock company thus had a chequered process of development that lent corporate theory both its strengths and weaknesses. The long process of development of joint stock company[5] and its utterly gradual development as a distinct form of enterprise endowed the institution with several characteristic features which were both reactive and pro-active in nature. The conspectus of corporate theory is integrally connected with the continuous ups and downs caused by the contending parties on one hand, and the law and the law courts on the other. The law enacted by the British Parliament and the judgements passed by the House of Lords espoused approaches discrete from one another in resolving disputes [6]. Corporate theory acknowledges this dichotomy of approaches and the series of cases decided by Courts in different countries starting with Great Britain which unleashed the Industrial Revolution in the first place. It may be mentioned in this context that while the Industrial Revolution did take place in Great Britain, it was in the USA where the Managerial Revolution occurred. The features of managerial revolution in India have been highlighted by us elsewhere [7]. The establishment of secondary institutions[8] for the hallowed purposes of keeping the operations of companies on track and, above all, the law courts, both within the country and abroad, for intervening for resolving disputes of various imports have in fact made the appreciation of corporate laws and regulations in their applicational dimensions anything but clear-cut [9]. The challenge-response continuum not only delayed the process of enacting a comprehensive legislation in one shot but also sought to offer solutions to the problems faced by the participants in the game marked by cross-currents of umpteen problems faced in practice and solutions sought. This resulted in loss of perspective and qualities of anticipation of the nature and magnitude of developments in the world of industry and business so that the law could have accommodated within its fold the much awaited objectivity in the framework [10]. The impermanence of the various provisions of the law not only created confusion and multiplicity of disputes that the law was supposed to solve, the company law itself had to undergo substantive changes to better respond to the points of order found wanting in dispute-resolution, requiring intervention of



courts. Nonetheless, it can hardly be denied that all the contrarian strands of views and approaches have together enriched corporate theory, informing it with better comprehension of tit-bits albeit occasional aberrations both in the enactments and the court judgements, in different countries of the British empire. This paper has in view highlighting some of these themes and variations that have impacted corporate theory and practice in different countries on one hand, and the ways in which corporate practices have shaped themselves within the perimeters thus outlined, on the other. The parameters of corporate management have found their impetus in the growing complexities in the market place infested by competitors and substitutes in the rather lax regulatory measures put into vogue and the growing hiatus between law and practice.

PRINCIPLES

The birth certificate of a company is its Certificate of Incorporation granted by the designated authority on the basis of the Memorandum of Association, that includes particulars regarding the name of the company with a specific mention of the word limited, address, objects of the company, authorized capital and signatories to the Memorandum, with particulars of their names, addresses and their subscription to the share capital of the company. The minimum number of members for a public limited company is seven and the maximum is unlimited. The other important document is the Articles of Association which delineates the internal management system of the company and the operation of the Corporate Seal which is an essential concomitant for binding the company in contractual relationship with the outside world. This underscores the first principle of corporate personality or body corporate. Which means that the company cannot pay more than what it possesses and that the liability of members is limited to the unpaid portion of the face value of shares as against the paid up portion. The process of development of joint stock companies underlines that they embody a large number of principles right from the very date of their inception. First of all, the principle of mass, i.e., 'many a little makes a mickle'. That small contributions of individuals make for a big total, capable of absorbing the shocks implied by the requirements of gargantuan sums of investment has remained a plus point in this regard. Share Capital is, however, not merely a one-time contribution insofar as it involves a possibility of recharging by way of a gap between the Authorized Share Capital and Subscribed and Paid-up Share Capital. Even the Authorized Share Capital limits can be raised depending on the changing requirements of industry and business. On the other hand, if a shareholder at any time feels burdened with the holdings, he is in a position to unload them in the stock exchanges. Companies are also in a position to deploy funds generated internally through the internal finance mechanism that many a company takes to. All this is



in response to the flexible financing needs as new opportunities open up, both in the existing pastures and in the new ones. The second principle, rather subdued according to the vogue scheme of things, is that corporate property is owned by the company itself, not by the shareholders, as it enjoys perpetual succession. The company that enjoys perpetual succession also remains a going concern perpetually. The hullabaloo on this count is entirely irrelevant. To make this a worthwhile proposition, it follows that a company must generate surplus from its operations – after all the other factors of production have been remunerated. This may sound odd but it is true and the proposition works in the same way as it applies to an automobile – barring the chassis, all other parts of it can be changed – barring the name of the company all other elements can be changed. The company can change its line of activity, its markets, its Board and its management while still remaining the same company. The dissolution question from this point of view is redundant; on the same plane, mergers and acquisitions or take-over, or even holding company ideas are also illogical and unwarranted, belittling as it does the very idea of perpetuity of the corporate being. The third principle concerns the fact that as a product of the law, the company functions as a social institution[8] existing for the avowed social purpose of engaging in economic performance, effectively and efficiently deploying the resources placed at its command, underlining that a company is not only expected to do things rightly, it must also do the right things. This in fact is the crux of the whole proposition related to the company's performance, and it is in this respect that most companies are found wanting - both big and small. A large number of products, inputs and processes would not pass the test. The fourth principle of ultra vires relates to corporate laws enacted in many countries going beyond the perimeters of established principles in court cases in almost all countries, in effect creating a dichotomy of approaches and a mixing up of issues. Courts in most countries are quite clear, consistent and emphatic that in the eye of law, company is discrete from its shareholders and all other stake holders in and around it[9]. As a social institution, it cannot commit any action, or rest in inaction, not sanctioned by society. The fifth, last and most significant principle is that corporate accounts must necessarily present details which are true and correct, supported by evidence. All the estimated figures contributing to what constitutes, and is accepted as, fairness, can be called to question on various grounds, notably the issues related to the dressing up of the figures presented in a manner that they look better than they really are. Withholding key information and presenting manipulated details have become common which the unwary shareholders are hardly in a position to decipher. Sophisticated sleight of hands ensure that the contents of these documents hide more than they disclose.



ADDRESSEES OF CORPORATE ANNUAL ACCOUNTS AND REPORTS

The context of corporate accounts and addressees of corporate annual reports would acquire a new significance when these are addressed to the law and the government primarily as the summation of the year's, rather than to shareholders. Their contents require overhaul in the sense that all significant entries must have evidential support. On the other hand, the idea of fairness, that has become the order of the day, is inexact and it contains elements that are not much better than guesstimation. More significantly, the content of fairness in the figures presented conveys different messages to different people and may adversely affect comparability among companies at any point in time and over time. It may be recalled that comparability of the figures presented is a fundamental issue in both theory and practice of corporate accounting. The present approaches to standards[11] and the dressing up of figures appearing in the accounts have willy-nilly encouraged the play of shenanigans. The Mark to market[12] proposition adopted by Enron violated all accounting conventions and virtually shook the confidence of the people through the maze of deceit in which the company indulged. It may be relevant to mention that many economic performance of these approaches are based on striking the numbers in the stock market as Barney Ebbers of WorldCom or Ken Lay of Enron[13] stressed ultimately led to the downfall of these world famous companies. Moreover, both the standards and the stock-market orientation are based on the supposition that shareholders own the company even when it is a going concern, and even when they have figured more as fugacious entities, surfacing mainly on the record date for declaration of dividend, half-yearly or yearly. It is, therefore, not entirely surprising that the number of corporate disputes has been on the rise and their pretexts have been varied and complicated[13]. It is significant to note that the courts have displayed a remarkable consistency of approach, barring of course some minor aberrations, such as 'lifting the veil' denoting that the company in question, the State Trading Company of India Ltd., was operating under a veil[14]. It is submitted that such instances are generally not found either in the company law or in its the day-to-day administration. Vested interests have virtually come in the way of objective approaches, leading the aggrieved to seek succour in law courts or openly agitating against the goings on as evidenced by the recent revolt on the Wall Street in the USA. The core idea of, and the stress on, the perfect market has all this while remained illusory. The afore-stated account is but a thumb-nail sketch of the process of metamorphosis through which joint stock companies have passed during the last two hundred years, albeit the fact that they are yet to find their feet on strong ground. The problems have been manifold and they begin with the process of incorporation itself and the definitive issues included in the MOA and AOA. Genuine attempts at finding solutions have been few and far between.



GRADUATION FROM EXPERIENCE

The principles referred to have virtually been graduates from experience, both jointly and severally. These have been termed principles in preference to doctrines or convention for three main reasons. One, unlike doctrines, these principles have not been superimposed. Secondly, these have not been called conventions because these principles have had a much sounder rationale than merely common practices adopted by companies. Lastly, these are called principles rather than doctrines or conventions because these are not unrelated virtues conjured up for sidetracking the dictates of common interest; rather these are generalizations that have stood the test of time, seeking to provide a platform good enough to withstand the relentless pressure that the business world generates as a normal course, under the new dispensation ushered in by the revolutionary changes in terms of numerous new inputs, new outputs and new technology, apart from a series of new services. These principles are reinforced by the fact that they have stood the test of time and they support the idea of discrete identity and interest of companies to live a healthy perpetual existence. These are at once their virtue and vice in themselves mainly because the companies are incorporeal beings and have to yield results through others' efforts. This does not mean they do not exist or that they are but fictitious persons. They are not merely juristic persons recognized only in the courts of law. They are virtually a lot more, as functional beings having discrete interest of their own. Many facts and facets of day-to-day experience contributed to their shaping up to a stature that they are today, despite numerous contrary forces that have tended to smear their clearer image. It was not for nothing that companies were recognized as such since long, even though they did not have a tangible body mass. They were recognized as natural citizens by the Chief Justice of the American Supreme Court in the late 1880s, despite their incorporeal state, almost a decade earlier than the celebrated *Saloman vs. Saloman & Co., Ltd.*, case in 1897.

The tenets of corporate theory have not been manifest in the corporate world. It is surprising that even private limited companies and partnership firms have been treated on about the same as regards their compliance with the relevant provisions of the respective laws and the surveillance exercised over their operations.

MUDDLED WORLD OF COMPANIES

Over the last three hundred years and more, a lot has been said and heard about business ethics especially with reference to the functioning of the corporate world in different lines of activities embracing garnering and deployment of capital, management of physical, financial and human resources placed at the command of those on the saddle, as also an acceptable and satisfactory dispensation of



factor remuneration – all figuring in the context of what is called social forensics. Creation of wealth being the motto, its just and equitable distribution all along remained a primary objective. Corporate theory remained concentric to generating the desired ambience in the relationships with both the internal and external phenomena that the functioning of all corporate bodies implied. In this specific context, it may also be mentioned that the evolution of the concept and philosophy of the corporation has hardly been unidirectional, as different intellectual disciplines struggled to contribute their mite to shaping corporate theory, corporate policy and techniques of measurement of corporate performance, with special respect to what their proponents thought was logical. In fact, several of these disciplines are not prepared even now to accord the corporation a discrete identity and are content with calling the corporate bodies only as structures of relationships and as associations of persons for achieving a common purpose. In contradistinction with this stand, corporate laws in all countries have asserted that the company possesses a discrete personality of its own and it is endowed with characteristic features that underline its singularity in unequivocal terms. Recognition of these features would have stressed those very ethical standpoints and would have nullified many a term and management policy component doing the rounds in the corporate world. While the Bubble Act of 1720 was still in force, Adam Smith rejected the concept of limited liability as a disreputable subterfuge for evading payment of debts. If the law stuck to the ethical principles, much of what goes on in the corporate world would have been nixed. Most of the significant court judgments seeking to infuse reason into the corporate laws and practices have not been followed in letter and in spirit. The result is quite visible insofar as the omnibus corporate legislations in most countries have willy-nilly allowed several aberrations that would not subscribe to reason. The innumerable views, observations and even birth of new intellectual disciplines have tended to blur the required clarity of approaches.

OVERCROWDING OF VIEWS - OFTEN CONTRADICTING EACH OTHER

The result of all this has been that there has been an overcrowding of views and theories overtly at variance with one another, creating confusions all around. The stand taken by the judiciary – though quite logical and consistent in itself - has not found wide and universal acceptance by the various intellectual disciplines – at war among themselves for a ringside seat, so to say. Consideration of business ethics in their different ramifications, as an integral part of the continuing power play by these different intellectual disciplines, virtually undermining the social forensics. All this has, in the circumstances, remained under a cloud for a long time. Corporate singularity versus corporate pluralism is a debate having many



discussants bolstering each viewpoint they espouse, but the raging controversy is not over yet. The maze of views has added to the confusion all around, worse confounded by the weight that each of them has sought to command. Business ethics, it may be argued, in the same context, does not really underline a superimposition of foreign values on business, as many seem to imply. Business ethics, as propounded by the corporate bodies, is embedded in the concept of the corporation itself, as much as it implies a clearer understanding of the foundations of business as it ramifies in different lines of activities. From the generic concept of business – without regard to the variegated functions that business performs, different scales of operation and the variety of forms of organization - as understood mainly in terms of engaging in the formal, transactional relationships among different parties, if one were to highlight the ethical foundations of a corporate being, one would come up against several considerations that do not figure in common parlance. Following the rules of the game, keeping one's word, respecting the commitments made and the inculcation of a spirit of give and take within the bounds of the law and the business mores, are what the world of business calls ethical practice as a kind of working definition of the term. Even in this regard, the controversy between social good and private profit has for long remained unresolved though ethical considerations, as a matter of debate, would not clash with the idea of generation of surplus from operations, because profit, in the last analysis, is a factor remuneration, very much like rent for land, wages for labour and interest for capital. Problems arise when shareholders entertain the illusion that they are owners of corporate property and start holding the reins on the basis of majority shareholding and consider companies as their fiefdoms. In such conditions playing Dr Jekyll and Mr Hyde is common.

OWNING SHARES AND OWNING CORPORATE PROPERTY

The point that owning shares and owning property are entirely different things, is easily brushed aside despite the fact that several corporate management thinkers have underscored that the obtaining confusion is at the root of many an unwholesome step both by the companies and the government. Peter F. Drucker insists that the shares are certificates the ownership of which is legitimate and the shares are tradable[16]. In the circumstances, eating the cake and having it can hardly be an acceptable proposition. Most shareholders in most countries have become share traders rather than shareholders, holding shares for gain in the stock market, buying them in a falling market and unloading them when share prices rise. Not only that shareholders the world over have shown no patience for holding shares for some time, at least for getting the dividend declared, they have shown much greater keenness for cashing in on the dividend-induced rise in share prices, even without waiting for the dividend as such. Dividends on their part have only



been one among several other factors that play their part in causing rise or fall in share prices. Owning shares and owning corporate property have remained bones of contention, more so because as long as the company is a going concern – and in our view it remains so perpetually – the shareholder is not allowed to dabble or interfere in the affairs of the company. Business ethics and family control also do not go together easily, as family considerations get primacy rather than management by objectives and techniques. From the points of view of a corporation, the issues are more complicated and the long history of development of the corporate concept has, in many ways, shaped and acuminated its operational spheres, its relationships with the outside world and its submission to professional surveillance. While the legal issues comprising the coded laws and the case laws have sought to be responsive to requirements for equipping companies with necessary powers and defining corresponding responsibilities, enunciating among others the structural-functional framework, nonetheless, the practical world of business is fraught with instances of deviance of different magnitudes and implications with respect to both the internal organization and the externalities. If shareholders are considered owners of a company, all the other considerations regarding their social significance become idle talks. Theoretically and functionally, these are not so, despite the pressure exerted by promoters and other shareholders. Their positions are entirely different in the United States where states have the right to issue Certificates of Incorporation and there are differences in practices among the states that initiate scrambles among promoters to establish companies and get Certificates of Incorporation from one state in preference to another. The position is different in the UK and India and other Commonwealth countries where the authority in this respect is unified. However, the large public limited companies serve communities they penetrate in different ways. The numbers of people dependent on them for jobs, directly and indirectly, their contribution to civic financing, the way they shape the physical contours and traffic patterns of the locality, their effects on the natural environment and more subtle consequences give them a special presence in the community, are benefits that such companies bring in their trail. Their decisions to curtail, maintain or expand operations have both an immediate impact and a longer term effect on culture, shaping it to reinforce their position as institutions[17]. Their functioning in the vicinage has without doubt substantially contributed to the physical, economic and social transformation, injecting a new meaning into the social system, heralding the emergence of new leadership and helping to change the desolate expanses of land into budding cities. By any count, this is not a small matter.



HIGHLIGHTS AND ROUNDING UP

A close scrutiny of the corporate theory and the bits attending on it would underline that the elements of the theory have not been fully appreciated in practice and there is still the question of minority shareholders, family control and the totally mistaken notion that a company is a private institution rather than public. The so-called issue of social responsibility becomes meaningless if the inherent social character of the company is recognized. First of all, it calls for recognition that a corporation as a separate entity is virtually a social institution, implying that it exists for generating value to society, not necessarily to shareholders as a separate class and it functions for the benefit of society by converting gifts of nature into consumables. The law has recognized its discrete entity long back, but the community of non-believers is also quite large and growing. They stress that the corporation is only an association of persons existing for a common purpose, not taking into view that this, association is holistic, like the limbs of the human body. Secondly, a corporation exists for the creation of value to society – by way of providing employment, generating surplus from its operations, producing goods acceptable and beneficial to society, creating markets and raising standards of living of the people at large. Thirdly, the ethical foundation of a corporation is strongly laid down by the codes of law under which it is incorporated, that gives it the status of a citizen despite its incorporeal nature, that stresses the fact that in this capacity it not only should not do something unacceptable to society but it should have, instead, a direct and positive attitude to betterment of life and living in the milieu, not as an act of philanthropy but as a business objective itself. It is an axiom that profits arise in the market place and, purchasing power of the people demonstrated in markets are a direct off-shoot of incomes generated among the people. Fourthly, various products and services offered in the markets must necessarily conform to standards that ensure that they do not have any ill-effects directly or indirectly, are at a reasonable price and are free from any deception as regards quality, weight, harmful contents, side effects, etc. Lastly and significantly, the corporation as a concept, as a product of the law and as a functional being, is not fictitious at all; the only difference from a natural person is that it operates on the basis of a birth certificate called the Certificate of Incorporation, a charter of its gambit of operations called the Memorandum of Association, and through others, its employees whose conduct day to day is defined and delimited by a document called the Articles of Association on the basis of submission of which the Certificate of Incorporation is granted. The corporation binds itself in all matters of contractual relationships either with the outside world or with the world inside through the operation of the Seal by persons authorized and named as such in the Articles of Association. This is again a signpost of ethical consideration in itself, such as a high-value acquist of another company which is tantamount to enslaving one company by another. Corporate



theory does not approve of such actions. As a distinct entity with perpetual succession, the joint stock company operates for ensuring that its perpetuity becomes meaningful, subserving social interests as a normal course of operation. Social responsibility is ingrained in its very essentials.

CORPORATE SOCIAL REPORTING

Corporate theory underscores that corporate profit is social profit, not private profit. Long back the AICPA Committee on Social Measurement identified the likely future directions corporate social reports will take [18]:

- 1 Disclosure of social information will ultimately become a regular feature of corporate annual reporting;
- 2 The method of disclosure will become more standardized – probably as a separate social report or as a separate section of a report containing both social and financial information;
- 3 The information covered in social reports will also become more standardized. All companies will, at a minimum, include their actions in respect to certain specified areas of social concern;
- 4 As techniques for making quantitative measurements improve, an increasing amount of quantitative information will be presented. However, some purely verbal description may always be expected; and
- 5 Corporations will begin presenting more comparisons – with their own past experience, government standards and industry norms.

Though it is incorporeal in nature, its operations touch every section of society in the general uplift caused in very many ways. Its employees do not act as agents in the formal sense, insofar as contracts entered into by them do not as a normal course figure as binding on the company until the agreement, or order, is put in black and white and the seal of the company is embossed thereon by the authorized signatory as provided in the Articles of Association. As a product of the law, it has to abide by social dictates and to remain an open book, but not requiring the series of steps that government seeks to include in the law; they come naturally. The principles referred to earlier have graduated from experience, passing the test in a series of challenge and change. Happenings in the stock exchanges do not generally affect its mode of functioning in the normal conditions, nor the status of its share capital except when the company goes for IPO. The unlimited potential of joint stock companies is still waiting for fruition, as a social mechanism for realization of public purpose. The mix-up of different interests and hankering after easy gain have shifted the major entrepreneurial interests from the start-up of industries to take over of running and profitable companies for nipping competition or enhancing market share.

**Endnotes & References:**

1. P. Chattopadhyay, 'Corporate Personality', Commerce Annual, Bombay, 1966.
2. Ibid. The formation of the joint stock company was accompanied by corporate audit and labour guilds.
3. The Bubble Act was related to the turmoil created by the deceit in the South Sea Company requiring the British Government to intervene by enacting the Bubble Act of 1720 intended to discipline the players in the game. It is not that the British Government was able to put an end to the widespread malpractices in one shot but that it marked Government's intervention for limiting and foreclosing widespread malpractices.
4. Adam Smith did not have faith in the joint stock company as a discrete form of enterprise and he branded the company as co-partnership underlining the pluralism rather than its singularity. He underlined that 'the butcher, the baker, the candle stick maker – all seeking their private gain – were contributing to the national wealth and thus serving a public purpose. In serving a public purpose, they, too, merited the advantages of incorporation. In short, private enterprise had become public purpose'. The observations of Smith were at a time when the Bubble Act was still in force. A good many changes did occur in later years when the Companies Act in Britain started better responding to the emerging complexities. In the United States, the notion that private profit seeking gave ample rationale to this more open access to the corporate form, with its attendant advantages. Cf. Neil W. Chamberlain, Social Strategy and Corporate Structure, Macmillan Publishing Co. Inc., New York, 1982, p.3.
5. The Companies Act in England underwent several changes for better responding to the emerging situation requiring formalization, sorting out any inadequacy or inconsistency and for achieving better responsiveness in the conduct of trade, commerce and industry. While these processes followed a pattern there, in the USA the situation was more complicated because all states did not follow the same line or law and interstate differences emerged many of which have continued till to-day, though obtaining the Certificate of Incorporation from one state would allow them to operate in all states, giving rise to assessing comparative advantage.
6. While the courts of law the world over have recognized the singularity of the company, the laws in different countries have allowed intrusion of



pluralism, the voting rights going by the dictum, one share one vote, rather than one shareholder one vote, oppression of minority shareholders by majority shareholders and what more, addressing a company in the plural, forgetting that in the eye of law, the company is a person, distinct from all other stake holders. This in effect rules out the incorporation of private limited companies, unlimited companies and companies limited by guarantee. A body corporate logically implies that it cannot pay more than what it possesses and limited liability primarily underscores that of the company; the shareholders' liability is limited to the face value of the shares held by them. All this gives primacy to the company rather than its shareholders. Accepting corporate property as virtual public property, rather than private, the corporate laws should have accommodated cognate provisions.

7. Cf. James Burnham, *The Managerial Revolution*, Indiana University Press, Bloomington, 1941. The emerging class of managers and management as a system as also the significance of the emerging managerial class received the focus of attention in this study. Earlier, F. W. Taylor's *Principles of Scientific Management*, that appeared in 1911 also took American industry by storm, followed by French and British thinkers like Henri Fayol, Mary Parker Follet and others. The formalized thinking on management and its emergence as a specialism in the USA, UK and other countries of the north and south. The story of the promotion of Management as a discrete area of focus to be branded as Managerialism has not been a bed of roses at all. F.W. Taylor had to depose before a Senate Committee against the charge that Scientific Management was inefficient and costly. Somehow he came out of it unscathed. The Indian situation was also somewhat muddled by a number of contrasts that came in the way of the promotion of scientificity in management practices. Unlike its birth place, the USA, the Indian situation was marked by a slow pace in the process of introducing professionalism, partly because of the dominance of institutions like the managing agency and partly because of family control, making fun with the concept of discrete existence of corporate entities. Cf. P. Chattopadhyay, 'Managerial Revolution in India', part I, *Indian Management*, Journal of the All India Management Association, New Delhi, March-April, 1969 and Part II, May-June, 1969.
8. The secondary institutions like the SEC in the USA and SEBI in India have the avowed purpose of acting as watchdogs of the implementation of the cognate laws and regulations in day-to-day operations especially with respect to both the secondary and the primary stock markets. These



institutions issue guidelines for compliance by the companies. The listing of public limited companies with the secondary institution in India is, however, not compulsory; and many a company is known to have applied for delisting to escape the glare of surveillance exercised by these institutions. Despite legal measures and compliance requirements clearly laid down in the corporate laws and the guidelines issued by the secondary institutions, several disputes do arise that require the intervention of the courts. The number of corporate disputes on different issues has been substantial. Several of these disputes are resolved by the Company Law Board but many others are brought before the designated Benches of High Courts for resolution on appeal.

- 9 While the propensity on the part of listed companies to escape the glare that the scrutiny by the secondary institutions implies, on their part, these institutions have devised mechanisms which involve detailed scrutiny of the periodical returns in compliance with the elaborate guidelines which are tedious and repetitive. These are in addition to the periodical returns in compliance with the provisions in the Act itself. Together the replies to the respective returns are time-consuming and costly. The advantages arising therefrom appear paltry. It was not for nothing that many listed companies raised their voices against all this. These are also reasons why only about 10-12% of the total number of public limited are listed with the stock exchanges. As public properties, rather than private, it is but logical to emphasize that hundred per cent of the public limited companies should be listed while the methods of surveillance should be, regular, systematic and penetrating. All instances of deviance should be taken seriously while quality compliance along with annual performance should be rewarded. A carrot and stick policy in this respect should work much better than the obtaining attitudes of the company law authorities and the secondary institutions.
- 10 For instance, both SEBI and the Ministry of Corporate Affairs complained of a mix-up of their respective responsibilities as delineated by the SEBI Act and the Companies Act. Jurisdictional conflict, it may be stressed, can mar each other's practical effectiveness. Unless both of them act in concert, compliance with the law and the regulations would hardly be flawless and free of duplication of efforts to be ultimately reflected in compliance. The loss of perspective is manifest in the number of amendments to the Companies Act, 1956 since the enactment. It may be stressed that barring some, most of these amendments could have been avoided. Too many amendments make the picture unstable.



11. Standards to be worth the term, have to have some essential qualities like their being relatively few in number, their stability, verifiability and comparability. Too many of them create problems. In fact, Professor R J. Chambers expressed the view that too many standards were no standards at all. The standards have shown the propensity to multiply, so much so that they have become a specialism in themselves, forgetting their role as yardsticks.
12. Mark to market is a way pricing products on the basis of prices ruling at a future date with no guarantee of its veracity. This spelt the ruin of Enron.
13. The story of misdemeanour of Ebbers and Lay has been given in some detail in P. Chattopadhyay, Corporate Misgovernance, IAARF, Calcutta University, 2008.
14. Shareholding in the countries of north and south has figured more as share trading because of the fugacious character of shareholders figuring on the record date, for receiving dividend and then is heard no more.
15. The famous judgement delivered by Mr Justice Gajendra Gadkar in the STC Case that suggested that companies operated under a veil which required piercing, to find out the offenders, the managers responsible, in evading sales tax.
16. “The only purpose still served today by the legal fiction of the investor's ownership is to make it possible for one man or for a small group of men to obtain managerial control of a huge enterprise by buying a minute fraction of its stock – absolute control in some cases rests on ownership of less than one per cent of the stock.” Cf. Peter F. Drucker, *The New Society: The Anatomy of the Industrial Order*, William Heinemann Ltd., London, 1951, p. 320.
17. Cf. Neil W. Chamberlain, *Social Strategy and Corporate Structure*, Macmillan Publishing Co. Inc., New York, 1982, p. 93.
18 Ibid. p. 87.



CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE LINKAGE: STUDY OF INDIAN BANKING SECTOR

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Abstract

This paper attempts to examine the linkage between corporate social responsibility (CSR) and corporate financial performance (CFP) in the Indian banking sector. For this study, a sample size of 12 listed public and private banks has been selected from CNX Bank Index of NSE. Corporate social performance (CSP) for sample banks has been calculated on the basis of activities performed by banks in specific CSR areas like Environment Protection, Community Welfare, Education, Women Welfare, Farmers' Welfare, Priority Sector lending and Financial Literacy. In order to measure corporate financial performance, ratios like RONW, NIM and CAR have been used. Annual reports of the banks have been used to get required data on CSR and CFP. To statistical analysis the data, Pearson correlation, T-test and regression model are used. Empirical results indicate that there is no significant relationship between the Corporate Social Responsibility and Corporate Financial Performance in Indian banking sector.

Key Words : *Corporate Social Responsibility (CSR), Corporate Social Performance (CSP), Corporate Financial Performance (CFP), Indian Banking Sector.*

The paper is divided into five different sections:

Section I covers a brief introduction to the topic. Section II reviews the existing related literature on the study. Section III gives research objective of this study and methodology used. Section IV presents the results and discussion of the study. Last but not the least, Section V concludes the paper along with limitations of the present study and scope for further research.

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SECTION-I : INTRODUCTION

Changes in the global environment increasingly challenge business around the world to look beyond financial performance and to integrate social and environmental concerns into their strategic management. Three Ps i.e. People, Profit and Planet are getting more attention now in the corporate decision making (Kakabadse, 2009). With the Business taking a shape of socio-economic entity, the social impact of corporation is becoming a very important issue in business administration as well as the performance measurement (Fiori et al. 2007). As a result of continuing changes, Sustainability reporting and corporate social responsibility (CSR) activity has grown rapidly (ACCA 2007). In the present socio-economic business scenario, any organizations would have a number of responsibilities towards different stakeholders i.e management, workers, customers, shareholders, government and the society. Realisation and fulfilment of these responsibilities is termed as corporate social responsibilities (CSR) (Harpreet 2009), that is affected by the factors like company's size, profitability, the particular industry, business culture, stakeholder demands, and regulatory requirement.

The field of corporate social responsibility (CSR) has grown exponentially and companies create corporate social performance (CSP) as they fulfill such corporate social responsibilities. CSR has now become an integral part of functioning of an organization and corporate social performance can be a good parameter to judge the performance of an organization. However, it is debatable, whether corporate social responsibility contributes to the financial performance of a company or whether enhancing CSP can result in better CFP. In review of past literature, the study on the relationship between CSP and CFP is inconclusive (Ullman et al., 1985). Additionally, the measurement of corporate social performance of an organization is a difficult and challenging task due to lack of consensus of measurement methodology.

In India, little research exists on the relationship between CSR and financial performance of Banks. Keeping in view the importance of banking sector in India, this study is focused to examine the extent to which corporate social responsibility contributes to financial performance of Indian Banks. The significance of this study is that it contributes to the existing body of knowledge in the area of corporate social responsibility and helps the management of the banking sector to understand the impact and significance of CSR on their financial performance while taking decisions about investing in CSR areas.



SECTION-II : LITERATURE REVIEW

2.1 Overview on CSR

The concept of Corporate Social Responsibility (CSR) originated in 1950's when Bowen, H. wrote a seminal book "The Social Responsibilities of a Businessman" (Carroll, 1999). Since then the notion of CSR has come to dominate the society-business interface and many theories and approaches have been proposed. CSR is a growing term that still does not have a standard definition or a fully recognized set of specific criteria.

The European Commission's defines CSR as: "A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." According to Business for Social Responsibility (BSR), corporate social responsibility is defined as "achieving commercial success in ways that honor ethical values and respect people, communities, and the natural environment." McWilliams and Siegel (2001) describe CSR as "actions that appear to further some social good, beyond the interest of the firm and that which is required by law." According to Wood (1991), "the basic idea of CSR is that business and society are interwoven rather than distinct entities". CSR is generally understood to be the way a company attains a balance or integration of economic, environmental, and social imperatives while at the same time addressing shareholder and stakeholder expectations.

2.2 CSR in Banks

The issue of Corporate Social Responsibility in Banks had been addressed by the scholars from all over the world. According to Cowton and Thompson (2000), financial institutions, such as banks, do not produce hazardous chemicals or discharge toxic pollutants into the air, land or water and thus apparently they might be viewed as uninvolved with environmental issues. But through their financing practices they are supporting commercial activity that ultimately degrades the natural environment (Smith, 1993). They act as facilitators by supplying the fund to support the production process which ultimately causes environmental degradation (Sarokin and Schulkin, 1991). According to Wanless (1995), "Banks should admit the responsibility of indirect involvement in environmental damages and recognize their environmental responsibility, which is a part of their CSR, to strike a balance between economic and social goals to encourage the efficient use of resources. It is not just philanthropy and obeying the laws, rather an attempt to ensure their own sustainability and profitability." Stressing the need for Corporate Social Responsibility (CSR) in India, RBI pointed out that CSR initiatives by the banks are vital for sustainable development.



2.3 Measuring Corporate Social Performance

Determining corporate social performance (CSP) is difficult and challenging due to lack of consensus of measurement methodology as it relates to corporate social performance. Methods proposed in literature to measure CSP are varied, and include the KLD (Kinder, Lydenberg, Domini) Index Method (Waddock and Graves, 1997) and the AReSE method (Charles-Henri and Stéphane, 2002). The KLD rating classifies eight CSP assessment indicators with special attention to the five that provide multi-aspect assessments of stakeholder-related relationships, which may produce major impact on corporate strategy (Pralhad and Hamel, 1994). In particular, community relationships, employee relationships, emphasis on environmental performance, product features, and treatment of women and disadvantaged groups (Waddock and Graves, 1997). Although AReSE rating uses a different assessment mode, it also lists five characteristics of CSR in its assessment rules, including ER—employee relationships, ENV—environment, SHA—shareholder relationships, PRD—product quality relationships with suppliers and customers, and COM—community. In many cases, subjective indicators are used, such as a survey of business students (Heinze, 1976), or business faculty members (Moskowitz, 1972), or even the Fortune rankings (McGuire, J. B., A. Sundgren, and T. Schneeweis 1988).

