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IMPACT OF CORPORATE GOVERNANCE FACTORS ON THE FIRM PERFORMANCE OF NSE LISTED COMPANIES IN INDIA

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Abstract

Corporate Governance has become an important area of enhanced focus for firms the world over on account of various reasons like corporate scandals, increased need for trust and expectations by stakeholders in corporate management as well as the ever increasing role of corporations in the world economy. Though the term, Corporate Governance, refers to various important aspects of corporate functioning, good corporate governance refers to high ethical standards that are often demonstrated through high standards of integrity, openness as well as greater transparency and accountability in the decision making process. The main objective of this study is to explore the impact of corporate governance factors on firm performance. This study analysed board structure and performance of listed firms in the National Stock Exchange (CNX Midcap) during the study period. The present study found that corporate governance factors like Board Size, Firm Size and Insider Directors create more wealth as the result of better performance.

Keywords: *Corporate Governance Factors, Board Structure, Stakeholders' Value and Board Directors.*

1. INTRODUCTION

Good Corporate Governance is a key to the integrity of corporations, financial institutions and markets and it is the key to the health of any economy and its stability in the long run. In recent years, Corporate Governance has attained significance all over the world. Corporate Governance is about ethical conduct of business and good Corporate Governance must really evolve with the changing circumstances of a company. Openness, transparency, integrity and accountability are the key elements of Corporate Governance for any corporate entity (**Rajani B.Bhat and Suresh V.N, 2013**).

The concept of corporate governance identifies their role and responsibilities as well as their rights in the context of the company. Investors believe that a company, with good corporate governance, would perform over a period of time and that effective governance could reduce the risk and attract further investment (**Agrawal.A and C.R.Knoeber, 1996**). Good governance should address all issues that lead to a value addition for the firm and protect the interests of all the stakeholders and shareholders. It is the system of structuring, operating and controlling a company with a view to achieving strategic goals for the benefits of shareholders, creditors, employees, customers and suppliers complying with all the legal and

regulatory requirements. (Maria Maher and Thomas Anderson, 2000).

Board of corporate, that comprises of outside directors, monitors corporate management on behalf of shareholders (Fama and Jensen, 1983). In the agency settings of emerging economies, where ownership concentration is the general norm along with weak protection of shareholder rights, the composition of board with outside directors (particularly independent directors) posed a significant challenge. As such, the supervision of the management by outside directors could not be overemphasized. Further, the board performs multifaceted tasks and has direct or indirect effect on firm performance (Ruigrok et al., 2006). Therefore, the pertinent issue which is worthy of consideration is board composition with outside directors (independent and grey directors) under concentrated ownership.

2. REVIEW OF LITERATURE

There are a number of research studies on the corporate governance factors. Some of them have studied the impact of ownership structure and firm's performance on corporate governance. An attempt has been made here to review the previous studies. The summarized results of select reviews made in this study are given in **Table-1**. The above literature provided an overview of different models used to study the Ownership Structure and Corporate Performance from various parts of the world. An attempt has been made in this study to evaluate Firm Performance and Corporate Governance Factors in the Indian context, working on the models used in the above studies.

3. STATEMENT OF THE PROBLEM

Corporate Governance flows from the concept of accountability and assumes greater significance in the case of corporate form of organization where the ownership and management of organizations are distanced. The

key role for the growth of the organization is played by the board of directors. The success of any business firm mainly depends upon the good and effective corporate governance. In the corporate form of organization, there is always dominance by majority shareholders on the minority shareholders. But the shareholders who are supposed to control, are unable to control the firms effectively and make the decisions. The problem is that there is no assurance that the management team always represents the interests of shareholders. Majority of shareholders, by exercising their voting rights, elect the directors and control majority of directors to determine the outcome of the firms. The good proportion of outside directors on the board is essential for good corporate governance. Outside Directors (non-executive directors), particularly independent directors, are mandated by law in order to protect the interests of minority shareholders and to increase the firm profitability and its value in the long run. Hence the corporate governance is essential to protect the interests of all types of stake holders. Against this background, the present study entitled, "Impact of Corporate Governance Factors on the Firm Performance with Special Reference to NSE Listed Companies in India", was undertaken.

