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Editor Note

The Journal of Commerce and Business Studies embarked to disseminate the research undertaken in contemporary areas of business and management with a view to create a solution-oriented paradigm for national problems. It is pertinent to note that the Journal of Commerce and business studies provides wide circulation to the exemplary research output with academic rigor with high standards of originality amongst Academic Institutes, Central Universities and Business Organizations as well.

The papers in this issue address the contemporary and emerging issues of consumer behavior, customer relationship management, dynamics of corporate governance in FMCG sector as well as diverse corporate boards. This issue also takes a close view of interest rate volatility and the pacing micro and small enterprises.

I would like to thank the authors who have contributed to this issue of the Journal and also to those five dozen authors who sent their papers for publication in this issue. This issue is an output of sheer hard work of the editorial team, the reviewers and the support of associate editor. The guidance and interventions of the head, Department of Commerce helped to improvise the issue manifold. I wish the present issue unfolds further research questions and avenues.

With Warm Wishes

Dr Sunaina Kanojia
Editor

From Complaint Handling to Customer Commitment: An Investigation in Indian Context

Kavita Sharma¹ and Swati Aggarwal²

The present study explores distributive justice, procedural justice and interactional justice - the three dimensional view that the justice literature provides to understand the process of complaint handling and satisfaction - on the bases of customers' perception in Indian context. Customers' perception of justice dimensions that result into complaint satisfaction forms the bases to their relations with firm in terms of commitment and loyalty. The study finds distributive justice assume more dominant position in complaint satisfaction and also supports past researches in terms of effect of complaint satisfaction on continuance, normative and affective types of commitment. The pattern of relationship between complaint satisfaction and commitment types, however, differ across different exchange situations involving FMCG, Non-FMCG and service products. Using questionnaire based survey responses of 835 respondents; hypothesised relationships were tested using SmartPLS version 2.0 for model testing. Since, the study helps in understanding the way complaint handling mechanism leads to commitment, marketers can benefit by developing effective complaint handling programs.

INTRODUCTION

Complaint handling refers to the strategies that the firm uses to reconcile and acquire knowledge from service failures so that organisation's reliability gets (re)established in the eyes of the customer (Hart, Heskett and Sasser, 1990). It has pronounced impact on customer retention rates, spread of word of mouth and the bottom line performance. Zairi (2000) in one of his studies clearly observed that complaint handling and achieving customer satisfaction are quite compatible concepts that can be used interchangeably. Customers evaluate company's complaint handling performance on the basis of meeting of their expectations, and it determines their satisfaction with complaint handling (SATCOM). There are both attitudinal and behavioural outcomes of complaint satisfaction and it has prominent role in driving long-term relationships with the customers.

Customer may resort to complaints when there is unsatisfactory performance of a service provider leading to dissatisfaction among the recipients (del Rio-Lanza et. al 2009). Customer complaint behaviour (CCB) is the response stimulated due to dissatisfaction in consumption of a product or service, which a customer can neither psychologically accept nor can be forgotten (Homburg & Fürst, 2005). Companies providing right and fair resolution in their complaint handling practices may, therefore, have a pool of satiated customers. Bitner, Booms and Tetreault (1990) and Smith and Bolton (1998) suggested that whereas a poor recovery may result in “magnification of the negative evaluation, an excellent recovery can increase satisfaction and loyalty beyond the degree before the failure.”

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Present study explored justice literature to provide a comprehensive framework for understanding the complaint handling process from initiation to its completion resulting into complaint satisfaction. In the backdrop of past researches suggesting close linkage between effective resolution of customer problems and relationship marketing variables, viz., customer satisfaction, trust and commitment (Achrol, 1991; Morgan and Hunt, 1994), the present study explores linkages of *complaint satisfaction* with commitment types. Commitment type are either normative, continuance or affective, and the investigation into their linkage with complaint satisfaction depending upon complaint handling could hold significant insights for marketers in devising the service recovery systems. Customers in a committed relationship most likely have an affirmative attitude toward the firm and spread positive word of mouth (Brown *et al.*, 2005; Verhoef *et al.*, 2002), which according to Chen and Quester (2015) is the display of behavioural loyalty. When exchange partners are committed to one another, they are willing to work together, earnestly share information, be compliant, and suggest about the committed partner to others (Mangold *et al.*, 1999).

In the remaining sections, conceptualized model is developed along with the hypothesized relationships. Research method including the details of testing of measurement model and hypothesis testing are explained next. Last section covers marketing implications particularly concerning emerging markets.

CONCEPTUAL FRAMEWORK

The concept of perceived justice given by Adams (1965) has important role in understanding customer's reactions to complaint situations, and researches taken up across several contexts for example, legal, organizational and buyer-seller have found the invaluable role of perceived justice in elucidating customer's reactions to conflict situations (Goodwin and Ross, 1992; Gilliland, 1993). The perceived justice of complaint handling is considered as multifaceted construct and encompasses three dimensions, viz., distributive, interactional and procedural justice.

Distributive justice is the “perceived fairness of outcome allocations, and is typically evaluated with respect to the equity of those outcome distributions” (Deutsch 1985). Several researches in marketing in the past provide the positive impact of tangible compensation on customer perceptions of distributive justice. The tangible compensation can take the form of reimbursement, product/service replacement, credit, apology, repair, refund, correction, and even additional tangible compensation (Tax, Brown, and Chandrashekar 1998; Smith, Bolton, and Wagner 1999). Customers who complain might assess the fairness of compensation differently on the basis of their previous experience with the organization or the other organization they have dealt with; and the way other customer's complaints were resolved, and their own perception of the loss suffered by them. Thus, it could be suggested that distributive justice in complaint handling is thought to be institutionalised best when the complaint outcome was perceived by the complainant as deserved; met one's needs, or was fair. Moreover, several researches on complaint handling demonstrates that the perceived distributive justice of complaint handling positively affects “customers' reactions, including satisfaction with the encounter” (Smith, Bolton, and Wagner, 1999; Smith and Bolton, 2002), “outcome satisfaction, satisfaction with complaint handling, re-patronage intentions, overall satisfaction/return intentions, and perceptions of fairness, and decreases negative

word-of-mouth” (Maxham and Netemeyer, 2002; Clemmer, 1993). The proposed hypothesis, therefore, is:

H₁: Presence of distributive justice positively affects satisfaction with complaint handling.

Procedural justice is defined as the “perceived fairness of the means by which the ends are accomplished” (Lind and Tyler, 1988). Past researches demonstrated that the belief of the complainants that procedures are fair, though at times unfavourable too, led to the satisfaction with the outcome received by them. Researchers in marketing area have enlisted several parameters of procedural justice such as, “convenience, flexibility, timeliness (of response), opportunity to voice, process control, process knowledge, helpfulness, efficiency, assumption of responsibility, and follow-up” (Goodwin and Ross, 1992) that have a positive effect on complaint handling outcomes including “satisfaction with the encounter” (Smith and Bolton, 2002), “outcome satisfaction, satisfaction with complaint handling, overall satisfaction, repurchase intentions and a negative effect on negative word-of-mouth behaviours” (Maxham and Netemeyer, 2002). The proposed hypothesis here is

H₂: Presence of procedural justice positively affects satisfaction with complaint handling.

Interactional justice refers to the “fairness of the interpersonal treatment people receive during the enactment of procedures” (Gilliland, 1993). Several marketing researchers have shown that complainant's perception of interactional justice is influenced by “empathy, effort, politeness, friendliness, sensitivity, apology, explanation, justification, lack of bias, and honesty” (Smith et al., 1999). There is a considerable theoretical and empirical support in the past researches indicating how two-way interactions significantly affect the relationship between the justice components and satisfaction and attitude variables (Greenberg, 1990). Since frontline employees are frequently in interaction with the service customers, there is an opportunity for interpersonal behaviours to influence procedural justice evaluations. If a complainant receives adequate explanation for the complaint procedure, the satisfaction with the process is likely to enhance whereas excuses or a poor explanation would work the other way round. Thus, interactional justice positively affects “satisfaction with the encounter” (Smith and Bolton, 2002), “outcome satisfaction, satisfaction with complaint handling, repatronage intentions, overall satisfaction/return intentions (Maxham and Netemeyer 2002), and decreases negative word-of-mouth”, we therefore propose,

H₃: Presence of interactional justice positively affects satisfaction with complaint handling

Organizations that are providing just and adequate resolutions in their complaint handling practices are more likely to have a pool of satisfied customers. Satisfaction with complaint handling (SATCOM) is the customer's evaluation of how well a company was able to handle the complaint situation. Customers compare their perceptions of the actual performance of the complaint handling procedures with their expectations towards that performance.

Complaint satisfaction refers to the way the complaint has been handled by the company and the complaint handling performance is assessed on the basis of meeting or exceeding the complainant's expectations. In conceptual terms, Carreras (2006) describes satisfaction as a psychological phenomenon which is the result of the experience of the complainant whose satisfaction is measured in

terms of degree of wellbeing felt by a person in context of a particular product or service in question. Researchers in the past used several antonyms for this concept, like “satisfaction with service recovery” (Maxham and Netemeyer, 2002), “overall complaint satisfaction” (Stauss, 2002) and “satisfaction with the remedy” (Harris et al. 2006). The satisfaction referred to in the preceding discussion is transaction-specific, and researches in the area suggests SATCOM as positively associated with overall satisfaction i.e., being satisfied with the complaint handling process increases the “stock” of overall satisfaction towards the firm (Mc Collough, Berry and Yadav, 2000).

Westbrook (1987) observes that satisfaction “usually is regarded as the central mediator of post purchase behaviour, linking prochoice product beliefs to past choice cognitive structure, consumer communications and repurchase behaviour”. Similarly, satisfaction with complaint handling could be the central mediator that links perceptions of the fairness dimensions to post complaint attitudes and behaviours. Customer satisfaction build on the basis of transaction specific as well as overall satisfaction with the firm, though, exhibit itself in terms of attitudinal and behavioural consequences, the extant satisfaction researches are mainly focussed on behavioural intentions toward a product or organization as a consequence of customer satisfaction. Attitudinal variables, which have greater potential for developing long-term customer relationships, therefore need to be investigated empirically. The present study has its focus on types of commitment as relational variables and their relation with satisfaction with complaint handling.

Commitment construed as an enduring desire to be in a valued relationship results more from an identification process (congruence in values, affiliation and belongingness) than from an evaluation process that assesses the worth of maintaining the current exchange relationship (Aurier & Goala, 2010). Various researches (like, Henning-Thurau, Gwinner, and Gremler, 2002; Sharma and Patterson, 2000; Gruen et al., 2000; and Gundlach et al., 1995) although view commitment as uni-dimensional concept (like), the multi-dimensional view is more in sync with researches from other disciplines, i.e., organizational behaviour and social psychology (Adams and Jones, 1997; Meyer and Herscovitch, 2001). Commitment has been treated as a multidimensional construct. Considering that the extant researches lack insight with regard to SATCOM resulting into which specific type of commitment, present study considers multi dimensions view of the customer commitment, comprising affective commitment, continuance commitment and normative commitment. In a comprehensive review of the workplace commitment literature found that despite the use of different labels, considerable research support is there for three dimensions of commitment originally proposed by Meyer and Allen (1997), viz., affective, continuance and normative and that these dimensions are appropriate regardless of the target of commitment.

Affective commitment refers to a desire-based attachment to the organisation (i.e. employees remain with the organisation because they want to). In a customer setting scenario, affective commitment is referred to a force that binds the consumer to the service provider out of desire (Meyer and Herscovitch, 2001). According to Wiener (1982) in case of membership relationships, affective commitment is focused on a positive emotional attachment, i.e. the degree to which the membership is psychologically bonded to the organisation on the basis of how favourable it feels about the organisation. It reflects on individual “psychological bond” (Gruen et al., 2000) with a service provider and is similar to “loyalty

commitment” described by Gilliland and Bello (2002). Many of the uni-dimensional conceptualisation of commitment in other marketing research contexts has actually tapped the affective dimensions of commitment (Garbarino and Johnson, 1999) and present study proposes that:

H₄: Higher the satisfaction with complaint handling more is the affective type of commitment.

Normative commitment represents a force that binds a customer to the service provider out of perceived obligation. Normative commitment results in customer staying with a service provider because they feel they ought to. Gruen et al. (2000) have implicitly investigated normative commitment in marketing context in a study of professional association memberships. Their study suggests, membership organisations that obtain a higher overall level of normative commitment should also continue to enjoy higher levels of coproduction activities which in turn represent opportunities for members to interact. Meyer and Allen (1997) suggested that normative commitment develops through socialisation when individuals internalise a set of norms concerning appropriate behaviour. The hypothesis is:

H₅: Higher the satisfaction with complaint handling more is the normative type of commitment.

Continuance commitment represents a constraint-based force which binds the customer to the service provider out of need. It reflects the fact that customers stay with a service provider because they feel they have to; it reflects a sense of being “locked in” to the service provider (Meyer and Herscovitch, 2001). Continuance commitment is similar to Bendapudi and Berry's (1997) notion of a “constraint-based relationship” and has been drawn from organisation literature; whereby consumers continue to remain in the relationship because of economic, social or psychological costs. This form of commitment has also been described as “calculative commitment” (Gilliland and Bello, 2002), i.e., due to economic costs of leaving, consumer decides to stay. In marketing context, research by Bendapudi and Berry (1997) provides similar view. Certain factors that are instrumental in developing “constraint-based relationships” are high switching costs, larger dependence on the service provider, and lack of attractive alternative partners. Another study by Fornell (1992), identified time, money and effort as the factors of switching costs. If there is an increase in switching costs, consumers are more likely to perceive that they are “locked in” to their service providers, which in turn results in them being less likely to switch service providers. Conversely, if alternative service providers are perceived to be attractive, consumers are less likely to feel “locked-in” with their current service providers, which increases the likelihood of switching. In case of satisfaction with complaint it can be expected that customer will be less likely to switch resulting into continuance commitment. The hypothesis is:

H₆: Higher the satisfaction with complaint handling more is the continuance type of commitment.

The three aspects of commitment which are, although, distinct but are related concepts (Meyer et al. 2002). *Affective commitment* positively relates to *normative commitment* (Meyer and Smith, 2000) and interacts with *continuance commitment* in their effect on behavioural intentions, such as switching intention. It is suggested that the “have to” aspect of continuance commitment overrides the “want to” aspect of affective commitment.

The hypothesized relationships are shown through the conceptual model which depicts the linkages

between justice dimensions, satisfaction with complaint handling and customer commitment in relational perspective (Fig. 1). The next section explains the methodology used to investigate into the proposed relationships.

Fig. 1: Conceptual Model



METHODOLOGY

Hypotheses proposed in earlier section were assessed on the basis of questionnaire based survey responses of conveniently selected 835 respondents from Delhi, NCR region. Responses were obtained in the context of select products including automobile, banking services, branded clothing, cellular services, insurance services, mobile handsets, restaurants and toiletries. The selected products hold their generality to the respondents and it was ensured that the respondent selects any two of these products that they have purchased in the past and mention their brand name. The purpose was to ensure that the specific firm is kept in focus for the purpose of framing of responses to the questionnaire and thus to allow for investigation into various aspects of complaint handling and its effects on relationship with the firm in focus. Responses to scale items, which were drawn from past studies, to measure various aspects of complaint handling and its effects were obtained through seven point likert scale. The sample comprised of majority of young highly qualified males having service as their occupation and earning sufficiently well (Table 1). Both aggregative and dis-aggregative analysis was used to test the hypothesised relationships. At aggregative level the pooled data of eight products is used and for dis-aggregative level analysis the three products representing durable, non-durable and service product categories were used to have deeper insights into the testing of hypothesised relationships. The three

products chosen for dis-aggregative level analysis were Automobile, Toiletries and Insurance. There is apparent lack of past researches also in the contexts of these three products.

Table 1: Sample Profile of Respondents

Demographic Factor	Percentage	Demographic Factor	Percentage
AGE-Group		Working Status	
18-30	65.9	Working	57.3
31-40	27.9	Non-Working	42.7
41-50	3.8	Occupation	
Above 50	2.4	Student	36.3
Marital Status		Service	45.4
Married	43.7	Business	8.7
Unmarried	56.3	Others	9.6
Gender		Monthly Family Income	
Male	57.3	Less than 20,000	5.9
Female	42.7	20,000-30,000	12.6
Education		30,000-50,000	29.9
High School	4.9	More than 50,000	51.5
Graduate	40.5		
Post Graduate	54.6		

RESULTS

Factor Extraction: We performed factor analysis on the pooled data of eight products to identify the dimensions of complaint handling and commitment that underlay buyer-seller relationship across various exchange situations. Eleven item scale measuring complaint handling was used to assess the underlying justice dimensions, viz., *Distributive Justice*, *Interactional Justice*, and *Procedural Justice*. Factor analysis of eleven item scale which resulted into the three factor structure with eigen value more than one, explained 71.515 percent variation in the data through varimax rotation. Item loadings further validated the proposed underlying dimensions of complaint handling (Table 2) and the three factor structure was retained for further analysis. The three types of commitment viz., *Affective Commitment*, *Continuance Commitment*, and *Normative Commitment* as discussed above were also assessed through factor analysis of twelve item scale. The factor structure that explained 65.127 percent variation, comprises of three factors with eigen value more than one and conforms the proposed three dimensions (Table 3). KMO test of sampling adequacy and Bartlett's test of Sphericity were satisfied in the case of both 'Complaint' and 'Commitment' scales. Factor scales for complaint handling, complaint satisfaction and commitment are found sufficiently reliable with cronbach alpha values of more than .60 (Table 4).

Table 2: Results of Factor Analysis of Scale Measuring Complaint Handling

Factors	Item Label	Items	Components			Item Mean/ Std. Deviation
			1	2	3	
Distributive Justice (DJ)	C6	At the time of making complaint the organisation gave reasonable account as to why the original problem occurred	.608		.488	4.53(1.598)
	C7	The organisation responded quickly to my complaint	.791			4.73(1.498)
	C8	The organisation was willing to adapt its complaint handling procedure to satisfy my needs	.584		.449	4.64(1.601)
	C9	I got due response to my complaint	.858			4.69(1.614)
	C10	Overall, the outcomes I received from the organisation were fair enough	.709			4.77(1.521)
	C12	The organisation answered my request in a timely manner	.687		.368	4.75(1.552)
Interactional Justice (IJ)	E1.7	I feel that the employee of the organization give detailed explanation and relevant advice		.801		4.92(1.373)
	E2.4	In regards to handling of my problem, I think employees seemed very interested in my problems		.818		4.74(1.344)
	E2.5	In regards to handling of my problem, I think employees behaviour during complaint handling was fair		.829		4.82(1.296)
Procedural Justice (PJ)	C4	Does organisation guidelines include instructions to record complaint information in a fast, complete and structured manner	.317		.834	4.61(1.561)
	C5	Does organisation guidelines include instructions to forward complaint information to the person in charge in a fast, complete and structured manner	.367		.790	4.64(1.534)
Variance Explained		71.515 percent	30.947	21.256	19.312	

Table 3: Results of Factor Analysis of Scale Measuring Commitment

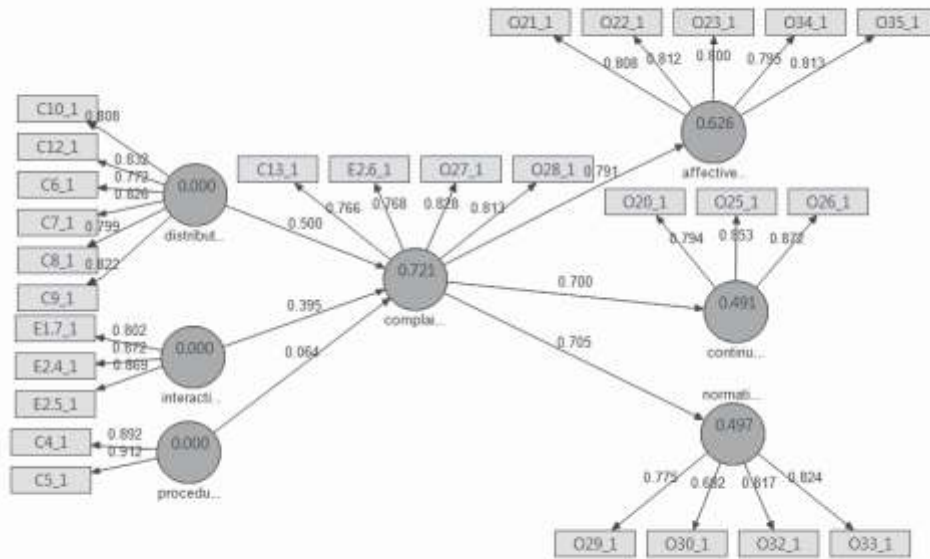
Factors	Item Label	Items	Components			Item Mean/ Std. Deviation
			1	2	3	
Affective commitment (AC)	O21	I take pleasure in being a customer of the organization	.575	.557		5.03(1.448)
	O22	The organisation takes the best care of their customers	.628	.436		5.01(1.393)
	O23	I feel my presence is acknowledged by the organisation	.513	.422	.327	4.74(1.578)
	O34	My last experience with this organisation was very pleasant	.780			5.06(1.473)
	O35	I am highly satisfied with the service quality of the organisation	.750			5.08(1.436)
Continuance commitment (CC)	O20	It's likely that I will continue to buy from this organisation	.508	.632		5.23(1.529)
	O25	I am very committed to my relationship with this organisation		.745	.399	4.74(1.644)

Normative commitment (NC)	O26	I am a loyal customer of the organisation	.722	.331	4.93(1.558)	
	O29	It would be very hard for me to leave my organisation right now even if I wanted to	.313	.745	4.58(1.831)	
	O30	I feel that I have too few options to consider leaving my organisation		.814	4.30(1.820)	
	O32	The relationship with the organisation has great deal of personal meaning to me	.567	.593	4.66(1.580)	
	O33	I am proud to belong to this organisation	.485	.555	4.68(1.744)	
Variance Explained			65.127 percent	25.600	19.956	19.571

Table 4: Results of Test of Reliability of various Scales and One Sample T-test

Relationship dimension	Number of items	Test of reliability Cronbach alpha	Scale mean score	t-value test value=4	p-value (sig. at p<.05)
Distributive justice	6	.896	4.6822	104.307	.000
Interactional justice	3	.806	4.8189	122.505	.000
Procedural justice	2	.805	4.6089	92.998	.000
Complaint satisfaction	4	.757	4.7995	118.272	.000
Affective commitment	5	.840	4.9724	122.400	.000
Continuous commitment	3	.754	4.9358	108.443	.000
Normative commitment	4	.782	4.5592	95.409	.000

Model Testing: The conceptual model (Fig. 1) was tested through PLS-SEM technique. Smart PLS version 2.0 was used to construct the path model both for aggregative and dis aggregative level analysis (Figure 2). Both at aggregative and dis-aggregative level multi-item measurement scales are internally consistent with their composite reliability scores of more than 0.70, and AVE of more than 0.50 which suggests convergent validity of these scales (Table 5). Discriminant validity of measurement scales is also evident as cross loadings of the items constituting these scales are found less than their loading on the constructs for which they are used as its measure.