Content analysis is another method of measuring CSP. It has been widely used in corporate social and environmental responsibility research. Examples of studies that use content analysis methodology include Nieminen and Niskanen (2001), Maignan and Ralston (2002), Vuontisjärvi (2006), Castaldo et al.,(2010), Hinson et. al.(2010), Muthuri and Gilbert (2011).

2.4 Measuring Financial Performance

General measures of financial performance fall into two broad categories: investor returns and accounting returns. The basic idea of investor returns is that, the return should be measured from the perspective of shareholders. Whereas, Accounting Return measures of financial performance focuses on how firm earnings respond to different managerial policies. Waddock and Graves (1997) measured financial performance using three accounting variables: return on assets, return on equity, and return on sales, providing a range of measures used to assess corporate financial performance by the investment community. Earnings per share (EPS) or price/earnings (P/E) ratios are used in some studies as the most common measure of accounting returns (Bragdon and Marlin 1972). On the other hand, Cochran and Wood (1984) used three account returns measures: the ratio of operating earnings to assets, the ratio of operating earnings to sales, and excess market valuation.



2.5 Relationship Between Corporate Social and Financial Performance

The relationship between corporate social performance (CSP) and corporate financial performance (CFP) has been a hot debate topic among scholars around the world. Does CSR lead to superior financial performance? This question has received considerable attention in the literature. Margolis, Elfenbein, and Walsh (2007) in their review, observe that 167 studies have examined the CSR-CFP link between 1972 and 2007. In their meta-analysis of these studies, Margolis et al. (2007) conclude that the overall correlation between CSR and CFP—more precisely, the coefficient of CSR is positive but small. As against to this, other studies pointed out the uncertain relationship between CSP and CFP (Alexander and Buchholz, 1982; Aupperle, Carroll and Hatfield, 1985; Ullman, 1985; Shane and Spicer, 1983). Some studies pointed positive correlation between CSP and CFP (Wokutch and Spencer, 1987; McGuire, Schneeweiss and Sundgren, 1988; Waddock and Graves, 1997); while other studies pointed out negative correlation between CSP and CFP (Marcus and Goodman, 1986; Lerner and Fryxell, 1988; Holman, New and Singer, 1990). Few studies suggested that CSR is not related to CFP at all. Ullmann (1985) pointed out that there is no reason to anticipate the existence of any relationship between CSR and CFP, as there are many variables in between the two.

SECTION-III : OBJECTIVE & RESEARCH METHODOLOGY OF THE STUDY

3.1 Objective

The objective of this paper is to examine the relation between corporate social responsibility (CSR) and corporate financial performance (CFP) for the selected listed Indian banks.

3.2 Research Methodology

The research methodology used can be summed up as follows:

3.2.a) Hypothesis

In the context of the objective of this study, following null & alternative hypothesis has been made-

H0- There is no significant relationship between corporate social responsibility (CSR) and corporate financial performance (CFP) of selected banks.

H1- There is a significant relationship between and corporate social responsibility (CSR) and corporate financial performance (CFP) of selected banks.

3.2.b) Period Of Study

Period of study is limited to the year 2011-12 (ended March 2012).



3.2.c) Sample Size And Selection

Sample size for this study consists of 12 listed public and private banks based on the NSE CNX Bank Index as on Dec 2012. This index captures the capital market performance of Indian Banks and represents about 87.59% of the free float market capitalization of the stocks forming part of the Banking sector universe. List of sample banks are as follows-

Public Banks (6)	Bank of Baroda (BOB)	Bank of India (BOI)	Canara Bank (CB)	Punjab National Bank (PNB)	State Bank Of India (SBI)	Union Bank of India (UBI)
Private Banks (6)	Axis Bank (AXIS)	HDFC Bank Ltd (HDFC)	IndusInd Bank Ltd (IB)	ICICI bank Ltd (ICICI)	Kotak Mahindra Bank (KM)	Yes Bank Ltd (YB)

3.2.d) Sources of Information

The data was mainly collected from the secondary sources. The required data relating to corporate social responsibility & financial performance was available in the annual reports of the concerned banks. Corporate social responsibility of sample banks has been quantified and measured in terms of corporate social performance (CSP).

Content analysis has been used to generate the underlying data for our research. It is a "technique for systematically identifying specified characteristics of messages" (Holsti, 1969) and has been widely used in corporate social and environmental responsibility research (Gray et al., 1995).

3.2.e) Type of data collected

Type of Data collected to calculate Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) has been explained below-

Corporate Social Performance (CSP)

From the literature review, following 7 variables have been identified to measure the corporate social performance of the banks-



Table-1: List of Corporate social performance variables

Sr No.	Variable	Method of measurement
1	Priority Sector lending	Priority sector advances to total advances
2	Environment Protection	Activities for environment protection
3	Community Welfare	Activities for community welfare
4	Education	Activities for promotion of education
5	Women Welfare	Activities for women welfare
6	Farmers' Welfare	Activities for farmer welfare
7	Financial Literacy	Activities for financial literacy

Source: Authors calculation based on literature review

Corporate Financial Performance (CFP)

From the literature, following items have been considered to measure the financial performance of the banks-

Table-2: List of Corporate social performance variables

Sr No.	Variable	Method of measurement
1	RONW	Profit after tax/ Net Worth
2	NIM	Interest margin/ Average Assets
3	CAR	Ratio of Total Capital to Risk Weighted Assets

Source: Authors calculation based on literature review

3.2.f. Analysis Techniques

3.2.f.i) Calculation of Corporate Social Performance (CSP) Score

In order to calculate the corporate social performance score of the sample banks on the basis of variables mentioned in Table-1, we have used the following scoring criteria-

a) Table-3: Criteria for Priority Sector Lending (PSL)

PSL Ratio	Below 25%	25% to 30%	30% to 35%	35% to 40%	Above 40%
Points Given	2	4	6	8	10

Source: Authors calculation based on literature review

a) Table-4: Criteria for other variables except Priority Sector Lending (PSL)

Number of Activities	0	1 to 2	3 to 4	5 to 6	Above 6
Points Given	0	1	2	3	4

Source: Authors calculation based on literature review



In the present study, we have used primary type of aggregation methodologies wherein equal weights are assigned to all categories of corporate social variables (Environment Protection Community Welfare, Education, Women Welfare, Farmers' Welfare and Financial Literacy). This is similar to the methodology used by Hillman and Keim (2001). According to Freedman & Jaggi (2005) equal weight method is simple and avoids controversies. Chien-Ming Chen and Magali Delmas in their study “Measuring Corporate Social Performance: An Efficiency Perspective” June 2010 attempted to analyze 43 publication related to corporate social performance by aggregation types and observed that , of the 43 publications, 26 (more than 60%) used equal weights for measuring corporate social performance variables.

Corporate social performance against the variables mentioned in Table-1 (except priority sector lending) was measured on the basis of number of activities performed against each variable. Number of activities is classified into particular group/ interval as provided in Table-4 and points are assigned on the basis of number of activities performed.

Total CSP score has been calculated by adding up the individual score against each CSP variable. Each Bank can have maximum CSP score of 34 points (10 points for priority sector lending and 24 points for all other activities except priority sector lending).

Finally, CSP performance of a Bank is calculated in terms of percentage of CSP score obtained against the maximum score. Based on the CSP performance, a bank has been classified into either CSR Compliant (CSR-Yes) or Non-CSR Compliant (CSR-No) on the basis of following criteria-

Table-5: Criteria for CSR Compliant or Non-CSR Compliant Banks

CSP Performance	Category
> 50%	CSR Compliant (CSR-Yes)
<=50%	Non- CSR Compliant (CSR-No)

Source: Authors calculation based on literature review

3.2.f.ii) Calculation of Corporate Financial Performance (CFP)

Ratio Analysis has been used to calculate the data for corporate financial performance of the selected banks based on the variables mentioned in Table-2.

3.2.f.iii) Person Correlation

This study use the Person correlation analysis method (Heinze, 1976; McGuire et al., 1988; Stanwick, 1998; Preston and O'Bannon, 1997; Charles- Henri et al., 2002; Hull et al., 2008) to understand the CSP and CFP link, and its relational degree and direction.



3.2.f.iv) T- Test

Independent Sample T Test at significance level of 5 % has been used to compare the financial performance of CSR Compliant Banks with Non-CSR Compliant Banks.

3.2.f.v) Regression Analysis

To study the causal relationship between CSR and CFP, this study employs regression analysis (Fogler and Nutt, 1975; Vance, 1975; Chen and Metcalf, 1980; McWilliams et al., 2000; Hull et al., 2008), when CSP is an independent variable and CFP is a dependent variable. The regression equation used is as below-

$$CSP_S = \beta_0 + \beta_1RONW + \beta_2NIM + \beta_3CAR + \beta, \text{ Where}$$

CSP_S = Corporate Social Performance score, β_0 = Differential Intercept of the regression

RONW = Return on Net Worth, NIM= Net Interest Margin, CAR = Capital Adequacy Ratio

SECTION-IV : RESULTS AND ANALYSIS

4.1 Descriptive Analysis:

A) Corporate Social Performance at Group Level and Individual Bank Level

Table-6: Corporate Social Performance (CSP) – At Group Level

	Priority Sector lending	Environment Protection	Community Welfare	Education	Women Welfare	Farmers' Welfare	Financial Literacy	Total CSP score
PUBLIC BANKS	38 (46.34)	8 (32.00)	17 (39.53)	7 (35.00)	10 (62.50)	9 (69.23)	8 (44.44)	97 (44.70)
PRIVATE BANKS	44 (53.66)	17 (68.00)	26 (60.47)	13 (65.00)	6 (37.50)	4 (30.77)	10 (55.56)	120 (55.30)

Figures in bracket represent percentage (%)

Source: Authors calculation based on data from annual reports

Table-6 shows the corporate social performance score at Public and Private Bank level against each of the performance Indicator. It can be observed that on overall basis, private banks are ahead from public banks with high Total CSP score. However, on comparison at specific performance indicator level, it can be noted that there are few areas especially Women Welfare & Farmer's Welfare where public sectors banks have performed well in comparison to private banks. One of the important points to highlight is about increasing attention among banks



towards environment protection. In line with the 'Green Initiative in Corporate Governance', Banks have continued with an electronic copy of the Annual Report available through email. Few specific initiatives in the area of environment protection taken by banks are a) Installation of ATMs with Solar Panels that save commercial electricity and DG power, b) Switching off electric signs after 11 pm at branches to prevent wastage of electricity, c) Installation of Power Saving Devices at selected branches, d) Use of eco-friendly spectra paper which is made out of wheat straw instead of wood pulp, e) Introduction of paperless fax in select branches and promoting the concept of duplex printing.

Table-7: Corporate Social Performance (CSP) – At Individual Bank Level

Bank Name	Bank Type	Corporate Social Performance (CSP)			Category (CSR-Yes/ CSR-No)
		Max score	CSP score	% score	
Bank of Baroda (BOB)	Public	34	12	35.29	CSR-No
Bank of India (BOI)	Public	34	11	32.35	CSR-No
Canara Bank (CB)	Public	34	14	41.18	CSR-No
Punjab National Bank (PNB)	Public	34	22	64.71	CSR-Yes
State Bank Of India (SBI)	Public	34	21	61.76	CSR-Yes
Union Bank of India (UBI)	Public	34	17	50.00	CSR-Yes
Axis Bank (AXIS)	Private	34	16	47.06	CSR-No
HDFC Bank Ltd (HDFC)	Private	34	24	70.59	CSR-Yes
IndusInd Bank Ltd (IB)	Private	34	20	58.82	CSR-Yes
ICICI bank Ltd (ICICI)	Private	34	25	73.53	CSR-Yes
Kotak Mahindra Bank (KM)	Private	34	18	52.94	CSR-Yes
Yes Bank Ltd (YB)	Private	34	17	50.00	CSR-Yes

Source: Authors calculation based on data from annual reports

Table-7 shows the corporate social performance score at individual bank level. It can be observed that for public banks, the highest score recorded is 22 by Punjab National Bank, while the lowest score is 11 by Bank of India. For private bank, the highest score recorded is 25 by ICICI Bank, while the lowest score is 16 by Axis Bank. Out of total sample of 12 banks, 8 banks representing 67% of the sample size are able to achieve the CSR Compliant category while 4 banks are categorized into Non-CSR compliant category.



Table 8: Corporate Social Performance (CSP) Matrix

Category	Number of Banks	Public Banks	Private Banks
CSR Compliant (CSP score % \geq 50%)	8	3	5
Non-CSR Compliant (CSP score % $<$ 50%)	4	3	1
TOTAL	12	6	6

Source: Authors calculation on the basis of CSP score in Table-7

Table-8 shows CSP score matrix for sample banks. It can be observed that majority of the private banks (5 out of 6) are CSR compliant whereas for public banks, only 3 out of 6 banks could get classification of CSR compliant bank. However, it has to be noted that for the purpose of this study, the threshold for classification of bank into CSR Compliant or Non-CSR compliant has been kept at lower side. In case, this limit is increased to 70% then only 2 banks (i.e HDFC and ICICI) representing just 17% of the sample population for this study could be classified as CSR compliant and balance 83% would be Non-CSR compliant. It also indicates that CSR in Indian banks is at an early stage and getting momentum slowly.

B) Comparison of Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) at Group Level and Individual Bank Level

Table-9: Comparison of CSP and CFP – At Group Level

	Non-CSR Compliant Banks				CSR Compliant Banks			
	RONW	NIM	CAR	CSP	RONW	NIM	CAR	CSP
Mean	16.02	2.90	13.51	13.25	15.58	3.59	15.33	20.50
Range	5.83	1.09	2.72	5.00	10.19	1.97	6.67	8.00
Max	18.60	3.59	14.67	16.00	20.89	4.70	18.52	25.00
Min	12.77	2.50	11.95	11.00	10.70	2.73	11.85	17.00
SD	2.86	0.51	1.13	2.22	3.18	0.69	2.58	3.07
Variance	8.15	0.26	1.29	4.92	10.11	0.48	6.67	9.43
N	4				8			

Source: SPSS Output

Table-9 shows the comparison of CSP and CFP at group level. It can be observed that the average RONW for Non CSR compliant category bank is 16.02 which is more than the average RONW (15.58) of CSR compliant category banks. However on comparison at NIM and CAR level, the CSR compliant category banks have shown better results than Non CSR compliant banks. Although there is



noticeable difference in the CSP score of two categories of banks however no such difference has been observed in the case of RONW and other financial parameters (i.e NIM and CAR). From descriptive analysis level it may be said that there is no significant difference between CSR compliant and Non-CSR compliant banks.

Table-10: Comparison of CSP and CFP – At Bank Level

Bank	Category	RONW	NIM	CAR	CSP Score	CSP Category
Bank of Baroda (BOB)	Public	18.22	2.97	14.67	12	CSR-No
Bank of India (BOI)	Public	12.77	2.52	11.95	11	CSR-No
Canara Bank (CB)	Public	14.47	2.50	13.76	14	CSR-No
Axis Bank (AXIS)	Private	18.60	3.59	13.66	16	CSR-No
Union Bank of India (UBI)	Public	13.67	3.21	11.85	17	CSR-Yes
Yes Bank Ltd (YB)	Private	20.89	2.80	17.90	17	CSR-Yes
Punjab National Bank (PNB)	Public	17.56	3.84	12.63	22	CSR-Yes
State Bank Of India (SBI)	Public	13.95	3.85	13.86	21	CSR-Yes
HDFC Bank Ltd (HDFC)	Private	17.27	4.22	16.50	24	CSR-Yes
IndusInd Bank Ltd (IB)	Private	16.97	3.33	13.85	20	CSR-Yes
ICICI bank Ltd (ICICI)	Private	10.70	2.73	18.52	25	CSR-Yes
Kotak Mahindra Bank (KM)	Private	13.65	4.70	17.52	18	CSR-Yes

Source: Authors calculation based on data from annual reports

Table-10 shows the comparison of CSP and CFP at individual bank level. For banks like BOB, Axis and Yes bank in the category of Non CSR compliant banks, we observed a significant high RONW as compared to banks like ICICI Bank, SBI and HDFC that fall under CSR compliant category. Thus it can be noticed that although CSP performance of banks is less but they may have high RONW. Similarly in the case of NIM & CAR, it can be observed that there is no direct relationship between the CSP and financial performance at individual bank level.

4.2 Statistical Analysis:

4.2.a) Corelation Analysis:

Table-11: Pearson Correlation results

	CSP_Score	RONW	NIM	CAR
Pearson Correlation	1	-.134	.464	.436
Sig. (2-tailed)		.677	.129	.157
N	12	12	12	12

Source: SPSS Output

On the basis of Pearson Correlation results in Table-8, it can be seen that though there is a high positive relationship between CSP score and financial parameters like NIM and CAR but it is not significant at 5% level. In the case of RONW, this relationship is negative and also not significant.



4.2.b) T-Test:

The t-tests results are summarized through Tables 12 that shows the results of the difference of means of RONW, NIM & CAR between Non-CSR compliant Banks and CSR compliant Banks. We can notice that the RONW of the CSR compliant category banks are lower when compared against the Non- CSR compliant category banks. Thus we can comment that CSR banks are not performing better than the NCSR banks.

On the other hand, the results of the difference of means of NIM and CAR for CSR compliant category banks are better compared to Non CSR compliant banks. However, the two-tailed t-test does not support this observation as we could not get any statistically significant result from T-test in this regard. Thus on the basis of T-test, it can be concluded that there is no significance variance between the CSP score and financial parameters of the selected banks and hence Null hypothesis cannot be rejected at 5% level of significance.

Table-12: T-Test- Independent Sample Results

	RONW		NIM		CAR	
	Non-CSR Compliant Banks	CSR Compliant Banks	Non-CSR Compliant Banks	CSR Compliant Banks	Non-CSR Compliant Banks	CSR Compliant Banks
Sample Size(valid N)	4	8	4	8	4	8
Mean	16.02	15.58	2.90	3.59	13.51	15.33
S.D	2.86	3.18	0.51	0.69	1.13	2.58
t-test of paired samples Difference in sample means	0.432		-.69000		-1.81875	
t-test statistic (Equal variances not assumed)	0.238		-1.952		-1.692	
Sig. (2-tailed)	0.819		.086		.122	

Source: SPSS Output

4.2.c) Regression Analysis

Regression result reveals that CSP score cannot be significantly explained by any of the financial parameters i.e RONW, NIM and CAR at 5% level of significance. As we can see that p value is more than 0.05 at 95% level of confidence. Thus it can be concluded that there is no significant relationship between CSP score and the financial parameters and null hypothesis cannot be rejected

Table-13: Regression Model & Coefficient summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.618 ^a	.382	.151	4.12950

a. Predictors: (Constant), CAR, RONW, NIM

Source: SPSS Output



Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.114	10.972		.284	.784
RONW	-.293	.424	-.193	-.689	.510
NIM	2.687	1.814	.420	1.481	.177
CAR	.717	.544	.372	1.318	.224

a. Dependent variable : CSP Score

Source: SPSS Output

SECTION-V

5.1 Conclusions and Implications

This study attempted to examine the linkage between corporate social responsibility and financial performance in the Indian banking sector. Results indicate that there is no significant relationship exists between the CSR and CFP as evident from descriptive analysis, Pearson correlation test, T-test and Regression analysis. In the two-tailed t-tests, no significant evidence was found to show that CSR compliant category banks are significantly different than the Non-CSR compliant category banks. Our findings are consistent with the study conducted by Ramasamy et.al (2007) on Malaysian firms and Ahmed et.al (2012) on Bangladesh banking sector. Our results indicate that it may take some time to see a significant linkage between CSR and financial performance in developing countries like India.

Results presented in our study are against to the arguments that organizations which have solid financial performance have more resources available to invest in social responsibility areas. We observed that banks having high RONW or NIM are not able to get high CSP score. Though writing-off the link between CSR and CFP completely would be unjustified, however, more detailed studies are needed to measure and monitor this linkage. This study in this respect would serve as a base for examining the linkage between corporate social responsibility and financial performance in India.

5.2 Limitations and Future Research

First, the study is limited to a sample of 12 Indian listed banks hence more evidence is needed on the CSR activities & performance before any generalization of the results can be made. Second, the data was collected only for the year 2011-12 and hence the results of the study cannot be assumed to extend to different study periods. Third, the reliability of the CSR data is also an important issue, as data from different sources have significant differences regarding how to evaluate the CSR performance of an organization.

Future research in this area could proceed in a number of directions. First, more extensive studies are needed to explore the causal mechanisms linking CSR to CFP for larger sample of data and to determine whether or not those relationships hold consistently over time. Second, another appropriate method to measure the CSR & CFP can be used for future study.



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IMPACT OF CORPORATE GOVERNANCE INDEX ON POST-M&A PERFORMANCE OF INDIAN ACQUIRING COMPANIES

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Abstract

The present study attempts to investigate whether differences in the quality of firm level corporate governance influence post-M&A performance of acquiring firms for a sample of companies by creating a corporate governance index. The study is based on a survey of sample of 155 companies having completed mergers and acquisitions deals announced during January 2003 to December 2008.

We use a broad, multifactor corporate governance score, which is based on the responses to objective survey questions supplemented with interviews of senior management, directors, CFOs, board members, company secretaries, compliance officers, and investor relation officers. The questionnaire is designed on the basis of major standard qualities relevant to measure the corporate governance. Companies having higher corporate governance score show better financial performance on the basis of all measures of rate of return. Companies with higher corporate governance score show better valuations. Companies with higher rank of corporate governance index are good performers which are revealed from better profitability ratios.

Key Words : CFO, Corporate Governance, M&A, ROCE.

I. INTRODUCTION

Corporate governance aims at resolving conflicts of interest between managers and shareholders; between large shareholders and minority shareholders, and thus mitigates agency costs. Financial transparency, operational transparency and information disclosure are extremely important elements of corporate governance. Firms with poor corporate governance practices are usually

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associated with a low level of financial and operational transparency, and low quality of information disclosure, which implies great information asymmetry. Agency theory suggests that firms with better corporate governance standards perform better because of lower agency costs and more effective monitoring mechanisms. Botosan (1997) shows that an improvement in corporate governance practices reduce information asymmetry between shareholders and managers. Lang and Lundholm (1999) suggest that a higher level of transparency and higher quality of disclosure are associated with lower information risk.

The market for corporate control is an important corporate governance mechanism. An important question in this regard is how corporate governance practices of acquirer firms directly influence performance outcomes of acquisitions decisions. The question deserves attention for several reasons. Mergers and Acquisitions serve as an important instrument of corporate governance to increase corporate efficiency. In fact, Mergers and acquisitions (M&A) are well-suited events where corporate values are tested over the times. The role of corporate governance has been explored on the measurement of the announcement affects on the acquiring firms. The present study investigates the impact of corporate governance score on the abnormal returns on the announcement. Further, association between corporate governance score and the financial performance of the sample acquiring firms post-merger and acquisition have been examined. The primary objective of the present study is to provide evidence for a possible relationship between corporate governance score and performance of acquiring firms in short-run as well as long-run. The present study provides the empirical evidence on relationship between corporate governance score and M&A performance in Indian context.

II. LITERATURE REVIEW

The existing literature investigating the relationship between corporate governance and mergers and acquisitions examine the issue from various perspectives. The majority of prior literature on relationship between corporate governance and firm value documents a positive association between stronger corporate governance and firm valuation (Bebchuk et al., 2009; Cremers and Nair, 2005; Core et al., 2006; Yermack, 1996; Gompers et al., 2003). Virtually most of the previous work focus on the specific aspect of corporate governance such as Gompers et al. (2003) on takeover defenses; Yermack (1996); Lipton and Lorch (1992) on board size, Hermalin and Weisbach (1991); Bhagat and Black (2002) on board composition, Bebchuk et al.(2005) on management entrenchment, Cremers and Nair, (2005); Core et al. (1999) on executive compensation.

Another set of the empirical studies analyze the impact of corporate governance in a cross-section of countries. Klapper and Love (2004) analyzed impact of



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corporate governance for 14 emerging markets, Durnev and Kim (2005) for 27 countries by using and Credit Lyonnais Securities Asia (CLSA) rating data.

A Few studies use primary and survey based data on firm level corporate governance structure within a specific country. Balasubramaniam et al. (2010); Beiner et al. (2006); Black et al. (2006); Drobetz et al. (2004); and Chen et al. (2007) report a positive relationship between governance practices and firm valuation for Indian, Swiss, Korean, German and Taiwan public firms respectively.

Empirical studies utilizing various corporate governance indices have shown that corporate governance is positively associated with firm value or stock returns (Bebchuk et al., 2005; Gompers et al., 2003).

Carline, Linn and Yadav (2009) examine associations between corporate governance characteristics of acquiring firms and operating performance effects of 81 domestic corporate mergers in the United Kingdom during 1985-94. They find that board ownership, board size and block-holder have an economically and statistically significant impact on post-merger operating performance changes. They have also investigated the relations between the initial market revaluation of the merger partners, operating performance changes and post-mergers returns of the merged firm.

Swanstrom (2006) investigates abnormal returns associated with acquisitions announcements based on a sample of 294 acquisitions occurring from 1994 to 1998. He finds that acquiring firms have significant two day abnormal returns. He developed a multiple regression model that includes corporate governance variables which has Adjusted R-squared of 14.2 per cent with board size, the sensitivity of CEO's wealth to changes in share price, method of payment, and acquiring firm size all being significant explanatory variable. Grinstein and Hribar (2004) find that larger boards tend to pay smaller mergers and acquisition bonuses to managers. O'Sullivan and Wong (1998) examine the relationship between internal and external control mechanisms. The study investigates the relationship between board composition, ownership structure and takeovers in the UK in the period 1989-1993. They compare board composition.

Malekzadeh, McWilliams and Sen (1998) find that the structure of the board influences the market reactions to anti- takeover charter amendments. McWilliams and Sen (1997) observe negative market reaction to anti-takeover announcements. This reaction is more pronounced when the board is dominated by insider and gray directors and where the CEO is also the chairman of the board.

Bertrand and Mullainathan (1998) examine the impact on executive compensation of changes in states' anti-takeover legislation. They argue that the



adoption of anti-takeover legislation reduces pressure on top managers, and causes firms to substitute more intensive incentives elsewhere. They find that pay for performance sensitivities and levels of CEO pay increase (the latter possibly to compensate for increased risk imposed on CEOs) after adoption of anti takeover legislation.

Datta, Iskandar-Datta and Raman (2001) find a strong positive relation between the acquiring firm's shareholder wealth and the proportion of total compensation awarded to acquiring firm managers in the form of new stock option grant. The study separates acquisitions into high and low base managers' equity based compensation (EBC). They document that high EBC firm's experience significant positive stock price effect whereas low EBC firms suffer significant losses.

Roll (1986) suggests that managers driven by hubris try to maximize value, but overestimate the value of target and simply overpay for acquisition.

Shleifer and Vishny (1988) find that managers overpay not because they make valuation errors, but to reap personal benefits from acquisitions that are non-value maximizing to the acquiring shareholders.

Shivdasani (1993) examines the relationship between corporate governance structures and probability of takeover of a firm. His results provide evidence that outsider – directors have significantly lower equity ownership in target firms than in non target firms. Due to less ownership, the outsider- directors are not adequately motivated to improve the performance of the company and hence, such companies are more likely to become a takeover target. He also provides evidence that large block holders have an important role to play in takeover. The ownership of large unaffiliated block holders increases the probability of hostile takeovers; since the unaffiliated block holders are concerned with the performance of the company and they facilitate outsiders in the takeover of the target firm, especially when the target firm is not performing well, by selling their block holding to the bidder. On the contrary, block holders affiliated to management, support the resistance of takeovers by the managers and thus reduce the possibility for hostile takeover.

Shleifer and Vishney (1986) develop a theoretical model which explains large external shareholders may facilitate takeovers by selling their shares to bidding firms when incumbent managers are underperforming and unwilling to implement reforms.

Bris and Cabolis (2002) show that when acquiring foreign firms are from countries with better governance investors' wealth increases, suggesting that cross-border mergers provide an alternative mechanism for the contractual transfer of corporate governance.



Rossi and Volpin (2004) study the determinants of mergers and acquisitions around the world by focusing on differences in laws and regulations across countries. They find that the volume of mergers and acquisition activity is significantly larger in countries with better accounting standards and stronger shareholder protection. They also document that the probability of an all-cash bid decreases with the level of shareholder protection in the acquirer country. Their findings indicate that a more active market for mergers and acquisitions is the outcome of a corporate governance regime with stronger investor protection. The majority of prior literature on relationship between corporate governance and firm value, documents a positive association between stronger corporate governance and firm valuation.

Although this evidence demonstrates the interest in corporate governance, the important question of whether good corporate governance leads to higher stock returns on the announcement of M&A and consequently to higher firm valuation and better financial performance has not received attention. Further, as far as literature in the Indian context is concerned, no survey has been conducted for Indian managers to the best of my knowledge. While corporate governance has received more attention in recent years, the role that such governance plays in merger and acquisition strategy has not attracted such attention particularly in India. Much of the recent academic attention on corporate governance has been focused on corporate accounting scandals and their prevention. Corporate governance and merger strategy however has not been the focus. Thus, the present study is modest attempt to fill these gaps.

In light of the above, the following issues have been identified for examination:

Does the corporate governance score of the acquiring firm have any impact on short-term abnormal returns and long-term financial performance of merger and acquisition?

III. OBJECTIVES

The research objectives of this study are:

1. To gain insight into corporate governance practices of acquirers by developing a corporate governance index.
2. To provide evidence for a possible relationship between corporate governance score and long-run performance of acquiring firms.

IV. DATA COLLECTION AND SAMPLE SELECTION

The universe of this study covers all M&As during the period January 1, 2003 to December 31, 2008. The rationale of the period of study emanates from the fact the major development and changes in SEBI clause 49 has been incorporated in year 2003 itself.



Table 1 presents the year-wise distribution of the number of merger and acquisition announcements, the sample companies and the respondent companies between January 1st, 2003 and December 31st, 2008. Year-wise distribution shows that 803 companies made 1210 announcements. But there are companies which made multiple announcements across the year. So the sample consists of 541 companies that made 1210 mergers and acquisitions announcements during the sample period (Table 1).

Table 1
Distribution of sample, year-wise (2003-08)

year	No. of acquisitions announced	No. of mergers announced	No of companies	Number of respondent companies
2003	66	16	66	13
2004	54	32	73	11
2005	101	52	104	11
2006	198	50	159	27
2007	298	78	232	52
2008	211	49	169	41
Total	928	282	803	155

Source: CMIE database Prowess (3.2)

The unit of analysis for this study is acquiring firms in India. The scope of the study is limited to analyzing the performance of acquiring firms. The reference period for the study includes the five years after the M&A. The secondary data were collected from the Prowess databases of Centre for Monitoring Indian Economy (CMIE), Capitaline database and website of Bombay Stock Exchange. Data were also collected from the websites of the companies, Electronic Data Information Filing and Retrieval System (EDIFAR) website of SEBI. Besides, relevant data were also extracted from the annual reports and websites of the companies.

The primary data was collected from senior management, directors, CFOs, board members, company secretaries, compliance officers, and investor relation officers of firms.

Following the review of literature, questionnaire for corporate governance survey was designed. Questionnaire was based on corporate governance practices of the

acquiring firms. The questionnaire carried questions seeking factual information and the perceptions of the firms wherein they were asked to mark their responses on Binary scale, where 1 to governance attribute if the company meets minimally acceptable standard on that attribute and 0 otherwise. The questionnaire was validated by seven experts. Modifications, wherever necessary, were made according to the feedback received from experts. Thereafter, a total of 541 companies were approached in four phases and 155 responded to the request.

Out of the above respondents, nearly three-fourth (72 per cent) are from manufacturing sector while one-fourth (28 per cent) are from services sector, (depicted in Figure 1).

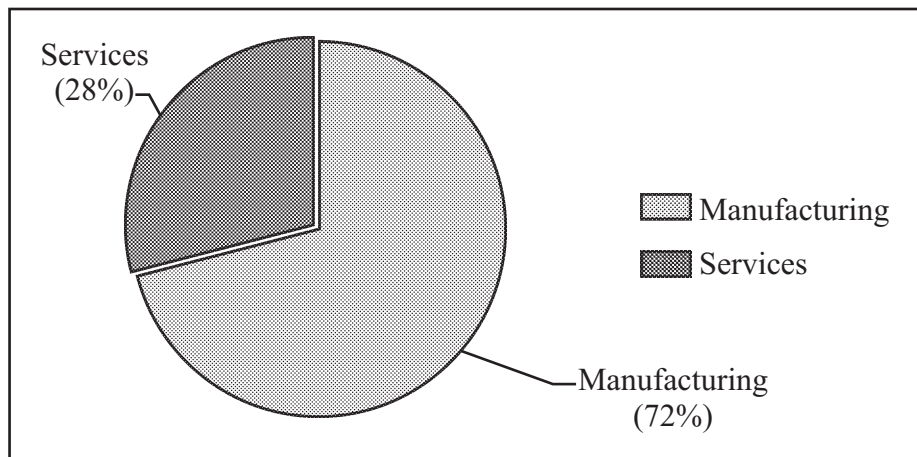


Figure 1: Sector-wise distribution of respondent companies

To utilize the responses of the two groups for analysis, an independent samples t-test is conducted. This is to determine if there is any significant difference between the two groups in their corporate governance scores.

