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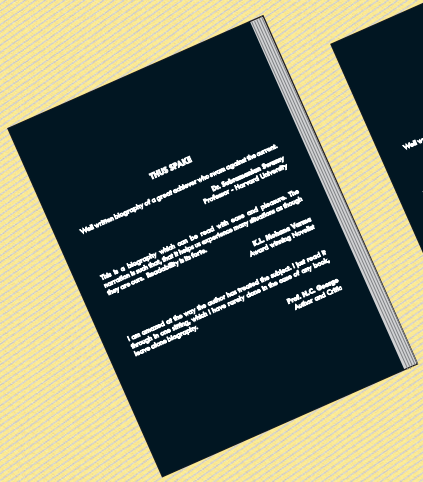

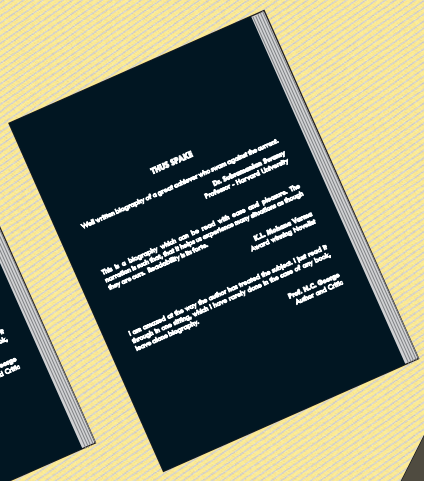

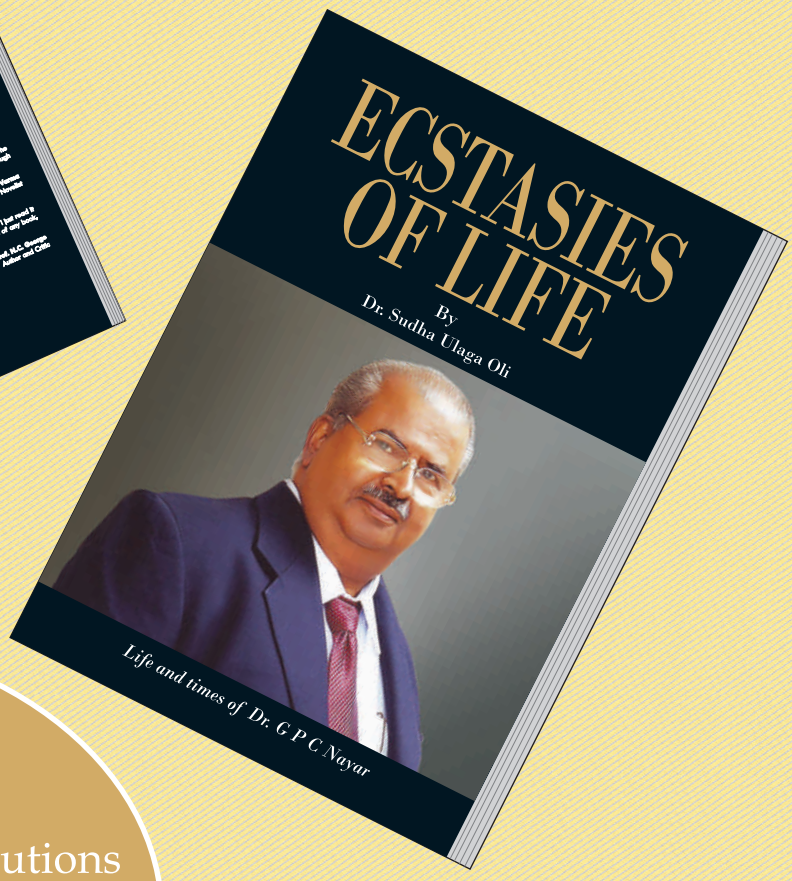

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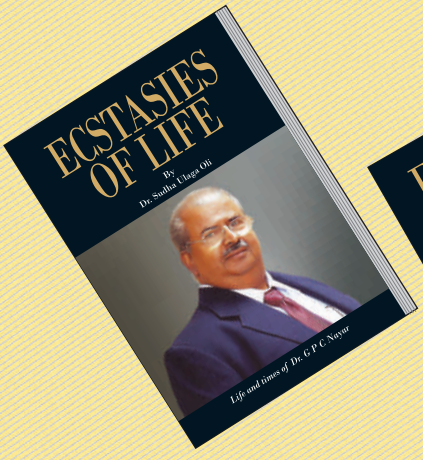

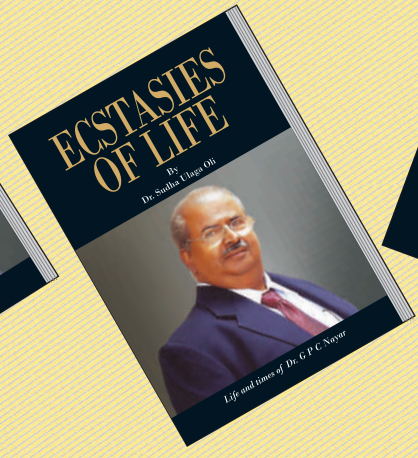

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Contents

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Articles

Chairman's Overview

The life insurance industry in India is the biggest in the world and is predicted to grow at a Compound Annual Growth Rate of 12-15 percent over the next five years. The insurance market offers a huge business opportunity waiting to be exploited.

The industry as such has undergone a marked transformation ever since it was liberalised in 2000. There have been a number of products and operational innovations necessitated by consumer demand and intense competition in the field. Changes in the regulatory environment also had path-breaking impact on the growth of the industry.

The future of the industry looks attractive with further changes in the regulatory framework that will be necessitated in the way industry conducts its business and engages with its customers. Our lead article on efficiency analysis of Indian Life Insurance firms, we hope, will throw more light on the scope for improvement in this sector.

Derivatives have largely changed the landscape of modern financial markets. The stock market affects the effective functioning of the derivative market because the value of the derivatives depends on the underlying securities. Our second lead article is a study to examine the impact of the expiration of the derivative contracts on the trade volumes and the returns from the securities.

By implementing principles of good corporate governance a company can increase profitability, improve competitiveness, credibility and reputation. Highest standards of governance reduce many risks that may arise from daily operations. A study paper to measure the relationship between corporate governance and financial performance of a company appears as the third lead article in this issue.

We also feature in this issue a number of learned articles on a variety of topics such as Eliminating Corruption, Marketing Ethics, Marketing Penetration by Banks, Job and Family Life, Work-Life Balance, Employee Engagement and the like.

I am confident that this issue will be truly informative and educative to our readers.

Dr. G. P. C. NAYAR

Chairman, SCMS Group of Educational Institutions.

SCMS Journal of Indian Management

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Editorial

Computer Literate and Information Literate

Scientific modes of knowledge have undergone great changes. Information technology has also developed along similar lines. In other words, the Internet has been using its supportive role for these changes in our research and social life. To be precise, the Internet has been a powerful medium in research activities and has been transforming society. Yes, consequent on these, we have been experiencing both internationalization and globalization. There has been a growing demand for inter-trans disciplinary strategies and methods for that. Therefore scholars in humanities and social sciences have had to work together to meet the growing demands.

Digital resources are extensively distributed across a range of sites: libraries, museums, traditional and digital archives, websites etc. They are catalogued according to very different practices and standards that reflect in some combination: the resources' initial location, their intellectual content, and their physical form. Presently, internet accessible resources are located by users who know how and where to find them.

All of us must acknowledge and address the problem and form a community of interests to formulate the needs and desires. If we ignore the changes going on and the requirements that they cause, we risk being left out. We risk being provided with information, organized according to the needs or conceptions of information engineers or natural scientists.

Within this entire struggle for information on the World Wide Web, another tool of the Internet, e-mail has been widely used, also within the humanities, making contacts between scholars and students faster and easier, no matter which geographical distance may separate them.

Mailing list, Twitter, Facebook, WhatsApp ,etc. as forums of (permanent) discussion form new communities united solely by their fields of interest. Everybody may enter-without respect of person or position- as soon as he or she knows where the discussion is held and how to subscribe- as soon as he or she has access to the Internet. But generally taking part in the discussion is once a question of computer literacy as the ability to find lists where topics you are interested in are treated. Furthermore, participants are pointed towards new publications, online and printed, appearing in the field, and receive comments on new features of the Internet and new software for different purposes

During the past many decades we became computer literate. Now during the last few decades we have felt the need to become information literate and we have been vying with one another to achieve the goal. It all shows Computer Literate and Information Literate is complementary to each other. Shall we have introspection: despite all information surpluses how far we have trapped information with propriety?

Dr. D. Radhakrishnan Nair

Efficiency Analysis of Indian Life Insurance Firms: A DEA Investigation

Joy Chakraborty

Abstract

The present study addresses the efficiency aspects of the country's life insurance sector using a panel data-set of 18 life insurance companies covering the study-period from 2008-09 to 2014-15, against the backdrop of the US financial crisis.The application of the non-parametric Data Envelopment Analysis (DEA) has pointed out the inconsistencies in the operational efficiencies of the life insurers, along with the directions for improvement.

Keywords: *Life Insurance, DEA, efficiency, LICI, financial crisis, IRDAI*

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The insurance sector in India has been opened up for private participation since the year 2000. Till then, the life insurance business continued to remain under the monopoly of the state-owned Life Insurance Corporation of India (LICI) from its inception in 1956. With the enactment of the Insurance Regulatory and Development Authority of India (IRDAI) Act in 1999, the country's insurance market was opened up for private participation based on the recommendations of the Malhotra Committee Report, 1994. As a result, the monopoly of the government-owned LICI eventually suffered a setback with the entry of private-sector life insurance companies, either independently or in collaboration with foreign partners. At the end of the FY 2014-15, the market share of LICI stood at 73.48 per cent with the number of players having risen to 24 (inclusive of LICI) in the country's life insurance sector. The collective performances of the private life insurers have been commendable since the privatization of the country's insurance sector. That is evident from the 26.52 percent gain in market shares at the end of the FY 2014-15, almost from scratch.

The rise in the number of new entrants in the country's life insurance sector promoted a healthy competition among the life insurers that eventually lead to a reduction in insurance services, improvement in the customer-service facilities and strengthening of their competitive position within the ambit of IRDAI regulations. At the same time, the abrupt rise in the number of players in the country's life insurance sector has also raised concerns about the efficiency of the life insurers in the protection of consumers' interest and timely payment of assured returns to the policyholders. Hence, identification of operational efficiencies in the performances of the life insurers over the time holds importance from the view-point of safeguarding policyholders' interests against the backdrop of insurance sector reforms.

The present study addresses the operational efficiencies of the 18 public and private-sector players in the country's life insurance sector during the post-deregulation study-period from 2008-09 to 2014-15, against the backdrop of the US financial crisis of 2007-08. The present study has been structured as follows: Section - 2 summarises the literature review. Section - 3 presents the conceptual framework of the non-parametric DEA approach as undertaken in the present study. Section - 4 discusse the research objectives, sample selection, methodologies used along with the limitations and future scope of the study. Section - 5 reported the findings and analysis. Section - 6 highlights the concluding observations.

Literature review

Having reviewed the most pertinent past research papers, the researcher did not find evidence of any such studies in India or in abroad that comprehensively dealt with the efficiency aspects of the Indian life insurance industry, against the background of the global financial crisis. The present study intended to fill that research gap. Some of the literatures reviewed by the researcher have been summarised below in Table-1.

Table –1: Summary of Past Studies on Efficiency of Insurance Firms

Sl. No.	Author (s) & Year of Publication	Input Variables	Output Variables	Period of Study	Area of Work
1	Bawa and Bhagat (2015)	Number of Agents, Number of Offices	Net Premiums, Number of Policies sold	2006 - 2013	Life Insurance
2	Bawa and Ruchita (2011)	Equity Capital, Labour	Net Premiums	2002 - 2010	Health Insurance
3	Chakraborty and Sengupta (2012)	Operating Expenses, Commission Expense	Net Premium, Number of Products launched	2003 - 2010	Life Insurance
4	Chakraborty and Sinha (2010)	Operating Expenses, Commission Expenses	Net Premium, Number of Products launched	2003 - 2008	Life Insurance
5	Dutta (2013)	Labour Expenses, Business Service and Material Expenses, Total Investment	Premiums Earned, Income from Investments	2005 - 2010	Life & General Insurance
6	Dutta (2011)	Labour Expenses, Business Service and Material Expenses, Total Investment	Premiums Earned, Income from Investments	2005 - 2010	Life & General Insurance

7	Garg and Deepti (2008)	Number of Agents, Operating Expenses, Equity Capital	Net Premium, Operating Income	2002 - 2006	General Insurance
8	Janjua and Akmal (2015)	Business Services, Debt Capital, Equity Capital, Labour Expenses, Number of Branches	Net Premium, Investment Income, Net Claims	2006 - 2011	Life & General Insurance
9	Mandal and Dastidar (2014)	Operating Expenses, Commission Expenses, Equity Capital	Net Premium, Claims Processed	2006 - 2010	General Insurance
10	Nandi (2014)	Commission Paid, Operating Expenses	Net Premium, Net Benefits Paid	2002 - 2012	Life Insurance
11	Owusu-Ansah et. al. (2010)	Debt Capital, Equity Capital, Management Expenses	Net Premium, Claims Settled, Income on Investment	2002 - 2007	General Insurance
12	Saad and Idris (2011)	Commission Paid, Management Expenses	Net Premium, Net Income on Investment	2000 - 2005	Life Insurance
13	Singh and Kumar (2011)	Operating Expenses (including commission), Capital	Net Premium, Income on Investment, Claims	2000 - 2008	General Insurance
14	Sinha (2013)	Commission Expenses, Operating Expenses	Net Premium, Net Benefits Paid	2001 - 2012	Life Insurance
15	Sinha (2012) [*Ph.D work*]	Commission Expenses, Operating Expenses	Net Premium, Net Benefits Paid	2001 - 2010	Life Insurance
16	Sinha (2015)	Operating Expenses	Premiums Collected, Sum Assured	2005 - 2012	Life Insurance
17	Sinha (2007)	Operating Expenses	Benefits paid, Operating Income, Net Premium	2002 - 2006	Life Insurance
18	Sinha (2007)	Operating Expenses, Number of Agents, Equity Capital	Net Premium, Gross Income	2003 - 2005	General Insurance
19	Sinha (2006)	Number of Agents, Equity Capital	Net Premium, Operating Income	2004 - 2005	Life Insurance
20	Tone and Sahoo (2005)	Business services, Labour Expenses, Policyholder-supplied debt capital, Equity capital	Claims Settled, Ratio of Liquid Assets to Liabilities	1982 - 2001	LifeInsurance

Source: - Compiled from the Respective Studies

CONCEPTUAL FRAMEWORK

An Introduction to DEA

Data Envelopment Analysis (DEA) is the most preferred frontier model for performance measurement and determining the efficiency levels of Decision Making Units (DMUs), which can be a financial institution, a department, a division, etc. The DEA approach is non-parametric in nature since it does not make any assumptions about the population parameter. DEA effectively uses the maximization linear programming technique to create the efficient frontier by finding a set of linear estimates that bound (envelope) the observed data, resulting in a convex production possibility set. It is a benchmarking technique in the sense that 'best practice firms' lie on the frontier and envelope other inefficient firms. The relative efficiency level of a firm is determined with respect to the 'best-practice firms'. The firm which is found to be relatively most efficient attains a score of 1 (or 100%) and the relatively inefficient firms secure a score between 0 and 1 (or between 0% and 100%). The efficiency or inefficiency level of the firms is determined by their distances from the production frontier. More is the distance signifies farther is the position of the firm from the efficient or best-practice firms which are positioned on the frontier. A point on the frontier is considered to be efficient either (a) if it produces maximum output using the same input, referred to as a case of output-maximization, or (b) if it uses minimum inputs to produce the same output level, referred to as a case of input minimization. The DEA approach takes into consideration either the input-oriented or the output-oriented model. In an input-oriented model, the amount of inputs used by the firms would be compared against the efficient firms who would use to produce the same output. In case of the output-oriented model, the actual output produced by the firms would be compared with that which an efficient firm would produce using the same input. DEA was originally developed by Charnes, Cooper and Rhodes (1978) and was later further extended by Banker, Charnes and Cooper (1984). The DEA approach is described in brief as follows:-

Let us consider a productive unit producing a scalar output Y from bundles of m inputs x=(x1, x2, …, xm). Let (xj, yj) be the observed input-output bundle of firm j (j=1, 2, …, n).

The technology is defined by the production possibility set:

Ps = {(x, y): y can be produced from x}

An input-output combination (x0, y0) is feasible if and only if (x0, y0) ε Ps

The underlying assumptions are as follows:

(i) All observed input-output combinations are feasible. Thus (xj, yj) ε Ps (j=1, 2,…, n)

(ii) The production possibility set Ps is convex. Hence, if (x1, y1) ε Ps and (x2, y2) ε Ps then {ωx1 + (1-ω) x2, ωy1+ (1- ω) y2} ε Ps i.e. weighted averages of feasible input-output combinations are also feasible.

(iii) Inputs are freely disposable. Hence, if (x0, y0) " Ps and x1 ≥ x0 then (x1, y0) ε Ps

(iv) Output is freely disposable. Hence if (x0, y0) ε Ps and y1≤y0 then (x0, y1) ε Ps

2 DEA Models

There are 2 basic models under the DEA technique. The basic DEA model proposed by Charnes, Cooper and Rhodes in 1978 is the CCR model which is built on the assumption of Constant Returns to Scale (CRS). Later on the model was modified in 1984 by Banker, Charnes and Cooper (BCC model) with an assumption of Variable Returns to Scale (VRS). The difference in the two models is with regard to the assumptions about the technology. According to both the models, the efficiency aspect covers the measure of 'Technical Efficiency' (TE). For both the models, a DMU is considered to be efficient if the TE score is equal to 1.

Technical efficiency values of *one*, determined from an output-orientated perspective, represents a point on the frontier that would produce the maximum output using the same inputs as that of the other firms, and hence considered as efficient. An output-orientated DEA is illustrated, as shown in Figure – 1, by a piecewise linear production possibility curve based on a production process involving two outputs (q_1 and q_2) and a single input (x). The curve ZZ/ depicts the unit production possibility curve and firms lying on this frontier would be considered as the 'best practice' firms, such as 'B'. Firms lying below the frontier, such as 'A', are considered as inefficient firms, because ZZ/ represents the upper bound of the production possibilities.

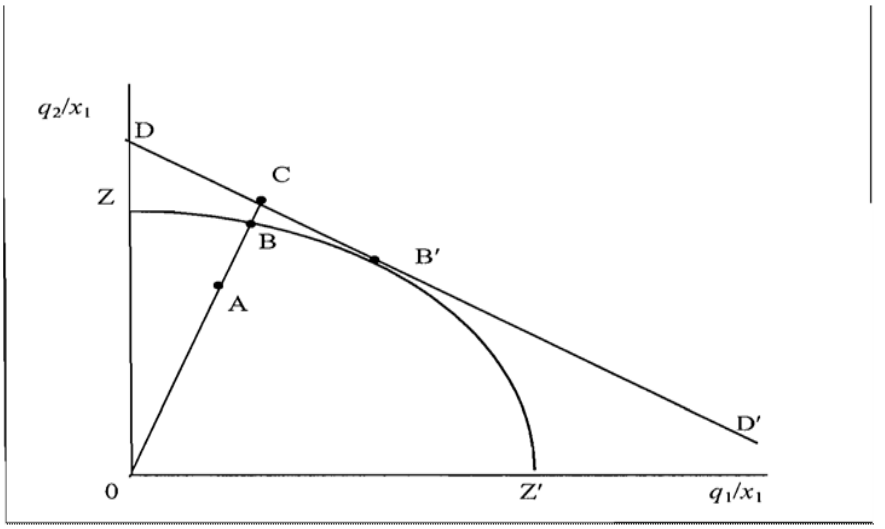


Figure – 1: Output-orientated DEA

Source: - Cooper, W. W., Seiford, L. M. & Tone, K. (2007). "Data Envelopment Analysis: A Comprehensive Text with Models, Applications, References and DEA-Solver Software (2nd Edition)." Springer Publications, USA.

Under the CRS and VRS assumptions, the efficiencies are known as Technical (or Total Technical) Efficiency (TTE) and Pure Technical Efficiency (PTE) respectively. If there is a difference between CRS and VRS with a Technical Efficiency score of less than 1, it implies the existence of Scale Inefficiency.

Scale efficiency is the ratio of Technical Efficiency (CRS)/ Pure Technical Efficiency (VRS). It is the indicator of the local returns to scale enjoyed by the firm (at the point of the observation). The result relating to 'Scale Efficiency' (SE) can be used to draw inferences about the Most Productive Scale Size (MPSS). Scale Efficiencies vary between 0 and 1. If the SE is less than 1, then the respective firm exhibits VRS (increasing/decreasing). If the ratio is equal to 1, then the firm exhibits CRS. In other words, if the SE attains a score of 1, it implies that the DMU is operating at the minimum point of the cost curve with respect to CRS, which signifies that the firm is said to be operating at MPSS. If the results do not show a score of 1, it implies an instance of non-optimum scale utilization thereby representing to either a case of Increasing Returns to Scale (IRS) or Decreasing Returns to Scale (DRS). Existence of IRS and DRS implies about the size of the firms to be too small (sub-optimal level of operations) or too large (over-optimal levels of operation) respectively. In determining the SE, the TE scores under both CRS and VRS assumptions are taken into consideration. The relation between the three factors demonstrates a decomposition of efficiency as follows:-

TTE (CCR model, CRS) = PTE (BCC model, VRS) x SE

The results of the DEA model are sensitive to the information about inputs and outputs. The selection of input-output variables are difficult to identify for any life insurance firms since input prices are often implicit, and outputs are mostly intangible. Unlike the measurement of output, input measures in an insurance industry are more tangible and directly observable. With regard to the variables selection for the present study, the following three important thumb rules should be kept in mind (Cooper et. al., 2007).

1. The data-set should be strictly positive for both the outputs and the inputs used in the study.

2. There should be a significant positive relationship between the input and output variables, which can be verified through the correlation matrix.

3. In addition to the above, the following conditions also need to be satisfied: $n \geq p \times q$, and $r = 3 (p + q)$, where 'n' is the number of DMUs, 'p' is the number of inputs, 'q' is the number of outputs, and 'r' is the total number of observations.

RESEARCH METHODOLOGY

1 Objectives of the Study

Based on the research gap as found from the literature review, the present study has two-fold objectives which are listed as follows:-

(a) To examine the technical, pure technical and scale efficiencies of the 18 life insurance companies in India, inclusive of the sole public-sector LICI, for the period from 2008-09 to 2014-15.

(b) To evaluate the impact of the global financial meltdown on the operational performances of the life insurance firms during the period under review.

2 Sample Selections

The objective of the present study is confined only to the post-reform period, after the liberalization of the country's insurance sector since the financial year 1999-2000, so the subsequent period of reforms has only been considered. The purposive sampling approach has been employed in the selection of the sample that comprises 01 public-sector and 17 private-sector life insurance firms in India, who have been consistently in operation covering all the years of the study-period. Moreover, the reason behind the selection of the time-period from 2008-09 to 2014-15 was also to evaluate the extent of the impact of the global financial crisis upon the performances of the life insurance firms under review.

3 Research Tools

While deciding on the most suitable tool of analysis, the researcher has found that extensive literature review reveals the application of the non-parametric DEA as the appropriate model for studies related to efficiency. Hence, the present study has adopted the non-parametric DEA for efficiency analysis of the life insurance firms under review on the basis of the output-oriented model under the Variable Returns to Scale (VRS) assumptions, using the DEAP computer program, version 2.1

4 Specifications of Input and Output Variables Used

The choice of the variables was based on the study of literature. Further, literature review shows that there are primarily two approaches, i.e. the intermediation approach and value-added (or, production) approach, in analysing the operational efficiencies through DEA. The present study has used both the intermediation and the value-added approach to determine the input and the output variables used. Accordingly, the 'net premiums earned' and the 'Benefits paid (Net) to the policyholders' has been selected as the outputs following the value-added approach, in addition to the third output i.e. 'Income from Investments' following the intermediation approach. For the purpose of efficiency analysis of the life insurance firms, the researcher has used the 'Operating Expenses,' 'Commission Expenses,' following the intermediation approach, and the 'Investments' following the value-added approach as the three inputs for the study. The Input and the Output variables used in the present study for the application of output-orientated DEA has been summarised as follows in Table – 2.

Table - 2: Summary of Input-Output Variables used in DEA

Variables Used	Input/Output	Description
Operating Expenses	Input	All Operating Expenses (excluding commission) borne by the life insurers, obtained as per Schedule-3 of Annual Reports.
Commission	Input	All Commission Expenses borne by the life insurers, obtained as per Schedule-2 of Annual Reports.
Investments	Input	All Investments made by the life insurers out of policyholders' and shareholders' funds, obtained as per Schedules 8 & 8B respectively of Annual Reports.

Net Premiums	Output	Net Premiums earned by the life insurers, obtained as per Schedule-1 of Annual Reports.
Benefits paid (Net)	Output	Benefits Paid (Net) by the life insurers, obtained as per Schedule-4 of Annual Reports
Income from Investments	Output	Income from Investments (i.e. Gross Interests, Dividends & Rent *plus* Profit on sale of Investments *less* Loss on sale of Investments), obtained from Policyholders' and Shareholders' Accounts respectively of Annual Reports.

Source: - Compiled by the author

5 Data Sources

The secondary data for the present research work has been collected from the IRDA Annual Reports from 2008-09 to 2014-15, and from the websites of the respective life insurers. The data-sources were based on the financial statements (i.e. Policyholders' Account, Shareholders' Account and the Balance Sheet) of the Indian life insurance firms under review.

6 Limitations and Scope of Study

The data collected for the present study has been derived from the published financial statements of the respective non-life insurers without any emphasis on primary data. Hence, the study incorporates all the limitations that are inherent in the published financial statements. The study is restricted to a time span of 7 years focussing on the post-recessionary phase of the reform period from 2008-09 to 2014-15 since the outbreak of the global financial crisis. Hence, the future studies of research in this area could take into account more number of players covering both the country's life insurance and general insurance sectors for an extended time-period. Moreover, many other areas that can be studied include the cost-efficiency analysis, application of stochastic frontier models for analysis in conjunction with the efficiency and productivity analysis of the country's insurance sector.

Findings and Analysis

In order to apply the model and to ensure that all monetary values are directly comparable, all the nominal values of the data of each year for the selected variables have been deflated using the all-India Consumer Price Index of industrial workers w.r.t. to the base year 2001-02. Hence, the three inputs are Deflated Commission Expenses (DEF_CEX), Deflated Operating Expenses (DEF_OEX), and Deflated Investments (DEF_INV). The three outputs are Deflated Net Premium (DEF_NP), Deflated Net Benefits paid (DEF_NBP), and Deflated Income from Investments (DEF_IINV).

To establish a production mechanism of inputs and outputs and to test whether DEA can be applied on the deflated data-set, a correlation analysis between the variables has been carried out in the present study related to the FYs 2008-09 to 2014-15. Table – 3 presents the Correlation Matrix of the Input and Output variables used in the present study.

Table – 3: Correlation Matrices of the Input-Output Variables Used

VARIABLES		INPUTS				OUTPUTS		
		DEF_CEP	DEF_OEP	DEF_INV		DEF_NP	DEF_NBP	DEF_IINV
INPUTS	DEF_CEP	1	0.980	0.982		0.998	0.976	0.978
	DEF_OEP	0.980	1	0.978		0.980	0.979	0.979
	DEF_INV	0.982	0.978	1		0.981	0.988	0.997
OUTPUTS	DEF_NP	0.998	0.980	0.981		1	0.973	0.977
	DEF_NBP	0.976	0.979	0.988		0.973	1	0.993
	DEF_IINV	0.978	0.979	0.997		0.977	0.993	1

Source: - Compiled by the author

Based on the results obtained from Table-3, we find that all the selected variables depicted high positive correlation coefficients among each other thereby indicating the appropriateness of the selection of variables within the scope of the DEA framework. The above results are also indicative of the fact that all selected variables were significant proxies of the production process in the country's life insurance sector.

Tables 4 – 10 given below presents the descriptive statistics relating to the input-output variables used in the present study for analysing the efficiencies of the 18 life insurers' under review in the post-deregulation period for the FYs 2008-09 to 2014-15.

Table – 4: Descriptive Statistics (FY: 2008-09)

(Figures in Rs. Lakhs)

Particulars	INPUTS			OUTPUTS		
	DEF_OEX	DEF_CEX	DEF_INV	DEF_NBP	DEF_IINV	DEF_NP
Mean	95147	57755	2510370	219003	229051	829113
Standard Deviation	134864.41	151524.47	9868220.02	807605.26	924397.81	2389300.82
Coefficient of Variation (*in Times*)	1.42	2.62	3.93	3.68	4.03	2.88
Maximum Value	612452	677922	43194676	3545820	4040372	10620714
Minimum Value	2684	1044	7779	51	15	9998

Source: - Calculated

Table – 5: Descriptive Statistics (FY: 2009-10)

(Figures in Rs. Lakhs)

Particulars	INPUTS			OUTPUTS		
	DEF_OEX	DEF_CEX	DEF_INV	DEF_NBP	DEF_IINV	DEF_NP
Mean	91815	58407	2861075	312327	309812	860056
Standard Deviation	157170.62	159387.20	11197188.30	1057607.01	1004834.53	2457886.11
Coefficient of Variation (*in Times*)	1.71	2.73	3.91	3.38	3.24	2.86
Maximum Value	720342	712371	49023237	4654745	4439785	10940348
Minimum Value	2176	1393	8084	206	2109	14736

Source: - Calculated

Table – 6: Descriptive Statistics (FY: 2010-11)

(Figures in Rs. Lakhs)

Particulars	INPUTS			OUTPUTS		
	DEF_OEX	DEF_CEX	DEF_INV	DEF_NBP	DEF_IINV	DEF_NP
Mean	95770	54143	3089331	426818	359645	862605
Standard Deviation	201797.60	161793.72	11976477.51	1361455.21	1147504.81	2469654.52
Coefficient of Variation (*in Times*)	2.11	2.98	3.87	3.18	3.19	2.86
Maximum Value	917853	719388	52462144	6013037	5068941	10992327
Minimum Value	1783	1194	10883	414	2902	13152

Source: - Calculated

Table – 7: Descriptive Statistics (FY: 2011-12)

(Figures in Rs. Lakhs)

Particulars	INPUTS			OUTPUTS		
	DEF_OEX	DEF_CEX	DEF_INV	DEF_NBP	DEF_IINV	DEF_NP
Mean	78724	50525	3177485	421737	335052	777411
Standard Deviation	162863.91	157434.41	12148926.00	1319632.75	1192452.09	2267771.35
Coefficient of Variation (*in Times*)	2.07	3.11	3.82	3.13	3.56	2.92
Maximum Value	742010	698290	53259247	5844385	5246104	10089697
Minimum Value	1944	1104	14902	2955	258	11235

Source: - Calculated

Table – 8: Descriptive Statistics (FY: 2012-13)

(Figures in Rs. Lakhs)

Particulars	INPUTS			OUTPUTS		
	DEF_OEX	DEF_CEX	DEF_INV	DEF_NBP	DEF_IINV	DEF_NP
Mean	75169	47172	3211151	474797	371593	696462
Standard Deviation	164449.36	148803.41	12089897.17	1354372.59	1263572.03	2096707.72
Coefficient of Variation (*in Times*)	2.18	3.15	3.76	2.85	3.40	3.01
Maximum Value	745878	659285	53046064	6021486	5574054	9312041
Minimum Value	1797	839	14743	7888	3518	9163

Source: - Calculated

Table – 9: Descriptive Statistics (FY: 2013-14)

(Figures in Rs. Lakhs)

Particulars	INPUTS			OUTPUTS		
	DEF_OEX	DEF_CEX	DEF_INV	DEF_NBP	DEF_IINV	DEF_NP
Mean	77601	47789	3549046	499707	390920	714738
Standard Deviation	188115.79	157939.56	13252501.01	1488707.41	1335970.95	2235431.88
Coefficient of Variation (*in Times*)	2.42	3.30	3.73	2.98	3.42	3.13
Maximum Value	848447	697962	58174915	6611529	5891540	9907869
Minimum Value	1486	642	26504	9218	3820	8556

Source: - Calculated

Table – 10: Descriptive Statistics (FY: 2014-15)

(Figures in Rs. Lakhs)

Particulars	INPUTS			OUTPUTS		
	DEF_OEX	DEF_CEX	DEF_INV	DEF_NBP	DEF_IINV	DEF_NP
Mean	77366	41860	4047007	451467	471396	699818
Standard Deviation	195960.69	134252.43	15048167.15	1273904.85	1435143.25	2125230.38
Coefficient of Variation (*in Times*)	2.53	3.21	3.72	2.82	3.04	3.03
Maximum Value	881602	594177	66072742	5674242	6366106	9428456
Minimum Value	1051	220	33409	5640	3210	4108

Source: - Calculated

Based on the results obtained from Tables 4 – 10, we find that the maximum and minimum mean (or, average) values over the entire data-set were recorded at 40, 47,007 (Rs. in Lakhs) and 41, 860 (Rs. in Lakhs) against the variables DEF_INV and DEF_CEX respectively during the FY 2014-15. The maximum values obtained against all the selected variables were consistently recorded in favour of LICI over the study-period. Among the input and output variables used in the present study, the lowest values against all the selected variables were jointly shared by Sahara Life, Bharti-AXA Life and IDBI Federal Life respectively. The maximum and minimum standard deviations over the study-period were respectively recorded for the variables DEF_INV and DEF_CEX against the FY 2014-15. The coefficient of variation, expressed as a ratio of standard deviation to mean, is considered as a useful statistic ahead of standard deviation while comparison between data-sets with widely different means. The highest and lowest coefficients of variations (measured in times), over the selected study-period, were recorded at 4.03 and 1.42 against the variables DEF_IINV and DEF_OEX respectively during the FY 2008-09. The coefficient of variation in all the years registered a value more than *one* against all the selected input-output variables, thereby indicating a high amount of variation in relation to the mean values across the data-set during the period under review.

For the determination of different efficiency results, the application of both the CCR and BCC models have been used in the present study. Value of an efficiency index 'one' indicates that the insurer lies on the production frontier, and is considered as a 'best-practice' insurer relative to others in the sample under two different assumptions of scale. Value of an efficiency index less than one indicates that the insurer is less efficient than the 'best practice' insurers in the sample. If there is no difference in efficiency scores of TE and PTE for an insurer, then the corresponding value of Scale Efficiency (SE) is one, which means that the insurer is operating at the CRS level. In determining SE, there is a need to measure the TE under CRS (also called as Total TE, as defined in CCR model), and TE under VRS assumptions (also called as Pure TE, as defined in BCC model), which is denoted as follows:-

SE = TE (CCR model, CRS) / PTE (BCC model, VRS)

Tables 11 – 13 presents the Technical Efficiency (TE), Pure Technical Efficiency (PTE) and Scale Efficiency (SE) scores of the life insurers' under review covering the period 2008-09 to 2014-15. The last two columns of the tables represented the insurer-wise ranks and 'average' efficiency scores of the life insurers covering the entire study-period. An attempt has been made to rank the individual life insurers based on their average efficiency scores using the descending order of magnitude (as shown in the final columns of the tables). In case of a 'tie' in the average efficiency scores, the life insurers have been allotted the same ranks and the next placed insurers were given the subsequent ranks. An attempt has also been made to represent the number of efficient and inefficient life insurers, with corresponding percentages in terms of total life insurers included in the sample, under the two different scales of assumptions over the study-period.