Fig 2: Path Model (using Smart PLS 2)

R^2 measure that provides the extent of explained variation for each of the endogenous construct, viz., distributive justice, interactional justice, procedural justice, complaint satisfaction, affective commitment, normative commitment, continuance commitment, are shown in Table 6. The structural models demonstrate predictive power as the variance explained (R^2) in key endogenous constructs range between 0.491 to 0.721 for aggregative level model and 0.366 to 0.875 for the three models representing specific exchange situations.

Table 5: AVE, Composite Reliabilities and R Square

Con- structs	Aggregative				Automobile			Insurance			Toiletries		
	N	AVE	CR	R²	AVE	CR	R²	AVE	CR	R²	AVE	CR	R²
DJ	6	0.6562	0.9197		0.5112	0.8604		0.6305	0.9109		0.6693	0.9238	
PJ	2	0.8133	0.8970		0.6440	0.7835		0.8750	0.9333		0.8604	0.9249	
IJ	3	0.7195	0.8849		0.6836	0.8660		0.7427	0.8964		0.6765	0.8625	
CS	4	0.6306	0.8722	0.7211	0.5685	0.8402	0.5917	0.6214	0.8673	0.7552	0.5986	0.856	0.7433
AC	5	0.6489	0.9023	0.6264	0.6182	0.8894	0.5402	0.6721	0.9111	0.6935	0.6713	0.9107	0.5289
CC	3	0.7048	0.8775	0.4910	0.6559	0.8511	0.3668	0.7018	0.8758	0.5047	0.6781	0.8626	0.4675
NC	4	0.6064	0.8598	0.4978	0.5246	0.8103	0.4452	0.6052	0.8597	0.6093	0.6564	0.8838	0.460

The other important part of model evaluation is the examination of fit indices reflecting the predictive power of estimated model relationships. Stone-Geisser's Q^2 (Geisser, 1974; Stone, 1974) measure was used to assess the predictive validity of the model, and blindfolding procedure of Smart PLS was used to obtain Q^2 value for each endogenous construct. At omission distance -'d'-chosen to be 8, as per the suggested range of 5 and 10 (Hair *et al.*, 2011), constructs' cross-validity redundancy value is larger than zero (Table 6) for the constructs under study. According to Hair *et al.* (2011), 'if an endogenous construct's cross-validated redundancy measure value (Q^2) for a certain endogenous latent variable is larger than zero, its explanatory latent constructs exhibit predictive relevance'.

HYPOTHESES TESTING

Table 6 shows the individual path coefficients (β coefficients) and their significance testing (t-test value) by means of bootstrapping.

Study supports H1, H3, H4, H5 and H6, as the hypothesized relationships for both aggregative and disaggregative level of analysis are found significant at $p < .05$ (excepting for toiletries (H_3) and Insurance (H_4)). Accordingly, *distributive justice* (H1), and *interactional justice* (H3) lead to satisfaction with complaint handling. The effect of complaint satisfaction on *affective commitment* (H4), *continuance commitment* (H5) and *normative commitment* (H6) is positive and significant. Due to the lack of empirical support at $p < .05$ study rejects the hypothesized relationships H2.

Table 6: Path Coefficients at Aggregative and Disaggregative Level

Hypotheses	Path	Aggregative	Disaggregative		
		Path Coefficient (β) (t-statistic) ¹	Automobile Path Coefficient (β) (t-statistic) ¹	Insurance Path Coefficient (β) (t-statistic) ¹	Toiletries Path Coefficient (β) (t-statistic) ¹
H ₁	DJ --> CS	0.500(5.2806)	0.6867(4.9295)	0.613(3.5962)	0.751(5.4348)
H ₂	IJ --> CS	0.395(5.1218)	0.2756(3.8823)	0.267(4.7374)	0.468(7.8364)
H ₃	PJ - -> CS	0.064 (0.7443)	0.0322(0.5389)	0.194(2.9877)	-0.0459(0.9696)
H ₄	CS --> AC	0.791 (17.8)	0.6081(14.7921)	0.642(29.8911)	0.590(9.5272)
H ₅	CS --> CC	0.701 (11.4111)	0.7389(7.7476)	0.842(13.8995)	0.944(9.7982)
H ₆	CS--> NC	0.706(11.661)	0.7856(11.7326)	0.827(19.2786)	0.7178(11.5771)

DISCUSSION AND IMPLICATIONS

The empirical testing done in the context of varied relational settings represented by exchange of durable, non-durable and service products shows 'Complaint Handling' as multidimensional concept. The results of the present study support the view that justice concepts provide an effective theoretical framework for explaining satisfaction with complaint handling. The effect of two of the three justice dimensions, viz. distributive, interactional and procedural on complaint satisfaction is significant and positive. Specifically complainants who experience higher levels of distributive and interactional justice report increased satisfaction with complaint handling. The standardized regression weights clearly indicate that most important dimension of complaint handling is distributive justice, followed by interactional justice and these findings are in sync with the previous studies on complaint handling by Goodwin and Ross (1992), Mattila (2001); Davidow (2003). Maxhem and Netmeyer (2002) also found

that retailers providing complainants with refunds and discounts were likely to increase satisfaction with recoveries.

At the dis-aggregative level analysis, as suggested by earlier studies by Maxham and Netemeyer (2002) distributive justice is found to be the most prominent factor in forming satisfaction with recovery perceptions across all product categories followed by interactional justice. The results of the present study show that complaint handling and satisfaction is significantly and strongly associated with commitment, which provides empirical support for the proposition that complaint handling is tied closely to relationship marketing. This in turn provides a clear indication that complainant offer the companies the favourable chance to prove their trustworthiness and if their complaints are handled in an effective manner that would be a suitable driver of their subsequent attitudes and behaviour. The reassessment of the fairness and appropriateness of existing processes particularly in terms of outcomes (distributive justice), and employee-customer communication's (interactional justice) can, therefore, be a more strategic move for a marketer.

For the first time commitment – the higher order relational variable- has been studied at three different levels for their linkages with complaint satisfaction. In the organizational commitment literature, affective commitment component is most strongly related with the target behaviours (Meyer et al., 2002). Consistent with Meyer and Smith's (2000) argument, findings of the present study also suggest that customers may feel an obligation to stay with a company because of all the positive experiences they had with the service provider.

In a service provider context, according to Meyer and Herscovitch (2001) repurchase and switching are the focal behaviours, and other behaviours beneficial or detrimental to the service provider such as positive word of mouth, complaining or price sensitivity could be considered discretionary. According to them focal behaviours are those to which an individual is bound by his or her commitment, and discretionary behaviours are those which are not clearly specified within the terms of commitment, and the effects of each of them appear to be consistent on both focal and discretionary behaviours (Meyer and Herscovitch, 2001). Affective commitment typically demonstrates stronger relations (Meyer et al., 2002). On this basis, it could be expected that increasing both affective and normative commitment in service contexts should result in a variety of more positive customer behaviours toward the company, which may even extend beyond repurchase decisions.

In the case of insurance sector, since companies work on the risk element, and if risk cover factor is considered well by the company, customers may tend to continue with the same organization for years and may not like to switch to other partners. One important factor to note here is the growth prospect and the policy cover which the companies are providing. For example, in case of unit linked insurance plans, unless growth factor is present, customers will switch easily to the competitors..

For the exchange situations involving non-durable products, like toiletries, the largest effect of complaint satisfaction is in the case of continuance commitment, followed by normative commitment. It is possible that customer may not trust firm's policies and procedures, yet due to higher satisfaction with complaint handling or service delivery he may decide to continue his patronage, thus showing loyalty through positive word-of-mouth or even repurchase intentions. In this study, though, we used

satisfaction with complaint handling as drivers of affective, normative and continuance commitment, according to Herscovitch and Meyer (2002), it is possible that affective commitment develops when “individuals become involved in, recognize the value-relevance of or derive their identity from the association with an entity”, whereas normative commitment develops “through socialization, the receipt of benefits that induces a need to reciprocate, or acceptance of the terms of a psychological contract”.

LIMITATIONS

Consumer complaint behaviour as a basis to loyalty is, however, only a partial view of the relationship between customer and the firm. The effective resolution of customer problems and relationship marketing are linked closely in terms of their mutual interest in customer satisfaction, trust and commitment (Achrol, 1997). Trust in an organization is also acquired by learning of previous interactions i.e. conflicts, the company had with others in similar situations. Customer satisfaction with outcome of such interactions over time increases the reliability in the firm and thus contributes to trust. Several other relational variables, such as duration of relationship, value, reputation which the extant literature suggest and could provide further insights for understanding the missing linkages of commitment with loyalty measures. Tendencies toward loyal behaviour are studied in terms of commitment which is in the form of affective, continuous and normative. The actual behaviours like purchase frequency, word of mouth, suggesting loyal behaviour have not been studied. The analysis was not conducted across demographics. Future research studies may investigate into the effects of demographic variables on various relationship dimensions to better help the companies in identifying and targeting the relationship customers.

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Board Traits and Firm Performance: Empirical Evidence from Indian FMCG Sector

J. P. Sharma¹ and Jyoti Paul²

Boards have become very important for smooth and efficient running of the organizations. Their various characteristics are investigated in this paper to find out whether they have any impact on firm performance. The dearth of sector specific studies in the area of corporate governance has been the stimulus to conduct such a research work. Secondary data sources have been used extensively for the 107 companies from Indian FMCG sector. They were analyzed in respect of their board traits and panel data regression was used to find out any relation between such board traits and firm performance. Tobin's Q and ROA were the two performance variables chosen for this purpose. The OLS results show the point estimates came out to be significant in case of Board size. Separation of Chair and CEO posts has a positive impact in case of market based performance. Board independence shows no significant relationship with both the performance measures. The OLS results show market gives premium for separation of roles of Chairman and CEO. The OLS results show larger boards committees' size gives positive signals in the market and hence improve financial performance

Key words: Board Traits, Firm Performance, Q, ROA

Corporate governance has been linked with the performance of the firm in the economic and finance literature in the past. Board of directors has a pivotal role in corporate governance. They are the internal mechanisms of governance. Boards have become very important for smooth and efficient running of the organisations. Their various characteristics are investigated in this paper to find out whether they have any impact on firm performance. The primary aim of the paper is to provide empirical evidence and specifically find out the impact of Board size, Board Duality and independence of the Board on the performance of the firm.

RATIONALE OF THE STUDY

The researcher could not find many sector specific studies in the area of corporate governance. Further the empirical work on role of Boards in case of a sectoral context was missing. The Indian FMCG sector is the fourth largest sector of the economy and has a total market size of more than US\$ 13.1 billion. The FMCG market is set to treble from US\$ 11.6 billion in 2003 to US\$ 33.4 billion in 2015. The aim is to bridge the gap and FMCG sector was chosen for the purpose of the study as the sector is witnessing substantial growth despite recession times and an increase in its share is expected. The study and its implications will be of immense relevance for the sector chosen.

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OBJECTIVES OF THE STUDY

- (i) To review the extant literature on board characteristics and their impact on firm performance
- (ii) To empirically analyze the relation between board traits and firm performance specifically for Indian FMCG sector.

REVIEW OF LITERATURE AND HYPOTHESIS FORMULATION

The Board of directors is responsible for decision-making on behalf of shareholders. The Clause 49 requires a balance of executive and non-executive directors on the Board. Specific board traits have been widely researched in the past. Studies show that the board of directors should have a fair representation of both management and shareholders' interests. Excessive control by inside directors will tend to make decisions favoring management, whereas if the number of independent directors is more, it will leave management out of the decision-making process and may cause good managers to leave in frustration. This section focuses on various Board characteristics that influence performance of firms.

Board Size and Performance

There have been dichotomous views regarding influence of Board size on the performance of firms. Resource dependence theory advocates that larger boards will be associated with higher levels of firm performance. Prior researches have shown such linkages like Alexander, Fennell and Halpern (1993), Goodstein, Gautam and Boekar (1994). Further, a recent study by Rehman and Shah (2013) found a significant positive effect of board size on both market based and accounting based performance measures. Whereas there are contrasting different views put forward by researchers providing empirical evidence that firms with larger boards have lower variability of corporate performance. There have been famous research works showing that larger boards are not effective. They are slow, cumbersome and full of political entanglements. An inverse association between board size and firm value has been found by many studies. The study has also taken size of board committees into account on similar grounds and the null hypothesis to find out the effect of both the board and committee size on performance is set as:

H₀₁: There is no significant relationship between board size and size of committees and firm performance.

Duality and Firm Performance

CEO duality has been the subject of academic interest since long time. Duality is considered as one of the board control structure mechanism. There are competing views of agency theory and stewardship theory on this aspect. The research in the past has shown mixed results of CEO duality on firm performance. Agency theory perspective supports separation of CEO and Chairman on the ground that it leads to effective monitoring of management while advocates of stewardship theory argue that authoritative decision-making under single leadership leads to higher performance. In a recent study with a new perspective duality's impact on accounting performance is found to be contingent to family control factor. In the case of Indian firms where family businesses dominate the scene, the researcher tries to test duality and its impact by setting the null hypotheses as:

H₀₂: There is no significant relationship between CEO duality and firm performance.

Board Independence and Performance

The issue of independence of Board has been researched in many previous studies. Whether the outside directors are good for the firm or not is still contentious. Inside directors are more familiar to the activities of the company and can act as monitors of top management, while on the other hand independent directors bring with them the professional expertise which is advantageous for the company. The codes and committees across the globe have suggested rules that require a mix of executive and non-executive directors. The literature regarding the assessment of impact of board independence has mixed views. Few have found a positive association between independence of board and performance. While many prior works have found no relation as to board independence and performance. The present study has framed the following null hypothesis to test board independence:

H₀₃: There is no significant relationship between board independence and firm performance.

RESEARCH METHODOLOGY AND DESIGN

Secondary data sources have been used extensively in the study which includes books, journals, and corporate governance reports of various FMCG companies, their annual reports, material procured from various conferences and the World Wide Web. The empirical analysis has used variety of statistical methods to interpret the results.

SAMPLE SELECTION

All companies listed on BSE during the financial year 2012-13 were considered for the study initially. There were 368 companies in total listed on BSE in FMCG sector. Out of 368 companies listed on BSE, 186 companies were suspended either due to penal or procedural reasons. After repeated searches, no data could be traced relating to them. They were not having websites; few were having websites but not having any financial information. So it was decided to exclude these suspended companies.

Out of the remaining 182 companies, for 75 listed companies either the information on various aspects of corporate governance needed for analysis was not available or website was not found or it was under construction; further there were few companies for which annual reports of three years considered in the study (2010-11, 2011-12 and 2012-13) were not available. Few companies have to be dropped because the accounting year they were following was different from the financial year. Because of these reasons, the final sample consisted of 107 companies for which all needed information was available.

Key Variables

Performance variables

The main aim of the study is to explore the performance implications as to compliance with corporate governance norms. The performance measures taken in the study relate to both the market-based and the accounting based methods. Tobin's q is used as market based performance measures in the study. ROA as

supported in the finance and accounting literature is chosen as the accounting based measure in the analysis.

Tobin's Q: The value of Tobin's Q greater than one is considered to be a good indicator showing that companies are using scarce resources effectively, whereas those companies having Q value as less than one show the company is using resources poorly. Tobin's Q has been computed using the following formula in the study:

$$\frac{(\text{Market Value of Equity} + \text{Book Value of Preference Shares} + \text{Book value of Debt})}{\text{Total Assets}}$$

This specification of Tobin's Q is extensively used in number of studies in India and abroad. This varies from the actual Tobin's Q which uses market value of debt and replacement cost of assets. However, in India since debt is not freely traded in the market and assets are recorded at historical cost, therefore, Book value of Debt and Book Value of Total Assets has been taken.

Return on Assets (ROA): This accounting variable is calculated as ratio of operating income (EBIT) to Total Assets. Total assets include value of fixed assets, investments and current assets. This measure is independent of company's tax structure and hence used in many corporate governance studies.

Control Variables

The performance of a firm is affected by a host of factors, so it is important to take into account the control variables otherwise the emerging relationships will be spurious. In order to take such variables into account the researcher has relied on the studies in the past and has decided upon control variables to be included besides the independent variables. The control variables included in this study are discussed below:

Size of the firm: There can be difference in market values of firms because of their respective sizes, so it is essential to take it into account to omit any bias. Larger firms can be more diversified and decentralized with potentially bigger agency and bureaucratic costs. Moreover they have greater resources at their disposal and can exploit economies of scale, employ skilled task force and hence result in being more efficient and thus having positive relationship with performance. Thus, a variable to control firm size is taken to control for operating performance. In this study, firm size is measured by using natural logarithm of total assets for each year taken in the study. Log transformation of this variable is used to correct for high degree of skewness in the firm size, thus ensuring that data is properly distributed and further it takes into account the problem of heteroskedasticity.

Age: The age effect is ambiguous as older firms can benefit from economies due to experience and be more efficient but on the contrary, as the firm ages, it may become more complex and may have greater agency problems. Moreover, older companies are prone to inertia, and rigidities in adaptability which may negatively impact performance. Age is measured by using natural logarithm of the number of years between the observation year and the year of incorporation of the firm.

Leverage: The amount of debt in firm's capital structure is used to account for the risk characteristic of

the firm. Firms having a higher level of debt have a higher cost of capital and also greater monitoring by debt holders and will have to perform better than it would have been otherwise. To measure the effect of this measure, natural logarithm of leverage is used. Leverage in the study is calculated as debt to total assets ratio.

Business group dummy: Business groups are a distinct characteristic of Indian businesses. The firms affiliated to business groups are more diversified than independent firms as found by George (2008). Further, business group affiliated firms may have political connections, access to financing, or be more diversified, which could affect Tobin's q . Because such an effect can have an impact on performance the researcher has included a business group dummy to capture this effect. The variable is coded as 1 if company is a part of any business group and 0 otherwise.

Year Dummies: The study uses both the time series and cross sectional data to analyse results for board characteristics and its impact on performance. There are two ways to deal with such kind of data. First can be a panel model with fixed firm effects, but such variables virtually eliminate much of the cross-sectional variability across firms. The study uses the procedure with random firm effects allowing for cross-sectional firm variations while the time variability has been captured by year dummies. Dummy variables D12 and D13 are used for the year 2011-12 and 2012-13 respectively.

Panel Regression Model: It involves pooling of observations on a cross-section of units over several time periods and helps to give results that are simply not detectable in pure cross-section or pure time-series studies. The panel regression equation differs from a regular time-series or cross section regression by the double subscript attached to each variable.

The general form of panel data model can be specified as:

$$Y_{it} = \beta_1 + \beta_2 X_{2it} + \beta_3 X_{3it} + \dots + \beta_k X_{kit} + \mu_{it}$$

$i=1, 2, 3, \dots, N$
 $t=1, 2, 3, \dots, T$
 $k=2, 3, 4, \dots, K$

where i stands for the i^{th} cross-sectional unit, t for the t^{th} time period and k stands for k^{th} variable.

Multivariate regression analysis on panel data has been used to empirically test the hypotheses based on board characteristic and performance. Applying combination of variables, models of linear regression equations were constructed. Model 1 entered only concerned variables as independent variables with the dependent being the performance variable. In the second Model the control variables were introduced in a manner that the stability of the regression coefficients to the main independent variables could be assessed. The specific Models to test different hypothesis are specified at the appropriate places in the paper.

Board Characteristics and Firm Performance- Analysis

This section analyses various board characteristics which affect board performance. There are various board characteristics which are studied viz. various performance measures. The researcher here analyses

this relationship using Panel data regression for three years in the context of Indian FMCG sector. As has already been discussed in review of literature, Board of directors are the most significant mechanism who guide and monitor management in the best interest of all stakeholders. It is of great concern in this context to empirically analyse the relationship between board characteristics and firm performance.

Board size and firm performance

Table 1 shows that all the committee size and board size are significantly positively correlated with firm size. This can be interpreted as larger firms have large board size and as well more members in various committees. But the board size and all other sizes of committees are not significantly correlated to both the market based performance i.e Tobin's Q and Market to book value ratio. But the size of remuneration committee and investor grievance committee are significantly negatively correlated to ROA.