Table 2 depicts the respondents' profile; the respondents are primarily the executives who held top level management positions in their respective companies. They include: almost one-third (30.3 per cent) chairman, managing directors, chief executive officers, chief financial officers and directors, one-fourth (25.2 per cent) company secretary and deputy general managers, 22.2 per cent vice-presidents and chief legal officers and the remaining 21.3 per cent are general managers (finance) and investor relation officer.



Table 2
Respondents' profile

Respondents designation	Number
Chairman, Executive Directors (Finance) and Chief Financial Officers	47 (30.3 %)
Company Secretary and Deputy General Manager	39 (25.2%)
Vice Presidents, Head and Chief Legal Officers	36 (22.2%)
General Manager (Finance, Investor Relations Officer)	33 (21.3%)
Total	155 (100%)

V. DEVELOPMENT OF CORPORATE GOVERNANCE INDEX

Primary data is used to prepare a Corporate Governance Index (CGI). We have designed a survey questionnaire on the broader definition of corporate governance. The questionnaire focused not only on the transparency and disclosures but broader issues like management discipline and social recognition and responsibility. The survey questionnaire is divided into two parts. Part I of the questionnaire contains questions related to the respondent's profile; they are asked to provide their current job title and the industry classification of their firm. Part II of the questionnaire contains sixty seven questions.

The survey is based on the 67 broad attributes of corporate governance arranged into following seven key sub-categories. Questions related to one category are intentionally not arranged in one section and are dispersed.

1. Management Discipline (MDIS)
2. Transparency (TRA)
3. Independence (IND)
4. Accountability (ACC)
5. Responsibility (RES)
6. Fairness (FAI)
7. Corporate Social Responsibility, Corporate Governance Initiatives and Recognition (CGR).

Corporate Governance Score (CGS) is based on the responses of the 67 issues categorized under seven main aspects included in the questionnaire. The respondents are asked to indicate the company's practice on different level of scales; these points are later translated into numeric values as per the scale. The questionnaire is designed to give a numeric presenting overall Corporate Governance score stated as a percentage. CGS has been assigned a value of 1 to governance attribute if the company meets minimally acceptable standard on that attribute and 0 otherwise in case of binary scale. The answers to these questions



are also cross-checked from the information available in public domain as stated earlier. The scores are assigned in a highly conservative manner based on the response obtained in discussion with the respondent. Corporate Governance Index (CGI) is constructed on the basis of total scores obtained for these qualities. A higher corporate governance score indicates the good governance of the company. We are not interested in disaggregated score in each category as the categories are prone to be overlapping.

There are several minimum accepted standards that are met by all companies in the sample. These minimum standards are the mandatory requirements of SEBI Clause 49 on Corporate Governance. Our questionnaire contains 18 such questions and the minimum average score for such minimum accepted standards is 26.9 % (this confirms to SEBI's requirement). On the basis of these scores companies are classified in four quartiles. Companies in top quartile are the companies having score above 90 per cent. These are the companies which have gone beyond the mandatory requirements and moved ahead in pursuit of excellence in corporate governance. Companies in the bottom quartiles are the companies complying with the minimum mandatory standards of corporate governance.

VI. EMPIRICAL RESULTS AND DISCUSSIONS

Analysis of corporate governance score

Corporate governance index (CGI) is constructed on the basis of total scores obtained for sixty seven attributes of corporate governance covered in questionnaire. Corporate governance score has been calculated for each attribute individually and total score has been used to rank the companies. There are several minimum accepted standards that are met by all companies in the sample. These minimum standards are the mandatory requirements of SEBI Clause 49 on Corporate Governance. Our questionnaire contains 18 such questions and the minimum average score for such minimum accepted standards is 26.9 per cent (this confirms to SEBI's requirement).

Distribution of corporate governance score

A survey of 155 companies was conducted to construct a corporate governance index. We then classify companies, using quartiles based on their corporate governance score, into four governance portfolios. Mean average score for the sample is 69.4 per cent.

Table 3 shows the distribution of survey-based corporate governance score for 155 Indian public-listed firms. It is evident that mean corporate governance score has increased from 64.5 in 2003 to 72.8 in 2008. The minimum and maximum



score has also shown improvement over time. It appears from the relevant data that Indian corporate have learned and become conscious about the importance of good corporate governance over time. Table 4 presents quartiles-wise mean corporate governance score of respondent companies. Companies in top quartile are the companies having score above 80 per cent. These are the companies which have gone beyond the mandatory requirements and moved ahead in pursuit of excellence in corporate governance. Companies in the bottom quartiles are the companies complying with the minimum mandatory standards of corporate governance. The Table shows that nearly 25 per cent companies in the sample had scores below 52 per cent. Mean average score for the sample is 69.4 per cent.

Table 3
Frequency distribution of corporate governance score, Year-wise (2003-08)

Year	Mean CG Score	Min CG Score	Max CG Score	Number of Respondent Companies
2003	64.5	30.6	77.6	15
2004	68.5	43.7	94.2	10
2005	68.8	44.8	86.6	15
2006	69.0	39.9	97.1	29
2007	68.9	37.7	91.4	49
2008	72.8	42.9	98.5	36
Total	69.4	30.6	98.5	155

Table 4
Mean Corporate Governance Score of respondent Companies (Quartiles-wise)

Quartile	Mean Corporate Governance Score(CGS)	Number of Companies
Top Quartile(Q ₁)	85.24 %	39(25.16%)
Q ₂	74.3%	38(24.5%)
Q ₃	66.1%	39(25.16%)
Bottom Quartile (Q ₄)	51.86%	39(25.16%)
Sample	69.4%	155 (100%)

Independent samples t-test for manufacturing sector and service sector groups

The respondents are divided into two groups based on the industry they belong to, manufacturing and services. Table 5 reveals the sector-wise distribution of



corporate governance score of the respondent companies. It is obvious from the relevant data that companies in service sector have better corporate governance score. It appears that companies in service sector are conscious for their corporate governance practices and put their corporate governance structures in place.

An independent samples t-test is conducted to observe if there is a significant difference between the corporate governance score of these groups. Table 6 reports the findings of the independent samples t-test. The results illustrate that firms in service sector are more conscious for governance; however, the difference in corporate governance score is not significant ($p\text{-value} = 0.429 > .05$).

Table 5
Industry-wise frequency distribution of corporate governance score, (2003-08)

Industry	Mean CG Score	Min CG Score	Max CG Score	Number of Respondent Companies
Manufacturing	68.8	37.6	98.5	111
Services	70.8	30.6	98.5	44
Total	69.4	30.6	98.5	155

Table 6
Independent samples t-test of corporate governance score on manufacturing and services sector

Mean CGR for services group (N=44)	Mean CGR for manufacturing group (N=111)	Mean difference	T-value	Significance level
70.8	68.8	2.06	0.795	0.429

Impact of corporate governance score on post-M&A financial performance

If better corporate governance is related to better firm performance, better-governed firms should perform better than worse-governed firms. This section conducts a cross-section comparison of the performance of firms with corporate governance score in upper quartiles with the firms in lower quartiles. Financial performance has been measured in terms of the important profitability ratios which measure how efficiently financial resources are deployed by the management. The study tests the following hypotheses to measure the impact of corporate governance on financial performance:



Firms with better overall corporate governance have better financial performance, i.e. the financial performance of the companies with higher corporate governance score is higher than the financial performance of the companies with lower corporate governance score.

The financial performance has been judged on the basis of profitability ratios related to investments namely capital employed and equity funds. Accordingly the following two ratios have been computed for five years (t+1, t+2, t+3, t+4, t+5) subsequent to mergers and acquisitions:

ROCE (return on capital employed) and ROE (return on equity funds). While return on capital employed (ROCE) manifests how efficiently long-term funds of owners and lenders are used, return on equity funds (ROE) ROE indicates the return for the equity owners. These rates have been computed based on average assets, average capital employed, and average equity funds; the average is based on their respective values at the beginning and end of the year.

Return on the basis of sales has been computed in terms of net profit margin (NPM). Better margin in post-merger and acquisition period indicate the managerial ability to realize the expected synergies and perform the business profitably. Actual economic gains from assets are captured by operating cash flows. The change in acquisition-related performance of the acquirer is examined by comparing operating performance before and after the acquisition. For this purpose, operating cash flow profit ratio (OCFR) based on sales has also been calculated. This definition of operating performance is not affected by depreciation, goodwill etc. (Healy et al., 1992). We have calculated ROCE, ROE, NPM and OCFR as per equations 1 to 4 respectively.

Return on Capital Employed (ROCE)

ROCE determine how efficiently the financial resources are deployed by acquiring companies. ROCE indicates how efficiently the long-term funds of the owners and lenders are being used and focus directly on operating efficiency.

$$ROCE = \frac{\text{Profit before interest and taxes (PBIT)}}{\text{Average long – term assets used + net working capital}} \dots \dots \dots (1)$$

Capital work in progress has been excluded.

Return on Equity Funds (ROE)

$$ROE = \frac{\text{Profit after taxes - preference dividend}}{\text{Average equity fund}} \dots \dots \dots (2)$$



Equity fund= paid-up equity capital + reserves and surpluses + retained profit - accumulated losses.

Net Profit Margin (NPM)

NPM determines the relationship of reported net profit after taxes to sales.

$$NPM = \frac{\text{Profit after taxes}}{\text{Net sales}} \dots\dots\dots(3)$$

Operating Cash Flow Ratio (OCFR)

Pre-tax operating cash flows scaled by sales are used to measure the change in performance measures.

$$OCFR_s = \frac{\text{PBIT} - \text{nonoperating income} + \text{depreciation} + \text{amortisation} + \text{any non cash expenditure}}{\text{Net sales}} \dots\dots\dots(4)$$

To test the hypothesis H1 i.e. the financial performance of the Companies with higher corporate governance score is higher than the financial performance of the Companies with lower corporate governance score. We have conducted T test for the difference of mean for ROCE, ROE and NPM and OCFR for top quartile (Q1) and bottom quartile (Q4). Table 7 reveals the results of profitability ratios (ROCE and ROE) and Table 8 tabulates the results of performance ratios (NPM and OCFR). It is evident from relevant data that companies in upper quartile have 10.8 per cent, 7.2 per cent, 18.8 per cent, 22.3 per cent and 26.6 per cent higher ROCE one year post-M&A, two years post-M&A, three years post M&A, four years post-M&A and five years post-M&A respectively; moreover, the difference is statistically significant at one per cent.

Panel B of Table 7 depicts that the companies with higher corporate governance score earn better return on equity funds. The higher returns are in the range of 8.6 per cent to 14.6 per cent as evident from the difference in ROE of companies in upper quartiles and lower quartiles. The difference is statistically significant at 5 per cent (p-value= 0.044<0.5) and (p-value= 0.044<0.5) one year and two years post-M&A respectively. Such findings lead to conclusion that the null hypothesis of no difference between the profitability of companies with different corporate governance score is rejected. It may be concluded that companies with better overall corporate governance have better profitable ratios.



Table 7
Independent samples t-test statistic (profitability ratios)

Year Post-M&A	Mean ratio (Q ₁)	Mean ratio (Q ₄)	Mean difference	t-value	Significance value
A: ROCE					
t + 1	35.8% (N=39)	25.1% (N=39)	10.8%	3.02**	0.003
t + 2	28.1% (N=38)	20.8% (N=36)	7.2%	2.98**	0.006
t + 3	34.2% (N=38)	15.3% (N=38)	18.8%	5.06**	0
t + 4	39.4% (N=34)	17.1% (N=34)	22.3%	3.98**	0
t + 5	44.9% (N=24)	18.3% (N=23)	26.6%	2.68**	0.004
B: ROE					
t + 1	25.9% (N=39)	17.3% (N=39)	8.6%	2.03*	0.044
t + 2	25.9% (N=38)	12.5% (N=36)	13.6%	2.08*	0.042
t + 3	25.2% (N=38)	13.1% (N=38)	12.1%	2.68**	0.009
t + 4	20.8% (N=34)	6.3% (N=34)	14.6%	2.4*	0.02
t + 5	22.4% (N=24)	10.3% (N=23)	12.1%	2.67**	0.009

** and ** Denote significance at 5 per cent and 1 per cent respectively.*

Table 8 illustrates the results of t- test for the difference of mean for performance ratios. It is evident from relevant data that companies in upper quartile have 8 per cent, 5.8 per cent, 9.6 per cent, 10 per cent and 4.15 per cent higher NPM one year post-M&A, two years post-M&A, three years post M&A, four years post-M&A and five years post-M&A respectively; moreover, the difference is statistically significant.



Table 8
Independent samples t-test statistic (performance ratios)

Year Post-M&A	Mean ratio (Q ₁)	Mean ratio (Q ₄)	Mean difference	t-value	Significance value
A: NPM					
t + 1	16.2% (N=39)	8.2% (N=39)	8%	2.53*	0.013
t + 2	14.6% (N=39)	8.9% (N=38)	5.8%	2.96**	0.007
t + 3	16.2% (N=38)	6.6% (N=38)	9.6%	3.5**	0.001
t + 4	14.1% (N=34)	4.1% (N=34)	10%	2.47*	0.017
t + 5	11.7% (N=24)	7.5% (N=23)	4.15%	2.38*	0.03
B: OCFR					
t + 1	25.3% (N=39)	17.1% (N=39)	7.87%	1.99*	0.048
t + 2	24.1% (N=39)	16.1% (N=38)	7.98%	2.19*	0.032
t + 3	21.7% (38)	17.2% (38)	4.63%	2.31*	0.029
t + 4	24.5% (N=34)	15.2% (N=34)	9.1%	2.51*	0.014
t + 5	21.8% (N=24)	14.2% (N=23)	7.64%	2.2*	0.033

*and **Denote significance at 5 per cent and 1 per cent respectively.

Panel B of Table 8 depicts that the companies with higher corporate governance score earn better operating cash flow ratios. The higher returns are in the range of 4.63 per cent to 9.1 per cent as evident from the difference in OCFR of companies in upper quartiles and lower quartiles. The difference is statistically significant at 5 per cent (p-value= 0.048<0.5), (p-value= 0.032<0.5), (p-value= 0.029<0.5), (p-value= 0.014<0.5) and (p-value= 0.033<0.5) one year, two years, three years, four years and five years post-M&A respectively.



Such findings lead to the conclusion that the null hypothesis of no difference between the performances of companies with different corporate governance score is rejected. It may be concluded that companies with better overall corporate governance have better performance ratios.

Analysis of corporate governance score and post-M&A valuation

To test the relationship between corporate governance score and financial valuation, price to book ratio (PB) and price-earnings ratio (PE) have been measured. It is hypothesized that firms with better overall corporate governance have higher firm value, i.e. the financial valuation of the companies with higher corporate governance score is higher than the financial valuation of the companies with lower corporate governance score.

Table 9 presents the results of the independent t-test to compare the mean post-M&A PB and PE ratios of sample companies in upper (Q_1) and lower quartile (Q_4). It is evident from relevant data that companies in upper quartile have 1.6 per cent, 2.3 per cent, 2.3 per cent, 1.8 per cent and 1.8 per cent higher PB ratio one year post-M&A, two years post-M&A, three years post M&A, four years post-M&A and five years post-M&A respectively; moreover, the difference is statistically significant.

Panel B of Table 9 depicts that the companies with higher corporate governance score are valued more by market as revealed by their PE ratios. The higher valuations are in the range of 3.46 per cent to 25.1 per cent as evident from the difference in PE ratios of companies in upper quartiles and lower quartiles. The difference is statistically significant at 5 per cent ($p\text{-value} = 0.049 < 0.5$), ($p\text{-value} = 0.011 < 0.5$), ($p\text{-value} = 0.045 < 0.5$), ($p\text{-value} = 0.038 < 0.5$) and ($p\text{-value} = 0.007 < 0.5$) one year, two years, three years, four years and five years post-M&A respectively. These results indicate that the companies with better corporate governance score are valued higher than the companies with lower corporate governance score.



Table 9
Independent samples t-test statistic (valuation ratios)

Year Post-M&A	Mean ratio (Q ₁)	Mean ratio (Q ₄)	Mean difference	t-value	Significance value
A: PB					
t + 1	4.23 (N=39)	2.57 (N=39)	1.6	2.01*	0.047
t + 2	5.9 (N=38)	2.6 (N=36)	2.3	2.57**	0.015
t + 3	4.8 (N=38)	2.5 (N=38)	2.3	1.99*	0.048
t + 4	4.6 (N=34)	2.8 (N=34)	1.8	1.96*	0.049
t + 5	4.2 (N=24)	2.4 (N=23)	1.8	2.21*	0.04
B: PE					
t + 1	18.1 (N=39)	13.2 (N=39)	3.46	1.97*	0.049
t + 2	37.1 (N=38)	14.3 (N=36)	22.7	2.7**	0.011
t + 3	40.2 (N=38)	15.1 (N=38)	25.1	2.04*	0.045
t + 4	22.7 (N=34)	15.2 (N=34)	7.5	2.2*	0.038
t + 5	33.8 (N=24)	14.3 (N=23)	19.5	2.98**	0.007

* and ** Denote significance at 5 per cent and 1 per cent respectively.

VII. CONCLUDING OBSERVATIONS

The present chapter examines the impact of corporate governance practices of the acquirers on short-term abnormal returns and long-term financial performance. The results are revealing. The empirical findings show that companies with high corporate governance score have positive abnormal returns in the short-run, better financial performance and higher valuations post-M&A; while companies with lower corporate governance score have lower financial performance and lower valuations post-M&A. The results are consistent with La Porta et al. (2002) that firms with better corporate governance enjoy higher valuation.

These findings have important implications. For investors, the findings reveal that, as far as agency costs are concerned, investments in companies with better



corporate governance score are more profitable. For corporate managers, the results imply that the management should be aware of the need for efficient corporate governance structure and mechanism to control agency problems. Better governance and disclosure practices increase investor confidence which in turn have positive influence on valuation. Companies with good governance are likely to be valued more. For policy makers, the findings that firm performance is significantly influenced by effective corporate governance could serve to justify regulative measures and towards enforcing healthy corporate governance regime and initiatives to encourage corporate to adopt and adhere to these measures.



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IMPACT OF PREVAILING WORK CULTURE ON EMPLOYER IMAGE (STUDY ON SELECT COMMERCIAL BANKS IN INDIA)

Pradipta Gangopadhyay

Abstract

The Commercial Banks in India are considered as the heart and barometer of the financial system. They may be reckoned as pillars of the economy as they play a principal role in the economic development of the country. The banking industry, over the years has undergone through substantial transformation, consolidation, and developments to become contemporary with the rest of the organizations. In the present customer centric competitive arena, satisfaction, quality, and loyalty prove to be key factors for organizational survival and development, especially for companies belonging to the service oriented sectors.

The business of banking companies lies much on the relationship between the bank employees and the bank customers. And how employees feel they are treated makes a difference to what they are willing to do for the organization. A positive work culture helps an organization develop attributes and qualities that make an organization distinctive and attractive to those who feel an affinity with it. It is the right work environment which helps in attracting and retaining the right people and to create conducive atmosphere of delivering the best of services. The challenge is to gain the true alignment within the organization and to live the brand's mission. This requires improvement in performance of the commercial banks, apart from marketing, in various other functional areas such as recruitment, retention, employee engagement and finally the growth of the bottom line.

This paper attempts to examine and evaluate the existing work culture in commercial banks, especially in Public Sector Banks (PSBs) in midst of expanding business activities of the private banks, re-entry of foreign banks, strict regulatory and disclosure requirements imposed by Government and RBI and such other challenges in this sector. The approach is from the HRs perspective and explores whether these organizations are prepared to employ today's generation, who are more polished in terms of education and career objectives and thus may not be able to adjust to unexpected, hostile work environment.

Key Words : *Brand image, Occupational stress, Employee relationship, Job satisfaction, Potential applicants, Work environment, Employer Branding*

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INTRODUCTION

Even though most organizations generally center their branding efforts toward developing product and corporate brands, branding may as well be applied in the area of human resource management. Steadily, more and more firms are adopting 'employer branding' as one of their strategies to attract recruits, improve work environment and retain talent. A small part of an employer brand predictive model is the work culture, which from a micro view, is determined by the psychological status of the employees and the prevalent work practices in an organization. The work culture of a firm encompasses around the mission, vision, values, corporate reputations, policies, leadership and management competencies existent. In today's corporate world, skills and knowledge of manpower is the main competitive enabler in the service sector. Hence attracting and retaining such talent would definitely be a competitive advantage for any firm. Presence of good work culture in an organization would be a strong tool to create a positive image of the company's stakeholders. Among such stakeholders are the present employees and the potential job applicants who wish to be absorbed in such firms. The right talent would get attracted only when they come to hear/learn positive and conducive work environment prevailing in their targeted companies.

Brand building has become an indispensable matter in the consumerist world as it helps to deliver a sense of familiarity to the customers and is considered to be beacons of trust. With liberalization of the financial sector, competition has increased manifolds and differentiating ones services from others is vital for survival. Though branding involves huge investment, it has become an inevitable strategy to act as source of competitive advantage for various sectors of the economy. Various researches and financial performance results from several banks indicate how aggressive brand building has become significant determinant of efficient performance. The organization need to have attraction in terms of economic, psychological and social benefits. Many research studies support the relationship between employer brand and the attraction and retention of talent, limited attempts have been undertaken to study the effect of work culture concepts on brand image of an organization. This study tries to empirically validate work culture that can predict effective talent attraction and retention efforts in organizations.

LITERATURE REVIEW

On thorough literature review it is seen that most employer brand research studied on the possible relationship between various organizational brand concepts of companies, talent attraction and retention. The new economy is characterized by a volatile talent demand-supply equation set against erratic attrition trends and



boundless cutthroat competition, and organizations have never had a tougher time in finding, managing and nurturing talent (Cheese et al., 2007; Mohapatra, 2005). The quest to win the talent war confronts companies around the world to realign their employer brand efforts in a bid to mitigate talent limitations (Deloitte LLP, 2010; Minchington, 2006).

The impact of talent shortage obstructs organizational efforts to execute against growth strategies thereby rendering sustainability's threats to organizations and training economic growth (Boshard & Louw, 2010; Charest, 2011; Ingham, 2006; Prinsloo, 2008). Research findings by Milkovich and Newman (2008) confirm that job candidates are attracted to companies with benefits that fit their inherent preferences and needs. The delivery of the firms' promises requires alignment with the identified needs of the job applicants.

Kristin Backhaus and Surinder Tikoo (2004), 'Conceptualizing and researching employer branding', functional benefits of the employer brand describes elements of employment with the firm that are desirable in objective terms, like salary, benefits, leave allowances. Symbolic benefits relate to perceptions about prestige of the firm, and the social approval applicants imagine they will enjoy if they work for the firm. Employees have the ability to help build strong and enduring brand equity, particularly within the service brand context (McDonald, de Chernatony and Haris, 2001; King and Grace, 2005).

Moroko and Uncles (2008) had mentioned three characteristics that stand out as highly consistent with organization branding –

- Being known and noticeable
- Being seen as relevant and resonant
- Being differentiated from direct competitors

Brand image is defined as an amalgamation of the perceptions related to the product-related, non-product-related related attributes and the functional /symbolic benefits that are encompassed in the brand associations that reside in consumer memory (Keller, 1993). One role of brand is to create and enhance satisfaction, and satisfaction predicts future behavior towards the brand (Gary Davies, 2007).

Work on employment issues tends to focus on job satisfaction and on its links to employee behavior (Gary Davies, 2007). Collins and Stevens (2002) found that company-based attributes had greater impact on job seekers than role specific attributes. Cable and Turban (2003), assert that strong brand identity and positive reputation are important factors in attracting job applicants. When the psychological contract is fulfilled, the employee is more likely to be engaged and



loyal; however, if the contract is broken a fall in engagement and productivity can result, accompanied by a rise in staff turnover (Rousseau, 1990; Robinson and Morrison, 1995). There is an enduring assumption that the performance of organizations is dependent on the extent to which employee values are aligned to company strategy (Blackler and Brown 1981; Gordon and DiTomasso, 1992).

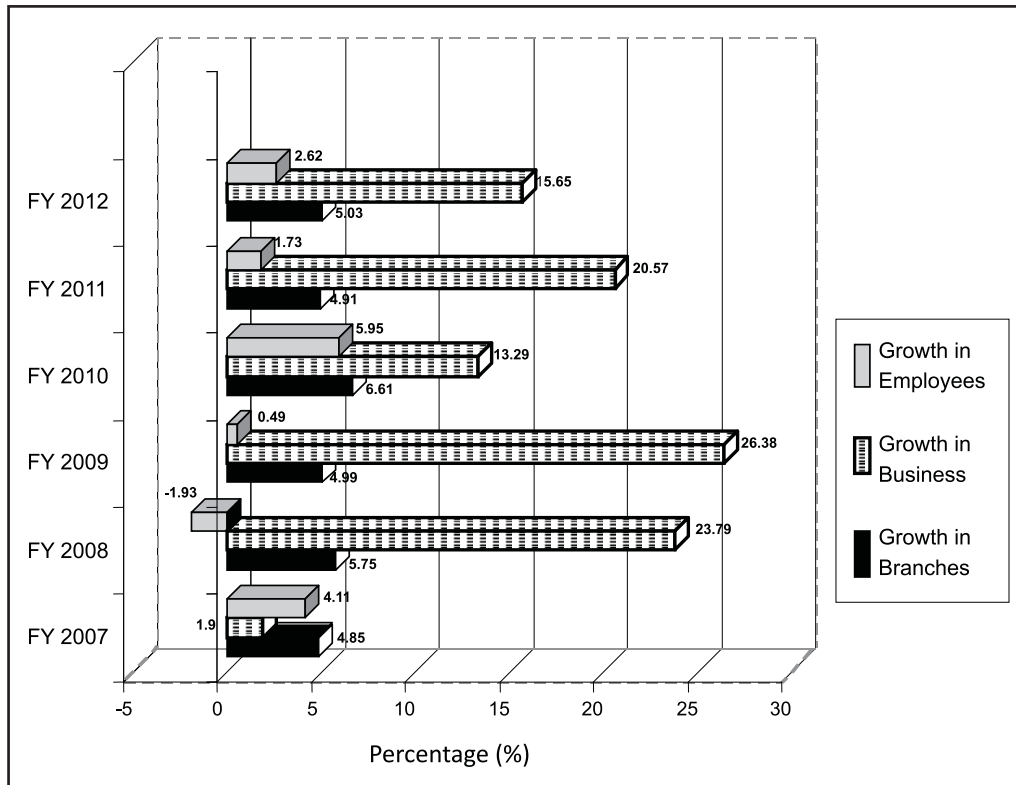
Clearly, it is seen that existing marketing and branding theory can add to the development of employer branding knowledge. Employer branding theory development stands to gain from the recognition that employer branding is indeed a context to be studied in its own right. A small part of an employer brand predictive model is the work culture, which form a micro view of the whole. As seen in the earlier studies the prevailing work culture is determined by the psychological status of the employees and the prevalent work practices in an organization. Potential applicants get attracted to an organization based on the extent to which they that the organization possesses and the importance valued by the applicant. Research on person-organization fit indicates that potential applicants compare the employer brand image they what to their needs, personalities and values. The more positive the brand image perceived by the applicants, the more highly identified the applicant becomes with the organization.

MANPOWER TRENDS IN THE INDIABANKING SECTOR

As per the Institute of Finance, Banking and Insurance (IFBI), the banking industry is expected to grow at a healthy rate of over 20% for the next 2 to 3 years. Banking industry, being one of the fastest growing segments of the economy, too faces challenges of scarcity of resources and skilled manpower. Such skilled manpower is not easily available in adequate numbers to meet the growing requirements of this sector. This is mainly due to normal attrition, competition and faster growth in business. The position is going to exacerbate further for the banking system as a whole, due to superannuation of many experienced bankers in the Public Sector during the current decade. Public sector banks in India employ more than 7 lakh people at present.

Various statistics in bank performance reports show how the number of branches, and the growth of business has taken place over the years, but similar growth of manpower has not taken place for the manpower in the sector. The Public Sector banks face a dearth of manpower for which there is stupendous work pressure in these organizations.

Table 1: Comparison of growth in number of branches, amount of business vis-à-vis employee strength for six consecutive years



Source: Compiled from various sources such as RBI, IBA websites

Sharma (2012), there is a dismal picture in the growth of employees in the public sector banks in India over the years, only a meager increase of number of employees is seen as compared to the growth of branch network and growth of business in these banks.

With only 30-35% of the population financially included, the Indian public is still underserved by formal banking. This will lead to issue of new banking licenses and formulation of innovative models that may serve the people who are not covered by traditional banks. With the planned announcement of new licensing policy, more financial institutions are expected to be established and requirements of manpower with the requisite skill set are expected to increase many-fold. There is thus a large current as well as the future demand for requisite manpower in the banking sector. On the other hand, a report by Economic Times Bureau shows the



rate of attrition in PSBs varies between 10% - 15% annually, which is a matter of real concern. According to a finding by Boston Consulting Group, in 2010, the average cost per employee in public sector surpassed the new private sector and their major suggestion has been focused on streamlining the HR Department. One of the objectives of corporate branding is to create an organization with a better workplace; branding activity, therefore, needs to be treated as a significant change initiative rather than a cosmetic effort. This strategic activity carried out by a consultant agency for a particular organization cannot act as a magic wand; it does not automatically mean that employees will 'live' the corporate brand. In order for employees to weave the brand vision in their minds, the brand message needs to be directed towards employees on day-to-day interactions that influence the way people experience workplace.

RATIONALE FOR STUDYING THE PREVALENT WORK CULTURE AND JOB MARKET OF BANKS IN INDIA

The work culture of an organization is influenced by psychologically meaningful and behaviorally relevant perceptions of the employees associated with it. Since work culture varies from organization to organization, it may create varied influence on the behavior of the employees of the bank. Consequently, the perception of prevalent work culture to those associated with an organization spread to various quarters by way of word of mouth and by way of behavior. This perception from the micro environment of the organization spread to its macro environment by this mode. In a company, the culture evolves out of collective perception of employees on various aspects of work life. It grows day-by-day from experiences due to a mixture of facets of organizational realities, goals, objectives, policies and practices.

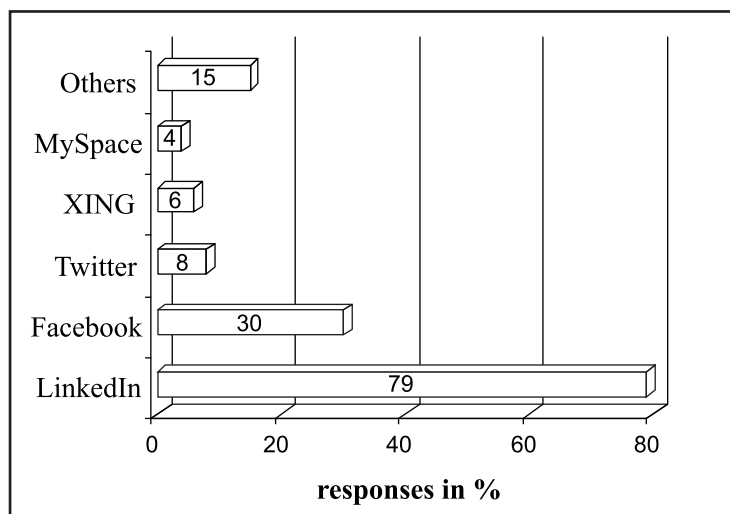
People talk of their workplace, about the organizations, the products, services they provide, their colleagues, bosses and many things to their peer group, friends, family members etc now and again. Hence the spread of information on work environment, culture and practices etc of any organization do not tend to remain a secret and swell across to other people, organizations, place and various institutions too. Today, with the availability of IT, varied communication channels such as print and electronic media, information spread faster than can be imagined. An image of the organization is created to the public at large about the way of functioning of it. Eventually, this image of the firm develops into the brand image of the organization and people relate to the organization they tend to recall the characteristics associated with these concerned organization.

The social networking is another such mode which has off let been a catalyst to such spread of information. Many job seekers use corporate websites, chat on



social networked sites with fellow peers, colleagues and friends to collect information on – training programs, job mobility, vacation policy, compensation options etc. Social media that have sneaked into many aspects of our online life have started making headway in job searches.