Table – 11: Technical Efficiency Scores of the Life Insurers under CRS

DMUs/Life Insurers	TE_{CRS} (2008-09)	TE_{CRS} (2009-10)	TE_{CRS} (2010-11)	TE_{CRS} (2011-12)	TE_{CRS} (2012-13)	TE_{CRS} (2013-14)	TE_{CRS} (2014-15)	Avg. TE_{CRS} (2008-2015)	Ranks
LICI	1	1	1	1	1	1	0.986	**0.998**	**2**
ICICI PruLife	1	1	1	1	1	1	1	**1**	**1**
HDFC Standard	0.640	0.655	0.754	1	1	1	1	**0.864**	**8**
SBI Life	1	1	1	1	1	1	1	**1**	**1**
BAJAJ ALLIANZ Life	0.996	1	0.753	1	1	1	1	**0.964**	**4**
MNYL	0.453	0.492	0.549	0.689	0.665	0.716	0.679	**0.606**	**14**
Birla SLI	1	1	0.983	1	1	1	1	**0.998**	**2**
Reliance Life	1	1	1	1	1	0.880	1	**0.983**	**3**
TATA -AIA Life	0.524	0.499	0.516	1	1	0.961	0.973	**0.782**	**9**
Kotak-M Life	1	0.780	0.835	1	1	0.878	0.722	**0.888**	**7**
Exide Life	0.994	0.548	0.418	0.526	0.661	0.574	0.582	**0.615**	**13**
PNB METLIFE	0.659	0.665	0.890	0.868	0.845	0.730	0.660	**0.760**	**10**
AVIVA Life	1	1	1	1	1	1	0.880	**0.983**	**3**
SAHARA Life	0.885	0.652	0.573	0.636	0.703	0.827	0.730	**0.715**	**11**
SHRIRAM Life	1	0.826	0.992	1	0.947	0.803	0.746	**0.902**	**6**
BHARTI-AXA	0.694	0.808	1	1	1	1	1	**0.929**	**5**
Future Generali	0.467	0.320	0.432	0.502	0.548	0.610	0.684	**0.509**	**15**
IDBI Federal	0.942	0.638	0.601	0.641	0.625	0.612	0.613	**0.667**	**12**
Means	**0.847**	**0.771**	**0.794**	**0.881**	**0.889**	**0.866**	**0.847**		
Number of Efficient DMUs	**8** *(44.4%)*	**7** *(38.9%)*	**6** *(33.3%)*	**12** *(66.7%)*	**11** *(61.1%)*	**8** *(44.4%)*	**7** *(38.9%)*		
Number of In-Efficient DMUs	**10** *(55.6%)*	**11** *(61.1%)*	**12** *(66.7%)*	**6** *(33.3%)*	**7** *(38.9%)*	**10** *(55.6%)*	**11** *(61.1%)*		

Source: - Calculated

Table – 12: Pure Technical Efficiency Scores of the Indian Life Insurers under VRS

DMUs/Life Insurers	PTE_{VRS} (2008-09)	PTE_{VRS} (2009-10)	PTE_{VRS} (2010-11)	PTE_{VRS} (2011-12)	PTE_{VRS} (2012-13)	PTE_{VRS} (2013-14)	PTE_{VRS} (2014-15)	Avg. PTE_{VRS} (2008-2015)	Ranks
LICI	1	1	1	1	1	1	1	**1**	**1**
ICICI PruLife	1	1	1	1	1	1	1	**1**	**1**
HDFC Standard	0.641	0.658	0.754	1	1	1	1	**0.865**	**8**
SBI Life	1	1	1	1	1	1	1	**1**	**1**
BAJAJ ALLIANZ Life	1	1	0.753	1	1	1	1	**0.965**	**6**
MNYL	0.456	0.496	0.550	0.689	0.666	0.718	0.682	**0.608**	**14**
Birla SLI	1	1	0.996	1	1	1	1	**0.999**	**2**
Reliance Life	1	1	1	1	1	0.917	1	**0.988**	**5**
TATA -AIA Life	0.525	0.504	0.526	1	1	0.987	0.996	**0.791**	**10**
Kotak-M Life	1	0.805	0.838	1	1	0.886	0.735	**0.895**	**7**
Exide Life	1	0.593	0.450	0.543	0.672	0.594	0.591	**0.635**	**13**
PNB METLIFE	0.672	0.681	1	0.871	0.846	0.735	0.686	**0.784**	**11**
AVIVA Life	1	1	1	1	1	1	0.957	**0.994**	**3**
SAHARA Life	1	1	1	1	1	1	1	**1**	**1**
SHRIRAM Life	1	1	1	1	1	1	0.954	**0.993**	**4**
BHARTI-AXA	1	1	1	1	1	1	1	**1**	**1**
Future Generali	1	0.399	0.452	0.533	0.633	0.710	0.776	**0.643**	**12**
IDBI Federal	1	1	0.604	0.704	0.764	0.755	0.731	**0.794**	**9**
Means	**0.905**	**0.841**	**0.829**	**0.908**	**0.921**	**0.906**	**0.895**		
Number of Efficient DMUs	**14** *(77.8%)*	**11** *(61.1%)*	**9** *(50.0%)*	**13** *(72.2%)*	**13** *(72.2%)*	**10** *(55.6%)*	**9** *(50.0%)*		
Number of In-Efficient DMUs	**4** *(22.2%)*	**7** *(38.9%)*	**9** *(50.0%)*	**5** *(27.8%)*	**5** *(27.8%)*	**8** *(44.4%)*	**9** *(50.0%)*		
Number of Efficient DMUs Exhibiting CRS	**8** *(57.2%)*	**7** *(63.6%)*	**6** *(66.7%)*	**12** *(92.3%)*	**11** *(84.6%)*	**8** *(80.0%)*	**7** *(77.8%)*		
Number of Efficient DMUs Exhibiting IRS	**5** *(35.7%)*	**4** *(36.4%)*	**3** *(33.3%)*	**1** *(7.7%)*	**2** *(15.4%)*	**2** *(20.0%)*	**1** *(11.1%)*		
Number of Efficient DMUs Exhibiting DRS	**1** *(7.1%)*	**0** *(Nil)*	**0** *(Nil)*	**0** *(Nil)*	**0** *(Nil)*	**0** *(Nil)*	**1** *(11.1%)*		

Source: - Calculated

Table – 13: Scale Efficiency Scores of the Indian Life Insurers

DMUs/Life Insurers	SE (2008-09)	SE (2009-10)	SE (2010-11)	SE (2011-12)	SE (2012-13)	SE (2013-14)	SE (2014-15)	Avg. SE (2008-2015)	Ranks
LICI	1	1	1	1	1	1	0.986	**0.998**	**3**
ICICI PruLife	1	1	1	1	1	1	1	**1**	**1**
HDFC Standard	0.999	0.995	1	1	1	1	1	**0.999**	**2**
SBI Life	1	1	1	1	1	1	1	**1**	**1**
BAJAJ ALLIANZ Life	0.996	1	1	1	1	1	1	**0.999**	**2**
MNYL	0.994	0.993	1	1	0.998	0.998	0.996	**0.997**	**4**
Birla SLI	1	1	0.987	1	1	1	1	**0.998**	**3**
Reliance Life	1	1	1	1	1	0.959	1	**0.994**	**5**
TATA -AIA Life	0.997	0.989	0.981	1	1	0.974	0.977	**0.988**	**7**
Kotak-M Life	1	0.968	0.997	1	1	0.991	0.982	**0.991**	**6**
Exide Life	0.994	0.924	0.930	0.969	0.985	0.967	0.986	**0.965**	**9**
PNB METLIFE	0.980	0.976	0.890	0.997	0.998	0.994	0.963	**0.971**	**8**
AVIVA Life	1	1	1	1	1	1	0.919	**0.988**	**7**
SAHARA Life	0.885	0.652	0.573	0.636	0.703	0.827	0.730	**0.715**	**14**
SHRIRAM Life	1	0.826	0.992	1	0.947	0.803	0.782	**0.907**	**11**
BHARTI-AXA	0.694	0.808	1	1	1	1	1	**0.929**	**10**
Future Generali	0.467	0.803	0.957	0.942	0.866	0.859	0.881	**0.825**	**13**
IDBI Federal	0.942	0.638	0.995	0.909	0.818	0.811	0.839	**0.850**	**12**
Means	**0.942**	**0.921**	**0.961**	**0.970**	**0.962**	**0.955**	**0.947**		
Number of Scale Efficient DMUs	**8** (*44.4%*)	**7** (*38.9%*)	**9** (*50.0%*)	**13** (*72.2%*)	**11** (*61.1%*)	**8** (*44.4%*)	**7** (*38.9%*)		

Source: - Calculated

Based on the results obtained from Table – 11, we find that ICICI PruLife and SBI Life consistently recorded TE scores of 1 (one) over all the years of the study-period, under the CRS assumptions. Hence, they were jointly ranked as first. As evident from Table – 11, the number of efficient firms, with a perfect score of one, in the CCR model (i.e. under CRS constraints) ranged between 6 (i.e. 33.3 percent) to 12 (i.e. 66.7 percent) out of the total number of firms under review over the entire duration of the study-period. The seven-year average TE scores revealed that LICI and Birla Sun Life were jointly ranked as second with scores of 0.998 each, followed by AVIVA Life and Reliance Life at the third position with similar scores of 0.983 respectively. Hence, the above two life insurers with TE scores of less than one were considered as 'inefficient', since they could have produced on an average 0.2 percent and 2 percent of more output respectively using the same input as that of the efficient firms. Excepting ICICI PruLife and SBI Life, all the other life insurers depicted average TE scores of less than one over the study-period, although they were found to be efficient in phases with scores of one or 100 percent efficiency levels. Table – 11 also manifested that out of a total of 18 life insurers' under review, 16 of them were considered as inefficient based on their average TE scores covering the study-period which is indicative of the fact that the life insurers could have actually produced more outputs using the same input levels as used by the efficient firms. The TE scores of the life insurers ranged between a minimum of 0.320 to a maximum of 1 (one) over all the individual years of the study-period. The lowest rank though was obtained by Future General Life with an average TE score of 0.509, given their newness and inexperience in the country's life insurance sector.

Based on the results obtained from Table – 12, we find that the situation is much better in case of PTE with more players attaining the scores of 'one' or 100 percent efficiency. It has been found that a total of five life insurers namely LICI, ICICI PruLife, SBI Life, Sahara Life and Bharti-AXA Life consistently recorded PTE scores of one over all the individual years of the study-period, under the VRS assumption. Hence, they were jointly placed in the first position with average efficiency scores of one. Out of the 18 life insurers included in the sample, the number of efficient firms under the BCC model (i.e. relaxation of the CRS constraint) was higher than those obtained under the CCR model since the data is expected to be enveloped more tightly under the BCC model, and ranged between a minimum of 9 (or, 50 percent) to a maximum of 14 (or, 77.8 percent). This indicates that the number of efficient life insurers marginally increased under the VRS assumption than compared to that under the CRS assumption over the corresponding study-period. As evident from Table – 12, the PTE scores of the life insures ranged between a minimum of 0.399 (as recorded in the year 2009-10) to a maximum of 'one' over the study-period. The seven-year average PTE scores depicted Birla Sun Life and AVIVA Life in the second and third position with scores of 0.999 and 0.994 respectively. This indicates that the above two life insurers could have produced, on an average 0.1 percent and 0.6 percent, more output respectively using the same inputs as that of the efficient firms and hence were considered as inefficient. The least efficient life insurer was found to be MNYL with an average PTE score of 0.608 over the entire study-period. The last three rows of the table represented the number of efficient insurers with different scale of returns (IRS, CRS and DRS) under the VRS assumptions. The results showed that, on an average, the number of efficient life insurers exhibiting CRS, IRS and DRS in their operations for the entire study-period stood at around 70 percent, 20 percent and 10 percent respectively. It also appears that the number of life insurers operating under IRS and DRS showed marginal decrease and increase respectively over the study-period. The percentages ranged between a minimum of 7.7 percent to a maximum of 36.4 percent in case of IRS, but in case of DRS the percentages ranged between 'zero' to a maximum of 11.1 percent respectively.

Based on the results obtained from Table – 13, we find that ICICI PruLife and SBI Life were the only players that consistently secured a SE score of 100 percent in all the years of the study-period. As a result, both these players jointly achieved the first rank in terms of their average scale efficiency scores covering the entire study-period. The scale efficiency for each DMU is calculated as a ratio between the CCR and BCC efficiency scores i.e. the ratio of TE scores to PTE scores. The number of scale-efficient insurers showed a fluctuating trend over the study-period, thereby depicting the inconsistencies in terms of maintaining the optimum operational scale. Looking at the scores, we find that towards the beginning and end of the study-period, around 40

percent of the DMUs fell in the scale-efficiency zone. However, towards the middle of the study-period, the percentage of DMUs depicting scale-efficiency showed an increase of more than 60 percent. As is evident from the table, the maximum number of DMUs with a scale-efficiency score of 'one' or 100 percent was mostly recorded during the years 2011-12 and 2012-13. With regard to the average scale-efficiency scores covering the entire study-period, most of the players fell within the range of 80 percent to 100 percent. A low scale-efficiency score of less than 100 percent for LICI during the year 2014-15 was mostly attributed to a low TE score during the said period.

A look at the following tables 14 and 15 given below shows a more precise distribution of the total life insurers included in the sample in terms of different scale of operations (viz., Increasing, Decreasing and the Constant Returns to Scale) under the VRS technology assumptions.

Table – 14: Number and Percentage of Life Insurers Operating at Different Returns to Scale

Years of Operation	Efficiency Range of DMUs/Life Insurers						Total	
	CRS		IRS		DRS			
	No. of DMUs	% of DMUs	No. of DMUs	% of DMUs	No. of DMUs	% of DMUs	No. of DMUs	% of DMUs
2008-09	8	44.4	9	50.0	1	5.6	18	100
2009-10	7	38.9	11	61.1	0	Nil	18	100
2010-11	9	50.0	9	50.0	0	Nil	18	100
2011-12	13	72.2	5	27.8	0	Nil	18	100
2012-13	11	61.1	7	38.9	0	Nil	18	100
2013-14	8	44.4	9	50.0	1	5.6	18	100
2014-15	7	38.9	10	55.6	1	5.6	18	100

Source: - Calculated

Based on the results obtained from Table – 14, we find that around 40 percent to 70 percent of the entire sample of life insurers was found to operating at the constant returns to scale (CRS) in almost all the years of the study-period. In other words, majority of the life insurers in the range of 60 to 70 percent were found to be operating at the Most Productive Scale Size (MPSS) during the period 2011-12 to 2012-13. A significant number of life insurers in the range of 35 to 50 percent were found to be operating either at the sub-optimal scale or at the supra-optimal scale during the initial and in the concluding years of the study-period; hence the most efficiency level in case of such life insurers was not obtained during the period under review.

Table – 15 presents the year-wise number of efficient and projected life insurers with different returns to scale. The table clearly shows that a majority of the life insurers were found to be operating at the sub-optimal level as reflected in the increasing returns to scale (IRS) during the beginning and final years of the study-period. Out of the total life insurers included in the sample, a few of them were found to be operating at the supra-optimal scale as reflected in the decreasing returns to scale (DRS). Hence, it is clear that unless there is a significant increase in the number of insurers operating at the CRS, the country's life insurance sector will continue to give a dismal look in terms of efficiency. Hence, the insurance companies need to increase their firm-size so that they can operate more at the CRS.

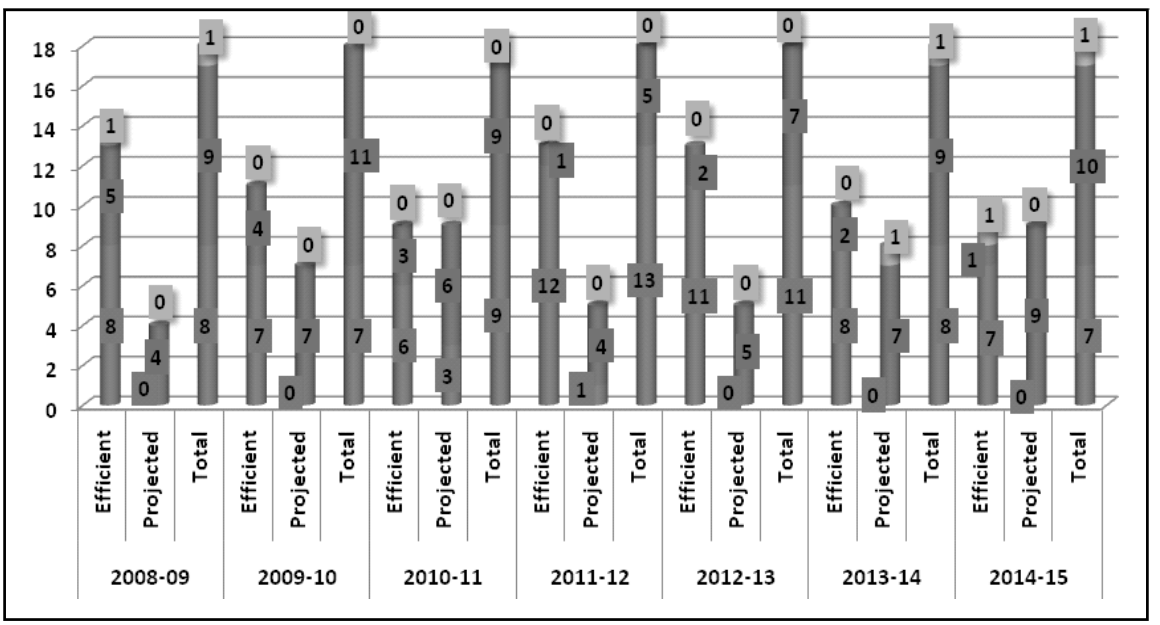
Table – 15: Life Insurer-wise Returns to Scale

DMUs/ Life Insurers	Years of Operation													
	2008-09		2009-10		2010-11		2011-12		2012-13		2013-14		2014-15	
	Efficient	Projected	Efficient	Projected	Efficient	Projected	Efficient	Projected	Efficient	Projected	Efficient	Projected	Efficient	Projected
LICI	CRS		CRS		CRS		CRS		CRS		CRS		DRS	
ICICI PruLife	CRS		CRS		CRS		CRS		CRS		CRS		CRS	
HDFC Standard		IRS		IRS		CRS	CRS		CRS		CRS		CRS	
SBI Life	CRS		CRS		CRS		CRS		CRS		CRS		CRS	
BAJAJ Life	DRS		CRS			CRS	CRS		CRS		CRS		CRS	
MNYL		IRS		IRS		CRS		CRS		IRS		IRS		IRS
Birla SLI	CRS		CRS			IRS	CRS		CRS		CRS		CRS	
Reliance Life	CRS		CRS		CRS		CRS		CRS			DRS	CRS	
TATA -AIA Life		IRS		IRS		IRS	CRS		CRS			IRS		IRS
KOTAK -M Life	CRS			IRS		IRS	CRS		CRS			IRS		IRS
EXIDE LIFE	IRS			IRS		IRS		IRS		IRS		IRS		IRS
PNB METLIFE		IRS		IRS	IRS			IRS		IRS		IRS		IRS
AVIVA Life	CRS		CRS		CRS		CRS		CRS		CRS			IRS
SAHARA Life	IRS		IRS		IRS		IRS		IRS		IRS		IRS	
SHRIRAM Life	CRS		IRS		IRS		CRS		IRS		IRS			IRS
BHARTI-AXA	IRS		IRS		CRS		CRS		CRS		CRS		CRS	
FUTURE Life	IRS			IRS		IRS		IRS		IRS		IRS		IRS
IDBI Federal	IRS		IRS			IRS		IRS		IRS		IRS		IRS

Source: - Calculated

A look at Table – 15 also reveals the increase in the total number of life insurers with CRS and IRS, with a relatively fewer number of DRS insurers. These results are indicative of the fact that there is immense scope for improvement for the life insurers to enhance their efficiencies and firm-sizes so as to operate at the minimum point of the long-run average cost curve. The results also indicated that ICICI PruLife and SBI Life were the only players who operated at the most productive scale size (MPSS) under constant returns to scale during all the years of the study-period. The other life insurers such as LICI, Bajaj Allianz Life, Birla SLI, Reliance Life and AVIVA Life also showed commendable results in terms of exhibiting CRS, with exceptions, in most of the years of the study-period. The life insurers operating at the CRS or IRS have the opportunity to be more efficient with higher growth, whereas the ones operating at DRS are considered to be too large in terms of scale economies. The results were also evident from the following Figure – 2.

Figure –2: Year-wise Returns to Scale of Indian Life Insurers



Source: - Calculated

Figure – 2 exhibits the year-wise number of efficient and projected life insurers with different returns to scale. The figure also substantiates a fluctuating trend in the total number of life insurers with CRS, IRS and DRS levels of operating scales. It is also evident that the number of players operating at CRS and IRS are more in comparison to DRS over the study-period. Hence, the life insurance companies have to make necessary adjustments in their scale size so as to operate at the constant returns to scale.

Figure – 3 given below depicts the yearly average TE, PTE and SE scores of the life insurers' under review covering the study-period from 2008-09 to 2014-15. The figure exhibited a sharp decline in the average efficiency scores of the life insurers during the initial years of the study-period during 2008 to 2011, after which it revived again. In terms of PTE scores that indirectly talks about managerial competence and proper allocation of resources, there was not much fluctuations observed in the scores over the study-period, barring the years 2008-09 to 2010-11. A similar trend was also noticed in case of TE and SE scores of the life insurers during the period under review.

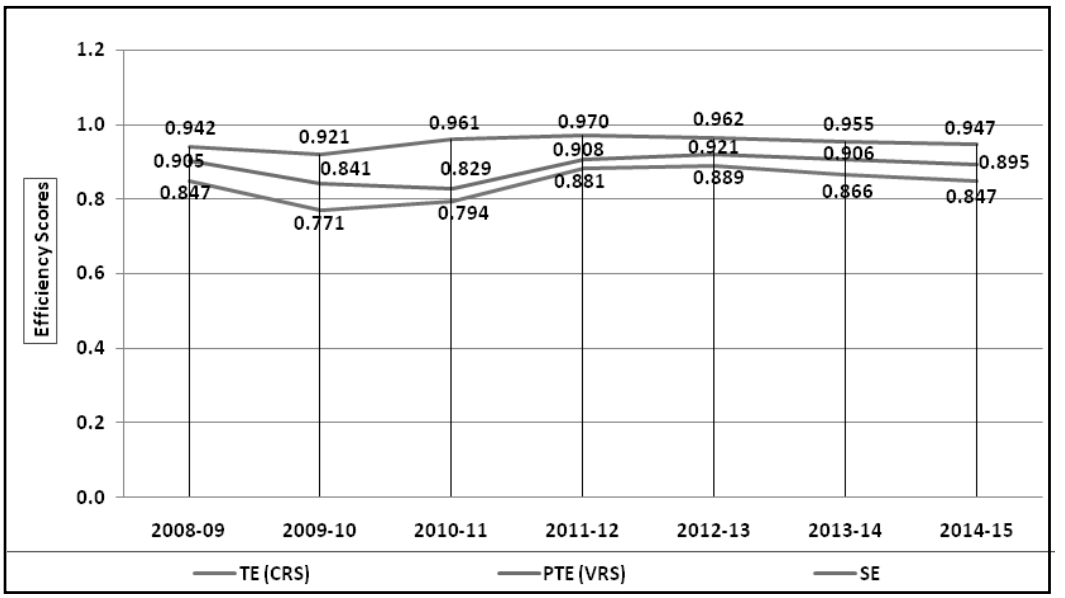


Figure – 3: Year-wise Average Efficiency Scores of the Indian Life Insurers

Source: - Calculated

As evident from the Figure – 3, there was a substantial fall in all the year-wise average efficiency scores of the life insurers in the country's life insurance sector during the years 2008-09 to 2010-11. The reasons for such a decline could be attributed to the contagion effects of the global financial meltdown, owing to the US sub-prime crisis, that occurred during the year 2007-08. The life insurance companies showed commendable signs of recovery since the FY 2011-12 from the impact of such a financial crisis. Since the year 2011-12, the average efficiency scores of the life insurers under review became more or less streamlined, as is evident from the figure - 3. Hence, it would be wise on the part of the insurance companies to develop strategies in order to mitigate any spill-over effects of any future global crisis in their respective businesses. Moreover, the insurance companies should also take a relook at the products, pricing and operational strategies in order to figure out the areas of improvements in terms of efficiency or output-maximisation.

Conclusion

It has been observed that there is immense scope for improvement in the country's life insurance sector. The efficiency and productivity levels of the life insurers' under review showed fluctuating trends over the study-period, thereby depicting the inconsistencies in terms of maintaining the optimum operational scale. It has been found that approximately an average of 55.5 percent of the total life insurers has exhibited CRS in their operation under the variable returns to scale assumptions. In some of the cases, the insurers were found to be operating at the sub-optimal or supra-optimal scale over the study-period; hence the most efficiency level was not obtained. ICICI PruLife and SBI Life were the only players who operated at the most productive scale size (MPSS) under constant returns to scale over all the years of the study-period. It has been observed that the average PTE scores exceed the average TE scores of the life insurers against all the individual years of the study-period. The best TE scores, relative to CRS technology, were attained by ICICI PruLife and SBI Life with results of 100 percent throughout the study-period. A further investigation into the results shows that the main contributor to the low TE scores was mainly because of PTE, and not SE. The low PTE scores indirectly talks about the poor managerial competence and improper allocation of resources by the life insurers. Hence, looking at the competitive wave prevailing in the country's life insurance domain, the life insurers must work upon all aspects of efficiency for sustainability of operations in the long-run. This would not only improve

the operational efficiencies of the individual players but would also result in a better performing industry as a whole. In addition, the insurance companies need to make necessary adjustments in their scale-size so that they can operate at the CRS.

Moreover, the researcher finds that there is a substantial fall in the efficiency scores of most of the private life insurers during the initial years of the study-period, the reason for which could be attributed to the global slowdown period after 2007-08. Thus, it would be wise on the part of the strategy-thinkers to adopt right changes in order to arrest spill-over effects in the country's life insurance segment from any future financial crisis.

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Expiration Day Effects of Derivatives in India

Neetu Chadha and Neha Singhal

Abstract

The present study examines the impact of the expirations of derivative contracts on trade volumes and returns from securities. Descriptive statistics to check any such volatility in S & P CNX Nifty for a period of 10 years i.e., 1st April 2005 to 31st March 2015. ADF model validates the stationarity of the data. Moreover AR (4) and ARCH model have been used to check the existence of any residual error in the data under consideration. GARCH/TGARCH models analyses the existence of any price reversal effect on the day following the expiration day. The results indicate that the trade volumes on the expiration days were notably higher than the volumes on the non-expiration days. A high volatility has been observed in the returns on the expiration days as compared to the usual trend followed on the non-expiration days. No price reversal has been observed

Keywords: Derivatives, Price Reversal, ARCH, GARCH, Expiration, Volatility, Return, Volume

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Indian economy took a shift from a closed one to an open one after 1991 reforms. The government was entirely restructured to reduce their role in the financial sector. A number of reforms were introduced for improvements in the legal and technological framework. The reforms made Indian firms compete in the global market and also increased the foreign participation. The setting up of prices and fixing interest rates were no more regulated by the government or CCI. They were now left to be decided by the free market forces.

Year 1994 marked the establishment of NSE by a group of Indian Financial Institutions. It was formed as a strong competitor to BSE, the oldest stock exchange of India. NSE ensured that the trading was not confined to a few brokers rather cover all those who were qualified to trade. The objectives were clearly achieved by the unveiled astonishing results. Since 1994, the market cap at NSE grew up by 2462%.

But, the unexpected fluctuations in the prices and interest rates were not evaded by such a startling performance of

the market and it resulted in risk and uncertainty and made it quite difficult for the companies to estimate their future revenues. This complication was resolved by the emergence of derivatives market in the two major stock exchanges of India, NSE and BSE. A derivative is an agreement with its worth from the capacity of a principal entity. The objective was to improve the risk management by the investors and bring the informational efficiency in the market. Much refinement was awaited after the introduction of the derivative market.

The performance exhibited was considerably satisfactory. Between April 2005 and March 2015, the total turnover of the equity derivatives went up by 176 percent. 1808 companies were found listed on the exchange by the end of March 2015, whereas 1014 of the listed stocks were regularly traded. In 2016-2017, the turnover in the derivatives segment of the equity market has been calculated (till date) to be 364 percent of the corresponding turnover in the underlying cash market.

On the contrary, the link between the derivatives and cash markets facilitated by the trade programs and index arbitrage raised a number of concerns among the market regulators in relation to crisis. The investors looked forward to realize the arbitrage profits due to the availability of the price and return volatility in the underlying cash market. A number of measures, thus, have been aimed at reducing such market volatilities leading to abnormal profits to certain investors. Consideration of expiration day effects is one such measure.

The expiration day effects occur when the traders adjust their short positions before the derivative contracts expire. This not only affects the prices and volume of the securities on that particular day but it also has a price reversal effect on the day following the expiration day, if a number of arbitrageurs move in the same direction and liquidate their securities at the same time. The investors trading in the derivative market would have concerns in regards to the settlement price and they will try to influence and manipulate the market price of the underlying security in the favourable direction, which necessitates the clear understanding of the expiration day effects for the investors trading in derivative market as well as the stock market.

Literature Review

The increasing concern of the expiration day effects has led to a number of researchers studying the impact of the derivative expiration on the volatility of the returns and volumes traded in the market and the possible reasons behind such impact. The researches have different models applied resulting in different results and conclusions. A few of them have been considered before undertaking the following study: Stoll and Whaley, (1997), Bhaumik, S and Bose, S. (2007), Feinstein, S.P., Goetzmann, W.N., 1988, Bollerslev, T. (1986), and a few others.

Bollerslev, T. (1986) studied about the generalized autoregressive conditional heteroscedasticity. The conditions of stationarity and autocorrelation structures were derived to study this model. The study involved a number of estimations and application of tests so as to generalize the ARCH model. GARCH model has been extended to include the ARCH effects. An example of the uncertainty of the rate of inflation was used for the empirical analysis.

Feinstein and Goetzman(1988) observed extraordinary volume on expiration-days with insignificant price effect. They investigated a period when the stock options, index stock options, and index stock futures expired simultaneously to check the volatility in the stock market during this period. They used the concept of the expiration rule change to Friday and observed that the high volatility seen at the time of expiration was reduced as the consequence of the rule change.

After the new settlement price rule changed to the Friday opening rather than in 1987, Stoll and Whaley (1991) again observed high trading volume and highly volatile assets on the expiration-days, Friday opening being the only difference.

Bhaumik, S and S. Bose, (2007) investigated the impact of derivative expiration on the trade volume, returns and the volatility of returns of the underlying cash market. AR-GARCH model was used to analyze the impact taking the largest stock exchange of India into consideration. The results given by them presented that the trade volumes on expiration days (weeks) were higher than those on non-expiration days (weeks). They also observed the volatility in the daily returns of the market index.

Debasish, (2010) examined whether the expiration effects exist on the NSE nifty index. The period of analysis covers index future. They used the pooled t-test along with the Wilcoxon rank sum test to check whether return, price, and trading volume were notably different at expiration with that on non-expiration. Findings here suggested that the Indian

stock market had expiration day effects in relation to the derivative trading. Investors and speculators were able to make profits by exercising the arbitrage opportunities arising from the temporary mismatch in prices in cash and derivative market.

Narang and vij (2012) evaluated the impact of expiration of the derivatives on the Indian spot volatility by using the regression techniques and GARCH models including TGARCH, EGARCH and PGARCH. They found that there was concentration of volumes in some particular months. The conclusion drawn was that it was a speculators' market. The manipulation by the speculators was found to be the main reason behind the high volatility during and after expiry of the studied contracts. The impact of expiration day on the volume, return and volatility depicted that the prices were speculative and traders cover their risk by taking large spot positions resulting in high volatility during expiration period.

Objectives of the study

The main objectives of the present study are:

- To measure the expiration day effects of derivative trading on trading volume, returns, and volatility of Indian stock market, and
- To examine the presence of price reversal on days following the expiration days.

Hypothesis

Testable Hypothesis has been stated as:

$H_{0:}$ Variance of returns for expiration-days is not significantly different from variance of return during non-expiration days.

Variables and Data

In the study, NSE is selected for finding evidences on the expiration-day effects of derivatives in the Indian stock market. NSE has established itself as the sole market leader in the derivatives segment in the country and it currently accounts for more than 99% of derivatives market share. As stock market index is considered as a good barometer for the overall market behaviour, CNX Nifty index of NSE is selected as proxy for stock market behaviour. The underlying stocks have been chosen in a way that they reflect different liquidities for the associated derivatives.

The Nifty is a 50-stock market capitalization weighted index. The companies included in nifty cover 22 different industries. Overall, the data for 2484 trading days have been sorted, of which 157 were the days on which derivatives contracts expired at the exchange. The derivative contracts expire on the last Thursday of every month.

For empirical analysis the daily price and turnover data on **S&P CNX Nifty** for **1st April 2005 to 31st March 2015** is used. This data is obtained from NSE s official website. For 10 years sample period, there are 3804 observations

Research Methodology

In this study, the measure of **return** for a given trading day is the difference between the value of Nifty on that day and the value of the Nifty on the previous trading day.

The **variance of return** for a particular day is used as a measure of volatility.

The **volume** is taken as the natural logarithm of the value of the turnover of Nifty on a particular day.

Price reversal is defined as the reversal of the Nifty price (reflected through return/volatility)in opposite direction when the expiration-day passes.

The price, volume and return are investigated for their volatility by comparing the values of these variables for the day prior to expiration, the day of expiration and the day after the expiration of the derivative contracts with the values recorded 1 week and 2 week prior the expiration days.

For the study on Indian market, there search one xpiration day effects has been extended in th efollowingways:

First,theexpirationeffect on the market has been examinedon account of the growth of the trade volume andreturns.

Second, a more sophisticated approach has been used to consider the expiration day effects than taking a mere comparison of the measures of central tendency by including the generalized auto regressive conditional he teroscedasticity (GARCH/TGARCH) models to generate the mean and variance equations of returns in the marke to veranex tended time period.

Empirical Analysis

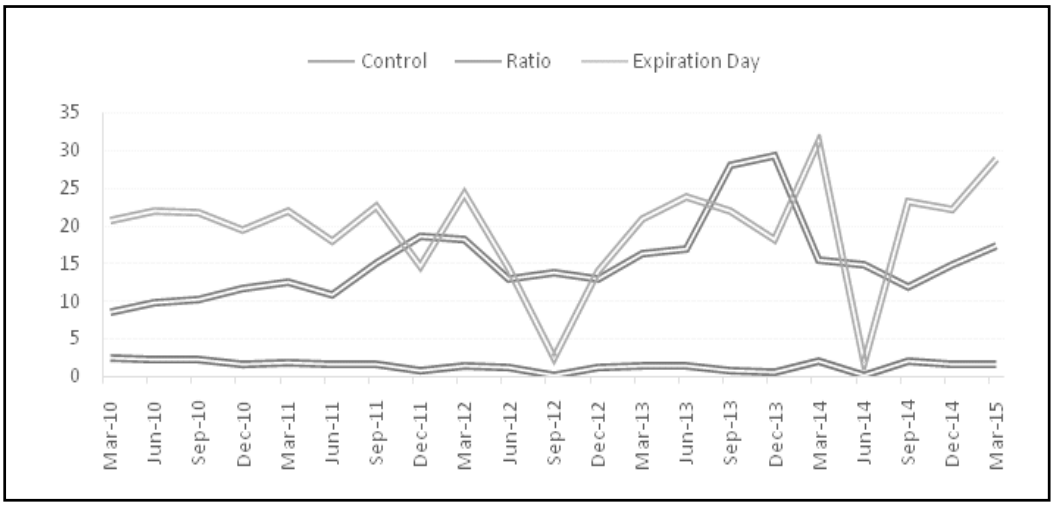

Figure 1: Comparativetrading (Cr.):Expirationdayvs.control

Note:Control is calculated as an AverageofreportedvolumeonThursdays1and2weekspriortoexpiration

Thursday.

Ratio calculated is of expiration day to control.

The total number of trade realised on the exchange, and the ratio of the trades on expiration Thursdays to the trades on a control category are highlighted in Figure 1. The control category is the average of the volume of trades on the non-expiration Thursdays. The volumes of trade on expiration days (weeks) were notably higher than the volumes observed on non-expiration days (weeks).

Also, the numbers of trades on expiration days and those depicted by the control category are closely correlated; the correlation coefficient being 0.59.

Table1.1: Growthrate of volumes (No. of sharestraded)

	EXPIRATION_DAY	EXPIRATION_WEEK	NON_EXPIRATION_DAY	NON_EXPIRATION_WEEK
Mean	66.02397	14.96305	35.10106	11.09553
Median	128.8100	69.74000	87.52500	-11.38000
Maximum	14104.49	12109.12	5096.100	25888.27
Minimum	-7671.900	-9054.940	-6222.630	-9084.630
Std. Dev.	2896.627	2204.384	1997.730	1955.882
Skewness	0.523036	-0.101548	-0.151385	4.076694
Kurtosis	5.818120	5.868082	3.945972	61.45519
Jarque-Bera	58.73445	259.3817	6.576877	77362.44
Probability	0.000000	0.000000	0.037312	0.000000
Sum	10299.74	11267.18	5616.170	5913.920
Sum Sq. Dev.	1.30E+09	3.65E+09	6.35E+08	2.04E+09
Observations	156	753	160	533

The descriptive statistics for the growth rate of volumes for expiration and non-expiration days (and weeks) has been reported in Table 1.1. The growth rate of volumes has been calculated by taking the difference between the volume traded on a particular day and the volume traded on the previous day. The null hypotheses that the measures of central tendency for the growth rate of trade volume on the expiration days (weeks) equals the measures of central tendency for the non-expiration days (weeks) is being tested in the statistics studied.

It can be seen that the **null hypotheses is rejected** as the exercise for the database was conducted.

Thus, it can be concluded that the growth rate of trade volumes is greater on the expiration days (weeks) than those on the non-expiration days (weeks).

Table 1.2:Returns

	EXPIRATION_DAY	EXPIRATION_WEEK	NON_EXPIRATION_DAY	NON_EXPIRATION_WEEK
Mean	41.03109	8.465870	41.22125	12.60779
Median	45.35000	8.650000	74.15000	4.200000
Maximum	1254.850	1156.250	1291.700	1516.000
Minimum	-1413.500	-1167.400	-1476.650	-963.8000
Std. Dev.	293.3991	122.8386	293.9800	160.3413
Skewness	-0.578896	-0.617905	-0.672813	1.504611
Kurtosis	7.927287	28.74643	8.848916	22.64288
Jarque-Bera	166.5211	20845.73	240.1368	8770.031
Probability	0.000000	0.000000	0.000000	0.000000
Sum	6400.850	6374.800	6595.400	6719.950
Sum Sq. Dev.	13342871	11347175	13741450	13677361
Observations	156	753	160	533

A similar exercise for the returns of securities on the Nifty index has been undertaken, and the results are reported in Table 1.2. The returns for a given trading day has been calculated by taking the difference between the value of Nifty on that day and the value on the previous day.

The descriptive statistics for the returns on the expiration and non-expiration days (& weeks) have been reported in the table.

The null hypotheses that the measures of central tendency for the return on the expiration days (weeks) equals the measures of central tendency for the non-expiration days (weeks) has been tested in the statistics studied.

Besides the visible acceptance of the hypothesis that the variance of return for expiration days equals that for the non-expiration days, all the rest can be **rejected** for this database as well.

