EMPIRICAL EVIDENCE OF CORPORATE GOVERNANCE DISCLOSURE AND BOARD SIZE MODULAR WITH FINANCIAL PERFORMANCE IN SELECT IT COMPANIES IN INDIA

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ABSTRACT

This paper investigates the relationship and impacts of board size and corporate governance disclosure of selected listed Indian IT companies on its financial performance using data for five companies over a single period of 2014 to 2015. Using structure equation modelling, the study demonstrates the extent to which board size and disclosure helps explain the financial performance of the selected companies. The main findings show that there's a significant relationship between independent variable i.e. board size and disclosure and dependent variable i.e. return on assets and capital employed. Thus board size is having inverse relationship with the returns whereas corporate governance disclosure is having positive relationship with the returns. Hence, the more the board size it will negatively affect the returns and more the corporate governance disclosure will lead to increase in returns. At backdrop this paper has also witnessed that different companies are having their own different attitude and approach regarding the disclosure of their corporate governance practice.

Key Words : Board of Directors, Financial Performance, Corporate Governance Disclosure, Board Size, Returns

INTRODUCTION

A number of previous studies shows thatfirms performance is being influenced by various characteristics such as firm's size;Board of directors; Governance; its profitability and returns; etc. Since board size has an impact on firm's performance, previous studies have been strongly criticized for not sufficiently controlling for endogeneity problems (Wintoki, Linck, & Jeffry, 2010). The endogeneity problems then further can be described as the correlation between the board size and other factors affecting firm's performance.In this paper apart from Board Size, corporate governance disclosure has been also taken as a variable so thus to eradicate endogeneity problem to an extent.The two most significant functions of board of directors are advising and monitoring (Raheja, 2005), (Adams & Ferreira, 2007). The advisory function relates to stimulating expert advice to the CEO and access to critical information and resources. Secondly the function is of monitoring the management and to eliminate the sick management practices so as to carry all the business activities eminently by safeguarding and keeping the interest of all the stakeholders in a legitimate and ethical manner.

The present study is basically focused on the relationship between corporate governance disclosure & board size with financial performance in magnitude of returns of the listed Information Technology companies in India. India has a very rich contribution in world regarding the IT business. There are many big IT companies

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present in India contributing in economy development significantly. The guidelines which has been taken into consideration for the study is SEBI clause 49 (2014), which has incorporated the material and contradictory changes brought under the Companies act 2013. As such, this study aims to quantifying the contribution of corporate governance to the performance for selected listed companies in India. Literature review and previous empirical studies from overseas have been gone through to develop a research framework and to develop research hypotheses in relation to the relationship between corporate governance and a firm's performance. As per the previous studies the present paper involves two parameters of corporate governance which can be measured through the following elements: board size and corporate governance disclosure. In addition, a firm's performance is measured by the return on asset and capital employed, known as the ROA & ROCE ratio.

SIGNIFICANCE OF THE STUDY

This research paper will enable us to check that to what extent the selected listed IT companies are following the SEBI guidelines regarding the corporate governance; Is there any relationship between corporate governance disclosure and returns. There is a duality regarding conception in the past literatures, where some are claiming board size is having positive relationship with the returns of the company's and on the contrary some are saying it have negative or no relationship with returns(Wintoki, Linck, & Jeffry, 2010).Whereas corporate governance disclosure has found from past literatures as having significant impact on financial performance of the companies(Hassan, 2012), (Fauzi & Locke, 2012).Few years ago stakeholder uses financial tools only to ascertain the financial performance of the companies but now they are also looking towards the corporate governance reports of the companies so as to acquaint themselves with the proper knowledge of corporate ethics and governance practices followed by the companies. Now in addition, the corporate governance disclosure in an easy and effective way is indispensably required by all the interested parties to the company for making any decisions. The SEBI has very strict rules regarding the board size and its composition of board of directors. SEBI has tried to improve the qualitative aspect of board also but to issue efficient guidelines for each and every company is not possible and on the contrary, it is also not possible for every company to get benefit by following all the SEBI guidelines. Many of the past literatures findings have shown that there's a negative relationship between board size and return on assets and capital employed(VO & Phan, 2013). This paper will edify about causal relationship of board size with returns of the company. The corporate governance practice and financial performance of companies are complementary and intertwined to each other.