Chart 2: Use of social networking platforms to look for career information and job opportunities

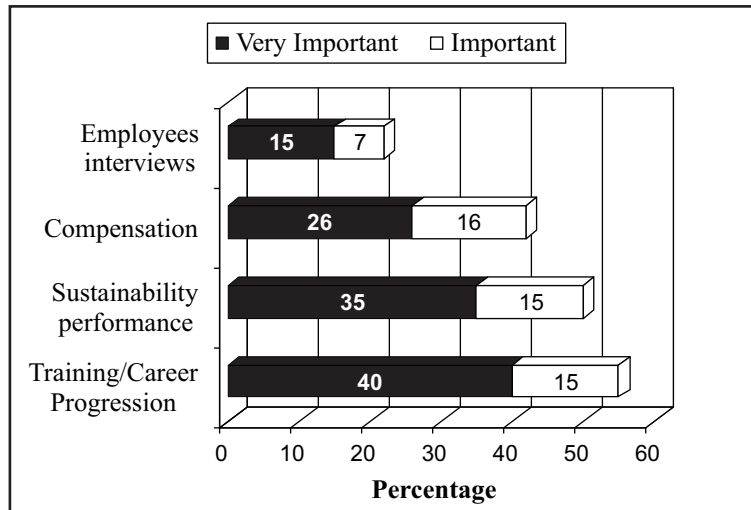


Source: Lundquist Employer Branding Questionnaire 2010, suitably modified for the study

In today's highly dynamic and rapidly changing business environment, the service sector in India has undergone a rapid change in the last decade. The financial sector, especially banks, is continuously trying to update themselves by acquiring and developing new technologies and professional workforce. As a result, it is important to study the role that organizational culture plays in motivating the diverse workforce. The role of work environment in driving efficiency in delivery of job and providing the right service to the stakeholders cannot be denied. Several organizations have proved that conducive work environment facilitate achievement and improve performance.

Earlier, such brand would have been created by offline activities, practiced in many ways: through job fairs, advertising, marketing and internal newsletters. Today with the extensive use of electronic and IT communication mode, use of websites, social websites, HR Consultancy firms play major role in shaping images of organizations.

Chart 3: How important is it to find the following information at time of recruitment



Source: Lundquist Employer Branding Questionnaire 2010, suitably modified for the study

Nowadays aspiring candidates and employees are more aware and have variety of choices for selection of workplaces. They tend to switch from one firm to the other much often than the earlier generations. People tend to search for organizations that are attractive to them and suit their demographic characteristics.

BUILDING THE EMPLOYER IMAGE OF BANKS IN INDIA

The Indian banking sector has undergone lot many changes due to globalization and liberalization, increased competition from foreign and private players and from introduction of new technologies. The pace of development for the Indian Banking Industry has been tremendous over the past decade. Many private sector banks have shown aggressive growth and achieved scale and visibility through customer focus and innovation. The public sector banks of India, which employ over 7 lakh people, are not way behind. Since 2005, a number of Public Sector Banks (PSBs) have gone in for revamps, from identity and image makeovers to expansion of services. They have felt the need to make themselves relevant to today's audience, Gangopadhyay (2012). In a situation when the banking industry, like any other financial services industry is facing a market that is rapidly changing, introduction of new technologies, fear of economic uncertainties, demanding customers, the branding strategy seems to work well. The success of banding is concerned with promoting an emotional response from the target audience.



Despite the corporate branding activities that the PSBs have been carrying out, employee retention and attracting talent have emerged as latest challenges for them. As the government stress on boosting financial inclusion and rural expansion, PSBs are racing against time to fill in large number of vacancies in the next few years.

OBJECTIVE OF THE STUDY

The paper aims to examine the influence of work culture on creation of brand image for an organization. The research question may be listed as:

- 1) To study the impact of work culture on the brand image of a bank towards its employees
 - 2) To understand the factors that may influence the prevalent work culture and how they may be responded to create a better employer image of the organization
- In this study, the potential candidates that are influenced by the attractiveness components of the organization related to their demographic characteristics are examined using statistical packages.

RESEARCH HYPOTHESES:

Null hypothesis H_0 – There is no significant impact of work culture on brand image of an organization

Alternate hypothesis H_1 - There is significant impact of work culture on brand image of an organization

RESEARCH METHODOLOGY:

To meet out the objectives of the study, statistical treatment of the data obtained from the field survey was carried out. Confidentiality of information has been maintained. Data from a sample of 110 respondents has been analyzed. Data collection was done through structured questionnaires customized for the study. The respondents were required to rank the statements with the five sets in terms of their applicability to the bank concerned. The data has been analyzed by using Statistical Package for Social Sciences (SPSS).

Descriptive statistics such as mean, standard deviation and ANOVA were used to analyse the data and test the hypothesis in regard to the demographic aspects of the group. In order to test study the relationship between the various independent and dependent variables 'Pearson Product-Moment' correlations were computed for the total sample. Stepwise multiple regression analysis was undertaken to assess the significant predictors of work culture for the total sample of employees at the officer level.

Scales developed from prior researches that had been generated through



deductive and inductive approaches has been used for the study. Based on information generated from prior studies, a pool of items related for each construct was used form structured questionnaire; the items were then customized for the study was made for primary data collection purpose.

Chart 4: Characteristics that had been considered in prior studies in the area, adapted to suit this study

Parameter of measure	Factors considered (Company-based attributes)	Indicator of improved brand image
Percentage of job offers accepted	Positive brand image of firm, Happy stakeholders, Positive work environment,	Higher percentage than industry average indicates attractiveness
Number of applicants per role	Job recognition, Better pay package, Conducive work environment	Higher number of applicants opting for similar posts showing competition
Average length of job tenure	Career advancement, Social recognition, Better for future promotion and growth, Employer loyalty	Longer period of staying with the company, indicating loyalty
Average staff turnover	Good and exciting work environment, Security of job, Flexible work times, Promotion opportunities	Lower than industry average shows attractiveness for the firm
Level of staff engagement	Supportive coworkers, Cordial relationship with superiors, Due recognition from the employer, Opportunity to learn from other department	More engagement proving better dedicated workforce

The statements had been constructed such that an idea of prevailing employee attitude and understanding the prevailing work practices in the organization under study had been done. Content and face validity were established by a panel of experts consisting of teacher educators, HR consultants and bank managers. They are requested to examine the instrument for content, clarity, wording, length, format and overall appearance.



POPULATION AND DATA COLLECTION

Sampling: Both the samples of banks and cities were done through convenient sampling method. As the researcher had reach of the banks in cities Kolkata and Bhopal, these cities were chosen for the study. The banks and their branches were conveniently selected, where the researcher could make headway to employees. As most matters in banks are confidential, reaching the staff for responses was very difficult.

Out of four banks approached, two would only allow such interaction in their select branches only. About 160 staff of various branches were approached, only 110 complete responses could be arranged for data collection finally.

A questionnaire was handed over to the concerned respondents consisting of various questions to dither their views on the prevailing work practices in their banks to dither the existing culture that may be prevalent in various banks. The distribution of questionnaire was done to 160 candidates, and a total of 110 candidates returned the questionnaire with proper and adequate responses.

INSTRUMENTATION

The questionnaire consisted of two parts: work culture and brand image scales with demographic characteristics. The items have been developed from various secondary researches and modified by the researcher to fit the study and target respondents. The index considered some facets of work culture that would determine brand image of an organization, using 29 items to be indicated by responding to five-point Likert type scale.

As explained in the literature of John Losby, a Likert scale is an ordered scale from which respondents choose one option that best aligns with their views. It is often used to measure respondents' attitude by asking extent to which they agree or disagree with a particular question or statement. A typical scale might be 'strongly agree', 'agree', 'neutral', 'disagree', 'strongly disagree'. It helps to measure attitude, belief, or behavior items. Numeric values assigned to each category for the purpose of analysis. A likert-type scale may or may not use a declarative statement.

Likert-type scales have features that are similar to the traditional Likert scale. For example likert-type scales do not have an ordered continuum of response categories and a balanced number of positive and negative options. A second difference is that likert-type scales do not use the traditional strongly disagree – strongly agree continuum. They use other ordered continuum response categories such as:



- Never, sometimes, often, always for assessing a frequency
- Mild, moderate, severe for assessing intensity
- Not at all, only a little, some, a lot, for assessing quantity

ANALYSIS AND INTERPRETATION

The consequences of statistical analysis of the data which have been interpreted through various tables are produced below. Descriptive analysis such as Mean, Standard Deviation and ANOVA results for the demographic variables in relation to the statements (Does work culture have significant impact on brand image of an organization) was done. The F value in the table represent ANOVA value and P indicates significance at 95% confidence level.

Table 1: Demographic variables in relation to the statement 'Is there a significant impact of work culture on brand image of organization'

Demographic variables		Mean	SD	F value	P value
Gender	Male	2.68	1.263	23.642	0.002
	Female	3.86	0.962		
Age	26-35	3.12	1.234	3.728	0.013
	36-45	3.51	1.151		
	above 45	3.34	1.002		
Education	Graduate	2.11	1.341	3.968	0.049
	Post graduate	2.58	1.332		
	Professionally qualified	3.19	1.391		
Cities	Bhopal	2.94	1.388	2.813	0.020
	Kolkata	3.11	0.877		
Designation	Clerks	2.66	1.359	5.954	0.017
	Officers	3.87	1.203		
Marital status	Married	3.26	1.205	5.954	0.017
	Unmarried	2.45	1.503		



From the table it is seen that there is noteworthy difference between the responses of male and female respondents with regard to work culture. The mean score of female respondents is 3.86 and for male respondents mean score is 2.68 with F value of 23.642 and P value 0.002. These show that female candidates are more concerned with work culture of the organization than that of male candidates. It is observed that there is no significant difference between the responses from candidates of different age groups with F value 1.018 and P value 0.402. The candidates with the age group 26 to 30 showed a means score of 3.12 and candidates aged above 35 years showed mean score of 3.34 indicating that aged candidates, having more experience, strongly feel that work culture would shape brand image of an organization.

The ANOVA results show that education of the potential respondents also influences their thought process and figure out a relationship between work culture and image of firms. F value of 3.728 and P value of 0.013 show that there is difference in view among employees of different levels of qualification. The mean scores of professionally qualified persons are higher than that of the score of graduates. The scores indicate that higher the education more they believe on the work culture as a determinant for job search.

The marital status of the candidates also has a bearing on their understanding and choice of firms with conducive work environment. Between unmarried and married respondents with P value 0.017 and F value 5.954, married respondents showed a higher mean score of 3.26 in comparison to unmarried people with means score of 2.45. Therefore married candidates are more conscious about the work environment and image of firms than their counterparts of unmarried lot. Similarly, respondents belonging to bigger cities, like that of Kolkata, show a higher mean score of 3.11 than a smaller capital city Bhopal. And the higher F value of 3.968 show significant difference in the attitude and belief about the work culture practices prevalent in organizations and their brand image in the market. The higher mean scores indicate that they strongly believe that work culture have greater influence to create brand image of a company.

For the research question 'Does work culture have significant impact on brand image of an organization' has been analyzed by correlation and regression statistics using SPSS. These statistical tools have been used to determine whether there are significant relationships between the variables. The scale model suggested by Davies (1971) has been used to describe the relationship between the variables. They are:

- 0.7 and above – indicates high correlation
- 0.4 to 0.69 – indicates moderate correlation
- Till 0.39 – indicating low relationship



The table 2 below shows the correlation of the impact of work culture on the brand image of the selected organization (bank):

Table 2: Correlation Statistics

Correlations			
		Work Culture	Brand Image
Work Culture	Pearson Correlation	1	0.876 #
	Significance (2-tailed)		0.000
	N	110	110
Employer Image	Pearson Correlation	0.876 #	1
	Significance (2-tailed)	0.000	
	N	110	110
<i># Correlation is significant at the 0.01 level (2-tailed)</i>			

It is clear from table 2 that prevalent work culture in a banking organization and its brand image are highly associated with the r-value (co-efficient of correlation) '0.876'. Since the correlation is significant at 0.01 and p value as indicated in the table is 0.000, the result obtained is significant due to the fact that $0.00 < 0.01$. Therefore, it is clear that work culture does have effect on brand image of banking organizations.

Further to that, the table 3, as given below shows the regression analysis of work culture on brand image of the selected banking organization.

Table 3: Regression statistics between work culture and employer image

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the estimate
1	0.876 *	0.767	0.765	0.21323
<i>* Predictors: (Constant), work culture</i>				

R = Coefficient of Correlation = 0.876. Indicates that both the variables, prevalent work culture and brand image are highly correlated.

R² = Coefficient of Determination, also known as goodness of fit, signifies how of much impact the independent variable has on dependent variable. R² = 0.767, indicates the values have high impact on the brand image.



Adjusted $R^2 = 0.765$ showed because the study has many questions defined under a single parameter. It indicates the combined R^2 for all the question items in that particular parameter.

Table 4: Coefficients Statistics

Coefficients #						
Model B		Un-standardized coefficients		Standardized	t	Significance
		Std. Error	Beta			
1	(Constant)	0.186	0.105		1.785	0.078
	Work Culture	0.883	0.047	0.876	18.955	0.000
<i># Dependent Variable: Employer Image</i>						

As seen in the table beta (β) value is 0.883 showing high impact values. This high value shows that the value of work culture have a high level of impact on the brand image of the employer ie the concerned banking organization. The statistical results indicate that when employer image is tested against work culture, there is significant relationship between the two variables ($R^2 = 0.767$, $R = 0.876$, $N = 110$, $p < 0.01$), the correlation is high and hence very high impact.

CONCLUDING DISCUSSION

The study was conducted to understand the impact of prevailing organizational work culture on the employer image of the organization. This study was mainly focused on some selected Public Sector Banks in India. In today's highly dynamic and rapidly changing business environment, recruitment is a challenging affair in the banking companies. Attracting the right talent and then retaining them in the organization is further more difficult. The work becomes easier if an organization has a reputed brand image, as an employer, in the market. A company which sends a positive vibration in the market and has created good image in the industry would attract the right talent.

From the study we can see that a strong correlation exists between work culture and brand image of an organization. To create a good employer image of a firm, it is important that it consistently delivers the organization's message at all employee touch points (recruitment, orientation, communication, shared services, performance and development, reward and recognition). Employees should experience the organizational brand through everyday behavior, values, management competencies and leadership competencies. The message spreads round various industries and across the country to create an employer brand with differentiated attractiveness in terms of functional economic and psychological benefits for the stakeholders.



QUESTIONNAIRE

Dear Respondent,

This is a survey for purely academic purpose and education. The confidentiality of the data will be maintained and your identity will never be divulged. **THANK YOU FOR YOUR COOPERATION!!!**

Please put cross (X) on the appropriate box

Gender:	Male	Female
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Age group:	26-35	36-45	Above 40
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Education:	UG	PG	Professional
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Designation:	Clerk	Officer
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Marital status:	Married	Single
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Bank:	
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Are the following provisions and systems important / available in your organization:

(you may put a cross (X) in the appropriate box of your choice)

(1) Provision for balance between private life and career opportunities

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(2) Presence of training & development facility to create stronger workforce

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(3) Continuous re-connection and follow-up of work at various level

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(4) Presence of clear organization culture

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(5) Policy for employee retention program present

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(6) Exit interviews are in use and reviewed by higher authority

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(7) Presence of leadership/management development programs

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(8) Presence of mentoring and career succession planning

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(9) Good employer image to develop work environment

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(10) Due importance given to internal branding

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(11) Employees considered customers of personnel department

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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RESEARCH BULLETIN _____

(12) Belief that branding is a purview of only the marketing department

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(13) Presence of contemporary work environment and practice

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(14) Value given to creativity and innovation

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(15) Presence of positive feedback mechanism

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(16) Free flow of communication among superior and staff

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(17) Presence of competitive compensation

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(18) Laid down policy of non-monetary motivation and staff welfare

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(19) Focus on Skill and competency development

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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(20) Management positively enforces good ethics and high morale

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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21) Presence of above items (from 1 – 20) important for conducive work practices and culture in office

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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22) The above items (from 1 – 20), if present in your organization, would create a better image of your employer

1 not important	2 somewhat not important	3 difficult to tell	4 somewhat important	5 very important
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LENDING APPROACHES OF INDIAN BANKS – A STUDY FROM SME PERSPECTIVES

Ram Jass Yadav

Abstract

The importance of SME sector in India can be best understood that it contributes 8% in Gross Domestic Product (GDP), 45% of manufactured output, 40% of exports, manufacture over 6000 products and provide employment to around 60 million person through 26 million enterprises as per latest 4th all India census of MSMEs. MSME sector is the second largest employment provider in the country and it is good vehicle to achieve inclusive and distributed growth besides a profitable avenue for the banks in India. The author has undertaken a survey in year 2012-13 to study lending approaches of Indian Banks from SMEs perspectives to examine problems being faced by SMEs in getting finance from banks and also to know viable solutions of identified impediments to improve credit-off take to the sector. Innovation being the focus of paper, primary information has been gathered from entrepreneurs for enhancing credit accessibility to them through innovative approaches & strategies.

Key Words : CGTMSE, CIBIL, DER, EDP, GDP, TAT

1. INTRODUCTION

The Micro, Small and Medium Enterprises (MSMEs) have emerged as a highly vibrant sector of the Indian economy which plays pivotal role in providing large employment opportunities and also help in industrialization of rural & backward areas. It is estimated that if India wishes to have growth rate of 8-10% for next couple of decades, it needs a strong SME sector, without which it would be difficult to realize theme of “*faster, sustainable & more inclusive growth*” for 12th Five Year Plan (2012-2017). Relationship business model is now required to be shifted to 'Efficiency based Business Model' for good corporate governance in fast moving global order where knowledge and intellectual skills are critical to create and improve products and services, develop more efficient distribution and marketing methods and ensure customer satisfaction. It is therefore, inevitable to search new ways & means of doing business for enhancing capacity building and improving competitiveness of SME sector. An English naturalist & eminent geologist Charles Darwin said “*It is not the strongest species that survive, nor the most intelligent, but the ones who are most responsive to change.*” In this

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backdrop, efforts have been made in the paper to ascertain possible *innovate approaches & strategies* for enhancing accessibility of Banks' finance to SMEs because merely about 5% MSMEs are covered by institutional funding given that approximately 95% of units require to bring into banking fold for inclusive growth in economy.

2. HYPOTHESIS OF STUDY

MSME being GEN-NEXT engine of growth; is an answer to realize 12th Plan with special reference to generate employment and export of the country. In light of great significant of the sector in economy and also huge potential of banks' lending from MSMEs for sustainable growth, the present study aims to identify major issues in SME financing from credit users (borrower) point of view. Research broadly based on the hypothesis from MSMEs perspectives “why banks' credit do not preferred” by them such as –

- ❖ Bankers prefer *security obsessed* lending
- ❖ Lengthy, complex and inflexible *paper works of banks*
- ❖ *Lower capitalization & high Debt Equity Ratio* of SME beneficiaries
- ❖ *Banks are taking months* to grant credit & there is no on-line tracking of loan application and many a times insufficient funding by banks to SMEs

3. METHODOLOGY & SAMPLE OF STUDY

To examine key issues narrated as hypothesis of the study, primary information has been gathered from the entrepreneurs through a questionnaire which has three parts viz. Demographic, Situational and Funding pattern relating to financing issues. The important information collected from SMEs includes Problems before Indian SMEs, Business drivers and issues in Bank Finance, Profitability of SME Firms, Solvency & coverage ratio of SMEs, Sources of financing and trend analysis on SME lending, Growth pattern of SME firms, General outlook and bankability of SME Firms and Ways for enhancement of SME Finance. The questionnaire used to collect data for undertaking research is depicted in annexure.

One hundred & ten (110) units have been selected in sample which are geographically spread throughout the country in 15 states - Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jharkhand, Madhaypradesh, Maharastra, Orissa, Rajasthan, Tamilnadu, Uttarakhanda, Uttarpradesh, West Bengal, and Delhi who are dealing with PSBs and private banks. The random sampling used in study covers 76 units from manufacturing and 34 units from service sector. The sample includes micro (19), small (63) and medium (28) enterprises representing 75%



units to MSE sector which is on top agenda of central government for equitable growth. Ninety four (94) units are owned by male and sixteen (16) by female in sample of SMEs. These SME firms are being run in form of companies (50), partnership firm (33) and sole proprietorship (27) firms. It is evident that sample is spread across the nation which includes SMEs from both manufacturing & service sector representing almost all types of constitutions and gender; therefore, it is diversified sample to represent the sector. The simple statistical techniques are used to arrive at empirical observations.

4. OBSERVATIONS ON LENDING APPROACHES TO SMES

Among numerous problems such as access to capital, technology, skill, market, awareness etc being faced by SMEs; access to adequate and timely credit at a reasonable cost is the most critical problem for SMEs. The major bottlenecks impeding the growth of the sector in general and SME finance in particular, are analyzed hereunder in the paper.

4.1) In-competitiveness of SMEs

The problems before Indian SMEs can be broadly grouped into three categories, based on the different sets of constraints faced and requirements of policy interventions such as (a) Finance & accounting (b) Market linkage & technology and (c) Capacity building for competitive advantages. The responses on these problems are depicted in table - 1 and analyzed below-

Table – 1: Problems before Indian SMEs

Types of problems & constraints	Numbers	Percentile
<i>Capacity Building for competitive advantages</i>	124	44
Stiff completion from domestic firms	75	27
Non availability of skilled / managerial man powers	29	10
Competition from ADEs/EMEs	20	7
<i>Finance & Accounting</i>	100	36
Cost of Production or labor is high	70	25
Access to Bank Finance	18	6
Firms do not get finance for job works	7	3
Improper Book Keeping & Accounting	5	2
<i>Market Linkage & Technology</i>	49	17
Product Branding	20	7
Market for Products	14	5
Lack of Technology	15	5
Others	7	3
Total	280	100



Result indicates that problems relating to challenges of *capacity building* for a competitive advantage has highest score 124 of responses among all three categories of problems categorized which represent 44% responses. It can be observed from the results that Indian SMEs do not face much competition from advanced & developing economies (ADEs) and emerging market economies (EMEs) but facing stiff competition from domestic large sized firms. Non availability of skilled & managerial *man powers* is observed problems of this category by 29 SMEs. *Finance and accounting* is next impediment in growth of SMEs with its key elements of higher cost of production & labor (70 responses), bank finance including non availability of finance for job works (25 respondents), and improper book keeping & accounting. *Product branding*, market for products and lack of technology are major constraints for market linkage of SME firms as responded by 49 SMEs representing 17% of total numbers. The analysis witnessing that there is pressure on sector to reduce costs to withstand the domestic as well as international competition in globalised regime.

4.2) Business Drivers and Bank Finance

There are peculiar drivers of setting up business by these first generation entrepreneurs. The important issues usually faced by SMEs are compiled in the results depicted in table-2 and it is observed that majority of entrepreneurs had started their business after gaining adequate experience of the activity such as 52 respondents found to have their family business, 36 persons promoted their business activities having gained working experience at elsewhere, 22 SMEs had carried out market survey on viability of their business before commencement and 20 entrepreneurs were inspired from similar business of their friends & relatives which all put together constitutes eighty six percent of total responses.

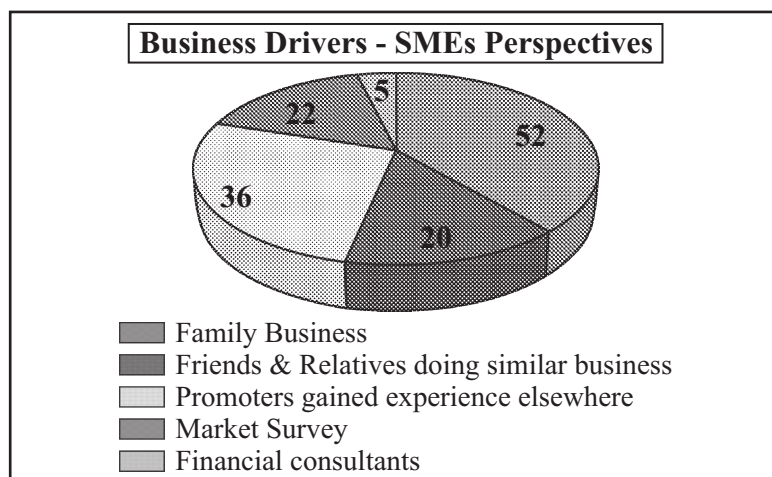


Figure -1



RESEARCH BULLETIN

It is therefore, evident that SMEs exercise due care before setting up the business as observed and also depicted in figure -1; but family business being the key drivers in majority of SMEs.

While seeking feedback & compiled in table -2; on time taken by banks in disposing of loan applications, merely 11 entrepreneurs representing 7% of responses expressed their views that they need fast delivery of loans and don't have time to wait for loans from banks.

Table – 2: Business Drivers & Issues in Bank Finance

Driving force to set up business	Nos	%age	Issues in Bank Finance	Nos	%age
Family Business	52	39	High rate of interest	60	38
Promoters gained experience else where	36	26	Insufficient collateral & guarantee	58	36
Market Survey	22	16	Promoters contribution	19	12
Friends & Relatives doing similar business	20	15	Lower capitalization, high DER, LTV	12	7
Financial consultants suggested to set up this business	5	4	No time to wait – time is money	11	7
Total	135	100	Total	160	100

It reveals that *turnaround time (TAT)* of granting loans matches with the expectations of 93% respondents, thus banks have improved their delivery channel to meet customers requirement in time. However, charging higher rate of interest and demanding high collateral by banks found to be major impediments by SMEs as expressed by sixty respondents constituting 38% and 58 entrepreneurs representing 36% of total numbers respectively. Lower capitalization with high debt equity (DER) and loan to value (LTV) ratio is reported by 12 respondents which might be owing to inadequate margin or not bringing own contribution by promoters in 19 responses that put together constitutes 19% of total responses. It substantiates that SMEs do not prefer loans from banks due to security obsessed lending and lower capitalization with high debt equity ratio.

4.3) Profitability of SME Firms

Profit being sole motive of any business organization, select parameters has taken into sample which has direct bearings on the profitability. Responses collected from entrepreneurs are of qualitative in nature and have analyzed in 4 scales such as increase, decrease, unchanged and not applicable which are presented in table-3.



Table – 3: Profitability of SME Firms (Last 3 Yrs)

Selected parameters of Profitability	Factor impacts (Nos of responses)				
	Total	Increase	Unchanged	Decrease	Not Applicable
Labors & Staff Cost	105	83	20	-	2
	(100)	(79)	(19)	-	(2)
Raw Material Cost	104	87	9	-	8
	(100)	(84)	(9)	-	(7)
Interest Expenses	104	82	16	4	2
	(100)	(79)	(15)	(4)	(2)
Other Operating cost	104	71	27	3	3
	(100)	(68)	(26)	(3)	(3)
Turnover & Sales	101	82	16	3	-
	(100)	(81)	(16)	(3)	-
Profit Margin	102	46	30	26	-
	(100)	(45)	(30)	(25)	-
Profit (PAT)	102	64	24	14	-
	(100)	(63)	(23)	(14)	-

Note - Figures in bracket indicated %age to total responses

Almost all factors of cost such as raw material, labor & staff cost, interest expenses and other operating expenses have increased during last 3 years in majority of SME firms and sales has also improved in 81% firms except in cases of 16% & 3% cases in which it was constant and decreased respectively. Further analyses of these factors reveal that change in sales and cost of production is disproportionate because in 55% cases the profit margin either remained unaffected (30%) or reduced (25%). However, profit after tax (PAT) found increased in 63% cases as against increase in profit margin of 45% which means that perhaps 18% units have improved their profit by way of other income through diversification of business including taking job works. Analysis also reveals that SMEs are less impacted from global meltdown during the last 3 years 2008-11 because the sales had increased in 81% firms despite world faced the recession. Indian economy overcome from the recessionary phase at earliest without many problems because SMEs dominated economy normally registers sustainable growth. In 16% cases sales was contained at same level without adverse impact while only in case of 3% units' sale was reduced. Therefore, SMEs are not only strong target for sustainable growth but *swiftly shock absorbers* while economy is under stress.

4.4) Solvency and Coverage Efficiency

Solvency and coverage ratios are considered financial stress absorbing indicators in banking parlance. These ratios are also applicable in assessment of banking



solvency under new rules framework of Basel – III which shows significance of these parameters across the world for financial institutions. In this context solvency and coverage efficiency are treated important issues of finance to SMEs by bank, thus qualitative response on loan to value (LTV) and debt equity ratios obtained from entrepreneurs which are expressed in three degree scales namely improvement (increase), deterioration (declined) and no impact (unchanged) on these ratio. It has been observed (table – 4) in sixty percent firms that their LTV ratio has either improved (23%) or remained unchanged (27%) and no debt (10%) was raised during last 3 years while in 40% cases the LTV ratio increased as expressed by 92 respondents.

Table – 4: Solvency and Coverage Ratio of SMEs

Indicators	Nos of responses on Factor impacts				
	Total	Increase	Unchanged	Decrease	No debt
Debt to Fixed Assets / Loan to Value Ratio (LTV)	92	37	25	21	9
	(100)	(40)	(27)	(23)	(10)
Debt Equity Ratio	89	31	30	23	5
	(100)	(35)	(34)	(25)	(6)

Note - Figures in bracket indicated %age to total responses.

The trend analysis of LTV reflects that SMEs have adequate room of raising term finance against primary assets in name of firms, because in 27% cases the coverage ratio found to be constant, 23% firms have repaid their term obligations thus their LTV decreased and 10% firms have not availed any debt. Under such circumstances demanding of collateral by banks tends to be ironical because most of the SMEs in sample have adequate leverage on coverage front and they are gradually improving LTV. Similarly, debt equity ratio (DER) indicates that 65% firms in survey sample are ploughing back their profit not to impact their solvency because 34% firms do not reflect any change in their DER, it is further reduced in 25% cases might be repayment of debt and retaining earning in business while 6% firms do not have any debt. Merely 35% firms reported increase in their DER but their equity level was also acceptable to their banks. Both the above observations substantiate the reality that SMEs are bankable on front of their solvency and coverage ratio

4.5) Sources of Finance & their Trend Analysis

Finance gap can be funded by numerous ways apart from bank loans such as retained earnings, friends & relatives, equity funding, trade credit, capital subsidy, private lender, non-banking financial companies, factoring, leasing, hire purchase etc.



Table – 5: Source for SMEs Finance

Source of Finance	Total responses	Source Preferred (Nos)	Percentile
Bank Loan	108	101	94
Retained Earnings	101	82	81
Friends & Relatives and sister/group concerns	107	78	73
Equity Funding	95	71	75
Trade Credit	100	67	67
Capital subsidy from Government	99	26	26
Private Money Lenders	98	12	12
NBFCs	91	9	10
Factoring, Leasing, Hire Purchase etc	90	13	14

However, results of the survey depicted in table - 5 reveals that Bank finance is observed the most preferred source of funding by SMEs with highest score of 94% followed by retained earnings (81%), equity funding (75%), friends & relatives (73%) and trade credit (67%) as per result of survey. Other sources such capital subsidy, private lender, factoring, leasing and NBFC are least preferred source by SMEs in sample. Finance from banks by SMEs is found to be more convenient and accessible probably owing to the fact that banks in present environment of banking are known 'one stop shop' that offers all sort of financial and non-financial services which covers insurance, payment of taxes & utility bills, e-ticketing, fund based & non fund based credit facilities etc.

Table – 6: Trend Analysis on SME Finance

Source of finance	Extent of finance granted by lenders						
	Total responses	100%	75%-99%	50%-74%	Less than 50%	Refused (High cost of loan)	Rejected
Working Capital from Banks	101	67	29	1	1	2	1
	(100)	(66)	(29)	(1)	(2)	(2)	(1)
Term Loan from Banks	90	55	19	3	-	12	1
	(100)	(63)	(21)	(3)	-	(13)	(1)
Trade Credit	85	36	17	4	3	19	6
	(100)	(43)	(20)	(5)	(3)	(22)	(7)
Private Borrowings	87	29	11	6	3	29	9
	(100)	(33)	(13)	(7)	(4)	(33)	(10)

However, to analyze trend of finance (table -6) being made available by these sources, primary data gathered on the extent of finance considered to SMEs by four major sources of funding viz. working capital and term loans from banks, trade credit and private borrowings. Responses collected from SMEs are grouped in six categories such as extent of finance less than 50%, 50% to 74%, 75% to



99%, 100%, finance rejected by banks and loan sanctioned but refused by borrower due to high cost of loans. It is observed that rejection rate of firms' request for working capital and term loan by banks was negligible as it was found only in one case but not providing adequate funding by banks have been concern. Hundred percent requirements were met only in 66% and 63% cases in working capital and term loan respectively. It shows that good amount of firms are compelled to *bridge deficit from other sources* including private borrowing which not only costlier but also causing funds diversion. It was also expressed by respondents that availment of *trade credit* found to be in-competitive in offerings from suppliers including higher prices and delayed supply of raw material that affects raw material cost and at times non-fulfillment of delivery commitment to end users and in turn SMEs failed in capacity building for competitive advantages. Refusals of sanctioned credit by SMEs are observed higher in 12 cases representing 13% of total numbers in term loans as compared to working capital owing to high cost of loans from banks. Higher cost of funds to beneficiaries is also observed major cause of refusal in case of trade credit (22% refusals) and private borrowings (33% respondents) which can be assumed one of the hindrances' in capacity building for competitive advantages.