The highly volatile market return can thus be assumed to be affected enormously by the expiration of equity futures and options contracts.

Expiration day effects and price reversals

The evaluation of the descriptive statistics calculated above indicates that the expiration day of derivatives affects the volatility of the returns but it does not directly affect the return itself. Another careful study has been done below so as to understand the impact of the derivative expiration on the market returns. The study analyzes not only the impact of the derivative expiration on the returns of the expiration day itself but also on the returns of the day following the expiration.

Price reversal occurs when the return on the expiration day is different from the usual trend in returns, thus necessitating the reversal in the return on the day following the expiration. Mixed evidences have been reported about such reversals in the past researches.

A **stationary time series** is the one whose statistical properties (mean, variance, autocorrelation, etc.) are found to be constant over time.

The modern theories are concerned with the stationary time series, so, the Volume and Return series of the index nifty are tested for stationarity with augmented Dickey Fuller (ADF) test.

Augmented Dickey Fuller (ADF) Test

Table 2.1: ADF test for RETURN series

Test Statistic: -49.31968			
Critical Values	1%	5%	10%
t-statistic	3.96174	3.41162	3.12768

Table 2.2: ADF test for VOLUME series

Test Statistic: -6.365747			
Critical Values	1%	5%	10%
t-statistic	3.96175	3.41162	3.12768

The results of unit root test shown in the tables 2.1 & 2.2 indicates that Nifty volume and return series are stationary as ADF test statistic is higher than its critical values at all the levels, thus **rejecting the null hypothesis of unit root** in return and volume series implying the stationarity of the data.

AR (4) Model

AR (4) model is used as under to check any residual errors in the return and the volume series.

ARCH statistics is also applied to check the availability or non-availability of the ARCH effects i.e., whether the error terms has a characteristic variance or not.

Table 3.1: AR model for VOLUME series

Variable	Coefficient	Std. Error	t-statistic	Prob.
C	6121.752	49.10083	124.6772	0.0000

Table 3.2: AR model for RETURN series

Variable	Coefficient	Std. Error	t-statistic	Prob.
C	0.034644	0.02617	1.323802	0.1857

ARCH Model

Table 4: Heteroscedasticity test: ARCH

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3505865	261624.8	13.40035	0.0000
RESID^2(-1)	0.412192	0.018313	22.50819	0.0000

Unlike table 3.1, table 3.2 i.e., AR (4) model for the return series observes an insignificant value. Table 4 displaying the ARCH statistics also indicates that the data in consideration have ARCH effects. Thus, **the null hypothesis of no ARCH effects is rejected**. The below used GARCH model is thus extended to include the arch effects.

GARCH Model

In the illustration, the commonly used ARCH(1) and GARCH(1, 1) models are outlined. The (G)ARCH model is extended to account for possible expiration day effects and price reversals on the day(s) after.

3 variables i.e. Return, Dummy 1 and Dummy 2 are considered to find the significant level.

Volume is taken to be the dependent variable.

Where **Dummy 1** is the dummy variable for expiration day which is used to find expiration-day effect on volume, return and volatility and this dummy takes the value of unity for all expiration-days and the value of zero otherwise i.e. for all non-expiration days.

Dummy 2 is the dummy variable for the next day succeeding (Friday) the expiration day for checking price reversal effect.

This dummy takes the value of unity for the next day's succeeding the expiration-days and the value of zero otherwise i.e. for all other days.

GARCH equation

GARCH=C(5)+C(6)*RESID(-1)^2+C(7)*GARCH(-1)

Table 5.1: Mean Equation

Variable	Coefficient	Std. Error	z-statistic	Prob.
C	5802.51	39.99545	145.0756	0.0000
RETURN	-29.64993	24.16336	-1.227061	0.2198
DUMMY_1	2163.827	100.4012	21.5518	0.0000
DUMMY_2	358.1682	133.155	2.689859	0.0071

Table 5.2: Variance Equation

Variable	Coefficient	Std. Error	z-statistic	Prob.
C	345175.3	41983.54	8.221681	0.0000
RESID(-1)^2	0.257925	0.020319	12.6936	0.0000
GARCH(-1)	0.681856	0.021041	32.40508	0.0000

Table 5.1 i.e., the mean equation indicates a **non-significant value**, thus implying an **acceptance of the defined hypothesis.** So, it can be said that there is neither a positive nor a negative price reversal following the expiration of the derivative contracts.

TGARCH Model

Finally, a threshold GARCH (or TGARCH) model is estimated that takes into account the possibility that over-pricing and under-pricing in the mean equation may affect volatility differently.

TGARCH equation

GARCH = C (5) + C (6)*RESID (-1)^2 + C(7)*RESID (-1)^2 * (RESID(-1)<0) + C (8)*GARCH (-1)

Table 6.1: Mean Equation

Variable	Coefficient	Std. Error	z-statistic	Prob.
C	5796.572	42.424	136.6343	0.0000
RETURN	-28.6595	24.55722	-1.16705	0.2432
DUMMY_1	2163.187	100.6485	21.49249	0.0000
DUMMY_2	363.389	133.3425	2.72523	0.0064

Table 6.2: Variance Equation

Variable	Coefficient	Std. Error	z-statistic	Prob.
C	356556.7	44150.75	8.075893	0.0000
RESID(-1)^2	0.272476	0.02525	10.79093	0.0000
RESID(-1)^2*(RESID(-1)<0)	-0.02303	0.029878	-0.77022	0.4412
GARCH(-1)	0.675719	0.022048	30.64804	0.0000

The result of the TGARCH Model, in table 6.1 & 6.2, is non-significant thus leading to the acceptance of the hypothesis. Thus, there is no evidence of significant over-shooting or under-shooting of the index on account of expiration of derivatives contracts.

CONCLUSION

The study indicated a significant expiration day effect of derivatives in India. The volume of trading is higher on expiration days than on non-expiration days. Both the mean and volatility of the returns to the market index at the National Stock Exchange were significantly different on expiration days, compared with other days.

No evidence of price reversals on the day following the expiration day was found. In other words, either the price reversal occurred on the expiration days itself, or the magnitude of the changes on the expiration day were not so large so as to necessitate a correction on the following day.

The derivatives trading in India has eventually improved the overall market depth and market liquidity thus reducing the asymmetric information and thereby reducing the volatility of the market even at expiration.

Thus, it can be concluded that there is no destabilization in the underlying stock market as a result of the expiration days of the equity derivatives.

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Corporate Governance and Performance: Indian Manufacturing Sector

Dr. Virendra Khanna

Abstract

Current study is based on the secondary data from 32 manufacturing companies of consumable goods, FMCG, pharmaceutical, and automobile sectors. The stepwise regression analysis has been performed to measure the impact of seven parameters of corporate governance given in SEBI clause 49 of the listing agreement. The study vindicates that the board composition, board ownership or shareholding pattern, disclosures, and other compliances are parameters of the corporate governance which have a positive and significant impact on the profitability of the manufacturing companies. It substantiates that degree of corporate governance is high among Indian manufacturing companies.

Keywords: Corporate governance, profitability, performance, manufacturing sector, disclosures, SEBI.

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Corporate governance mainly comprises the generally accepted customs, habits, norms, laws and regulations; which determine the manner in which a company operates its day to day functions. The comprehensive perspective of corporate governance can be defined as "corporate governance means all the efforts which took place for maximization of the shareholder's value without any adverse effect on the interests of the other stakeholders of the firm such as; employees, customers, suppliers, competitors, government, society and the investors." From the business perspective, corporate governance comprises all the processes and structures used to control and direct the companies. It defines the rights and duties of all the stakeholders of the company and also the rules and procedures to be followed by the company for making decisions related to corporate affairs. Hence, corporate governance defines the processes and structures for planning, implementing and monitoring the objectives of the company and ensures accountability of the company towards its stakeholders. The main objective of the corporate

governance is to ensure the fair degree of transparency in managing the affairs of the company, which can develop trust and secure the buoyancy of the stakeholders of the company. Globalization and liberalization have popularized the concept of corporate governance in developed countries. Due to the increased investment by the foreign institutional investment in the country, corporate governance has gained more importance, as the foreign investors need to ensure that the safety and utilization of their funds in the interest of the company and to increase the value of the shareholders. The managers of the company can provide this surety by managing high degree of transparency in the corporate affairs and by following good corporate governance practices. Corporate governance is the means through which the managers can develop trust among its stakeholders.{Cadbury Report (1992), "Corporate Governance can be defined as a system by which businesses are directed and controlled".}

The concept of corporate governance highlighted and became a matter of concern after the formulation of Clause 49 of the Listing Agreements by the SEBI in 2000. Clause 49 of the Listing Agreements was the first formal regulatory framework which is applied on all the listed companies. In 2009, Ministry of Corporate Affairs has also formulated some guidelines for the corporate governance in corporate sector, which are not mandatory but can be voluntarily adopted by the corporate sector. In India, National Foundation for Corporate Governance (NFCG) was established to promote and develop a framework for fair corporate governance practices among the companies and to promote ethical operations and processes of the businesses. The main objective of the NFCG is to raise the standard of the Indian companies by following the good corporate governance practices.

There is strong evidence based on the past researches that corporate governance affects the performance of the companies. There are many evidences available in the past which clearly shows that bad corporate governance affects the performance of the company negatively. Satyam Scandal in the year 2009 was one of the live examples which show that corporate governance and performance of the firm are correlated. Similarly, the instances of WorldCom and Enron, also established the relationship between corporate governance and corporate performance. Therefore, it is suggested that regulatory bodies and all the stakeholders should carefully monitor the weak corporate governance practices of the companies, because weak corporate governance will have adverse impact on the corporate performance. Companies in developed countries are facing intense competition both from the domestic and multinational companies. Corporate governance can be used to gain competitive advantage to compete in the markets and for survival also. It is well established fact that corporate governance and value creation by the firm are related to each other. Companies can get success by embracing and demonstrating ethical conduct towards its stakeholders and in the operations and processes of the company. Numerous studies are available in the literature, where the researchers have measured the relationship between corporate governance and corporate performance; the studies have shown mixed results. Some studies have proved a positive relationship between corporate governance and financial performance and some studies have proved a negative relationship between corporate governance and financial performance of the company.

Literature Review

Coskun and Sayilir (2012) measured the relationship between corporate governance and value of the firm. Researchers also explored the impact of corporate governance over profitability of the firms. The research was attempted on thirty one Turkish companies, using secondary data accessed from the financial reports of the companies. It was found from the study that corporate governance did not have any significant relationship with the profitability and firm's value. It was stated by the researchers that good corporate governance practices did not ensure good financial performance or high value of the firm.

Amba Muni(2014) aims to measure the relationship between corporate governance and financial performance of the firms. The research was attempted on 39 companies of Bahrain. The researchers used various variables to measure the corporate governance namely; CEO duality, Proportion of Non-executive Directors, Chairman of Audit Committee, Concentrated Ownership structure, Gearing Ratio, Institutional Investors and Return on Assets to denote financial performance of the company. It was found from the study that corporate governance had a significant effect on the financial performance of the companies of Bahrain.

Ehikioya, B. I. (2009) found during his research that CEO duality had a significant impact over the overall financial performance of the company. It was also stated in the research that if the positions of both the CEO and chairman were held by one person only, the agency cost would get created, as it might also restrict the board from effectively exercising oversight and monitoring duties, which would lead to lower performance of the company, Coles, et al. (2001).

Core et al. (2005) found in their study that the higher proportion of independent directors in the board of a company would have a positive impact on the financial performance of the company. The value of the firms was found to be higher whose board consisted higher number of independent directors in comparison to dependent directors. In contrast to the above study, Vafeas and Theodorou (1998) stated that there was no relationship between number of independent directors and the value of the firm. Yammeesri and Herath (2010) found in their study that independent directors did not contribute in the financial performance of the firms. The relationship between independent directors and corporate performance had been found insignificant in Thai companies.

Salami, K. A. (2011) measured the impact of ownership structure and financial performance of the companies. It was stated in the research that conflicts of interests, ownership structure and poor governance system all these had a negative impact over the corporate performance. It was found from the study that low ownership concentration led to lower profitability of the firm. Sorensen (2007) measured the impact of ownership structure on the cost efficiency. It was clear from the study that ownership structure had a significant impact on the corporate performance and cost efficiency. Research also revealed the fact that indirect ownership and dispersion both affected the control over the company, which resulted into higher agency costs and lower performance of the company. Cost inefficiency had been found in the firms who had fragmented ownership.

Chen, Lai, and Chen (2012) found during their research that higher use of internal funds have a positive impact on the corporate performance. Weill (2003) established that the relationship between leverage and corporate performance had been found negative in the companies of Italy, while the impact of leverage on the corporate performance was found significantly positive leverage in the companies of France and Germany. Majumdar and Chhibber (1999) investigated the relationship of leverage and profitability of the Indian companies. The relationship was found negative between leverage and corporate performance.

Aggarwal (2013) measured the relationship between corporate governance and corporate performance. The research was focused on 20 Indian companies. It was found from the study that corporate governance had a significant impact over the performance of the companies in India. Further, the study reveals that governance rating had a positive and significant impact on the corporate performance. It was also stated in the research that environmental ratings and employees ratings also had a significant impact over the corporate performance.

Vo Duc and Phan Thuy (2013) measured the impact of corporate governance over the performance of the companies. The study was conducted on 77 companies of Vietnam. Researchers measured the corporate governance using nine parameters such as; size of board, presence of female board members, duality of the CEO, presence of independent directors, ownership of the board, education level of board members, compensation of the board and block holders. The results of this study revealed that parameters of the corporate governance were found to be positively related with the corporate performance. Presence of female board members, compensation of board members and duality of the CEO, are found to be positively and significantly related with the financial performance of companies in Vietnam. The study also revealed that ownership of board members did not have a significant relationship with the financial performance of the companies.

Peters and Bagshaw (2014) measured the impact of corporate governance over the corporate performance of the companies of Nigeria. The research was based on the secondary materials collected from the 33 Nigerian companies from manufacturing, oil & gas and financial sector, for the period 2010 to 2011. It was found from the study that corporate governance practices were very high in the banking sector in comparison to manufacturing and oil & gas companies. The results of the study also indicated that corporate governance and corporate performance were

not significantly related to each other. No significant difference had been found in the financial performance of the companies with different level of corporate governance.

The literature review shows that most of the researchers have measured the corporate governance by using the numerous variables. There is a lack of studies in context of Indian companies, who have measured the corporate governance using the SEBI guidelines under Section 49 of the Listing Agreement. The current study will bridge the gap of literature and will be focused on measuring the corporate governance using the variables or parameters given in SEBI section 49 of the Listing Agreement. Thus keeping in view the importance of the corporate governance, the current study is an attempt to measure the corporate governance among manufacturing sector and its relationship with the financial performance of the companies.

Objectives of the Study:

The main objective of the study is to measure the corporate governance of the manufacturing sector of India and also to measure the relationship between corporate governance and profitability of the company.

Research Methodology

The study is purely based on the secondary data, taken from the annual reports of the companies for the period 2011 to 2015. Corporate governance has been measured using seven parameters which are mentioned in the SEBI Section 49 of the Listing Agreement. These parameters for compliance are mainly; board composition, shareholding pattern, board level committees, role and power of audit committee, number of subsidiaries, disclosures, and other compliance. Total 32 manufacturing companies had been selected for the purpose of study, listed on National stock exchange. The sampling is done using stratified random sampling techniques. Manufacturing companies have been divided into different strata and four types of strata have been taken in the study namely; consumable durable, automobile, pharmaceutical, and FMCG. From each of the four strata eight companies have been selected randomly. Variables used in the study are mainly, parameters of corporate governance (Independent variables), profitability (dependent variable) and organizational factors (control variables).

The explanation of the variables is given below in detail. The conceptual model used in the study is given in figure 1 below.

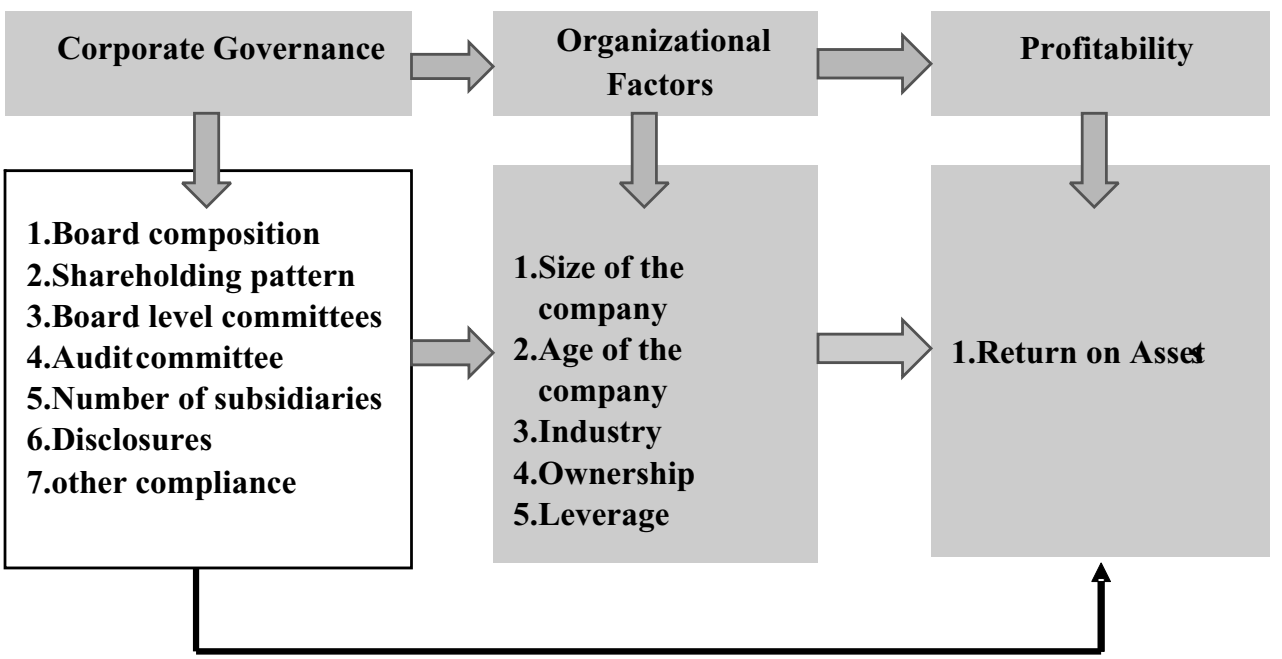

Figure 1: Conceptual Model

Sl.No.	Variable Type	Definition	Measurement
	Dependent Variable		
	Profitability	Return on Asset	(Profit before tax and interest)/ Total Asset
	Independent Variables		
V1	B_Comp	Board composition	Total number of directors
V2	Share_H	Shareholding pattern	Share of promoters/promoter group in total equity
V3	Comm	Board level committees	Number of independent director on the committees
V4	Audit	Role and power of Audit committee	Number of auditors
V5	Subsi	Number of subsidiaries	Number of subsidiaries and associated companies
V6	Discl	Disclosures	Remuneration of directors
V7	Other_C	Other compliance	Report on corporate governance in annual report, '1' if yes and '0' if no
	Control Variables		
V8	Size	Size of the firm	Natural log of Total assets
V9	Age	Age of the firm	Years the firm got established
V10	Indstry	Industry effect	Dummy variable for different types of manufacturing industry
V11	Owner	Type of Ownership	'1' if public sector and '0' if private sector company
V12	Levg	Financial Leverage	Debt to equity ratio

Formulation of Hypothesis

Board Composition**:** Board composition has been measured using the number of directors. The previous studies show that board size has both negative and positive effect on the profitability of the companies. Garg (2007) finds in his research that firms with smaller boards outperform the firms with larger board. There is an inverse relationship between number of directors and the profitability of the company. Lipton and Lorsch (1992), and Yermack (1996) conclude in their research that the small number of directors in the board will positively affect the company. The profitability of the company gets improved if the number of directors is less in the company. Klein (1998) and Dalton (1999) state in their research that large number of directors will contribute to the success of the firm, as the larger is the number of directors in the board of the company, the larger will be the information collected by these directors. Therefore the number of directors in the board affects the profitability of the company. On the basis of the above literature the null hypothesis is framed as follows:

Null hypothesis (H_{01}): There is no relationship between number of directors and profitability of the company.

Shareholding Pattern: Shareholding pattern shows the number of equity shares owned by the promoters or the promoters group. Adenikinju and Ayorinde (2001) find in their study that ownership of board does not have any significant effect on the corporate performance. The profitability of the firms is not affected by the shareholding pattern of the company.

Null hypothesis (H_{02}): There is no relationship between shareholding pattern and profitability of the company.

Board level committees: Board level committees indicated the total number of independent directors. Kaur (2014) stated in his research that board level committees and performance of the companies were positively related to each other. Board level committees played important role in enhancing the competitiveness and performance of the companies. In contrast to this the study of Hussain and Othman (2012) stated that the number of independent directors in the board level committees did not have any impact over the profitability measures. Imam and Malik (2007) stated in their research that firms whose board had high number of independent directors were able to raise more funds with equity.

Null hypothesis (H_{03}): There is no relationship between number of independent directors and profitability of the company.

Audit committee: The audit committee parameter of corporate governance indicates the number of auditors. It is one of the best corporate governance practices to show the number of auditors in the annual report of the company. The audit committee of the company executes the accounting functions and external audit. Kojola (2008) measured the relationship between audit committees and the performance of the company. It was found from the study that there was a positive and significant relationship between audit committees and the profitability of the company.

Null hypothesis (H_{04}): There is no relationship between audit committee and profitability of the company.

Number of subsidiaries: Number of subsidiaries is another important parameter of corporate governance. Under this variable, the number of subsidiaries is shown. The companies which show the number of subsidiaries and the information about their subsidiary companies in their corporate governance report indicates the high degree of transparency and higher level of profitability.

Null hypothesis (H_{05}): There is no relationship between number of subsidiaries and profitability of the company.

Disclosures: Disclosure parameters include the remuneration of the directors of the company. Kapooria et al. (2013) and Jensen and Murphy (1990) stated in their researches that the disclosure of the remuneration of the directors in the annual report of the company positively affects the financial performance of the company. The disclosure of remuneration of directors builds confidence in the shareholders, and creates a positive image about the company. Positive and sustainable corporate image leads to the profitability and overall good performance of the company. Therefore, it can be concluded that the disclosure of remuneration of directors and profitability of the firms have a positive relationship. Further the studies of, Jensen and Meckling (1976) and Mehran (1995) stated that remuneration of the directors is a parameter of corporate governance which attaches financial benefits to the management of the company and helps in running the company in the interest of the shareholders. It also helps in solving the agency problem between shareholders and management and affects the performance of the company positively.

Null hypothesis (H_{06}): There is no relationship between remuneration of directors and profitability of the company.

Other compliance: Under other compliances the parameter has been measured yes or no, the company who discloses the corporate governance report in its annual report is following the ethical practices and tends to more transparent. Higher degree of transparency leads to the higher level of profitability. On the other hand, the companies which do not include or disclose corporate governance report in the annual reports tend to be less transparent and lead to lower profitability.

Null hypothesis (H_{01}): There is no relationship between other compliances and profitability of the company.

Data Analysis

This section deals with the analysis of secondary data with the help of correlation and multiple regression analysis. The results of correlation analysis have been given in Table I.

Table 1: Correlation Matrix

	ROA	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	VIF
ROA	1													1.29
V1	0.04	1												1.34
V2	0.31	0.29	1											1.59
V3	0.15	0.10	0.21	1										1.57
V4	0.08	0.20	0.12	0.09	1									1.32
V5	0.18	-0.04	-0.03	0.13	0.14	1								1.31
V6	0.12	0.21	-0.05	-0.29	0.06	0.04	1							1.38
V7	0.24	0.04	0.13	0.05	0.29	0.11	-0.03	1						1.34
V8	0.42	0.03	0.12	0.18	0.21	-0.01	0.24	0.04	1					1.39
V9	0.04	0.18	0.03	0.21	0.11	0.02	0.04	0.00	0.02	1				1.59
V10	0.03	-0.01	0.11	0.10	0.02	-0.04	0.01	0.16	0.14	0.03	1			1.61
V11	0.12	0.05	0.02	0.14	0.01	0.10	0.09	0.14	0.02	0.02	0.04	1		1.22
V12	-0.35	0.17	0.18	0.08	0.09	0..06	0.04	0.00	0.01	0.02	0.04	0.05	1	1.19

Interpretation:

The correlation matrix shows the correlation between all the variables used in the study namely; dependent, independent and controlled variables. VIF shows the variance inflation factor, is a measure of multi-collinearity among the variables. It can be interpreted from the correlation matrix that none of the variable has significant correlation with other variables. The highest value of correlation that has been noticed is 0.42 between size of the company and return on asset. Thus, it can be said that there is no correlation among the dependent and independent variables. VIF value is the maximum at 1.61 which shows that there is no significant multi-collinearity among the variables. Further the conceptual model is tested for Autocorrelation and Heteroscedasticity among the variables. The results of Autocorrelation and Heteroscedasticity have been given in Table 2 in detail.

Table 2: Results of Autocorrelation and Heteroscedasticity

The White Test		Breusch Godfrey Test	
F-Statistics	1.6728	F-Statistics	5.6258
Observed R Sqaure	26.8935	Observed R Sqaure	31.2345
p-value of F (26276)	0.2156	p-value of F (26276)	0.1972
p-value of chi-square (30)	0.1924	p-value of chi-square (30)	0.1634

Interpretation:

It can be seen from the Table 2 that chi square and F-value both are found to be insignificant while using the White test, which shows that multicollinearity is not present among the variables. The results of Breusch Godfrey Test show that chi square and F-value both are found to be insignificant, thus there is no sign of autocorrelation among the variables. Thus both the tests show that data is suitable for further analysis and the data set can be used for multiple regression analysis. Table 3 shows the results of multiple regression model analysis. The following regression equation has been used to measure the relationship between dependent variable and independent variables:

$$ROA_i = \beta 0 + \beta 1B\_Comp_i + \beta 2Share\_H_i + \beta 3Comm_i + \beta 4Audit_i + \beta 5Subsi_i + \beta 6Discl_i + \beta 7Other\_C_i + \beta 8Size_i + \beta 9Age_i + \beta 10Inds_i + \beta 11Own_i + \beta 12Levg_i + \varepsilon_i$$

The regression equation has been solved using stepwise regression equation, where the organizational variables have been controlled during the analysis.

Table 3: Results of regression analysis

Model	Variables Entered	Method
1	B_Comp	Forward (Criterion: Probability-of-F-to-enter <= .050)
2	Share_H	Forward (Criterion: Probability-of-F-to-enter <= .050)
3	Discl	Forward (Criterion: Probability-of-F-to-enter <= .050)
4	Other_C	Forward (Criterion: Probability-of-F-to-enter <= .050)

Table 4: Results of regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.621a	0.386	0.385	18.2985633	0.386	1297.482	1	2067	0.000
2	0.631b	0.398	0.397	18.1201897	0.012	41.895	1	2066	0.000
3	0.636c	0.404	0.403	18.0323286	0.006	21.182	1	2065	0.000
4	0.645d	0.408	0.414	18.0112567	0.004	17.321	1	2064	0.000

a. Predictors: (Constant), B_comp
b. Predictors: (Constant), B_comp, Share_H
c. Predictors: (Constant), B_comp, Share_H, Discl
d. Predictors: (Constant), B_comp, Share_H, Discl, Other_C

Tables 3 and 4 show that from the stepwise regression model, four significant models have been emerged which show the relationship between dependent and independent variables in the current study. First regression model shows the relationship between board composition and return on asset. The value of R and R-square is 0.621 and 0.386 respectively. The value of r-square changes increases with the addition of some more independent variables in the regression model. Second regression model includes the two independent variables namely; board composition and shareholding pattern. The value of r-square changes from 0.386 to 0.398 after adding the variable shareholding pattern. That shows that the relationship of board composition with return on asset gets stronger if we add the independent variable shareholding pattern in the regression model. Regression model 3 indicates that the change in r-square increases from 0.398 to 0.404 if we add one more independent variable which is disclosure in the regression model. Thus a significant change can be seen in the relationship of dependent and independent variables. Similarly, the regression model 4 indicates that the value of R-square further gets changed if we add one more independent variable in the regression model which is the other compliance. The value of R-square increases from 0.404 to 0.408 by adding other compliance variable in the model. Thus, the last model seems to be most significant model for measuring the relationship between corporate governance and profitability of the firms because the value of R-square has been found to be 0.645. It can be indicated from the value of R-square that the 65 percent of the total variation in the value dependent variable is due to the independent variables and rest 35 percent is due to other factors. Therefore, the four independent variables which are found to be significant in the regression model namely; board composition, shareholding pattern, disclosure and other compliance can explain the 65% of the total variance in the profitability of the firm.

Table 5 : Anova Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	434445.635	1	434445.635	1297.482	0.000
	Residual	692108.946	2067	334.837		
	Total	1126554.581	2068			
2	Regression	448201.508	2	224100.754	682.524	0.000
	Residual	678353.073	2066	328.3412744		
	Total	1126554.581	2068			
3	Regression	455089.114	3	151696.3713	466.521	0.000
	Residual	671465.466	2065	325.1648746		
	Total	1126554.581	2068			
4	Regression	466088.213	4	116522.0533	402.813	0.000
	Residual	660466.368	2064	319.9933953		
	Total	1126554.581	68			

Table 5 depicts the value of Anova for each of the four models derived by the stepwise regression model. In the first regression model the value of F is 1297.482, which is found to be significant at 99 percent of confidence level. Similarly in the second, third and fourth models, the value of F is found to be significant at 99 percent of confidence level. Thus the null hypothesis is rejected which states that there is no relationship between corporate governance and profitability. A significant relationship has been found in the dependent and independent variables used in the study.

Table 6: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta	Std. Error		
1	(Constant)	-72.217	3.199			-22.573	0.000
	B_Comp	8.648	0.240	0.621	0.017	36.021	0.000
2	(Constant)	-81.795	3.497			-23.392	0.000
	B_Comp	7.877	0.266	0.566	0.019	29.621	0.000
	Share_H	0.198	0.031	0.124	0.019	6.473	0.000
3	(Constant)	-79.806	3.506			-22.760	0.000
	B_Comp	7.579	0.272	0.544	0.020	27.822	0.000
	Share_H	0.189	0.031	0.118	0.019	6.203	0.000
	Discl	0.085	0.019	0.082	0.018	4.602	0.000
4	(Constant)	-75.183	3.629			-21.675	0.000
	B_Comp	7.124	0.281	0.512	0.200	26.137	0.000
	Share_H	0.173	0.031	0.108	0.019	5.982	0.000
	Discl	0.079	0.021	0.069	0.019	4.128	0.000
	Other_C	0.068	0.018	0.043	0.020	3.982	0.000

Table 6 depicts the results of regression coefficients along with the t-value and p-value for all the four regression models. In the first regression model the value of unstandardized coefficients for board composition variable was 8.648 and beta value was 0.621. These values get reduced if we add some more independent variables in the regression model. The least values of unstandardized coefficients and beta are of other compliance variable. The t-values are found to be significant for all the independent variables in all the four regression models. In the current study only four variables out of seven independent variables were found to be significant and successfully represent the corporate governance of a firm.

Null hypothesis 1 which states that there is no relationship between board composition and profitability of the firms, is found to be rejected and it can be said on the basis of p value that there is a significant and positive relationship between board composition and return on assets. The number of directors in the board committee is an important indicator of the corporate governance of a firm and it affects the profitability of the company. The higher number of directors in the board committee positively affects the profitability of the firms.

Null hypothesis 2, which states that there is no relationship between shareholding pattern and profitability of the company, is found to be rejected in the current study and it can be said on the basis of p value that there is a significant and positive relationship between shareholding pattern and return on assets. The number of equity shares owned by the promoters of the company, which is also called the board ownership, is an important indicator of the corporate governance of a firm and it affects the profitability of the company. The higher proportion of shareholding pattern by the promoters encourages the better control of promoters on the company and also ensures the better corporate governance practices, which leads to higher performance of the company. Therefore, the proportion of equity shares owned by the promoters of the company positively affects the performance of the company.

Null hypothesis 6 which states there is no relationship between remuneration of directors and profitability of the

company is found to be rejected in the current study. Disclosure norms under corporate governance as per SEBI clause 49 of listing agreement has a positive impact on the corporate financial performance. The companies which disclose the amount of remuneration in their annual reports indicate a high level of transparency in their corporate governance practices and it positively affects the performance of the firms. The higher degree of disclosures ensures the higher degree of transparency in corporate affairs and it is a good signal for the corporate performance.

Null hypothesis 7 which states that there is no relationship between other compliances and profitability of the company is found to be rejected during the study. Other compliances of corporate governance have indicated the fact that whether the company shows the corporate governance report in their annual report or not? The companies which prepare the corporate governance report and make it available to be accessed by any individual are known to be more transparent companies. The companies which follow ethical practices during their day to day operations and disclose the corporate affairs publicly in a trustful manner, show higher performance than the companies which do not disclose the facts about the corporate affairs to the stakeholders of the company.

It was also found from the study that board level committees, audit committee and number of subsidiaries; do not have a significant impact on the profitability of the company. The board level committee is measured by number of independent directors in the board level committees of the company. The higher or lower number of independent directors in the board level committees does not have a significant impact on the profitability of the company. Audit committee which indicates the number of auditors in the company and number of subsidiaries, does not make a significant impact on the profitability of the company.

It can be concluded from the study that corporate governance and profitability of the firm are related to each other. Higher number of disclosures in the corporate governance report shows the fair degree of transparency in the operations of the company. Board composition, board ownership or shareholding pattern, disclosures and other compliances are the parameters of the corporate governance which have a positive and significant impact on the profitability of the manufacturing companies of India. It was also found from the study that degree of corporate governance is high among Indian manufacturing companies. All the selected companies completely follow the SEBI clause 49 of the listing agreement.

Limitations

The study has the following limitations:

1. Current study is limited to the manufacturing sector of India; the study can be extended to other sectors also.
2. The sample size of the study is Limited to 32 manufacturing companies listed on NSE.
3. The study is based on the secondary data about the corporate governance report derived from the annual reports of the companies.

Future scope

The study can be extended to the financial and other sectors of the economy. Primary data can also be collected to have more insights about the corporate governance practices of the companies from the employees, customers and other stakeholders' point of view. The voluntary parameters of corporate governance can also be measured to examine their relationship with the profitability of the firm.

Implications

The managerial implications of the study are that the companies which follow better corporate governance practices can achieve higher profitability. The better corporate governance practices show the higher degree of transparency in the corporate affairs, which develop a relation of trust between company and its stakeholders. The healthy relationship between management and stakeholders has a positive impact on the profitability of the firm. Companies which follow ethical practices and disclose the mandatory information in their annual report and prepare corporate governance, report accordingly and tend to generate high profits than their counterparts. Therefore, the manufacturing companies should follow better corporate governance practices and fair degree of transparency in their day to day operations.

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Eliminating Corruption from Organizations : Role of Business Schools

Dr. Ajith P

Abstract

This paper delineates the contribution b schools can make in elimination of corruption in organizations. Annually around three lakh MBAs are produced by b schools in India. Majority of them join various existing organizations as positive change agents. PRME has laid the foundation for responsible management education at a global level. The paper elaborates the strategy Indian business schools need to adopt to make a significant contribution towards elimination of corruption in organizations. The paper concludes with the hope that the b schools and the academic leaders who steer them are expected to play a very critical role in eliminating corruption from organizations by grooming ethical managers and leaders.

Keywords: *PRME, Corruption, Organizations, B-schools, Academicians, Managers, Leaders*

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Transparency International (TI), originally founded in Germany in May 1993, is a global civil society organization leading the fight against corruption. It brings people together in a powerful worldwide coalition to end the devastating impact of corruption on men, women and children around the world. The mission of TI is to create change towards a world free of corruption. It publishes an annual Global Corruption Barometer and Corruption Perceptions Index, a comparative listing of corruption worldwide. The headquarters of TI is located in Berlin, Germany. TI defines corruption as the 'misuse of entrusted power for private gain.'

Corruption is one of India's greatest challenges. It is a major obstacle for growth and sustainable development. It diverts resources from proper use, thwarts the promotion of necessary competition among various firms (leading to monopoly) and thus hurts all the people in the country. Corruption can tarnish the image of the nation and impede the progress towards becoming a developed nation.

Transparency in all transactions by administrators, managers and leaders can reduce corruption to a large extent. The basic facts, figures, policies and mechanisms should be revealed by all organizations for anyone to scrutinize (especially public organizations). India rose to 76th rank (2015) from 85th rank (2014) on the perception of corruption index where the first rank marks the country perceived as least corrupt (Ram, 2016). Though India has improved its perception, we have to travel a long way before India will be perceived as a corruption-free-nation.

Organizations should commit themselves for responsible and sustainable business practices. They can do this by promoting transparency in all transactions they undertake in addition to other good governance measures. Transparency is about shedding light on rules, plans, processes and actions. It is knowing why, how, what, and how much. Transparency ensures that public officials, civil servants, managers, board members and businesspeople act visibly and understandably, and report on their activities. It also means that the general public can hold them accountable. It is the surest way of guarding against corruption, and helps increase trust in the people and organizations on which the future of every citizen depends. Trust can reduce the transaction cost, making organizations more efficient, effective and ethical (Urban, 2005).