RESEARCH OBJECTIVES

The purpose of the study was to examinethe significant and causal relationship ofcorporate governance disclosure & board size with financial returns of the selected listed IT companies.

RESEARCH HYPOTHESES

H_{01} The parameters i.e. Board Size and Disclosure are truly equal in the population.

H_{02} There is no significant impact of board size on Return on Assets and Return on Capital employed of selected listed IT companies

H_{03} There is no significant impact of Corporate Governance disclosure on Return on Assets and Return on Capital employed of selected listed IT companies

RESEARCH METHODOLOGY

To achieve the research objectives of the present study in examining the relationship and its impact of corporate governance disclosure and board size on the corporate performance using return on assets and return on capital employed of selected listed companies as a performance measurement metrics, the following methodology has been applied:

FINDINGS OF PREVIOUS STUDIES

No.	Researcher	Samples	CG Measures	Remarks/Results
1.	(Fauzi & Locke, 2012)	79 firms	Board size, Board Committee and Ownership structure with ROA	Significant
2.	(Connelly, Limpaphayoma, & Nagarajan, 2008)	CG index of Family owned firms	CGI with ROCE	Positive
3.	(Black, Jang, & Kim, 2006)	515 companies	CG rating and Tobin's Q	Positive
4.	(Paul, Ebelechukwu, & Yakubu, 2015)	23 Microfinance banks	Board size with ROA	Not Significant
5.	(Kajananthan, 2012)	11 banking companies	Board committee, Board size, Board meeting with ROA	Positive Significant
6.	(Hassan, 2012)	Governance reporting indices of 95 corporations	Disclosure	Significant
7.	(Byun, Lee, & Park, 2012)	590 companies	BOD, Disclosure with ROE	Positive
8.	(Patel & Dallas, 2002)	859 firms	CGS and Tobin's Q	Positive Significant
9.	(Agarwal & Knoeber, 1996)	500 Firms	Independent Directors & Tobin's Q	Negative
			Dependent Directors & Tobin's Q	Positive
10.	(Wintoki, Linck, & Jeffry, 2010)	Generalized Method of Moments (GMM) estimator of 5000 firms	Board Structure with Firm performance	No Correlation
11.	(Enya, Miller, & Yang, 2011)	51 Public and 130 Private Insurance Companies	Board size, Board Structure and Tobin's Q	Positive Significant
12.	(Bhagat & Black, 2002)	Large American Public Companies	Outside Directors and Tobin's Q	Not Significant
13.	(Bhagat & Bolton, 2008)	GIF and BCF Indices	Board size and ROA	Positive Significant
14.	(Hermalin & Weisbach, 1988)	142 firms	Hiring of outside director after firms' Poor returns	Positive
			Firing of inside director after firms' poor returns	Positive
15.	(VO & Phan, 2013)	77 firms	Board size with ROA	Negative

- **Data collection and Study period :** The concerned research paper undertakes the study of top 5 Information Technology MNCs based in India, on the basis of their net worth. The selected MNCs are namely as; TCS; Infosys; Wipro; HCL Technologies; Tech Mahindra. The data for the study has gathered from the annual reports of the

selected MNCs for the period of 2014 to 2015.

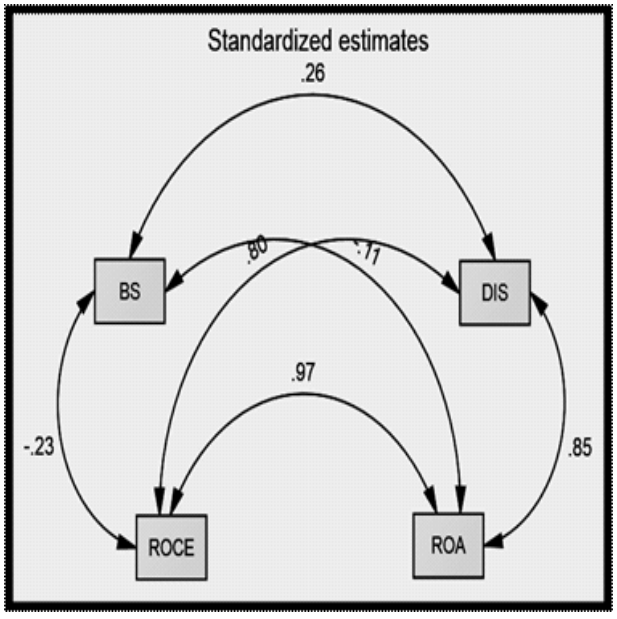
- **Design & Techniques :** The research is both exploratory and descriptive in nature. Statistical techniques applied in present study are path analysis and structural equation modelling – SEM (Amos 21).
- **Measurement of variables :** The dependent variables are the selected companies' financial performance, which is to be measured by ROA and ROCE. Return on assets and capital employed is an accounting-based performance measure and is included for robustness. The explanatory variables, are the board size and corporate governance disclosure, which has been extracted from the various 11 sub variables summed up under the respective broad explanatory variables heads.