Table 1 Correlation of Board and Committee Size and Performance Variables

	Board_size	AC_size	RC_size	IG_size	LN_TA	Q	MBR	ROA
Board_size Sig (2-tailed)	1 .000	.525** .000	.468** .000	.321** .000	.584** .000	-.074 .188	-.090 .108	-.011 .844
AC_size Sig (2-tailed)	.525** .000	1 .000	.397** .000	.244** .000	.303** .000	-.013 .817	-.025 .660	-.037 .511
RC_size Sig (2-tailed)	.468** .000	.397** .000	1 .000	.285** .000	.274** .000	.005 .933	.036 .521	-.134* .016
IG_size Sig (2-tailed)	.321** .000	.244** .000	.285** .000	1 .000	.166** .003	.017 .757	.013 .814	-.116* .038
LN_TA Sig (2-tailed)	.584** .000	.303** .000	.274** .000	.166** .003	1 .000	-.247** .000	-.213** .000	.112* .046
Q Sig (2-tailed)	-.074 .188	-.013 .817	.005 .933	.017 .757	-.247** .000	1 .000	.709** .000	-.032 .565
MBR Sig (2-tailed)	-.090 .108	-.025 .660	.036 .521	.013 .814	-.213** .000	.709** .000	1 .000	-.031 .585
ROA Sig (2-tailed)	-.011 .844	-.037 .511	-.134* .016	-.116* .038	.112* .046	-.032 .565	-.031 .585	1

** .Correlation is significant at 0.01 level(2 –tailed test)

*.Correlation is sig. at 0.05 level (2-tailed test)

Further the relationship between board size and size of various other committees with performance has been empirically analysed using the following model:

$$\text{Performance} = \beta_1 + \beta_2(\text{Board_size})_{it} + \beta_3(\text{AC_size})_{it} + \beta_4(\text{RC_size})_{it} + \beta_5(\text{IG_size})_{it} + \beta_6(\text{LN_TA})_{it} + \beta_7(\text{LN_Age})_{it} + \beta_8(\text{LN_Leverage})_{it} + \beta_9(\text{Busgroup_dummy})_{it} + \beta_{10}(\text{D12})_i + \beta_{11}(\text{D13})_i + \mu_{it}$$

Table 2: OLS Estimates of Board Size and Performance measured by LN_Q

		Standardized Coefficients		
Model		Beta	t	Sig.
1.	(Constant)		-2.693	.007
	Board_size	.075	1.647	.098
	AC_size	.308	5.007	.000
	RC_size	-.267	-4.461	.000
	IG_size	.241	4.391	.000
	p-value	0.000	F value	16.589
	R square	0.174	Adj. R square	0.164
2.	(Constant)		-2.693	.007
	Board_size	.178	2.378	.018
	AC_size	.199	3.331	.001
	RC_size	-.229	-4.048	.000
	IG_size	.193	3.702	.000
	LN_TA	-.085	-1.411	.159
	LN_Age	-.027	-.518	.605
	LN_Leverage	-.327	-6.506	.000
	Busgroup_dummy	-.054	-1.058	.291
	D13	.058	1.046	.297
	D12	.114	2.064	.040
	p-value	0.000	F-value	13.046
	R square	0.297	Adj. R square	0.274

Table 3: OLS Estimates of Board size and Performance measured by ROA

		Standardized Coefficients		
Model		Beta	t	Sig.
1.	(Constant)		2.646	.009
	Board_size	.092	1.308	.192
	AC_size	-.003	-.047	.962
	RC_size	-.146	-2.256	.025
	IG_size	-.103	-1.736	.084
	p-value	0.043	F value	2.489
	R square	0.031	Adj. R square	0.018
2.	(Constant)		-2.500	.013
	Board_size	-.161	-1.941	.053
	AC_size	.017	.255	.799
	RC_size	-.105	-1.675	.095
	IG_size	-.125	-2.152	.032
	LN_TA	.195	2.914	.004
	LN_Age	.311	5.391	.000
	LN_Leverage	-.031	-.556	.579
	Busgroup_dummy	.039	.693	.489
	D13	-.013	-.217	.829
	D12	.010	.156	.876
	p-value	0.000	F-value	4.779
	R square	0.134	Adj. R square	0.106

Table 2 and 3 show the regression estimates as analysed through two Models. In the first Model, the board size and the size of various other committees were entered in the Model, the p-values of 0.000 for LN_Q and 0.043 for ROA led to the **rejection of null hypothesis of no relationship between size of board and committees and firm performance**. Further in the second Model, various control variables were introduced, the results show similar results. The point estimates for all the committees' sizes were significant for LN_Q. Board size is significant at 0.053 levels in case of ROA. But the t-value in case of ROA showed a negative relationship. Remuneration committee size is negatively associated with performance for both the performance measures but the point estimates are significant only for LN_Q.

Duality and firm performance

Whether dual CEO leadership structure is better for corporations is one of the most hotly debated issues in corporate finance. In the first stage, we analysed whether duality and the size of the firm were having any relation. To analyse the duality aspect, the separation of Chairman and CEO is coded as 1 and 0 otherwise for firms with CEO and Chairman as same person. The following table shows a significant positive relation between separation of Chair and CEO positions and size of the firm.

Table 4:Correlations between Separation of Chair and CEO with Firm Size

		CM_CEO	LN_TA
CM_CEO	Pearson Correlation	1	.273 **
	Sig. (2-tailed)		.000
LN_TA	Pearson Correlation	.273 **	1
	Sig. (2-tailed)	.000	

**. Significance of Correlation at 0.01 level(2-tail)

The literature provides diverssupport on the relation between CEO duality and firm performance. The following Model is used to test the hypothesis

$$\text{Performance} = \beta_1 + \beta_2(\text{CM_CEO})_{it} + \beta_3(\text{LN_TA})_{it} + \beta_4(\text{LN_Age})_{it} + \beta_5(\text{LN_Leverage})_{it} + \beta_6(\text{Busgroup_dummy})_{it} + \beta_7(\text{D12})_i + \beta_8(\text{D13})_i + \mu_{it}$$

Table 5: OLS Estimates of Duality and Performance measured by LN_Q

		Standardized Coefficients		
Model		Beta	T	Sig.
1.	(Constant)		3.425	.001
	CM_CEO	.158	2.854	.005
	p-value	0.005	F value	8.143
	R square	.025	Adj. R square	0.022
2.	(Constant)		.241	.810
	CM_CEO	.101	1.857	.064
	LN_TA	.021	.388	.698
	LN_Age	.035	.676	.499
	LN_Leverage	-.394	-7.594	.000
	Busgroup_dummy	-.071	-1.317	.189
	D13	-.075	-1.288	.199
	D12	-.109	-1.871	.062
	p-value	0.000	F-value	11.033
	R square	0.198	Adj. R square	0.180

Table 6: OLS Estimates of Duality and Performance measured by ROA

		Standardized Coefficients		
Model		Beta	T	Sig.
1.	(Constant)		4.396	.000
	CM_CEO	.046	.813	.417
	p-value	0.417	F value	.661
	R square	.002	Adj. R square	-0.001
2.	(Constant)		-3.450	.001
	CM_CEO	-.035	-.594	.553
	LN_TA	.072	1.217	.224
	LN_Age	.255	4.537	.000
	LN_Leverage	-.018	-.332	.740
	Busgroup_dummy	.044	.761	.447
	D13	-.019	-.297	.767
	D12	-.013	-.206	.837
	p-value	0.001	F-Value	3.594
	R square	0.075	Adj. R square	0.054

Duality and its relation with performance are giving mixed results depending upon the performance measure chosen for analysis. The first Model in case of LN_Q is having a p-value of 0.005 showing that the baseline model is significant. Even when the control variables are added in the Model the p-value improved and the point estimate is significant at 0.064 levels showing that the **null hypothesis is rejected indicating there is a significant relationship between duality and market based performance measure.**

But when duality is assessed with operating measure of ROA the p-value of 0.417 in the baseline model was quite high to reject the null hypothesis. Even when control variables were added though the Model improved, but the point estimate remained insignificant. Therefore, the **null hypothesis cannot be rejected when ROA is taken as performance measure.**

Independence of Directors and Firm Performance

The role of independent directors has been given considerable prominence in India after the Satyam debacle. Many researchers in the past have analysed the relationship between the independence of the directors and firm performance. We have tested the following Model to analyse the results regarding the same in case of sample FMCG companies:

$$\text{Performance} = \beta_1 + \beta_2(\text{CM_indep})_{it} + \beta_3(\text{ID_prop})_{it} + \beta_4(\text{LN_TA})_{it} + \beta_5(\text{LN_Age})_{it} + \beta_6(\text{LN_Leverage})_{it} + \beta_7(\text{Busgroup_dummy})_{it} + \beta_8(\text{D12})_i + \beta_9(\text{D13})_i + \mu_{it}$$

Table 7: OLS Estimates of Independence and Performance measured by LN_Q

		Standardized Coefficients		
Model		Beta	T	Sig.
1	(Constant)		.862	.389
	CM_indep	-.049	-.867	.387
	ID_prop	.042	.746	.456
	p-value	0.494	F value	0.707
	R square	0.004	Adjusted R square	-0.002
2	(Constant)		-.424	.672
	CM_indep	-.089	-1.722	.086
	ID_prop	.029	.573	.567
	LN_TA	.060	1.092	.276
	LN_Age	.059	1.148	.252
	LN_Leverage	-.415	-8.089	.000
	Busgroup_dummy	-.065	-1.213	.226
	D13	-.078	-1.330	.184
	D12	-.110	-1.882	.061
	p-value	0.000	F value	9.623
	R square	0.198	Adjusted R square	0.178

Table 8: OLS Estimates of Independence and Performance measured by ROA

		Standardized Coefficients		
Model		Beta	T	Sig.
1	(Constant)		1.686	.093
	CM_indep	.094	1.674	.095
	ID_prop	-.022	-.393	.694
	p-value	0.217	F value	1.537
	R square	0.010	Adjusted R square	0.003
2.	(Constant)		-2.322	.021
	CM_indep	.065	1.173	.242
	ID_prop	-.010	-.176	.860
	LN_TA	.054	.928	.354
	LN_Age	.244	4.396	.000
	LN_Leverage	-.010	-.173	.863
	Busgroup_dummy	.045	.779	.437
	D13	-.018	-.279	.780
	D12	-.013	-.202	.840
	p-value	0.001	F value	3.281
	R square	0.078	Adjusted R square	0.054

Table 7 and 8 make it clear that there is no significant relationship between independence and performance. The first Model has a p-value of 0.494 for LN_Q and 0.217 for ROA showing that **null hypothesis can't be rejected indicating no significant relationship between board independence and performance**. In the second Model when control variable were introduced in both the cases the p-values improved, but the point estimates remained insignificant. For LN_Q the chairman independence was negatively associated with performance and for ROA the proportion of independent directors was negatively associated with performance, though the point estimates were not significant.

SUMMARY AND IMPLICATIONS

Board Size

The results show a strong positive correlation between size of the firm and size of the board and implying that bigger firms need greater pool of knowledge which is provided by more members on the Board. The size of the various committees is also significantly positively correlated with the size of the firm.

The optimal number of directors on the Board is still a contentious issue. Various theories have advocated different opinions. From the viewpoint of agency theory, larger boards enhance effective monitoring and hence improve performance. Similarly, resource dependency theory suggests that larger boards bring with them vast pool of knowledge to help increase firm value. Various researches in the past have delved into the issue in the past as reviewed before.

The OLS results show the point estimates came out to be significant when the performance measure was taken as Tobin's Q implying that larger boards and large size of various committees give positive signals in the market and hence improve financial performance. But when the operational measure of firm performance i.e ROA was taken, though the results are significant for Board size only, it predicted a negative relationship; showing larger board may hamper the operational performance.

Duality and Firm Performance

In case of Indian FMCG sector separation of Chair and CEO is significantly correlated with size of the firm showing that bigger firms seek separate Chairman and CEO to handle vast operations and complex businesses. It is supported by correlation results of the sample companies of FMCG sector.

Separation of Chair and CEO posts has a positive impact in case of market based performance showing that market perceives bigger firms are better managed by the separation of the two posts. The Chairman in such big companies are providing overall guidance and have a visionary role although the day to day affairs are left in the hands of CEO for better management. They are in closer contact with the employees and so the organisation as a whole benefits from such a separation. The OLS results show market gives premium for such a separation of roles.

Although the results show that the accounting based measure does not hold the result true showing that separation of the posts is not having a significant impact on operational performance of the firms. Further past researches have shown that the relationship between CEO duality and accounting performance is

influenced by other factors like presence of the family control, probably because of which the two performance measures are showing different results.

Board Independence and Firm Performance

As per the corporate governance report of sample firms of the FMCG sector, none of the firm was having less than 33% of independent directors in year 2013. Further only 10 firms were having an Independent director as Chairman.

Board independence measured by Independent Chair and the proportion of independent director's show no significant relationship with both the performance measures. Nor the market is providing premium for independence neither the accounting measure is significantly affected by Board independence. The firms in the FMCG sector are complying well with the norms of independence provided by Clause 49 and firms which are not having an independent Chairman are doing well. The results are consistent with many prior researches including that of Hermalin and Weisbach (2001), Bhagat and Black (2002) and Koerniadi and Rad (2012).

CONCLUSION

The study enhances the existing literature on board traits and its link with firm performance in the Indian context. In context of Indian FMCG sector, as per the results of the study it can be concluded that Board size does have an influence on the performance of the firm. Duality is giving mixed results depending upon the measure chosen for performance. Market based measure is influenced by duality. And board independence is not affecting the firm performance. So the companies in this sector can benefit from these results and use the results for a favorable board structure.

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Appendix 1

Variables used in the Study

Q	Tobin's Q
ROA	Return on assets
LN_Q	Natural log of Q
LN_MBR	Natural log of MBR
LN_TA	Natural log of Total Assets
LN_Age	Natural log of age
LN_Leverage	Natural log of leverage
Busgroup_dummy	Business group dummy, business group affiliation=1, otherwise=0
D12	Dummy variable for the year 2011-12
D13	Dummy variable for the year 2012-13
ID	Independent Director
Board_size	Total number of members on the Board
AC_size	Number of members in Audit Committee
RC_size	Number of members in Remuneration Committee
IG_size	Number of members in Investors' Grievance Committee
CM_CEO	Separation of position is coded as 1, otherwise=0
CM_indep	Chairman is Independent
ID_prop	Proportion of ID

Interest Rate Movements and Stock Returns: A Panel Data Approach

K. Latha¹, Sunita Gupta² and Renu Ghosh³

The present study attempts to examine the relationship between interest rate movements and stock returns in India by using the methodology of panel regression. The study spans the period from 1st April 1996 to 30th August 2014. Sample used in the study consists of all financial and non-financial companies listed in the S&P CNX 500 index with continuous availability of share prices over the study period. Time series used in the present study is non-stationary; it was however found to be stationary at the first difference. Stock returns in India exhibit significant exposure with both market returns and interest rate changes. Both the financial sector and non-financial sector stocks are potentially affected by interest rate changes but the magnitude of impact varies widely.

The impact of interest rate changes on common stock returns of financial institution is higher as compared to non-financial institutions. In case of financial firms, the impact of interest rate movements is higher on banking firms compared to non-banking financial firms. In case of non-financial firms, the moderate relationship is found between stock returns and interest rate changes for automobile, cement & cement products, chemical products, construction, consumer goods, energy, industrial manufacturing, IT, metal products and pharma sectors, whereas this relationship is found to be weak for fertilizer & pesticides products, health, media & entertainment, service, telecom and textile sectors respectively.

Key words: Stock Returns, Interest Rate, Panel Regression, Financial Sector and Non-Financial Sector.

INTRODUCTION

Financial system is the bridge that brings together the surplus sector and the deficit sector. Without a sound and effective financial system, a country cannot have a healthy economic system. The financial system of an economy should not only be hassle free but it should also be able to meet challenges of both internal and external factors surrounding it. Indian financial system is now no longer confined to only metropolitans; it has expanded its reach to the rural areas through the policy of financial inclusion. It is the main reason for India's growth process and its way from developing country to developed country.

The relationship between stock returns and interest rate changes has been one of the most dominant themes in the financial research for the past few decades. Interest rate is one of the important macroeconomic variables, which is directly related to economic growth. Interest rate is considered as the cost of capital, the price paid for using the money for a period of time. Theoretically inverse relationship is suggested between stock returns and interest rate. Reason for negative relationship between stock returns and interest rate movements may be that when interest rates are hiked, investors transfer their money out of the stock market, believing that higher borrowing costs will affect balance sheet negatively

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resulting in devaluating the stock price (Singh & Arora, 2010). The nature of change in stock prices depends on the characteristics of the firm.

Interest rate risk is an important concern for financial firms. The interest rate variable is important for the valuation of common stocks of financial institutions because the returns and costs of financial institutions are directly dependent on interest rates. Stock returns sensitivity to interest rates was theoretically advocated by Stone (1974). He was the first one to develop the two-index model by incorporating the interest rate risk as an extra factor for explaining the stock returns of financial firms. Interest rate changes in banking and financial sector firms directly affect their input costs, operating margin and the demand for services by their customers. Since costs and revenues of financial institutions depend heavily on interest rates, it is obvious to assume that their stocks are vulnerable to interest rate movements. Hence, theoretically interest rate movements should have relatively higher impact on the stock returns of financial firms as compared to non-financial firms. Various authors have, therefore, examined the empirical sensitivity of stock returns of financial institutions to changes in market interest rates, and enormous of literature show a strong relation between the stock returns of financial institutions and interest rates. The bulk of the research has almost exclusively focused on the developed countries especially US banking sector.

The present study contributes to the related literature by studying the sensitivity of stock returns to interest rate changes using data for Indian firms since 1996. Interest rate sensitivity of both financial and non-financial firm is analyzed in the present study using panel data approach.

OBJECTIVE OF THE STUDY

The broad objective of present study is to ascertain the significance of strength and direction of the impact of interest rate movements on common stock returns of financial firms listed in S&P CNX 500 in India. The financial firms will include- Banking firms and non-banking firms. For the purpose of comparison, the present study also examines the impact of interest rate movements on stock returns of non-financial firms listed in S&P CNX 500 in India. The idea behind this study is to find out whether stock returns are related to interest rate changes. Therefore, in particular, the present study will have the following research objective:

- To examine whether common stock returns in India exhibit significant sensitivity to interest rate changes.

Testable Hypotheses

The study seeks to achieve the above mentioned objective by testing the following hypotheses:

- a) There is no significant relationship between stock returns and interest rate changes.
- b) There is significant relationship between stock returns and interest rate changes.

Data and their Sources

The sample for the purpose of study consists of 411 companies forming part of S&P CNX 500 index that

has continuous available prices for the period under consideration. The list of sample companies is provided in Table A and Table B of the appendix. These companies represent a broad spectrum as they belong to all 18 major sectors of the economy. For 89 firms, data was not available continuously. The sample selected for study is further divided into two parts financial firms and non-financial firms for comparing the effect of interest rate movements on these two groups of institutions separately. Financial firms are further segregated into banking firms and non-banking financial firms. The non-financial firms are segregated into different industry namely: Automobile industry, Cement & Cement Products Industry, Chemicals Product Industry, Construction Sector, Consumer Goods Industry, Energy Sector, Fertilizer & Pesticides Product Industry, Health Sector, Industrial Manufacturing Industry, IT sector, Media & Entertainment Industry, Metals Product Industry, Pharma Sector, Service Sector, Telecom Industry and Textile Industry to check the impact of interest rate changes on these sectors separately.

The adjusted closing stock prices are collected on weekly basis. Weekly stock returns of individual firm are used to create panel data work file. Panel data is a combination of time series and cross-sectional data. In panel data the same cross-sectional firms is studied over time. Panel data have both space as well as time dimensional component of data. The present study has 411 cross-section firms for which weekly time series data is taken ranging for the period starting from 1st January 1996 to 30th August 2014. In total there are 278477 observations.

Interest Rate Proxy

The cut-off implicit yield on 91-days Treasury Bills has been used as the interest rate variable because it is the deregulated interest rate in India which is determined by the forces of demand and supply. It is important to mention here that prior to 1993, the rate of return on 91-days T-bills was exogenously fixed at 4.60% p.a. Administrative restrictions on interest rates have been steadily eased since 1993. It was only since January 1993 that a new auction based system was introduced which allowed implicit yield on 91-days T-bills to vary. Data for cut-off implicit yield on 91-days Treasury Bills have been collected from RBI website rbi.org.in.

Market-Proxy

The return on the S&P CNX Nifty-500 equity index, the widest equity market index in India is used as a proxy for market portfolio. It is a broad based value weighted market index generally used in research studies. The data regarding index values have also been collected from NSE website and Prowess database.

LITERATURE REVIEW

Stock returns sensitivity to interest rates was theoretically advocated by Stone (1974). He was the first one to develop the two-index model by incorporating the interest rate risk as an extra factor for explaining the stock returns of financial companies. "The stock returns interest rate sensitivity has long been the focus of academic research. Arbitrage Pricing Theory (APT) as developed by Ross (1976), argued that a number of systematic factors and not just market factor (captured by market risk premium) significantly explain stock returns. By employing factor analysis, study asserted that there are several

systematic factors (Industry specific and company specific) that affects the security's return besides market returns such as unanticipated changes in interest rates, inflation rate, index of industrial production, trade deficit etc. Since Stone (1974) developed the two-index model, Martin & Keown (1977), Lyngne and Zumwalt (1980), Choi and Jen (1991) investigated whether inclusion of interest rate as an extra-factor in two-index model adds explanatory power for estimating stock returns" (Latha, Gupta, & Ghosh, 2016). The results supported the Stone (1974) two-index model which attest the presence of interest rate as an extra-market factor in explaining stock returns.