1.1 Categories of Corruption

According to TI, corruption can be classified as grand, petty and political, depending on the amounts of money lost and the sector where it occurs. Grand corruption consists of acts committed at a high level of government that distort policies or the central functioning of the state, enabling leaders to benefit at the expense of the public good. Petty corruption refers to everyday abuse of entrusted power by low and mid-level public officials in their interactions with ordinary citizens, who often are trying to access basic goods or services in places like hospitals, schools, police departments and other agencies. Political corruption is a manipulation of policies, institutions and rules of procedure in the allocation of resources and financing by political decision makers, who abuse their position to sustain their power, status and wealth.

Corruption impacts societies in a multitude of ways. In the worst cases, it costs lives. Short of this, it costs people their freedom, health or money. The cost of corruption can be divided into four main categories: political, economic, social, and environmental. On the political front, corruption is a major obstacle to democracy and the rule of law. In a democratic system, offices and institutions lose their legitimacy when they are misused for private advantage. This is harmful in established democracies, but even more so in newly emerging ones. It is extremely challenging to develop accountable political leadership in a corrupt climate.

Economically, corruption depletes national wealth. Corrupt politicians invest scarce public resources in projects that will line their pockets rather than benefit communities, and prioritize high-profile projects such as dams, power plants, pipelines and refineries over less spectacular but more urgent infrastructure projects such as schools, hospitals and roads. Corruption also hinders the development of fair market structures and distorts competition, which in turn deters investment. Corruption corrodes the social fabric of society. It undermines people's trust in the political system, in its institutions and its leadership. A distrustful or apathetic public can then become yet another hurdle to challenging corruption. Environmental degradation is another consequence of corrupt systems. The lack of, or non-enforcement of, environmental regulations and legislation means that precious natural resources are carelessly exploited, and entire ecological systems are ravaged. From mining, to logging, to carbon offsets, companies across the globe continue to pay bribes in return for unrestricted destruction.

Given the above described backdrop, the objectives of this paper include; (1) Discuss the role of b schools in eliminating corruption from organizations, (2) Elaborate the strategy that can be adopted by all b schools to eliminate corruption from organizations.

1. Role of b schools in eliminating corruption

Business schools play an important role in shaping future business managers, entrepreneurs and leaders; and also in educating them on the importance of responsible citizenship. Through research, educational resources, learning know-how and educational infrastructure, b schools can increase knowledge and understanding of responsible organizational behavior and citizenship. Business leaders who are values-led and purpose driven have to redefine the role of business in society and shape them with the right values and culture to achieve service excellence (Manwani, 2013). Rational leadership capability alone is no longer adequate and needs

to be complemented with a new set of competencies associated with developing 'wise' responsible leaders who can steer organizations to sustainability and responsible growth while putting purpose along with profits. Higher order thinking and decision-making skill aligned with values and vision, and incorporating the best possible outcome for all stakeholders is expected from business leaders.

Between 2008 and 2012, the total number of b schools in the country doubled to 2,385, according to AICTE, while the total student intake rose from around 100,000 to 300,000(Murray, 2014). According to the apex regulator for technical education - All India Council for Technical Education (AICTE), there are 3644 b schools in the country offering Master of Business Administration (MBA) and 308 institutions offering Post Graduate Diploma Management (PGDM) as on May 2012. Currently there are more than 4500 b schools in the country and is perhaps the highest in the world. The time has come for India to look beyond, and be a beacon to the world in the field of management education. This is possible only by effectively blending the eastern management principles, in which we are leaders, and the modern western outlook, which we have already borrowed in good amount. The way ahead for management institutes of India is of higher responsibility. On one side it will have to meet the national aspirations and on the other side it will have to show the right and better direction to the modern management education which is at crossroads globally (Paninchukunnath, 2013).

Many initiatives were created worldwide to fight against corruption and to advance transparency. Among them, the UN Global Compact (UNGC) was launched in July 2000, as a policy platform and a practical framework for companies that are committed to sustainability and responsible business practices. The initiative seeks to align companies' business operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. In this direction the GC and leading academic institutions jointly developed in 2007 the Principles for Responsible Management Education (PRME), a set of six principles which lay the foundation for the global platform for responsible management education. The PRME are inspired by internationally accepted values such as the principles of the UNGC. The PRME seeks to establish a process of continuous improvement amongst institutions of management education in order to develop a new generation of business leaders capable of managing the complex challenges faced by business and society in the 21st Century.

2. The PRME

The Principles for Responsible management education (PRME), which were unveiled by a group of scholars and leading academic organization at the UN Global Compact Leaders Summit in July of 2007 and now endorsed by over 600 business schools and management-related academic institutions, serve as guidelines for management education providers to enhance curricula, pedagogy, research and incentives to prepare organizational leaders who will balance economic with societal goals. The six principles to be adopted by management institutions are given below:

2.1 The six principles for responsible management education:

A. *Purpose: We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.*

B. *Values: We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.*

C. *Method: We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.*

D. *Research: We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.*

E. *Partnership: We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.*

F. *Dialogue: We will facilitate and support dialogue and debate among educators, business, government, consumers, media, civil society organizations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.*

Business schools should implement all the above six principles, starting with those that are more relevant to their capacities and mission. They have to report on progress in adopting the above six principles to all our stakeholders and exchange effective practices related to these principles with other academic institutions. The practices in the b school should serve as example of the values and attitudes they wish to convey to their students.

3. Managerial Approaches to Fight Corruption

Managers adopt two broad ways to address corruption - one is 'inspirational leadership' and the second is 'compliance system.' Both paths integrally address the individual as the centre of their concerns. Moreover they both rely on the ability of each individual to act in accordance with the established standards. A person could be inspired by good leadership, identifying and conforming to the leader's values. Inspiration focuses on affective motivation that in the end, if effective, will drive their own enthusiasm to seek out more efficient and better practices.

Within a compliance system the individual faces, rules, processes, and roles that restrain them from certain actions. Both systems focus on either eliminating the opportunity or strengthening the enforcement. It is imperative that organizations use these two tools simultaneously as they are complementary. They should propose goals, roles and incentive systems that allow a person to proliferate in conformation with human dignity, justice and truth. In this way the development and nourishment of honesty overall contributes to the common good. Compliance systems should help to diminish opportunities of corruptive behavior, while enforcing rules and norms. The human being can only thrive by living freely all the positive values. Society should contribute with systems , norms and rules that unite people's actions under a global umbrella of driving the common good. Organizations accomplish their mission of providing goods and services efficiently when their constituents can work respecting human dignity, collaborating with the common good, developing justice, and ultimately being true and honest in their daily decision-making.

4. Strategic Approaches which b schools can Adopt

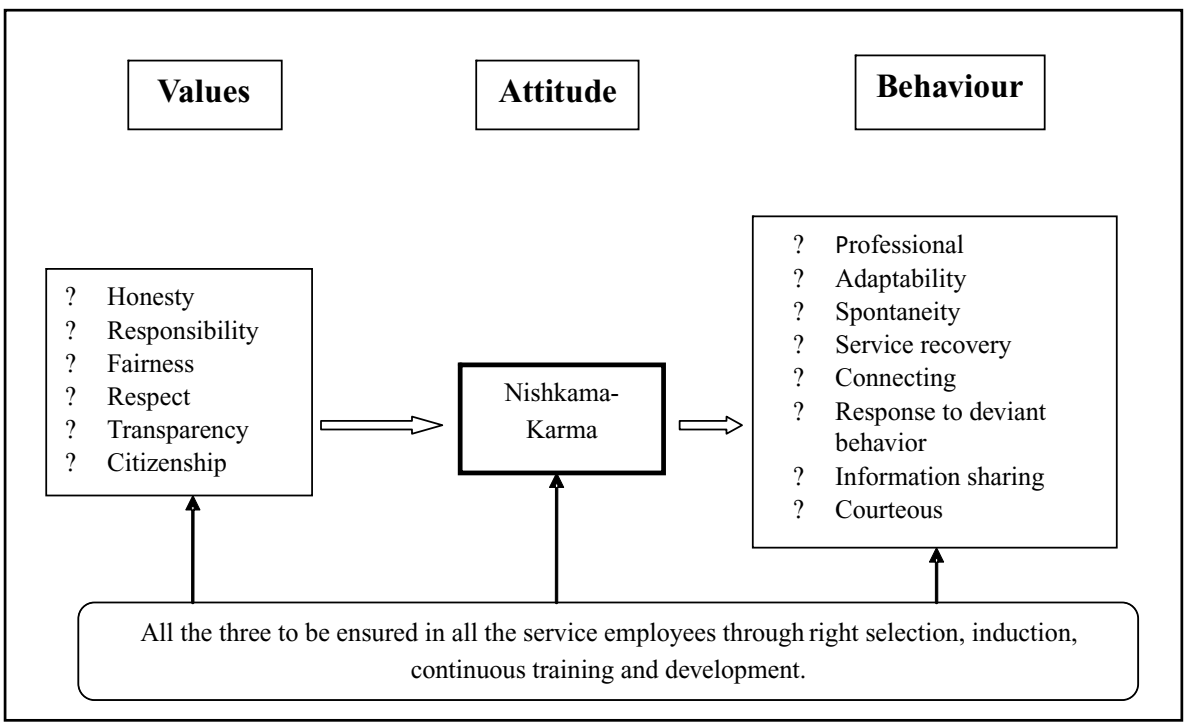
In the current academic environment, corporate responsibility and sustainability have entered but not yet become embedded in the mainstream of business related education. The PRME therefore emphasize a timely global call for business schools and universities world-wide to gradually adapt their curricula, research, teaching methodologies and institutional strategies to the new business challenges and opportunities. The six strategic approaches which b sschools can adopt to eliminate corruption in the organizations is shown in the **figure 1**. Each of the approaches which can be implemented by any b school is elaborated below.

Figure 1. Strategic Approaches which all b schools can adopt

A. Train budding managers to adopt Nishkama attitude

In order to encourage budding managers to fight against corruption, it is important to propose clearly the foundations of positive behaviour. It is not just to meet some ethical standards considering them as external constraints, but to realize that the construction of a better society is expected from managers and organizations. Budding managers, who are receiving training, mentoring and development in b schools, should be encouraged to uphold human dignity, common good, justice, truth and honesty.

World's most admired companies' survey uses nine attributes to evaluate the reputation of the companies (see **Appendix 1** for all nine attributes). Corporate culture shapes the internal environment of a service organization. It includes factors such as vision, mission, values, commitment to continuous improvement, customer orientation, ethical conduct etc. Thus to shape the employee behavior, Nishkama-Karma concept has to be made an integral part of service organization's culture. This will reinforce the efforts undertaken to shape the new employees in the initial days in the organization. Living the right values, right attitude and demonstrating the appropriate behaviours (as given in **Figure 2**) by all employees will spread a Nishkama-Karma culture across the organization and help the organization to sustain service excellence and achieve service leadership. The values in the model are based on AMA ethics code and the employee behaviours are based on the study done with 113 consumers who availed interpersonal services and experienced service satisfaction. The focus of employees with nishkama attitude will be to undertake selfless service and not on the personal gains (Paninchukunnath and Jain, 2010).



Source: (Paninchukunnath and Jain, 2010)

Figure 2. Nishkama-Karma Model for achieving service excellence in interpersonal services

The concept as per Gita advocates - "*To action alone hast thou a right and never at all to its fruits; let not the fruits of action be thy motive; neither let there be in thee any attachment to inaction*" (Prabhupada, 1989). There are three considerations here - prescribed duties, capricious work, and inaction. Prescribed duties are activities enjoined in terms of one's acquired modes of material nature. Capricious work means actions without the sanction of authority, and inaction means not performing one's prescribed duties. Lord Krishna advised that Arjuna (budding manager) not be inactive, but that he performs his prescribed duty without being attached to the result. One who is attached to the result of his work is also the cause of the action. Thus he is the enjoyer or sufferer of the result of such actions.

As far as prescribed duties are concerned, they can be fitted into three subdivisions, namely routine work, emergency work and desired activities. Routine work performed as an obligation in terms of the scriptural injunctions, without desire for results, is action in the mode of goodness. Working with expectation of specific desired results becomes the cause of bondage; therefore such work is not auspicious. Everyone has his proprietary right in regard to prescribed duties, but should act without attachment to the result; such disinterested obligatory duties doubtlessly lead one to the path of liberation (self-actualization). Lord Krishna instructs that everyone has the right to perform actions in order to purify ones existence and advance in spiritual knowledge. But one should not cultivate one's mind to think that by the right to perform actions, one receives rewards. This mentality is destructive to advancement because then one will get attachment to the actions and then subsequently to the rewards. According to Lord Krishna, one should neither be attached to results of action nor to inaction of not performing one's prescribed activities. We should not allow our egos to dictate to us that we should be inactive, because, then we incur the sin of non-committance in performing our natural duties every day. The Nishkama-Karma attitude of service employees is beneficial for themselves, organization and customers as shown in the **Table 1** below.

Table 1 - Comparison of Nishkam-Karma (the right attitude) and Sakam-Karma (self-interest driven).

Nishkam-Karma (selfless approach)	***Sakam-Karma*** (self- interest driven)
➢ **Benefit for employees**	
Psychological energy conservation	Burnout
Reactionless, steady action	Reactionful, erratic action
Perfection (as the aim)	Success
Inner autonomy	Dependence on praise etc.
Freedom	Bondage
Work-as-worship for excellence	Competitive rivalry
Mind-enrichment	Job-enrichment
Leads to yoga with the higher self	Alienation
Better concentration and focus	Distraction
➢ **Benefit for organization**	
Socio-economically appropriate	Questionable
Work-commitment	Reward
Employee engagement	Detachment
➢ **Benefit for customers**	
Satisfying service experience	Ordinary/poor service experience

Source - Adapted from '*Ethics in Management*' by Prof. S. K. Chakraborty(2006)

Along with '*Nishkama Attitude',* when the employee is having positive attitude, the benefits to organization magnifies many fold. Positive attitude manifests in the employee in the form of positive, constructive and creative thinking; optimism, the motivation and energy to do things and accomplish goals, and a happy demeanor.

The dynamic and fast-changing nature of our world today is best described by managerial acronym- VUCA, short for volatility, uncertainty, complexity, and ambiguity. Nishkama-Karma Model is useful in employee selection but it does not discuss the skill dimension and does not directly discuss hardworking orientation, ambition to self-actualize and emotional intelligence which are critical qualities needed in employees of an organization which want to excel in VUCA world. Given the narrow approaches adopted by majority of the organizations, the need for a holistic framework is very high. Paninchukunnath (2015) has proposed a holistic framework for employee selection in the VUCA world- the KESHAVA framework (K-framework). The framework consists of seven key qualities needed in an employee to adapt and perform in a VUCA environment. The organizations need to explore all the seven components in an applicant to assess his/her fitness to face the organizational challenges in the VUCA world. The components of the holistic KESHAVA framework are - Knowledge, Emotional Intelligence, Skill, Hardwork, Attitude, Values and Ambition. KESAVA framework will help organization select the candidates who are always driven by good ethical values (who can work against corruption).Employees having good character and competence in equal measure is most suited for the VUCA world. Leaders of the firms in VUCA world should ensure that the employees go beyond merely serving customers to create unique, delightful, experiences; to honorably represent their company and nurture its brand, not only when they are on the job, but whenever they publicly express themselves in tweets, blog posts, emails, or any other interaction; and to be creative with fewer resources and resilient in the face of unimaginable uncertainty. According to UNESCO, the four pillars of learning include-

1. Learning to know: to provide the cognitive tools required to better comprehend the world and its complexities, and to provide an appropriate and adequate foundation for future learning.

2. Learning to do: to provide the skills that would enable individuals to effectively participate in the global economy and society.

3. Learning to be: to provide self-analytical and social skills to enable individuals to develop to their fullest potential psycho-socially, affectively as well as physically, for a all-round complete person.

4. Learning to live together: to expose individuals to the values implicit within human rights, democratic principles, intercultural understanding and respect and peace at all levels of society and human relationships to enable individuals and societies to live in peace and harmony.

A. Encourage students to imbibe ethical values

Rokeach (1973) defined values as enduring beliefs that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. 'Enduring beliefs' means that; values are generally stable, although they can change as people continue to make decisions that involve putting one value ahead of another. According to American Marketing Association (AMA) values represent the collective conception of what people find desirable, important and morally proper. Values serve as the criteria for evaluating the actions of others. Marketing practitioners must recognize that they not only serve their enterprises but also act as stewards of society in creating, facilitating and executing the efficient and effective transactions that are part of the greater economy. Marketers must embrace, communicate and practice the fundamental ethical values that will improve consumer confidence in the integrity of the marketing exchange system. Values for marketers which are intentionally aspirational include honesty, responsibility, fairness, respect, transparency and citizenship (AMA, 2014).

1. **Honesty**—to be truthful and forthright in our dealings with customers.
2. **Responsibility**—to accept the consequences of our marketing decisions and strategies. Make strenuous efforts to serve the needs of customers.
3. **Fairness**—to try to balance justly the needs of the buyer with the interests of the seller.

4. **Respect**—to acknowledge the basic human dignity of all stakeholders. Value individual differences and avoid stereotyping customers. Listen to the needs of customers and make all reasonable efforts to monitor and improve their satisfaction on an ongoing basis.

5. **Transparency** – to create a spirit of openness in marketing operations.

6. **Citizenship**—to fulfill the economic, legal, philanthropic and societal responsibilities that serve stakeholders in a strategic manner.

As per Chakraborty and Chakraborty (2005), the foundation of ethics in practice lies in values within. Values are the cause and ethics is the effect. Behaviour is the purest form of the expression of one's values, intent, priorities and feelings. Good behavior of employees emanates from the good value system present in them and the values nurtured by the leaders of the organization. Values like truth, goodness, beauty, Atithi Devo Bhava (guest is God), Vasudhaiva Kutumbakam (the cosmos is one family), tolerance, and simplicity are at the core of Indian culture. The concept of Vasudhaiva Kutumbakam(VK) is used in a theory presented by Marshall McLuhan as global village.

B. Curriculum Modification

B schools can modify their curriculum in two broad ways to teach and learn ethical practices;

(a) Vertical approach - Introduce compulsory courses in areas like - business ethics, leadership, corporate governance, corporate social responsibility, natural resource management, climate change, personality development, business sustainability etc. Such compulsory courses will sensitize students to learn and adopt ethical practices. Such courses will also contribute to make the MBA curriculum more holistic.

(b) Horizontal approach - Under this approach, the ethical principles and values have to be incorporated in the various existing foundation and specialization courses. All the faculties in the b school have to be trained to incorporate and deliver ethical principles and values in their respective courses as a mandatory requirement. This approach will introduce, remind and reinforce the ethical values almost on a daily basis for the entire duration of two years starting from the first semester.

The traditional approach to designing the business curriculum around a core of functional areas that embrace the "value-free" assumptions of social science while adding a gloss of value-based ethical platitudes and mini-cases along the way has not worked well. Without business ethics front and center in every business school curriculum, our future record may be more tarnished (Swanson and Frederick, 2003). Thus, adopting both vertical and horizontal approach in combination can help generate the right level of ethical sensitivity and learning in future managers.

C. Code of Conduct - The MBA Oath

The oath is a voluntary pledge for graduating MBAs and current MBAs to "create value responsibly and ethically." By formalizing a written oath and creating forums for individuals to personally commit to an ethical standard, the initiative hopes to accomplish three goals: (1) to make a difference in the lives of the individual students who take the oath, (2) to challenge other classmates to work towards a higher professional standard, whether they sign the oath or not, (3) to create a public conversation in the press about professionalizing and improving management (Anderson and Escher, 2010). The oath can be taken by students at the time of induction into the MBA program or during the initial weeks of first trimester/semester. This will ensure that the students get enough time to understand and practise their role from the initial days of their grooming into an ethical and responsible manager. The oath also needs to be displayed prominently in the campus, especially in the class rooms, library, hostel, canteen and seminar halls so that they see it daily and reinforce their commitment to make it a part of their daily life. The oath is as follows:

- *As a business leader I recognize my role in society.*

- *My purpose is to lead people and manage resources to create value that no single individual can create alone. My decisions affect the well-being of individuals inside and outside my enterprise, today and tomorrow.*

- *Therefore, I promise that:*

I will manage my enterprise with loyalty and care, and will not advance my personal interests at the expense of my enterprise or society.

I will understand and uphold, in letter and spirit, the laws and contracts governing my conduct and that of my enterprise.

I will refrain from corruption, unfair competition, or business practices harmful to society.

I will protect the human rights and dignity of all people affected by my enterprise, and I will oppose discrimination and exploitation.

I will protect the right of future generations to advance their standard of living and enjoy a healthy planet.

I will report the performance and risks of my enterprise accurately and honestly.

I will invest in developing myself and others, helping the management profession continue to advance and create sustainable and inclusive prosperity.

In exercising my professional duties according to these principles, I recognize that my behavior must set an example of integrity, eliciting trust and esteem from those I serve. I will remain accountable to my peers and to society for my actions and for upholding these standards. This oath I make freely, and upon my honor.

Although the MBA oath has formalized a written version of an ethical code of conduct for managers, the concept behind ethics in business can be traced back to the initial formation of management education in the early 20th century. Rakesh Khurana, a professor at HBS, traces the evolution of the management degree in his book- *From Higher Aims to Hired Hands: The Social Transformation of American Business Schools and the Unfulfilled Promise of Management as a Profession* (Princeton University Press, 2007). According to Khurana, the original intent of instituting a management degree was to educate a managerial class that would run America's corporations in a way that would serve the broader interests of society rather than the narrowly defined interests of capital or labour (Khurana, 2007). B students need to be made aware of the fact that they have duties to others in society than themselves and their paymasters (Swanson and Frederick, 2003).

D. Conducting Research on Ethics

Research is one of the six principles of PRME. B schools need to undertake constant research to discover innovative ways of addressing the corruption challenge at various levels of organization. The research need to cover all categories of corruption like grand, petty and political. Conducting seminars and workshops from time to time will help to disseminate the research findings as well as in organizing brainstorming sessions among academicians and practitioners. The students should also be actively involved in all activities of research and dissemination of findings among all stakeholders of the b school.

E. Partnership

B-schools have to collaborate with industry and various other governmental and non-governmental organizations. The collaboration can be for undertaking various joint initiatives involving students and faculty. The initiative can range from awareness creation about ethical practices to implementing and monitoring good governance systems in organizations. Such partnerships can facilitate the transfer of knowledge and expertise among the partnering organizations and there by accelerate the process of eliminating corruption. Partnership as a corruption fighting strategy is unique as it brings various stakeholders to one platform. Corruption can only be eliminated if representatives from government, business and civil society work together to develop standards and procedures which all of them are willing to support. Corruption can't be rooted out in one big sweep. A steady step-by-step or project-by-project process of fighting corruption can yield better results. A partnership approach is necessary to get all relevant parties around the negotiating table to accelerate correction and change. Partnership is one of the six principles of PRME.

5. Link between PRME and Fighting Corruption

In the table 2 given below, the link between each PRME and how through its practice, any b school can contribute towards fighting corruption is explained.

Table 2: PRME and Fighting Corruption

No	PRME	Fighting Corruption
1	**Purpose:** We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.	Sustainable value generation is impossible when corruption exists. The commitment and focus to generate sustainable value will help in fighting corruption.
2	**Values:** We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.	Values of social responsibility when inculcated in the budding managers, it will automatically generate thoughts and sustainable actions against corruption.
3	**Method:** We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.	Curriculum embedded with ethical values and an ethical learning environment, withsin the b school, will nurture the best character among the budding managers who will carry the same methods and practices to the organizations where they will join in future.
4	**Research:** We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.	Engaging organizations to understand their role in sustainable value creation through research activities will sensitize the existing and budding managers on the needs of ethical practices and in-depth understanding of how corruption erodes value.
5	**Partnership:** We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.	B schools partnering with industry to explore ethical challenges and the discovery of ethical and sustainable methods will lead to innovative management practices. Joint initiatives will accelerate the solution discovery and implementation process.
6	**Dialogue:** We will facilitate and support dialog ue and debate among educators, business, government, consumers, media, civil society organizations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.	B school's engagement with various organizations and institutions by organizing events throughout the year can increase the awareness among all stakeholders about the urgent need to eliminate corruption and undertake value creation in a sustainable way.

6. Conclusion

Business schools can make significant contribution in the elimination of corruption in organizations. With nearly three lakh management postgraduates passing out every year in India, b schools are a force to reckon with in the fight against corruption. Corruption can manifest in many forms like grand, petty or political and thus require concerted efforts by all sections of the society and innovative approaches. Organizations are also of various types in the society and almost all are inflicted with the cancer of corruption. The existing and the future managers and leaders of the organizations need proper orientation and training to prevent and fight corruption. As b schools are the training ground for future managers and leaders, all of them need to adopt PRME with full commitment. Indian B-schools can adopt one or more of the proposed six strategies like - nishkama attitude, ethical values, code of conduct (MBA Oath), research on ethics and partnership to make a significant contribution to eliminate corruption in the organizations.

Contribution to the elimination of corruption in organization is a mission which the nearly 4500 b -schools in the country can jointly undertake through the adoption of PRME and the six strategies recommended in this paper. The budding managers and leaders of India can script a new corruption free era, if oriented in the right direction during their formative years in the b schools which are ever increasing in India.

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Appendix

Appendix 1: The attributes of reputation on which companies are evaluated in determining the industry rankings (Haygroup, 2014).

1. Ability to attract and retain talented people
2. Quality of management
3. Social responsibility to the community and the environment
4. Innovativeness
5. Quality of products or services
6. Wise use of corporate assets
7. Financial soundness
8. Long-term investment value
9. Effectiveness in doing business globally

Raters are asked to evaluate each eligible company on each attribute by assigning a score from zero ('Poor') to ten ('Excellent'). For the purposes of the industry rankings, a company's overall score is determined through a simple average of the individual attribute scores. Companies who rank in the top half of their industry are defined as "most admired" within their industry. The attributes were developed prior to the inception of the Most Admired Companies rankings in the mid-1980s through a series of interviews with executives and industry analysts to determine the qualities that make a company worthy of admiration.

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SMEs and Corporate Social Responsibility : Indian Perception

Dr. Kiran Mehta and Dr. Renuka Sharma

Abstract

The present study has made an attempt to know the CSR activities done by Small and Medium Enterprises in India and how do these SMEs perceive the term CSR. The findings of the study have indicated that the SMEs are poor in communicating their CSR activities to all stakeholders in general and external stakeholders in particular. The major managerial implications of the current research are to provide training, awareness and orientation to SMEs to understand the scope of CSR activities and develop a strategic approach towards CSR for sustainability and growth through proper communication to all stakeholders.

Keywords : *Sustainability, Corporate Social Responsibility, Philanthropy, Charity, SMEs, India.*

Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs-

Brundtland Commission's Report, 1987

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The CSR is a multidisciplinary concept and still there is no consensus developed for a standard definition and scope of Corporate Social Responsibility. But the contribution of origin of term Corporate Social Responsibility goes to Bowen (1953) when he defined the term in his book entitled *Social Responsibilities of Businessmen*. He gave an insightful thought to industry and academia to focus on the relevance of corporate social responsibility (CSR) as a very serious affair for both large and small organizations. One of other earlier books written by Davis and Blomstrom (1966) defined social responsibility as:

"Social responsibility, therefore, refers to a person's obligation to consider the effects of his decisionsand actions on the whole social system. Businessmen apply social responsibility when they considerthe needs and interest of others who may be affected by business actions. In so doing, they lookbeyond their firm's narrow economic and technical

interests (p. 12)."According to Davis and Blomstroom (1975) "CSRs are obligations of decision makers to take actions which protect and improve the welfare of society as a whole along with their own interest."

The World Business Council for sustainable Development (WBCSD) has said,"Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large."

The institute of Chartered Accountants in England and Wales describes it as ensuring organizations manage their businesses to make a positive impact on society and the environment, at the same time maximizing value for their shareholders.

The Australian Centre for Corporate Social Responsibility defines CSR as the actions taken by an organization to minimize negative social and environmental impacts and leverage, core competencies, products or services to create positive social and environmental impacts.

The CSR has become a proliferating discourse at all economic and social platform so that the nexus between the society and business can be established and social responsibility of business especially large business houses can be established.

The above definitions have indicated that the term CSR has been described in various ways. Hopkins (2005) focused on ethical treatment to all stakeholders both within and outside the organization. It was Archie Carol (1991) who gave a broader and multilayered elaboration of the concept of Corporate Social Responsibility in four inter-related aspects. They are:

- Economic,
- Legal,
- Ethical, and
- Philanthropic responsibilities.

There is a huge consensus among researchers and academicians regarding these four aspects of corporate social responsibility expressed by Carroll.

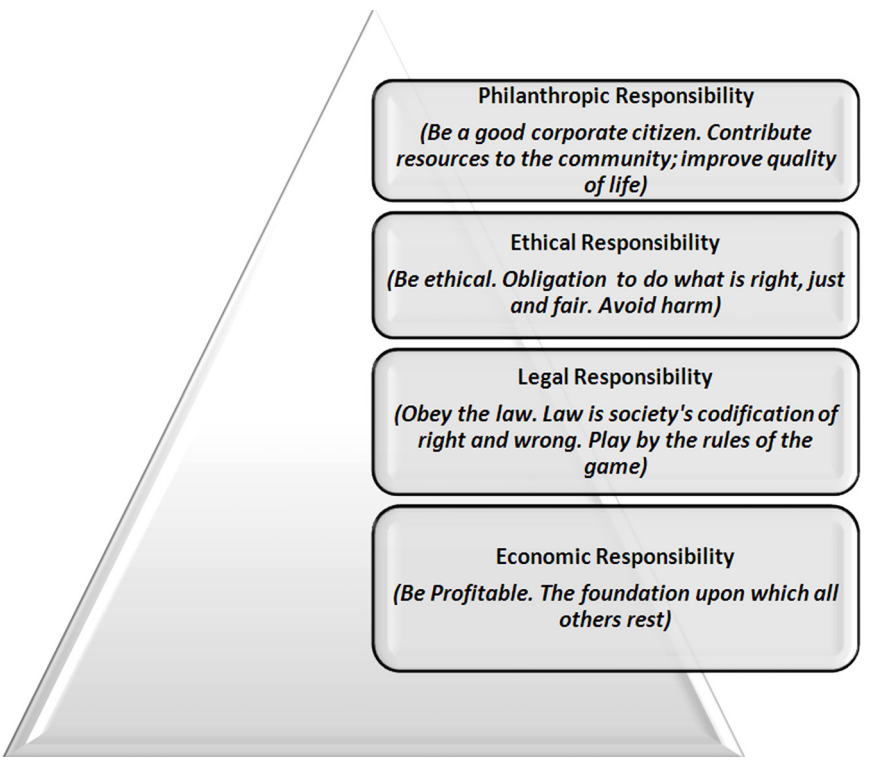

Figure 1

"Public policy also has a key role in encouraging a greater sense of corporate social responsibility and in establishing a framework to ensure that business integrates environmental and social considerations into their activities…Business should be encouraged to take a pro-active approach to sustainable development in its operations both within the EU and elsewhere." Source: European Commission's Communication on Sustainable Development, from EU

The Corporate Social Responsibility has become a global phenomenon and even if a firm producing least achievement at local level has started thinking about CSR activities to build a strong corporate brand image in the market. The big companies have understood that in addition to increasing their market size in the global world they have to be good corporate citizens too and that is possible by fulfilling the social responsibility. But all these big corporates are not doing such activities deliberately. But many times social pressures and regulations have strained them to follow a code of conduct, ensures a good governance system and socially responsible behavior throughout the complete chain of stakeholders (from raw material supplier to end user of product), i.e., all internal and external stakeholders. But continuous uses of CSR practices by big corporates have several challenges too. As majority of these big companies are operating in various countries with different culture, laws, regulations and code of conduct therefore, following a long series of socially responsible practices in many countries is a big challenge. Another major challenge can be the measurement criteria of socially responsible practices. How one can actually examine the impact of CSR practices of a company when other factors are also contributing to the economic and non-economic performance of the company.

Majority of the large and big corporations have been adopting CSR practices because of one or more of these three reasons. The impact of globalization can be observed on the work culture of all big and small organizations. Under such a competitive environment, it is really important for organizations to make their distinctive reputation in the market place and CSR activities help in attaining this motive too. The impact of CSR is tremendously important. It does not talk about protecting the interest of closely related stakeholders but also to those stakeholders far from the list. It considers thinking from the perspective of future generations too. There is vast literature available on various aspects of CSR practices by multinational and transnational corporations. But there is an equal importance of such practices in small and medium enterprises too. It is more important in case of one of the fastest growing developing countries like India where this sector can play a pivotal role in providing employment to large population and can support government and industry to meet the targets set in "Make in India" regime. The growth of small and medium enterprises can give great contribution to reduce poverty in the country and bring distribution of income at parity level. India being an agro-based economy has more relevance of achieving growth in small and medium enterprises because this sector provides enormous opportunities for sustainable livelihood through simple production processes adopted by them. They are the promoters of entrepreneurship too and can contribute to a sustainable and more resilient economic system in a global dynamic environment. These are the backbones of large companies too by providing customized output usable for industry and for niche markets too. The CSR activities can definitely increase the sustainability of SMEs in India. The CSR activities help the SMEs to understand the broader needs of the society and boost innovation in SMEs, reduce cost, reach to world market space and thus increase its own welfare as well as of society. There are critics too for CSR activities who say that it increases the barricades to open the world economy by promoting cultural values of a specific society only. But in any case the benefits and opportunities associated with corporate social responsibility fulfillment are unmatchable. In case of India, the majority of SMEs are run on their traditional practices. They have their own culture of serving different stakeholders. The terms "Philanthropy" and "Charity" are also frequently used by the employers of these SMEs and they use these two forms also as a way to fulfill their social and moral duties towards society and environment.

CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." Vast literature is available on how CSR is implemented in large corporations and its impact on various efficiency parameters of company. But in case of SMEs, there is relatively much lesser number of studies available.

The initial evidences were documented by Andersen (1996) and mentioned various benefits of CSR to SMEs which included better sales and brand image, better employee recruitment and more retention of employees in the organization etc. Prior to this, Savage (1994) reported that in case of South African companies, approximately 50 percent of the sampled companies were making social disclosures in which disclosures related to human resource were given more importance. It documented that disclosures related to working conditions, compensation related to employees were primarily focused by companies.

Belal (1999) conducted a study on Bangladesh and reported that disclosure practices by companies in Bangladesh focused more on employees and some of the firms considered environmentally related disclosures as a practice of social disclosures. Purushotahman et al. (2000) concluded that in Singapore, the economically better performing companies were found more inclined towards corporate social responsibility disclosure practices in comparison to companies performing economically lesser. The corporate social disclosure practices were focused on five broad themes which include, environment, human resources, energy, community involvement and products and services. Ricks (2005) says that CSR in SMEs help them to increase viability and improve corporate image. It also helps SMEs to get rid of appalling image of corporate. Nielsen and Thomsen (2009) document that CSR is more driven by personal values of managers of SMEs rather than a strategic focus of profitability and sustainability. It was identified that the SMEs, in their study, were using only indirect methods to communicate their CSR activities which was fruitful in case of internal stakeholders but in case of external stakeholders indirect or word-of-mouth style of communicating the CSR activities was insufficient.

In more recent study by Dzansi (2011), it was identified that the CSR activities in SMEs result in community improvement, customer satisfaction, happy workers, more employability, better sales and profits, motivated employees with increased loyalty and community goodwill. Santos (2011) documented the similar results. In case of India, majority of the research evidences are available in the context of CSR practices adopted by large corporations. The initial evidences in this regard were documented by Singh and Ahuja (1983) when they analyzed annual reports of 40 companies by doing content analysis and made an attempt to identify relationship between corporate reporting practices with other factors taken in the study. Cowen *et al.* (1987), Porwal and Sharma (1991), Agarwal (1992), Chander (1992) and Batra (1996) were among others who initiated research on CSR in various public and private companies wherein several evidences were reported related to disclosure practices and earning or profitability position of the companies under study. Shah and Bhaskar (2010) conducted a case study on BPCL in which they extensively discussed the importance of fulfilling social responsibilities by an organization being a part of the society. The case study documented that the BPCL, a public sector undertaking was taking many initiatives to fulfill its social responsibility. In a more recent study by Moon (2011), the researcher documented that in case of India, CSR activities are assumed to be performed by large companies. The SMEs provide huge employment opportunities in the country and contribute significantly to the overall GDP of world economy; therefore SMEs should contribute more to the social welfare (Aras and Crowther, 2010). While the overall impact of CSR activities might be profitable but some individual CSR projects or activities could not be profitable in the sense that such CSR activities might not have positive impact on the profits of the company (Moser and Martin, 2012). Inyang (2013) conducted a study on SMEs by adopting qualitative literature survey method and found that SMEs were engaged with the roles associated with consumerism, environmental action, community development, employee initiatives, and supply chain requirement. As by the study SMEs plausible engaged in CSR activities and this could be achieved by increasing training programmes, development of SMEs-oriented tools, increased resources for the SMEs, standards to guide adoption and implementation of CSR activities, government support etc. Mayr (2015) conducted a case study on Austrian Construction Company which was the well-known example of social activities in Austria and its owner symbolized the ideal of responsible entrepreneur. In this study the author showed that how this company have integrated CSR into corporate activities and analyzed the process of CSR implementation. Finding of the study stated that the successful implementation and operationalization of CSR in SMEs is dependent upon straightforward and rigorous process with both top-down and bottom-up obligations. Johnson and Schaltegger (2015) conducted a

blanket analysis and concluded that immense number of CSR authority tools is available to SMEs, including CSR focused business plan, benchmarking, CSR balance, or CSR audits. The study concluded that the implementation of a sustainable management was essential component of the investigation of CSR management tools at SMEs as before date those CSR management instruments were somewhat developed in practice.