4.6) Sanction Terms and conditions by Banks

Loans to needy person are granted on set norms which are famously known as credit covenants or principles of lending to mitigate inherent risks in finance business. Banking industry is also not an exception and therefore, all types of loans and advances are considered on certain terms and conditions which ensures optimum quantum of finance through method of lending, fixation of repayment period based on cash flow of the firms, pricing of loans to charge risk premium, collaterals to mitigate default risks. Entrepreneurs' were interacted on these parameters to know the degree of improvement; deterioration, no impact in recent past and consolidated results of survey is presented in table - 7. Seventy nine (79) firms have reported hike in interest rate on their loans which is mainly because of economic scene of rising trend of interest rates in banking thus it cannot be treated an unit specific increase. However, in seven percent units it is decreased indicating the improvement in their credit rating which may be considered a rewarding impact on their loan pricing. Further, the constant rate of interest in 18 percent cases shows that these units are availing loans at fixed rate option, which may be considered a tool of hedging risk by borrower in increasing trend of interest rates.



Table –7: Terms Analysis of SME Finance

Parameters	Increased	Decreased	Unchanged	Total
Interest Rate on loans	79	7	20	106
	(75)	(7)	(18)	(100)
Processing, documentation & other costs	55	14	36	105
	(53)	(13)	(34)	(100)
Size of loan limits	72	10	19	101
	(71)	(10)	(19)	(100)
Repayment period	16	13	68	97
	(17)	(14)	(69)	(100)
Collateral requirement	40	18	41	99
	(40)	(18)	(42)	(100)

Note - Figures in bracket indicated %age to total responses

Seventy two SMEs constituting 71% of total numbers have availed increase in their limit to meet their enhancing financial requirements which might be one reason of increase in processing, documentation and other costs. It is observed that 83% SMEs have fulfilled their repayment obligation because there was no change in the repayment period and rather it was reduced in 14% cases due to improved cash flow. Repayment period was increased in 17% cases owing to global meltdown and market recession; therefore, SME finance witnesses comparatively lesser rate of default and higher shock absorbing capacity in the economy. Collateral requirement enhanced in forty firms constituting 40% of numbers as against enhancement of loan limits in 71% cases in sample survey. *It leads to the conclusion that SMEs are fairly covered and require less collateral for their financial needs.*

4.7) SME – A sector of higher growth

SME is known for its contribution in all round growth of an economy such as employment generation is continuously increasing, exports and production also showing increasing path for this sector. While at micro level, feedback was obtained from entrepreneurs on their average growth rate in turnover and profit during last three years. The upfront results from response collected witnessed that there are negligible units in sample which shown no growth as depicted in table- 8.



Table – 8: Growth pattern of SME Firms

Growth Range (Annual)	Turnover/ Sales		Profit before Tax		PAT	
	Actual*	Projected	Actual*	Projected	Actual*	Projected
Over 25%	52	55	27	41	27	39
	(49)	(53)	(26)	(39)	(26)	(37)
10-25%	42	41	51	44	48	39
	(40)	(39)	(49)	(42)	(46)	(37)
Less than 10%	9	7	23	20	24	26
	(8)	(7)	(22)	(19)	(23)	(26)
No Growth	3	1	4	-	6	1
	(3)	(1)	(3)	-	(5)	-

**Last three years average & Figures in bracket indicated %age to total responses.*

Eighty nine (89) percent SME firms grew with 3 years average rate of 10% & above and over 92% firms projected to grow with more than 10% in sales volume in subsequent years. Furthermore, 52 firms accelerated in sales with a growth rate of more than 25% which is indeed testimony of possessing higher growth appetite by this sector. It is also observed from the responses that SME is a sector of entrepreneurship dreaming high & believes in ambitious projections because number of firms projected to be higher than actual in growth rate over 25% in all selected parameters of business. Analysis signifies that SMEs moving towards higher profitability as number of firms projected in growth range of over 25% increased from 27 to 41 in profit before tax. This reinforce the statement that SMEs finance might be smaller in their ticket size but these would be proven profitable business for sustainable growth in future for banking industry because there are good number of units having potential of high growth as around 37-39% firms projecting over 25% hike in profit. There is big group of over 60% firms which will grow with a rate of more than 25% in years to come thus it is bankers bonanza as these firms will have need of finance to achieve their ambitious projections.

4.8) Sector with Positive Outlook – Enhances its Bankability

Among numerous issues involved in lending at macro and micro level, author has taken both kinds of issues into account in completing this study which includes economic outlook, firms' business, owned capital, credit history of firms with credit information companies, willingness of banks & suppliers to provide credits and propensity of investors for making equity / debt investment in SME firms. To avoid complexity in data, qualitative information has collected from entrepreneurs to examine impact namely increase/improvement,



decrease/deterioration & unchanged on the selected factors which are presented in table - 9.

Table – 9: General outlook for Bankability of SME Firms

Factors affecting SME Finance	Improved	Deteriorated	Unchanged	Total responses
Economic outlook	72	21	11	104
Sales, Profitability & Business of firm	87	6	11	104
Own Capital	87	6	11	104
Credit history of firms like CIBIL	66	2	36	104
Willingness of banks to provide loan	82	14	8	104
Desire of Suppliers for Trade Credit	56	19	25	100
Investors propensity for equity / Debt investment	35	8	31	74

Environment has been in favor for SME financing because sales, profitability & business and capital either increased or maintained as reported by 98 firms constituting 94% of total response barring deterioration observed merely in six cases. It signifies that bankability of finance to SME sector has been improved thus it is viable business for banks owing to positive outlook of the sector. Credit history awareness is observed in 102 firms representing 98% of total respondents because deterioration in credit records with CIBIL found only in two SME firms. The analysis evident enhanced accessibility of banking services to SMEs as these firms have good track of credit history with credit information companies which is prerequisite to consider financial needs in present framework of regulation hence SME sector now become bankable. Situational analysis further reveals that 82 enterprises represent 79% of total numbers have opined that bankers found willing to provide loan to SMEs, however, in 21% cases bankers attitude observed indifferent to help the SME firms. Trade credit is though one of available sources of funding financing need of SMEs, it is not much preferred by entrepreneurs owing to reasons described in preceding analysis and same can be observed in present case that improvement is reported by 56% respondents as compared to 79% in case of bankers' willingness. Further improvement in propensity of investors has been reported by 35 firms constituting 47% of responses for equity / debt investment in SME constituents but respondents in sample have not expressed their encouraging feedback for this source at present which might be owing to unawareness of the market or uneconomical size of operations of sample firms in the study.



4.9) Ways of enhancing SME Finance

The entrepreneurs have suggested some remedial measures (table -10) to find out viable solution for enhancing accessibility of bank finance to the sector which is determinants to offer viable recommendations in the study.

Table – 10: Ways for enhancement of SME Finance

Measures suggested by SMEs	Number	Percentile
Attitude transformation of banker	53	23
Awareness campaign for bankers & beneficiaries about Govt. Scheme	45	19
Special provision for interest subvention, rebate for regular payment, provisioning	41	18
Allocation of equal time to appraise person & purpose of activity	34	14
Timely disposal	33	14
Transparency in process – on line tracking of loan application	29	12
Total	235	100

It has emerged from the impression of respondents in survey that attitude is a key determinant of complete success which makes an organization the happening one. Fifty three entrepreneurs (constituting highest percentile of 23 among measures suggested by respondents) have felt need of handholding approach by bank officials. To realize the expectations of end-users of credit, management of banks should review skill development and role transformation module of training for field staff. Awareness was found lacking about government programmes being implemented through banks for development of SME sector. Forty five respondents representing 19% of numbers informed that awareness campaign for both bankers SMEs should be run including submission of papers and filling up application under various schemes to avail their full benefits. Also respondents suggested to make bank finance cost effective, giving due importance to person behind project while appraising the application, timely disposal and bringing transparency in processing system of loan application by providing on-line tracking to applicants.

5. RECOMMENDATIONS

SME sector is perceived as a profitable endeavor for banking business despite significant differences in lending practices, business models, drivers and obstacles of SME finance for banks. Taking empirical observations & remedial measures suggested by the entrepreneurs into account, following recommendations are being offered towards making banks' SME loan book strong for sustainable development of banking industry and inclusive growth of Indian economy.

5.1) Succession Planning & Training Reforms in Banking

Credit being the specialized function of core banking, banks should recruit



officers who are professionally qualified such as CA, CMA, MBA etc and provide them exposure of working in loan department under mentoring of senior experienced officials as a matter of succession planning. Besides recruitment of specialized officers, talent inside the banks should be identified and groomed because promoting the people without grooming would not help much to solve gap of leadership in banking. To identify, develop & manage talent at all levels, training colleges of banks to be upgraded as centers of excellence and should be responsible for continuing learning efforts across the organization. Training is also essential to branch managers and their field officers for change in mindset away from perceived risk in financing SMEs. Internal processes in training such as faculty selection, development of faculty, fill up at least 50% specialized positions (such as credit, treasury, human resources, marketing etc) through lateral recruitment as core faculty with PhD as essential qualification with suitable nomenclature in banking like Research Assistant, Assistant Professor, Associate Professor or Professor; to bring professionalism of international standards in training. Banks to set up specialized training colleges to cater training needs of financing such as “Academy of Bank Finance (ABF)”. Performance management and evaluation system of faculty should be on line of UGC guidelines giving more focus on developing case study of high repute, carry out in-house research, qualifying knowledge & skill test to continue faculty in training system instead assured tenure of 3-5 years in system. The succession planning and training reforms in banks as suggested in the paper *will help to address problems before Indian SMEs observed in the study* such as non-availability of skilled/managerial man powers, enhance willingness of banks, sensitize bankers to provide loans without insisting collateral to this sector by attitude transformation.

5.2) SME Reward Policy – Incentivize Financial Discipline & Charge Poor Governance

As experienced from empirical observations that good number of SMEs have maintained or improved their solvency ratio by plough back profit and also improved LTV by making regular / advance repayment of bank loans while some borrowers have failed to bring financial discipline in the business as expected by their bankers. It is therefore a lesson for bankers to introduce some rewarding policies for SMEs who observe good governance to encourage them for continuing good work and also to motivate them to fall in competition for rewards such as Green Channel banking arrangements i.e. putting their credit proposal of increased financial requirements on fast track route to speed up decisions with less formalities and also to incentivize them by offering rebate in rate of interest and /or also by Entrepreneurial Award by the banks. While defaulters should be published in local print & electronic media to avoid further misuse of public resources. Therefore, it is recommended to place a policy on rewarding the discipline and punishing those who have defrauded the public money and



resources. It will bring good governance by SMEs and also will create positive business environment.

5.3) Training & Awareness to SMEs

First generation entrepreneurs and family business being unique peculiarity of SMEs; have either no credit rating or poor credit rating for want of its awareness. Thus there is need of handholding approach to be experience by both entrepreneurs and bank officials. Their counseling is warranted not only for financial issues but also in non-financial matters. Entrepreneurs should understand that banks are custodian of public money thus demanding loan at cheap & un-economical price, not using the money for the purpose it was granted etc. are blockage in the growth life line of economy in general and banking sector in particular. Banks in consultation with SMEs association at all levels such as Chamber of Commerce, Industry Associations etc should conduct Entrepreneurs Development Programme (EDP) for incubation and entrepreneurship to set up industries which will realize theme of 12th Plan of generating 30 Mn employments and 25% increase in manufacturing production. Training Colleges of banks should be given target to reserve at least 15% of their annual programmes for EDPs which can be under aegis of Corporate Social Responsibility (CSR) in banking because financial support or donation of any extent cannot be substitute of providing good education and governance as real contribution under CSR especially when knowledge has become powerhouse in the world. Financing alone will not help SMEs for capacity building to compete & grow, Banks should come forward in providing counseling to entrepreneurs on both finance & non-finance related issues such as benefits of maintaining proper books of accounts, retaining profit into business instead evading of tax payment, details of credit guarantee scheme –CGTMSE, various determinants of credit rating, benefits of rating the firm from SME rating agencies, usage of e-business in branding & disseminating production information to users, practicing financial discipline in dealing with banks to build their good credit history with credit information companies like CIBIL, and many more. This will enhance efficiency & bankability of SME firms from financing angle and also will build their capacity for competitive advantages because credit rating is one of benchmarking in business world. SME Care & Counseling Centers (SMECC) should be institutionalized by each bank at regional level with mandate to educate beneficiaries on this front and should work like back office outlet.

5.4) Business Process Reengineering (BPR) - Leaning Credit Operations

To address the issues of lengthy processing system of SME proposals and also to introduce transparency in business processing through online tracking of loan applications as observed in the study, it is suggested that banks should avoid wastage of man-hours and duplicity of information asked from applicants by



leaning operations through effective BPR initiatives. Simplified application cum sanction form should be introduced across the industry for loan up to Rs.200 lacs to SMEs with check list of documents to be submitted and loan agreements to be executed by applicants. It should be uploaded on website of banks and on line tracking system of applications to be introduced. Simplification in processing system for loans to micro & small enterprises is inevitable because existing process found complex & lengthy at par with large corporate firms. Time is money and it is said that *'if one wants more time to take correct decision in that case a correct decision is also wrong when it is taken too late'*. It has come across in few cases that lack of knowledge bounds a banker to become business diverter & decision shy. It is thus recommended that credit operations should be leaned and driven by a Knowledge Bankers who are found to be *"decision taker, today believer & tomorrow's beginner"*. Some of the banks have already set up dedicated outlet such as central processing cell, SME Loan Factory, SME Loan Hub etc for catering financial needs of SMEs equipped with skilled manpower of customized credit products & services as part of their BPR initiatives to reduce turnaround time; but many more banks still require to take necessary measures of improvement in TAT norms. Adoption of right BPR models helps a bank in identification of wastage which led to more than 50 percent reduction in Turn around Time (TAT) for customers' more than 50 percent reduction in duplication of work. Less number of handovers and system inputs lower chances of error and reduce operating risks which in turn enhance productivity and efficiency in lending operations

5.5) Technology & Innovation – Product Development by Banks

Technology has changed the style of doing business and living the life. Innovation is neither synonymous nor substitute of technology but it is forecasting future taste & demand of users and adopt the change to lead. Technology backwardness and lack of innovation are major problems before SMEs because they are doing business with traditional approach comparatively less techno innovation and without succession planning which are either closed or divided on death or disputes among key members of family. So, proper succession planning and technology up gradation and innovation along with market survey are essential to make SMEs an on-going concern. Further the promoters do not have adequate funds for technology up gradation. Also it is observed that banks should offer some innovative products which priced at fixed rate option for hedging risk by borrowers in increasing rate of interest trend. Banks should therefore, mandatorily consider loan for capex investment in technology up gradation and innovation of SMEs; otherwise it may lead to diversion of funds from working capital to capital expenditure or increase private borrowings. This loan for technology up gradation should be subsidized from government fund by way of capital subsidy or interest



subvention etc. This finance may be called 'Capacity Building or Mezzanine Finance' to SMEs. Similarly, banks should have some customized SME products in their basket which are priced at fixed rate option because it is a tool with banks to hedge and freeze their net interest margin (NIM) while interest rates are started declined on advances because aligning deposits rates with the changes scenario takes time owing to option of fixed interest rate on deposits. From borrower's point of view, it is beneficial for managing interest burden when rates are increasing in the economy.

5.6) Activity Based Credit (ABC) Approach

Security is though one of the credit risk mitigation measures; it is not always workable because of non-realization of market value, non-marketable titles deeds as it has been witnessed in recent past that financial institutions who have built their sub-prime loan books had disappeared from the market due to either non-realization of market value or high diminution provisioning. Those who have focused on activity based lending could survive. Since credit requirement of SMEs to the largest extent are small in size which qualify for guarantee under CGTMSE that is highly liquid security as compared to any other tangible collaterals. It has been emerged from the study that SMEs are bankable owing to their favorable LTV and DER, therefore, it is recommended that banks to encourage collateral free & activity oriented lending which are of self liquidating in nature, building zero risk weight loan books that does not charge to the precious capital of banks. *Presidential Nation award* is also recommended to be introduced for those individuals and member lending institutions who are star performer in SME finance under CGTMSE scheme on line of nation award prevails for outstanding performance under MSME finance; which will not only make CGTMSE scheme more lucrative and successful but will also encourage banks to set their own targets of ABC approach based financing to the sector.

5.7) Capacity Building & Efficiency Enhancement – Fast Track Treatment (FTT)

SMEs are treated in-competitive in market because of high cost of production, low profitability owing to various reasons such as uneconomical raw material cost, labor cost, power bills etc being small scale of operations. It therefore, recommended that State Governments should have provision of preferential and green channel treatment to SMEs with respect to clearance & approvals to be given for setting up business, providing uninterrupted power supply or back end capital subsidy on loans for purchase of power back up investment like DG sets, provide land & common facilities in industrial estates at acquisition cost for making them competitive with large firms indigenously and globally. The cluster approach seems to be answer of variants affecting profitability such as raw material cost, labor cost and other operating cost. SMEs under cluster would have



leverage of procuring raw material in bulk from indigenously and internationally, customized labor force for their activities would be hired at competitive charges locally or from up country places and finally uninterrupted power supply in specialized zone where cluster works. As regards interest expenses hike reported by SME firms in sample, it is impact of increased rate of interest scenario globally which is recommended to be subsidized by introducing a scheme of interest subvention for loans up to Rs.100 lacs to MSEs covered under MSMED Act 2006

5.8) SME Market Development - New Products by Banks & Support by Nodal Agencies

Making development for SMEs products at their own is a difficult task for them owing to lack of product brand and packaging quality. Huge amount of expenses are to be incurred towards market making movement and such type of expenses are of capital nature which should be amortized in due course of time. It is felt that costs involved in marketing like appointment of marketing personnel, advertisement of products on print & electronic media, expanding network through agents or representative at up-country centers etc.; but expenses on these items are not considered by bankers while appraising loan application. It is therefore, recommended that investment for market development activities illustrated herein the paper should be considered permissible cost of project for finance at par with capex in plant & machinery else without taking this aspect into account, assessment of loan limit would be ab-initio incomplete. A scheme of clean overdraft for marketing development may be worked out. Market development initiatives would give direct access of SMEs to end-users of their products at price with adequate margin rather selling the products to large corporate at lower price and blocking funds for longer period. Government & policymakers may consider this proposal to make capital provision of marketing for SMEs in budgetary allocation to the sector. Government procuring policy regarding buying at least 20% of annual purchase from SMEs has put in place but not being adhered to in its letter and spirit by big giants. Since MSEs do not have expertise / skills for approaching to the large corporate thus DIC or Directors, MSME establishments at regional level should own responsibility of providing details of products of these MSEs to the Government /PSU buyers reinforcing mandatory guidelines and also verifying their compliance from time to time. Also Banks should mark lien in total working capital limit as sub-limit reserved for purchasing from SMEs while sanctioning credit facilities to large corporates. These both items should be a standing agenda of discussion at various forums like BLBC/DLRC/SLBC where almost all stakeholders of SME sector participate.

5.9) Industry Business Associations

Chambers and associations are representatives of SME sector, thus there is need of understanding each other that banks have obligations to their depositors and other



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stakeholders to safeguard their interest. SMEs as customers of bank credit have therefore, certain duties towards banks such as repaying bank loans, maintaining proper books of accounts, submitting information correctly and more importantly sharing information about financial problems if arise so that they can work together with the banks in resolving them. Also it is in welfare of SMEs to get them rated from rating agencies, as it could enable them to negotiate with their bankers for interest rate reduction, larger loan size or even obtain faster process of their loan application. They must also aware that if they default and their credit history is poor they will find it difficult to access bank finance, as banks have been mandated to pass on all credit history of their clients to CIBIL or any other credit bureaus registered with RBI. SME chambers or associations to collaborate with banks, training institutes, business schools and management institutes to organize workshops & training programmes for their member on basic accountancy, information technology, cash flow, various financial products for SMEs. Such awareness campaigns will help the entrepreneurs for easy access to bank credit because if borrowers have informative financial statements with a strong financial condition as reflected in terms of financial ratios; it will expedite credit process and ensure timely & adequate credit supply.

SUM - UP

The study has unveiled some interesting finding such as SMEs are big bonanza for banks owing to their positive business outlook and innovativeness being their functional peculiarity. It has emerged from the survey that SMEs are not poorly leveraged in terms of LTV and DER which are key determinant for finance by any banks / institutions. Government has implemented numerous measures including procuring the good by public sector undertakings from SMEs which also support marketing development to small enterprises. In this backdrop of empirical findings, banks in India should also review their credit delivery mechanism for the sector to grab huge business opportunities taking into consideration that they are functioning in a knowledge economy environment. Besides financial assistance to SMEs, banks must invest in networking and mentoring of SMEs by creating separate cells to provide consultancy to SMEs to teach them how to function and manage data such that their performance can be analyzed easily and thus expediting the loan sanctioning process. Author has made an attempt to offer some suggestions for bankers, entrepreneurs and regulators based on the observations of the study in the paper to address the issues in SME Financing intending to link approximately 95% MSMEs which are still not availing institutional credit for equitable development and inclusive growth of the economy and also to enhance capacity building of the sector to compete in global market.



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**MARKET REACTION TOWARDS BONUS ISSUE ANNOUNCEMENTS
IN INDIA
-A COMPARATIVE STUDY BETWEEN BSE AND NSE**

Swapan Sarkar

Abstract

Bonus issue to the stockholders is simply a process of capitalization of a company's accumulated profits. This only increases the number of shares outstanding without having any effect on stockholders' proportional ownership of stocks or the capital structure of the company. Thus bonus issue announcements are unlikely to contain any new information that can receive significant market reaction around such announcements. Interesting to note that empirical studies do document significant market reaction on and around the bonus announcements. This article measures the market reaction around bonus announcements in Indian stock market and thereby tests its semi-strong form efficiency with reference to BSE and NSE, using event study approach. It also aims to identify difference in the pattern of information impoundment between the two exchanges. Results reveal significant market reaction around bonus announcements confirming semi-strong form inefficiency and document observable difference in the pattern of information incorporation in the two exchanges.

Key Words : *Abnormal Return, Bonus Issue, Market Reaction, Market Efficiency.*

INTRODUCTION:

Bonus issue is basically a process of capitalization of the reserves accumulated by a company over the years by setting aside a part of the profit otherwise distributable among the shareholders. Thus bonus issue only increases the number of equity stocks outstanding without having any effect on stockholders' proportional ownership of stocks or the capital structure or financial position of the company. Thus bonus issue announcements should not contain any new information and as such one would not expect any significant price reaction around such announcements. Interesting to note that the empirical studies do document significant market reaction on and around the bonus announcements thus raising serious doubts over the efficiency of such markets, because, a semi strong form efficient market is unlikely to generate any statistically significant abnormal market reaction to event announcements.

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In this context the present study attempts to identify the significant market reaction, if any, towards bonus announcements in the Indian stock market and thereby to test its efficiency at semi strong form. For this purpose the study considers both Bombay Stock Exchange as well as National Stock Exchange as the representatives of the Indian Stock market. In addition, the study also attempts to capture the difference, if any, in the pattern of information incorporation in the above two exchanges which may reveal significant observations regarding the relative efficiency of these two exchanges. In that sense the study is unique as neither such a comprehensive coverage was made nor was such a comparative analysis attempted involving the two exchanges in any earlier research attempts.

PLAN OF THE STUDY:

For clear and in depth analysis and understanding, the present study has been organized as follows:

1. 'Bonus Issue, Information Content and Relevant Regulations in India' to discuss the technicalities associated with bonus issue and the information it conveys.
2. 'Bonus Issue Announcement and Efficient Market Theory' to address the conceptual aspects of market efficiency associated with the market reaction to bonus announcements and similar other information.
3. "Literature Review"- to conduct a brief survey of literature on the issue.
4. "Objectives of the Study" – to document broad and specific objectives of the study.
5. "Empirical Methodology" – to explain sample and data used and test techniques applied.
6. "Empirical Results"- to incorporate empirical findings.
7. "Conclusion"- to make an overall judgment.

1. Bonus issue, Information Content and Relevant Regulations in India:

As stated earlier, Bonus issue is simply the distribution of additional stock to the existing shareholders in proportion of their current investment. A company may issue bonus stock either by capitalization of retained earnings or accumulated capital reserve. Thus, bonus issue neither affects the proportional shareholding of the investor, nor it changes the capital structure or financial position of the company. However empirical studies conducted in this regard indicate that market reacts positively to bonus announcement. Hence bonus announcement obviously contains some information beneficial for the investors.

Relevant regulatory guidelines provided by SEBI or the Companies Act 1956 are as follows-



- a. Memorandum and Articles of Association must allow bonus issue in respect of authorized share capital or capitalization of reserves; otherwise they should be altered accordingly to incorporate such provisions.
- b. Companies are allowed to issue only fully paid up bonus shares and declaration of bonus dividend to make partly paid shares fully paid up is not allowed.
- c. The company must not default in payment of interest or principal in respect of fixed deposits and debentures and in the payment of statutory dues of the employees.
- d. Bonus shares can be issued only out of free reserves built out of the profits or share premium collected in cash.
- e. Companies are required to implement the bonus issue proposal within a period of 6 months from the date of approval at the meeting of board of directors, and the new shares are to rank *pari-passu* with the existing shares.

2. Bonus Issue Announcement and Efficient Market Theory:

As per the Efficient Market Hypothesis, an efficient market is one in which security prices adjust instantaneously and in an unbiased manner to any new information becoming known to the market, thus leaving no scope for any market participant to earn above normal return on a consistent basis over a long period of time. However the concept of market efficiency is not absolute but relative and depends on the information set actually impounded in the stock prices. As suggested by Fama, while weak form efficiency only ensures incorporation of past price information, semi-strong form validates impoundment of both past and present publicly available information and strong form efficiency implies incorporation of all information - both public and private. This indicates that market reaction around any price sensitive public information like bonus announcements can be considered a good test of market efficiency in the semi-strong form. It is found that there exist significant abnormal return on and around the bonus issue announcement; such a fact will surely confirm market inefficiency in the semi-strong form.

3. Literature Review:

In Indian context quite a few studies have been carried out in last three decades to measure the market reaction towards bonus announcement and thereby to test the semi-strong form efficiency of the Indian stock market.

Ramachandran (1985) examined the market reaction towards announcement of bonus issues on equity stock prices but found no concrete evidence for semi strong form efficiency of Indian stock market.



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Obaidullah (1992) in his study found positive stock market reaction to equity bonus announcements and hence supported the semi-strong form EMH.

Rao (1994) estimated cumulative abnormal return of even 6.31% around the three days of bonus announcement and concluded that Indian stock market is semi-strong form efficient.

Rao and Geetha (1996) analyzed bonus announcements and concluded that one could not make excess money in the Indian stock market by studying the patterns of abnormal returns of announcements made earlier.

Srinivasan (2002) studied market reaction towards bonus issue on ex-bonus and ex-rights dates and found large positive abnormal returns for equity stocks.

Similar study by Budhraj, Parekh and Singh (2004) on BSE suggested that abnormal returns around the bonus announcement date over a three day trading period starting one day prior to the announcement date is significant at 5 % level. They also opined that much of the information in the bonus announcement gets impounded into stocks by the time it is announced.

Mishra (2005) found significant positive abnormal returns for a five-day period prior to bonus announcement.

Sharma and Singh (2011) considered twenty five bonus issues between 2002 and 2007 and found statistically insignificant positive market reaction to the bonus issues. He concluded that Indian market is semi-strong form efficient.

Roy (2011) measured market reaction to both stock splits and bonus issues in India from 1996 to 2008. He found that Indian market reacts to the stock split announcements but not to bonus issues.

Sujit Kumar and Halageri (2011) considered bonus announcements for a period of 1/4/1996 to 31/3/2011. The results indicate that Indian stock market (nifty) is not perfectly efficient and there is significant abnormal return during the announcement period.

Bharat and Shankar (2012) considered 34 companies belonging to BSE 500 which made bonus announcements during 2001-2010 and found insignificant abnormal returns around the bonus announcement date. They concluded that Indian stock market is highly efficient in semi-strong form.

Dhar and Chhaochharia examined the announcement effects of stock splits and bonus issues on the Indian stock market during the period April 2000 to March 2007. They found that though bonus issues result in sharp spike on the announcement date, stock splits don't. Overall they found support for semi-strong form of efficiency for the market.



Suresha and Naidu (2012) investigated the market reaction to bonus issue announcement for Nifty stocks from 1995 to 2011. They found that on the announcement date there is significant positive abnormal returns but under a short run of AD+3 abnormal returns do not persist and dilutes to its normal return. The study found out that Indian market reacts positively to bonus issues.

Thus it appears that researchers are not unanimous regarding the significance of the market reaction around bonus announcements in Indian stock market and consequently its efficiency in semi-strong form. This provides us the impetus to look into such matter again. Moreover this study, as has been claimed earlier, also has attempted to compare the market reaction at BSE vis-a-vie NSE to find out any difference in the pattern of information impoundment, if any, which has not been approached earlier.

4. Objectives of the Study:

The study has the following specific objectives:

- a. To measure the market reaction towards bonus announcements in India with reference to both BSE and NSE
- b. To compare the pattern of market reaction towards bonus announcements in BSE vis-a-vie NSE.
- c. To identify whether the two exchanges and the Indian stock market is efficient in the semi-strong form.

5. Empirical Methodology:

5.1. Sample and Data:

For the purpose of our study we have considered bonus announcements by listed companies during the period 1.1.2005 to 31.12.2011. At first, we identified Indian publicly listed companies that made bonus issue during the above period using the database of www.moneycontrol.com. Out of those we identified the companies which belong to BSE100 index and S&P CNX 100 index for testing the market reaction at BSE and NSE. Then we collected (or rather verified) the bonus announcement dates from the official website of BSE and NSE. Following points were also considered while finalizing the sample.

1. The Bonus announcement date is reported in any leading newspaper like Economic Times or Business Line.
2. No other significant announcements (like stock split, cash dividend etc) were made along with bonus announcement.
3. Daily closing prices were available for the selected companies in the official



website of the exchange (here BSE and NSE) for a period of 200 days before and 20 days after the announcement.

During this process we ultimately settled with a sample of 26 companies each for BSE and NSE as follows.

Table 1: Sample BSE 100 Firms under Event Study on Bonus Announcement

Serial No.	Company	Bonus Ratio	Announcement Date	Record Date	Ex Date
01.	Adani Enterprise	1:01	30-10-2009	11-12-2009	10-12-2009
02.	Ashok Leyland	1:01	15-06-2011	03-08-2011	02-08-2011
03.	Bajaj Auto	1:01	22-07-2010	10-09-2010	08-09-2010
04.	BHEL	1:01	25-01-2007	01-06-2007	31-05-2007
05.	Cipla	3:02	13-02-2006	25-04-2006	24-04-2006
06.	Crompton Greave	2:05	14-10-2006	15-12-2006	14-12-2006
07.	Cummins	2:05	04-08-2011	21-09-2011	20-09-2011
08.	Dabur India	1:02	31-10-2006	29-01-2007	25-01-2007
09.	Divis Labs	1:01	06-06-2009	01-08-2009	30-07-2009
10.	Dr Reddys Labs	1:01	31-05-2006	29-08-2006	28-08-2006
11.	GAIL	1:02	23-06-2008	07-10-2008	06-10-2008
12.	HCL Tech	1:01	14-12-2006	16-03-2007	15-03-2007
13.	Hind Zinc	1:01	19-01-2011	08-03-2011	07-03-2011
14.	Infosys	1:01	14-04-2006	14-07-2006	13-07-2006
15.	ITC	1:01	18-06-2010	04-08-2010	03-08-2010
16.	Jaiprakash Associates	1:02	21-10-2009	18-12-2009	17-12-2009
17.	Larsen & Tubro	1:01	07-06-2006	29-09-2006	28-09-2006
18.	Lupin	1:01	17-05-2006	14-08-2006	11-08-2006
19.	ONGC	1:02	26-07-2006	30-10-2006	27-10-2006
20.	Reliance	1:01	07-10-2009	27-11-2009	26-11-2009
21.	Sesa Goa	1:01	29-04-2008	18-08-2008	08-08-2008
22.	Siemens	1:01	22-11-2007	03-03-2008	29-02-2008
23.	Sterlite Industries	1:01	10-02-2006	12-05-2006	05-05-2006
24.	TCS	1:01	17-04-2006	31-07-2006	28-07-2006
25.	Wipro	2:03	23-04-2010	16-06-2010	15-06-2010
26.	Zee Entertainment	1:01	23-09-2010	12-11-2010	11-11-2010



Table 2: Sample S&P CNX 100 Firms under Event Study on Bonus Announcement

Serial No.	Company	Bonus Ratio	Announcement Date	Record Date	Ex Date
01.	Ashok Leyland	1:01	15-06-2011	03-08-2011	02-08-011
02.	Adani Enterprise	1:01	30-10-2009	11-12-2009	10-12-2009
03.	Bajaj Auto	1:01	22-07-2010	10-09-2010	08-09-2010
04.	BHEL	1:01	25-01-2007	01-06-2007	31-05-2007
05.	Biocon	1:01	22-04-2008	12-09-2008	11-09-2008
06.	Cipla	3:02	13-02-2006	25-04-2006	24-04-2006
07.	Container Corp.	1:01	30-01-2008	17-04-2008	16-04-2008
08.	Crompton Greave	2:05	14-10-2006	15-12-2006	14-12-2006
09.	Dabur India	1:02	31-10-2006	29-01-2007	25-01-2007
10.	Divis Labs	1:01	06-06-2009	01-08-2009	30-07-2009
11.	Dr Reddys Labs	1:01	31-05-2006	29-08-2006	28-08-2006
12.	GAIL	1:02	23-06-2008	07-10-2008	06-10-2008
13.	HCL Tech	1:01	14-12-2006	16-03-2007	15-03-2007
14.	Infosys	1:01	14-04-2006	14-07-2006	13-07-2006
15.	ITC	1:01	18-06-2010	04-08-2010	03-08-2010
16.	JP Associates	1:02	21-10-2009	18-12-2009	17-12-2009
17.	Larsen and Tubro	1:01	07-06-2006	29-09-2006	28-09-2006
18.	Lupin	1:01	17-05-2006	14-08-2006	11-08-2006
19.	ONGC	1:02	26-07-2006	30-10-2006	27-10-2006
20.	Reliance	1:01	07-10-2009	27-11-2009	26-11-2009
21.	Sesa Goa	1:01	29-04-2008	18-08-2008	08-08-2008
22.	Sterlite Industries	1:01	10-02-2006	12-05-2006	05-05-2006
23.	TCS	1:01	17-04-2006	31-07-2006	28-07-2006
24.	Titan Industries	1:01	29-04-2011	24-06-2011	23-06-2011
25.	Wipro	2:03	23-04-2010	16-06-2010	15-06-2010
26.	Zee Entertainment	1:01	23-09-2010	12-11-2010	11-11-2010

5.2. Methodology:

We followed standard event study approach based on Market Model as suggested by Fama (1970). The bonus announcement date is treated as the *event date* ($t=0$) and the period from $t = -20$ to $t = +20$ (a total of 41 trading days including the event announcement date) is taken as the *event window*. The *estimation window* is $t = -200$ to $t = -21$ (i.e. a total of 180 trading days prior to the event window).