Maisel & Jacobson (1978) study examined the magnitude by which interest rate movements may alter costs and revenues of a commercial bank and the way in which bank adjust their loans and assets overtime in response to shifts in market interest rates in U.S. and found that rate of returns and costs adjust with each other i.e. financial institutions adjust their loans and assests in response to interest rate changes so as to equalize their marginal costs and revenues.

Giliberto (1985) presented a methodological note on the model re-specification of interest rate sensitivity for common stock returns of financial institutions. Most of the study in U.S. in this area has used a two-factor model proposed by Stone, 1974 for examining the effect of interest rate as an extra factor whereas some have used unbiased estimates of interest rate index by using the orthogonalizing process for independent variables and reported different results. The study reported that re-specification of the original two-index model results in biased estimates and some previous studies finding are clouded by a particular misspecification.

In the Indian context, interest rate risk examined by the study of Patnaik & Shah (2002) for a sample of 43 major banks found evidence for significant interest rate sensitivity of Indian banks. Two largest banks, SBI and ICICI bank, carried relatively little interest rate risk than other banks in the sample. Size served as the hedging instrument for the large banks. 33 out of 43 banks stand to lose or gain more than 25 percent of their equity capital in the event of 320 bps shock. Only 10 out of 43 banks were hedged. Hence, cross sectional heterogeneity exist across banks for their interest rate exposure. Literature provided substantial evidence for stock returns exhibiting statistically significant inverse relationship with interest rate changes (Asprem, 1989; Ballester, Ferrer, Gonzalez, & Soto, 2009; Alam & Salahuddin, 2009; Moss & Moss, 2010; Kasman, Vardar, & Gokce, 2011; Ballester, Ferrer & Gonzalez, 2011).

RESEARCH METHODOLOGY

For each company under study, the log returns are computed. Log return series have the advantage of stationarity as a result these are free from unit root and can therefore be easily compared with each other. Thus stock returns are calculated as under:

$$R_i = \ln(P_{it} / P_{it-1}) \quad (1)$$

Where

R_i = Stock return of company i at time t.

P_{it} = Stock price of company i at time period t.

P_{it-1} = Stock price of company i at time period $t-1$.

Market returns are computed on the same line as the stock returns. S&P CNX 500- widest equity market index in India is used as benchmark for calculating market returns.

Robust analysis of time series data requires that the time series employed in the study should be stationary i.e. it should be free from unit root. Panel unit root testing has emerged from the time series unit root testing. Individual time series unit root tests have limited power. The panel approach yields higher power test than carrying separate unit root test for each individual time series because it allows individual regression error, intercept and trend coefficient to vary freely across individuals. Stationarity of panel data series is tested using Levin, Lin and Chu test (LLC test, 2002) which suggests the following hypotheses.

H_0 : Each individual time series in the panel contains unit root.

H_1 : All individual time series in the panel are stationary.

Levin, Lin, & Chu (2002) test procedure main hypothesis is:

$$Dy_{it} = dy_{it-1} + \sum_{L=1}^{p_i} q_{iL} Dy_{it-L} + a_{mi} d_{mt} + e_{it}, \quad (2)$$

Where, $m = 1, 2, 3$. Since p_i is unknown, authors therefore suggested three-step estimation procedure of their test statistic.

Step 1: Perform ADF regressions for each individual in the panel and generate orthogonalized residuals.

$$Dy_{it} = dy_{it-1} + \sum_{L=1}^{p_i} q_{iL} Dy_{it-L} + a_{mi} d_{mt} + e_{it}, \quad (2')$$

Where, $m = 1, 2, 3$.

The lag order p_i is permitted to vary across individuals in the panel.

Step 2: After determining order p_i in (2'), two auxiliary regressions are run to generate orthogonalized residuals.

a) Δy_{it} on Δy_{it-L} and d_{mt} to obtain the residuals \hat{e}_{it} and

b) y_{it-1} on Δy_{it-L} and d_{mt} to get residuals \hat{u}_{it-1}

Step 3: In the third step residuals are standardized by performing

$$\tilde{e}_{it} = \hat{e}_{it} / \hat{S}_{ei} \quad (3)$$

$$\tilde{u}_{it-1} = \hat{u}_{it-1} / \hat{S}_{ei} \quad (4)$$

Where \hat{S}_{ei} denotes the standard error from each ADF.

Finally, pooled regression is run

$$\tilde{e}_{it} = d\tilde{u}_{it-1} + \tilde{e}_{it} \quad (5)$$

Under the null hypothesis $\delta=0$. The necessary condition for the Levin-Lin-Chu test is

$$\sqrt{N_T} / T \rightarrow 0, \text{ Whereas sufficient condition would be } N_T / T \rightarrow 0 \text{ and } N_T / T \rightarrow k$$

According to authors, the LLC test statistic is suitable for most macro panels when N lies between 10 and 250 and when T lies between 5 and 250. Here N and T stand for number of cross section and time observations respectively.

Panel Regression Analysis

Panel data is a combination of time series and cross-sectional data. In panel data the same cross-sectional firms is studied over time. Panel data has both space as well as time dimensional component of data. The panel data obtained was fitted to the equation by the regression method. The relationship between dependent and independent variables were determined and inferences were drawn on the basis of regression analysis. Tahmoorespour & Ardekani (2012) study used the methodology of panel regression for assessing the impact of interest rate on bank's stock returns in 14 international markets.

- **Multivariate:** the following model is employed to test the impact of market return and interest rate changes on stock returns:

$$R_t = a + b_1.R_m + b_2.\Delta I_t + u_t \quad (6)$$

Where R_t is the return of stock at time t; R_m is the return on the market index which is considered to reflect economy-wide factors; ΔI_t is the changes in interest rate; β_0 is the intercept term; u_t denotes the residual of the regression and represent that part of the returns that cannot be explained by market returns and changes in interest rate.

Estimation of panel data regression can be done through two different approaches:

- **The Fixed Effects Approach:** In Fixed effects approach, the estimation of regression depends on the assumptions made about the intercept, slope coefficients and the residual error term. In the present study intercept and slope coefficient of the estimates are assumed to be constant across time and the error term captures the differences in individual cross-section time units.
- **The Random Effects Approach:** In Random effects approach, the assumption is that the intercept of individual unit is random with a constant mean value. The individual intercept is expressed as deviation from the constant mean value.

The choice of approach between fixed effects and random effects can be made with the help of **Hausman Test**.

Hausman Test

Hausman test developed in 1978 can be used to differentiate between fixed effects model and random effects model in panel data.

The null hypothesis underlying the Hausman Test is that fixed effects and random effect estimators do not differ substantially and random effect model is preferred. While under alternative hypothesis fixed effect model should be preferred.

Estimator	H_0 is true	H_1 is true
Random Effect Estimator	Consistent Efficient	Inconsistent
Fixed Effect Estimator	Consistent Inefficient	Consistent Possibly Efficient

The observations made by Judge et al. may also be useful for choice between fixed and random effect model. According to them if the time series data observations is large and cross-sectional units is small, there may be little difference in the value of the parameters estimated from fixed and random effects approach and fixed effect approach may be preferred (Judge, Hill, Griffiths, Lutkepoul, & Lee, 1982).

EMPIRICAL RESULTS

Table 4.1 presents the results of panel unit root test at first difference.

Table 4.1: Results of the Panel Unit Root Test

Companies	Levin, Lin & Chu test-statistic	Number of cross-sections	Number of observations
CNX 500 Companies Stock Returns	-387.9840* (0.0000)	411	278477
Financial Companies Stock Returns	-164.0190* (0.0000)	70	45426
Banking Firm's Stock Returns	-105.8000* (0.0000)	35	18956
Non-Banking Financial Companies Stock Returns	-59.1478* (0.0000)	35	26365
Non-Financial Companies Stock Returns	-254.7550* (0.0000)	341	232710
Automobile Companies Stock Returns	-49.0134* (0.0000)	22	19031
Cement & Cement Products Companies Stock Returns	-40.7486* (0.0000)	11	10177
Chemical Products Companies Stock Returns	-47.6036* (0.0000)	12	11592

Construction Companies Stock Returns	-21.8887* (0.0000)	43	17908
Consumer Goods Companies Stock Returns	-66.0526* (0.0000)	47	33688
Energy Sector Companies Stock Returns	-49.4565* (0.0000)	37	24200
Fertilizers & Pesticides Products Companies Stock Returns	-18.6500* (0.0000)	5	4007
Health Sector Companies Stock Returns	-23.2837* (0.0000)	3	2240
Industrial Manufacturing Companies Stock Returns	-62.2981* (0.0000)	35	29481
IT Companies Stock Returns	-73.7776* (0.0000)	29	17877
Media & Entertainment Companies Stock Returns	-24.5603* (0.0000)	14	57277
Metal Products Companies Stock Returns	-38.7000* (0.0000)	20	13122
Pharma Sector Companies Stock Returns	-54.4280* (0.0000)	25	21130
Service Sector Companies Stock Returns	-37.7637* (0.0000)	23	12948
Telecom Companies Stock Returns	-23.6579* (0.0000)	5	1964
Textile Companies Stock Returns	-16.9706* (0.0000)	10	7004
S&P CNX 500 Index Returns	-318.8231* (0.0000)	411	278477
Interest rate	-15.3620* (0.0000)	411	278477
Interest Rate Change Series	-306.082* (0.0000)	411	278477

Note: Values in parentheses indicates p-value.

* Indicates p-value significant at 1% level.

It may be mentioned at the outset that panel time series used in the present study is non-stationary; it was however found to be stationary at the first difference.

Table 4.2: Correlation Coefficients between Market Returns and Interest Rate Changes

		Market Returns	Interest Rate Changes
Market Returns	Pearson Correlation	1	-0.0170
	Sig. (2-tailed)		0.597
	N	971	971
Interest Rate Changes	Pearson Correlation	-0.0170	1
	Sig. (2-tailed)	0.597	
	N	971	973

The correlation coefficients obtained between market returns and interest rate changes does not present the problem of **multicollinearity** between the regressors.

In the section below interest rate sensitivity of common stock returns is examined using random effect approach of panel regression model. The exercise carried out in the present section takes sample consisting of firms listed in S&P CNX 500-equity market index.

Table 4.3: Estimation of Common Stock Returns with Panel Least Square Random Effect Approach

CNX 500 Companies	c	α	β	Adjusted R^2	Hausman Chi-Square Test Statistic
CNX 500 Company's Stock Returns	0.4010 (0.1565)	1.0740* (0.0000)	2.3826 (0.1092)	0.0003	7.5677** (0.0227)
Financial Sector Stock Returns	0.0001 (0.5684)	1.0327* (0.0000)	-1.1364* (0.0000)	0.2934	8.9213** (0.0116)
Banking Sector Stock Returns	0.0001 (0.7539)	1.0581* (0.0000)	-1.4540* (0.0000)	0.3286	1.7775 (0.4112)
Non-Banking Financial Sector Stock Returns	0.0002 (0.6337)	0.9964* (0.0000)	-0.7476* (0.0000)	0.2506	11.0306* (0.0040)
Non-Financial Sector Stock Returns	0.4834 (0.1542)	1.0820* (0.0000)	3.0441*** (0.0858)	0.0003	8.0329** (0.0180)
Automobile Sector Stock Returns	0.0011* (0.0085)	0.8298* (0.0000)	-0.3820** (0.0137)	0.1991	0.5593 (0.7561)
Cement & Cement Products Sector Stock Returns	-0.0004 (0.5011)	0.9645* (0.0000)	-0.4036** (0.0486)	0.2651	0.6282 (0.7304)
Chemical Products Sector Stock Returns	0.0003 (0.5756)	0.8536* (0.0000)	-0.4917** (0.0152)	0.2032	0.0000 (1.0000)
Construction Sector Stock Returns	3.8304 (0.2754)	3.2199*** (0.0843)	40.8841*** (0.0647)	0.0002	1.1660 (0.5582)
Consumer Goods Sector Stock Returns	0.0016* (0.0000)	0.7547* (0.0000)	-0.3327* (0.0033)	0.1735	3.4806 (0.1755)
Energy Sector Stock Returns	-0.0012* (0.0008)	1.0539* (0.0000)	-0.3358** (0.0105)	0.2947	5.1440*** (0.0764)
Fertilizers & Pesticides Sector Stock Returns	-0.0008 (0.3468)	0.9677* (0.0000)	-0.4410 (0.1747)	0.2728	0.9767 (0.6127)
Health Sector Stock Returns	0.0009 (0.4418)	0.7424* (0.0000)	-0.7293 (0.1108)	0.1668	1.2866 (0.5255)

Industrial Manufacturing Sector Stock Returns	0.0002 (0.5245)	0.9093* (0.0000)	-0.4035* (0.0012)	0.2282	1.7559 (0.4156)
IT Sector Stock Returns	-0.0002 (0.7677)	1.1546* (0.0000) ⁴⁷	-0.2447 (0.2047)	0.2419	0.1892 (0.9097)
Media & Entertainment Sector Stock Returns	-0.0009 (0.2515)	1.1107* (0.0000)	0.0693 (0.8027)	0.2666	0.7019 (0.7040)
Metal Products Sector Stock Returns	-0.0013** (0.0244)	1.1493* (0.0000)	-0.3669*** (0.0924)	0.2489	2.5517 (0.2792)
Pharma Sector Stock Returns	0.0014* (0.0002)	0.7425* (0.0000)	-0.3616** (0.0111)	0.1780	0.7908 (0.6734)
Service Sector Stock Returns	-0.0003 (0.5916)	0.8619* (0.0000)	-0.2532 (0.1677)	0.1978	7.4233** (0.0244)
Telecom Sector Stock Returns	-0.0021*** (0.0895)	1.0474* (0.0000)	0.3561 (0.4087)	0.2813	6.2042** (0.0450)
Textile Sector Stock Returns	-0.0002 (0.7728)	0.9401* (0.0000)	-0.3279 (0.1989)	0.2302	5.6673** (0.0588)

Note: Values in parentheses indicates p-value.

* Indicates p-value significant at 1% level.

** Indicates p-value significant at 5% level.

*** Indicates p-value significant at 10% level.

Results of the above suggest that α , the coefficient of market risk is positive and statistically significant for all sectors considered under study whereas β , measuring the effect of interest rate changes on common stock returns is negative and statistically significant for all sectors except for composite CNX 500 index, Fertilizers & Pesticides, Health, IT, Media & Entertainment, Service, Telecom and Textile sectors respectively. Results of the Hausman test are statistically significant for composite CNX 500 index, financial, non-banking financial, non-financial, energy, service, telecom and textile sectors respectively indicating that cross-section variation in individual unit is significantly related to explanatory variables. Hence least square estimation requires fixed effect approach for reliable estimation of returns. It can also be observed from the results that the impact of market returns on non-banking financial firms common stock returns is larger than the impact of interest rate changes in absolute terms implying that a major portion of their stock returns is explained by the market returns whereas a major portion of banking firms common stock returns are explained by interest rate risk alone.

Table 4.4: Estimation of Common Stock Returns with Panel Least Square Fixed Effect Approach

CNX 500 Companies	c	α	β	Adjusted R²
CNX 500 Company's Stock Returns	0.2001* (0.0000)	1.0741* (0.0000)	2.3823 (0.1092)	0.8774
Financial Sector Stock Returns	0.0002*** (0.0664)	1.0324* (0.0000)	-1.1361* (0.0000)	0.2931
Banking Sector Stock Returns	0.0001 (0.7532)	1.0579 (0.0000)	-1.4533* (0.0000)	0.3282
Non-Banking Financial Sector Stock Returns	0.0002 (0.6314)	0.9958* (0.0000)	-0.7476* (0.0000)	0.2506
Non-Financial Sector Stock Returns	0.2391* (0.0000)	1.0821* (0.0000)	3.0439*** (0.0859)	0.8774
Automobile Sector Stock Returns	0.0011* (0.0085)	0.8297* (0.0000)	-0.3829** (0.01350)	0.1989
Cement & Cement Products Sector Stock Returns	-0.0004 (0.5012)	0.9644* (0.0000)	-0.4052** (0.0477)	0.2649
Chemical Products Sector Stock Returns	0.0003 (0.5756)	0.8535* (0.0000)	-0.4917** (0.0152)	0.2029
Construction Sector Stock Returns	3.0804 (0.0000)	3.2206*** (0.0842)	40.8871*** (0.0647)	0.8755
Consumer Goods Sector Stock Returns	0.0016* (0.0000)	0.7546* (0.0000)	-0.3358* (0.0030)	0.1731
Energy Sector Stock Returns	-0.0012* (0.0008)	1.0538* (0.0000)	-0.3291** (0.0121)	0.2944
Fertilizers & Pesticides Sector Stock Returns	-0.0008 (0.3464)	0.9679* (0.0000)	-0.4441 (0.1717)	0.2722
Health Sector Stock Returns	0.0009 (0.4416)	0.7422* (0.0000)	-0.7226 (0.1141)	0.1666
Industrial Manufacturing Sector Stock Returns	0.0002 (0.5245)	0.9093* (0.0000)	-0.4035* (0.0012)	0.2282
IT Sector Stock Returns	-0.0002 (0.7675)	1.1547* (0.0000)	-0.2433 (0.2072)	0.2418
Media & Entertainment Sector Stock Returns	-0.0009 (0.2516)	1.1105* (0.0000)	0.0737 (0.7903)	0.2654
Metal Products Sector Stock Returns	-0.0013** (0.0244)	1.1492* (0.0000)	-0.3597*** (0.0990)	0.2483

Pharma Sector Stock Returns	0.0014* (0.0002)	0.7424* (0.0000)	-0.3604** (0.0113)	0.1777
Service Sector Stock Returns	-0.0003 (0.6000)	0.8618* (0.0000)	-0.2396 (0.1919)	0.1982
Telecom Sector Stock Returns	-0.0021*** (0.0900)	1.0459* (0.0000)	0.3575 (0.4069)	0.2822
Textile Sector Stock Returns	-0.0002 (0.7720)	0.9403* (0.0000)	-0.3354 (0.1889)	0.2301

Note: Values in parentheses indicates p-value.

* Indicates p-value significant at 1% level.

** Indicates p-value significant at 5% level.

*** Indicates p-value significant at 10% level.

Table 4.4 above presents the results of panel least square fixed effect approach. Results obtained using fixed effect approach are similar to the results obtained by using random effect approach except for adjusted R^2 which has increased substantially for composite CNX 500 index, non-financial and construction sectors respectively indicating the reliability and accuracy of estimated parameters of regression model.

SUMMARY & CONCLUSIONS

Various researches empirically examined the sensitivity of stock returns of financial institutions to changes in market interest rate, and plenty of literature shows a strong relation between the stock returns of financial institutions and interest rates. The bulk of the research has almost exclusively focused on the banking sector especially in US. The present study investigated the interest rate sensitivity of financial and non-financial institutions comprising CNX 500 firms in India. The objective of this study is to contribute to the related literature by studying sensitivity of stock returns to changes in interest rate using data from a major emerging market like India, which has witnessed significant developments in its economic and financial system since 1991. The sample for the purpose of study consists of 411 companies forming part of S&P CNX 500 index that has continuous available prices for the period under consideration. The sample selected for study was further divided into two parts financial companies and non-financial companies for comparing the effect of interest rate movements on these two groups of institutions separately.

Interest rate sensitivity of stock returns was tested by 'pooling' information across sample employed in the study by using panel regression analysis. Stationarity of panel time series is tested by using Levin, Lin & Chu (LLC test, 2002) test and found to be stationary at the first difference. The effect of interest rate on stock returns movement is evident from the results. Coefficient of market risk is found to be positive and statistically significant for all the sectors whereas effect of interest rate changes on common stock returns is found to be negative providing evidence in **favour of acceptance of first alternate hypothesis**. Both the financial sector and non-financial sector stocks are potentially affected by interest rate changes but the magnitude of impact varies widely. The impact of interest rate changes on common stock returns of financial institutions is higher, as the interest rate changes directly affects their input cost, profit margin and demand of funds by their customers. Hence, changes in interest rate have a

relatively higher and consistent impact on the stock returns of financial institutions as compared to the common stock returns of non-financial institutions in India. Results of the present study are consistent with the findings of (Lynge & Zumwalt, 1980; Choi & Jen, 1991; Faff & Howard, 1999; Patnaik & Shah, 2004; Ryan & Worthington, 2004;). The non-financial companies are also not protected from the interest rate risk. When interest rate sensitivity is analyzed separately for non-financial firms, weak relationship is found between interest rate changes and stock returns for fertilizer & pesticides products sector, health sector, media & entertainment sector, service sector, telecom sector and textile sector.

Results of the study provided empirical evidence that interest rate exhibits significant impact on stock returns of financial as well as non-financial companies in India. In other words, Indian stock market is said to be informationally inefficient with respect to interest rate variable. If the market is inefficient with respect to information, then it has important implication that the individual investor in the stock market can earn abnormal profits by making use of this information.

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Women on Corporate Boards: A Study of Select Listed Indian Companies

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The urge of flawless and efficient board to create corporate excellence through corporate governance, policies and provisions countries across the world are moving towards diverse boards, especially gender diverse boards. Recognizing the limitations of traditional board composition this study identified the characteristics of the companies to explain the status of gender diverse boards in India. This present study dwells on the penetration of women on corporate boards and its trend in S&P CNX 200 index companies over a period of four years prior to the implementation of mandatory provision (i.e. 2012-2015) along with the structural comparison of twenty nine countries including sixteen European Union member countries, six Asian countries and seven other countries. The results of data analysis revealed that in India women participation on corporate boards is at the stage of tokenism as only larger boards have few women directors. Even there is a variation in number of women directors across various industries but the number is not significant in any case. Increased attention to the issue of women on corporate boards under the provisions of Companies Act, 2013 presents new challenges to corporate sector in India. This study presents the probable challenges to for the companies to encourage diverse composition of the boards by expounding the status of women on corporate boards in India and its probable significant impact.