Objectives of the Study

As discussed in the above section that large corporations are actively involved in taking initiatives to fulfill their social responsibility and are also benefitted by it. But in case of small and medium enterprises, the awareness and initiatives towards CSR are not very promising. Therefore the present study has focused on findings the practices adopted by Small and Medium enterprises for CSR activities and how do they measure the impact of CSR activities.

Research Methodology

The study under consideration is more of exploratory in nature. It has made an attempt to know what small and medium enterprises think about CSR activities and how relevant are such activities to them for obtaining sustainable growth of their business. For this purpose an attempt was made to interview 100 entrepreneurs running small and medium enterprises in India. But only 84 out of 100 could be interviewed either due to non-availability of such entrepreneurs or due to other reasons. Out of 84 entrepreneurs, 63 were contacted personally and 21 SMEs were interviewed telephonically.

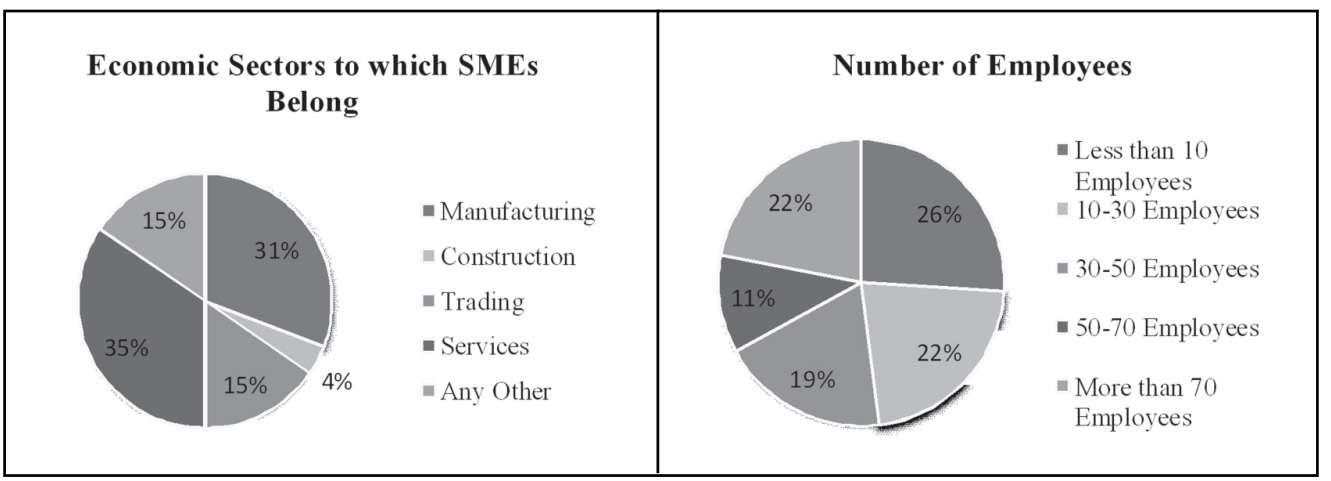

Figure 2

The questions asked were open-ended in nature and then a qualitative analysis of their views on CSR and sustainability was done. The above two pie-charts show various economic sectors to which the SMEs belong in the present study and number of employees working in these SMEs.

Results and Discussion

The first question asked at the interview of entrepreneurs was: how did they perceive the concept of Corporate Social Responsibility. The introductory section had already discussed the definition and meaning of CSR. But the SMEs in India were not found much familiar to them with a standard definition and meaning of social responsibility of business. They understood the term in a very naïve manner. For many of them, it was doing good things while in business. A few of the answers mentioned that there was no need to do any CSR activity by small enterprises. But many of them were able to relate it with social issues. Majority of the SMEs understood the term CSR in a narrow perspective only. They said employee satisfaction and motivation was CSR. And if a business was legal and ethical then it was sufficient to fulfill its social responsibility in place of any specific CSR activity. Some of the anonymous responses are mentioned below:

"CSR is promoting self-regulatory mechanism of following rules, regulations, standards and compliance and serving the end consumers."

"To contribute something to society and a spirit of giving back."

"I understand it as an obligation to pursue those policies or to make those decisions or to follow lines of actions desirable in terms of the objectives of our society and to create and maintain values of our society."

"CSR marks a great impact on society. It makes a business to put some efforts in building a well-structured society and upgrade it in one or the other way."

"CSR is an activity which is beyond profits of the company and which helps in uplifting the society."

"CSR covers economic, legal, ethical, philanthropic activities and fulfilling responsibilities towards better environmental. All these act as a driving force to force the business organizations to expand their CSR strategies flanking the desired objectives of the business. It is implicit that with CSR activities only, the society can sustain for future generations."

"The only purpose of CSR is to build sustainable business with healthy economies, markets and societies."

Succinctly, it can be said that majority of the SMEs comprehend that CSR is an approach thinking beyond 'Just Profit Maximization' objective and it involves welfare activities. Some exceptions were also identified when 2-3 small and medium enterprises said that their organization was too small in size therefore they were not required to do any CSR activity which mainly concerned with medium or big sized organizations. Even 2-3 entrepreneurs said that being entrepreneurs they had already generated employment opportunities for the society therefore nothing else was to be expected from them. Certainly, majority of the SMEs were not able to make out the strategic aspect of CSR, i.e., sustainability of business. Further, it is important to know how these organizations implemented their CSR activities.

Implementation of CSR Activities

As discussed above, the SMEs in India do not comprehend the term CSR as big corporate are using it to take strategic advantage. Almost every entrepreneur interviewed during the present study is doing something good for society. But it is not done in a specific policy framework of business. They are doing welfare activities as per their individual mindful comprehension. More than fifty percent of the entrepreneurs think that looking at the needs of their employees is biggest contribution to CSR as it has win-win results for both organization and employees. Employees feel motivated with welfare activities supported by their employers and they work with more loyalty and efficiency which ultimately helps the employer to grow economically. Some of them give utmost importance to disseminating education in the society which will have a sustainable impact on the overall development of society. A few of them specifically focused on the protection of environment as a major CSR activity. Broadly, the CSR activities are implemented through a range of different methods which are broadly classified into following five categories.

Focused towards employees welfare	Collaboration with NGOs	Promoting Education	Green Environment	Others
• By providing employment to people • Giving fair wages and salaries to staff and employees • Free Medical Insurance to Workers and other Health Benefits • Subsidized residential facility to workers • Employees participation in decision making	• Arranging food for poor people • Distributing books to children living in slums • Collaboration with religious committees which arrange food for needy people	• Imparting free education to under-privileged community • Educating Girl Child	• Planting Trees for Green Environment • Ensuring Environment Protection and avoiding misuse of natural resources	• Following the rules and regulations set by regulatory bodies • Awareness program for farmers

It was identified that the SMEs considered in the study were indulged in societal welfare activities and the next strategic decision is with regard to communication of CSR activities of a business

Communicating the CSR Practices to Various Stakeholders

When asked the SMEs how they communicated to different stakeholders regarding CSR activities done by them, their retort was quite fascinating. At first, many of entrepreneurs reacted as why there was a need to publicize the welfare activities. These were not done with fortitude to get something in reparation.

Many of these entrepreneurs said that they organized some annual event where they show cased the outstanding contribution made by their workers. It was a kind of revelation to see that motivating employees defined the scope of CSR activities. Only 20 (approx.) percent organizations have a culture of rolling out emails to different stakeholders regarding their CSR activities. The point of fact is that there is trifling understanding among these SMEs regarding the need of communicating CSR activities. Only the organizations which focus on employee welfare as a major activity of fulfilling social responsibility are using internal communication methods or organizing an event where these are communicated which are targeted to internal stakeholders and external stakeholders come to know about all this indirectly not as a result of initiative taken by employers.

Drivers for CSR Activities by SMEs

Values, Strategies and Public Pressure are the three most important factors identified as basic drivers of corporate social responsibility. But if these drivers are related with the entrepreneurs surveyed in the present study then values, public pressure and strategies can be ranked one, two and three respectively as drivers for CSR activities. The mainstream entrepreneurs said that it was in their value system at family level and that was the main driver for them to behave socially responsible. The respondents of the present study highlighted the following as main drivers of doing CSR activities.

- Internal Satisfaction
- Value System
- Spirit of Giving Back to Society
- To fulfill responsibility towards society
- Increasing the Goodwill and Reputation of Business
- Good Relationships with labor and employees
- To motivate employees
- Environment Protection
- Helping needy and poor people
- Influence of Other (only 2-3 SMEs reported this)
- Economic sustainability (Only two entrepreneurs directly link the CSR activities with economic sustainability)

Philanthropy, Charity or Corporate Social Responsibility?

An interesting part of this issue is that CSR in India is prevalent in its philanthropic form. Philanthropy is an essential part of Indian values and cultures. When we say, values are one of the major drivers of CSR activities, and then it seems more appropriate and relevant in India. The SMEs interviewed for the present study, are fulfilling their responsibility towards society in the name of charity and philanthropy also. More than fifty percent of the respondents have agreed that they are involved in charity and philanthropic activities but they do not have a specific policy framework in the name of CSR. Even 3-4 SMEs have said that they are not aware about the term CSR but they are functioning for the betterment of society either in the name of philanthropy or charity. Majority of the SMEs show a religious and philanthropic attitude and believe that sacred giving and sharing their income with less-privileged people results in eternal gain.

Measuring the Impact of CSR activities

Since majority of SMEs characterize CSR activities with humanity and providing better working environment to workers therefore they perceive the level of self-satisfaction and motivate employees as a measure to witness the impact of CSR activities. It was fascinating to hear when majority of the SMEs say that they do not know how to measure the impact of CSR activities and even they never think of measuring the impact of CSR activities. Following are the some parameters which are focused by SMEs as an upshot of CSR activities.

- Increased Performance by Employees
- Self-Satisfaction
- Better reputation of Firm
- Happiness
- Better Environment and less Pollution
- Better Product quality
- Increase Profits
- Better Relationship with Stakeholders
- Easy to find Industry Collaborators
- It should not be show-cased therefore there is no need to explicitly mention the results of CSR activities.

Conclusion

The society expects business to go beyond their traditional goal of profit maximization and undertake corporate social responsibility for a sustainable environment and socio-economic growth of a country. The SMEs have been defined on the basis of various parameters, viz., annual turnover, ownership structure, asset value or number of employees etc. More than 50% of global GDP is produced by SMEs. The idea of CSR practices have also been related to big corporates. But recently CSR and SMEs discourse is found everywhere. Like big corporate, the responsible practices by SMEs can also result in sustainability in competitive business eco-system. The current study has observed that SMEs think about CSR from a very narrow perspective. Majority of them either relate CSR to helping the poor and needy who give them internal satisfaction and they do it out of humanitarian ground. Or they are relating it just to help their employees by providing them some better amenities, bonuses and incentives so that their turnout ratio can be reduced and they work with more efficiency. It is difficult to identify the SMEs who could relate CSR activities to all the stakeholders and can think from a broader perspective which results in sustainability of their business for future generations too.

These SMEs are not found interested in making any mandatory provision to perform socially responsible activities by government or regulatory bodies. Chahoud et al. (2007) also reported that the Indian companies are in a state of ambiguity regarding their corporate social responsibility. Their study has also reported that the Indian companies are getting matured in understanding the scope of CSR and the focus is shifting towards sustainability, self-regulation and multi-stakeholder aspect rather than a philanthropic attitude.

The current study also supports the prior work that uncovers only limited use of sustainability management tools in SMEs (Johnaon and Schaltegger, 2015). The rationales for this limited implementation are that SMEs principally set out quite simple management tools, and the execution of multifaceted CSR tools often fails due to resource limitations. Likewise, the present study also confirms that not all CSR activities at SMEs are profitable (Moser and Martin, 2012). Entrepreneurs and managers of SMEs generally do not question whether one or another CSR measure has a superior outcome on the success of the company; rather, they often set priorities instinctively. Thus, it might be one of the primary reasons that SMEs do not implement specific CSR management tools, that no need for such tools is alleged by SMEs and that SMEs do not confiscate knowledge about such tools.

Suggestions, Recommendations and Practical Implications

Chaudhary and Wang (2007) reported that the IT companies in India are lagging behind in a proactive approach towards communicating their CSR activities. The 100 IT companies in their study have been found active in CSR activities but these companies have not been using the right method to communicate such activities to various stakeholders. In case of present study, the small and medium enterprises have been found even more unapprised when it comes to communicating the CSR activities to various stakeholders. Using proper Ways of Communicating CSR activities:

The Small and Medium Enterprises have not been found active in communicating their CSR activities to internal stakeholders as well as to external stakeholders. To communicate the same to internal stakeholders, different methods like internal newsletters, award ceremonies for staff and employees, and internal departmental meetings can be used to showcase CSR activities. Similarly, to communicate the same to external stakeholders, internet, website, using some vernacular newspapers and communicating all relevant information to suppliers, debtors, vendors and distributors can also be helpful.

The present study gives an insight into the very practical approach to CSR activities in SMEs and thus makes a valuable contribution to the theory development specifically in Indian context. In particular the present study shows that

CSR management at SMEs is not a particular discipline but quite varies based on company culture and on the mindset of the founder or entrepreneur. It also states that SMEs should link CSR activates to their corporate strategies. SMEs generally have a propensity to spotlight stoutly on day-to-day business and operational objectives. Therefore, CSR management can expand the perspective of the SME and reinforce company's awareness of resources and competencies. All this will help SMEs to prepare them better for the future and will make them even more competitive.

One more observation during the study is worth mentioning that these SMEs are expecting Government to acknowledge the endeavors made by these enterprises for the upliftment of society. There is no formal platform for such acknowledgement. So governments can strengthen SME by acknowledging those SMEs which are successfully doing CSR activities. The current study also defines that how SMEs can execute their CSR activities. Similarly SMEs should consider individual contextual factors, such as the general business environment and individual stakeholder's interest while implementing the CSR activities in their own organization (Baumgartner 2014). However, the possibility that CSR will be subjugated and used utterly for marketing and communication purposes cannot be barred. The intentional utilization of CSR activities that has a vigorous connection to the company's core business and the notion that CSR is a long term investment (Burke and Logsdon, 1996), both of which indirectly enhance enterprise value, are felicitous from an ethical standpoint and even desirable in terms of overall convivial welfare (Husted and Allen 2000). This understanding in particular must be promoted to a more preponderant extent among entrepreneurs and managers.

This study designates a desideratum for additional research on the motives for and rudimentary understanding of CSR activities in SMEs. Moreover, it would be subsidiary to examine the expedient by which CSR core areas are defined and the methods for linking CSR activities to the core business. From a hardheaded viewpoint, the perpetuating absence of CSR activities implements at SMEs should be addressed (Johnson and Schaltegger, 2015). Conducting a variety of studies/research will yield more concrete and detailed recommendations for the strategic implementation of CSR at SMEs, taking into account the particular characteristics of each company. Another fascinating issue is how SMEs (companies in general) address CSR commitments in times of economic difficulties and financial crises; finding a felicitous balance between profit orientation and CSR commitment seems to be quite exigent (Mayr 2010).

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Measures of Market Penetration by Banks: Indian Perspective

Dilpreet Singh and Dr. Harpreet Singh

Abstract

Although literature on market penetration by banks is replete with the motives and recompenses ofpenetration of banking services, little light has been shed on how market penetration by banks can be measured. Within the context, the present study is an attempt to conclusively establish the measures of market penetration by banks. An empirical analysis of the views of 364 bank officials engaged in the development or execution of strategies revealed that increase in number of account holders, increase in total number of branches, increase in aggregate deposits, and increase in number of ATMs, are the most important measures of banking penetration. It is therefore recommended that when attempting to capture market penetration by banks, these parameters should be used.

Keywords: *Bank, market penetration, India, multi-dimensional scale*

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For the past two decades, market penetration by banks has been a subject matter of concern for bankers and regulators. There has been a lot of talk inside and outside the banking industry regarding the many benefits of penetration of banking services (Bihari, 2011). While regulators view it as a means to achieve financial and social inclusion, bank strategists consider it a route to enhance growth and profits (Singh and Singh, 2015). But what ever may be the end, social, economic or commercial, deepening of banking services has been accorded a high priority by both regulators (Mukhopadhyaya, 2014) and banks (Kumar and Radcliffe, 2015).

India is the seat of the largest unbanked population in the world (CRISIL, 2015). On an average, only 35 percent people have a bank account or a formal access to banking services (World Bank, 2015a). The rest of the 65 percent population of the country is excluded from mainstream banking services. When compared with the global average of 50 percent (World Bank, 2015a), India is found severely lagging behind. This situation is worrisome from the point of view of both, the individual and the economy.

At an individual level, access to banking services can improve the standard of living and break the vicious circle of poverty (Dangi, 2013). It can enable access to cheap organized credit, releasing the currently unbanked from the control of spurious moneylenders and create opportunities for livelihood generation, savings and investments (Garg and Agarwal, 2014). This will insulate individuals and their families from economic shocks and create avenues for wealth creation.

From the point of view of the economy, penetration of banking services shall pave way for inclusive growth. With all sections of the society participating in the process of economic growth and development, India shall be able to arrest the perpetual problems of slow economic growth and persistent income inequality (GPFI, 2015). Realization of small business opportunities in the wake of access to affordable capital shall generate welfare effects that will manifest themselves in the form of greater economy activity, income generation (Nayak, 2014) and reduced poverty (Scronce, 2014).

Realizing the social and economic benefits of penetration of banking services, national policy-makers and regulators have embarked on a very ambitious program of penetration of banking services (Garg and Agarwal, 2014). Embracing it as a development priority, the government has publically committed to achieve a deep penetration of banking services. It announced the Pradhan Mantri's Jan Dhan Yojana envisioning a bank account for every Indian (Mukhopadhyaya, 2014). It relaxed the KYC norms and adopted many technology and knowledge based approaches to ensure the hassle free and cost-effective penetration of banking services (Garg and Agarwal, 2014). Not only this, the Reserve Bank of India launched many awareness and literacy campaigns to promote the acceptance of banking services among the masses (Thapar, 2013). The Central Bank also facilitated bank linkages by developing the banking correspondent model. This helped prevent the hemorrhage of money in the process of penetration by outsourcing the actual process of reaching the unbanked. Undoubtedly the efforts made by the government to improve the penetration of banking services are laudable.

Moving ahead, if we look at the situation from the point of view of the bankers, we find an equal if not more emphasis laid by them on penetration of banking services. This makes one wonder why market penetration has caught the fancy of bank strategists and become an integral part of their planning.

Reaching the unbanked is a means to enhance the profits of banks (Singh and Singh, 2015). Contemporary banks are consequently penetrating virgin markets and designing new products and services to cater to the needs of the unbanked (Sarma, 2008). Banks are vigorously opening new accounts and establishing new branches aiding in deposit and credit penetration (CRISIL, 2015). These initiatives are helping banks explore new avenues of growth in the wake of stagnation in current markets (Muldoon, 1989; Javalgi et al., 1990; Philp et al., 1992; Anthony et al., 2006; Howley & Savage, 2007), as well as beat the competition (Meidan, 2007). Therefore, in adopting the strategy of market penetration, banks are looking to achieve growth, enhance profits and snatch a larger share of the market.

Having established that the government and bankers are both concerned with the deepening of banking services, it may be suitable to explore what exactly penetration of banking services entails and how it can be measured.

The finance ministry believes that the number of bank accounts, irrespective of the volume of deposits is the most significant measure of banking penetration (Srinivasan, 2014). The Reserve Bank of India considers ATM network and branch network (inclusive of business correspondents) as the most important indicators of penetration of banking services (RBI, 2013). The Government deems electronic benefits transfer as a measure of penetration of banking services since a hundred percent success in electronic transfer of subsidies would imply that every household has at least one bank account (Srinivasan, 2014). In other words, the Government too thinks that an increase in the number of bank accounts signifies penetration of banking services.

Further, taking up the case of international bodies, the number of commercial bank branches is the most important G20 indicator of penetration of banking services. The other parameters that G20 uses to measure banking penetration are formally banked adults, formally banked enterprises and points of banking service (GPFI, 2011). The International Monetary Fund accounts for banking penetration through the number of commercial bank branches. The World Bank

however differs in its approach and considers the number of bank accounts and the number of transactions per account as the most important gauges of the extent of market penetration by banks (World Bank, 2015b). The same measures are also used by the credit rating agency CRISIL (CRISIL, 2015).

Moving away from regulators, and towards researchers, Meidan (2007) points out that penetration strategies for banks include construction of additional bank branches, attracting new customers, establishing electronic fund transfer points, increasing the usage rate of existing services and developing new markets. Howley and Savage (2007) feel that penetration of banking services entails extension of range of banking interests and foray into international banking. Kane (2005) believes that it not possible to achieve penetration of banking services "without a culture of deposit gathering and deposit growth." On the basis of an empirical research, Demirguc-Kunt and Klapper (2013) establish account penetration and access to bank credit as measures of penetration of banking services. Mukkawar (2012) expresses banking penetration as a function of number of rural bank braches. Nayak (2014) uses the increase in number of smart cards in circulation to measure the extent of penetration of banking services and Samra (2012) believes that an increase in the number of banks and bank branches indicates a higher penetration of banking services (Table 1 captures the review of literature).

Table 1: Snapshot of review of literature

Sl. No.	Author and date	Measures/Indicators of penetration of banking services
	Regulatory bodies	
1.	Finance ministry	Number of bank accounts
2.	Government of India	Electronic benefits transfer Number of bank accounts
3.	Reserve Bank of India	ATM network Branch network (inclusive of business correspondents)
	International bodies	
4.	G20 (GPFI, 2011)	Number of commercial bank branches Formally banked adults Formally banked enterprises Points of banking service
5.	International Monetary Fund	Number of commercial bank branches
6.	CRISIL	Number of bank accounts Number of active accounts
7.	World Bank	Number of bank accounts Number of transactions per account
	Researchers	
8.	Kane (2005)	Volume of deposits
9.	Howley& Savage (2007)	Extension of range of banking interests Foray into international banking
10.	Meidan (2007)	Number of bank branches Number of customers Number of fund transfer points Usage rate of existing services Development of new markets
11.	Mukkawar (2012)	Number or rural bank branches
12.	Samra (2012)	Number of banks Number of bank branches
13.	Nayak (2014)	Number of smart cards
14.	Demirguc-Kunt&Klapper (2013)	Account penetration Access to bank credit

From previous studies, it can be safely inferred that though the end is the same, each researcher has used a different approach to measure the extent of penetration of banking services. Further, while the regulators and international bodies both support the conviction of bankers, who believe that market penetration can increase growth, leading to social and economic prosperity; they lack consensus on how penetration of banking services can be measured or what its chief indicators are. The present study attempts to establish the same.

There is a lot of debate inside and outside the banking industry regarding market penetration by banks. Literature is replete with the economic and social rewards of penetration of banking services (Anthony et al., 2006; Trivelli, 2013). A number of previous researchers have proffered different definitions (Meidan, 2007), motives (Singh and Singh, 2015) and advantages (Howley & Savage, 2007; Sarma, 2008) of market penetration by banks; and there exists a consensus among their views. However, the authors found a lack of agreement among the previous researchers regarding how market penetration by banks can be measured. Within the context, the present study is an attempt to establish the measures of market penetration by banks.

Study Methodology

Questionnaire and Data Collection: A questionnaire containing the possible variables that may be used to measure market penetration by banks (for study variables refer to table 2) was drafted. A review of literature and interviews with senior bank officials helped collate the study variables. In order to assess the relative importance of a particular variable, the responses of the respondents were anchored on a five-point Likert scale with 1 indicating "very important" and 5 indicating "very unimportant." The questionnaire also contained questions on the demographic profile of the respondents. The questionnaire was pretested for validity and clarity on respondents selected from the relevant population.

Table 2: Variables used in the questionnaire

Sl. No.	Study variables
1.	Increase in total number of branches
2.	Increase in number of branches in metropolitan cities
3.	Increase in number of branches in urban areas
4.	Increase in number of branches in semi-urban areas
5.	Increase in number of branches in rural areas
6.	Increase in number of employees
7.	Increase in number of ATMs
8.	Increase in aggregate deposits
9.	Increase in term deposits
10.	Increase in demand deposits
11.	Increase in savings bank deposits
12.	Increase in aggregate amount of loans
13.	Increase in amount of term loans
14.	Increase in non fund income
15.	Increase in debit cards
16.	Increase in credit cards
17.	Increase in number of cheques
18.	Increase in number of account holders
19.	Increase in number of rural bank account holders
20.	Increase in number of urban bank account holders
21.	Increase in number of transactions per account
22.	Increase in number of banking correspondents

Data for the study was collected over a fifteen-month period from March 2014 to May 2015. The sampling technique used was convenience sampling. In all, 1150 questionnaires were administered. However, at the end of the survey and after data cleaning, only 364 usable responses were obtained. In order to ensure rationality of responses, only the banking officials engaged in the development and execution of strategies were approached. These officials include vice-presidents, assistant vice-presidents, deputy general managers, assistant general managers, zonal managers, chief managers, senior managers etc. of various public and private sector Indian banks. Since, most of the respondents were senior bank officials and difficult to approach, the response rate of the survey was very low (31.65 percent). The final data constituted of responses from officials of 21 public sector and 12 private sector banks. For details of collected data, refer to table 3.

Table 3: Details of data collected

Number of questionnaires distributed	1150
Number of usable responses obtained after data cleaning	364
Response rate	31.65
Number of usable responses obatined from public sector banks	214
Number of usable responses obtained from private sector banks	150
Bank wise details of collected data	
Bank name	**Number of responses**
Public sector banks	
Allahabad Bank	5
Andhra Bank	13
Bank of Baroda	3
Bank of India	1
Bank of Maharashtra	2
Canara Bank	13
Central Bank of India	15
Corporation Bank	2
IDBI Bank	8
Indian Bank	2
Indian Overseas Bank	3
Oriental Bank of Commerce	10
Punjab and Sind Bank	71
Punjab National Bank	24
State Bank of India	14
State Bank of Hyderabad	1
State Bank of Patiala	10
Syndicate Bank	2
UCO Bank	7
Union Bank of India	2
United Bank of India	2
Vijaya Bank	4
Private sector banks	
Axis Bank	13
City Union Bank	1
Federal Bank	7
HDFC Bank	49
ICICI Bank	17
IndusInd Bank	13
ING Vysya Bank	2*
J & K Bank	6
Karnataka Bank	4
Kotak Mahindra Bank	16*
South Indian Bank	2
Yes Bank	20

*ING Vysya Bank has now merged with Kotak Mahindra Bank

Data Analysis Techniques: In order to establish the most important measures of market penetration by banks, mean scores for each variable were calculated. It was considered appropriate to calculate mean scores since it is the most suitable technique if the purpose is to arrive at a single most representative value for a set of known numbers (Medhi, 1992; Salkind & Rasmussen, 2006). It is the best predictor of the centroid of a set of values. This technique was also considered fitting because it makes the incomparable attributes (measures of market penetration by banks in the present case) comparable and prioritizes them by reducing and aggregating the information into one standardized score. This process provides a clear cut ranking of the alternatives (Herwijnen, 2006) and categorically helps judge, which score is high and which score is low (Cohen et al., 2011).

Further, to convert the results into an easy to visualize structure (Ding, 2006) multi dimensional scaling was employed. It was considered particularly appropriate in the present case because it helped create faithful geometric representations of rated similarity between each pair of items (Hout et al., 2013).

Profile of respondents: Table 4 represents the demographic profile of the respondents. As can be seen, the percentage of male respondents was nearly three times the female respondents. The percentage of male respondents was 76.10 percent, while the percentage of female respondents was 23.90 percent. Further, 28.85 percent respondents were under 30 years, 22.53 percent respondents were in the age group of 31 to 40 years, 14.56 percent respondents were between 41 and 50 years and 34.07 percent respondents were over 51 years (age categories have been adopted from Sarros et al. (2012)).

Table 4: Demographic profile of respondents (n = 364)

Variable	Classification of variable	Frequency	Percentage
Gender	Male	277	76.10
	Female	87	23.90
Age	Under 30 years	105	28.85
	31 – 40 years	82	22.53
	41 – 50 years	53	14.56
	Over 51 years	124	34.07

Data Analysis and Discussion

Table 5 shows the mean scores attained by each study variable. A lower mean score indicates a higher importance of the variable and vice-versa. Variables have been arranged in decreasing order of importance. Further, variables have also been ranked on the basis of the scores they have attained (Herwijnen, 2006).

In the succeeding paragraphs each of the study variables have been discussed in detail.

Table 5: Measures of market penetration by banks

Study variable	Mean Score	Rank
Increase in number of account holders	**1.21**	**1**
Increase in total number of branches	**1.29**	**2**
Increase in aggregate deposits	**1.39**	**3**
Increase in number of ATMs	**1.40**	**4**
Increase in number of branches in rural areas	1.41	5
Increase in debit cards	1.51	6
Increase in aggregate amount of loans	1.56	7
Increase in non fund income	1.57	8
Increase in number of rural bank account holders	1.61	9
Increase in number of employees	1.64	10
Increase in credit cards	1.68	11

Increase in savings bank deposits	1.71	12
Increase in amount of term loans	1.75	13
Increase in number of urban bank account holders	1.81	14
Increase in demand deposits	1.84	15
Increase in number of branches in semi-urban areas	1.89	16
Increase in term deposits	1.92	17
Increase in number of banking correspondents	1.97	18
Increase in number of cheques	1.99	19
Increase in number of branches in urban areas	2.04	20
Increase in number of branches in metropolitan cities	2.09	21
Increase in number of transactions per account	2.78	22

Increase in number of account holders: "Increase in number of account holders" has emerged as the most significant measure of market penetration by banks. Interestingly, this finding is in synchronization with the indicators of bank penetration used by the finance ministry, the World Bank and the credit rating agency CRISIL. Further, many previous researchers (Meidan, 2007; Derirguc-Kunt and Klapper, 2013) have also considered an increase in the number of bank accounts as a vital measure of penetration of banking activity.

Though an increase in the number of bank accounts is a popular determinant of penetration of banking services, many previous researchers have not used it to measure the extent of banking penetration (Kane, 2005; Mukkawar, 2012; Samra, 2012; Nayak, 2014). This probably could be because many critics feel that the number of accounts irrespective of the volume of deposits is meaningless (Howley and Savage, 2007). Citing the particular case of India, in the wake of the government's mission to achieve financial inclusion, over 100 million new bank accounts have been opened. Out of these new accounts, only 54 percent are actively used (Murthy, 2015). Thus, the approach of achieving banking penetration by opening new accounts may be flawed due to the lack of universality of the method and the sheer focus on speed and numbers (Ramaswamy, 2014).

To over come this problem, banking experts recommend the use of a more superior measure of banking penetration - number of transactions per account (CRISIL, 2015; World Bank, 2015b). Critics believe that an increase in the number of transactions per account indicates an increase in banking activity and hence banking penetration (Meidan, 2007). However, in the current study bank strategists have not accorded any importance to this parameter (rank 22).

Despite the drawbacks in this approach, the number of bank accounts remains the most important and popular measure of penetration of banking services. Further, while the absolute number of bank accounts has emerged as the most important parameter to measure banking penetration, the respondents do not accord an equal importance to the geographical location of the bank accounts. The variable "Increase in number of rural bank account holders" (rank 9) has managed to achieve a rank among the top ten variables, but the variable "Increase in number of urban bank account holders" (rank 14) has not emerged as a significant indicator of market penetration by banks in the present study. This could probably be a reflection of the understanding of the bank strategists that a higher potential for banking penetration exists in the rural markets.

Furthermore, closely associated with the number of bank accounts, is the number of debit cards (most account holders possess a debit card). This could have accounted for the relatively high rank (rank 6) achieved by the variable – "Increase in number of debit cards." It may not be amiss to point here that while the number of debit cards has emerged as a reasonably important measure of banking penetration, the number of credit cards has not been afforded a similar treatment (rank 11). This could be a reflection of the loan-averse nature of the Indian population, where resorting to borrowed money is still a social taboo. If we compare these results with those of a study conducted by Nayak (2014), we find a dichotomy in the results of the two studies. Nayak (2014) considered an increase in number of smart cards as

the most important measure of penetration of banking services. This finding is not seconded by the current study.

Increase in total number of branches: "Increase in total number of branches" has emerged as the second most important measure of penetration of banking services. This finding coincides with the banking penetration indicators used by the Reserve Bank of India (Reserve Bank of India, 2015), G20 and the International Monetary Fund. Individual researchers, such as, Meidan (2007) and Samra (2012) have also recommended an increase in the number of commercial bank branches as an important measure of banking penetration.

Banking experts opine that not only the number of branches, but also their location plays an important role in achieving penetration of banking services (Philp et al., 1992). Since growth in the current markets has saturated and most metropolitan cities in India have achieved a 100 percent penetration of banking services (CRISIL, 2015), a move into the rural markets is recommended. For this reason perhaps, in the current study "Increase in the number of branches in rural areas" has emerged as the fifth most important measure of penetration of banking activity. This finding of the current study is supported by the findings of a previous study conducted by Mukkawar (2012). Given the Indian scenario, Mukkawar (2012) recommends an increase in the number of rural bank branches as the most significant measure of banking penetration. Further, apart from rural branches, none of the other study variables specifying the location of new bank branches – "Increase in number of branches in semi-urban areas" (rank 16), "Increase in number of branches in urban areas" (rank 20) and "Increase in number of branches in metropolitan cities" (rank 21) have emerged as significant indicators of penetration of banking services.

Though an increase in number of branches is a popular measure of banking penetration, many previous researchers have not taken it into consideration while accounting for penetration of banking services (Nayak, 2014; Demirguc-Kunt & Klapper, 2015). This may be on account of a decrease in reliance on physical bank branches and popularity of branchless banking (PwC, 2012). It may also not be amiss to point out here that although the use of Internet and Information Technology are an important alternate channel of delivery of banking services, this strategy may not work very well in India. Given the focus of the government on financial inclusion and the poor penetration of Internet services in the rural areas, a wide network of bank branches is required. But in the light of the high cost associated with a wide branch network, many experts recommend that help of banking correspondents may be sought to achieve penetration of banking services (Srinivasan, 2012, RBI, 2015). In the present study however, the variable "Increase in number of banking correspondents" has not fared well (rank 18). This can only mean that while expanding the network of banking correspondents is a means to achieve banking penetration, it is not a measure of the extent of penetration achieved.

Increase in aggregate deposits: Bank strategists consider "Increase in aggregate deposits" as the third most important measure of penetration of banking activity. This finding is supported by previous literature (Kane, 2005; Ben-David et al., 2014). This also explains the government's latest initiative to open payment banks (specialized in accepting deposits) to achieve penetration of banking services.

Further, within the type of deposits, none of the variables have fared well – "Increase in savings bank deposits" (rank 12), "Increase in demand deposits" (rank 15) and "Increase in term deposits" (rank 17). This indicates that while an increase in aggregate deposits is important to achieve penetration of banking services, the type of deposit in itself may not be very significant.

Having established that increase in deposits is a key indicator of penetration of banking services, the widespread concern in the Indian banking industry on account of deceleration in aggregate deposits (Business Standard, 2015) is understandable. While the number of bank accounts is steadily increasing (CRISIL, 2015), the increase in aggregate deposits is slowing down (Business Standard, 2015). This indicates a need to focus on deposit gathering and deposit growth along with an increase in number of bank accounts. Indian banks should thus shift their focus from merely opening bank accounts to vigorously chasing deposits.

Furthermore, critics are worried that the weakened aggregate deposit inflows will disrupt the role of banks as liquidity

creators (Acharya and Mora, 2012). Ability to create loans is directly proportional to bank deposits (Jayaratne and Morgan, 2000; Berger and Bouwman, 2009) and hence Indian banks may not be in a position to create adequate loans to meet the growing credit needs of the economy. And as per the current study, "Increase in aggregate amount of loans" is a measure of banking penetration, albeit not a very important one (rank 7). Also, the other variable specifying a loan type– "Increase in amount of term loans" (rank 13) has not fared well in the current study.

Of the many banking services, credit is a major one. Though this variable has not achieved a very high rank in the current study, many experts believe that credit penetration / access to bank credit is an important measure of penetration of banking services (Demirguc-Kunt and Klapper, 2013). Since, credit penetration is a corollary of deposit penetration, it is suggested that Indian banks should graduate from the role of passive recipients of deposits to active seeker of deposits.

Moving ahead, though credit penetration indicates banking penetration, a mindless increase in aggregate amount of loans is not recommended. Loans enhance the exposure of a bank and considerably increase risk (Altunbas et al., 2011). They also directly and negatively impact the return on equity (Kohler, 2015). What may be done in such a scenario?

A good solution to stabilize banks in the face of high credit exposure is an increase in non-fund income. It can be achieved through a diversification of income sources (Demirguc-Kunt et al., 2000; Kohler, 2015). This may have accounted for the popularity of universal banking and fee based banking activities in the recent past. Banks are today trying to deepen penetration by extending their range of banking activities (Demirguc-Kunt and Klapper, 2013) and this may be the reason why the variable "Increase in non-fund income" has emerged as one among the top ten measures (rank 8) of penetration of banking services in the present study.

Increase in number of ATMs: Against the backdrop of the government's objective of financial inclusion, ATMs provide an easy and convenient means of penetration of banking services. In fact, since ATMs are open typically at all times of the day and night; and all days of the week, they are considered even more convenient and cost effective than traditional banking offices in achieving penetration of banking services (Humphrey, 1994).

Experts believe that "there is nothing like a real world indicator for an economic phenomenon and it is gratifying to discover a new proxy for banking penetration – the number of automated teller machines" (Gapper, 2011). This explains why the variable "Increase in number of ATMs" features among the top measures (rank 4) of penetration of banking services in the present study.