4. NEED FOR THE PRESENT STUDY

Firm performance is affected by corporate governance mechanism of sample companies in India because their success or failure is dependent on the extent to which they are managed efficiently. The study of governance mechanism is helpful for the shareholders to take informed investment decisions. The study of this type is useful for the corporates to perform accounting, auditing and corporate reporting in tune with the global standards. It is beneficial for the companies to enhance the corporate strategy, financial integrity of their organisations and to protect the interests of all the stakeholders including creditors, investors, policy makers, apex regulating bodies and the economy as a whole. Since the governance practices contribute to the

enhancement of the value of listed companies in NSE, the study aimed to explore the efficacy of corporate governance mechanism which affects firm performance resulting in accountability to shareholders and other stakeholders through appropriate corporate reporting repeated. It also helps firms to attract low cost investment by attracting investors and improving creditors' confidence, both nationally and internationally. It increases firms' responsiveness to the needs of the society and results in improving long-term performance.

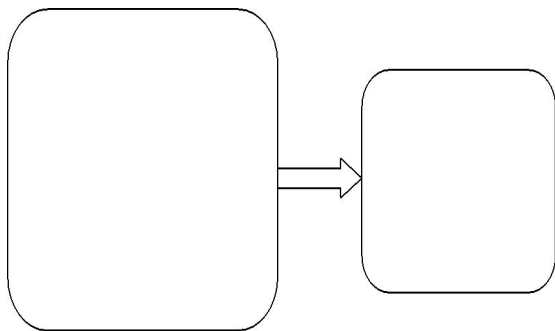
5. OBJECTIVES OF THE STUDY

The present study proposes to examine the impact of corporate governance factors on firm's performance of the CNX Midcap companies listed in NSE and to test the differentiation in the corporate governance factors between firms.

6. HYPOTHESES OF THE STUDY

The present study tested the following null hypotheses.

- NH1:** There is no significant relationship between corporate governance factors and firm performance.
- NH2:** There is no significant impact of corporate governance factors on firm performance.



7. METHODOLOGY OF THE STUDY

7.1 Sample Selection

Indian Stock Market is one of the most dynamic and efficient markets in Asia. Similarly, NSE is one of the top stock exchanges in India.

Hence the sample for this study included CNX Midcap companies listed on the National Stock Exchange. Out of 100 companies, only 50 companies were selected based on the value of Market Capitalization (**refer Annexure-1**). Only those companies that earned high values of market capitalization were selected for the study.

7.2 Source and Collection of Data

The study mainly depended on secondary data. The required data regarding annual financial statements of sample companies were collected from the CMIE Prowess Corporate Database and www.nseindia.com. The other relevant details for this study were collected from various books, journals and magazines.

7.3 Period of the Study

The study analyzed the financial statement of CNX Midcap companies from 1st January 2005 to 31st December 2012.

7.4 Tools Used in the Study

The present study used the following tools.

- Descriptive Statistics like Mean, Standard Deviation, Minimum, Maximum, Kurtosis and Skewness.
- Financial Ratios like Return On Equity (ROE), Earnings Per Share (EPS) and Tobins Q were also used.

c. Cross Correlation

The following equation was used to calculate the Cross Correlation

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{n(\sum x^2 - (\sum x)^2)(n\sum y - (\sum y)^2)}}$$

Where,

N = Number of observations

$\sum x$ = Dependent variables, and

$\sum y$ = Independent variables

d. OLS Regression

The residual, $\hat{\epsilon}$, is the difference between the actual Y and the predicted Y and has a zero mean. In other words, OLS calculates the slope coefficients so that the difference between the predicted Y and the actual Y is minimized. (The residuals are squared in order to compare negative errors to positive errors more easily). The estimated regression equation is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 D + \hat{\epsilon}$$

A set of variables is perfectly multicollinear if there exists one or more exact

linear relationships among some of the variables.

$$\lambda_0 + \lambda_1 X_{1i} + \lambda_2 X_{2i} + \dots + \lambda_k X_{ki} = 0$$

The holding for all observations i, where λ_j are constants and X_{ji} is the ith observation on the jth explanatory variable. Explore one issue caused by multicollinearity by examining the process of attempting to obtain estimates for the parameters of the multiple regression equation.