Table 1. Measurements of variables

Variables Dependent Variables	**Charts**	**Definitions**	**Measurements**
ROA	(*Chart 3)*	Return on Assets	
ROCE	(*Chart 3)*	Return on Capital Employed	
Explanatory Variables			
BS	(*Chart 1)*	Board Size	The weighting in the construction of index is at the scale of 10, based on subjective judgments. *(For easy and clear understanding the Score has been depicted with the help of Chart in the paper)*
DIS	(*Chart 2)*	CG Disclosure	

The Explanatory variables are further consisting of various sub-variables. The BS and DIS[1] are average of their own sub-variables. The Sub-variables of Board size are Women Director, Proportion of Independent Director, Proportion of Executive Directors and Number of Directors. The sub-variables of Corporate Governance Disclosure are Space given to CG[2] in Annual Reports; Corporate Governance Philosophy; Detailed Nomination Information; Remuneration Details; Stakeholders' Relationship Committee; Audit committee and Disclosure of Shareholding Pattern.

RESULT AND ANALYSES



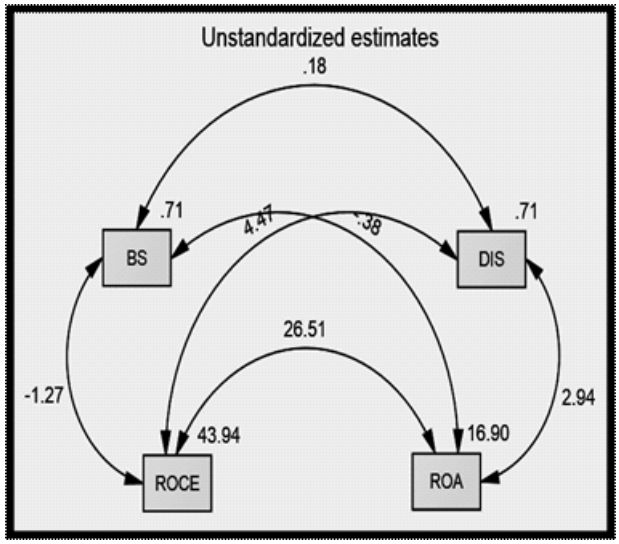


Figure 1 depicts the implied correlation estimates among the said variables, board size(BS); discourse(DIS); return on capital employed(ROCE); return on Assets(ROA). DIS have positive and significant relationship with ROA and ROCE at 10% level of significance. On the contrary BS have negative relationship with ROA and ROCE.

Figure 2 depicts the variances and covariance's among the variables. The variance for the variable BS and DIS has been considered equal from the beginning by labelling them with same constraints, this can be seen in figure where variance of BS and DIS are equal. The covarianceof board size (BS) with return on assets (ROA) and return on capital employed (ROCE)is negative which indicates that the return and board sizes moves slightly inverse whereas covariance of disclosure (DIS) with ROA and ROCE moves positively.

Table 1: Sample Covariance's

	ROA	ROCE	BS	DIS
ROA	23.687			
ROCE	36.608	58.572		
BS	.263	.097	.335	
DIS	4.664	7.184	**.183**	1.084

Table 1 and 2 describes the sample covariance and implied covariance respectively. Here, sample covariance is identified model and implied covariance is over-identified (reduced) model in which variances of BS and DIS has been labelled with same constraint. The covariance for board size (BS) and disclosure (DIS) have come out to be same in the sample and implied covariance table bothas 0.183 (marked in bold red), which indicates that the parameters (BS and DIS) required to have equal estimates are really equal in the population. From here this has been taken as same for the rest of study.