As of May 2015, the total number of ATMs in India is 183887 and individually, State Bank of India tops the list of number of ATMs per bank (source: RBI). Given the total population of the country, these figures indicate poor penetration of banking services. In fact, the number of ATMs per 1000 square kilometers in India is far below the average of other emerging economies (source: RBI). Thus, keeping in mind the extent of financial exclusion, there is a lot of scope of increase in number of ATMs in India.

Other variables: In the present study, the variable "Increase in number of employees" has attained rank 10 among the 22 variables used. The contention that a higher number of employees signifies a deeper penetration of banking services is questionable. Though it may sound logical to presume that workforce expansion will aid in achieving penetration, the fact remains that in the absence of due contribution to profit or business, additional employees are a liability for banks. For this reason perhaps, while the normative goal of many banks is market penetration, they are simultaneously reducing their workforce to enhance productivity and efficiency (Preez, 2015; Shankar, 2015).

Lastly, the variable "Increase in number of cheques" has not been given much importance as a measure of banking penetration (rank 19). For this reason, in the present study, this variable has emerged as an insignificant measure of penetration of banking services.

Figure 1 represents a visual spatial display of the preferences and perceptions of the respondents (Malhotra and Dash, 2010). This depiction reduces the complexity of the data allowing a visual appreciation of the underlying relationships between variables (Hout et al., 2013).

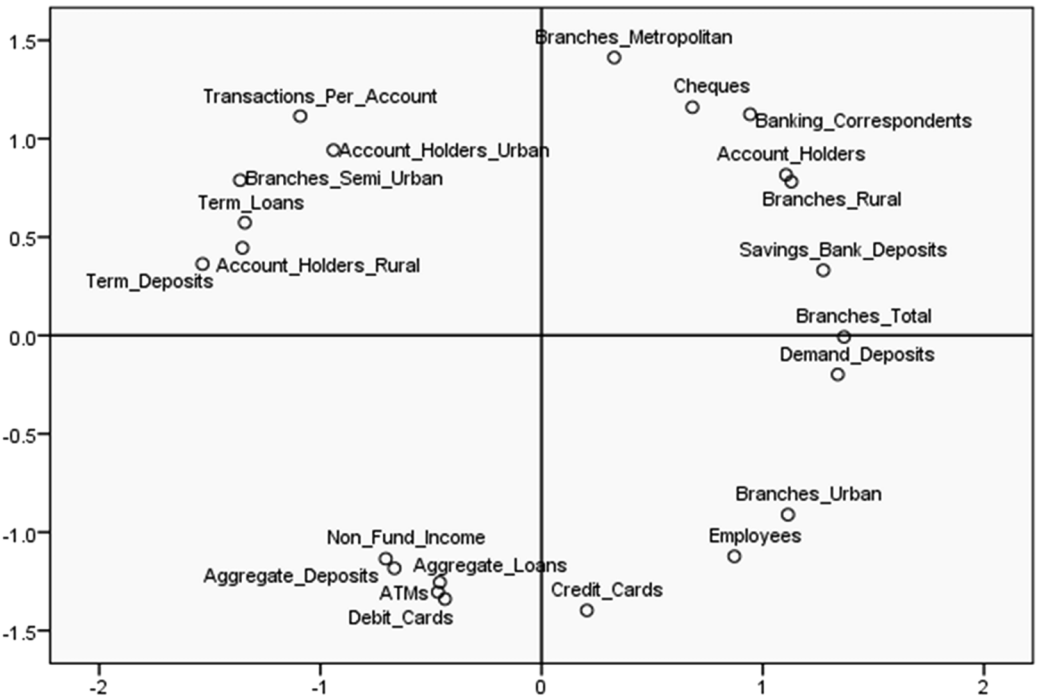

Figure 1: A visual spatial display of perception of the respondents

The above scatter plot of variables in a two-dimensional plane has helped arrive at an arrangement that best approximates the responses of the respondents. Clear patterns of clusters, based on perceived similarity emerge that provide a meaningful representation of the views of the respondents.

Conclusion and Implications

On the basis of current study, it can be concluded that increase in number of account holders, increase in total number of branches, increase in aggregate deposits and increase in number of ATMs, are the most significant measures of penetration of banking services. Therefore, when attempting to measure or compare penetration of banking services, these four variables should be used. This will not only help standardize the process of measurement of banking penetration, but also facilitate an easy comparison between the works of different researchers/ bodies.

Limitations of the Study

The sampling technique used for the current study was convenience sampling. Because of the inherent limitations of this technique, future researchers may rethink the use of this technique.

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Marketing Ethics: Enhancing Firm Valuation and Building Competitive Advantages

Dr. Pankaj M. Madhani

Abstract

Marketing ethics plays a critical role in forming, maintaining and sustaining long-term customer relationships. An ethical marketing practice is a key factor of organization's success because it affects the organizations' capability to build strong relationships with customers, and accordingly, it is one of the organizational drivers enhancing Customer Lifetime Value (CLV). The CLV of a customer represents the amount the customer will contribute to the bottom line of the firm over the span of the business relationship with them. Ethical marketing are practices that emphasize transparent, trustworthy, and responsible personal and organizational marketing policies and actions that exhibit integrity as well as fairness to consumers and other stakeholders. The ethical reputation of the organization results in customer trust which in turn leads to satisfaction and commitment to the organization and hence builds competitive advantages. Research provides various marketing ethics frameworks and valuation matrix along with numerical illustrations to understand how marketing ethics help organizations in improving overall performance and ultimately firm valuation.

Keywords : *Marketing ethics, Customer satisfaction, Customer trust, Customer loyalty, Customer lifetime value, Firm valuation*

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Ethics is a collection of principles of right conduct that shape the decisions people or organizations make. Ethics studies morality through the critical examination of right and wrong in human action. Morality refers to the customs, principles of conduct and moral codes of an individual, group or society. One way in which an organization influence ethics is by formally and explicitly defining *right* from *wrong.* Practicing ethics in marketing means applying standards of fairness, or moral rights and wrongs, to marketing decision making, behavior, and practice in the organization. The purpose of marketing ethics is to create a long term sustainable competitive advantage. Those organizations that develop this advantage are able to satisfy the needs of both customers and the organization. This focus has come about for two reasons. First, when an organization behaves ethically, customers develop more positive attitudes about the firm, its products, and its services. Second, when marketing practices depart from

standards that society considers acceptable, the market process becomes less efficient.

The ethical marketing activity is especially important in today's environment of increased customer awareness; demanding customers; shorten product life cycle (PLC) and stiff competition. Some organizations are using marketing ethics as a key selling point, because more customers consider an organization's ethical reputation when making purchasing decisions. Not employing ethical marketing practices may lead to dissatisfied customers, bad publicity, lack of trust, lost business, or, sometimes, legal action. Thus, most organizations are very sensitive to the needs and opinions of their customers and look for ways to protect their long-term interests.

Marketing ethics plays a critical role in forming, maintaining and sustaining long-term customer relationships. As the customer base forms a large part of an organization's overall value, valuing customers makes it possible to value the enterprise. This is especially applicable to the process of building long term customer relationship, whose financial value is better captured by the concept of Customer Lifetime Value (CLV), which is the sum of the individual value of all present and future customers measured over their lifetimes with the organization. The CLV concept proposes that price is not the only criterion that wins the battle as customer satisfaction, customer loyalty and the long term relationship also matters. Although organizations are interested in knowing the CLV of their customers, they are also keen on identifying the factors that are in their control that could increase the CLV. An ethical marketing practice is a key factor of organization's success because it affects the organizations' capability to build strong relationships with customers, and accordingly, it is also one of the organizational drivers enhancing CLV.

Literature Review

Ethics is defined as an "inquiry into the nature and grounds of morality where morality means moral judgments, standards, and rules of conduct" (Tsalikis and Fritzsche, 1989). Business ethics is the total of rules of conduct and principles of conduct that is based on ideas relating to which business attitude is correct and which one is false (Scholl et al.,1993). Good business ethics can enhance business results, which leads to sustainable development of organizations (Weeks et al., 2004). The marketplace is becoming increasingly aware of, and increasingly discriminating against, corporations that fail to meet the criteria of ethical business operations and ethical management principles (Svensson and Wood, 2004).

According to Kotler and Armstrong (2003), "organizations determine the needs, wants, and interests of target markets and then strive to deliver superior value to customers in a way that maintains or improves the customers' and the society's well being." But consistent with the idea of marketing also influencing societal well-being, it is also imperative to thoughtfully analyze the ethics of marketing practices. Trust is the foundation for the efficiency and effectiveness of the market system, and it is nurtured with high ethical standards. The law alone is not enough to ensure a sufficient quantity of honesty such that the marketplace operates smoothly and fairly. Hence, more emphasis is on the habitual ethical actions of marketing managers striving to keep their promises to customers by creating fair and transparent exchange within the economic system. If the overall market system has ethical integrity, exchange becomes simpler to carry out (Laczniak and Murphy, 2006).

Marketing ethics concerns the application of ethical considerations to marketing decision making (Smith, 1993). Ethical marketing are practices that emphasize transparent, trustworthy, and responsible personal and organizational marketing policies and actions that exhibit integrity as well as fairness to consumers and other stakeholders. Marketing ethics is defined as "the systematic study of how moral standards are applied to marketing decisions, behaviors and institutions" (Murphy et al., 2005). Marketing ethics can be considered as moral judgment and behavior standards in marketing practice or moral code or system in marketing area (Gaski, 1999). In other words, marketing ethics is the research of the base and structure of rules of conduct, standards, and moral decisions relating to marketing decisions and practices (Lu et al., 1999).

Marketing ethics encompasses the societal and professional standards of right and fair practices that are expected of marketing managers. The most basic ethical standards are often articulated in professional codes of marketing conduct. Professional organizations such as the American Marketing Association (AMA) likewise document ethical considerations as instrumental to their purposes. Specifically, the AMA mission statement (2004) includes as one of its central tenets, "To advance the thought, application *and ethical practice* of marketing." The Norms

and Values statement of the AMA, revised in 2004, represents a useful, *duty-based* specification of marketer responsibilities that exceed those codified in law. Ethical marketers must achieve a behavioral standard in excess of the obligations embedded in the law. Typically, the law represents the lowest common denominator of expected behavior for marketing and business practice (Carroll, 1991). Ethical marketing organizations always should strive to exceed the obligations embedded in the law and the legal minimums of social compliance.

Marketing activity can be ethical or unethical based upon the degree to which a proposed act is perceived as right or wrong, fair or unfair, just or unjust. Marketing has been frequent targets of ethical issues. Marketing managers who take strategic decisions often face with ethical conditions and their decisions is related to all sides of marketing mix such as product, price, place and promotion (Rallapalli et al., 2000). Ethical issues in marketing such as misleading advertising, unsafe and harmful products, abuse of distribution channel power, and promotion of materialism, which were the main ethical concerns of the 1950's, are still serious problems today (Kotler, 2004). Product adulteration is one sort of malpractice done by the marketers whereby they mix artificial, inferior or spurious ingredients substances in the product as well as offers the low-standard products to the consumers in order to save cost and make more profit. Adulterated food includes additives, preservatives, artificial colors or flavoring (Memery et.al., 2005). Over and above, new issues are regularly added to this list, including stealth marketing, predatory lending, promotion of off-label uses of pharmaceuticals, and online privacy (Karpatkin, 1999).

Unethical marketing activity cause various problems for organizations such as lack of customer trust, spoiled customer relationships, declined customer retention, and reduced sales (Jones et al., 2005). Research suggests practices like dishonest actions and high pressure selling tactics have a negative effect on customer trust (Kennedy et al., 2001). Unethical sales behavior negatively impacts the profitability of the firm (Madhani, 2014). There is a positive association between ethical behavior and organizational performance and accordingly the financial performance of firms committed to ethical behavior is superior to those that are not (Verschoor, 1999; 2003).

Ethical marketing activity is related to fair play, honesty and full disclosure in customer relationship. Ethical marketing activity does not seem to translate into short-term sales performance (Román and Munuera, 2005). Examples of ethical marketing activity include: selling products that meet customers' needs, providing true information about the products in terms of its benefits or availability and implementing low-pressure selling techniques. The ethical reputation of the organization results in customer trust which in turn leads to satisfaction and commitment to the organization. Commitment is one of the most crucial dimensions in relationship marketing. Moorman et al., (1992) defined commitment as the desire or intention to sustain a valuable relationship.

It was also found that ethical behavior has a strong positive relationship with customer satisfaction with the sales person. Sales people who behave in an ethical manner are honest in their communications, sell only those products and services they believe will benefit the customer, promise only what can be delivered, and treat customer information in a confidential manner. Conversely, unethical marketing activity can be defined as any short-run conduct that enables the sales person to gain at the expense of the customer (Román and Ruiz, 2005).

According to Gruca and Rego (2005), an organization generates benefits for itself beyond the present transaction by satisfying a customer. These benefits arise from the positive influence of the satisfied customer's future shopping behavior. Customer satisfaction is an important precursor to customer loyalty and subsequent repurchase (Seiders et al., 2005). For example, satisfied customers are more loyal and over time impact their purchase intention (Anderson and Sullivan, 1993). Some of this increased level of purchasing is due to satisfied customers being more receptive to cross-selling efforts (Fornell, 1992). Anderson et al., (1994) and Rust et al., (2002) found a positive influence of customer satisfaction on financial performance indicators of a firm, such as return on investment (ROI) and return on assets (ROA). Luo et al., (2007), also underline that, customer satisfaction is an important driver of a firm's profitability.

The CLV of a customer represents the amount the customer will contribute to the bottom line of the firm over the span of the business relationship with them (Kumar and Shah, 2009).

CLV is influenced by retention rate, lifetime revenue of customer as well as profit margin. Customer lifetime duration is also dependent on retention rate; with any increase in retention rate after value of 70% results into steep rise in average customer lifetime (Madhani, 2015a).

CLV provides the present value of a customer relationship over the lifetime with an organization, and is calculated based on a number of sales transactions with customers (Kumar and Rajan, 2009). CLV of customers (current as well as future), and ultimately customer equity (CE) often eventually forms a proxy for valuation of firms (Gupta et al., 2004). CE is defined as the total of the CLV (customer lifetime value) of all the organization's current and potential customers (Rust et al., 2004). CE seeks to assess the value of not only a firm's current customer base but also its potential or future customer base and represents the entire operating cash flow of a firm.

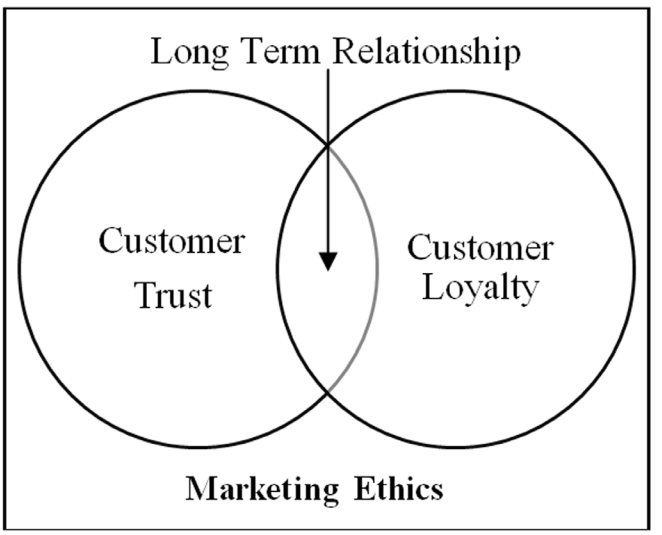
This research works in this direction and provides various marketing ethics frameworks and valuation matrix to understand how marketing ethics help organizations in improving overall performance and ultimately firm valuation.

Marketing Ethics: Enhancing Customer Trust and Loyalty

Today it is not enough to have satisfied customers; firms should also target and try to retain their most valuable customers by building customer trust and loyalty. Ethical marketing facilitates firms to foster long-term relationships with customers based on customer satisfaction, trust and loyalty. Trust is defined as the belief, feeling or expectation from partner's expertise, reliability and intentions (Cater and Zabkar, 2008) in all relational exchanges. Customer trust will result in the customer's willingness to develop and maintain a relationship with the firm. Customer trust is based on the ongoing relationship with the firm and not merely based on a single transaction as trust is developed through repeated interactions in which customer observes the offerings of the firm to be consistent. The trust in a firm occurs when the customer 'has confidence in the firm's future product/service performance because the level of such past performance has been consistently satisfactory'. Customer trust is an essential element for building and maintaining long-term customer relationships, a sustainable market share and solid customer loyalty.

Customer trust has a positive correlation with customer loyalty. Customer loyalty can be defined as a complement of trust (Rosanas and Velitta, 2003). Customer loyalty is generally described as occurring when customers repeatedly purchase a good or service over time and customers hold favourable attitudes about it. Customer loyalty is considered as a key underlying variable in maintaining customer retention (Pritchard and Howard, 1997) and it concerns with the likelihood of a customer returning frequently, making referrals, building strong word-of-mouth reputation, as well as providing references and publicity (Bowen and Shoemaker, 1998) and hence potentially expanding the customer base (Huddleston et al., 2004). Customer loyalty has been recognized as an important source of sustainable competitive advantages due to customer retention, repurchase, and long-term customer relationships (Rust et al., 2000).

Customer loyalty causes customers to buy a particular brand, which improves the customer's value and ultimately the firm's performance. Customer loyalty can result in favorable operating cost advantages for retailers, fewer markdowns, reduction in inventory and simplified capacity forecasting due to lesser fluctuations in demand. Customer loyalty is seen as one of the most important criteria for a company to obtain competitive advantage because it determines customers' repurchases in future (Oliver, 1999). Customer loyalty and repurchase decisions are highly regarded by the firm as they determine firm's profitability and growth (Palmatier et al., 2006). Since customer loyalty is considered to be the complement of trust, the degree of customer loyalty is an important consideration for firms. Organizations that maintain relationships with customers on the basis of trust, ethics, and integrity will have a competitive advantage over those that do not. Framework of Figure 1, shows how marketing ethics influence relationship between customer trust, loyalty and long term customer relationship.

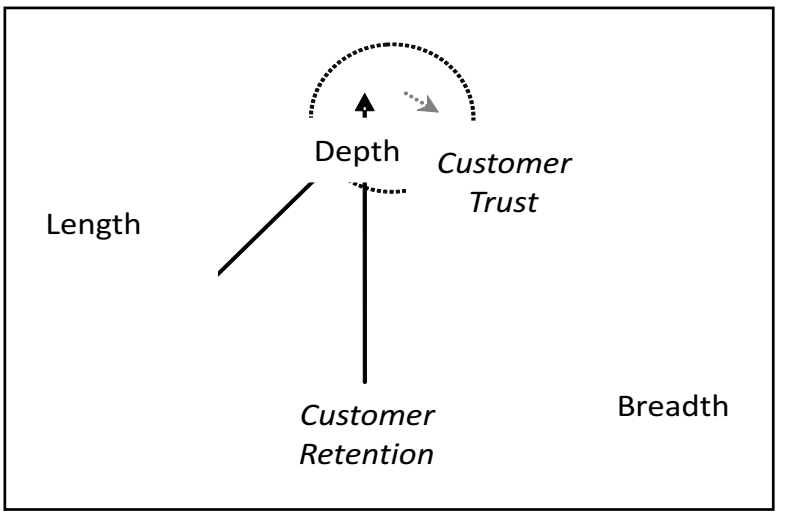


(Source: Framework developed by Author)

Figure 1: Marketing Ethics: Enhancing Customer Trust and Loyalty and Building Long Term Relationship

Ethical Sales/Marketing Efforts and CLV: Key Relationship
Ethical behavior is differentiated from unethical behaviour based upon the degree to which a proposed act is perceived as right versus wrong, good versus evil, fair versus unfair, or just versus unjust (Román, 2003). Unethical sales behaviour is defined as a short-run salesperson's conduct that enables him/her to gain at the expense of the customer (Alrubaiee, 2012). Ethical sales behaviour can play a critical role in the formation and maintenance of long-term relationships with customers (Wray et al., 1994) and is an important factor of maintaining high level of relationship quality (Ou et al., 2015). Relationship quality can be considered as an overall assessment of the strength of a customer relationship (Wulf et al., 2001). Oliver and Swan (1989) indicated that a customer satisfaction with the salesperson increased when the customer felt he/she had been fair in the transaction, which is associated to ethical sales behaviour (Futrell 2002).

Ethical sales behaviour displayed by employees would actively and successfully build a strong customer relationship which will in turn increase the customers' satisfaction, trust and commitment with them (Hansen and Riggle, 2009). Such relationships between organizations and customers have three dimensions such as (1) length or duration of customer relationship corresponds to customer retention (or defection), defined as the probability that a customer continues (or ends) the relationship with the organization (2) depthof a relationship is reflected in the frequency of product usage over time. It is also reflected in customers' decisions to upgrade and purchase premium (higher margin) products instead of low-cost variants (up-selling). Hence, it refers to the deepening of the customer's relationship with the organization through increased usage or upgrading and (3) breadth of a relationship is reflected in cross-selling that is, the number of additional (different) products purchased from an organization over time. Hence, breadth refers to the expansion of the customer relationship with the organization.As shown in framework of Figure 2, these dimensions create various attributes of CLV such as customer trust, customer loyalty, and customer retention. All these attributes are positively influenced by ethical sales/ marketingefforts.



(Source: Framework developed by author, adopted from Madhani (2014))

Figure 2:

Ethical Sales/Marketing Efforts and CLV Framework: Key Dimensions

Hence, all these dimensions should be applied empirically to estimate CLV, by assigning the underlying behaviors into the equation (Verhoef, 2004). Equation below represents CLV framework shown in Figure 2:

$$\mathbf{CLV} = \sum_{t=0}^{n} \frac{\mathbf{P(retention)}_{\mathbf{it}} * \left(\mathbf{Product}_{\mathbf{ijt}} * \mathbf{Usage}_{\mathbf{ijt}} * \mathbf{Margin}_{\mathbf{jt}}\right)}{(1+\mathbf{d})^{\mathbf{t}}}$$

Where

$P(retention)_{it}$ = The probability of continuation of the relationship for customer *i* at time *t*

= (length of the relationship)

$Product_{ijt}$: The purchase of product *j* by customer *i* at time *t* (breadth)

$Usage_{ijt}$: The usage of product *j* by customer *i* at time *t* (depth)

$Margin_{jt}$: The contribution margin for product *j* per usage or volume entity on time *t*.

d : Discount rate

n : Number of periods

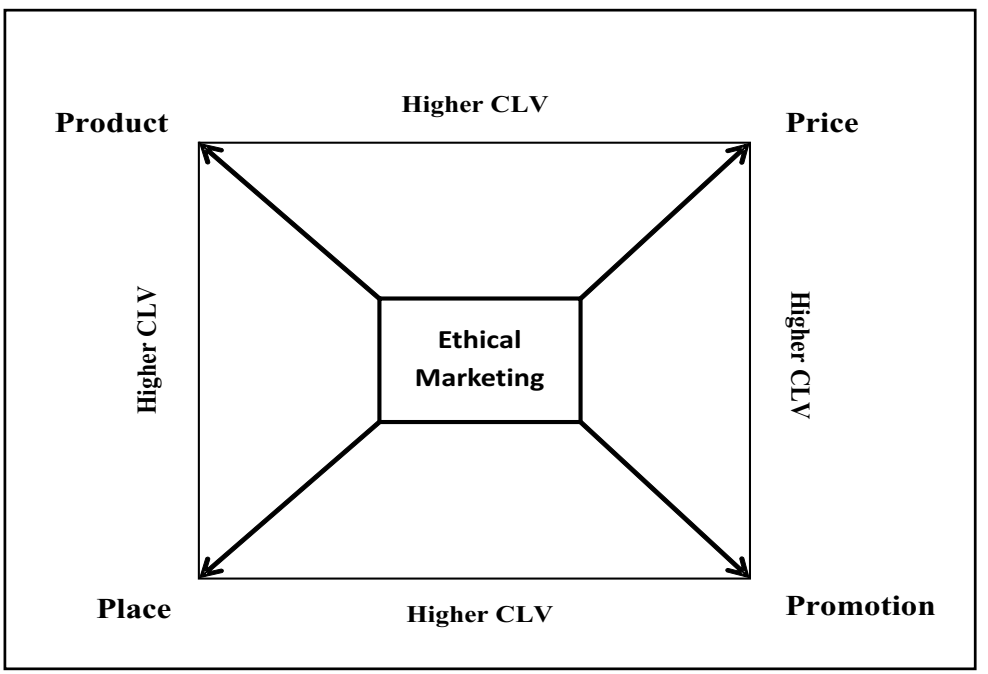
Customer trust has a positive influence on customer loyalty. The greater the customer trust is, the higher the customer loyalty becomes. As customers think their sales person's sales behaviors are ethical then they would tend to trust the sales person as well as the organization. Both customer trust in the sales person and customer trust in the organizations are positively related to customer loyalty.Trust is a cumulative process that develops over the course of repeated and satisfactory interactions with the sales person. The sales person's ethical sales/marketing efforts positively affect customer trust in the sales person and hence when the degree of the sales person's ethical sales behavior is perceived to be high, the customer will have more trust in the sales person. The sales person's ethical sales/marketing efforts also positively affect customer trust in the organization.

The level of trust a customer has in the sales person is considered as key link to the relationship and future

intentions. Trust is a global belief on the part of the customer that the sales person will fulfill its obligations as understood by the customer and can be relied on to deliver on its promises. Ethical sales/marketing effortsare positively associated with customer trust, customer loyalty and customer retention, thus enhancing relationship quality and CLV.

Ethical Marketing: A Conceptual Framework

Marketing focus on designand control various marketing mix variables in order to best satisfy needs of customers in the target market. The marketing mix includes the Product (what the actual offering comprises), Price (the value exchanged for that offering), Promotion (the means of communicating that offering to the target audience) and Place (the means of having the product offering available to the target audience) or distribution deals with the movement of the product to the final consumer (McCarthy, 1960). The traditional marketing mix is also known as the 4 P's of marketing. The organization attempts to generate a positive response in the target market by blending these four marketing mix variables (Product, Price, Place and Promotion) ethically. Marketing ethics systematically examines marketing variables related to 4P-issues such as unsafe products, deceptive pricing, discrimination in distribution and deceptive advertising. Ethical marketing processes positively influence marketing mix variables and also increase CLV (Figure 3).



(Source: Framework developed by Author)

Figure 3: Ethical Marketing: A Conceptual Framework

Various marketing mix variables along with ethical considerations are explained below:

Product

The product is the physical product offered to the consumer; it also refers to any services or conveniences that are part of the offering such as product authentication, product recall, product quality, product packaging etc. Most marketers develop or market products suited to defined market segments, as this (along with appropriate targeting and positioning) should help maximize sales and brand equity. Marketing face with a lot of ethical problems in new product development process, since ethics is discussed less

than it is needed, faulty products are put on the market and so these products harm consumers (Morgan, 1993). Other ethical issues related to product such as rubbish problem which packing cause after its usage (Menezes, 1993), information on product labels can sometimes be used as deceptive although it is technically true, decline of recalling of product although it is problematic, failing in terms of guarantee related to product and performing planned product obsolescence to shorten product life cycle (Chonko, 1995). The deceptive packaging can be termed as the packaging that will contain false identity, faulty information and which will unfairly promote the products to the consumers. Mann and Thornton (1978) indicated deceptive packaging as one sort of unscrupulous practice done by the marketers whereby the faulty product information or misinformation is provided on the label or package in order to deceive consumers.

Price

Pricing includes not only the value of product to the firms, but also considers value to the customers for the price paid. Too high prices are not ethical, when they are a means to take advantage of consumers as it happens in the case of monopolies, oligopolies or cartels. From the ethical point of view pricing is probably one of the most difficult areas of marketing. Unfair pricing can be defined as charging either an excessive price compared to its original price or charging fictitious pricing (Kaynak, 1985). Ethically, price should be equal or proportional to benefit which is taken by the consumers (Kehoe, 1985). However, during situations of monopolistic power, it results into unreasonable price increase (Ortmeyer, 1993). Other ethical issues related to pricing include non-price price increases, misleading price reduction, price advertisements which can be misleading or considered as deceitful, predatory pricing which aims to have monopolistic position, discriminatory pricing, pricing applications of products according to the products' unit or quantity basis and practicing of misleading pricing methods (Chonko, 1995).

Place

Place (or distribution) decisions are those associated with channels of distribution that serve as the means for getting the product to the prospective customers. The distribution channel performs transactional, logistical, and facilitating functions. Ethical issues related to this marketing mix variable grow out of firms, which form channel of distribution (such as direct marketing and internet marketing), and have different needs and goals. Ethical issues in direct marketing are privacy, confidentiality and intrusion (Chonko, 1995). It is not ethical from marketers to send unwanted spams to consumers, because such emails violate consumers' privacy. Ethical problems which are faced while using of internet for marketing are reliability of operations, illegal activities, privacy, accuracy, pornographic, product guarantees, burglary, aiming at children, spams, and deceptive advertisements (Bush et al., 2000).

Promotion

Promotion decisions are those related to communicating and selling to potential consumers. Aim of promotion is to attract the customers to purchase the product and to increase the number of customers by making them switch to the brand under promotion. Promotion is an effective tool to increase the market share in the competitive market by attracting the customers to purchase a brand. Consumers desire to obtain more for the same price and are thus sensitive to sales promotion like free gift, price reduction or special offers. The ethical issue is that companies may be tempted to take advantage of customers by making promises and promotions that cannot be kept. Deceptive or false promises include failure to provide promised benefits (i.e. mail in rebate) or failure to provide a gift in conformity to what was promised.

Ethical issues related to promotion can be analyzed under two topics; advertising and personal selling. The relationship between advertising and ethics can be analyzed from the point of view of persuasive trait of advertising, deception, puffery and making promises that cannot be kept. Other ethical issues related to advertising include advertising to children, demonstrations, mock-ups, endorsements and testimonials (Drumwright, 1993). An advertisement will be deemed misleading or deceptive only if it is reasonable to expect that persons exposed to it, or those targeted by it, would come to hold false beliefs as a result of exposure to it. A misleading advertisement is one that causes a distorted perception and for which the advertiser is considered responsible. It could be that the consumer misled by an advertisement will be tempted to buy the advertised product and in that way either getting less than he thought he would or paying more than he should (Attas, 1999).

Personal selling by sales people who act in an ethical manner are more effective at building strong customer relationships - their customers are more satisfied with them, more trusting of them, and more committed to them. Customer trust with the sales person is defined as the confidence that the customer has in the integrity and reliability of the sales person. This confidence in turn will result in the customer's willingness to develop and maintain a relationship with the sales person (Madhani, 2014). Ethical sales behavior is defined as fair and honest actions that enable the salesperson to foster long-term relationships with customers based on customer satisfaction and trust. Examples of such activities include: selling products that meet customers' needs, providing true information about the product (e.g. when comparing with the competitors' products or in terms of its benefits or availability) and implementing low-pressure selling techniques (Singhapakdi et al., 1999). The propensity for sales person to make unethical choices can be reduced by organization in various ways: developing a code of ethics, reinforcing ethical behavior through an ethical climate and designing a compensation system that rewards ethical behavior and punishes unethical behavior (Madhani, 2015b).

Ethical concerns can arise in every element of the marketing mix. Table 1 below shows various marketing mix variables and ethical considerations.

Table 1:Marketing Mix Variables and Ethical Considerations

Sr. No.	Marketing Mix Variables
A)	**Product**
	1. Marketer should not manipulate the availability of a product for the purpose of exploitation. 2. Marketer should not exaggerate or lying the benefits of a product offering. 3. Information regarding all substantial risks associated with product or service usage should be disclosed. 4. Products and services offered should be safe and fit for their intended uses. 5. Marketer should not misrepresent the credentials of the product / service provider. 6. Any product constituent substitution that might materially change the product or impact the buyers purchase decision should be disclosed. 7. Obligation and responsibilities in contracts and mutua l agreements should be met in a timely manner.
B)	**Price**
	1. The full price associated with any purchase should be disclosed. 2. All extra-cost added feature should be identified. 3. Marketer should not engage in price fixing. 4. Predatory pricing should not be practiced.
C)	**Place**
	1. Coercion should not be used within the marketing channel. 2. Undue influence should not be exerted over the resellers' choice to handle a product. 3. Marketer should not implement manipulative influence techniques or high pressure selling tac tics. 4. Marketer should not sell products that customers do not need 5. Marketer should not hide mistakes or errors in product/ service delivery
D)	**Promotion**
	1. Communications about products and services offered should not be deceptive. 2. False and misleading advertising should be avoided. 3. High pressure manipulations or misleading sales tactics should be avoided. 4. Sales promotions that use deception or manipulation should be avoided. 5. Marketer should not treat customers unfairly or neglect customer requests. 6. Marketing practices that m ake it difficult to invoke a product/service guarantee for promotional item should be avoided.

(Source: Table developed by Author)

Honest actions such as low pressure selling techniques, fairness, responsible acts, forbearance from opportunism and benevolence of a sales person are observable and are suggested to increase customer trust in the sales person. Sales person's honest actions and ethical sales behavior increases customer trust and loyalty.

Illustration

Although unethical sales behaviors can damage the customers, organization, or both, it is the organization that ultimately loses (Schwepker et al., 2005). The case of Sears's automotive center service advisors, who routinely added contrived repairs to customers' bills, is a good example of how unethical sales behavior negatively impact organization (Babin et al., 2000). In 1992, automotive service advisors were accused of overcharging auto repair customers in order to earn higher commissions. It was found by Sears that its automotive service advisers, acting under a commission sales plan, were selling parts and services that customers did not need. That behavior harmed both the customer and company in the long run. Sears was charged for fraud, making false and misleading statements and willful departure from accepted trade practices. Though customers were the first victims of unethical behavior of sales people, Sears's reputation was irreparably damaged. Sears' total cost to settle pending lawsuits was huge, i.e. about $60 million (Paine, 1994).

Research Methodology

A two stage methodological approach is adopted in this research. In the first stage, research focuses on development of a business value added framework to highlight value added for organization because of ethical marketing. The second stage involves the development of CLV framework along with valuation matrix to support business value added framework.

A) Development of a Business Value Added Framework

In the present scenario of competitive environment, more and more organizations are aggressively searching for competitive advantages in order to get a better position in the markets.

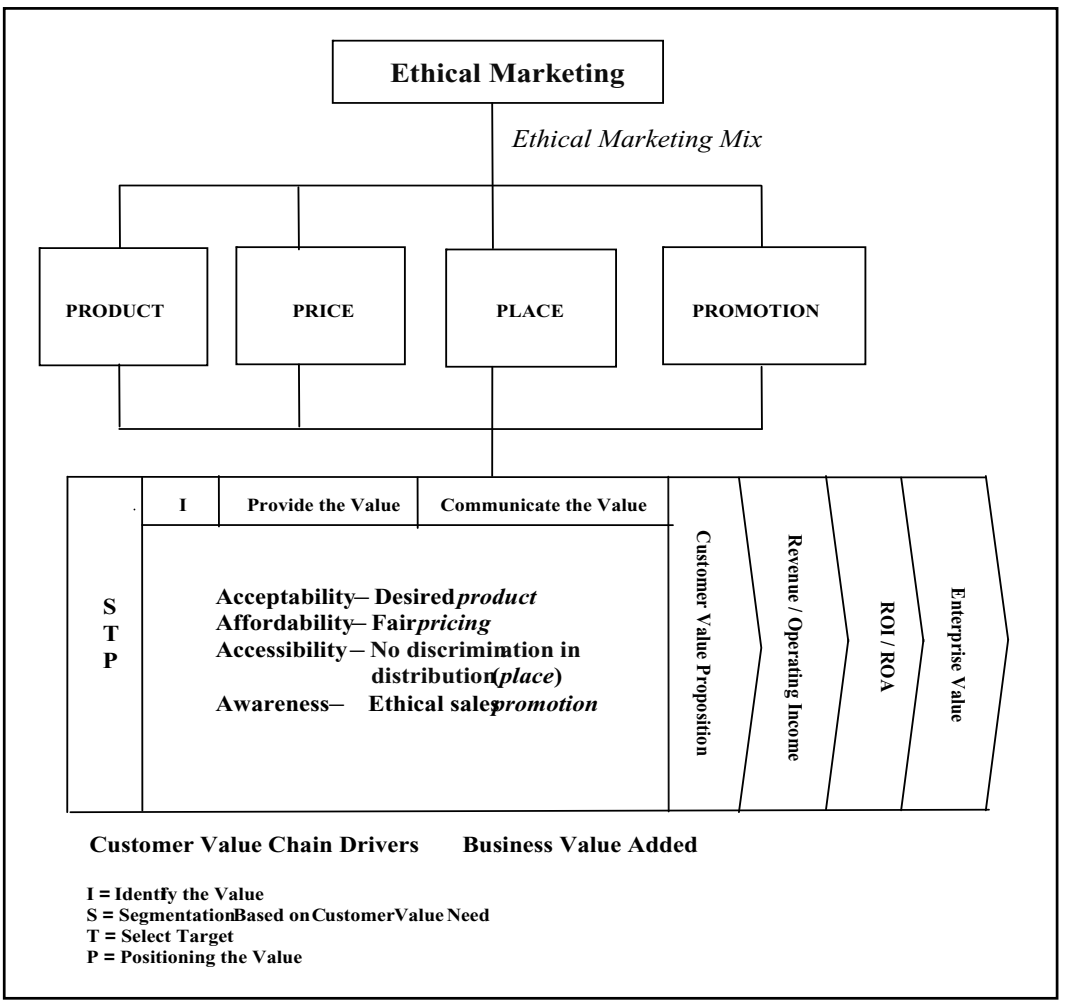
Competitive advantage is the extent to which an organization is able to create a defensible position over its competitors (Porter, 1985). The source of competitive advantage can be found in a firm's ability to differentiate itself from the competitors (Morgan and Strong, 2003). To gain competitive advantage over its competitors, a firm must deliver value to its customers through cost advantage by performing activities more efficiently than its competitors or by creating greater differentiation advantage by performing the activities in a unique way in relation to competitors (Barney, 1991; Peteraf, 1993; Slater, 1996). Having a competitive advantage for organization generally suggests that they can have one or more of the following capabilities when compared to its competitors: lower prices, higher quality, higher dependability, and shorter delivery time. All these capabilities are positively influenced by ethical marketing.