$$Y_i = \beta_0 + \beta_1 X_{1i} + \dots + \beta_k X_{ki} + \epsilon_i$$

The Variables used in the Study

Name of the Variables	Abbreviations	Measure of Variables
Return on Equity	ROE	(Net Profit/Shareholders Equity)
Price Earnings Ratio	P/E	(Stock Price/Earnings Per Share)
Tobins Q	Tobin Q	Year-end market capitalization divided by the book value of total assets and the sum of the market value of equity and the book value of debt divided by the book value of total assets.
Board Size	SIZE	Total Asset Logarithm
Firm Size	LEV	Ratio of long term debt to the total assets
Profitability Margin	PM	Profit Margin (Profit after Tax/Turnover)
Board Independence	BOIN	Independent directors/Number of directors
Insider Ownership	INOWN	Percentage of promoters or promoter group ownership in firm
Grey Directors	PERGR	Number of non-executive, non-independent directors divided by the total number of directors on the board

8. LIMITATIONS OF THE STUDY

The following are the limitations of the present study

- This study focused only on CNX Midcap Companies of NSE.
- This study was based mainly on secondary data and hence it is riddled with certain limitations which are bound to be connected with secondary data.

- The study period was restricted to a period of eight years from 2005 to 2012.
- This study used certain statistical tools which also have certain inherent limitations.

9. ANALYSIS OF CORPORATE GOVERNANCE FACTORS AND FIRM PERFORMANCE

For the purpose of this study, the analysis was made as follows;

- a) Analysis of performance of CNX Midcap Companies
- b) Analysis of Corporate Governance Factors of CNX Midcap Companies
- c) Relationship between Corporate Governance Factors and Firm Performance of CNX Midcap Companies
- d) Impact of ROA on Corporate Governance Factors of CNX Midcap Companies
- e) Impact of P/E on Corporate Governance Factors of CNX Midcap Companies
- f) Impact of Tobins Q on Corporate Governance Factors of CNX Midcap Companies

a) Analysis of performance of CNX Midcap Companies

The results of Descriptive Statistics (Mean, Standard Deviation, Minimum, Maximum, Kurtosis and Skewness) for the financial parameters of CNX Midcap companies during the study period from 1st January 2005 to 31st December 2012, are shown in **Table-2**. It is to be noted that the performance of sample companies was measured against parameters like Return On Equity (ROE), Price Earnings Ratio (P/E) and Tobins Q. The mean return was 20.0731 and standard deviation of P/E was 2.5144. According to the Tobins Q, the sample firms assumed the lowest risk at 2.0537, with a return value of 2.9221. The value of ROE (0.6375) recorded low risk and low return (0.4662) for all sample firms during the study period. Besides, the analysis of the Table clearly indicates that the Price Earnings Ratio (P/E) was a more important factor than other parameters like ROE and Tobins Q as far as the sample companies were concerned during the study period. According to the results of Kurtosis, the ROE (1.7060) and P/E (2.9045) were Leptokurtic and the Tobins Q (5.1457) was Platykurtic during the study period. Besides, the analysis of kurtosis clearly indicates the fact that sample variables (ROA and ROE) were perfectly skewed in

the normal bell curve. The performance of sample companies was positively skewed in respect of ROE (0.6561), P/E (1.1048) and Tobins Q (1.8801). The overall analysis of the Table reveals that there was inverse relationship between risk and return and hence the regulators may take necessary steps to minimize the risk and return trade off in the market. Retail investors may use this information to design their investment strategy to their advantage.

b) Analysis of Corporate Governance Factors of CNX Midcap Companies

Table-3 reveals the results of Descriptive Statistics for 50 sample companies listed in CNX Midcap during the study period from 1st January 2005 to 31st December 2012. It is to be noted from the Table that variables like Board Size, Leverage, Profitability Margin, Board Independence, Insider Ownership and Grey Directors were used to test the performance of firms. For the purpose of analysis of variables taken for the study, Mean, Standard Deviation, Minimum, Maximum, Kurtosis and Skewness were used. The analysis of the Table shows that the mean return value was 26.068 while standard deviation of INOWN was 4.4145. The variable, namely, Lev assumed the lowest risk (6.7175), with the highest return (13.8575). The standard deviation (risk) of Profitability Margin was high (12.0701), with high mean return (16.3437) and the value of other indicators, namely, SIZE at 5.7937 and PERGR at 0.0462 recorded low risk and low return. According to the results of this study, the INOWN and Leverage were more important factors than other parameters during the study period. The result of kurtosis shows the fact that it was Leptokurtic for all parameters and it was high in the case of SIZE (1.7327). The Profitability Margin (4.7726) was high in Platykurtic. Besides, the analysis of kurtosis indicates that variables taken for this study were perfectly skewed in the normal bell curve. The value of skewness reveals that sample companies were positively skewed in