Key words: Gender Diverse Boards, Corporate Governance

INTRODUCTION

“Women on corporate board influences corporate governance and firm performance through multi-level processes” (Terjesen et. al. 2009). Presence of women on corporate boards influences board governance practices directly (Buse et. al 2016) so women could act as a surrogate device for corporate governance (Ferdinand et. al. 2011). Therefore having “*Women on Boards Not Just the Right Thing ... But the Bright Thing*” (Brown et. al. 2002). Urge for promoting women on corporate boards are based on the principles of fairness and equality as women comprise of half the population and workforce. “Further heterogeneity at board level in terms of gender leads to unique and valuable contribution to the boardroom dynamics” (Konrad et. al. 2008). Given the bottom line priorities of most corporate, the latter argument is far more likely to persuade. There is a significant difference in board processes and good governance practices of the board where women directors are serving these differences in process and practices lead to differences in outcomes (Terjesen et. al. 2009).

Women diligently prepare for the meetings as they are defensive, risk averse and so maintain integrity of the organisation. (Obert et. al. (2015). In monitoring role women are effectual so considered as a crucial corporate governance device (Lakhal et. al. 2015). Firms lacking in diversity may face disastrous

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collapse like Enron (O'Connor M. 2003). Companies with women CEOs report more conservative earnings (Simon S. M. Ho et. al. 2015). There is a positive association between the number of women directors on a corporate boards and the incidence of corporate social behaviour (Bernardi and Threadgill 2010, Zhang et. al. 2013, Fernandez-Feijoo et. al. 2014). Due to primordial conception high potential women are offered fewer 'hot jobs' with visible projects, mission critical roles and international experience. Though most of the companies have development programmes for women, still women's representation on corporate boards is poor as accountability to diversity is poor in corporate sector. It has been observed that in despite the increase in women's educational level and contribution in workforce, representation of women on corporate boards is severely low as compared to men. The diminutive numbers of women, who do reach the top echelons, promised that there is a sustainable change within corporations and businesses in terms of gender equations, which is not true. A few studies that have been carried out so far provided a very dismal, non-empirical and subjective outlook about women representation on corporate boards in India. Presently women representation on corporate boards shows progressive trends in various Asian and European countries.

REVIEW OF LITERATURE

Surrogate device for corporate governance could be gender diversity of boards (Ferdinand et. al. 2011). Heterogeneous boards encourages diverse views and opinions and ensures more transparency in board good governance practices by reducing bias in selection process of board members (Terjesen et. al. 2009). Gender diversity of corporate boards resolves many attendance problems as women members not only have better attendance records also male peers have fewer attendance problems. Monitoring committees are generally offered to women as they devote more efforts towards ensuring transparency and monitoring. "Chief Executive Officer turnover is more receptive to stock performance and directors receive more equity-based compensation in firms with more gender diverse boards" (Adams and Ferreira 2009). Therefore quality of monitoring and the financial performance of the firm were affected by the gender diversity of the board (Carter et. al. 2007, Campbell and Vera 2008). Various research studies reported that women in top management jobs tends to have constructive impact on firm performance despite of controlling for several characteristics of the firm and direction of causality (Smith et. al. 2005, Simpson et. al. 2010, Izgi and Akkaş 2012, Julizaerma and Sori 2012, Joecks et. al. 2013, Zaichkowsky 2014, Terjesen et. al 2015). Ensuring gender diversity on corporate boards rarely becomes a strategic priority of the company. Women on corporate boards positively influence the company's performance and governance, conferred by various studies though with subjective results. Companies that judiciously take appropriate measures and help talented women to climb up the corporate ladder will gain a decisive competitive edge. Research have highlighted the link between gender diverse boards and good governance credentials being significantly related like paying more attention to audit risk oversight and control, balancing the needs of all the stakeholders and insist on robust conflict of interest guidelines. The literature suggests that women directors are good for corporate governance in at least three ways as boardroom discussions include the perspectives of the multiple stakeholders; detailed discussion results in improved decision making and boardroom dynamics are more concerted (Konrad et. al. 2008). An exemplary survey of 201 Norwegian firms using Hierarchical multiple regression analysis revealed that board strategic control is more when the ratio of women is

higher (Nielsen and Huse 2010). Less number of acquisitions and issuance of debt are also small in case of firms with women executives in comparison to homogeneous boards with all men. Value destroying acquisitions are generally made by firms with male executives and are more likely to be removed from their position as executive. Research suggested that firms with women executives make decisions that are better for investors. Investors react more favourably for women appointment to the board (Adams et. al. 2011, Huang and Kisgen 2013, Campbell and Vera 2010) as women alleviate value-decreasing stakeholder conflicts. (Kang et. al. 2010). Presence of women on a board may affect companies positively through their influence on operational matters both internally as well as externally (Bernardi et. al. 2006, Elstad and Ladegard 2012). In addition to men, women can be treated as additional human capital (Singh et. al. 2008) under turbulent environment as they bring diverse leadership style, set of skills and experiences which promotes openness, inclusion and facilitates change (Furst and Reeves 2008). Gender diverse management teams often applies different management practices by promoting participation of employees in decision making (Melero 2011) which increases employees productivity (Ali et. al. 2013). Critical mass of women can make it possible to augment firm innovation level mediated by board strategic tasks (Torchia et. al. 2011). Corporate inefficiencies are reduced due to gender diversity at board level as it facilitates corporate to achieve optimal performance (Sabatier M. 2015).

Despite of significant advances in educational qualification of women, they hold negligible leadership positions in business across the globe. Government have responded positively in requiring gender quotas for corporate boards and through voluntary measures in many countries. Based on data of 1,691 firms of 17 countries it was concluded that voluntary approach to gender diversity has positive outcome in terms of performance in comparison to regulatory approach (Labelle R. et. al. 2015). Careful implementation of voluntary targets is more effective but mandatory quotas provide immediate solution to the underrepresentation of women in leadership position (Klettner et. al. 2014). To overcome the barriers to the boardroom, governments and professional organisations need to accelerate their efforts for women directors as the status of women on corporate boards varies across the world (Adams and Flynn 2005). Majority of the variations in the proportions of gender diverse boards across the world may be attributable to national institutional systems and their by laws (Grosvold and Brammer 2011). Study reported on the data of 43 countries found that gender diverse boards may be shaped by the extensive environment including the social, political and economic structures of individual countries. Countries where there is a longer tradition of more representation of women in politics are less likely to have higher percentage women at board level (Terjesen and Singh 2008). Public limited company boards must at least 40% representation of each sex by 2008 as per the regulation in Norway so as to enhance gender balance of the board (Seierstad and Opsahl 2011). Mandatory quota for women significantly impacts the boards for gender diverse ones (Terjesen et. al. 2015). In U.S. the SEC's diversity disclosure requirement produces a significant increase in diversity on corporate boards (Branson 2012) and sturdy mentoring programs provides a way to increase the number of women in senior management roles (Dworkin et. al. 2012). In Brazil, firms that have longer listing history in the stock market have more women directors (Lazzaretti et. al. 2013). Based on a sample of all the directors of 834 listed companies of Italy over a period of 2008–2010 it was concluded that variation is there in women representation in terms of characteristics of the company (Bianco et. al. 2015). Mandatory quota approach is proposed to be the right fit for India to resolve the problem of lesser gender diverse boards (Kamalnaath and Peddada 2012).

From the above it's now eloquent that there are enormous numbers of studies begun to address barriers to greater women participation on corporate boards, whether operating in particular sector or country. The importance of gender diversity to corporate boards has increasingly been documented. As a mounting body of research exhibited that board diversity helps the companies to access the larger talent pools, respond more proactively to the investors and helps in achieving improved financial performance. Empowering women to take leadership positions is important for economic growth and a competitive internal market. Diverse perspectives help to bring more clarity to board discussions and decisions. Research showed that a gender diverse board improves the environment and make board more responsible by increasing their focus on risk management.

OBJECTIVES

The present study seeks to critically examine the status of women on corporate boards in India. The specific objectives of the study have been identified as follows:

- i. To review literature conceptually and empirically so as to identify emerging themes and gaps in the knowledge regarding presence of women on corporate boards.
- ii. To provide insight into the international variations in the approaches of countries to increase the percentage of women on corporate boards.
- iii. To study the gender diversity ratio (number of women directors to board size) of corporate boards in India and predicting their future trend in the absence of stringent measures (mandatory quota).
- iv. To study the relationship between the number of women on corporate boards and the characteristics of the companies over a period of four years in select listed Indian companies.

Formulation of hypothesis

Research in the prefecture of Corporate Governance proposes that a woman on corporate boards is the need of the hour for inclusive improved business performance. Across the globe, women comprise of a large segment of the available managerial talent still their representation in the boardroom is very low. Therefore, this is a vital issue of gender equality and researchable proposition. No single theory directly predicts the nature of the relationship between gender diversity of board and its impact on corporate governance and financial performance but several theories provided insights into the issue. The imperative theory related to this is Organizational Justice Theory. Organizational Justice Theory has the potential to provide valuable benefits for the organizations and employees as the research has expounded those employees examine distributive justice, procedural justice and interactional justice. This theory is based on the perception of employees about workplace which includes equal treatment of both the genders (Cropanzano et. al. 2007). Gender diversity influences governance outcomes, which in turn impact financial, social reputational and environmental outcomes of the firm (Terjesen et. al. 2009). Globally, there is a need to undertake affirmative action to accelerate a dawdling trend in the nomination of women to the top echelons of the corporate sector. Table 1 primarily summarize the initiatives of the Asian, European and other countries to enhance gender diversity on boards, categorized

by method and status (i.e. currently in effect or proposed but yet to be implemented). These have broadly fallen into three distinct initiatives: Quota legislation (mandatory in nature), regulation (comply or explain approach) and voluntary methods (deliberately undertaken by the companies).

Table 1: Initiatives to Place Women on Corporate Across the World

Name of the country	Initiatives implemented and the year of implementation
Asia	
Hong Kong	Comply or explain approach since 2013
Israel	Quota implemented since 1993 for government companies
Japan	Quota expected to be implemented
Malaysia	Quota implemented since 2011 and to be achieved by 2016
Singapore	Diversity task force was set up in 2012
European Union	
Austria	Quota implemented since 2011 for 55 enterprises where government hold is more than 50%
Belgium	Quota implemented since 2011
Denmark	Quota implemented since 2013
Finland	Comply or explain approach since 2010
France	Quota implemented since 2011
Germany	Quota implemented since 2014
Greece	No regulation, only state owned companies have representation from each gender
Italy	Quota implemented since 2011
Luxembourg	Comply or explain approach since 2009
Netherlands	Comply or explain approach since 2011
Poland	Comply or explain approach since 2010
Portugal	Quota implemented since 2012 for only state owned companies
Slovenia	At least 40% representation of both sex applies only to state owned companies since 2012
Spain	Comply or explain approach since 2007
Sweden	Comply or explain approach since 2010
United Kingdom	Comply or explain approach since 2011
Other Countries	
Australia	Comply or explain approach since 2011
Brazil	Quota implemented since 2010
Canada	Quota implemented for state owned companies since 2006 and for others comply or explain approach in since 2014
Iceland	Comply and explain approach since 2009 and quota introduced for publicly owned enterprises since 2010
Norway	Quota implemented since 2003
South Africa	Quota implemented since 2012
United States	Comply or explain approach since 2010

To endorse globalised corporate structure and adhere to good corporate governance The Companies Act, 2013 has introduced a provision to have at least one woman on the corporate board of certain class of companies. In India initially Clause No. 132 of the Companies Bill, 2009 proposed mandatory appointment of at least one woman director in such class of companies as may be prescribed. Rules will provide such class of companies. This initiative was in line with the policy of the Government which encourages inclusive decision making by including more and more women at various levels. Again the same proposal was there in Companies Bill, 2011 under New 149(1) 2nd proviso. Companies Bill, 2012 also proposed the same. Further, the Committee was constituted by Ministry of Corporate Affairs (MCA) to investigate the need of having diversified board and its impact on financial performance, board effectiveness and relationship with stake holders. This trend is primarily due to the primordial conception of the role of women. Therefore Companies Act, 2013 proposed “at least one woman director to bring gender diversity in the homogeneous board rooms in India and as per SEBI circular (February 2014) the deadline set for the companies was September 30, 2014 further it extended to March 31, 2015”.

Companies Act, 2013 and Women on Corporate Board

As per Sub Section (1) of Section 149 of The Companies Act, 2013 “every company must have at least the following number of individuals as directors 3 directors in the case of a public company, 2 directors in the case of a private company and 1 director in the case of a One Person Company; and subject to a maximum of fifteen directors. After passing special resolution company may appoint more than 15 directors. But such class of companies must appoint at least one woman director.” However, “Second Proviso to Section 149(1) read with Rule 3 of The Companies (Appointment and Qualification of directors) Rules, 2014 (Chapter 11) says every listed company and every other public company having (a) paid up share capital \geq Rs. 100 crore; or (b) turnover \geq Rs. 300 crore shall appoint at least one woman director”. As per Sub Section (2) of Section 149 companies are required to comply with this provision within a period of 1 year. Any women director intermittent vacant post must be filled before the next immediate meeting of the board or within a period of three months whichever is later. SEBI issued circular on September 15, 2014 to alleviate process of implementing stronger corporate governance norms by listed companies. The provision related to appointment of women director as provided in Clause 49 (II) (A) (1) shall be applicable with effect from April 01, 2015 (earlier September 30, 2014). SEBI has exempted the following companies from complying this provision those having paid up share capital \leq Rs. 10 crore and net worth \leq Rs. 25 crore as on the last day of the previous financial year. Further if clause 49 becomes applicable to the company later then that company must comply with the provisions within a period of 6 months.

Initiative by FICCI Centre of Corporate Governance

FICCI Centre of Corporate Governance recognised a major impediment in increasing the representation of women Corporate Boards in India is the limited number of women who are well qualified and trained to serve on the Boards. An equally big constraint is the limited number of “Board Ready” women who are well known to the Board Chairmen. Without adequate preparation, personal acquaintance or a strong reference, a Board Chairman or a Nomination Committee is unlikely to consider a woman or man for a board position. To deal with both of these issues the Mentoring Programme is designed. Under this programme, women were mentored by the chairperson or any other board member having wide knowledge of Corporate Governance and board level experience to join corporate boards. The Programme Director will monitor the progress of mentoring and assist Mentors and Mentees as needed. The programme objective would not only help women to get placed on corporate boards but also endeavour to ensure that women joining corporate Boards are better prepared to succeed as a corporate Board member. The women on corporate boards programme will also try to provide ongoing support to women who will be on corporate Boards.

Women representation on corporate boards in India varies in terms of characteristics of the company (Sikand et. al. 2013, Jonge 2014).

Based on an extensive literature review following hypothesis is derived as per the appropriateness in Indian perspective:

H₀₁: There is no significant relationship between the number of women on corporate boards and

the characteristics of the company.

In order to endorse the aforesaid overall null hypothesis is cascaded into seven sub hypotheses as under:

H_{01a}: There is no significant relationship between the number of women on corporate boards and the board size.

H_{01b}: There is no significant relationship between the number of women on corporate boards and the age of the company.

H_{01c}: There is no significant relationship between the number of women on corporate boards and the size of the company.

H_{01d}: There is no significant relationship between the number of women on corporate boards and the performance of the company.

H_{01e}: There is no significant relationship between the number of women on corporate boards and the board independence of the company.

H_{01f}: There is no significant relationship between the number of women on corporate boards and the number of corporate governance committees of the company.

H_{01g}: There is no significant relationship between the number of women on corporate boards and the number of board meetings of the company.

Repercussions of mandating seat for women on corporate boards under Companies Act, 2013

Companies have started the process of appointment of a woman director on their board after passage of Companies Act 2013, to comply with its sub section (1) of section 149, many private sector companies have appointed one woman who are directly or indirectly related to promoter group to comply the letters of law and not in spirit. Some of them are illustrated below:

Table 2: Women who are appointed to comply with subsection (1) of section 149 of Companies Act, 2013, during the year 2013 and 2014

Name of the Company	Name of the Women Director and Designation	Date of Appointment	Relationship with Promoter Group/ Top Management
Kilitch Drugs Ltd.	Ms. Mira Mehta, Whole Time Director	October 17, 2013	Wife of promoter, Mr. Bhavin Mehta
PPAP Automotive Ltd.	Ms. Vinay Kumari Jain, Non-Executive Director	December 26, 2013	Wife of CMD, Mr. Ajay Kumar Jain
Sundaram Finance Ltd.	Ms. Shobhana Ramachandran, Independent Directors	January 27, 2014	Great granddaughter of founder of TVS Group, Mr. T. V. Sundaram Iyengar
Cera Sanitaryware Ltd.	Ms. Deepshikha Khaitan, Additional Director	March 29, 2014	Daughter of CMD, Mr. Vikram Somani
Godfrey Phillips Ltd.	Ms. Bina Modi, Additional Director	April 7, 2014	Wife of president, Mr. K. K. Modi
Raymond Ltd.	Ms. Nawaz Gautam Singhanian, Additional Director	April 30, 2014	Wife of CMD, Mr. Gautam Singhanian
Century Textiles Ltd.	Ms. Sarala Devi Birla, Additional Director	May 5, 2014	Wife of chairman, Mr. B. K. Birla
Asian Paints Ltd.	Ms. Amrita Amar Vakil, Additional Director	May 14, 2014	Wife of the son of co-founder, Mr. Amar Vakil,
Jindal Saw Ltd.	Ms. Tripti Arya, Additional Director	May 17, 2014	Daughter of non-executive chairman, Mr. Prithvi Raj Jindal
J Kumar Infra projects Ltd.	Ms. Kusum Jagdish Gupta, Additional Director	May 20, 2014	Wife of CMD, Mr. Jagdish Kumar Gupta

Jindal Drilling & Industries Ltd.	Ms. Saroj Bhartia, Additional Director	May 24, 2014	Daughter of the founder, late Mr. O P Jindal
Pae Ltd.	Ms. Pratibha Arvind Doshi, Non-Executive Director	May 27, 2014	Wife of Chairman, Mr. Arvind Doshi
Kothari Petrochemicals Ltd.	Ms. Nina Bhadrashyam Kothari, Non-Executive Director	May 27, 2014	Wife of CMD, Late Mr. Bhadrashyam Kothari
Kothari Sugars & Chemicals Ltd.	Ms. Nina Bhadrashyam Kothari, Non-Executive Director	May 27, 2014	Wife of CMD, Mr. Bhadrashyam Kothari
HSIL	Ms. Sumita Somany, Additional Director	May 29, 2014	Wife of Joint MD, Mr. Sandip Somany
RadicoKhaitan Ltd.	Ms. Shailja Saraf, Additional Director	May 30, 2014	Daughter of CMD, Mr. Lalit Khaitan
DB (International) Stock Brokers Ltd.	Ms. Shikha Daga, Additional Director	May 30, 2014	Daughter of MD, Mr. Shiv Narayan Daga,
Aries Agro	Ms. Nitya Mirchandani, Additional Director	May 30, 2014	Wife of executive director, Mr. Rahul Mirchandani
Sita Shree Foods Ltd.	Ms. Anshu Goyal, Additional Director	May 30, 2014	Wife of promoter, Mr. Ashish Goyal
Gujarat Sidhee Cement Ltd.	Ms. Juhi Chawla, Additional Director	May 31, 2014	Wife of vice-chairman, Mr. Jay Mehta
Kirloskar Oil Engines Ltd.	Ms. Gauri Kirloskar, Additional Director	June 17, 2014	Daughter of chairman, Mr. Atul Kirloskar
Reliance Industries Ltd.	Ms. Nita Ambani, Non-Executive Director	June 18, 2014	Wife of chairman, Mr. Mukesh Ambani
Sumeet Industries Ltd.	Ms. Gangadevi Shankarlal Somani, Non-Executive Director	June 28, 2014	Wife of CMD, Mr. Shankarlal Somani
Rasoya Proteins Limited	Ms. Manik Anil Lonkar, Additional Director	July 30, 2014	Wife of Managing director, Mr. Anil N. Lonkar
Videocon Industries Limited	Ms. Ramabai V. Dhoot, Additional Director	February 28, 2015	Wife of Chairman & Managing Director, Mr. Venugopal N Dhoot

Source: Compiled from annual report and website of respective companies

According to the report of Press Trust of India over 250 companies appointed women directors on March 31, 2015 to meet SEBI deadline. However, most of the companies appointed women related to promoters or top executives as from April 1, 2015 onwards the companies without a woman director may face penal actions and monetary fines as per the SEBI regulations and under the Companies Act, 2013. Penalty under the Companies Act, 2013 varies between Rs. 5,000 to Rs. 5 lakhs whereas SEBI norms impose penalty upto Rs. 25 crore.