To grow and prosper in the time ahead, organizations must develop and implement competitive business strategy that satisfies the needs of the target market. The core of any business strategy is the customer value proposition, which describes the unique mix of product and service attributes, customer relations, and overall image that an organization offers. It also explains how the organization will differentiate itself from rivals to attract, retain, and strengthen relationships with targeted customers.

To demonstrate the ways in which ethical marketing can generate overall business values for an organization, Porter's (1985) value chain framework is used as a basis to present a business value-added framework as shown in Figure 4. The role of added value has long been accepted as a means of securing competitive advantage (Normann and RamõÂrez, 1994; Naumann, 1995) and long-term success of the firm (de Chernatony and McDonald, 1998). According to Brown (1997), the value chain is a tool to segregate a business into strategically relevant activities. This classification enables identification of the source of competitive advantage by performing these activities more cheaply or better than its competitors. Slywotzky and Morrison (1997) used a 'customer-centric' approach to propose a modern value chain in which the customer is the first link to all that follows. Prior researchers have also used value added framework (Moon and Ngai, 2008; Madhani 2011; Madhani 2012; Madhani 2015c).

As shown in Figure 4, ethical marketing by organization will have positive impacts on all elements of marketing mix of 4 P's (product, price, place and promotion) and enhances customer value proposition. However, such marketing mix

elements are independent variables for 4A's (Acceptability, Affordability, Accessibility and Awareness) of customer value chain drivers which are in turn dependent variable and creates added value for the customers as well as for the organization (Figure 4).



(Source: Framework developed by author)

Figure 4: Ethical Marketing: A Business Value Added Framework

B-1) Development of a CLV Framework

Ethical marketing influence customer behavior (such as customer acquisition, customer retention, and customer expansion in the form of cross-selling / up-selling), which in turn affects customers' CLV or their profitability to the firm. CLV is the key method for determining how much each customer adds to the value of the organization. Lifetime revenue of customer is dependent on average life time of customer and number of purchases during lifetime.

CLV is the only financial metric that incorporates into one, all the elements of revenue, expense and customer behavior that drive profitability. CLV focuses on long-term profitability instead of immediate sales outcome. CLV depends on three main components of customer relationship – acquisition, retention, and cross-selling. The lifetime value of a customer for an organization is the net revenues obtained from that customer over the life time of transactions with that customer minus the cost of attracting, selling, and servicing the customer taking into account the time value of money (Jain

and Singh, 2002). This metric also manages to score over other metrics by adopting a customer-centric approach instead of a product-centric one, as the driver of profitability. CLV is a calculation of projected net cash flows that a firm expects to receive from the customer, adjusted to the probability of occurrence and are then discounted. Hence, it measures the present value of all future profit streams of a customer across the entire customer life cycle. Although a true CLV measure implies measuring the customer's value over his or her lifetime, for most applications it is three years as in most cases the majority of a customer's lifetime value is captured within the first three years (Gupta and Lehmann, 2005). For example, if the retention rate is equal to 75%, and the discount rate is equal to 20%, then three years accounts for about 86% of the CLV (Kumar et al., 2008).

On average, firms spend six times more to acquire customers than they do to keep them (Gruen, 1997). As the cost of acquiring customers is high, the profitability from a customer arises if customers make many repeat purchases. Customer retention is very much a function of customer loyalty, and hence, strategies that strengthen the relationship between the firm and the customer should improve retention. Many authors have documented the financial benefits to a firm of increasing retention rates. Firms can boost profits by almost 100% by retaining just 5% more of their customers (Reichheld and Sasser, 1990). Retention can be increased with better products and services, more competitive pricing, promotions, particularly value added ones, and increased brand value (Malthouse and Mulhern, 2008). Another study found that increasing customer retention rates by 5% could increase firm's profit by 2% to 9% (Gupta et al., 2004). Unethical marketing practices decrease customer retention rate thereby ultimately reduces CLV of customer.

One of the most effective ways to boost CLV is to increase customer satisfaction as it enhances customer trust, loyalty and retention rate. A positive link between satisfaction and usage has been documented in prior research (Bolton and Lemon, 1999). Research on a meta-analysis of purchase intentions studies found that satisfied customers are more loyal (Szymanski and Henard, 2001). A study conducted by Deloitte Consulting found that firms which recognize the importance of understanding CLV are 60% more profitable than firms that do not consider CLV (Kale, 2004). Research has found that a 5% increase in customer retention can increase customer lifetime profits by 25% to 95%. The same study found that it costs six to seven times more to gain a new customer than to keep an existing one (Reichheld and Teal, 2001).

As shown in Figure 5, ethical marketing enhances customer trust, loyalty and satisfaction, strengthens customer relationship and ultimately increase CLV through customer acquisition, retention and expansion. CLV, impact CE and eventually valuation of the firm.

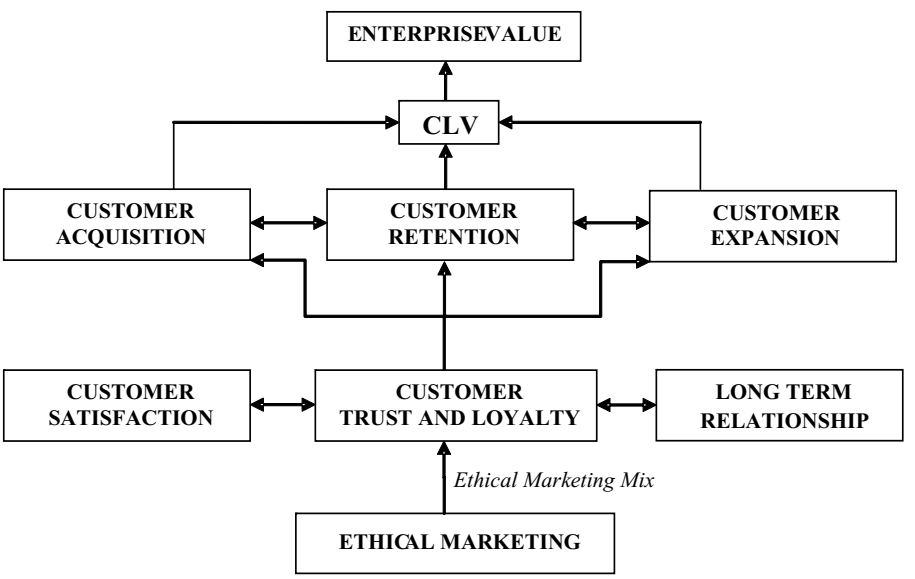


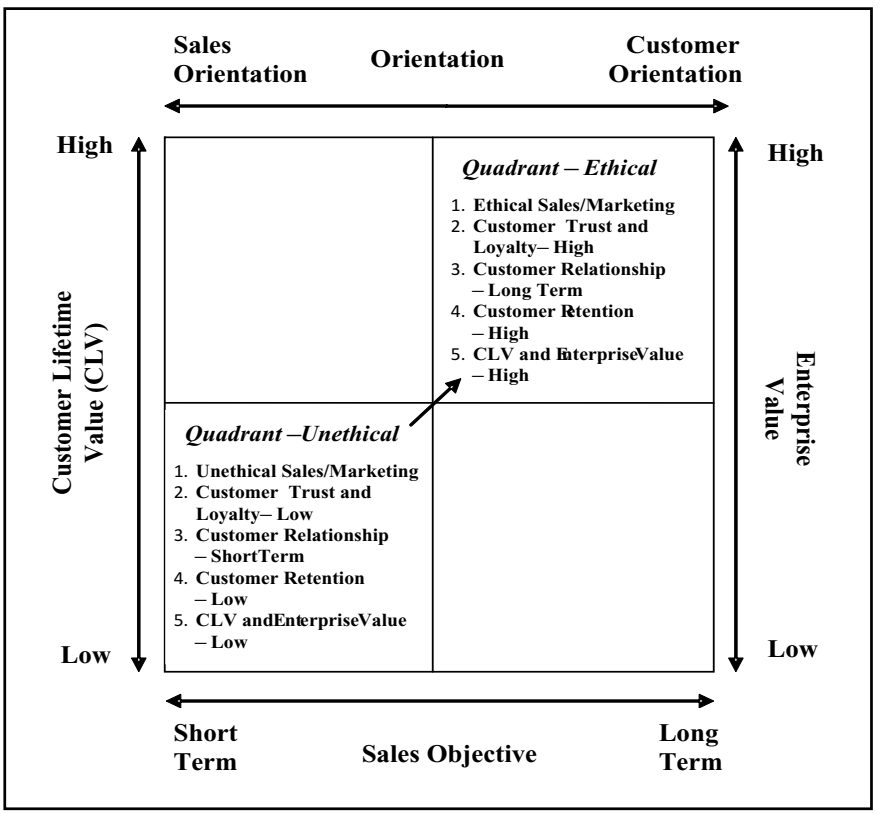
Figure 5: Ethical Marketingand CLV: A Conceptual Framework

(Source: Framework developed by author)

As the CLV concept is based on customer value, it increases marketing's accountability, emphasizes long term relationship with customers and sensitizes the organization regarding negative consequences of unethical marketing practices. The CLV approach quantifies the potential monetary value of customers over their lifetime and builds linkages between ethical marketing and the financial performance of the organization.

B-2) Development of a Valuation Matrix

Typically, CLV is a function of the contribution margin, the propensity for a customer to continue in a relationship (customer retention), and the marketing resources allocated to the customer and hence, marketing ethics directly influence CLV. Unethical marketing practices such as aggressively selling to customers when not requested or hiding the facts regarding product or services might result in customer defection. Hence, with unethical marketing practices, customer dissatisfaction increases, resulting in higher cost burden in maintaining a customer relationship. In contrast, having gained customers' trust through honest and ethical marketing behavior might provide enduring advantage to the organization in terms of higher CLV as competitors struggle to convince customers to take the risk and switch to a different organization (Figure 6).



(Source: Matrix developed by Author)

Figure 6: Ethical Marketing – Enterprise Value Matrix

Customers are more inclined to identify themselves with the organization and continue to do business when organization that is perceived as ethical (Ahearne et al., 2005). There is a negative relationship between unethical sales behavior and customer-oriented selling. Ethical sales practices may avoid short term decisions that hamper long term benefits. In contrast, unethical sales practices may focus on short term gain by misleading customer to gain immediate sale, but such deception will likely jeopardize future sales. As such ethical behavior - behavior that is both legal and morally acceptable - plays a very important role in customer oriented selling.

Unethical marketing practices not only destroy sales opportunities but also waste marketing resources in efforts to gain new customers. These organizations need to spend more on marketing (advertising and sales promotion) budget as their practices also reduce the impact of marketing efforts. The unethical marketing practices increases customer dissatisfaction and churn rate and hence decreases retention rate. With low retention rate of customers, organizations won't be able to up-sell or cross-sell products, there by further decreasing sales revenue. Hence, it translates in to lower CLV as well as enterprise value (Figure 6).

Various Illustrations

1) Unethical Marketing Practices (Deceptive Promotion)

After going through initial rapid growth, the business growth of Royal Limited, a tea processing and marketing company began to slow down mainly because of stiff competition and increased demands of customers for natural flavors. After much R&D and with very encouraging customer response during pilot test, Royal launched a new variant of ginger herbal tea in the market. To revive overall growth, Royal launched a promotion scheme for the new product. As new flavor - ginger tea contained herbal medicinal ingredients; it was good for health in long term as it increases vitality of the body. However, to increase sales volume quickly, marketing indulged in unethical practices by creating unrealistic product expectations as promotion campaign apart from highlighting good test of ginger tea also claimed that it is health supplement and quickly reduces obesity. Under this circumstance, as customers were given wrong promise about product, they were highly dissatisfied with the newly flavored ginger tea although it was unique in test and liked by most customers.

Hence, after initial good response of promotion for ginger flavored tea, demand for product quickly died down. The retention rate, from existing data of Royal Limited, showed that a 17% of new users become light users, 38% of light users become medium users and 40% of medium users become heavy users. Royal market research team found that customers felt cheated by unethical marketing promotion (i.e. wrong promise about the product). It was the case of creating unrealistic expectations (exaggerating or lying the benefits of a product offering). Accordingly, unethical marketing promotion resulted into decreased customer satisfaction and trust, lower retention rate of customer (i.e. retention rate decreased by 50%) and ultimately decreases in CLV and enterprise value (Table 2).

Table 2: New Product Launch and Unethical Marketing Promotion

Calculation		Customer Hierarchy			
		New (A)	**Light** (B)	**Medium** (C)	**Heavy** (D)
(1)	Number of purchases / lifetime	-	20	60	100
(2)	Average lifetime (years)	-	2	4	7
(3)	Lifetime revenue ($)	300	1100	3300	6400
(4)	Profit margin (%)	15	9	9	9
(5)	Profit by category = (3) x (4) ($)	45	99	297	576
(A)	**Ethical Marketing**				
(6)	Average retention rate (%)	100	22	43	45
(7)	Initial number of customers	100	-	-	-
(8)	Customers retained from 100 = $(8)_{prior}$ x (6)	100	22	9	4
(9)	Total profit = (5) x (8) ($)	4500	2178	2673	2304
(10)	Profit per new customer = (9)/(8_A) ($)	45	21.78	26.73	23.04
(11)	CLV of new customer = $(10_A) + (10_B) + (10_C) + (10_D)$ ($)	116.55			
(12)	Number of customers	1000			
(13)	Firm value (in terms of CE) = (12) x (11) ($)	116,550			

(B)	Unethical Marketing - Deceptive Promotion				
(14)	Average retention rate (%)	100	11	21	22
(15)	Initial number of customers	100	-	-	-
(16)	Customers retained from 100 = $(16)_{prior}$ x (14)	100	11	2	0
(17)	Total profit = (5) x (16) ($)	4500	1089	594	0
(18)	Profit per new customer = (17) / (15_A) ($)	45	10.89	5.94	0
(19)	CLV of new customer = $(18_A) + (18_B) + (18_C) + (18_D)$ ($)	61.83			
(20)	Number of customers	1000			
(21)	Firm value (in terms of CE) = (19) x (20) ($)	61,830			
(22)	Decrease in firm valuation with unethical behavior =(13) – (21) ($)	54,720			
(23)	Decrease in firm valuation with unethical behavior =[(22)/(13)] x100 (%)	46.94			

(Source: Calculated by author)

2) Unethical Marketing Practices (Poor Product Quality)

A direct catalogue retailer of mobile phone/accessory has been attracting new customers by sending the product catalogue through random mailing. The cost of sending a general catalogue (including production and mailing cost), is $1. From experience, company anticipates that the response rate from a random mailing to be 1%. A response rate of 1% means that of 100 catalogues sent, only one recipient is expected to respond. After initial success, in order to increase profit quickly, the retailer compromised on product quality. This is the case of unethical marketing practices, i.e. product manipulation (selling inferior products). Such unethical behavior decreased loyalty of customers and resulted in drop of retention rate from 75% to 60% (Table 3).

Table 3: Unethical Marketing Practices: Low Quality Product

Calculation		Year (n) (n >= 0)							
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
(1)	Unit cost of catalog (including mailing cost) ($)	1	1	1	1	1	1	1	1
(2)	Catalog response rate (%)	4	4	4	4	4	4	4	4
(3)	Customer acquisition cost = (1)/(2) ($)	25	25	25	25	25	25	25	25
(4)	No. of times catalog sent = (every month)	12	12	12	12	2	12	12	12
(5)	Marketing promotion cost = (1) x (4) ($)	12	12	12	12	12	12	12	12
(6)	Average order size ($)	50	50	50	50	50	50	50	50
(7)	No. of purchase/year	2	2	2	2	2	2	2	2
(8)	Gross margin (%)	25	25	25	25	25	25	25	25
(9)	Margin on each purchase = (6) x (8) ($)	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
(10)	Discount rate (%)	10	10	10	10	10	10	10	10

(A)	**Ethical Marketing Practices**(retention rate **'r'**= 75%)								
(11)	Retention rate across years = $(r)^n$ (%)	100	75	56	42	32	24	18	13
(12)	Expected profit/customer = [[(7) x (9) – (5)] x (11)] ($)	13	9.75	7.31	5.48	4.11	3.08	2.31	1.74
(13)	NPV of profit/ customer = $[(12)/((1+(10))^n]$ ($)	13	8.86	6.04	4.12	2.81	1.92	1.31	0.89
(14)	CLV = Cumulative profit / customer (net of acquisition cost) ($)	-12	-3.14	2.91	7.03	9.84	11.75	13.06	13.95
(15)	CLV of new customer ($)	13.95							
(16)	Number of customers	10,000							
(17)	Firm value (in terms of CE) = (15) x (16) ($)	139,500							
(B)	**Unethical Marketing Practices – Low Product Quality (retention rate 'r' = 60%)**								
(18)	Retention rate across years = $(r)^n$ (%)	100	60	36	21.6	12.96	7.78	4.67	2.80
(19)	Expected profit/customer = [[(7) x (9) – (5)] x (18)] ($)	13	7.80	4.68	2.81	1.68	1.01	0.61	0.36
(20)	NPV of profit/ customer = $[(17)/((1+(10))^n]$ ($)	13	7.09	3.87	2.11	1.15	0.63	0.34	0.19
(21)	CLV = Cumulative profit / customer (net of acquisition cost) ($)	-12	-4.91	-1.04	1.07	2.22	2.85	3.19	3.38
(22)	CLV of new customer ($)	3.38							
(23)	Number of customers	10,000							
(24)	Firm value (in terms of CE) = (22) x (23) ($)	33,800							
(25)	Decrease in firm valuation with unethical behavior = (17) – (24) ($)	105,700							
(26)	Decrease in firm valuation with unethical behavior = [(25)/(17)] x100 (%)	76							

(Source: Calculated by author)

As calculated in Table 3, unethical marketing practices decrease firm valuation by 76%.

Conclusion

Ethical marketing practices increase customer satisfaction, trust and loyalty, and builds long term customer relationship. As customer lifetime value is a concept based on customer value, it's derived from the long term relationship context occurring throughout the customer lifetime. Ethical marketing practices foster an environment of heightened customer trust and loyalty necessary for building long term customer relationship and enhance CLV as well as CE. Thus, an emphasis on marketing ethics can help sales organizations attract new customers, maintain and expand relationships with existing customers and expand market share through cross-selling and up-selling.

With ethical marketing process, organizations exhibit a strong sense of integrity and avoid deceptive and dishonest practices in satisfying customer needs and hence build trusting and long term customer relationships. Ethical marketing practices play a significant role in enhancing financial performance and firm valuation. In long run, ethical marketing is much more likely to achieve better corporate performance in terms of sales, profitability and market share because of higher customer satisfaction, trust and loyalty and ultimately higher CLV and valuation of firm. Marketing ethics strengthen long-term viability of the organizations and build competitive advantages.

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Interferences and Moderation of Job and Family Life

Sheeja Krishnakuamar

Abstract

The study tries to understand the interference of family issues into work and work issues into family. This study is undertaken to find out the level of job satisfaction in spite of the distracting factors. Important objectives of the study include finding the interference of work domain factors into family satisfaction and the family domain factors into job satisfaction. The study is conducted on women employees working in IT companies. Collected data is analyzed using descriptive and inferential statistical tools. The study on the influence of cultural factors helps to understand its importance as a moderating factor for the success of the organization. The study throws light on the factors that companies have to concentrate for the smooth functioning of it. The model created may be useful to identify the factors that are relevant to be taken care for balancing life and work.

Keywords : *Job involvement, work hours, supervisor support, co-worker support, policies*

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There are changes happening in the organization due to the social, economic and demographical variations. One of the major changes that are visible in the organization is the participation of women in the workforce. Entry of women in great numbers has forced organizations to bring a change in policies and programs. This has brought transformations in the family structure also. Previously men earn from outside and women take care of household activities. Educated women for more financial stability started entering the corporate world. This created an imbalance in the sharing of household work as most of the time women are outside the house. Sweeping changes in the composition of families and the workforce, such as more dual-career couples and working mothers with young children, have increased the likelihood that both male and female employees have substantial household responsibilities in addition to their work responsibilities (Gilbert, Hallett, and Eldridge, 1994). This created pressure for both men and women who are working in the corporate. Thus policies in the organization have been rewritten for

the employees to adjust the work and family life so that their commitment to the organization is not disturbed. Companies are taking many measures to ease the situation. The ability of employees to balance their work and family lives depends on the characteristics of their jobs and workplaces, as well as on their family situations (Berg, Kalleberg and Appelbaum, 2003). Advent of technologies is another factor that influenced their lives. There is a chance for the employees to work from home without venturing out of the house. But this facility made employees to get connected with the job most of the time. So the pressure related to the job increased and so imbalance still existed among the employees. For some employees elderly members in the house or small kids at home are the major issues. Organizational and job characteristics, along with individual and family variables, affect the individual towards his commitment towards the job. The support that is provided from the organization is favourable to employees depending on the family background, nature of job, family support etc. All these factors, in turn, affect one's organizational commitment (Berg, Kalleberg, and Appelbaum, 2003).

Committed and dedicated employees are the greatest asset of the organization. Retaining them in the organization is the utmost challenge that management face. A good culture of the organization supports the employees to perform well in the organization. A well maintained environment is essential for the proper understanding and dedication towards the job. Their personal issues, especially family problems, may interfere with the job. This may result in less concentration towards the job. By supporting the employees to manage the work and family facilitate company to have committed and devoted workers.

Existence of an organization mainly depends on the dedicated, committed and loyal employees. They decide the growth of the company. An environment away from interferences of the family life would allow employees to concentrate on the work. Galinsky and Stein (1990) contend the environment of the company is crucial to the success of policy implementation. So companies should take measures to see that employees are focused fully to the work. Companies started to take steps that make employees work with total dedication while other family issues like child or elder care are supported by them. These initiatives are put forth in the form of policies for the employees to use it and get adapted to the situation. But the initiatives like work from home, flexible timing, child care assistance etc. are looked upon by individuals in different ways. This study tries to find out the level of interference of work into family life and family life into work.

Women at Corporate

There are information from information technology companies that the number of women employees is increasing and their requirement in the companies also increasing twofold. The statistics show that Tata Consultancy Services recruit maximum number of female employees and has crossed more than one lakh. In TCS the ratio of female to male is 25:75. More than one-third of the employees in information technology companies are women. Some of the other companies that follow TCS are IBM, Wipro, and Accenture etc. At Wipro Technologies, 10 percent of women employees hold outstanding designations. The numbers show that women employees are exhibiting a good performance and their dedication to the work is tremendous that employers do not want to avoid considering this gender for work. Studies reveal that women are twice hard working compared to male counterpart and take their job seriously. NASSCOM survey reveals that women comprise 25 percent out of the 2 lakh employees of information technology majors like TCS and Wipro. NASSCOM study points that the present ratio is 76:24 of males verses females would change to 65:33 in the near future.

Model Framework

The two domains that an employee has to balance are that of the work and family. Grandey et al. (2005) proposed that among various roles, work and family roles are the two most important life roles for most people and incompatibility between them may create tension and negative feelings. The interference of one domain into other may result in the tension within and disagreement with others. The conflict within occurs when the family domain factors interfere and destroy the concentration to do the work. In the same way work domain factors may interfere into family life and create unnecessary disturbances. Work-family conflict is a form of inter-role conflict in which the demands from one domain (work or family) are incompatible with role demands stemming from another domain, family or work (Greenhaus and Beutell, 1985). It is important to identify the crucial

variables that kill harmony. Organization should identify those aspects and focus on it and rectify it for improving the performance of the employees. The unwanted disturbances can be controlled by the interference of the supervisor or colleagues by supporting the employees. By formulating family-friendly policies and implementing well in the organization can also reduce the annoyances. Satisfied employee towards his family and job would succeed well in the organization. A great deal of enthusiasm is noticed in such employees. Research literature suggests that if work is considered to be the source of this interference then the employee may develop a negative attitude towards his or her job, resulting in lower job satisfaction (Grandey et al., 2005).

Satisfaction

Locke (1969) defines job satisfaction as the individual's subjective valuation of different aspects of the job. The main aspects of job satisfaction can be considered as synonyms of affect and attitude. Job satisfaction arises from a variety of feelings related to the characteristics of the job, like feelings about the working conditions, about the level of earnings, about the risk of losing the job, about the opportunity for personal control, and so on. Locke has defined job satisfaction as enjoyable state of mind that an individual gets from job appraisal.

Job satisfaction is defined as "a pleasurable emotional state that results from an individual appraisal of one's job" (Locke, 1969). Family satisfaction, on the other hand, may be defined as the degree to which the individual feels satisfied with the time spent with family members and fulfilling their needs and wants. Grandey and her colleagues (2005) found that work-to-family and family-to-work conflict are negatively associated with the job satisfaction. However, in their study, work-to-family conflict was observed to show stronger correlation with job satisfaction than family-to-work conflict.

Involvement

Job involvement according to Byron can be explained as the extent to which employee identify themselves involved with their employment roles and the degree to which their interests are focussed on the work. In the same way family involvement is the extent to which an individual is engrossed in household duties such as housework and child-care-related obligations that can create time-based pressure from the family realm (Frone et al. 1992a).

Stress

Stress can be defined as a situation when an individual cannot adjust with normal situation and feel that ability to adjust is not possible and affect the performance. When a person is confronted with a situation which poses a threat, and perceives that she or he does not have the capability or resources to handle the stressors the imbalance that results at that point in time is termed as stress (Luthan, 2005). This stress is felt in job and family life. Those individuals feel excited, and take tension and find that productivity and performance is reducing.

Time

Time–related pressure occurs when an individual is mentally involved with either the work or family related area that it difficult to concentrate on other role responsibilities (Greenhaus and Beutell, 1985). Studies done by Byron, 2005 finds the long working hours create interference of work into family life. Inappropriate shift timing, overtime working and sudden work load can cause intrusion of duties from one domain into another. This will result in conflict between work and family roles. A growing aspiration to balance work with other aspects of life can doubtless be linked to the long hours that many individuals have to devote to work.

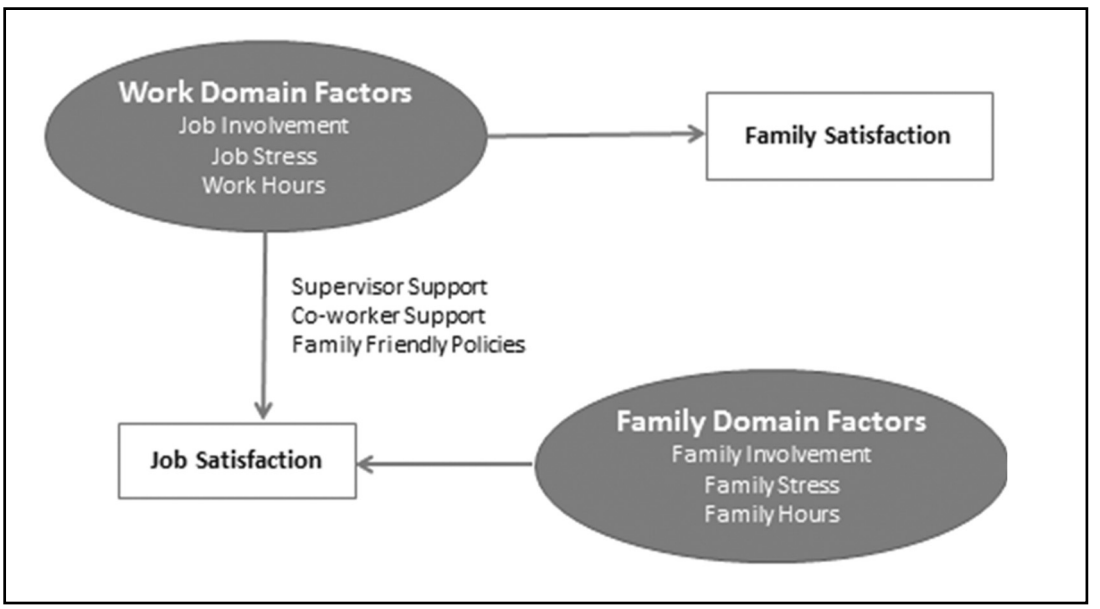
Cultural Support

Support from work place or family helps to reduce the inter-role conflict and lead to higher job satisfaction. Carlson and Perrewé (1999) have demonstrated that a supportive culture at work can reduce the degree of work/family conflict individual's experience. A caring culture creates a perception in the mind of the employees that they are protected and considered. This enhances their dedication towards the organization and improves productivity. There are policies that are formulated that are friendly in nature. These policies are called "family-friendly benefits" and include interventions such as flexible work schedules, child-care referrals, and leaves of absence (Allen 2001). The family-friendly benefits can be implemented properly in the organization by an accompanied change in organizational norms and values. In a study done on Taiwanese and British employees by Lu and colleagues (2010) found that cultural

support function as a moderating effect on the relationship of work-family conflict with job and family satisfaction. Another study by Hsu (2011) found that there is a significant interaction effect of supervisor support on the relationship between work-family conflict and job satisfaction.

The variables considered for the study related to work and family are job involvement, job stress, work hours, job satisfaction, family involvement, family stress, family hours and family satisfaction. Other factors that support the cultural aspects include supervisor support, co-worker support and policies that support work-family balance. Balancing the job and family in the rapid changing environment is difficult for both male and female employees working in any sector. According to studies of Chandra, understanding and practising the art of work-life balance are ways of counteracting against to circumstances to help to persons fulfil their responsibilities and aspirations to lead to mutual benefit of the individual, business and society at large.

A model created to understand the relation of variables explained in detail is given below:



The model is created to explain the interference of work domain factors like job involvement, job stress and working hours into the family life that impact family satisfaction. Same way the interference of family domain factors like family involvement, family stress and family hours impact job satisfaction are depicted in the figure 1. There are some cultural factors that may act as moderators considered in the study are family-friendly policies; superior support and co-worker support are also demonstrated in the model. The impact of each variable towards other is examined and analysed in this study.

Methodology

The data is collected from the IT employees working in three different companies in Bangalore. The three companies chosen are well established companies. Care is taken to find that organization has been established 20 years ago in Bangalore. This is to confirm that organization is experienced enough the problems related to balance of work and family life among the employees. The questionnaire has been prepared and handed to the respective HR managers to collect the data. Three known companies have been approached. About 150 questionnaires have been distributed but only 120 returned. All the respondents have been females. Majority of the respondents, sixty eight, were between 30 and 40years. Number of employees between 20 and 30years, have been 42. There are only 10 employees between 40 and 50 years. In that, majority of employees between the age group between 30 and 40 years have been married with children (fifty). All women employees between

the age group 40 and 50years, have been married and with children. Among the employees between 20 and 30 years majority were married but without children (thirty five).

There are different instrumental variables and items are used for the preparation of questionnaire. Some of the variables used are job and family involvement, job and family stress, job and family hours spend, job and family satisfaction and also work culture. In that for job and family involvement three items are used developed by Kanungo(1982) and Fone and Rice (1987) for family involvement. For Job and family satisfaction Kandel Davies and Ravies(1985) and Kandel et al. (1985). For the culture, scale developed by (Beauvais and Kowalski 1993; Francesco and Thompson 1996) have been used. Cronbach Alpha is done to find out the reliability and is found that all the scale was above 0.7. Likert scale five point scale is used in the questionnaire.

Hypothesis

Some of the hypothesis that is created to understand the relation of different variables is:

Hypothesis 1: There is a significant interference of work domain factors to family satisfaction.

Hypothesis 2: There is a significant interference or family domain factors to job satisfaction.

Hypothesis 3: There is moderating effect by the cultural factors like family – friendly policies, supervisor support and co-worker support to job satisfaction.

Result

Mean and standard deviations of the variables are shown in Table 1. A small standard deviation emphasizes that the values in a statistical data set are close to the mean. Here the standard deviation is found to be concentrated around the mean.

Table.1 Descriptive Statistics

	N	Mean	Std. Deviation
Family Satisfaction	120	3.66	.996
Job Satisfaction	120	3.30	1.098
Job involvement	120	3.27	1.073
Family involvement	120	3.20	1.273
work hours	120	3.51	1.195
family hours	120	3.35	1.294
Policies	120	2.94	1.346
superior support	120	2.75	1.118
coworker support	120	2.74	1.242
Valid N (listwise)	120		

The table 2 explains that only 24% of the job satisfaction variances are explained by the given independent variables like family hours, family stress and family involvement. Though the value is small there is a cause and effect relation between the variables. But table 3 explains that 35% of the family satisfaction are explained by the independent variables like work hours, job stress and job involvement.

Table 2: Job Satisfaction - Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.490[a]	.240	.221	.992	1.027

a. Predictors: (Constant), Family involvement, family hours, family stress

b. Dependent Variable: Job Satisfaction

Table 3: Family Satisfaction - Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.595[a]	.354	.338	.846	1.238

a. Predictors: (Constant), Job involvement, job stress , work hours

b. Dependent Variable: Family Satisfaction

While compared to both the tables, tables 2 and 3, the standard error is found to be less in the table 3 that is in the case of family satisfaction,compared to table 2.The lower the value of the standard error, the better it is. Durbin – Watson Test explains that when values are closer to 2 then there is no auto correlation between the errors. So that is also proved to be good in both the cases.

Table 4: ANOVA for Job Satisfaction

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	36.116	3	12.039	12.223	.000[a]
	Residual	114.250	116	.985		
	Total	150.367	119			

a. Predictors: (Constant), Family involvement, family hours, family stress

b. Dependent Variable: Job Satisfaction

In tables 4and 5 the F test proves to be significant. Here ANOVA does not explain about comparison of the variables but only explain the significance of model. Same is the case in table 4, F test is significant.

Table 5: ANOVA for Family Satisfaction

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.599	3	15.200	21.225	.000[a]
	Residual	83.068	116	.716		
	Total	128.667	119			

a. Predictors: (Constant), Job involvement, job stress , work hours

b. Dependent Variable: Family Satisfaction

Table 6: Coefficients for Job Satisfaction

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.538	.321		4.785	.000
	family hours	.135	.070	.160	1.927	.056
	family stress	.226	.069	.284	3.267	.001
	Family involvement	.214	.072	.252	2.967	.004

The table shows that there is a significant relation between family stress and family involvement with job satisfaction as the p value is less than 0.05 but the family hours is not significant as the value is greater than 0.05.

Table 7: Coefficientsfor Family Satisfaction

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.311	.312		4.204	.000
	work hours	.247	.066	.294	3.753	.000
	job stress	.100	.062	.123	1.609	.110
	Job involvement	.380	.072	.407	5.263	.000

a. Dependent Variable: Family Satisfaction

The p value for jobstress is more than 0.05. Other variables are significantly related to family satisfaction as the p value is less than 0.05.

From the study it is found that there is an interference of work domain factors to family satisfaction and from family domain to job satisfaction. Thus the Hypotheses 1and 2 arepartially significant.

Hypothesis 1: There is a significant interference of work domain factors to family satisfaction.

Hypothesis 2: There is a significant interference or family domain factors to job satisfaction.

It is partially significant as family hours and job stress are not statistically significant.

The moderating effect of the cultural factors is studied using Hayes Regression. The different factors taken into consideration include supervisor, co-worker and policies. Through this study it can be estimated the influence of the cultural factors on the job domain factors like job involvement, job stress and job work hours towards job satisfaction. The result of the study related to job satisfaction and job factors with supervisor as moderator factor is shown in the table below.

Table 8: Moderating Effect of Supervisor Support

Model = 1
Y = JS
X = JF
M = SU

Sample size
120

****
Outcome: J S

Model Summary

p	R	R-sq	MSE	F	df1	df2
.0000	.2505	.0628	.5508	8.1935	3.0000	367.0000

Model	coeff	se	t	p	LLCI	ULCI
constant	4.5932	.8903	5.1590	.0000	2.8424	6.3439
SU	-.2986	.2313	-1.2909	.1975	-.7536	.1563
JF	-.2561	.2244	-1.1413	.2545	-.6973	.1852
int_1	.1114	.0575	1.9393	.0532	-.0016	.2244

Interactions:

int_1 JF X SU

R-square increase due to interaction(s):

	R2-chng	F	df1	df2	p
int_1	.0096	3.7608	1.0000	367.0000	.0532

The result shows that supervisor support does not act as a moderator as the p value is more than 0.05. This shows that supervisor support as a cultural factor will not help to achieve job satisfaction.

Through Hayes Regression considering co-worker support as a cultural factor is examined to find whether it is acting as a moderator.

Table 9: Moderating Effect of Co-worker Support

```
Model = 1
    Y = JS
    X = JF
    M = CO

Sample size
        120

**************************************************************************
Outcome: JS

Model Summary

   P        R         R-sq       MSE        F        df1        df2
.0001     .2426      .0589      .5531     7.6520     3.0000   367.0000

Model        coeff         se          t          p       LLCI       UI
constant     -.0275     1.7091     -.0161      .9872    -3.3883     3.3
CO           .8247      .4025     2.0489      .0412      .0332     1.61
JF           .8350      .4212     1.9826      .0482      .0068     1.66
int_1        -.1574      .0985    -1.5976      .1110     -.3511      .0

Interactions:

int_1    JF          X     CO

R-square increase due to interaction(s):
         R2-chng          F        df1        df2          p
int_1      .0065     2.5524     1.0000   367.0000      .1110

**************************************************************************
```

The results show that the p value is not less than 0.05 and so there is no significance. So it is found that co-worker also will not act as a moderator to achieve job satisfaction.