Return of stock 'i' for day t is given by $R_{i,t} = \ln(P_t/P_{t-1})$. Similarly market return for day t is given by $R_{m,t} = \ln(I_t/I_{t-1})$, where P = Price of stock and I = Index value, \ln =Natural Logarithm. Here we considered BSE 100 and CNX 100 as the market



portfolio for evaluating the abnormal return on BSE and NSE respectively around the event date.

As per the market model, expected stock return is given by,

$$E(R_{i,t}) = \alpha + \beta R_{m,t}$$

Using OLS technique we estimated the values of α and β taking the estimation period data. Then, we calculated the Abnormal Return for each stock and for each day of the event period by taking the difference between actual and estimated stock return,

$$AR_{i,t} = R_{i,t} - E(R_{i,t})$$

To eliminate the effect of abnormal return(s) of any particular stock(s), average abnormal return for each day of the event window (AAR_t) is calculated as follows: $AAR_t = \sum AR_{i,t} / N$, where N = total number of sample firms (here 26 in each case).

In order to draw an overall inference about the reaction of stock prices to the announcement of the event, the cumulative average abnormal return (CAAR) is calculated over a time interval (t_1, t_2) as follows:

$$CAAR(t_1, t_2) = \sum AAR_t; \text{ where } -20 \leq t_1 < t_2 \leq +20.$$

Finally, to test the statistical significance of the Abnormal Return and Cumulative average abnormal return we use t statistic as follows:

For Abnormal Return, [as recommended by Asquith (1983)]

$$t = AAR_t / S.E; \text{ where } S.E = \sqrt{\frac{\sum (AR_{it} - AAR_t)^2}{N-1}} \times \sqrt{\frac{1}{N}}$$

For Cumulative average abnormal return, [as recommended by Campbell, Lo and McKinley]

$$t = CAAR(t_1, t_2) / S.E; \text{ where } S.E = \sqrt{\sum_{i=1}^N \sigma_{i(t_1, t_2)}^2} / N^2 \text{ and } \sigma_{i(t_1, t_2)}^2 = \text{variance of stock } i \text{ for } (t_1, t_2) \text{ period.}$$

If the calculated value of t-statistic of AAR_t (CAAR (t₁, t₂)) exceeds the critical value of t at a chosen level of significance ($\alpha = 1\%$ or 5%) and for (N-1) i.e., 25 degree of freedom, it will confirm that statistically significant average abnormal return (cumulative average abnormal return) is generated by the stocks on and around the event day.

6. EMPIRICAL FINDINGS:

6.1. Market Reaction towards Bonus Announcement at BSE:

The results of the event study on bonus announcement by sample BSE 100 firms are documented in Table 3 and 4. Further AAR and CAAR movement have been shown in chart 1 & 2.



Table 3: Results of t Test on AARs on BSE (One Sample Test, Test Value = 0)

Trading Day	AARs	t Statistic	df	p Value	Trading Day	AARs	t Statistic	df	p Value
-20	-0.00209	-0.61649	25	0.543147	1	-0.00354	-0.68004	25	0.50273
-19	0.007184	1.537879	25	0.13664	2	-0.00213	-0.66601	25	0.511501
-18	<i>0.008199</i>	1.517436	25	0.141701	3	-0.00223	-0.70289	25	0.488616
-17	0.001525	0.407828	25	0.686872	4	-0.00193	-0.57776	25	0.568597
-16	-0.00366	-1.19819	25	0.242081	5	-0.0027	-0.73583	25	0.46868
-15	-0.00445	-1.27543	25	0.213883	6	-0.0044	-1.22683	25	0.231317
-14	0.002061	0.926131	25	0.363233	7	-0.00171	-0.53774	25	0.595512
-13	0.003156	0.856063	25	0.400094	8	-0.00155	-0.4143	25	0.682186
-12	0.003437	0.654428	25	0.518812	9	0.000172	0.042044	25	0.966797
-11	<i>-0.00687</i>	-1.91408	25	0.067124	10	-0.00249	-0.66983	25	0.509103
-10	0.000405	0.139165	25	0.890435	11	-0.00061	-0.15048	25	0.881592
-9	-0.00131	-0.43262	25	0.669	12	-0.00348	-0.95238	25	0.350024
-8	0.00474	1.032756	25	0.311606	13	-0.00107	-0.35994	25	0.721914
-7	0.003904	0.7964	25	0.433298	14	0.001457	0.381355	25	0.706162
-6	0.004185	0.786461	25	0.438989	15	0.004688	1.022384	25	0.316391
-5	0.004203	0.902535	25	0.375387	16	<i>-0.01004</i>	-2.387*	25	0.024891
-4	-0.00023	-0.06442	25	0.949152	17	0.005154	1.393291	25	0.175797
-3	0.002316	0.622145	25	0.53948	18	<i>0.007128</i>	2.372632*	25	0.025667
-2	0.003162	0.554202	25	0.584365	19	0.001438	0.505049	25	0.617948
-1	0.003658	0.83544	25	0.411384	20	-0.00534	-1.65907	25	0.109597
0	0.011034	1.925446	25	0.065621					

Note: * Significant at 5% level

Table 3 depicts the average abnormal return (AAR) for each day of the event window for the overall sample and the corresponding computed values of the t-statistic for BSE stocks. It is observed that the AARs of almost all days of the event window are not statistically significant except a few cases. For BSE AAR for day $t=+16$ and $t=+18$ are only significant at 5% level (i.e. only 2 out of 41 days). This implies mostly statistically insignificant average abnormal returns being generated by the sample stocks in the event window. In addition, chart 1 show that AARs are more positive than negative during the pre-event window and is reversed during the post event window. Moreover among all the 41 days, AAR is highest on the event day itself.

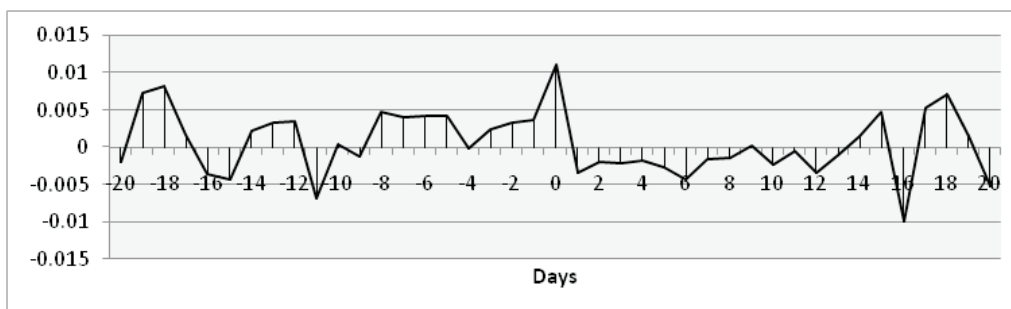


Chart 1: AAR of Sample BSE100 Firms

In reality, sometimes the reaction of the stock prices to the announcement of an event is not prominently reflected in the behaviour of AAR of a specific day. The real impact of any event is realized by the investors through accumulated abnormal returns of a time interval before, after and around the event day. Therefore, we consider cumulative average abnormal returns (CAARs) corresponding to certain time intervals within the event window as presented in Table 4 below. If the market is semi-strong form efficient CAAR for the time interval should be statistically insignificant and as we approach towards the event date it should tend towards Zero.

Table 4: Results of t Test on Cumulative Average Abnormal Returns

Interval	CAAR	SE	t value
Pre 20 to Post 20	0.021381	0.00401	5.332524 **
Pre 15 to Post 15	0.011883	0.004039	2.942384 **
Pre10 to Post 10	0.013558	0.004165	3.255323 **
Pre 5 to Post 5	0.011615	0.00435	2.669907 #
Pre 20	0.033535	0.004175	8.032426 **
Pre 15	0.022376	0.00416	5.378481 **
Pre 10	0.025034	0.004313	5.8042 **
Pre 5	0.013107	0.004385	2.988891 **
Post 5	-0.01253	0.00355	-3.52849 **
Post 10	-0.02251	0.003728	-6.03788 **
Post15	-0.02153	0.003748	-5.74324 **
Post 20	-0.02319	0.003727	-6.22095 **

Note: **Significant at 1% level, # Significant at 5% level

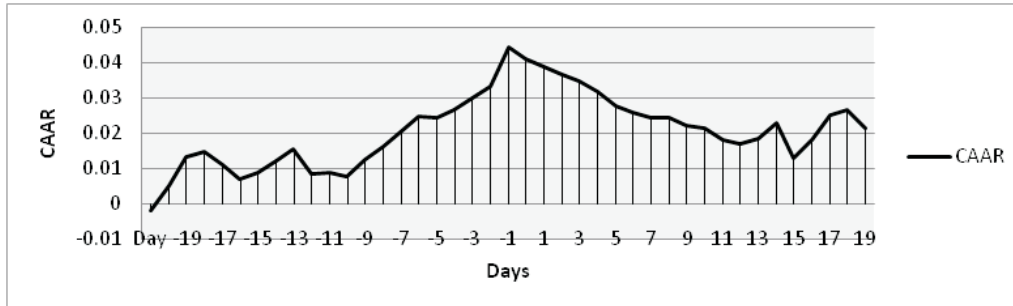


Chart 2: CAAR of Sample BSE100 Firms

From Table 4 it can be observed that the CAARs of all the time intervals of pre and post event window except (-5, +5) interval are statistically significant at 1% level and CAAR for (-5, +5) interval is significant at 5% level. The graph associated with the table also clearly shows that there is no sign of the CAAR to be wiped out on and around the event date, rather it reaches the peak just before the event date and faded out very slowly after that. All these clearly rule out the possibility of having insignificant CAAR on and around the event date, the essential requirement for the market to be efficient in the semi strong form.

6.2. Market Reaction towards Bonus Announcement at NSE:

The results of the event study on bonus announcement by sample NSE CNX 100 firms have been documented in Table 5 (and Chart 3) and 6 (and Chart 4) as follows:

Table 5: Results of t Test on AARs on NSE (One Sample Test, Test Value = 0)

Day	AAR	t Stat	df	p Value	Day	AAR	t Stat	df	p Value
-20	-0.00284	-0.86455	25	0.395504	1	0.0001903	0.023978	25	0.981061
-19	0.0071144	1.384961	25	0.1783	2	-0.002472	-0.71731	25	0.479833
-18	0.0013671	0.276922	25	0.784117	3	-0.000814	-0.23678	25	0.814753
-17	0.0019049	0.512804	25	0.61259	4	0.0011997	0.33352	25	0.741523
-16	-0.001733	-0.51666	25	0.609934	5	-0.005521	-1.50889	25	0.143862
-15	-0.003408	-1.25694	25	0.220394	6	-0.001613	-0.42262	25	0.676189
-14	0.0021172	0.799594	25	0.431478	7	-0.002503	-0.74176	25	0.465143
-13	0.0020961	0.507572	25	0.616202	8	-0.00233	-0.67	25	0.509
-12	0.0026688	0.589461	25	0.560842	9	-0.000171	-0.04343	25	0.965705
-11	-0.006689	-1.91022	25	0.067641	10	-0.004522	-1.33398	25	0.194237
-10	3.533E-05	0.01141	25	0.990987	11	-0.001152	-0.2908	25	0.7736
-9	-0.003183	-0.9458	25	0.353304	12	-0.00182	-0.44215	25	0.662179
-8	0.0015848	0.354686	25	0.7258	13	0.0010375	0.378251	25	0.708437
-7	0.0071557	1.360082	25	0.185943	14	0.0036763	0.985027	25	0.334048
-6	0.0043044	0.857223	25	0.399465	15	0.0046678	0.954421	25	0.349009
-5	0.0035246	0.783973	25	0.440421	16	-0.007033	-1.45041	25	0.159376
-4	0.0025425	0.765331	25	0.45124	17	0.0038089	1.145709	25	0.262765
-3	0.0012206	0.356107	25	0.724748	18	0.0052694	1.982687	25	0.058493
-2	0.0045254	0.83179	25	0.413402	19	-0.000446	-0.13213	25	0.895939
-1	0.0061342	1.087999	25	0.286974	20	-0.003536	-0.94986	25	0.351277
0	0.0090327	1.504467	25	0.144991					

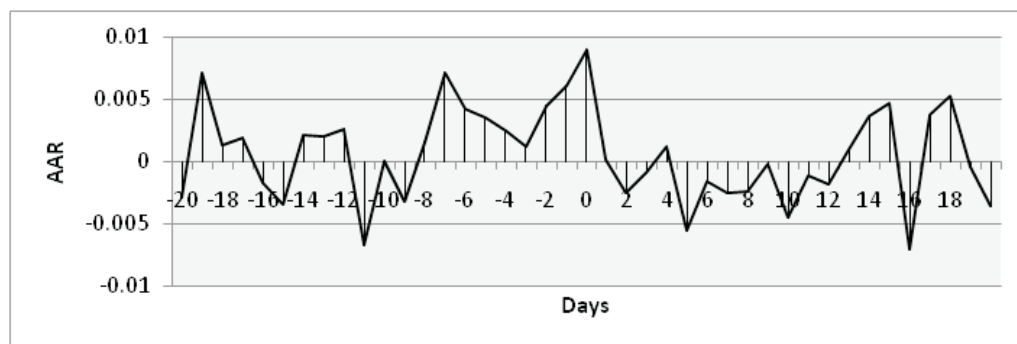


Chart 3: AAR of Sample NSE CNX 100 Firms

Table 5 depicts the average abnormal return (AAR) for each day of the event window for the overall sample and the corresponding computed values of the t-statistic. It is observed that the computed t-values of all AARs in pre and post event window are lower than the critical value of t-statistic at 5% level of significance. This implies statistically insignificant average abnormal returns being generated by the sample stocks in the event window. The chart shows that AARs are more positive than negative during the pre-event window and is reversed during the post event window. Moreover among all the 41 days, AAR is highest on the event day itself.



Along with AARs we have also calculated CAARs i.e. cumulative average abnormal returns (which shows the real impact of any event realized by the investors) corresponding to various pre and post event time intervals as follows.

Table 6: Results of t Test on Cumulative Average Abnormal Returns

Interval	CAAR	SE	t value
Pre 20 to Post 20	0.025391	0.004147	6.123218**
Pre 15 to Post 15	0.021516	0.00422	5.098088**
Pre10 to Post 10	0.018322	0.004434	4.132336**
Pre 5 to Post 5	0.019563	0.004812	4.065324**
Pre 20	0.030443	0.004158	7.321545**
Pre 15	0.024629	0.004168	5.908901**
Pre 10	0.027845	0.00444	6.270912**
Pre 5	0.017947	0.004516	3.974131**
Post 5	-0.00742	0.004553	-1.629061
Post 10	-0.01856	0.00421	-4.407181**
Post15	-0.01215	0.004129	-2.94155**
Post 20	-0.01408	0.004031	-3.494059**

Note: **Significant at 1% level

It is observed that the CAARs of all the time intervals of pre and post event window except the interval (+1, +5) are statistically significant at 1% level but CAAR for (+1, +5) interval is insignificant.

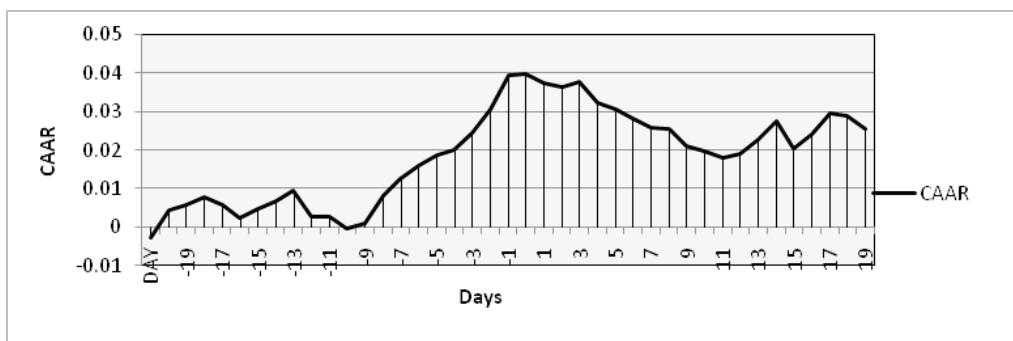


Chart 4: CAAR of Sample CNX100 Firms

The graph associated with the table also clearly shows that there is no sign of the CAAR to be wiped out on and around the event date, rather it reaches the peak just before the event date and faded out very slowly after that. All these clearly rule out

the possibility of having insignificant CAAR on and around the event date, the essential requirement for the market to be efficient in the semi strong form.

6.3. Comparative results on market reaction towards bonus announcement at BSE & NSE:

The comparative results on market reaction towards bonus announcements at BSE and NSE have been documented in Chart 5 and 6 (Please also refer to table 3, 4, 5 and 6).

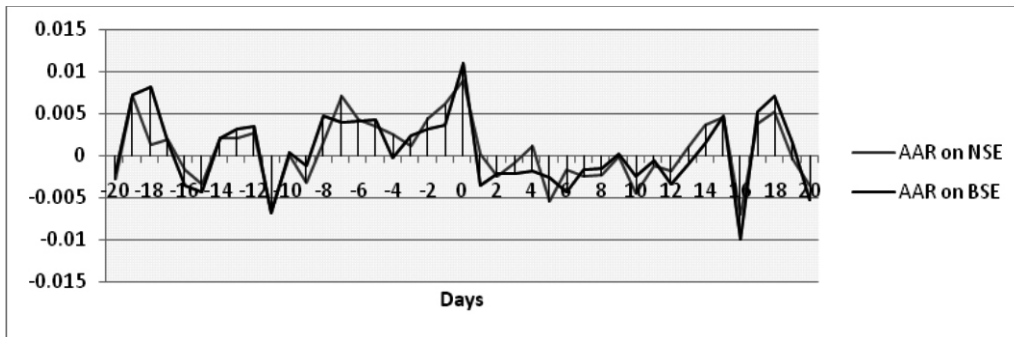


Chart 5: Comparative AAR on BSE and NSE

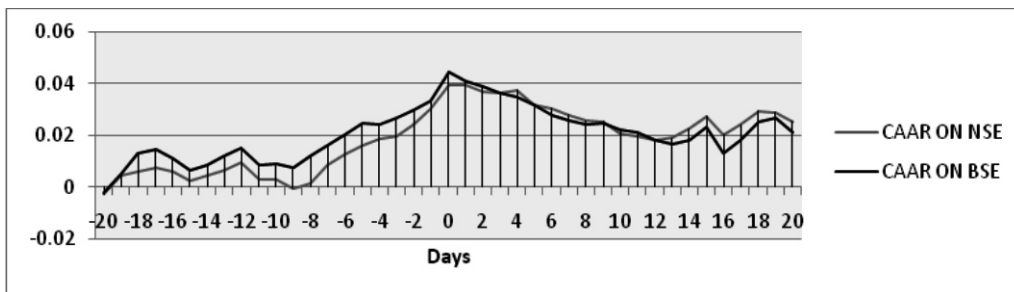


Chart 6: Comparative CAAR on BSE and NSE

Our analysis based on the event study on market reaction to bonus announcement in BSE and NSE reveals some interesting observations. It shows that all of the AARs (please refer to table 3 and 5) under the 41 days event window are insignificant at 5% level for NSE while AAR of $t=+16$ and $t=+18$ days are significant at 5% level on BSE. During pre event period AAR ranges from a minimum of -0.006689 to a maximum of 0.007156 for NSE and from -0.00687 to 0.008199 on BSE. During post event period the same is from -0.00703 to 0.0052694 for NSE and from -0.01004 to 0.007128 on BSE. For the event date itself AAR is 0.009033 on NSE and 0.011034 on BSE. Thus for both pre event,



post event period and also on the event date BSE generates higher maximum abnormal returns and lower minimum return as compared to NSE. The study also shows that the entire pre event 5, 10, 15 and 20 day intervals generate positive CAARs for both BSE and NSE. During post event period, however, the same is negative. This might be due to the fact that on leakage of the stock bonus information prior to the announcement day, exuberance grows among the informed investors to buy such stock in consequence of which its price rise abnormally leading to abnormal returns during pre event interval which is subsequently reversed because of the correction process of the over-reacting investors. Moreover the charts show that CAAR line of BSE during pre-event window is always above that of NSE thus confirming the cumulative return generated by BSE is higher at any time as compared to NSE. But the same is also reversed during the post event window. This suggests that during post event window BSE is faster in correcting itself.

7. Overall Conclusion:

From our analysis we find that Indian stock market reacts positively towards bonus issue announcement. Both BSE and NSE generate positive CAAR during pre event window and negative CAAR during post event window which signifies swing in the market mood after bonus issue is announced. Moreover the study also finds that excepting for two days ($t=+16$ and $t=+18$ at BSE) AARs are mostly insignificant, but in contrary CAARs are significant for almost every interval at both the exchanges. Such a result clearly indicates that both BSE and NSE evident significant market reaction around the announcement date and hence cannot be expected to be efficient in the semi-strong form. Finally, our comparative analysis of both BSE and NSE shows that CAARs are more positive in BSE during pre-event period and more negative during post-event period as compared to NSE which indicates that market reaction is more at BSE than NSE in both anticipating the bonus announcement and then correcting itself after such announcement.

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PRICING MODELS OF EDUCATION IN A REGULATED ENVIRONMENT

Shirish S Raibagkar

Abstract

Pricing of education in a country like India is a tricky issue. The providers of education fall in different segments – fully owned and controlled by Government, partly owned and controlled by private sector and the Government and fully owned and controlled by the private sector. This article studies and evaluates the existing pricing model used by the Fee Fixation Committees of some major states in India for deciding the fees (price) of private unaided colleges. The study assumes importance because the Government is looking forward to more active participation from the private sector in education. The pricing model used by the Fee Fixation Committees is a good example of how the Government is trying to maintain a reasonable balance between the interests of the Colleges and the students. However, there can be some improvement areas that are discussed in this article. The article also explores the opportunities for professionals in finance in this big area involving Government, Institutions and students at large.

Key Words : Fee Fixation, Fee Fixation Committee, Pricing, Private unaided colleges.

BACKGROUND AND INTRODUCTION

For services like education in a country like India, pricing is a tricky issue. If we look at the various educational service providers in the country, they can be classified into the following categories –

1. Institutions that are fully owned and controlled by the Government
2. Institutions that are fully owned and controlled by the Private Sector without any kind of monetary support of the Government (Fully autonomous institutions)
3. Institutions that are fully owned by the Private Sector, do not receive any grants from the Government, yet are subject to good amount of control by the Government in matters like fees (private un-aided institutions or self-financing institutions)

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4. Institutions that are fully owned by the Private sector but receive grants from the Government and hence are largely controlled by the Government (private aided institutions)

Amongst the above categories there is a vast difference in the pricing or the fees charged. The following table highlights as an example this vast difference in the fees of medical education (MBBS) per year of colleges in Maharashtra for the AY 11/12 –

Srl No.	Category	Fees per student
1	Government	45,000/- ¹
2	Private un-aided but regulated	4,06,000/- ²

The pricing objectives, policies, methodology and number of factors lead to such a vast difference in the fees. Of late the category of private un-aided institutions providing education is on the rise. Millions of students are taking education from such institutions. Very few, who are highly intelligent are able to secure admissions in Government Colleges. Further those who are rich are able to get into fully private educational institutions like the IIPM by paying relatively high fees. But a vast majority, those who are neither highly intelligent nor are very rich, have to join the private educational institutions. Hence it is of importance to understand the pricing dynamics of these institutions. This article aims at discussing and evaluating the pricing models of private un-aided educational institutions in the higher education segment. Such institutions are required to get their fees fixed or approved by the State level Fee Fixation Committees (known as Regulatory Committees in some states.) Thus, such colleges even though are in the private sector don't have liberty to take fees as per their expectations. They have to follow good number of guidelines framed by the respective State Fee fixation committees. In Maharashtra alone, around 2500 colleges (788 from Medical streams and 1644 from Engineering streams) have applied to the State Committee for fixation of their fees for Academic Year 2012/13³. Further there are other regulatory aspects that have a significant bearing on the pricing of education in these institutions. For example the recent implementation of 25% reservation for the poor students under the Right to Education Act (RTE) has created some kind of fear amongst the schools since fees reimbursement has not come from the Government. School managements are afraid that they will be unable to bear the cost of the quota in the coming years, if they are not reimbursed.⁴ And interestingly, the institutions at the same time have to counter other external variables like competition, market fluctuations etc. The following table identifies some of the dynamics of the pricing models for such institutions –



ENVIRONMENT	FACTORS IMPACTING PRICING
INTERNAL	1. Salary Costs
	2. Other Administrative Costs
	3. Financial costs like interest
	4. Depreciation
	5. CAPEX
EXTERNAL	1. Overall market position
	2. Competition from other colleges
	3. Compliances of norms of regulatory bodies

THE EXISTING PRICING MODEL

References to the websites of various state governments like Maharashtra⁵, Gujarat⁶, Madhyapradesh⁷ and others reveal the following broad features of the existing pricing models for private unaided educational institutions –

1. The pricing models are essentially cost based models. The prices or fees can vary significantly from college to college. For example amongst the 289 Engineering colleges in Maharashtra whose fees have been finalized for AY 2012/13, lowest is Rs.40,000/- whereas highest is more than Rs.1 lac.⁸ No profiteering is allowed. Overall the formula is quite simple. "Total Cost" divided by number of students is the fees per student. This is OK for the Institutions as most of them are formed as "Charitable Trusts" with no profit objective.
2. The cost that is generally considered is the historical cost. In some cases it is adjusted for inflation. For example, when fees are fixed for Academic Year 2012/13, costs of 2011/12 based on audited accounts, are considered and are adjusted for inflation. Similarly depreciation is allowed on the basis of standard accounting principles of historical costs of fixed assets.
3. Finance costs like interest in any form are not allowed while calculating the fees. The logic is that it is the responsibility of the Management of the Institutions to provide for the infrastructure from their own funds (that is the Trust corpus.)
4. Most of the State Committees are in the nature of judicial authorities



constituted under some kind of statute passed by the respective States. They rely on the information submitted by the colleges and also financial statements certified by the Chartered Accountants. They also have a grievance redressing mechanism in case either the Colleges or the students are aggrieved by the price (fees).

EVALUATION OF THE MODEL – PROS AND CONS

The pricing model as discussed above have the following merits –

1. From a regulatory point of view, where the State feels that it is important to exercise some kind of control over the price charged for a basic service like education, it is a good mechanism with a logical and well accepted framework. The logic of the pricing model is quite simple. You incur a cost and you recover it in the form of a price from your customer. If you employ a teacher, it is up to you to pay him Rs. 10,000/- per month or Rs. 1,00,000/- per month. In either case, whatever you pay, will be reflected in your price.
2. The pricing model tries to take care of interests of various groups like colleges, students and those employed in the colleges. For example, if in an year, the college pays salary arrears of 6th pay commission, these are allowed as an additional element in the price or fees to be paid by the students.⁹ At the same time there are provisions for incentives for quality initiatives like Accreditation, Conferences, Seminars and Phds in terms of small hike in price or fees.
3. Over the last 5 years or so, the Committees have been able to develop some kind of standardization in the pricing model. There are standard formats, formulae, guidelines, procedures etc. These are disseminated on the web-sites and are known to all concerned. Whatever decisions are taken, are documented in the form of minutes of the Committee meetings and are also displayed on the web-sites. Thus, despite being a Government regulator, there is a visible attempt to maintain some kind of transparency.

However, the Pricing Model has got some Limitations:

1. From the student's point of view, he has to take the price, that is, fees based on the cost. No doubt, he has the choice to opt for the college of his choice depending on various factors including the price, yet, there is no guarantee that despite choosing a high-priced college he will get good quality. An un-informed or ill-informed student can find himself at a college where he might discover that there is hardly any correlation between the price charged and the value delivered. This is not to be construed as a generalization, but this is also not an exception. When you have a brand



called "Philips" you make a conscious and well informed decision that for the relatively high price you are assured of good quality in return. That is not the case here because of the pure accounting approach to price determination. There are commodities like sugar or petrol whose prices are determined primarily on the basis of costs. But education is not like sugar or petrol.

2. While the pricing models are essentially driven by "cost", the basis of cost is financial audit and not cost audit. With some exceptions, the costs are taken as per the financial statements that are audited by Chartered Accountants. There can be cases, where costs are incurred exorbitantly or they are incurred because of inefficiencies, yet they are converted into price in the form of fees. With the very limited kind of infrastructure that is available with the Fee fixation Committees, it cannot be expected that they will go into very finer details of the costs particularly when they have to fix the fees of something like 2500 colleges (as stated earlier) in a few months time. This being the case, the colleges are in a way assured that whatever be the cost, they can recover it in the form of price. Of course, if the price is too high, students who are in a position to exercise a choice and who are willing to take some pains can decide not to choose such colleges. But if we consider students from the semi-urban and rural areas, they more or less, are price takers despite the fact that the costs may not fully represent the value which they are getting. Thus, one gets a feeling that accepting costs on the basis of financial audit is somewhat misplaced.

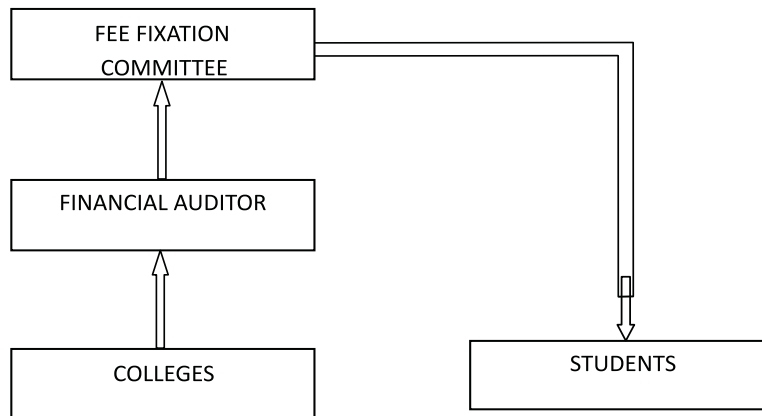
POSSIBLE IMPROVEMENTS IN THE PRICING MODEL

The key issue is to explore the possibility of linking the price with value rather than cost. Admittedly, the issue of determining and quantifying value that too of a service like education is a highly subjective matter. Yet, we can definitely try to explore a bit, of course, subject to our own limitations.

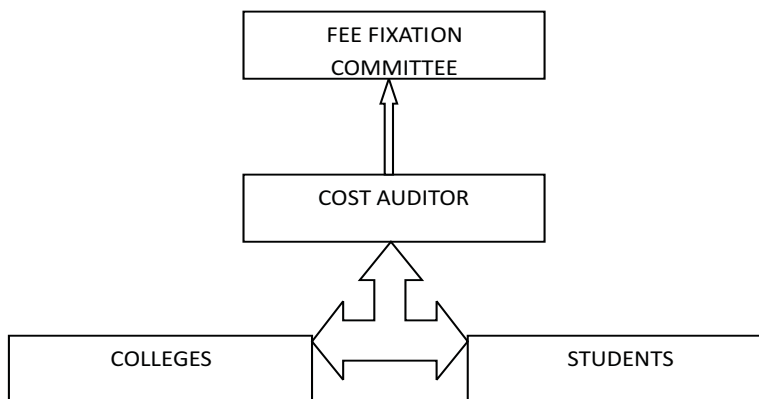
Before the proposed model, let's quickly have a glimpse at the existing model.