Table 2 : Implied Covariance's

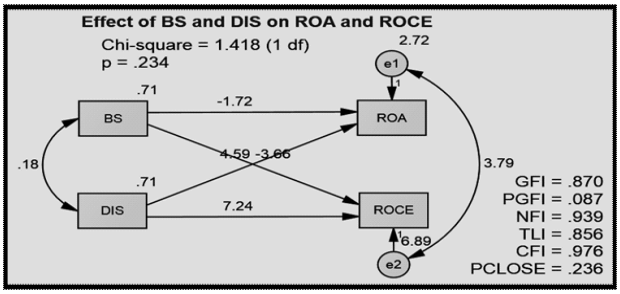
	ROA	ROCE	BS	DIS
ROA	16.899			
ROCE	26.511	43.944		
BS	-.382	-1.275	.710	
DIS	2.944	4.470	.183	.710

The chi-square 1.418 which is less than three also explains that the difference between the parameter and estimates is not significant. The above statistics shows that board size and disclosure are truly equal in the population. So it can be said that the chi-square value (1.418) is a single observation on a random variable that has an approximate chi-square distribution with one degrees of freedom. The probability is about 0.234 that such an observation would be as large as 1.418. Consequently, the evidence against the null hypothesis is not significant at the 0.05 level.

Results of Structural Equation Modelling

The chi-square of the model is 1.418, which is not significant and represents towards the goodness of model fit. Many authors are of the point that, if the sample size is small and degree of freedom is very less i.e. 1, then model fit testing should be avoid because it will produce an unfavourable model fit result. But the present study has taken up for the goodness of model fit testing also and the information like GFI, PGFI, NFI, TLI, CFI represent towards the said model as good model fit where RMSEA represent an unfavourable figure. Ramsey should need to be less than 0.05 and p-close to be more than 0.05 for a good fitting model but due to the small sample size and very less degree of freedom

Ramsey will not occur with favourableresult. Hence by seeing all other fitting indexes including chi-square the goodness of model fit can be inferred as a fit model which has the ability to consistently reproduce the data.



Note: GFI = Goodness-of-Fit Index; PGFI = Parsimony Goodness-of-Fit-Index; NFI = Normed Fit Index; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = rootmean square error of approximation; PCLOSE = p of close fit.

Figure 3 and Table 3 displays the unstandardized regression coefficient weights or path loadingsof predictors (BS &DIS) on outcomes (ROA & ROCE). Disclosure have positive significant impact on ROA and ROCE at less than 1% level of significance, where Board size shows negative significant impact on ROA and ROCE at 10% level of significance. B (or b) generally refers to the unstandardized coefficient. It means that the regression coefficient in the original measurement units.

The figure 3 and table 3 portrays that when disclosure (DIS) goes up byone-point score then ROA and ROCE goes up by 4.59% and 7.24% with having standard error of 1.014 and 1.613 respectively, on the other hand when board size (BS) goes up by one-point score then ROA and ROCE goes down by 1.72% & 3.66% with having standard error of 1.01 and 1.61 respectively.

Table 3 : Regression Weights

		Default model	Estim-ate (B)	S.E.	C.R.	P
ROCE	<—-	BS	-3.662	1.613	-2.271	.023
ROA	<—-	DIS	4.592	1.014	4.530	***
ROA	<—-	BS	-1.721	1.014	-1.698	.089
ROCE	<—-	DIS	7.243	1.613	4.491	***

*** less than 1 percent level of significance

Table 4 : Standardized regression weight

		Default model	Estimate (β)
ROCE	<—-	BS	-.465
ROA	<—-	DIS	.941
ROA	<—-	BS	-.353
ROCE	<—-	DIS	.920

Table 4 and Figure 4shows the standardised coefficient of the variable.Under standardised regression weight, â make it easier to compare different predictors to see which is more important. The â in table refers to the number of standard deviation changes we would expect in the outcome variable for a 1 standard deviation change in the predictor variable. Here â represents that -0.465 and -0.353 of standard deviation changes inversely would be expected in ROCE and ROA (outcome variables) for every 1 standard deviation change in the board size (predictor variable). On the other side 0.941 and 0.920 of standard deviation changes would be expected in ROA and ROCE (outcome variables) for every 1 standard deviation change in the corporate governance disclosure (predictor variable).