According to the shareholder advisory firm IIAS “SEBI has increased its focus on strengthening Corporate Governance and may take this opportunity to establish the seriousness of its intent. This time, SEBI could restrain promoters and directors of non-compliant companies from holding any new position as director in listed companies. But, expect the severity of the penalty to increase with the passage of time which may include severe financial penalties and eventually restrictions on accessing capital markets.” On April 8, 2015 SEBI issued a “Circular bearing reference no. CIR/CFD/CMD/1/2015 and subject as Fine structure for non-compliance with the requirement of Clause 49(II) (A) (1) of Listing Agreement to all recognized Stock Exchanges and to MD/ED of the companies. Those listed companies who have not complied with the provision during April 1, 2015 to June 30, 2015 were fined with the amount of Rs. 50,000 additionally Rs. 1000 per day was imposed during July 1, 2015 to September 30, 2015 or till the date of compliance with provision and Rs. 1,42,000 plus Rs. 5000 per day was imposed on companies complying on or after October 1, 2015”. During the period of one year (immediately after the enactment of Companies Act, 2013), for 794 directorship positions 711 women have been appointed in 758 companies. Despite of introduction of mandatory provision it is highly disappointing that still after one year of mandatory introduction of provision large numbers of companies are not having women on their corporate boards and same is illustrated in the form of table 3.

Table 3: Out of 1500 companies (approx) listed on NSE, number of companies not complying with the provision after implementation of mandatory provision

Date	1/4/15	1/5/15	1/6/15	1/7/15	1/8/15	1/9/15	1/10/15	1/11/15	1/12/15	1/1/16	1/2/16	1/3/16
Number of Companies	189	153	128	110	96	84	74	66	53	51	61	53

Source: Compiled from the website of Indian Boards Data base

Research Design

This paper is primarily based on the analysis of secondary data while working on the representation of women on corporate boards of CNX Nifty 200 companies in India. For this purpose data has been collected from financial websites, prowess and content analysis of annual reports of the respective companies. Descriptive statistics, Kruskal Wallis test and Spearman's Correlation has been used to study the relationship between the number of women on corporate board and the characteristics of the company. Linear trend analysis has been used to forecast the percentage of women on corporate boards if The Companies Act, 2013 did not introduce the mandatory provision under section 149(1). SPSS and MS excel was used to perform these tools. The CNX 200 index is a well-diversified stock index accounting for 15 industries of the economy. The total traded value for the year ending March 2015 of all index constituents was approximately 88.26% of the traded value of all stocks on the NSE.

Descriptive Statistics

It includes observation from CNX listed 200 companies in India during the period of four years 2012, 2013, 2014 and 2015 are considered. During the period of four years 2012, 2013, 2014 and 2015 the number of women varies from 0 to 4.

Table 4: Women on Corporate Boards: A Statistical Snapshot

Basis	2012	2013	2014	2015
Total number of director positions	1859	1878	1868	1841
Total number of positions held by women directors	115	126	138	196
Percentage of women directors	6.19%	6.71%	7.39%	10.65%
Number of women holding the position of director	100	108	114	167
Number of women serving as executive director	28	29	28	29
Number of women serving as non-executive director/ independent director	87	97	110	166
Number of companies having no woman on their boards	92	90	73	17
Number of companies having more than one women on their boards	24	30	27	29
Number of women holding a position of chairperson	3	5	3	4
Number of public sector companies having no woman on their board (out of 35 companies in a sample)	18	17	14	15
Number of private sector companies having no woman on their board (out of 142 companies in a sample)	74	73	59	2

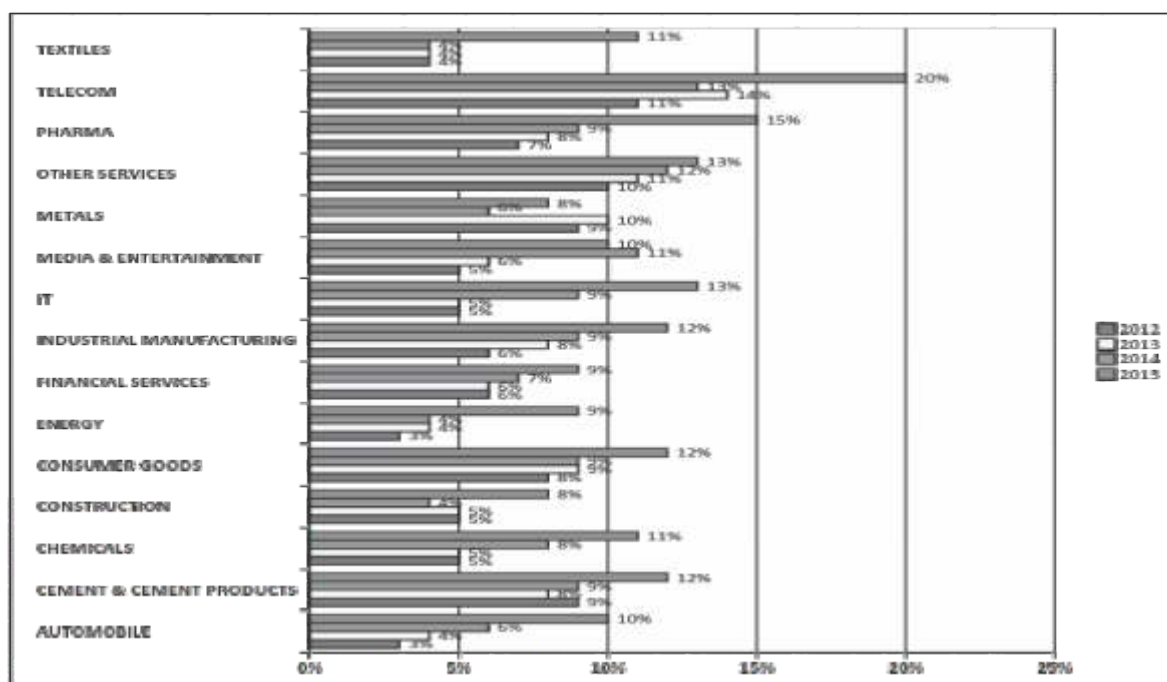
Source: Data compiled from Annual report and website of the respective companies

From table 4 we can see the dismal position of women in the top echelons of corporate sector. Although we can see an upsurge in the women representation on corporate boards but with very slow pace which forces the government to mandate through legislative measures. Over the period of four years we can see an increase in number of women as non -executive director/independent director but there is stagnation in the number of women as chairperson and executive/whole time director.

Table 5: Industry Wise: Statistical Snapshot

S. No.	Industry	Total Number of Companies	Percentage of Industry Representation
1	Automobile	10	5.65%
2	Cement & Cement Products	5	2.82%
3	Chemicals	5	2.82%
4	Construction	11	6.21%
5	Consumer Goods	18	10.17%
6	Energy	22	12.43%
7	Financial Services	43	24.29%
8	Industrial Manufacturing	10	5.65%
9	IT	14	7.91%
10	Media & Entertainment	3	1.69%
11	Metals	9	5.08%
12	Other Services	7	3.95%
13	Pharma	13	7.34%
14	Telecom	4	2.26%
15	Textiles	3	1.69%
Total		177	100%

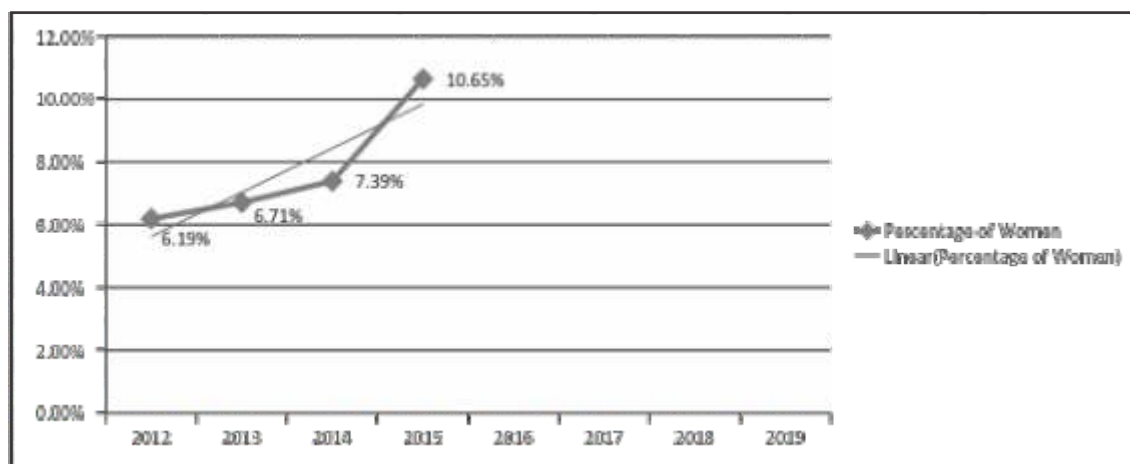
From table 5 it is indicative that in a sample of 177 companies the highest representation is of financial services industry (24.29%) followed by energy (12.43%) and consumer goods industry (10.17%). Lowest representation is of textile industry (1.69%).

Figure 1: Industry Wise Percentage of Women on Corporate Boards during 2012-2015

Source: Data compiled from Annual report and website of the respective companies

An industry-wise statistics in Figure 1 indicates that percentage of women on corporate boards varies across different industries over a period of four years (2012-2015).

Figure 2: Trend analysis of percentage of women on corporate boards



To perform the trend analysis data related to women on corporate boards during the period of four years that is 2012, 2013, 2014 and 2015 expressed in percentage form has been used and the method of least squares is used to find a line that best fits the points. The R-squared value equals 0.82, which is a good fit. The closer to 1, the better the line fits the data. The trend line gives an idea about which direction the women representations are going. From Figure 2 we can say that women representation is showing upward trend in India even without mandating at least one seat on corporate boards but the pace with which it is increasing is very dawdling. Although there was a huge increase in percentage of women on corporate boards in 2015, it was mandatory for the companies to have at least one woman on their boards as per Companies Act, 2013 from April 1, 2015.

Relationship between Number of Women on Corporate Boards and the Characteristics of the Companies

The study has been conducted to analyse the data of CNX 200 companies for establishing the relationship between women on corporate boards and the characteristics of the companies, Spearman's Correlation and Kruskal Wallis test has been used to establish the relationship between number of women on corporate boards and the characteristics of the companies. Several variables have been employed for the study.

Grouping Variable for Kruskal Wallis test

The Grouping Variable for Kruskal Wallis test is the number of women directors serving on corporate board during the period of four years 2012, 2013, 2014 and 2015. The Test Variables for Kruskal Wallis test are the characteristics of the company, so for that purpose seven characteristics of the companies are studied which are discussed as follows:

- **Board Size:** For the board size total number of directors serving on corporate board during the period of four years 2012, 2013, 2014 and 2015 ending March 31 are considered.
- **Age of the Company:** For the calculation of age of the company year of incorporation is considered.

- **Size of the Company:** For size of the company market capitalisation during the period of four years 2012, 2013, 2014 and 2015 ending March 31 are considered.
- **Performance:** For the purpose of performance, company's return on assets (ROA) during the period of four years 2012, 2013, 2014 and 2015 ending March 31 are considered. ROA is a financial ratio that shows the percentage of profit that a company earns in relation to its total assets.
- **Board Independence:** For the board independence percentage of total number of independent and non executive directors serving on corporate board to total board size during the period of four years 2012, 2013, 2014 and 2015 ending March 31 are considered.
- **Corporate Governance Committees:** For the Corporate Governance Committees total number of corporate governance committees of the board during the period of four years 2012, 2013, 2014 and 2015 have been considered.
- **Board Meetings:** For the board meetings total number of meetings of the board during the period of four years 2012, 2013, 2014 and 2015 are considered. Number of board meetings beyond mandatory requirement represents open and collaborative discussion including multiple stakeholders view.

Table 6: Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Board_Size	708	10.5169	2.78834	3.00	20.00
AGE	708	42.8559	29.03676	4.00	150.00
Market_Cap	708	3.1764E4	54515.23293	998.00	5.00E5
ROA	708	7.2797	8.96501	-47.00	60.00
Board_Independence	708	73.2924	13.41801	17.00	93.00
Num_Committees	708	6.2768	3.49049	2.00	21.00
Num_Meetings	708	7.2811	3.80781	4.00	36.00
Num_Woman	708	.8121	.80312	.00	4.00

The descriptive statistics of all the characteristics is presented in the table 6. It includes observation from CNX listed companies in India during the period of four years 2012, 2013, 2014 and 2015 are considered. During the period of four years 2012, 2013, 2014 and 2015, the number of women varies from 0 to 4.

Table 7: Results of Kruskal Wallis Test

Test Statistics ^{a,b}							
	Board_Size	AGE	Market_Cap	ROA	Board_Independence	Num_Committees	Num_Meetings
Chi-Square	65.583	7.004	36.905	4.955	13.663	17.583	2.116
df	4	4	4	4	4	4	4
Asymp. Sig.	.000	.136	.000	.292	.008	.001	.715
a. Kruskal Wallis Test							
b. Grouping Variable: Num_Woman							

Table 8: Result of Spearman's Correlation

	Num_Woman	Board_Size	AGE	Market_Cap	ROA	Board_Independence	Num_Committees	Num_Meetings
Num_Woman	1.000							
Board_Size	.281	1.000						
AGE	-.032	.183	1.000					
Market_Cap	.182	.296	-.007	1.000				
ROA	.051	.006	.120	.223	1.000			
Board_Independence	.053	-.071	.029	-.104	-.110	1.000		
Num_Committees	.135	.144	.226	.205	-.266	-.027	1.000	
Num_Meetings	-.023	.188	.315	.119	.261	-.013	.461	1.000

FINDINGS

The findings obtained from Kruskal Wallis test in table 7 and Spearman's Correlation in table 8 exerts that null hypothesis H_{01a} may be rejected as there is an empirical support that number of women on corporate boards and the board size is found to be significantly different ($p < 0.05$). So it may be concluded that women representation is likely to be found on the boards with a larger size as there is positive relationship between number of women on corporate boards and the board size ($r = 0.281$). Perhaps this has been the case where the companies have extended their boards to incorporate women directors as the mandatory provision has been introduced after the end of sample period. Null hypothesis H_{01b} is accepted as number of women on corporate boards and the age of the company not found to be significantly different ($p > 0.05$). So may not conclude that women representation is likely to be found on the boards of younger companies in comparison to older companies. Null hypothesis H_{01c} is rejected as there is an empirical support that number of women on corporate boards and the market capitalisation is found to be significantly different ($p < 0.05$). So it can be concluded that women representation is likely to be found on the boards of larger size of companies as there is positive relationship between number of women on corporate boards and the market capitalisation ($r = 0.182$). Null hypothesis H_{01d} is accepted as the number of women on corporate boards and the performance (return on assets) not found to be significantly different ($p > 0.05$). So it cannot be concluded that women representation is likely to be found on the boards of less profitable companies in comparison to more profitable companies. Null hypothesis H_{01e} is rejected as the number of women on corporate boards and the board independence is found to be significantly different ($p < 0.05$). So it can be concluded that women representation is likely to be found on the boards with more independent and non-executive director ($r = 0.053$). Null hypothesis H_{01f} is rejected as the number of women on corporate boards and number of corporate governance committees found to be significantly different ($p < 0.05$). So it can be concluded that women representation is likely to be found on the companies with more governance committees as there is positive relationship between number of women on corporate boards and number of corporate governance committees ($r = 0.135$). Null hypothesis H_{01g} is accepted as the number of women on corporate boards and the number of board meetings is not found to be significantly different ($p > 0.05$). So it cannot be concluded that women representation is likely to be found on the boards with less number of board meetings.

CHALLENGES FOR WOMEN TO ACCESS CORPORATE BOARDS

Countless studies on the issue of women highlight multifaceted challenges that women face during their movement to the board positions. A study bestowed glass ceiling notion and analyzed gender inequality in the workplace and to portray that the impediments women countenance in relation to men become greater as they move up the corporate ladder (Akpinar-Sposito 2013). Objective facts and subjective perception is having a very wide gap as men in India apparently does not believe that there is an existence of any glass ceiling in Indian corporate world (Jain and Mukherji 2010). Empirical study on women on the boards of Fortune 100 companies expounded that while women have made substantial progress onto boards since 1934 but still they confronted considerable barriers to board membership which cannot be eliminated over a period of time (Fairfax 2006). Explanations for the enduring homogeneity of FTSE 100 companies including lack of line experience, inadequate career opportunities, gender differences in linguistic styles and socialization, gender-based stereo types, the old boy network at the top, lack of ambition, lack of commitment and tokenism was disproved by the research through underlying theories of social exclusion (Singh and Vinnicombe 2004). In U. S. the main cause of underrepresentation of women for the top jobs is that managers assumed women need to fulfil social obligations with in the family which will interrupt their work and they will not perform as ideal worker so this stereotype obstructs the women to move up in the top echelons of corporate sector. Men and women managers' family work conflict prejudices toward women employees and such prejudices substantially creates impediment in women's career progress, they supported the persistence of the glass ceiling (Hoobler et. al. 2011). During a from 2000 to 2004 using a sample of SBF120 stock market index it has been highlighted that the appointment of women directors is strongly related to ownership structure, board size, size of the firm, professional services rendered by them, valuable skills and networking links. For the purpose of appointing women on board positions they face a double glass ceiling problem as French firms rely more on their demographic attributes (Nekhili and Gatfaoui 2013). Further there is an irony in public attitude towards women while serving in leadership positions as they have an interactive style in comparison of men who have controlling style (Oakley 2000, Kulkarni and Bakhare 2011). Men accept women as subordinate but not as senior in India (Rao et. al. 2013). (Heilman 2012) stated that gender stereotypes give rise to biased judgments, decisions and impeding the advancement of women. Based on the sample of Texas headquartered Fortune 1000 firms, using Hierarchical Linear Models, his results suggested that 3/4 of the variation in women at top level can be due to difference in workplaces. It was suggested to remove barriers to employment at the lower and middle level managerial ranks which are crucial in creating greater gender diversity in at board level and endorses for gender equality in employment (Skaggs et. al. 2012). Gender discrimination intersects with ageism in corporate sector, the myriad ways of gendered ageism women managers encounter not only by men, but also sometimes by other women includes women physical appearance, responsibilities, sexual availability and the menopause (Jyrkinen 2013). Companies are responding to either internal or external calls for diversity and adding a director rather than the demand being performance based therefore it is undoubtedly not gender neutral. During a period of 8 years 2001-2008 a study was conducted on 387 publicly traded Nordic corporations it was highlighted that additional women appointments are conditioned by the current presence of women directors (Gregoric et. al. 2013). Departing of women director increases the probability of adding women to the board. Industry factors do influence the representation of women on

corporate boards (Farrell and Hersch 2005) size of the company, diversification strategies and networking effects the likelihood of women representation on corporate boards (Hillman et. al. 2007). Cultural forces ease the emergence of women as leaders as cultures are not simply characteristics of societies, but rather can be shaped to serve a social rationale. In women's career advancement economic and cultural factors plays vital role (Adams and Kirchmaier 2013). Women representation among top managerial position is also affected by tighter cultures and loose cultures as tighter culture will yield fewer women to the managerial positions whereas loose cultures will be more receptive to changing existing cultural practices (Toh and Leonardelli 2012). During the period of 11 years from 2000-2010 a study was conducted on US companies it was found that women CEOs are offered the less powerful role of CEO and President and they often gain structural power if they are entrepreneurs, working for larger companies or possess an elite educational qualification. (Muller-Kahle and Schiehl 2013).

CONCLUSION

The results reveal that women representation on corporate boards in India is at the stage of tokenism though there is a significant variation in number of women across various industries. Larger companies with more independent boards and voluntary corporate governance committees tend to have more women on their boards in comparison to others. On the other side this negligible number of women on corporate boards provides the indication that women are perceived to be more sensitized towards implementation of ethical practices and corporate excellence. Notwithstanding, much remarkable progress is there in all the spheres in India but still there is immense divergence between the constitutional rights and desolate reality of humiliation for women. Woman in India still needs a support of a legal system that endows women with fewer rights than men, despite expedition through gender equalising changes over the past so many years. India still has a long way to go before the country witness an equal number of women navigate through middle management and reach the top echelon of the corporate hierarchy. As women on corporate boards still faces enormous challenges, therefore there is a need that the government formulate various policies and regulations for the transformation process that India needs to heal the rift created by apartheid era. Further there is a need for synergy emerging out of coordinating efforts of government and corporate leaders to endorse the effective participation of women on corporate boards and not just the symbolic representation. Further, different psychological factors indicate it empirically that issues of governance and ethics are somewhat managed in a more positive manner by females as compared to male. The quantum of effectiveness may also be captured in future studies which will help companies to incorporate more gender diverse boards.

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A Study of Long Term Trend in Behavior of Lending to Micro and Small Enterprises with Reference to Nationalized Banks in India

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*Banking plays a silent, yet crucial part in our day-to-day lives. The economic development of any country depends on real as well as monetary factors. In this globally competitive world we cannot underestimate the importance of banking and the monetary mechanism. Banking machinery of a country is geared to the economic development of the country. Banking business has done wonders for the world economy. But on the flip side; financial inclusion has continued to remain one of the biggest challenges for the banking sector across world. Especially in India traditional banking model has failed to penetrate the low-income and self-employed segment. The present study examines the penetration (financial inclusion) and long term behavior of lending to Micro and Small Scale Enterprise by Nationalized banks in India. **The annual data on credit to micro and small scale enterprises by all nationalized banks period from 1st April 2005 to 31st March 2015 (total span of 10 years) has been considered. The study finds that the total credit extended to micro and small scale enterprises has been increasing; however, the rate of change is highly variable. The present research suggests channelizing more credits for micro and small enterprise, as it is potential growth drivers for Indian economy.***

Key words: Nationalized Banks, Long Term Trend, Micro and Small Enterprise

Commercial banks are one of the oldest financial institutions and play a vital role in economic development of the country. Economic development requires simultaneous investment in various sectors, neglecting a single sector may not lead to desired result. Before the nationalization of banks in 1969, the banks were run and operated by capitalists who make policy of their own interest and therefore, bank branches were restricted to metro cities and hence rural India was completely neglected. After the nationalization of 14 commercial banks in 1969, the priority was given to small scale industries and agriculture sector and self-employed schemes. The funds were allocated to those sectors at a concessional rate. Small scale industries are one of the important pillars of Indian economy. In 1997-98, they accounted for 40 per cent of the industrial output and 35 per cent of the exports. The Agricultural Credit Review Committee (GOI, 1986), emphasized that National Banks have to play a vital role in providing credit to the priority sectors as cooperative societies failed to perform the task of providing assistance to the priority sector. Narshimam committee which was constituted for banking sector reform in 1992, recommended that the system of direct credit programme should be gradually phased out and that the credit programme should cover a redefined priority sector, consisting of small and marginal farmers, tiny sector of industry, small business and transport operators, village and cottage industries, rural artisans and other weaker sections. The committee proposed that the credit target for this redefined priority sector to be fixed at 10 per cent of aggregate bank credit. The Reserve Bank of India (RBI) revised the priority sector lending target at 75% for Regional Rural Banks (RRBs) in January 2016.