The existing pricing (fee fixation) model of private un-aided private colleges -



The proposed pricing (fee fixation) model for private un-aided private colleges -



FEATURES OF THE PROPOSED MODEL

1. Here it is proposed to make the students a part of the price determination process. Some people may argue that students might have very limited knowledge about the commercial aspects of pricing. Well, this is only a doubt. Today's students are well informed and with a little bit help they would be easily able to understand the numbers and calculations, more importantly, because it is the price which they have to pay. This participation from the students in the pricing will bring more transparency and accountability. Colleges would be more judicious and vigilant with their spending because they will have to convince not any other 3rd person



- but the students who are the customers themselves. If one views the existing pricing model, it is quite apparent that the students, who are the actual consumers, have very little say as regards the cost and the price. The students will know exactly how much salary is being paid to each of the faculties and what value in return he is getting for the same. This in turn will put pressure on the faculty members to improve quality of their service. The basic idea of this model is to eliminate all kinds of gaps due to lack of information. If the students are equipped with full information and also have participation, in-efficiencies in the costs would significantly get eliminated. Thus, the proposed model is a "participative" kind of model.
2. Another important change that is proposed in the pricing model is the substitution of financial audit with cost audit for the purpose of pricing. Financial audit suffers from some obvious limitations as discussed in earlier paragraphs. On the other hand, cost audit looks at costs from angles of efficiency and propriety. It would be worthwhile to understand the basic differences between the two types of audit. The purpose of the financial audit is to report on the profit and loss account and balance sheet as to whether they show true and fair view of the business or not. The purpose of the cost audit is to certify that whether the expenditure incurred on the production of items (or rendering of a service) has been incurred prudently or not. The financial auditor has to comment upon the accuracy of the transactions recorded and the cost auditor has to comment upon the correctness and judiciousness of the decisions taken in production of items (or rendering of services). Thus where the cost of a particular product or service is a sensitive issue, cost audit plays an important role. It emphasizes prudence in spending. This aspect is altogether missing in financial audit. Cost audit would analyze the costs in much more details and would provide useful data that can be actually used to reduce the costs. It would be unfair if keeping in view the interests of the students alone, the fees are reduced in an ad-hoc manner. This would leave the colleges in losses as the revenue would not be sufficient to cover the costs. But cost audit helps us to identify and eliminate costs that are actually a waste and if this is done, both the students and the colleges would be happy.
 3. The role of the Fee Fixation Committee under this model would be more of a policy formulator. Once the cost auditor certifies the fee calculation, the same can be forwarded to the Fee Fixation Committee and they can officially declare those by following their procedures. They can continue to play their role of the judiciary and act as a complaint redressing agency.



OPPORTUNITIES FOR FINANCIAL CONSULTANTS

Financial Consultants can play an important role in this entire issue. Following areas can be identified –

1. Pricing model design
2. Model refinement and improvement
3. Designing appropriate and practical costing systems that can facilitate cost audit
4. Suggesting systems for cost control and cost reduction
5. Annual cost audit

CONCLUSION

Education is a widely consumed service. Quality of education affects quality of life. In a country like India, pricing of education is very much regulated. Price of a product or service should be based on value rather than cost. And basically, the contention is that costs that are certified through a financial audit cannot be the basis of pricing a service. It is felt that with the kind of structural changes that have been proposed in the new model, pricing of education in the private un-aided sector can move towards value. It is for an Institute like The Institute of Cost and Management Accountants of India, to take up the matter with the Government and try and bring about this change – a change not just in the pricing model but in eliminating inefficiencies in costs. It is also felt that the Institute can certainly plead for introduction of Cost Audit because the pricing is based on cost.



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PRIMARY SECURITIES MARKET & INDIAN ECONOMY: A STUDY IN THE POST LIBERALIZATION ERA

Soumen Das

Abstract

The size and character of primary market has undergone a rapid transformation and expansion since mid-eighties. Before liberalization, resource mobilization from the primary market was low but in the early nineties it gradually increased and major reforms taken place in the primary market after establishment of the Securities and Exchange Board of India (SEBI).

This paper seeks to address the question of whether primary securities market promotes economic growth in an emerging market like India, during the post liberalization era. The study employ annual time series data from 1991-92 to 2011-12, collected from Annual reports of Reserve Bank of India (RBI), various issues of National Stock Exchange of India, annual reports of SEBI.

The empirical result shows that there is a significant positive impact of primary securities market activity on economic development and industrialization.

Key Words: *Economic Development, Index of Industrial Production, New Capital Issue, Primary Securities Market, Private Placement*

1. INTRODUCTION

Capital formation occurs in the primary market (new issue market) as it supplies additional funds to the companies directly. The main function of primary market is to facilitate the transfer of resources from savers to entrepreneurs for starting a new enterprise or for the expansion or diversification of the existing one. It does not have any organizational set up in any particular place and is recognized only by the specialist institutional services that it renders to the borrowers of capital funds at the time of any particular operation. New issues can be classified in various ways. The first categories of new issues are by new companies and old companies. This classification was suggested by R.F. Henderson (1951).

Indian economy is going through the phase of economic transition since 1991. The Indian capital market received special attention under the policy of liberalization. Reforms in the security market, particularly the establishment of SEBI, abolition of Controller of Capital Issue (CCI), market determined allocation of resources, screen based nationwide trading, market determined

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interest rate structure have greatly improved the regulatory framework and efficiency of trading and settlement in the Indian capital market. Primary market is the centre point of the capital market which bringing together the two principal segment of the market that of investors and the seekers of the capital. Regular growth of the economy of any country is possible only through a robust and vibrant primary market. It has noted that the depressed capital market conditions are attributable to the general slowdown in the economy. A satisfactory pace of economic growth in any economy is contingent upon availability of adequate fund. A well developed and efficient securities market, act as a supplier of funding for economic activity at macro level and plays the specific role in the economy. The study is divided into six sections. Literature Reviews are presented in section 2. Objectives of the study are pointed out in section 3. Databases and methodology is discussed in section 4. Empirical results are shown in section 5. Section 6 concludes the study.

2. LITERATURE REVIEW:

Several studies were conducted on primary market in India by academicians, researchers and by the primary market advisory committees. Many scholarly books and articles have been brought out.

Khan (1977, 1978) studied the role of new issues in financing the private corporate sector during the 1960s and early 1970s. He found that new issues were declining during this period. Patil (1986) opined that resource mobilization task is going to be challenging one for the private corporate sector in view of the seventh plan period. Khambata and Khambata (1989) analyzed the growth and development of the Indian equity market and found that Indian capital market did not play significant role in financing of the industrial sectors during the period 1960 to 1980.

Samuel (1996) showed that stock market play a limited role as a source of finance for Indian and U.S firm. Desai (2000) examined the reasons for sluggishness in the primary market. Lowry (2003) found that demand for capital and investors' sentiments are statistically and economically significant determinants of IPO volume. Arwah (2003) advised that primary capital market was found to be unequivocal and IPOs were offered at a discount.

Sayuri, Shirai (2004) opined that during 1990-2001, equity market had not proved a stable source for financing.

Levine and Zervos (1996) examine empirical association between stock market development and long-run economic growth, using regression analysis of forty-one countries from 1976 to 1993. Result shows a positive relationship between stock market development and economic growth.



Osaze (2000) sees the capital market as the driver of any economy to growth and development because it is essential for the long-term growth capital formation. It is crucial in the mobilization of savings and channeling of such savings to profitable self-liquidating investment.

Deb & Mukherjee (2008) shows the causal relationship between stock market development and GDP growth rate in India.

Ewah, Esang & Bassey (2009) examine the impact of capital market on economic growth in Nigeria between the periods of 1990-2010, using time series data on market capitalization, money supply, interest rate, total market transaction and government development stock with the help of multivariate regression analysis.

Ewan (2009) appraise the impact of the capital market efficiency on the economic growth of Nigeria using time series data from 1961 to 2004.

Arav (2010) shows the importance of capital for economic development. Barna & Mura (2010) investigate the correlation between capital market development and economic growth in Romania.

Mishra (2010) examined the impact of capital market efficiency on economic growth in India using the time series data on market capitalization, total market turnover and stock price index from the period first quarter of 1991 to the first quarter of 2010 with the help of multiple regressions technique. The result shows that the capital market in India has the potential of contributing to the economic growth of the country.

Kolapo & Adaramola (2012) examines the impact of capital market on economic growth in Nigeria between the periods of 1990-2010, using Johansen co-integration and Granger causality tests. The study confirms that the Nigerian capital market and economic growth are co-integrated. They used GDP as dependent variable and Market capitalization, total new issues, value of transaction and total listed equities and government stocks as explanatory variables.

Regmi (2012) examine the causal relationship between stock market development and economic growth in Nepal during the period 1994 to 2011. The study confirms that stock market development has significantly contributed to the economic growth in Nepal.

Adeusi, Sulaiman & Azeez (2013) examines the impact of capital market on economic growth in Nigeria between the periods of 1986-2010, using regression and co-integration techniques.

From the above literature review it has been found that primary market plays an important source of corporate finance and capital market development stimulates



economic growth, but most of the studies emphasize the importance of stock market in economic growth, they do not simultaneously examine the activity of primary securities market. In this paper an attempt has been made to investigate the role of new issue market in India in Indian economy.

3. OBJECTIVES OF THE STUDY

In light of above discussion, the current study is aimed to analyse and examine the role of primary capital market in Indian economy.

4. DATABASE & METHODOLOGY

The study depends exclusively on secondary data. Data for empirical analysis have been collected from the SEBI Bulletin, Handbook and Annual Reports, Reserve Bank of India Bulletin, Handbook of Statistics on Indian Economy and various reports published in financial journals, financial magazines and NSE & BSE websites.

In this study, annual data from 1991-92 to 2011-12 have been used in case of all the variables like, Index of Industrial Production (IIP), Resource Mobilized in the primary market as reported by SEBI and amount of fund raised in the private placement market.

Index of Industrial Production (IIP): IIP index shows the status of production in the industrial sector of an economy in a given period of time. It is an indicator of industrial activity in the country. Industrial productions also signal the economic growth and development of the country. We use IIP as a proxy of economic development and indicator of industrialization of the country.

New Capital Issue (NCI): New Capital Issue denotes the total amount of funds raised from the domestic market. In this study we have considered the total amount of resource mobilized from the Indian primary market as reported by SEBI. It includes resource mobilized by private and public corporate sector, through Initial Public Offer (IPO), Further Public Offer (FPO), Convertible Cumulative Preference Shares (CCPs), Bonds and other Debt issues.

Private Placement Issues (PVT): It denotes total amount mobilized in the private placement market in India in the post liberalization era as reported by RBI.

Methodology:

With a view to accomplish the stipulated set of objectives of our study, first of all, the three selected series were converted to logarithmic form. Then, correlation coefficient is calculated to understand the degree of association among the chosen variables. Then regression equation is estimated through Ordinary Least Square (OLS) method.



In order to avoid a spurious regression situation the variables in a regression model must be stationary or co-integrated. Therefore, in the first step of regression, we use Augmented Dickey-Fuller (ADF) test, an extension of the Dickey and Fuller (1981) method on these log transformed time series variable to investigate whether they are stationary or co-integrated. The regression equations estimated by the OLS method is given as:

$$\text{LnIIP} = \alpha_1 + \beta_1 \text{LnNCI} + \beta_2 \text{LnPVT} + u_{it} \quad \text{----- (1)}$$

Where,

Ln = Natural logarithm of the variable

IIP = Index of Industrial Production (Base 1993-94)

NCI = New Capital Issue, PVT = Resource raised in the private placement market

α_1 = Constant terms; u_{it} = Random Error Terms

5. EMPIRICAL RESULTS

In this section, we have analyzed the relationship between the primary market activity and economic development of the country based on time-series data for the period from 1990-91 to 2011-12. The variables in the equation are selected because of their economic meaningfulness and direct relationship.

Table 1 shows the correlation matrix.

Table 1: Correlations Matrix

		IIP	NCI	PVT
LnIIP	Pearson Correlation	1	.577**	.941**
	Sig. (2-tailed)		.006	.000
	N	21	21	21
LnNCI	Pearson Correlation	.577**	1	.383
	Sig. (2-tailed)	.006		.086
	N	21	21	21
LnPVT	Pearson Correlation	.941**	.383	1
	Sig. (2-tailed)	.000	.086	
	N	21	21	21

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

Source: Author's Computation

It has been found from the above correlation matrix that variable PVT highly correlated with IIP and NCI is moderately correlated IIP and significant at 1% level.



Test for Stationary

The unit root test results are presented in Table 2. For all the level series under study, the null hypothesis of a unit root is not rejected. However, when the tests are applied to the first differences of the variables, the null is rejected indicating that they are stationary. Consequently, all the three level series are found integrated of order one, that is, I(1) process according to Augmented Dickey-Fuller (ADF) test. Therefore we can run our regression model. The lag length is chosen based on Schwarz Information Criterion (SIC) as suggested by Enders (2008).

Table 2: Results for the Dickey Fuller Unit Root Test for the Variables

Variables	Constant [At Level]	Constant [At 1 st Difference]
LnNCI	-2.097126 (0) [0.2203]	-6.080800 * (0) [0.0001]
LnPVT	-1.282268 (0) [0.6166]	-6.969179 * (0) [0.0000]
LnIIP	0.198390 (0) [.96]	-3.356641 ** (0) [0.0264]

Note: Asterisk (& **) denotes rejection of unit root hypothesis at 1% & 5% level of significance; () Lag lengths for ADF; [] Mackinnon (1991) one-sided p-values.*

Source: Author's Computation

Regression Analysis:

We have examined the impact of primary market activity on economic development through multivariate regression techniques. The model used here has the following functional equations.

$$\text{LnIIP} = \alpha_1 + \beta_1 \text{LnNCI} + \beta_2 \text{LnPVT} + u_{it} \text{ ----- (1)}$$

**Findings:**

Table 3, shows the regression results.

Table 3: Results of regression analysis

Dependent Variable: LnI IP				
Method: Least Squares				
Sample Period: 199 1-92 To 2011 -12				
Included Observation: 21 after adjustment				
Variable	Coefficient	Std. error	t-statistic	P-Value
Intercept	1.227632	0.282653	4.343242	0.0004
LnNCI	0.120345	0.029411	4.091781	0.0007
LnPVT	0.258318	0.018963	13.62227	0.0000
R-square	0.941040	Durbin -Watson Stat		1.62784
Adjusted R -square	0.934489	F-Statistic (P-Value)		143.65(0. 000)

Source: Author's Computation

Hence, the parameters of the explanatory variables are significant and signs as desired. The values of R^2 (0.941040) and adjusted R^2 (0.934489) are high and it is significantly different from zero. There is a rule of thumb, according to Granger and New Bold (Gujrati, 2007) to check whether any estimated regression is spurious or not. If $R^2 > d$, the estimated equation said to be spurious-where d refers to Durbin-Watson d value. In the above estimated equation, Durbin-Watson Statistics is sufficiently greater than the value of R^2 , which strongly proves that the relationship between primary market activity and economic development is not spurious.

Another noteworthy feature, revealed from the Durbin-Watson (DW) statistics is that there is no specification error in the model at 1% level (as the significance points of d_L and d_U at 0.01 level of significance are 0.89 and 1.277 respectively, where the null hypothesis is misspecification of the model). As the Durbin-Watson (DW) statistics is high one can conclude that autocorrelation does not arise in these results.



With regard to the explanatory variables, the coefficient of NCI and PVT are significant at 1% level. The value of R^2 and adjusted R^2 indicating that more than 90% variation in dependent variable explained by the variables used as the activity of the primary securities market. Result shows a positive and significant relationship between Indian primary securities market activity and economic growth.

6. CONCLUDING OBSERVATIONS:

Primary securities markets play an important role in economic development of the country. Government and private corporate sectors mobilize long-term capital from the primary market to finance their long term projects. Primary market plays an important role through channelizing the long term capital from the surplus sector to deficit sector to finance the development projects of the public companies such as construction of roads, dams, expansion of new projects, expansion of infrastructure facilities etc and also promotes industrial development and motivates industrial entrepreneurship.

In the post liberalization era public and private corporate sector raised huge capital in the primary market through private placement debt and equity and also in the form of Initial Public Offer of equities and debt, and rights issues. Therefore we may conclude that primary capital market stimulates national wealth creation for economic development of the country, through channelizing long term capital. In the post liberalization period resource mobilization from primary market increases in the early 1990s but in the second half of the 1990's, following the securities market scams and subdued conditions in the secondary market resource mobilization through new capital issues declined. Revival of the new capital issues started from 2003-04 onwards, after improvement in investor sentiment, investment climate and macroeconomic outlook.

The empirical results reveal that there is a significant relationship between economic development of the country and primary securities market activity. Regression results shows that resource mobilizations through new capital issue and through private placement are statistically significant at 1% level and stimulates economic development. Thus, it recommends that proper development of the primary securities market can increase the channelizing of long term capital for productive use and economic development of the country.



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PROFITABILITY ANALYSIS IN SAP –YOUR KALEIDOSCOPE FOR PERFORMANCE EVALUATION

Pramod Bhav

Abstract

How many of us remember Kaleidoscope..? It is like a tube containing pieces of colored glass. We turn the tube or our Kaleidoscope clockwise or anti clockwise in different angles and the reflections of the glass pieces inside produce different shapes which look really fascinating.

Reporting capability of Profitability Analysis is no different than that.

Here, the glass pieces are the dimensions (organizational units, products, customers etc) in Profitability Segments and when we scroll up or down their values it is like turning the tube or the kaleidoscope to view the financials for given combinations of these dimensions.

Key Words : Kaleidoscope, SAP, Profitability Reporting.

INTRODUCTION

Profitability Analysis in management Accounting as a functional stream in SAP, or CO-PA as it is commonly referred to, is quite close to the heart for many who derive the joy from utilizing its multidimensional reporting to meet their information needs.

Ironically, many organizations have either not implemented this module or they have not realized its potential strengths. I have all along praised this module in SAP for the sheer integration it demonstrates with other functional streams in SAP, for its excellent reporting capabilities and for the immense value potential it has for the business.

SYSTEM INTEGRATION STRENGTHS

User community in organizations where Profitability Analysis has been effectively implemented is quite convinced about how seamlessly integrated it is with other modules in SAP.

In regards to *revenue and sales incidental expenses*, it has integration with Sales and Distribution functions. Sales, scrap sales, service income, distressed sales, allowances, discounts, freight, sales returns, samples, dealer incentives – you name the type of revenue or sales related expense that gets accounted for in

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General Ledger during billing (or sales invoicing as is conventionally known), system will ensure that it is also captured in Profitability Analysis.

It has integration with Product Costing in as much as it captures the 'proportionate' break up of standard cost with every sales invoice posted in the system, proportionate meaning if 100 units of a product are sold and the total cost per unit is Rs 450 with breakup of 200 as Raw Material, 25 as Packing Material, 80 as variable manufacturing Costs and 60 as other indirect or Fixed Costs, then system will capture this break up of standard product cost for 100 units in the same PA document it generates for the sales invoice.

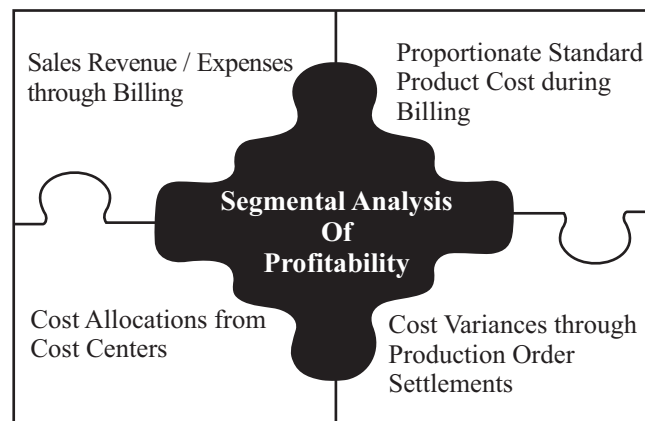


Figure I – System Integration overview

Profitability Analysis also has integration with Shop Floor Operations in Production Planning, in as much as it captures *the breakup of variances* on the same lines as it captures break up of standard cost during billing. Variances between standard costs for the given quantities manufactured as per the production or process orders and the actual costs booked to such orders are posted in General Ledger to 'Price Difference' account with contra debit or credit to Cost of Goods Manufactured every time these orders are declared as 'Technically Complete' in system. These variance amounts are also captured, by way of separate documents generated for each of the production orders, in Profitability Analysis with their break up in different categories.

Profitability Analysis has system capability to capture practically every financial P&L relevant transaction in it. Let us take a trivial matter, for example. We are expected to revise standard product costs at regular intervals to reflect prevailing input costs so that they continue to be relevant for meaningful comparison with actual costs. The gain or loss on revaluation of inventories with revised standard costs, that gets accounted for in General Ledger during the process of Costing Run, is also captured in Profitability Analysis.

At a manufacturing plant level, we will have *under or over absorbed costs* (unless we reevaluate activity units at actual prices after the fiscal period is over) and we will also have un-absorbed costs in cost centers at corporate level. System provides for apportionment of all of these costs to desirable Profitability segments so as to ensure comprehensive coverage of costs or expenses posted in General Ledger.

There are *certain types of gains or losses* like the one resulting from revaluation of inventory or from physical verification of inventory or from price differences on material procured. These types of costs or gains are also captured in Profitability Analysis by means of standard system configuration.

To make it long and short of this discussion, I would say system provides for *different avenues* to ensure that we are accounting for all sorts of revenue and costs in Profitability Analysis so that the data captured therein falls in line with financial P&L.

MULTIDIMENSIONAL PROFITABILITY REPORTS

Like we are able to see financial P&L being updated on real time basis with every other financial transaction processed in system, we are also able to see *multi dimensional reports* in Profitability Analysis being updated on line.

However, The big difference between financial P&L and the P&L in Profitability Analysis lies in the fact that we get to see the detailed 'break up' of our revenue and costs for different *market and / or manufacturing segments* in Profitability Analysis. The difference between the two (financial P&L and CO-PA) also lies in the granularity that the system provides in Profitability Analysis reporting that enables us to view profitability for various combinations of products, customers, regions, distribution channels etc, on real time basis.

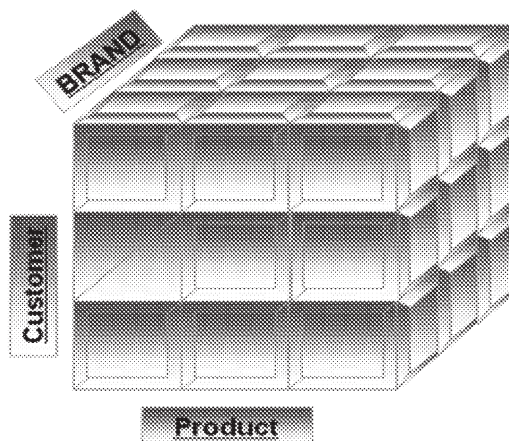


Figure II – Multidimensional Reporting Structure



Financial P&L updated on real time basis provides bird's overview of operations useful only to the chairman or CFO. And, the New GL (the other variant of General Ledger in SAP) is only the cousin of standard General ledger. Profit Center Accounting or the accounting at a business area level goes one step further. No doubt. It provides you a snapshot of P&L for given business segments which may have been determined based on product categories or locations. But, both of those forms of accounting also fail to provide any insight into operations or they simply do not reveal how profitable are different market segments or how cost efficient are manufacturing operations.

Profitability Analysis serves this purpose. System picks up values of different characteristics or dimensions like product, customer, region, brand, plant etc from every single document it processes and captures the financials – namely, sales revenue, break up of standard costs, variances, common costs apportioned...so on and so forth - for these combinations.

If I am asked this question as to why do we configure the system and implement Profitability Analysis when we already have general ledger, profit center accounting or business area accounting and the new GL? My answer would be, we implement it because *there is nothing as agile and comprehensive as Profitability Analysis is in SAP.*

RELEVANCE OF PROFITABILITY ANALYSIS AT SEGMENTAL LEVEL

Just imagine that we have three products with four different brands of each of those and eight customers. The segments we have for profitability analysis are ninety six. Even in this simplest example, we will not have same price, same discount structure or same shipping expenses incurred in different market segments. Naturally, the bottom line will be different for these individual market segments.

In regards to costs of different products and efficiency in their manufacturing operations, different considerations will apply and those too have impact on profitability of respective manufacturing segments.

So, it is always a *dynamic situation* when it comes to prices, costs and profitability in different operating and market segments. Management needs this analysis to make short term decisions and formulate long or medium term strategies. In a complex business environment, it is only Profitability Analysis in SAP that caters to the needs for information in this regard.

With every sales document posted in the system, the profitability segment is determined dynamically based on information such as which product is sold,



customer it is sold to, which region it is sold in, which category or brand the product belonged to ...so on and so forth.

Now, consider the fact that business firms, from small size to large corporations, process sales invoices every day in tens, hundreds or thousands. They have a large customer base across the country and in majority cases beyond its boundaries. These firms will have a wide range of products and their brands, their discount structure and pricing strategies vary widely for various categories of customers and products, their cost structure is different at different manufacturing locations and operational efficiency differs from time to time on account of various reasons. All of these factors having impact on overall profitability are captured in Profitability Analysis with their break up in respective manufacturing or market segments.

REPORTING DYNAMICS

Reporting in Profitability Analysis is all *user friendly*. We can devise our own reports based on our needs. We can capture very detailed break up of revenue and costs in reports meant for managers responsible for day to day operations and we can capture only the building blocks of P&L in reports meant for senior management.

System provides for a reporting tool, called Report Writer, in which we can determine which combination of characteristics we want to analyze the profitability relevant data for and then, system will enable us to review profitability for all existing or available combinations of values of those characteristics.

We can predetermine the dimensions like range of customers or products or regions or brands to be invoked in these reports or we can capture information at a level as high as the whole of an organization or at a level specific only to manufacturing plants or sales depots.

We can group one or more values for reporting purposes. For example, sale of goods and income from distressed sales could be one revenue figure or it could be shown separately in reports. Likewise, break up of product costs could be captured separately or it could be captured as one amount in a report. For example, in a report meant for managers on shop floor we will show detailed break up of product cost whereas in a report for managers in corporate office we might want to show only cost of goods sold as one value.

These reports provide for inbuilt ability to scroll up and down the values of each of the dimensions like a plant or a sales office or a product brand – for example, and the financials will show up accordingly for different combinations of these dimensions.



It is this flexibility of Profitability Analysis that enables us get the kaleidoscopic view of operations.

By the way, how many of us remember Kaleidoscope..? It is like a tube containing pieces of colored glass. We turn the tube or our Kaleidoscope clockwise or anti clockwise in different angles and the reflections of the glass pieces inside produce or take different shapes which look really awesome. Reporting capability of Profitability Analysis is no different than that.

Here, the glass pieces are the dimensions (organizational units, products, customers etc) in Profitability Segments and when we scroll up or down their values it is like turning the tube or the kaleidoscope, to view the financials for given combination of characteristic values.

PROFITABILITY ANALYSIS, PART OF SAPECC AS A WHOLE

Like any other functional streams or sub streams in SAP, Profitability Analysis is also managed with the help of a separate organizational unit, called Operating Concern.

Like all other financial ledgers Profitability Analysis also has its own document numbering range and has its own internal numbering control. As and when it is updated with any transactions, system creates document numbers.

The document numbers are not fiscal year specific. Document numbering is separate for actual postings and documents that the system creates in planning. As it is true with other modules, we can also have more than one planning versions in Profitability Analysis.

The structure that we have for Profitability Analysis can be either 'Costing Based' or 'Account Based' – So that we are able to capture detailed break up of standard product costs and their variances with actual costs, we need to have it as 'Costing Based'. The relevance of 'Account Based' Profitability Analysis is more in trading or service industries.

Profitability Analysis will follow the same fiscal year as Financial Accounting does. The documents would be posted in two currencies i.e. company code currency and the operating concern currency. Multinational entities benefit a lot from transactions being processed in country specific and group currencies.

OTHER CONSIDERATIONS FOR ITS DEPLOYMENT TO BE EFFECTIVE

Reconciliation of financial P&L with CO-PA is considered to be a *mandatory step* during period end closing in many renowned organizations. This is because reports based on the data from PA are referenced during strategic and operational decision making. The sanctity of data captured in PA is, therefore, validated by



way of reconciling high level profitability reflected in it with financial P&L.

Although lot of P&L relevant data flows to CO-PA programmatically by virtue of system configuration like it does in financial accounts, explicit user actions are also involved to capture certain relevant data in system like, for example, settlement of production orders as a result of which cost variances are captured in CO-PA. Such user actions are integral part of period end closing activities and to ensure that they are complete and reflected properly in Co-PA, it is important that the two sets of P&L (General Ledger and Profitability Analysis) are reconciled periodically.

Value Flow Actuals	Production Cost Centers		Common Cost Centers		Marketing Costs- IO / WBS		CO-PA
	+	-	+	-	+	-	
Direct Posting FI (G&A Exp)	→						
Rebates, discounts or any such accrual of costs through billing			→				
Marketing costs posted to Internal Orders / WBS			→				
Sales Invoicing			→				
Cost of Goods Sold			→				
Cost allocations to Profitability Segments				→			
Cost allocations to Profitability Segments		→					
IO / WBS Settlement						→	

Figure III – Actual Flow of Values

As the organizations grow, their reporting needs grow and so does the volume of data in these reports. The speed with which ECC server populates the data in PA reports falls short of obvious expectations from ever busy managers...(!). At times, it takes several minutes for the report to pop up the data.

To overcome this limitation, required data from PA is captured in BI. *Data retrieval in BI reports is much faster and it makes life a lot easier for business managers. SAP HANA is a step forward in this direction. SAP HANA database with SAP's in memory computing capability will provide accelerated data processing for existing SAP applications. SAP CO-PA Accelerator software is the first solution delivered to SAP customers using SAP HANA as a secondary*



database to the SAP ERP application.

With large scale manufacturing and trading operations in multiple products, markets and territories, multinational firms will immensely benefit from deployment of SAP HANA. It will enable these organizations to analyze business operations in real time at a mind boggling speed.

CONCLUSION

CO-PA in SAP is highly integrated application and provides for excellent performance analysis and reporting mechanism which no organization ought to overlook. The insight it provides in segmental profitability is unparalleled and has the potential to aid significant improvement in the prevailing financial health of the organization.

LIST OF ABBREVIATIONS / DESCRIPTIONS

Abbreviation / Acronym	Expansion / Descriptions
ERP	Enterprise Resource Planning – integrated systems software
SAP	ERP product developed and marketed by SAP AG, German software company
ECC	Enterprise Central Component – the server nomenclature of SAP ERP
P&L	Profit and Loss Account
New GL	New General Ledger, functionality introduced in SAP for additional general ledgers to comply with different accounting requirements
BI	Business Intelligence – SAP Platform for Data Warehousing functionality
HANA	High Performance Analytic Appliance

**RELEVANCE OF TRADEMARK / BRAND OF MUTUAL FUND****Nand Kishore Sharma*****Abstract***

Mutual fund industry in India has emerged as a dominant financial intermediary in Indian capital market; but it has not achieved the status of their counterparts in USA, UK, and other developed countries. Mutual fund industry has a tremendous potential for growth in Indian environment. In order to create a place for mutual funds, there is a need to take a composed view of the mutual fund industry in terms of AUM as a function of brand of a mutual fund scheme. If there are two similar products launched by two different brands of asset management companies, then the units of one product are sold in large numbers, increasing unit capital and total assets under management. In my present research study sample of top six Asset Management Companies which had the highest assets under management is chosen. After selection of these mutual funds fifteen schemes were short listed for the purpose of my research. The period of my research study begins from April 2006 to March 2013.

An important change in mutual fund industry in India was observed after the breakup of UTI and the industry had growth phase from 2006 to 2007. A fall of 8% in assets under management was also seen in the year 2008-2009 that affect revenues and profitability of industry adversely. HDFC Equity Fund had highest market quality among my all the sample scheme. This was due to the fact that the net operating margin was highest and there was positive sales growth, even though not the highest sales growth. Market quality of the ICICI Infrastructure Fund, Reliance Equity Fund, UTI Infrastructure Fund, Birla Sun Life Midcap Fund is lower due to two elements i.e. growth performance and net operating margin. The results of my research showed that investors were moderately satisfied with their investment in mutual fund. Majority of them chose to invest in schemes of those funds which they assumed as market leader. The investors have to look at all the schemes available in the market and their investment objective to make a fair choice. Mutual funds are generally perceived as investments in equity markets and hence investors expect a return much superior to the normal return that other comparable instruments given. In my developed countries mutual funds attract much more investments as compared to banking sector but in India case is reverse, there is lack of awareness about the knowledge of the various schemes to investors of our country.

Key Words : Trade mark, Brand, Economic Value Added, Mutual Fund.