The last factor considered for the study, the policies is tested using Hayes Regression to find out whether it acts as a moderator.

Table 10: Moderating Effect of Policies

```
Model = 1
    Y = JS
    X = JF
    M = PO

Sample size
120

**************************************************************************
Outcome: JS

Model Summary
   p R       R-sq        MSE       F        df1        df2
 .0000.3073    .0944      .5322    12.7540     3.0000   367.0000

Model
coeff         se          t          p       LLCI       ULCI
constant     5.7267      .7706     7.4312      .0000     4.2113     7.2422
PO          -.2888      .1829    -1.5793      .1151     -.6484      .0708
JF         -1.1406      .3614    -3.1560      .0017    -1.8512     -.4299
int_1        .2311      .0876     2.6391      .0087      .0589      .4032

Interactions:

 int_1   JF          X     PO

R-square increase due to interaction(s):
         R2-chng          F        df1        df2          p
int_1      .0172     6.9646     1.0000   367.0000      .0087

**************************************************************************
```

The above table shows that the p value is less than 0.05 and can be interpreted that there is a significant relation. In this study it is clear that policies of the company act as a moderator to cushion the effect of job domain factors to satisfaction. From this Hypothesis 3 is partially significant.

Hypothesis 3: There is moderating effect by the culturalfactors like family – friendly policies, superior support and co-worker support to job satisfaction.

Among the three cultural factors only one cultural factor is statistically significant while other two, supervisor support and co-worker support are not significant.

Discussion

The study related to the interference of work into family and family into work affecting the satisfaction of family and job are studied in detail. The study tries to find out whether cultural factors have any role to reduce the impact of job domain factors like job involvement, job stress and work hours. The study is conducted in IT companies where participation of female employees is more. Only women employees are requested to participate for the study. The study shows a positive relation between work domain factors like family involvement and family stress to job satisfaction. Also there is a positive relation between family domain factors like job hours and job involvement with family satisfaction. The significant relation is understood through the regression. Both the factors related to work like work involvement and working hours, in excess will always disturb the family satisfaction. Carrying work to home, attending frequent official calls during dinner or while attending family get-together may irritate other family members and may in turn upset the employee's mental peace. In the same way, frequent phone calls from home or attending more house hold chores during the office hours would lose concentration on the job. The R^2 estimates the functional relationship between dependent and independent variables.

The culture of the organization can act as moderators. For this study some of the cultural factors considered are policies, supervisor support and co-worker support. According to Clark (2001),temporal flexibility is the ability to have discretion in one's work schedule. Bailyn defined operational flexibility as control over the conditions of work. This includes having the autonomy to decide how the work is to be done without unnecessary monitoring or restrictions. These flexibilities can be brought into the organization through policies. So in this study supervisor support and co-worker is considered separately and family-friendly benefits are under policies.

Without supervisors to encourage employees to use leave policies and flexible work policies, and to judge employee performance on the basis of output and not just "face time," a policy-based strategy to reinforce a family-friendly culture will have limited effect. Studies of Repetti claim job satisfaction and productivity at work improves with supportive supervision.

Co-worker support is also considered as one of the important factor for adjusting the work and family life (Clark, 2001). In a longitudinal study, O'Driscoll and colleagues (2004) found that support from work colleagues moderated the relationship of work-to-family and family-to-work conflict with job satisfaction and family satisfaction.

But in this study, using Hayes Regression it is found that p value for both supervisor support and co-worker support are not significant. For supervisor support the p value is 0.0532 and that of co-workers is 0.1110. Both were greater than 0.05. But the p value of policies is 0.0087. This is less than 0.05. So supervisor support and co-worker support are not considered as the important factors that can be considered as moderators for job satisfaction in the organizations. The study tries to stress the point that working environment can be made effective by the policies of the organization.

Implication

Today in this competitive world, increasing the morale of the employees, attract and retain a dedicated workforce is not easy. For the existence and sustained growth of the company understanding the requirements and difficulties of their employees are important. A study of this nature will help to solve some of the uncertainties that company faces in today's turbulent work environment. Each organization has its own way of functioning. The gender of the employees, nature of work, the kind of work pressure and the way it is handled, flexibility etc vary from company to company. This study was concentrated on three IT companies to understand the work related issues and family related issues and the interference of each into other domains. The work involvement and hours spend in the company can badly influence the satisfaction of the family life. Too much of work load that extends beyond the working hours may be carried back home may create unwanted problems which may reduce the interest in the family aspects. Even too much family interferences like working couple with a small child or elderly parents without relatives support may be forced to find time to solve such issues. This may build too much pressure within the mind of employees that leads to less interest in job. These issues can be addressed using relevant policies of the organization. Study reveals that supervisor support and co-worker support vary from individual to individual and the impact of it cannot be judged uniformly. But well-structured and implemented policies in the organization can be utilised and be of benefit to the employees in the organization.

Previously employees were looking for paid vacations, pension plan, health insurance etc for balancing happiness between job and family. But now as both husband and wife are working in the organizations, they are interested more for flexible working time, child or elder care, work from home etc that can balance work and family life. It is found that some talented, efficient female employees even leave the job to solve these issues. Loosing such talented employees is a loss to the organization. Well formulated company policies may help employees to balance work and family issues. Policies have to be revised every now and then depending on the changing scenario of the environment. It has to be audited so that it can solve the issues of the employees. Well planned and structured policies can take care of the issues that employees face and balancing act of work and family life will become smooth and comfortable. Supervisor and co-worker support can contribute to an extent to balance but only policies can really bring about the act of balancing work and family life without much interference from one domain to another.

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Work-Life Balance: Assessing Perceptions

Nandini Borah and Nehal Bagla

Abstract

Much research has been done on Work-Life Balance, but little work has been done to probe the work-life balance of teachers in technical institutions. The purpose of the study was to describe the teachers' perceived work-life balance. Additionally, the study sought to describe the relationship between perceived work-life balance and job demands and family demands. The results of the study showed that perceived work-life balance is negatively related to greater perceived family demands as well as greater perceived job demands. The paper also discusses the implications of the findings.

Keywords: *work-life balance, family characteristics, job characteristics, teacher*

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The evolving intricacies of modern organizational work as well as personal aspects of life offer great challenges to the modern teacher. Teachers participate in diverse and unbounded work and life roles; which creates challenges when they try to balance the responsibilities and pressure associated with each role. With intensifying work pressure a teacher finds himself or herself juggling through a myriad of activities. Conflicting responsibilities, multiple roles, family and job demands have disturbed the existing balance between a teacher's work life and family life. These imbalances in work-life relationships can lead to severe health problems and hamper job performance as well. Enlightened institutions acknowledge the fact that work-life balance of the teachers' is critical to their success. However, improving the quality of work-life and maintaining a positive work-life balance remains a tough challenge.

For those who seek out to sustain a fine balance between their work roles and family roles work-life balance remains as an issue of concern (Guest, 2002). The profession of teaching is a demanding one (Crutchfield, Ritz, and Burris, 2013) and therefore, work-life balance for teaching

professional has become one of the supreme challenge in today's world. Teachers' work load not only demand their time in the institution but it also extends beyond the institutional boundaries- to their homes. Apart from teaching and maintaining student records, which are the primary work activities, a teacher is also expected to attend to various activities related to the institution which increases their workload. Harmonizing work and family roles has become a challenging task for teachers as they are required to spend excessive hours at work, leaving little time to devote to other life roles (Cooper and Nelson, 1981; Lawver, 2007; Murray, Flowers, Croom and Wilson, 2011).

Statement of the problem

Maintaining a balance between one's personal and professional life has become an important matter in the society. Employees struggle to juggle between their work and non-work duties and responsibilities. The expression of work-life balance was first used in the mid-1970s to describe the balance between one's work and personal life. Kanter (1977) opined about the "myth of separate world" and called attention to the reality that work and home are inescapably linked. Work-life balance is one construct which explains the relationship between the institutional and cultural time and space of non-work and work in societies where income plays a major role (Gregory and Milner, 2009). In the past few years there has been an increasing interest in work-life balance and many organizations have taken proactive steps to maintain their employees work and life balance. However, very little research has been done to probe work-life balance amongst teachers.

This study makes an empirical investigation to explain the perceived work-life balance amongst teachers of technical institutions in Guwahati region of Assam. The study further attempts to explain teachers' perceived job demands and family demands and its relationship with their perceived level of balance between work and life roles.

Literature review

Work-life balance

The term work-life balance gained popularity in research and policy matters, facilitating the understanding of non-work concerns with employment (Gregory and Milner, 2009). Despite the popularity of the construct, most of the major reviews of work-life balance articles either do not mention work- life balance per se, or when it is mentioned it is not explicitly defined (Greenhaus et al., 2003). There has been a great debate over a formal definition of work life balance. Furthermore, in studies where work-life balance or related constructs are explored, researchers seem to have used several different approaches to operationally define and measure the construct (Greenhaus et al., 2003; Potgieter & Barnard, 2010). For the purpose of this study the definition proposed by Kalliath and Brough (2008) was adopted. According to Kalliath and Brough (2008) "work-life balance is the individual perception that work and non-work activities are compatible and promote growth in accordance with an individual's current life priorities." It is important to note from this definition that work-life balance is about individuals' perception as they fulfill multiple and often competing roles.

Traditionally work-life balance has been viewed through the lens of women employment. However, the horizons of work-life balance have widened to include men's and women's negotiation of the demands from paid employment and domestic life. Although rates of women participation in the workforce have increased considerably, the organization of labour in the workplace and family has not changed commensurately (Brewster and Padavic, 2000; Gerson, 1998). Furthermore, women are still primarily held responsible for home and child care (Bond, Galinksy and Swanberg, 1998) and employers continue to orient their expectations based on a male model that presumes the presence of a nonworking spouse (Acker, 1990; Gerson, 1998).

Research on work-life balance has found that multiple role commitments lead to mental and physical exhaustion leading to increased stress (Goode 1960; Pearlin, 1989; Mui, 1992) whereas favorable balance between work and family life reduced intention to leave through increased job satisfaction (Forsyth and Polzer-Debruyne, 2007; Bilal, Zia-ur-Rahman, and Raza, 2010). Although most of the literature is focused on negative spillover, there are evidences of positive consequences such as increasing economic resources, improving self-esteem, and enhancing social integration (Barnett, 1999; Baruch and Barnett, 1986; Crosby, 1991; Moen, Robinson, and Dempster-McClain, 1995).

Research suggests that two groups of factors namely, family characteristics and job characteristics, relate to how men and women manage multiple role demands from work and family. Both these factors are described in the following section.

Family characteristics

Family characteristics play an important role on employee well-being. Several research studies have indicated that family characteristics have an important impact on well-being, role satisfaction and perceptions of balance (Keene and Quadango, 2004). Child care responsibility and family structure have been found to have significant impact on satisfaction (Hochschild, 1997; Greif, DeMaris and Hood, 1993; Saltzstein, Ting, and Hall Saltzstein, 2001). It has been found that family involvement has a negative impact on satisfaction with work-family balance. Moreover, family factors and life stage are important determinants of balance (White, 1999).

Job characteristics

Job characteristics seem to be an important predictor of perceived work-life balance because the work characteristics determine the employee's freedom to negotiate between conflicting demands. However, research has shown mixed results with respect to job characteristics. Glass and Camarigg (1992) have demonstrated that higher-level occupations are more accommodating to family life. Milkie and Peltola (1999) found that work demands influence role balance whereas Hecht (2001)has established that greater scheduling flexibility at work is positively associated with well-being. On the contrary, Moen and Yu (1999) have found that autonomy and scheduling flexibility are not associated with overall feelings of work-life satisfaction.

Objectives suggest the following: to determine the effect of gender on perception of work-life balance. And to study the impact of family and job characteristics on perceived work life balance.

Hypotheses

To determine the effect of gender on perceptions of work-life balance, following hypothesis is formulated:

H_1: Gender differences exist in levels of perceived work-life balance.

To fulfill the second objective the following hypothesis was formulated:

H_2: Greater family demands will negatively relate to perceived balance.

H_3: Greater job demands will negatively relate to perceived balance.

Methodology

A self-report questionnaire was designed and completed by teaching professionals employed in technical institutions in Guwahati region of Assam. Data was gathered using a hardcopy survey. Employees were informed about the purpose of the study and its confidentiality. The sample consisted of randomly selected 250 teaching professionals from seven technical institutions in Guwahati. A total of 227 usable questionnaires were returned (90% response rate). The final sample consisted of 56% men and 44% women; the average age was 36 years; and the average tenure was 5 years and 6 months. Perceived work-life balance was measured through 15-items adapted from an instrument reported by Fisher-McAuley, Stanton, Jolton, and Gavin (2003). Each item was presented in the form of a statement with a five point Likert scale from 1 (strongly agree) to 5 (strongly disagree). Family demands and job demands were measured by developing five items each. Family demands related to the amount of time and energy sought by the family and job demands related to the working hours and work activities and work spillover.

Analysis and findings

In order to determine the reliability of the instrument used for the study, a reliability analysis is conducted. Reliability is the degree to which an assessment tool produces stable and consistent results. It is also the overall consistency of a measure. A measure is said to be highly reliable if it produces similar results under consistent conditions. Cronbach's alpha is the most frequently used measure of reliability.

Table 1. Reliability statistics for the 25-item scale

Reliability Statistics	
Cronbach's Alpha	N of Items
.731	25

From the table (Table 1) it can be seen that the Cronbach's alpha score for the 25 items scale is found to be 0.731. A reliability coefficient of 0.7 or higher is considered acceptable in most social science research situations. The Cronbach's alpha score suggests that the items have high internal consistency and therefore, it can be concluded that the scale used in the study is internally consistent and reliable.

Gender differences in work-life balance

Hypothesis 1 deals with the differences in the perceived work-life balance with respect to gender. An independent sample t-test has been done to find out if there exists any difference in the perceived work-life balance with respect to gender.

Group Statistics

Table 2. Group statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Work-life balance	Men	127	3.9921	.97993	.08695
	Women	100	1.8800	1.11265	.11126

Independent Samples Test

Table 3. Independent sample t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Work-life balance	Equal variances assumed	5.502	.020	15.185	225	.000	2.11213	.13910	1.83803	2.38622
	Equal variances not assumed			14.957	198.640	.000	2.11213	.14121	1.83366	2.39059

The result of the independent sample t-test shows that significance against the F-value of 5.502 is 0.020 which is less than 0.05. Therefore, equal variances are assumed for the sample. The t-value against equal variances assumed is 15.185 and significance against the t-value is 0.000 which is less than 0.05. Therefore, the null hypothesis is rejected. This implies that there is a difference between the mean scores of perceived work-life balance between male and female employees. It is evident from the group statistics table that the mean perceived work-life balance for men is 3.9921 and for women is 1.8800. Women, thus, tend to perceive their work-life balance negatively as compared to men.

Family demands and job demands: impact on work-life balance

To assess the impact of family demands and job demands on work-life balance multiple regression analysis is used.For the multiple regression tests, the independent or predictor variables are: family characteristics and job characteristics and the dependent or criterion variable is perceived work life balance.

The mathematical model for the multiple regression analysis is as follows:

$$\mathbf{Y} = \alpha + \beta_1 \mathbf{x_1} + \beta_2 \mathbf{x_2}$$

where,

Y = Perceived work life balance

X_1 = Family demands

X_2 = Job demands

α = Constants

β_1, β_2=Coefficients

The results of the multiple regression tests are displayed below:

Descriptive Statistics

Table 4. Descriptive statistics

	Mean	Std. Deviation	N
Work-life balance	3.0617	1.47717	227
Family demands	2.3921	1.53154	227
Job demands	2.6740	1.57114	227

Correlations

Table 5. Correlations table

		Work-life balance	Family demands	Job demands
Pearson Correlation	Work-life balance	1.000	-.701	-.655
	Family demands	-.701	1.000	.474
	Job demands	-.655	.474	1.000
Sig. (1-tailed)	Work-life balance	.	.000	.000
	Family demands	.000	.	.000
	Job demands	.000	.000	.
N	Work-life balance	227	227	227
	Family demands	227	227	227
	Job demands	227	227	227

The correlations table shows that the Pearson correlation coefficient, r, is –0.701, for work-life balance and family demands, and that is statistically significant ($p < 0.05$). Similarly, the Pearson correlation coefficient, r, is –0.655, for work-life balance and job demands, and that is also statistically significant ($p < 0.05$). This basically implies that greater family and job demands negatively relates to work-life balance. Increase in family and job demands negatively impacts the perceived balance of work and life.

Model Summary

Table 6. Model summary of multiple regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.791[a]	.626	.622	.90799

a. Predictors: (Constant), Job demands, Family demands

Table 7. ANOVA table of multiple regression analysis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	308.462	2	154.231	187.074	.000[b]
	Residual	184.674	224	.824		
	Total	493.137	226			

Table 8. Coefficients table of multiple regression analysis

The overall predictability of the model is shown by the adjusted R^2 value of 0.622 which indicates that 62% of the factors (family demands and job demands) are responsible for the perceived work life balance of teachers.

From the analysis of variance (ANOVA) test it can be seen that the significance value of 0.00 is less than 0.05 which implies that there is a significant correlation between the dependent and independent variables, that is, perceived level of work-life balance with respect to different dimensions of family demands and job demands.

Coefficient analysis shows that the relationship between the dependent and independent variables according to the calculated significance value, the factors that is family demands and job demands have a significant relationship with the perceived work life balance as the calculated significance values are less than 0.05.

This implies that variation in perceived level of work-life balance can be explained with the knowledge of the family and job demands. The R^2 value of 0.622 indicates that approximately 62% of variance in perceived level of balance can be accounted for by the knowledge of family demands and job demands.

Conclusion and discussion

The results of this study describe important characteristics and descriptions regarding the sample. Although the results of this research are not generalizable to the entire teaching fraternity, the characteristics and descriptions might be informative in handling issues related to work-life balance of teachers. In this study nearly half of the respondents consisted of female respondents which clearly show the increasing number of female teachers in the academic profession. This is indicative of the increasing number of female teachers entering the profession. Moreover, it has also been found that perceptions of work-life balance differ significantly among men and women teachers. This is consistent with the fact that women are still primarily held

responsible for home and child care (Bond, Galinksy and Swanberg, 1998) and organization of labour in the workplace and family has not changed proportionately to accommodate the women worker (Brewster and Padavic, 2000; Gerson, 1998). The study has also revealed that family demands and job demands are important predictors of perceived work-life balance. Both family demands and job demands account for 62% of variance in perceived work-life balance of teachers. Teachers who have to devote long hours at work and whose work spillover to their home resulting in an intrusion into their family life are more susceptible to feeling that they are unable to maintain balance in their lives. Moreover, greater family demands also make teachers vulnerable to the perceptions that there is an imbalance between their work life and personal life.

Most educational institutions continue to operate on the basis of the traditional beliefs with respect to gender. Educational institutions have failed to recognize or rather ignore women's increased labour force participation. Besides this, institutions are yet to realize the changing nature of duties and responsibilities of the traditional Indian male teacher who has a working women counterpart. Additionally, there has been a change in the nature of duties and responsibilities of a teacher. Teaching no longer remains a traditional nine to five job and a teacher apart from teaching is expected to accomplish a lot of additional tasks related to the institution. These changes in the work environment and work practices have a tremendous effect in the life of the teachers. It is high time that educational institutions realize the mounting pressure of work as well as the increasing family demands. There is a need for designing and implementing work-life balance policies and practices in educational institutions as well. The corporate world, to a great extent, has already adopted employee friendly steps towards improving the work-life balance of their employees. Now it is the turn of educational institutions to churn out work-life balance policies for their employees.

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Employee Engagement: Hotel Industry

Venkateswarlu Karumuri

Abstract

The main objective of the study is to identify different employee engagement practices being followed in Indian hotel industry. The opinions of the employees towards the engagement practices are taken on Likert five point scale with the help of a structured questionnaire designed and distributed to the employees working in leading hotels in Visakhapatnam, Andhra Pradesh. A statistical tool, Factor Analysis was used to measure the preferences of the employees related to engagement in their organisations. The results may help the industry for effective implementation of engagement practices for optimum results.

Keywords: *engagement, employee engagement,factor analysis, hotel industry, employee motivation*

JEL Classification: M10, M12, M30, M31.

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In order to survive and gain competitive advantage in this rapid changing environment, organisations attribute more importance to their work force. The recent buzz among the industry, consulting firms and academia still with vast scope for research is the concept of employee engagement. There is an increasing awareness that employee engagement is pivotal to successful commercial and business performance. An engaged workforce will always provide competitive advantage over rivals. It is "engaged" factor which differentiates effective work to most effective work. Engaged employees are the 'backbone of good working environments where people are industrious, ethical and accountable'(Levinson, 2007a; Cleland et al, 2008).The employee engagement concept initiator, Kahn (1990) defined engagement as "harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (p. 694). In short, Kahn asserts engagement as psychological presence at work (Kahn, 1990, 1992). Rothbard (2001, p. 656) also defines engagement as psychological presence but goes further to state that it

involves two critical components: attention and absorption. Attention refers to "cognitive availability and the amount of time one spends thinking about a role" while absorption "means being engrossed in a role and refers to the intensity of one's focus on a role. Maslach, Schaufeli and Leiter (2001, p. 417) refer to engagement, as a psychological and emotional state, a 'persistent, positive affective motivational state of fulfilment'. Harter et al., (2002), defined employee engagement as "the individual's involvement and satisfaction as well as enthusiasm for work." According to International Survey Research (2003), employee engagement is defined as the practice by which a firm increases the commitment and contribution of its employees or human resources to achieve greater business outcomes. The International Survey Research resolved that employee engagement is a mixture of an employee's cognitive, behavioural and affective dedication to his or her organization. The concept of employee engagement has become famous amongst organisational practitioners (Robinson et al., 2004, Saks, 2006, Roberts 2006, Koyuncu et al., 2006, Ellis and Sorensen, 2007, Kular et al., 2008, Macey and Schneider, 2008; Halbesleben and Wheeler, 2008, Van Rooy et al., 2011). According to Robinson et al., engagement is a" A positive attitude held by the employee towards the organisation and its values. An engaged employee is aware of business context and works with colleagues to improve performance within the job for the benefit of the organisation. The organisation must work to develop and nurture engagement which requires a two way relationship between employer and employee." According to Saks (2006), the good way for employees to repay their organization is through their level of engagement. Employees will choose whether or not to engage themselves in relation to the resources they get from their organization. He suggests that employee engagement is not an attitude, but the degree to which an individual is attentive and absorbed in their work environment. Right Management (2006) defines true engagement as every person in the organisation being committed to the success of the business strategy. It goes beyond more than just simple job satisfaction and incorporates aspects of commitment, pride, and advocacy about the organisation's products and brand. Towers Perrin believes that engagement involves both emotional and rational factors relating to work and the overall work experience. The emotional factors tie to people's personal satisfaction and the sense of inspiration and affirmation they get from their work and from being part of their organisation, or instance, having a strong sense of personal accomplishment from one's job. The rational factors, by contrast, generally relate to the relationship between the individual and the broader corporation.

The CIPD Annual Survey report (2006c) defines engagement in terms of three dimensions of employee engagement: Emotional engagement: being very involved emotionally in one's work; Cognitive engagement: focusing very hard whilst at work; and Physical engagement: being willing to 'go the extra mile' for the employer.

Employee engagement is the level of enthusiasm and dedication a worker feels towards his or her job. Employee engagement, according to Tripathy (2007) refers to the level of commitment and involvement an employee has towards the organisation and values. It is also said to be a state wherein employees are emotionally attached, in addition to intellectually committed to the job (Hewitt Associates, 2004). Sangeetha (2006), says that employee engagement involves employee understanding of the aims of a business and their individual contribution, a desire to perform well in a job they consider interesting, a belief that the employer cares about their needs, and finally, a belief that they are supported.

Employee engagement is the level of emotional and intellectual commitment one has to their organization as well as the willingness of employees to "go the extra mile" to help their company to achieve its objectives. Employees can increase the probability of higher profitability, better services, customer loyalty, safety and sales by employing discretionary efforts in their work roles they are engaged (Kruse, 2012). When an employee cares more, there is the tendency to get involved and make greater contributions to the company, thereby resulting in organizational citizenship, commitment and intent to stay; reducing employee turnover (Kruse, 2012). Employee engagement encompasses many traditional concepts such as job satisfaction, organisational commitment, employee turnover and retention, employee motivation as well as emerging concepts in the field such as proactivity, adaptivity and flow.

The hotel industry plays a vital role in sustainable development. Hotel groups are found all over the globe, in downtown areas and suburbs, in metropolitan and in rural areas, in mountains and along coasts, from the most modern regions to the most remote. This infinite variety of locations makes the hotel sector a direct and privileged witness to major world developments, such as economic development, fight against diseases and illiteracy. The Indian hotel

industry is an oligopoly, with a few key players grappling for control. At present India is witnessing the entry of many hotel giants to the country. This is further intensifying the competition among the players. The organisations should focus on delivering customer value with ultimate satisfaction that is possible only with engaging the internal customers to optimum extent. The present study focuses on the empirical study of employee engagement practices that are implemented in hotel industry with reference to Visakhapatnam city, India.

Objectives of the study:

The major objective of the study is to make out the existing practices of employee engagement in hotel industry and thereby analyzing the perception of the employees towards the implementation of the engagement practices in their organizations.

Methodology

The study focuses on the present engagement practices being implemented, and to what extent the employees working in different star rated hotels were able to get engaged with those practices in their jobs. A total of 21 variables were taken into consideration to measure the engagement levels of the employees in different departments in star rated hotels. The respondents were asked to give their opinion (using a 5-point Likert scale; strongly agree [5], agree [4], slightly agree [3], disagree [2], strongly disagree [1]) of the 21 variables. A statistical tool like Factor analysis was used to study the engagement levels of the employees with the current practices. Factor Analysis reduced the data into definite factors of dimensions by removing the redundant variables. With the application of this tool on the data of the current engagement practices, the variables that were not making the employees engaged were revealed (because these variables were eliminated by Factor analysis).

The study is empirical, both qualitative and quantitative variables were used. The study is based on both primary and secondary data. The secondary data was collected from various magazines and journals. The primary data was collected from 140 employees working in different hotels in Visakhapatnam like Novotel, Taj Gateway, Four Points, Palm Beach, The Park, Green Park etc. The respondents were the employees who were working in different departments of their respective hotels, selected on a random basis.

Research Instrument: A structured questionnaire was specifically designed to elicit the opinions of the respondents depending on the objectives of the study. Questionnaire was framed in such a way that the respondents gave their opinions mostly for the questions on 5 point Likert scale. The study was conducted in Visakhapatnam, which is one of the north coastal districts of Andhra Pradesh.

Analysis and results

An attempt has been made to identify the present engagement practices being implemented in the hotel industry.

Reliability of Data: Kaiser-Meyer-Olkin (KMO) and Bartlett's Test:

To determine the appropriateness of factor analysis for the proposed study in hotel industry, Kaiser-Meyer-Olkin (KMO) and Bartlett's Test were conducted. KMO measures the magnitude of observed correlation coefficients to the magnitude of partial correlation coefficients. Bartlett's test measures the correlation of variables.

Table 1: Kaiser-Meyer-Olkin (KMO) and Bartlett's Test for measurement of salesmen motivation

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.601
Bartlett's Test of Sphericity	Approx. Chi-Square	812.78
	df	210.00
	Sig.	0.000

The KMO measure was observed to be 0.601 and Bartlett's test measures gave the value of 0.000. Hence, it can be interpreted that there was no error in 60.10% of the sample. The level of significance, which is less than 0.05 is desirable and acceptable as shown in the Table 1. At the end, it can be concluded that the data collected for the study was appropriate for factor analysis.

Table 2: Measurement of employee engagement in hotel industry

Variables	1	2	3	4	5	6	7	8
Autonomy at work (Q1)			0.819					
fair treatment(Q2)				0.651				
provision of equal opportunities(Q3)		0.818						
image of the organization(Q4)		0.825						
organizational policies(Q5)		0.558						
pay and benefit(Q6)						0.923		
recognition for work done(Q7)						0.511		
customer focus(Q8)	0.521							
training and development(Q9)	0.756							
direct communication with management(Q10)	0.709							
relationship with superiors(Q12)				0.776				
co operation among the employees (Q13)			0.737					
performance appraisal(Q14)				0.614				
emphasis for improvement of performance(Q18)					0.781			
trust(Q19)							0.555	
leaders are role models to me (Q20)								0.820
team work is encouraged (Q21)							0.842	

Extraction Method : Principal Component Analysis
Rotation Method : Varimax with Kaiser Normalisation
Source : Primary data

Table 3: Factor Eigen Values, Cumulative Value and Goodness of Fit

Factors	Eigen Values	% of total Variance	Cumulative %
FACTOR 1	4.089	19.471	19.471
FACTOR 2	1.927	9.174	28.645
FACTOR 3	1.658	7.895	36.54
FACTOR 4	1.611	7.674	44.214
FACTOR 5	1.392	6.627	50.841
FACTOR 6	1.282	6.107	56.948
FACTOR 7	1.236	5.884	62.832
FACTOR 8	1.148	5.466	68.298

Source: Primary Data

Factor Eigen Values, Cumulative Value, and Goodness of Fit: The Eigen Values explained cumulative values and Chi-Square value – a test for goodness of fit- all are arranged in the form on table in Table 3. All variables together explained 68.298% of the variance, with Eigen values more than 1. The Eigen Value or latent root is sum of squared values of factor

loadings to a factor (Krishnaswamy&Ranganatham, 2007). The calculated Chi-Square value is 812.78, which was found to be significant at the 5% level (with degrees of freedom = 210). This indicates that the said variables were statistically valid to explain all the 21 Propositions as eight factors.

Factor 1: With an Eigen value of 4.089, first factor was formed with three variables together explained 19.471% of the variance (Table 4). The first variable in the factor is customer focus, which is loaded with the score of 0.521. The second variable is training and development facilities provided to employees with 0.756. The respondents are keen in training and development provisions provided to them is acting as one of the important engagement factors. The third Variable is direct communication with management with 0.651 factor score

Hence, it can be concluded that the firms have to focus on effective designing of training and development programmes to engage the employees much in their respective departments.

Table 4 Factor 1

VAR	Variables	Factor scores
Q8	Customer focus	0.521
Q9	Training and Development	0.756
Q10	Direct communication with management	0.709

Factor 2: The second factor was formed with only two variables having an Eigen value of 1.927, where all the three variables together explained 9.174% of the variance (Table 5). Among the three variables, provision of equal opportunities (0.818) got a good factor score, which implies that the employees are provided with equal opportunities without any discrimination. The second variable that is image of the organization with factor score of 0.825 is another important engagement parameter for the employees working in the hotel industry. The next variable with factor score is organizational policies is also acting as an important engagement parameter

From the Factor 2, it is clear that the employees are provided with equal opportunities with good organizational policies further building a good brand image in the minds of employees.

Table 5 Factor 2

VAR	Variables	Factor scores
Q3	Provision of equal opportunities	0.818
Q4	Image of the organization	0.825
Q5	Organizational policies	0.558

Factor 3: The third factor was formed with only two variables having Eigen Value of 1.658, where all the two variables together explained 7.895% of the variance (Table 6). In the factor 3, autonomy at work got 0.819 as factor score that clearly implies that employees were given autonomy at work or freedom in performing the given work. The next variable is co-operation among employees (0.737) got good factor score in factor 3 which implies co operation among the individuals is also helping the organization in engaging the employees to a greater extent.

From the Factor 3, it is evident that the employees working in hotel industry were given freedom to perform the given work with good co operation among them.

Table 6 Factor 3

VAR	Variables	Factor scores
Q1	Autonomy at work	0.819
Q13	Cooperation among the employees	0.737

Factor 4: The fourth factor was formed with three variables having Eigen value of 1.611, where all the variables together explained 7.674% of the variance (Table 7). Among the three variables, fair treatment (0.651) got good factor score in this study, which implies that fair treatment is acting as an important engagement parameter. The second variable relationship with superiors got 0.776 as factor score which implies relationship with superiors was acting as an engaging variable. The third variable performance appraisal (0.614) also got a good factor score.

From the Factor 4, it is evident that the fair treatment along with provision of harmonious relationships with superiors and performance appraisal are being provided to engage the employees for better productivity.

Table 7 Factor 4

VAR	Variables	Factor scores
Q2	Fair treatment	0.651
Q12	Relationship with superiors	0.776
Q14	Performance appraisal	0.614

Factor 5: The fifth factor was formed with only one variable having Eigen value of 1.392, where it explained 6.627% of the total variance (Table 8). The only variable in this factor is emphasis for improvement of performance, which is loaded with a good score of 0.781, which means that the respondents strongly perceived that emphasis for improvement of performance followed by the managers in the firms as a better engagement practice.

Table 8 Factor 5

VAR	Variables	Factor scores
Q18	Emphasis for improvement of performance	0.781

Factor 6: The sixth factor was formed with two variables having Eigen Value of 1.282 where it explained 6.107% of the total variance (Table 9). Among the two variables pay and benefits got an excellent factor score in this study with 0.923 which implies that pay and benefits is acting as a sound engagement parameter of the respondents in the study. The second variable, recognition for work done (0.511) got a good factor score which implies that recognition for work done is acting as engagement variable to a good extent.

Table 9 Factor 6

VAR	Variables	Factor scores
Q6	Pay and benefits	0.923
Q7	Recognition for work done	0.511

Factor 7: The seventh factor was loaded with two variables having Eigen value of 1.236 where it explained 5.884% of the total variance (Table 10). The first variable, trust shown on the employees got a factor score for 0.555. The second variable, team work is encouraged (0.842) got a good factor score which gives implication that the organization encourages teamwork in each and every activity or task that is performed.

Table 10 Factor 7

VAR	Variables	Factor scores
Q19	Trust shown on the employees	0.555
Q21	Teamwork is encouraged	0.842

Factor 8: The eighth factor was loaded with only one variable having Eigen value of 1.148 where it explained 5.466% of the total variance (Table 11). Leaders are role models to be with factor score of 0.820 is the only variable in factor 8 implies that leaders in the organization are acting as the role models to the employees which helps in engaging the employees.

Table 11.Factor 8

VAR	Variables	Factor scores
Q20	Leaders are role models to me	0.820

Eliminated Variables form Factor Analysis: after performing the factor analysis, 21 variables were reduced to 17variables and four variables were eliminated from the analysis (which were loaded with less factor score than the threshold value of 0.5 that means these variables were not explaining any factor significantly). The four eliminated variables are shown in the Table 13.

Table 12: Eliminated Variables form Factor Analysis

Q11	Job security
Q15	Constructive feedback
Q16	Work itself
Q17	Relationship with co workers

These variables were not contributing to salesmen motivation, and were not useful for measuring the motivation levels of the respondents in the retail sector.

Recommendations

The present study recommends the following strategies can be adopted for better engagement of employees in their work.

The organisations should send employees to different leadership training programmes for the inculcation of leadership qualities organised by various institutes such as IIMs, premier Business Schools and various Professional bodies like NIPM, ISTD, and NHRD Network etc.

Sound compensation policy structure should be designed in such a way that it should attract the potential employees. Different types of allowances should be given in the form of benefits so that employees can be engaged further.

Organisations should concentrate on some welfare facilities to the internal employees like education, medicine and transport to increase the image of the organisation in the form of concern for employees. The organisations should also focus on corporate social responsibility activities by improving the livelihood of nearby communities.

Teams and group based work environment should be created where people will work in the form of collaborated teams and groups to give optimum results

The organisations should clearly communicate the growth potential to the employees, if they really work hard and prove themselves. Promotions should be provided purely on the basis of merit and expertise.

From the study it is also identified that autonomy at work also acting as good engaging variable in the firms. The organizations should give freedom to the employees to perform their work with autonomy where they can discharge their duties in an efficient manner.

Fair treatment of employees in the organisation can become an urgency factor to make engaged employees that helps in building the trust among the employees.

Conclusion

From the study it is identified that pay and benefits, encouragement of team-work, image building process of the organisation, the type of leadership and leaders had in the organisations and provision of equal opportunities, are creating huge impact on the engagement levels of the employees working in the hotel industry. The organisations should certainly focus on these elements to engage the employees fully. It is also evident that too much focus on customers, organisational policies, trust shown on employees, recognition for performance done, performance appraisal are least five variables that are not creating any impact on engagement levels of the employees. Though the organisations allocate time to look into these variables these may not engage the employees fully. It is suggested for getting better results the organisations can focus on the top five variables. The study of employee engagement practices in hotel industry will enable the organizations to understand what really engages the employees to perform efficiently for customer satisfaction, the ultimate value and thereby increasing effectiveness of the business. If their needs are identified properly, they will be motivated and fully engage in their jobs. Employee engagement enhances the commitment of employees towards work and organizations in all three dimensions such as physical, cognitive and emotional.

Limitations of the study

The results may not be applicable to other cities and states of Indias the study is covering only Visakhapatnam. The study has taken only 21 engagement variables to identify the engagement levels but there might be some more elements which are implemented and practised by the firms.

The study can be extended to other cities and states also located in India. The study can be extended to other sectors like banking, manufacturing, retail etc.

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SCMS JOURNAL OF INDIAN MANAGEMENT

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