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MICRO AND SMALL ENTERPRISE

Bank loans to Micro, Small and Medium Enterprises, for both manufacturing and service sectors are eligible to be classified under the priority sector as per the following norms:

- (i) **Manufacturing Enterprises:** The Micro, Small and Medium Enterprises engaged in the manufacture or production of goods to any industry specified in the first schedule to the Industries (Development and Regulation) Act, 1951 and as notified by the Government from time to time. The Manufacturing Enterprises are defined in terms of investment in plant and machinery.
- (ii) **Service Enterprises:** Bank loans up to ₹5 crore per unit to Micro and Small Enterprises and ₹10 crore to Medium Enterprises engaged in providing or rendering of services and defined in terms of investment in equipment under MSMED Act, 2006.
- (iii) **Khadi and Village Industries Sector (KVI):** All loans to units in the KVI sector will be eligible for classification under the sub-target of 7 percent /7.5 percent prescribed for Micro Enterprises under priority sector.
- (iv) **Other Finance to MSMEs:**
 - A. Loans to entities involved in assisting the decentralized sector in the supply of inputs to and marketing of outputs of artisans, village and cottage industries.
 - B. Loans to co-operatives of producers in the decentralized sector viz. artisans, village and cottage industries.
 - C. Loans sanctioned by banks to MFIs for on-lending to MSME sector
 - D. Credit outstanding under General Credit Cards (including Artisan Credit Card, LaghuUdyami Card, Swarojgar Credit Card, and Weaver's Card etc. in existence and catering to the non-farm entrepreneurial credit needs of individuals)
 - E. Overdrafts extended by banks after April 8, 2015 up to ₹ 5,000/- under Pradhan Mantri Jan DhanYojana (PMJDY) accounts provided the borrower's household annual income does not exceed ₹ 100,000/- for rural areas and ₹ 1,60,000/- for non-rural areas. These overdrafts will qualify as achievement of the target for lending to Micro Enterprises.
 - F. Outstanding deposits with SIDBI and MUDRA Ltd. on account of priority sector shortfall.

LITERATURE REVIEW

Literature review is one of the vital components of any research work. An extensive and carefully done literature review eliminates the possibility of repetition of study and increases the scope of adding new dimensions. It also helps in removing the shortcomings and limitations of existing research work and expand the possibility of conducting a better research.

Shabbir and Mujoo (2014) studied the trend of priority sector advances and non-performing assets in public, private and foreign Banks. The authors found that the Non-Performing Assets (NPAs) in public sector banks are more than the NPAs in private sector banks, and the priority sector lending was one of the major reasons for such problem. Naidu and Nair (2014) observed that profitability of the commercial banks was adversely affected by financial repression of the Indian monetary system. Various factor such as regulated flow of region wise credit, restriction on the use pattern of deposit mobilized, has adversely affected the profits of banks. Policy of Financial liberalization has led to higher profits for Banks as priority was shifted from social sector lending to productive sectors.

Maheswaran and Rao (2014) conducted Stress Test on NPAs among priority sector. It was observed in the study that all sectors of the economy don't behave equally with expansion of the economy, for example Manufacturing, Mining & Quarry sector have shown a downward trend. These priority sectors are likely to be given lesser priority by PSB, thereby causing contraction of loan disbursements. Jaiswal and Bhasin (2015) in their study examined the role of RRBs in developing and revitalizing the village economy by analysing various aspects related to priority sector lending. Their findings revealed that despite the impressive performance of RRBs the flow of credit to poor and marginal farmers was not impressive. Venugopal (2014) analysed the Performance of financial institutions in the field of priority sector lending using the Kruskal-Wallis test. Their finding found no significant relationship between lending to agricultural sector, small scale industries sector and total priority sector.

Kodan and Chhikara (2013) conducted a bank group wise comparative study on priority sector lending of scheduled commercial banks. Findings revealed that scheduled commercial banks were not able to achieve the priority sector lending target during the study period. A significant difference has been observed between the priority sector NPAs of public and private sector banks. Rani and Garg (2015) in their research on the basis of parameters such as lending to the priority sector explained that both private and public sector banks failed to achieve the required target of 32% set by the RBI during the period 2011-12 and 2012-13. Kaur and Silony (2011) in their study revealed that priority sector advances and agricultural advances of both the types of banks had improved manifold over the study period. But, they were still lacking behind to achieve the targets set for them by RBI in agriculture sector. It was observed that the performance of private sector banks in respect of all the parameters was better than that of public sector banks.

RELEVANCE OF THE STUDY

A general scanning of literature available from different published sources indicates that very few detailed studies have been conducted in India in the field of priority sector lending particularly micro and small scale lending. However, few of them have been conducted in many developing countries given their respective scenario. But these are not very relevant in Indian context.

Since around 90 percent of the country's workforce² is employed in the unorganized sector, therefore no government can afford to ignore the said sector as it is an important driver for employment and economic

² <http://indianexpress.com/article/cities/90-indian-workforce-in-unorganised-sector-deprived-of-welfare-schemes-says-justice-t-s-thakur/>

growth. The major constraint in the growth of this sector is however non availability of funds from formal institutions. For example, Kodan and Chhikara(2013), and Rani and Garg (2015) found in their study that priority sector lending of Public Sector Banks (PSBs) had improved manifold over the study period. But they still lacked to achieve the targets set for them by RBI in agriculture sector.

In view of this the present study intends to examine empirically the long-term lending behaviour of Micro and Small Scale enterprises which is one of the vital constituent of the priority sector lending in India.

OBJECTIVE AND HYPOTHESIS OF THE STUDY

The financial inclusion of marginalized and small sectors into financial sector always remains a challenge in India. Banking machinery of a country is geared to the economic development of the country. Banking business has done wonders for the world economy. But on the flip side, financial inclusion has continued to remain one of the biggest challenges for the banking sector. The objective of the present study is to study the penetration (financial inclusion) and long term behavior of lending to Micro and Small Scale Enterprise by Nationalized banks in India.

Along with the objective, the present study also tests the following hypothesis:

H_0 : “There exists no significant trend in total lending to micro and small enterprises by nationalized banks.”

H_1 : “There exists a significant trend in total lending to micro and small enterprises by nationalized banks.”

Data and Methodology

To achieve aforesaid objectives, the present study has considered the annual data on credit to micro and small enterprises by all nationalized banks period from 1st April 2005 to 31st March 2015 (total span of 10 years).

To study the behavior of lending to micro and small enterprise by nationalized banks, both descriptive statistics and regression analysis has been used in the present study. Descriptive Statistics provides a basic characteristics of the data, like Mean, Standard Deviation, minimum value and maximum value, whereas, regression analysis (trend analysis) has been performed to find out the trend in the credit extended to micro and small enterprises by nationalized banks over the period of years. The following model has been used to find out trend of credit extended to micro and small enterprises by nationalized banks:

Lending to micro and small enterprises = $a + b * \text{Time (in years)} + e$

Where lending to micro and small enterprises is considered as a dependent variable, a is intercept, b represents the long term trend in behaviour of lending to micro and small enterprises and time is considered as an independent variable. If b coefficient is positive and significant, it indicates, the credit

extended to micro and small enterprises by nationalized banks has been increasing over the period of time. If b is negative and significant, it indicates, the credit extended to micro and small enterprises by nationalized banks has been decreased over the period of time. If b is not significant, it indicates the credit extended to micro and small enterprise by the bank has remained same over the period of time. To find out the behavior of credit extended to micro and small enterprises by each and every bank, the regression model has been applied separately on the data of each bank.

EMPIRICAL RESULTS AND ANALYSIS

Micro and small enterprises are indispensable for economic growth of India. Ministry of Micro, Small and Medium Enterprises published in MSME Ministry, Annual Report 2012-13, that approximately 45 percent of India's manufacturing output, and 40 percent of exports is accounted by MSME sector in India. An attempt has been made to study lending to micro and small scale sector in detail in this section. The results of descriptive analysis of same are shown below in Table 1

Table 1: Descriptive analysis of lending to micro and small enterprises

S.No	Name of Bank	Mean (Crores)	Standard Deviation	Minimum	Maximum
1	Allahabad Bank	10694.11	7569.219	1886	22358
2	Andhra Bank	7130.82	5541.722	1217	16952
3	Bank of Baroda	20339.43	15356.113	4596	47799
4	Bank of India	22781.80	11875.194	5625	39822
5	Bank of Maharashtra	6802.30	5789.538	1066	16795
6	Canara Bank	23290.40	12124.469	6591	46305
7	Central Bank of India	11611.64	8040.032	3057	26503
8	Corporation Bank	10564.43	9163.215	1657	25767
9	Dena Bank	6186.65	4650.806	1322	15256
10	Indian Bank	6251.21	4073.958	1521	13261
11	Indian Overseas Bank	13001.30	8748.157	2914	26268
12	Oriental Bank of Commerce	13001.32	8748.127	2914	26268
13	Punjab and Sind Bank	3496.60	2087.657	940	6739

14	Punjab National Bank	28829.60	18170.271	8612	61262
15	Syndicate Bank	8772.18	6881.300	150	19874
16	UCO Bank	11895.43	8713.946	2102	26389
17	Union Bank of India	17070.81	11725.888	4447	40031
18	United Bank of India	6429.39	4260.661	1303	12345
19	Vijaya Bank	6180.32	4358.743	1072	15165

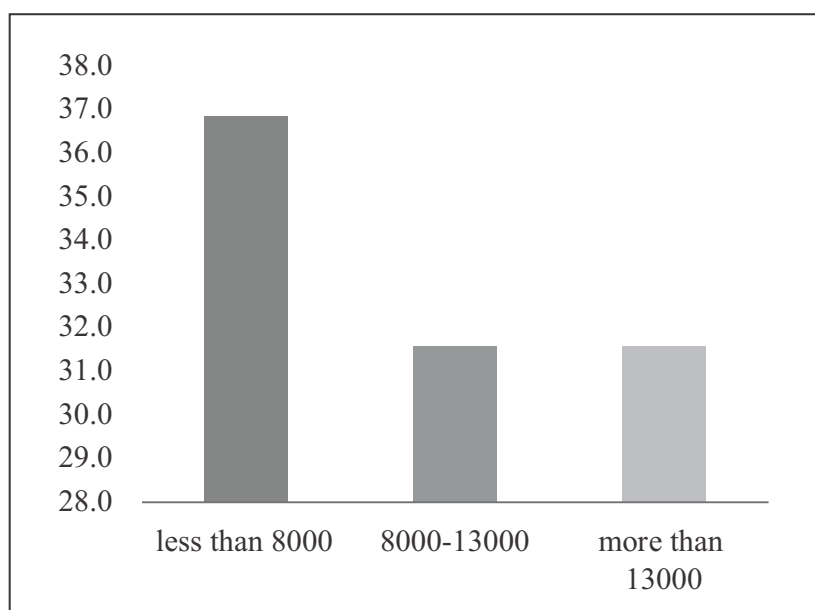
The results show that average credit to micro and small enterprises by nationalized banks is found to be highest in case of Punjab National Bank (28829.60 Crores) followed by Canara Bank (23290.40 Crores). However minimum average credit to micro and small enterprises is found to be in the case of Punjab and Sind Bank (3496.60Crores), Dena Bank (6186.65Crores) and Vijaya Bank (6180.32 Crores). In April 2015 separate sub targets under priority sector have been specified for lending to micro enterprises as well. Banks have been advised to increase lending to micro enterprises in line with RBI's revised guidelines.

On the basis of average lending to micro and small enterprises banks are divide into three groups. These groups are banks with average lending to micro and small enterprises less than 8000 Crores, average lending to micro and small enterprises Between 8000-13000 Crores and banks with average lending to micro and small enterprises more than 15000 Crores more than 13000 Crores. The frequency distribution of selected nationalized banks is shown in Table 2and Figure 1.

Table 2 Distribution of average total lending

Average lending to micro and small enterprises	Frequency	percent
less than 8000 Crores	7	36.8
Between 8000-13000 Crores	6	31.6
more than 13000 Crores	6	31.6
Total	19	100.0

Figure1: Distribution of average total lending



The results indicate that out of 19 nationalised banks, 7 banks (36.8 percent) have the average micro and small enterprises lending less than 8000 Crores, whereas 6 banks (31.6 percent) have average micro and small enterprises lending Between 8000-13000 Crores and similarly only 6 banks (31.6 percent) have average micro and small enterprises lending more than 13000 Crores which is approximately only one third of nationalised banking sector. Experience shows that the vulnerable sections of society, especially micro enterprises, do not get bank credit. Though they are included in the definition of priority sector, but due to no specified targets banks did not always bothered lending to them. Now as per latest RBI guidelines issued in April 2015 banks have to lend 7.5 percent of their loans to the micro enterprises. In order to ensure that banks take the targets seriously, RBI said it will assess the non-achievement of lending norms every quarter at the end of year from 2016-17 instead of annual basis as at present. Thus lending to micro and small enterprises is expected to improve in times ahead.

In the study an effort has been made to study the long term behavior of lending to micro and small enterprises by selected nationalised banks during the period 2006-2015. The results of regression model are shown below in Table 3.

Table 3: Regression analysis of lending to micro and small enterprises

Name of Bank	Dependent variable	Independent Variable	Regression coefficient (β)	t-test (p value)	F-test (p value)	R Square
Allahabad Bank	lending to micro and small enterprises	time (in years)	2460.333	15.681 (0.000)*	245.879 (0.000)*	96.8%

Andhra Bank	lending to micro and small enterprises	time (in years)	1774.024	11.133 (0.000)* *	123.953 (0.000)* *	93.9%
Bank of Baroda	lending to micro and small enterprises	time (in years)	6191.036	9.398 (0.000)* *	88.331 (0.000)* *	92.3%
Bank of India	lending to micro and small enterprises	time (in years)	3781.455	10.270 (0.000)* *	105.470 (0.000)* *	92.9%
Bank of Maharashtra	lending to micro and small enterprises	time (in years)	1828.000	9.214 (0.000)* *	84.890 (0.000)* *	91.4%
Canara Bank	lending to micro and small enterprises	time (in years)	3800.545	8.518 (0.000)* *	72.560 (0.000)* *	79.9%
Central Bank of India	lending to micro and small enterprises	time (in years)	2564.745	10.538 (0.000)* *	111.048 (0.000)* *	93.3%
Corporation Bank	lending to micro and small enterprises	time (in years)	2892.624	9.191 (0.000)* *	84.476 (0.000)* *	91.3%
Dena Bank	lending to micro and small enterprises	time (in years)	1474.576	9.691 (0.000)* *	93.910 (0.000)* *	92.1%
Indian Bank	lending to micro and small enterprises	time (in years)	1736.461	9.465 (0.000)* *	89.582 (0.000)* *	96.1%
Indian Overseas Bank	lending to micro and small enterprises	time (in years)	2696.382	14.047 (0.000)* *	197.322 (0.000)* *	96.1%
Oriental Bank of Commerce	lending to micro and small enterprises	time (in years)	2843.970	15.758 (0.000)* *	248.302 (0.000)* *	96.9%
Punjab and Sind Bank	lending to micro and small enterprises	time (in years)	585.552	4.549 (0.002)* *	20.689 (0.002)* *	38.2%

Punjab National Bank	lending to micro and small enterprises	time (in years)	5851.079	12.397 (0.000)* *	153.676 (0.000)* *	95.1%
Syndicate Bank	lending to micro and small enterprises	time (in years)	1649.733	2.985 (0.017)* *	8.908 (0.017)* *	52.7%
UCO Bank	lending to micro and small enterprises	time (in years)	2767.806	9.919 (0.000)* *	98.395 (0.000)* *	92.5%
Union Bank of India	lending to micro and small enterprises	time (in years)	3686.836	8.792 (0.000)* *	77.292 (0.000)* *	90.6%
United Bank of India	lending to micro and small enterprises	time (in years)	1387.139	16.551 (0.000)* *	273.948 (0.000)* *	97.2%
Vijaya Bank	lending to micro and small enterprises	time (in years)	1383.394	9.820 (0.000)* *	96.435 (0.000)* *	92.3%

** indicates that p value < 0.05

The result of bivariate regression model indicates that probability value of t statistics for all banks is found to be less than 5 percent level of significance hence with 95 percent confidence limit. It can be concluded that null hypothesis of no long term trend in total lending to micro and small enterprises cannot be accepted. Thus it can be concluded that there exists a significant positive trend in the behavior of total lending to micro and small enterprises of all selected nationalized banks. It is found that Bank of Baroda has the highest trend value of 6191.036. This indicates that on an average total lending to micro and small enterprises of Bank of Baroda increases by 6191.036 Crores every year. Bank of Baroda is followed by Punjab National Bank where it is found that on an average lending to micro and small enterprises of bank increases by 5851.079 Crores every year. The lowest trend is found in the case of Punjab and Sind Bank where total lending to micro and small enterprises increases by 585.552 Crores every year. It is surprising to note that even after more than 45 years of priority sector lending prescriptions; it has been observed that certain important sectors in the economy continue to suffer from inadequate credit flow.

CONCLUSION

Banking system is among the many institutions that directly affect the growth and development of an economy. Banks are considered the most important of all financial intermediaries in the financial system of the country. The subject matter of this research is micro and small enterprises which are equivalent of

first steps for the booming entrepreneurs in our economy. Easy and economical credit facility at the foundation step would encourage all the business minded youth of our 'startup-oriented' India. The significant amount of employment generated in small scale sector too cannot be ignored. All these benefits were not exploited to the brim due to inefficiency in the process of credit lending to micro and small enterprises.

The study found that the total credit extended to micro and small scale enterprises has been increasing, but the rate of change is not constant across banks. Further the study concluded that Bank of Baroda had the highest trend value of 6191.036, indicating average increase in total lending to micro and small enterprises. The lowest trend is found for Punjab and Sind Bank where total lending to micro and small enterprises increased by 585.552 crores each year.

It is surprising to note that even after around five decades of priority sector lending prescriptions; it was observed that certain important sectors in the economy continue to suffer from inadequate credit flow. At policy level, the present study suggests to channelize more credit for micro and small enterprises considering it is one of the potential growth drivers of the Indian economy.

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Case Study

Uber Referral: Successful Marketing Strategy

Kiran Bala¹ and Shikha Sachdeva²

INTRODUCTION

Uber's CEO Travis Kalanick stated “*Uber is always a reliable ride. Being unavailable, inconvenient is the opposite of Uber. Being Uber means being “Always On” and “Always Convenient”.*

Uber (Taxi) is a part of the Startups portfolio, is a leading taxi hailing application covering more than 507 cities across 66 countries. The company's been busy doing some impressive things like getting millions of application downloads, reaching a milestone of copious drivers on its network, and a profit of 10 billion dollars in 2015, the highest raise for any startup. Uber managed to recruit 20000 new drivers in a day (Harvard Business Review). The company is fulfilling over one million rides on a daily basis and currently has over eightmillion users. The company's fast rise to success directly correlates with the decrease in traditional taxi usage.

Uber is a technology company that provides a smart phone application connecting driver-partners with people who need a ride. Uber's application allows a rider to request a ride with the push of a button and track the car's progress toward the requested pickup location. Plus, Uber notifies the rider once the car arrives so customer can wait comfortably indoors in the meantime. Rather than trying to locate the nearest taxi stand or futilely attempting to hail a cab, Indians can now get a ride with the press of a button and rest assured it will arrive in less than four minutes on average. Drivers have been freed from a feudal medallion scheme that put them at the mercy of a small number of powerful and protected taxi owners who controlled their opportunity to earn a living. They have now effectively become small business owners and on the top of it flexible working hours that fit their needs while keeping 80% of their fares.

BRIEF SWOT ANALYSIS OF UBER

Slowly and gradually Uber is penetrating in the market with full vigour and trying its luck in the global market. There are plenty of strengths that Uber is showing, be it from the point of view of the customers/users or from the point of view of the employees/ drivers especially. The strengths include the provision of being cashless, the dynamism of the global environment which includes the use of plastic money is very well served by Uber, unlike the taxi industry Uber doesn't employ or license its drivers rather views them as independent contractors, this does not create a liability on the drivers. One of the significant aspects is dual rating system where not only the customers can rate the driver but the drivers can also rate the customers, this innovation boosts safety and faith in the system.

On the other hand when it comes to certain weaknesses, though uber is trying to penetrate in the global market but certain issues like poor infrastructure, bad reputation due to lack of employee loyalty, high

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operational cost as vehicles need heavy maintenance and the connection between the employee and the company is not very strong because of non-licensing of drivers, high poaching rate of drivers can be seen in case of Uber. Another disadvantage to Uber is the high competition level and lack of novelty in the business model and the model being very easy and convenient to set up, many people are getting into this business of transportation.