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MAJOR OBJECTIVES OF RESEARCH

Present research study entitled-“Critical Analysis of Relevance of Trademark / Brand of Mutual Fund on its Valuation” has following major objectives:

- 1) Does the brand equity of one asset management firm differ from other asset management firm?
- 2) Does the brand equity of mutual fund schemes play an important role in wealth maximization?
- 3) Is there an important role of brand equity in valuation of mutual fund?
- 4) Important factors influencing the investor's choice in selecting mutual fund organization and scheme?
- 5) Important views and perceptions of fund managers and investors on mutual fund investments.

REVIEW OF LITERATURE

The present research study is based on the review of 49 foreign and 72 Indian studies relating to Mutual funds, Brand Equity and Investors' Behaviour. The review of foreign studies ensured that mutual funds have a significant impact on the price movement in stock market, the average return from schemes were below that of their benchmark, the three models Sharpe, Treynor and Jensen widely used for the study provided identical results, good performance was associated with low expenses ratio which was not necessarily dependent on size of mutual fund. In our country government of India issued new guidelines for setting up mutual funds in public sector, private sector and for joint sector on 14th February 1992. On February 19, 1993, the first batch of 12 private sector mutual funds was given permission by SEBI. In India mutual fund industry rooted in free market and oriented towards competitive functioning with dedicated goal of service to the investors after 1992. Most of the research studies relating to mutual funds have been done in late nineties. The review brings to light the importance of Mutual funds in Indian financial scenario, highlight the need for adequate investor protection, single regulatory authority, higher return for a given risk as per investors' expectation, greater convenience and liquidity, and the expectations that mutual funds should work as a catalytic agent for economic growth and foster investors' interest. SEBI framed regulations to protect the interests of investors in securities and to promote the development and regulation of the securities market in our country. The review highlighted that investor behavior is influenced by overconfidence, biases and inaccurate perceptions of control. In our country investors give maximum importance to safety of money as major element followed by regular return and capital appreciation.



The reviews related to brand equity suggest that the goal of brand management should be to understand working of leverage equity to create value. It is based on the premise that brands, if well managed, affect the consumer behaviour positively, and thus brand owner derives benefit from it. The analysis used to measure the effect of brand in increasing demand of specific mutual fund. It is measured by an indicator called Brand Strength Score. The review explained that higher advertising expenditures indicate company's awareness about importance of advertising in increasing brand awareness in the market. It also indicates that consumers are influenced by advertising and present market is actually brand driven. The review relating to Economic Value Added assured EVA is consistent with the way the capital markets measure value and economic profit style of investing by emphasizing on the fundamentals of wealth creation helps to select the right company for investment. Many research studies were done in India relating to Mutual Fund Performance through NAVs and available in every research website. There was a paucity of literature in relation to the criteria affecting changes in mutual fund NAV related to change in number of shares in the mutual fund. For evaluating investments qualitative as well as quantitative analysis are used. Present study is concentrated on the quantitative analysis relating to change in number of shares in mutual fund which affects NAV and also the average assets under management. Average assets in management are dependent on sale of units of mutual fund scheme and are the criteria for determination of market leader. This research study is based on primary as well as secondary data. The research work started from 1st April 2006, when Indian mutual fund industry was looked as the wealth creation tool due to its great performance and ends on 31st March 2013, where it is in the stage of consolidation.

HYPOTHESIS

The present study is based on following hypothesis to compare brand equity of mutual fund schemes and to analyze the impact of brand on valuation of mutual fund:

Null Hypothesis:

- H_{01} : *The performance of the mutual fund is independent on total assets under management.*
- H_{02} : *There is no big change in the economic value added with respect to assets under management.*
- H_{03} : *There is no big change in the brand strength in different mutual fund companies.*
- H_{04} : *There is no big change in the brand equity with respect to assets under management.*



H₀₅: There is no big change in the in the choice of the mutual fund due to preference of that mutual fund.

H₀₆: There is no significance difference in the preference of key product variables of mutual fund scheme between investors and fund managers.

H₀₇: Brand equity marginally effects the valuation of mutual fund scheme.

Alternative Hypothesis:

H_{a1}: The performance of the mutual fund is dependent on total assets under management.

H_{a2}: There is big change in the economic value added with respect to assets under management.

H_{a3}: There is big change in the brand strength in different mutual fund companies.

H_{a4}: There is big change in the brand equity with respect to assets under management.

H_{a5}: There is big change in the in the choice of the mutual fund due to preference of that mutual fund.

H_{a6}: There is significance difference in the preference of key product variables of mutual fund scheme between investors and fund managers.

H_{a7}: Brand equity effects the valuation of mutual fund scheme to significant extent.

RESEARCH DESIGN

The present research work is descriptive, empirical, and analytical. It is descriptive because I have used secondary data to discuss the back ground of the research problem. My research work is analytical because I have conducted the survey to study the impact of brand on investors and the brand strength of selected mutual fund companies. My research work is empirical as the time series technique is used for comparison of balance sheets of selected companies of study period to find brand equity thereby brand valuation and economic value added.

RESEARCH METHODOLOGY

The research methodology used is combination of case study and survey method. The data needed for finding brand equity using BBDO's BEES method needs hard as well as soft factors. The selection of asset management companies and their mutual fund schemes is made on the basis of ranking of assets under management managed by them. The mutual fund schemes selected for finding brand equity from case study method. In present research brand equity also includes brand strength which is calculated through analysis of perceptions of investors. The



survey method was used to collect primary data from fund managers of mutual fund scheme and retail investors to understand the profile, preferences and perceptions of investors affecting their sentiment and choice of mutual fund for investment.

SAMPLE SIZE OF ASSET MANAGEMENT COMPANIES

To study impact to brand equity of top five brands in terms of total assets under management as a market leader and the investors perseverance towards the same. The study was done considering the total assets under management and various schemes offered by asset management companies registered AMFI. The Association of Mutual Funds of India works with 45 registered AMC's of the country as on 15th July 2012. The analysis of the schemes and calculation of brand equity relates to fifteen short listed schemes for the period beginning April 2006 to March 2013. The following sample of Asset Management Companies were the top six which had the highest assets under management for the period beginning April 2006 to March 2013 was selected for my study:

- 1) *Unit Trust of India Mutual Fund.*
- 2) *Reliance Mutual Fund.*
- 3) *ICICI Mutual Fund.*
- 4) *HDFC Mutual Fund.*
- 5) *Franklin Templeton Mutual Fund.*
- 6) *Birla Sun Life Mutual Fund.*

After selection of the above mutual funds, following schemes were short listed for the purpose of my research:

- 1) *UTI Leadership Equity Fund*
- 2) *UTI Infrastructure Fund*
- 3) *Reliance Growth Fund*
- 4) *Reliance Equity Fund*
- 5) *ICICI Prudential Infrastructure Fund*
- 6) *ICICI Prudential Dynamic Plan Fund*
- 7) *HDFC Equity Fund*
- 8) *HDFC Long Term Equity Fund*
- 9) *HDFC Top 200 Fund*
- 10) *Birla Sun Life Frontline Equity*
- 11) *Birla Sun Life Infrastructure Fund*
- 12) *Birla Sun Life Equity Fund*
- 13) *Birla Sun Life Midcap Fund*
- 14) *Franklin India Blue Chap Fund*
- 15) *Franklin India Flexi Cap Fund*



FINDING OF RESEARCH

The findings of my present research relating to brand equity of mutual fund on its valuation during my research period are:

Finding Relating to Industry

- 1) The mutual fund industry in our country had undergone a lot of mergers, acquisitions and closures besides the entry of many new mutual funds. The industry obtains an impressive growth in funds mobilization and assets under management are increased by 23% during my research period.
- 2) An important change in mutual fund industry in India was observed after the breakup of UTI and the industry had growth phase from 2006 to 2007. A fall of 8% in assets under management was also seen in the year 2008-2009 that affect revenues and profitability of industry adversely.
- 3) The equity schemes comprised of 36% of assets under management as compared to non equity schemes comprising of 64% of asset under management during my research period.
- 4) 67% of AUM (assets under management) under equity oriented schemes was contributed by retail, followed by high net worth individuals 21%, rest 12% was related to corporate, banks and FIIS.
- 5) In the year 2006, UTI a public sector mutual fund had highest assets under management, followed by Reliance, ICICI, HDFC, and Franklin Templeton. Since 2007 Reliance Mutual Fund had consistently topped the assets under management till 2012.

Finding Relating to Economic Value Added (EVA)

- 1) Each and every fund of my sample showed an increase in AUM (Assets Under Management) from 2006 to 2012. UTI Leadership Fund, Reliance Equity Fund and HDFC Long Term Equity Fund were exception.
- 2) When we compare increase in assets under management (AUM) with returns during 2006 to 2012, Birla Sun Life Midcap Fund, Franklin India Flexi Cap Fund were achieved only average (75%) performance during the period of my research. Reliance Growth Fund, ICICI Prudential Infrastructure Fund, ICICI Prudential Dynamic Fund, Franklin India Blue Chip Fund were obtain above average (90%) performance during the period 2006 to 2012. On the other hand HDFC Equity Fund, HDFC Top 200, Birla Sun Life Frontline Equity Fund was achieved excellent performance during my research period.



- 3) EVA was observed positive in 80% of my sample schemes and only in 20% of my sample it was negative. UTI Leadership Equity Fund, UTI Infrastructure Fund, and Birla Midcap Fund had negative EVA during my research period. Here, negative EVA means cost of capital is more than its capital employed.

Finding Relating to Unit Capital, Market Quality & Discounted Cash Flow

- 1) **UTI Leadership Equity Fund** had a unit capital of Rs 858 crores on 31st March 2007. The unit capital decreased to 504 crores on 31st March 2013. Compound Growth Rate (CAGR) of funds mobilized from scheme was 12% during my study period. Growth performance was observed at 2.42 times of unit capital. Net operating margin was 7.15 times of growth of unit capital. The extent to which the industry is brand driven was 0.0001 times of its sales value during the period 2006 to 2012. The net operating margin and brand development was observed at 2.87 during the study period.
- 2) **UTI Infrastructure Fund** had a unit capital of 402.2 crores on 31st March 2007. The unit capital of UTI Infrastructure Fund increased by 3 times on 31st March 2013. The compound annual growth rate (CAGR) of funds mobilized from scheme was 33% for the study period. The growth performance of UTI Infrastructure Fund was 0.7 times of unit capital. The net operating margin was 2.3 times of growth of unit capital. Extent to which the industry is brand driven was 0.0001 times of industry's sales. The market quality was computed at 0.9 during my research period.
- 3) **Reliance Growth Fund** had a unit capital of 495.8 crores on 31st March 2007. The unit capital of Reliance Growth Fund increased 1.4 times on 31st March 2013. The CAGR of funds mobilized from scheme was 7% for the period 2006 to 2013. The growth performance was 0.9 times of unit capital. The net operating margin was 16.4 times of growth of unit capital. The extent to which the industry is brand driven was 0.001 times of industry's sales. The market quality was 4.9 during my research period.
- 4) **Reliance Equity Fund** had a unit capital of 3979.8 crores on 31st March 2013. The unit capital decreased to 1247.6 crores on 31st March 2007. The CAGR of fund mobilized from this scheme was 28% during the period 2006 to 2013. The annual growth rate of this fund was negative during all the years of my research. The growth performance was also negative by 0.84 times of unit capital. The extent to which the industry is brand driven was 0.0003 times of industry's sales. The market quality was computed at 0.39 in my research period.



- 5) **ICICI Prudential Infrastructure Fund** had a unit capital of 1049.7 crores on 31st March 2007. The unit capital increased by 0.6 times on 31st March 2013. The CAGR of funds mobilized from this scheme was 36% during my research period. Growth performance was 0.21 times of unit capital. The extent to which the industry is brand driven was 0.0004 times of industry's sales. The market quality was computed at 0.18 during my research period.
- 6) **ICICI Prudential Dynamic Plan** had a unit capital of 763.6 crores on 31st March 2007. The unit capital increased to 1.27 times on 31st March 2013. The CAGR of funds mobilized from this scheme was 7.9% during my research period. Growth performance was 1.65 times of unit capital. The net operating margin was 15.58 times of growth of unit capital. The extent to which the industry is brand driven was 0.0003 times of industry's sales. The market quality was computed at 5.13 during the years 2006 to 2013.
- 7) **HDFC Top 200 Fund** had a unit capital of 357.6 crores on 31st March 2007. The unit capital increased to 3.5 times on 31st March 2013. The CAGR of funds mobilized from this scheme was 35.76% during my research period. The growth performance was 1.35 times of unit capital. The net operating margin was 7.96 times of growth of unit capital. The extent to which the industry is brand driven was 0.0007 times of industry's sales. The market quality was computed at 2.78 during my research period.
- 8) **HDFC Equity Fund** had a unit capital of 729.2 crores on 31st March 2007. The unit capital increased to 1.37 times on 31st March 2013. The CAGR of funds mobilized from this scheme was 7.19% for the research period. The growth performance was 1.09 times of unit capital. Net operating margin was 42.3 times of growth of unit capital. The extent to which the industry is brand driven was 0.0005 times of industry's sales. The market quality was computed at 13.21 during the years of my research.
- 9) **HDFC Long Term Equity Fund** had a unit capital of 1364 crores on 31st March 2007. The unit capital decreased to 0.47 times on 31st March 2013. CAGR of funds mobilized from this scheme was 22% during my research period. Growth performance was noted 0.98 times of unit capital. It is also observed that net operating margin was 2.34 times of growth of unit capital. The extent to which the industry is brand driven was 0.0002 times of industry's sales. The market quality was computed at 1.008 during 2006 to 2013.
- 10) **Birla Sun Life Frontline Equity Fund** had a unit capital of 60.1 crores on 31st March 2007. The unit capital increased by 10.4 times during the period



of research. The CAGR of fund mobilized from scheme was 94.5% for the period 2006 to 2013. Growth performance was 1.23 times of unit capital. The extent to which the industry is brand driven was 0.0003 times of industry's sales. The market quality was computed at 0.73 in my research study.

- 11) **Birla Sun Life Infrastructure Fund** had a unit capital of 398 crores on 31st March 2007. The unit capital was constant during my study period. The CAGR of funds mobilized from this scheme was 4.5% during the years 2006 to 2013. The growth performance was 1.73 times of unit capital during my research period. The net operating margin was 5.84 times of growth of unit of capital. The extent to which the industry is brand driven was 0.0003 times of industry's sales. Net operating margin and brand development was computed at 2.28 during the years 2006 to 2013.
- 12) **Birla Sun Life Equity Fund** had a unit capital of 61.6 crores on 31st march 2007. The unit capital increased by 1.6 times during 2006 to 2013. The CAGR of the funds mobilized from scheme was 19.64% during my study period. Growth performance was 1.82 times of unit capital during the study period. Net operating margin was 10.41 times of growth of unit capital during 2006 to 2013. The extent to which the industry is brand drive was 0.0004 times of industry's sales. The market quality was computed at 3.90 during my research period.
- 13) **Birla Sun Life Midcap Fund** had a unit capital of 92.7 crores on 31st March 2007. The unit capital increased by 4.7 times during my research period. The CAGR of funds mobilized from scheme during 2006 to 2013 was 3.17% during my study period. Growth performance was 0.69 times of unit capital during the years 2006 to 2013. Net operating margin was 0.48 times of growth of unit capital. The extent to which the industry is brand driven was 0.0003 times of industry's sales. The market quality was computed at 0.34 during the years 206 to 2013.
- 14) **Franklin India Blue-chip Fund** had a unit capital of 435.8 crores on 31st march 2007. The unit capital increased by 1.2 times during my research period. The CAGR of funds mobilized from scheme was 3.14 percent during my study. Growth performance was 0.64 times of unit capital. Net operating margin was 23 times of unit capital. The extent to which the industry is brand driven was 0.0004 times of industry's sales. The market quality was computed at 6.9 during my research.



- 15) **Franklin India Flexi-cap Fund** had a unit capital of 1893.8 crores on 31st march 2007. The unit capital increased by 0.51 times during 2006 to 2013. The CAGR of funds mobilized from scheme was 15.95% for the research period. The growth rate was consistently negative during the years 2006 to 2013. Growth performance was 0.87 times of unit capital during the study period. Net operating margin was 2.97 times of growth of unit capital. The extent to which the industry is brand driven was 0.0003 times of industry's sales during the years 2006 to 2013.

HDFC Equity Fund had highest market quality among my all the sample scheme. This was due to the fact that the net operating margin was highest and there was positive sales growth, even though not the highest sales growth. Market quality of the ICICI Infrastructure Fund, Reliance Equity Fund, UTI Infrastructure Fund, Birla Sun Life Midcap Fund is lower due to two elements i.e. growth performance and net operating margin. The average growth performance in the last four years was negative, which means unit was highest for Franklin India Blue Chip Fund, followed by Reliance Growth Fund, it is due to the reason that the strategies of the assets management companies were rewarded with increase in net operating margin in 2010 and 2011, soon after the impact of global financial crises in 2009 where almost all schemes were at bottom and had negative cash flows. Most of the schemes of my sample not only recovered from the losses but also gave absolute returns in next year, showing the highest future generating power, ensuring highest brand equity value. The lowest cash generating power is evident for infrastructure fund which shows that the last years of infrastructure financial history cannot be defined as successful in comparison to others.

INVESTORS PREFERENCES

1. In present research study 58% respondents were males and 42% were females. It was observed that the attitude of males was toward more risk whereas females were more balanced in approach. The males had aggressive approach whereas females reflected conservative behaviour.
2. The average age of respondent was 42 years 4 months, and 17% of the respondents held profession degrees. In my study 35% respondents were graduates. Therefore, it can be observed that 65% of respondents were of high acumen.
3. In this research project 27% respondents are belongs to business category, where as 25% of respondents are of service category, and remaining 48% respondents belongs to other categories i.e. retired, households, students and self occupied category. This information is disclosed on following table:

**Table 1: Showing Occupational Status of Respondents**

Name of Occupation	Percentage of Respondents
Service	25 %
Business	27 %
Retired	10 %
Household	18 %
Students	07 %
Self Occupied	13 %

4. In this research 33% respondents had yearly income from 5 lakhs to ten lakhs and generally they invested in mutual funds. This category preferred bank deposits in the first instance, with the highest average score of 4.9. Their second preference was towards post office savings scheme as the average score was 5.5. The third preference was for the equity shares with an average score of 4.1. Their fourth priority was mutual fund with average score of 3.5.
5. In present research 47 percent of investors had less than two years experience in this field, while 26 percent had 2 to 5 years of experience in this activity, 15 percent had 5 to 10 years experience and only 12 percent had more than 10 years of investment experience. This information is disclosed on following table:

Table 2: Showing Experience of Investors

Experience of Investors in years	Percentage of Respondents
Less than 2 years	47 %
2 to 5 years	26 %
5 to 10 years	15 %
Above 10 years	12 %



6. My research showed that 19.16 percent of investors of my study invest up to Rupees 50,000 in a year, 37.39 percent investors invest 50,001 to 1,00,000 rupees in a one year. 33.40 percent of investors invest 1 to 2 lakh rupees in one year, where as 9.38% invested between 2,00,001 to 5,00,000 rupees in one year, 0.67 percent of investors of my study invest 5,00,001 to 10,00,000 in one year. This information is disclosed on following table:

Table 3: Showing Amount Invested in Mutual Fund in a year Expressed in Terms of Percentage

Money Invested in Rupees	Percentage of Respondents
Up to Rs 50,000	19.16 %
50,001 to Rs 1,00,000	37.39 %
1,00,001 to Rs 2,00,000	33.40 %
2,00,001 to Rs 5,00,000	9.38 %
5,00,001 to Rs 10,00,000	0.67 %

7. In my study 15.30 % respondent invested monthly, 16.91 % respondent invested quarterly, 23.46 % respondent invested half-yearly, 17.42 % respondent invested yearly, 34.27 % of the respondents invested half yearly and 44.33 of the respondent invested occasionally. This information is disclosed on following table:

Table 4: Showing Percentage of Frequency of Investment done in a year Expressed in Terms of Percentage

Frequency of Money Invested in Rupees	Percentage of Respondents
Monthly	15.30 %
Quarterly	16.91 %
Half - yearly	23.46 %
Yearly	44.33%



8. The identity of self plays a major role in understanding objective of selecting mutual fund schemes. Proper scheme selection, preference for the mutual fund sector and dependence on the source of information. My study showed that 50 percent of the respondents are long term investors, 67.21 percent of respondents are middle term investors, and 45.10 % of respondents were short term investors, where 68.19 percent of investors were systematic investors. This information is disclosed on following table:

Table 5: Showing Percentage of Distribution of Respondents on the basis of Self-classification

Classification of Investors	Percentage of Respondents
Short term investors	45.10 %
Middle term Investors	67.21 %
Long Term Investors	50.00 %
Systematic Investors	68.19 %

9. The Indian mutual fund industry offers a wide variety of schemes. Based on the investment policy, the schemes can be broadly classified as: growth schemes, balanced, income, money market, tax saving, index, debt and pension.

Table 6: Investor's Preference towards Mutual Fund Products based on Scheme Objective

Mutual Fund Product	Average Score	Rank
Growth	4.7	I
Balanced	2.8	IV
Income	4.5	II
Money Market	2.6	V
Tax Saving	2.9	III
Index	1.7	VI
Debt	4.5	II
Pension	2.9	III

The above table revealed that the investors had first preference for growth schemes with an average score of 4.7. The second preference was given for income schemes and debt schemes with an average score of 4.5. Third rating was for tax saving scheme and pension scheme with an average score of 2.9.



In my research fourth rating was for balanced scheme with an average score of 2.8. The fifth rating was for money market with an average score of 2.6. The study of above table shows that sixth rank was index with average score of 1.7.

10. The main source of information for mutual funds was website of asset management companies and internet for 25 percent investors followed by TV advertisements for 24 percent, agents for 18 percent of investors, peers for 11 percent, news papers for 9%, family members for 7%, and others for 6% as disclosed in following table:

Table 7: Showing Sources of Information on Mutual Fund Expressed in Terms of Percentage

Names of Sources of Information	Percentage of Respondents
Website of asset management companies/internet	25 %
TV advertisements	24 %
Agents	18 %
Peers	11 %
News papers	9 %
Family members	7%
others	6 %

11. My research study showed that 52% of the respondents replied that they have very little knowledge of investment, 19% respondents replied that they have zero knowledge of investment, 15% respondents agree little knowledge of investment, whereas 14% strongly agree regarding their knowledge of investment. This information is given in following table:

Table 8: Showing Distribution of Respondents with reference to Investment Knowledge

Degree of Knowledge of Investors	Percentage of Respondents
Very little knowledge	52 %
Zero knowledge	19 %
little knowledge	15 %
Strong knowledge	14%



12. Present study revealed that 38% were experienced investors, 27% are professional investors, 22% are inexperienced investors and remaining 13% have requisite knowledge of investment. This information is given in following table:

Table 9: Showing Distribution of Respondents with reference to Investors Profile

Investors Profile	Percentage of Respondents
experienced	38 %
professional	27 %
inexperienced	22 %
requisite knowledge	13 %

13. My research showed that important reasons for making investment which affects the choice of Investment Avenue as well as mutual fund schemes can be classified into nine parts. Security after retirement was the most important reason to make investment in 35% cases of my study, the second most important reason was wealth creation in 15% cases, the third important reason was education of children in 12% cases, fourth reason was daily expenses in 9% cases, fifth important reason was emergency in 8% cases, marriage of children was sixth important reason in 7% cases, seventh important reason was tax benefit in 6% cases, eighth reason was buying of house in 5% cases and other reasons were noted in only 3% cases. This information is given in following table:

Table 10: Showing Sources of Investors' Opinion on basis of Important Reasons for Making Investment in order of Preference influencing Choice of Mutual Fund Expressed in Terms of Percentage

Name of Reason for investment	Percentage of Respondents
Security after retirement	35 %
wealth creation	15 %
education of children	12 %
daily expenses	9 %
emergency	8 %
marriage of children	7%
Tax benefit	6%
Buying house	5%
others	3 %



14. The results of my present research revealed that 36% of sample performs as per the change in market, 32% of respondents trying to maximize gain whenever there is a market advance, 17% of the respondents trying to reducing losses during depression phase in market, and remaining 15% of respondents inform other reasons. This information is given in following table:

Table 11: Showing Distribution of Respondents on the Basis of Considerations for making investments

Distribution of Investors on the basis of considerations for making Investments	Percentage of Respondents
As per change in market	36 %
maximize gain whenever there is a market advance	32 %
trying to reducing losses during depression phase	17 %
Other reasons	15 %

15. Present study showed that investors view regarding trust and loyalty towards mutual fund and consistent past performance as priority for making investments in mutual funds as the average score was 3.5 and 3.4 respectively. It was followed by total assets under management 3.2 as the size of the fund provides stability. In present research fourth factor determining success of mutual funds is net fund offer having average score as 3.1, fifth factor which determining success of mutual fund was lower NAV in relation to same core product which had average score as 2.7 in this regard. This information is given in following table:

Table 12: Showing Distribution of Investors on the basis of Priorities for Making Investments in Mutual Fund in order of Preference

Factors Determining Success of Mutual Funds	Average Score
Trust and Loyalty towards Mutual Funds	3.5
Consistent Past Performance	3.4
Total Assets Under Management	3.2
Net Fund Offer	3.1
Lower NAV in relation to same core product	2.7



16. In present research investors differ in their choice of investments due to differences in their willingness to invest for the expected return against risk; willingness to accept higher risk to attain higher expected returns, investor's risk tolerance; and attitude towards risk aversion in accepting risk. The risk of an investment refers to the variability of its rate of return. Forces that give rise for variations in returns are considered as the elements of risk. The degree of risk taken and the extent of benefits derived from investment are related to each other. Investors' willingness to take risk can be categorized as high, average, low and no categories based on the extent of risk accepted. My present research revealed that 37% of investors preferred average risk, 36% investors preferred low risk, 19% investors avoiding risk and 8% investors were ready to take as much risk as possible i.e. high risk. This information is given in following table:

Table 13: Showing Respondents' Willingness to take Risk

Categories of willingness to take Risk	Percentage of Respondents
Average Risk	37 %
Low Risk	36 %
High Risk	19 %
No Risk	8 %

17. The research work revealed that 34% of investors reviewed portfolio within half year, 32% investors reviewed quarterly, 19% investors reviewed yearly, 8% investors reviewed causally, and remaining 7% investors reviewed their investment never. This information is given in following table:

Table 14: Showing Frequency of Review of Portfolio for making Investment

Frequency of Review of Portfolio	In percentage
Half-yearly	34
Quarterly	32
Yearly	19
Causally	8
Never	7



18. Risk tolerance is basically investors' feeling of comfort in the choice of investment. The risk spectrum ranges from “safe or maximum stability” to “very risky or substantial volatility”. The comfort zone chosen by the investor determines the choice of investment and the extent of benefits derived. Investors' attitude towards fluctuations in the value of investments leads to churning of portfolio to avoid in investment. My study showed that 23% of investors churned portfolio to achieve maximum capital growth, 18% of investors churned portfolio due to fall in sensex, 15% investors churned portfolio due to depression in market, 12% investors churned portfolio due to economic downturn, 10% investors churned portfolio due to inflation, and remaining 22% investors churned portfolio due to other reasons.

Table 15: Showing Investors' Attitude towards Churning of Portfolio towards Fluctuations in the Value of Investment

Investors' Attitude towards Churning of Portfolio due to	In percentage
Maximum Capital Growth	23
Fall in Sensex	18
Depression in Market	15
Economic Downturn	12
Inflation	10
Other Reasons	22

CONCLUSION

Indian mutual fund industry had shown a good progress in terms of number of private sector Indian mutual funds, number of schemes launched, funds mobilized and assets under management. In today's highly competitive economic environment, companies have recognized the increasing importance of brands as one of their most important assets. Branding, however, becomes a mere cost exercise if the fund house does not deliver the results that satisfy the need of its clients, investors, investor lifestyle shows great opportunity for fund families to define their brand in a way that resonates with investors. The contrarian investment strategy had been revealed as net operating margin was reduced by almost 50% in 2009 and increased by 125% in 2013 concluding there was no fear of investing after a major crash and the hope in industry will lead to a long term performance.

The hallmark of any mutual fund is to outperform the market both in rising and falling markets besides ensuring benefits of diversification. The mutual funds were consistent in their positions in terms of assets under management for all the years of my research study. The top five mutual funds in industry contributed 57%



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of the total assets under management in our country. More than 75% of the schemes had given returns more than 72% during my research period led to the conclusion that the performance of the fund is dependent on total assets under management. It also revealed that asset under management of fund albeit, may lead to higher EVA. The corporate brand included in the analysis was perceived as appealing and there existed an “emotional” attachment to the corporate brand. There has been major change in the brand strength of different mutual fund companies. Inclusion of Brand strength in the model influenced the brand equity value significantly. This showed that the inclusion of the brand strength elements in the model had negative influence on the corporate brand equity. It was concluded that there is major change in the brand equity with respect to assets under management.

The survey of investors and fund managers preferences showed that the choice of investment in mutual fund varies with age due to change in objectives of investments. The average age of respondent was 43 years. It led to conclusion that the choice of investment in growth scheme is independent of age. Investment in funds management companies varies with place of stay. The choice of the brand of the mutual fund scheme varies from region to region leading to the broad conclusion that there is major change in the choice of mutual fund due to brand preference of mutual fund. The combined opinion of investors and fund managers led to conclusion that there is significant difference in the preference among investors and fund managers relating to key product variables of mutual fund scheme. The experience of the investors about their investment in mutual fund helped to conclude that the mutual fund industry is brand driven. The decision will be based on price if the industry is not brand driven. Investors and fund manager opined that consistent investment performance, accessibility of products, superior service standards and large distribution network contribute to maximization of investor satisfaction and enhancement of brand equity.

The industry is in a declining stage or will lead to declining stage. This was evident as growth performance and net operating margins had been negative for the post-crisis period in the five sample schemes. This is also evident by the increasing number of competing financial products like ETFs and the dwindling folios of retail investors in mutual fund industry.

In my view following three cautions relating to this research need to be noted:

- 1) Care must be taken in generalizing finding of my research to overall population.
- 2) Caution is advised in generalizing my finding beyond mutual fund service.
- 3) Valuing any brand using method of present research seems highly subjective



because parameters used, weights given and methodology of calculation are highly subjective.

SUGGESTIONS

The analysis of my research showed that majority had modest knowledge about the mutual fund companies and the mutual fund schemes. Investors were moderately satisfied with their investment in mutual fund. Majority of them chose to invest in schemes of those funds which they assumed as market leader. The investors have to look at all the schemes available in the market and their investment objective to make a fair choice. Mutual funds are generally perceived as investments in equity markets and hence investors expect a return much superior to the normal return that other comparable instruments given. In my developed countries mutual funds attract much more investments as compared to banking sector but in India case is reverse, there is lack of awareness about the knowledge of the various schemes to investors. Therefore, for the betterment of the Indian mutual fund industry which is the consolidation stage and value addition to investors in particular following suggestions are useful:

- 1) It is suggested that management of mutual funds will realized their main responsibility of educating the investors and remove any pre-conceived notions about mutual fund investment scheme.
- 2) It is very essential to educate Indian investors that mutual funds are market instruments and associated with market risk hence mutual fund could not offer guaranteed income. Because Indian investors are not willing to invest in mutual fund unless a minimum return is assured.
- 3) It is suggested that parameter beta (systematic risk) used to evaluate the performance of an equity diversified mutual fund in relation to a chosen market index as a benchmark must be calculated using weighted average of investment in equities and investment in liquid assets, as no equity diversified fund invest solely on equities but keep 5 to 10 percent of assets in liquid cash to meet contingency claims.
- 4) It is suggested that role of investors' redress cell has to become more dynamic, efficient and wide spread so as to reach out to investors rebuilding confidence among existing unit-holders and generate interest among the potential investors. Mutual fund ombudsman could be established for early settlement of disputes.
- 5) It is suggested that National or international accounting standards must provide for including Brand value in balance sheet of company. The regulation can look at providing disclosures in notes to accounts as this would



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lead to consistent evaluation of brand performance contributing to improvement of all key drivers leading to enhancement in brand equity.

- 6) It is suggested that rural market of our country provides a tremendous potential for the mutual fund industry. Mutual fund companies should look at targeting the rural markets by educating the rural investors and launching specialized schemes to cater to the rural investors.
- 7) It is suggested that assets management companies research the investor, because analysis of the investor is very important to cater to his needs and accordingly adopt push and pull strategy to increase investor base and bring stability and viability to the funds.
- 8) It is suggested asset management companies must maintain its competitive advantage in market by having in-depth knowledge about investors, their behavior, implications of global economic scenario on investors, mutual funds should have their help desk to guide investors when they are driven by panic in the industry.
- 9) It is suggested that assets management companies at their own end should help investors to make efficient informed decisions according to their investment objectives, as this would lead them to successful investing and trust in mutual fund industry in general and asset management companies in particular. Although AMFI and SEBI have been conducting various investors awareness and investor guidance programmes but these are only formalities to utilized funds from control government.
- 10) It is suggested that company's brochures via Asset Management Company's website and mass media will be more informative about the performance and returns to be generated by particular scheme with some assurance. It would go a long way to bring inexperienced and Risk Average Investors to invest in mutual funds.



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