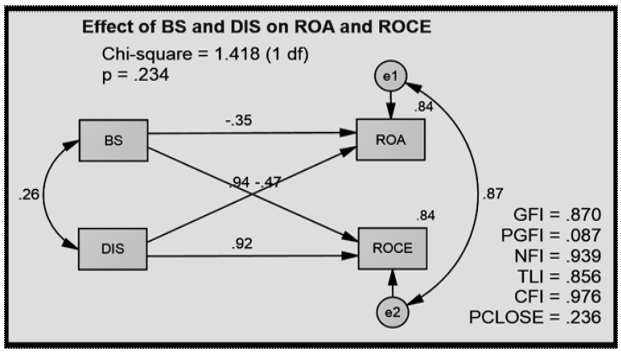


Figure 4 displays the squared multiple correlation (R^2) as 0.84 which shows a very significant contribution of independent variable i.e. BS & DIS on dependent variable i.e. ROA & ROCE. The prediction power of independent variable for dependent variable of the listed companies is very good. But this high R^2 is may be due to small sample size of affluent IT companies where all the selected companies are somewhat mandatorily following the same corporate governance practices prescribed by the SEBI.

No.	Hypotheses	Results	
H_{01}	The parameters i.e. Board Size and Disclosure are truly equal in the population.	Accepted	Equal
H_{02}	There is no significant impact of board size on Return on Assets and Return on Capital employed of selected listed IT companies	Rejected	Negative significant
H_{03}	There is no significant impact of Corporate Governance disclosure on Return on Assets and Return on Capital employed of selected listed IT companies	Rejected	Positive significant

THEORETICAL INTERPRETATION

The above analyses describe that explanatory variables i.e. corporate governance disclosure and board size are having significant relationship with dependent variables i.e. return on assets and return on capital employed (financial performance measures) of selected listed Indian IT companies. The corporate governance disclosure is showing positive impact on ROA and ROCE at 1 percent level of significance, which states that the companies that complimenting and disclosing more material and peculiar details regarding corporate governance practices are having/maintaining good financial performance also which help them to sustain financialstrengthens for long term and create a goodwill ahead of other companies in the industry likewise, TCS and Infosys are having.

Whereas board size is showing negative relationship with ROA and ROCE at 10 percent level of significance, which states that as the board size increases the financial performance (ROA and ROCE) of the selected companies' declines.These infers that an optimum board size is to be maintained which to be neither too small nor too large. With the increase in size of board the power of decision and strategy making also lies in several directors' hands which in return delays in converting that strategy into action as different directors will advocate different stratagem. The SEBI has mandated some of norms regarding the constituent of board such as to have at least one women director in board, at least one-third of directors need to be independent directors. These all norms are mandated by SEBI to safeguard the interest of all stakeholder and sustain their faith on company's governance. Simultaneously study also reveals the role of executive directors, those are the real key personnel's who devote their full-fledged duty to the company and have the better knowledge of company's activities, management and growths. The involvement of independent directors in board ensures that executive directors should carry the business and maximises the wealth of all the stakeholders ethically and legally irrespective of making their own personal gain.

CONCLUSION

The present study enunciates that (independent variable) board size and corporate governance disclosure are having significant impact on (dependent variable) return on assets and return on capital employed of selected IT companies. More precisely, corporate governance disclosure is showing positive significance with return on assets and capital employed whereas board size is expressing negative significance with returns. Almost all the selected companies are following mandatory and various non-mandatory provisions which has been laid by regulatory bodies like SEBI but all these companies are having different approach and attitude toward the corporate governance practice. The board size is displaying an inverse relationship with the dependent variables, return on assets and capital employed which is prompting the companies to have optimum board size rather than just to increasing the number of directors in board. A good proportion of executive directors are also indispensably significant for the effective

operation of the company as they are the full time directors who always have their eyes and brains open for the internal and external affairs of the companies. To keep check on the independency of executive directors a proportionately number of independent directors are required in board.

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