When it comes to opportunities there are many, the major one being the underdeveloped and conventional forms of taxi services which used to be expensive and availability being the prominent cause of dissatisfaction amongst the customers, Uber can make this disadvantage of conventional taxi services as one of its strengths and can take this opportunity to build more networks by connecting to suburbs, which is not easily accessible by traditional taxi services. Also more number of taxi can be added by increasing company's worth by inviting investors so that operational efficiency can be achieved which would further add to enhanced customer service and business of Uber. More services can be provided as Uber Ambulance, uber emergency cars, uber outstation cars etc which would give a competitive edge to the company.

With the opportunities, threats are also not too far. There are always threats for rising business model but that doesn't mean it's not possible to overcome them. The most conspicuous of them being the low profit margins of drivers, which make them not to join the company, hence leading to low penetration in the market due to lack of accessibility to the customers, high competition through pre-paid taxi offers by government which are much cheaper than Uber rates, other technology based taxi-services like Ola cabs, which is considered to be one of the major competitors of Uber in India. Stringent rules and regulations by the government and also Uber has damaged its brand by skirting regulations many times.

MARKETING CHALLENGES

The indicative marketing challenges of Uber are convincing people to try their service and further encouraging the users to tell their friends for the same. Uber is trying hard for the very first challenge of convincing people to try their service by subsidizing the cost of ride and making the first ride almost free for the customers which makes the user necessarily download the application and register. The strategy for the second is a referral program wherein the user gives his friends an incentive to try the cab service and the user gets a free incentive in return.

Facing the challenges through referral marketing strategy - every business organization needs networking, and networks are built through loyalty. Uber is facing this challenge very well by making its referral marketing strategy at the top because penetration in a market requires a sound customer base which can be built through loyalty of the existing customers.

Overcoming marketing strategy through Referral Marketing – A Right Strategy

Referral marketing strategy has been very aptly defined by Harvard Business Review as a science of converting customer's social capital into brand's economic capital. By customer's social capital we mean the social life which a customer lives, the people the customer meets and to whom he can discuss his experiences. When his social capital i.e. his friends, family, acquaintances become the customers of the

brand, this process generates economic capital for the brand's organization. Uber is meticulously using referral programs and is getting enhanced its revenue results. The structure of referral programs is very enriching and encompasses many imperative aspects of a sound marketing strategy of which its focal to make the customers loyal, Uber gives the opportunity to their existing customers to earn free rides who refers a friend. Uber also tries to maintain this loyalty by providing incentives to both parties i.e. customer who is referring a friend and a friend who is receiving a referral. This way existing customers (referring customers) don't feel that their friends (referred customers) only get benefit through referral programs. The ultimate goal of Uber is to convert the referred customer into a permanent and loyal customer because it's a well-established consumer psychology– people buy from people they trust. And that's because it reduces the risk of making a wrong purchase, simplifies decision making and reduces the active involvement of the consumer in the product.

Uber Customer Referral Programs are the most popular and valuable. This type of referral program is used to encourage existing users to bring others. These programs are the marketing strategy of many online tools and applications. **Customer referrals are true trustworthy referrals.** According to Nielsen's trust in advertising report “Referrals are the most trustworthy form of advertising”. This is beneficial for online marketing merchants, because many forms of online advertising are towards the bottom of the trustworthiness report.

In contrast Affiliate Referral Programs are not personal. These referrals are done by middlemen who are compensated financially for sending customers a particular product. With the rise of social media a new type of referral has also been born known as Ambassador or Influencer referrals. These are referrals from someone that customers don't know personally but customers see them as an expert.

Customers are more likely to trust a Uber Customer Referral Programs over Affiliate Referral and Influencer Referral programs because peer-to-peer recommendations are more powerful **than business-to-customer (B2C) relations**. Customer Referrals are trustworthy because they come from known person, such as a friend, colleague or relative. They really like the product and have a good experience, that's why they recommend a product /service. Customers trust that they are not pushing products for their personal benefit.

Since the referral is being sent through the referrer's personal communication channels, it does not come as a “click-bait” tactic. Referred users are more likely to open a link from their personal contact than read an email from a relatively unknown brand. For instance, look how Uber personalizes the referral email by including the name of the referrer. Despite being a minor hack, the feature goes a long way in driving conversions.

According to behavioral psychology, 'its hard for a person to have an inconsistent set of beliefs. For instance, if someone refers you to try an app, it's hard for him to go against it, as every individual seeks consistency among their cognitions. Therefore, personalizing referrals massively improves brand loyalty, as referrers are more likely to stick to the brand they pitched to their friends.

Studies show that 70% of consumers look at product reviews before making a purchase, and that reviews are 12 times more trusted than product descriptions from manufacturers. That's a classic example of

social proof. People conform to the action of others under the assumption that they reflect the correct behavior. By encouraging users to share referrals through social channels, brands leverage the advantage of social proof. When referrals start coming from multiple sources they trust, they not only adapt to the new behavior, they also validate it as being correct. Uber has constantly been trying to widen the scope of Referrals. Every user going to tap on the menu, at least once, so it is not possible that a customer miss this opportunity. Users can access the referral link when they're riding a Uber, checking out the availability or when they have successfully completed a ride. The usage of words, like, "Earn" and "Free" makes the offer tempting for users to checkout. The significant aspect of Uber is the technique of regulating the supply and demand of the cab services. Uber ensures that service credits are distributed in an equitable way through proper backend verification. Uber regulates the credit supply by releasing referral credits only when the referred user successfully completes a ride and not when the referred user onboardes the service. Uber encourages users to spend service credits on the platform. Uber ensures that the referred user is a valid user and creates demand for the service by making him ride.

Referral marketing tip of Uber -From a psychological perspective, Uber increases the perceived value of its referral credits by making users work hard for it. If the service credits were passed on easily, there's a risk that people might stop seeing the true worth of the service. But since referral credits are strongly regulated, they start appearing more rewarding to the users, as they feel they have earned the credits, and not merely received it for free.

Uber Referral Strategy - Major Obstacles

The major obstacles for Uber in markets are :-

- Poor infrastructure
- Low credit card use
- Low Smart Phone Penetration

According to Reserve Bank of India, there are 19.6 million credit cards in circulation—approximately a 1.7% penetration rate. Smartphone penetration in India is only 18%, creating further obstacles to adoption.

RECOMMENDATIONS

- **Unique URL over a code**

People prefer a unique url over a code because code has to manually be entered into a field for the referral process to begin. This adds an unneeded step to the process because the person who is being referred has to either remember the code or copy or paste it to the referral sheet. A referral url is great at accelerating a customer through signing up for a referral program. The added step of a code is removed and the link will take them right to the sign-up page that can have information already filled in for them. Url technique combines the streamlined approach with the added analytical benefits of tracking the urls .

- **Referral Programs should also include non cash incentives**

Referral Award Programs should be creative. It should include incentives such as additional storage space, additional points, and many online games. **University of Chicago study found that “Non-cash incentives are 24% more effective at boosting performance than cash incentives”**. Uber Referral programs can be more useful to customers if it also include non-cash rewards such as offer some sort of exclusive privilege for referring and award both parties involved in the referral.

- **Refer-a-Friend page is hard to find.**

Refer a friend information should be easy to see and navigate. It should be available in front screen. In fact, some customers have to run a Google search to just find it. Uber should make Referral Programs a simplistic process. The Refer-a-Friend page should be visible in the **Uber App Footer** and it should be accessed simply by clicking.

- **Give options of Referring**

Uber should provide more options for sharing. Some people love to share on Facebook, while others may only want to tweet or email out their referrals. Uber should give choice to their customers that they can share according to their convenience.

CONCLUSION

With the above discussion, we conclude that Uber is standing in a very strong place at the present time. With its diversified portfolio of marketing strategies, Uber is not only emerging as one of the leading cab service companies of the contemporary world but also making the challenges as opportunities and availing its benefits to the maximum. With the innate strengths and peripheral prospects, the company is proficiently facing its challenges and menaces. One of the weaknesses is the mismanagement of employees which reflects the organizational culture and further the reputé of the company. Uber is trying to promote its name through well tested marketing strategies which help Uber to achieve the target expectations of the patrons and customers of the company.

TEACHING NOTES

1. **Synopsis of the case** – This case mainly talks about an important marketing strategy by one of the upcoming business models i.e. Uber cab services. It gives an insight on the way Uber is making its entry felt in the Indian market. This case study discusses of a brief SWOT analysis and the marketing challenges which Uber is facing with special reference to the strategy of Uber Referrals as one of the prominent marketing strategies. Finally, the case talks about much needed changes required in order to build up a brand name and penetrate into the markets.
2. **Target Group** – The case will be a helpful element of managerial education courses. As it's such a contemporary issue, the students/ participants will be challenged to think about reality as they are also the customers of the service provider. Therefore, they are also prompted to think about more options available to the cab service that can help them enhance their brand value and grow in such

dynamic environment. This case could also be used for strategy decision makers of the cab service who can easily get to know the pros and cons of the current strategy initiatives of the company and make plans further.

3. **Learning objectives and key issues** – This case study aims to provide a brief SWOT analysis of the upcoming business model, Uber. It also aims to bring into renown the marketing strategies used by the company to penetrate and build its brand in the market of a developing country like India. It further allows the reader to make an analysis of the referral marketing strategy by recognizing its affirmative role in enriching the brand and also get acquainted with the obstacles faced by the company in regard to making this strategy a success.
4. **Teaching strategy** - For teaching cases a commanding student – centered instruction strategy should be used that encourages critical thinking, teamwork, inquisitiveness and develops interpersonal skills of the students. Teaching strategy always depends upon the kind of audience the teacher has. If the students are mature enough, they should deal the case through controlled discussion led by the teacher which could be enhanced by providing some tips through a presentation of significant areas which need to be dealt with.
5. **Questions for Discussion** – The discussion questions can be :
 - a. Why do you think that Uber is facing more challenges than its contemporaries?
 - b. Discuss upon the various marketing strategies of cab service providers in India you have come across.
 - c. How is the marketing strategy of customer referrals stronger or weaker than other strategies of the company?
6. **Analysis of data** – With the detailed discussion of the case moderated by the teacher with respect to the specific guidelines thought upon, the students can be made to come to a conclusion which gives certain solutions to the problems dealt in the case. The case can be presented in such a manner that the suggested conclusions.

Book Review

Match The Age To Keep Them Engaged - Decoding the secrets of creating a happy workplace by Deepak Malhotra (2015), Bloomsbury Publishing India Ltd., New Delhi, p 204

Vijay Kumar Shrotryia¹

The dominance of competitive business environment is compelling the organizations to devise ways to control cost and improve efficiency. Organizational effectiveness has become much larger a challenge to deal with especially in the last few decades. The role of HR is becoming crucial and for sustaining organizational performance, improving workplaces and retaining talent is the key. In these times Dr Deepak Malhotra brings out this volume which is based on his primary research and personal experiences to raise and answer some of the key questions to deal with employees at the workplaces and to transform these workplaces into happy workplaces.



I share my concern on employability with the author. We are in different times and we need to develop the workforce to deal with challenges at the transforming workfronts. Employees have to develop an attitude to respond to the call of time. The figures on employability of our youth are really shocking. All of us have this challenge to deal with.

Employee Engagement has caught the attention of HR academicians and practitioners and in that continuity this book is able to attract the attention to look at the concept from a different angle. One cannot have same yardstick to measure the performance of all the employees. Similarly organizations cannot have same process of engaging the employees of all ages. This is the basic premise of the book which provides an impressive account of his research findings as well as prescriptions to the managers to follow certain paths to respond to the needs to the workforce. Their needs are different and so should be their responses and remedies.

The book begins with the research procedure and key findings which further leads the way to suggest measures to improve work environment through effectively engaging employees based on their age. There seems to be no difference in the degree of engagement so far as gender is concerned however number of years spent in the organization show

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difference and till one spend around 5 years, the number of engaged employees seem to grow. I find it quite interesting to note that after spending around 5 years in an organization the number of engaged employees start falling. This makes lot of sense and as a student of HR, I feel it could be because of the gap between expectations and the experiences. At mid-level it occurs to employees in general.

Deepak divides the workforce in the brackets of the age groups 46 years and above (Baby Boomers), 31-45 years (Gen X) and up to 30 years (Gen Y). The generation below 30 years of age is considered as One click generation comprising of Gen G (12 to 18 years) and others as Gen I. His concern for all the brackets is well placed and his articulation and tenacity to look at the need, expectations, exposure of One click generation is very apt. He suggests different ways of engaging them as the needs of these employees are different. This is unique aspect of his research and it makes lot of sense when one goes through the suggestions. 'Match the Age' in the title of the book is based on this finding and a sizable part of the book is devoted in explaining and suggesting measures to increase the number of engaged or fully engaged employees at different levels. His personal experience in different organizations add value to the suggestions as well as to the whole volume.

As the author mentions, in India only around 9-10 percent of employees are fully engaged as against 15 percent as per global standards and globally around 25 percent are disengaged as against 30 percent in India. These figures pose a challenge to HR department. HR has to be considered as line function in order to increase the number of satisfied employees and thereby fully engaged workers. As argued by Vineet Nayar in his book on EFCS, one has to prioritize employees over customers to win over customer satisfaction. Only engaged employees can effectively engage customers.

The mention of entrepreneurial leadership is very frequent in the book which speaks of the author's intention to assure engagement of employees through creative ways of leadership. This is very important in the present day organizations and the lack of effective leader is driven by this fact that mostly they do not possess the ability to take risk and lead creativity. Deepak has successfully dealt with this aspect of leadership and narrated several personal incidences. His interest in cricket and Indian movies is well reflected through the writings in the boxes and their relevance with the theme of the book 'Keep them Engaged'.

Though EE has been criticized as nothing new and old-wine-in-new-bottle experience, it has been able to convince the academicians as an area of further exploration and an activity worth pursuing by the organizations to improve decision making, follow participative management and to win over employees through their active involvement. It also leads to create a feel of freedom, choice and commitment for employees to perform their best.

One of his observation:

If you ask me, I have never seen one person in the last two decades, who has been satisfied with his/her current remuneration. Then why do people stick with reputed brands like TATA, even when they pay lower than the competitor? (p 137)

The book is full of Engage and Match bullets which could be of good help to managers. However it does

not leave the reader with the takeaways in key points except that the employees of different age needs different treatment. Though the anecdotes, personal observations and experiences connect the dots nicely, yet the generalizations take away the seriousness of the proposed practices. If I have to point out some key ways to EE across different age groups, they would be:

- appropriate and timely rewards (performer vs non-performer, fair pay)
- improve communication (forward & backward feed)
- finding proper talent match (managing & retaining talent)
- ethical behavior (leader & other employees)
- effective work-life balance policy (flextime & flexjob)
- develop learning teams (technology & transformations)
- identifying training needs (self-assessment & industry requirements)
- build conducive work environment (free flow and exchange of views)

Though the book may not have academic rigor in its approach, it makes a good read for practicing managers. I recommend it to all who are interested to find ways to improve employee engagement and further to them who play strategic role in devising HR strategies towards attaining and sustaining organizational effectiveness.

Corporate Article

Corporate Social Responsibility: Benefitting the stakeholders

Rakesh Kumar¹

The term 'CSR' refers to Corporate Social Responsibility. Social Responsibility means corporate sectors have been made responsible for investment in the social areas such as education, health, nutrition, women empowerment etc. so that the lowest strata of the society may join with the progress of the nation.

Society, being one of the stakeholders, is supposed to be taken care of by the corporates but the same was not being done on a large scale few years back, though the concept of CSR in our country is not new as Philanthropy and charity works are being done in the country since long period though these were not known as CSR those days. Tata Group started this concept long ago and did several works for the betterment of the society. Some IT giants such as Wipro, TCS also contributed a lots towards developing the skills of the people while company like ITC made several efforts to improve the standards of livelihood of rural communities. Notwithstanding the facts that these efforts have made significant contribution in the society in the past, it is equally true that these efforts are like a drop in an ocean considering that major population of the country still living in villages with very less income or income below the poverty line.

In the past, some questions have arisen as to whether business means social service? Even if so, whether it is only the responsibility of the public sectors or private sectors too because the prime motive of the private sectors is to maximise their profit. Whether all business organisations should go for CSR at the cost of its profitability? Here, what we need to understand is that every company involve various stakeholders in conducting their business activities, therefore, as a part of Business Ethics, all the decisions of the company are supposed to take care of the interest of all the stakeholders. For example: if it is a fabric manufacturing company, it requires cotton as its raw material however growing cotton takes a lot of water. It can take more than 20,000 litres of water to produce 1kg of cotton. Hence, the preservation of ground water is very much important for the company. In addition to this, other issues such as health, education, proper training & skill upgradation of the farmers, who are involved in the plantation of cotton are equally important and are to be taken care of by the company.

Company may view it as an extra expenditure but it is altogether other way round. Company needs to do these activities if it wants to sustain its business for a long time. It may look surprising but yes, to continue the fabric manufacturing business for a long time, the company requires sufficient raw materials i.e cotton and therefore, good production of cotton can't be ensured without sufficient ground water availability and hence, CSR is also linked to Sustainability. Sustainable Development has been defined by the Brundtland Commission as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Corporate sustainability is a strategy for the sustainable development by drawing a balanced approach towards the betterment of triple bottom line i.e. people, profits & planet, though there is some difference in CSR and Sustainability.

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CSR concerns on the use of profit after the business is conducted, whereas Sustainability is more concerned about the way, business is conducted. Therefore, we should take sustainability as one of the core issue while implementing the CSR policies.

It should be ensured that whether our CSR policies&expenditure is creating platform for our sustainability and are finally going to help the people, society and the environment. Corporate Social Responsibility is, therefore, closely linked with the practice of Sustainable Development.

There is no doubt that if a company works within its ethical guidelines, the company's reputation goes up. Various research have confirmed that firms who engage themselves in social activities, tends to generates more profits in future as the stakeholders take the company's social efforts and contributions in good spirit. Thus, the expenditure on CSR leads to increase in the reputation of the firm and customers many times become ready to pay even premium price for the same product or services.

With a view to involve corporate sector in the development of the societal status of the people, Government of India enacted Companies Act, 2013 where CSR was incorporated as a mandatory item for the Company. This is applicable to companies which have an annual turnover of Rs 1,000 crore or more, or a net worth of Rs 500 crore or more, or a net profit of Rs 5 crore or more. The act states that every company shall constitute a Corporate Social Responsibility Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director. The committee shall formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the company, recommend the amount of expenditure to be incurred on the activities and monitor the Corporate Social Responsibility Policy of the company from time to time.

Under this act, companies are now required to set aside at least 2% of their average profit in the last three years for CSR activities which includes measures to eradicate hunger, promote education and rural sports, environmental sustainability etc. The companies shall have to report on CSR projects undertaken and other details including spending on these projects in their annual Report. If the company fails to spend such amount, the Board shall also specify the reasons for not spending the amount in their reports. As per the data released by the government, out of the total outlay of Rs 6,490 crore towards CSR in India for 2015, companies spent Rs 5,115 crore and India's total CSR reporting increased by 27% in 2015. This is a positive sign and surely a welcome move by the corporates in participating in the development agenda of the nation.

This law is also significant from the point that a huge population of the country is still below the poverty line and hence, there was an urgent need of the investment in social infrastructure. However, when we see the last few years of expenditure on CSR by companies, we observe that still many companies have not made the mandatory expenditure of 2 % even after the enactment of companies act, 2013. Several other issues such as formation of CSR committee and CSR Policy are still pending in some companies. Companies are not specifying the reasons for not spending the required amount in CSR in their report. Also, expenditures on CSR are sometimes not made in the areas specified by the law. There is no penalty for disclosure of reasons for not spending the said amount and it is viewed a compliance of the provisions. At present, there is no tax exemption on CSR expenditure as the finance act, 2014 clarifies

that expenditure on CSR does not form part of business expenditure, however, if any steps are taken by the Government for giving tax exemptions on CSR expenditures, which shall be surely a welcome move as it shall definitely increase the spending on CSR.

One important issue which needs significant attention is the inspections and scrutiny of CSR works. The company law stipulates that CSR Committee of the company shall monitor the Corporate Social Responsibility works of the company time to time but in this area, more checks and scrutiny are yet to be done to ensure the proper compliance of CSR. Some are of view that a Government appointed monitoring committee on CSR shall be more effective to monitor the activities of CSR works. However, government has clearly stipulated that “the spirit of this law is not to monitor but to generate the conducive environment for enabling the corporates to conduct them in a socially responsible manner, while conducting towards human development goals of the country.” And hence, the responsibility lies on the CSR committee/Board of Directors for proper framing of CSR Policy, spending on CSR and monitoring thereof on regular basis. For any policy to be successful, their effective implementation is the most important step. Therefore, the Committee and the Directors need to ensure that expenditure on CSR are done not only to comply the obligations under the law but also to fulfill the spirit of CSR which aims to achieve the equitable, inclusive and sustainable growth of the society thereby contributing towards the human development goals.

Today society, being one of the stakeholders, is looking towards the Corporates for their progress. The enactment of CSR in Companies Act, 2013 have made corporate world more responsive to the social requirement. Corporate are now realizing that besides economic profit, they have greater responsibility towards impact of their business on the society and the environment. Therefore, in a country like India, the involvement of Public and Private sectors in addressing the social problems is surely a welcome move. The increasing trend on expenditure on CSR works is also a positive sign. What we further need is to create more awareness about the benefit of CSR and realising the fact that CSR is just not about serving the society but it is a wonderful tool to improve the quality of life of community and society as a whole. There is no doubt that in days to come, Corporate Social Responsibility shall bring corporates more nearer to the people, society and environment which is a win-win situation for all the stakeholders.

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