Profitability Margin (1.6974), Board Independence (1.2610), PERGR (0.4945) and negatively skewed in SIZE (-0.6306), LEV (-0.3125) and INOWN (-0.9930) respectively. Researchers, from their interaction with officials from the sample firms, found that the independent board, with grey directors, may be replaced by independent directors, so as to enhance the performance of firms. The policy makers may find a suitable board model for companies and define the role of independent directors.

c) Relationship between Corporate Governance Factors and Firm Performance of CNX Midcap Companies

Table-4 shows the results of cross correlation test for sample firms during the period from 1st January 2005 to 31st December 2012. The analysis of the Table reveals the fact that there was significant and positive relationship between LEV and SIZE at 0.9645 and the p-value for two-tailed test of significance was 0.0001 at 5% significant level. Besides, there was also significant relationship between INOWN and SIZE (0.9299) and its p-value was 0.0018 at 5% significant level. It is to be noted that there was positive correlation coefficient between INOWN and LEV (0.8717), PERGR and ROA (0.9725) at 5% significant level. The Table clearly shows that there was negative correlation coefficient between SIZE and ROA (-0.9871), LEV and ROA (-0.9285), INOWN and ROA (-0.9101), PERGR and SIZE (-0.9601), PERGR and LEV (-0.9439), PERGR and INOWN (-0.8519) at 5% significant level. The other variables, as analysed in the Table, namely, E/P and PM, were not significantly correlated while one variable (Tobins Q) was also negatively insignificant. From this, it is inferred that there was no significant relationship between the corporate governance factors and firm performance as far as the sample firms were concerned during the study period. Hence the null hypothesis (NH1), namely, **“There is no significant relationship between corporate**

governance factors and firm performance”, is partially accepted. The overall analysis of this study found that the corporate governance factors, particularly insider ownership on the board and board size, were the essential elements that influenced the firm performance. Retail investors may also consider all relevant information relating to governance factors which are essential for their investment decisions.

d) Impact of ROA on Corporate Governance Factors of CNX Midcap Companies

The results of the Ordinary Linear Squares (OLS) Regression Analysis for CNX Midcap firms for the period from 1st January 2005 to 31st December 2012, are shown in **Table-5**. It is understood that there was positive and significant coefficient value recorded against the variable, namely, LEV (0.0041). The Table clearly explains the fact that there was negatively significant coefficient value for PM (-0.0041) and INOWN (-0.0022). The value for the variable, namely, PERGR was 9.7762 which was positively insignificant and the values for SIZE (-1.0281) and BOUT (-0.2401) were negatively insignificant. The coefficient of ROA was not significant at 5 percent level, which indicates that there was no correlation between corporate governance factors and firm performance. According to the Table, the value of R² was 0.9971 for ROA at 99% of variation. With reference to the analysis of F value, it is clear that there was insignificant value (4.9575) and the p-value of ROA was 0.1091 at 5% significant level. Based on the F-statistics, it is observed that there was no significant difference between the governance factors and firm performance of sample companies during the study period. It is inferred that the Variance Inflation Factors (VIF) of multicollinearity with Profitability Margin (2.2091), INOWN (10.0022) and the value of SIZE (55.8123), LEV (14.6881), BOUT (14.6112), Grey Directors (62.7585) were not correlated. Further, Durbin-Watson

Statistic at 3.2541 clearly indicates autocorrelation in the residuals. Hence the null hypothesis (NH1) namely, “**There is no significant impact for corporate governance factors on firm performance in Indian companies**”, is accepted. Hence the policy makers and stake holders may take appropriate steps to improve the effective implementation of corporate governance. Investors may note this information while investing their money in the stocks of the respective firms.

Figure-1 clearly displays the Corporate Governance Factors of Board Size, Firm Size, Profitability Margin, Board Independence, Insiders Ownership and Grey Directors in Return on Asset (ROA). It is clear from the Figure that leverage exercised positively significant influence on the performance of corporates.

e) Impact of P/E on Corporate Governance Factors of CNX Midcap Companies

Table-6 exhibits the results of the Ordinary Linear Regression Analysis based on the financial data of CNX Midcap companies during the study period from January 2005 to December 2011. For the analysis of this study, variables like Board Size, Leverage, Profit Margin, Board Independence, Insider Ownership and Grey Directors were considered as independent variables while P/E (Price Earnings Ratio) was taken as dependent variable. The Table clearly explains the fact that there was insignificant and positive coefficient value for SIZE (11.6691), Lev (0.3491), INOWN (3.9111) and PERGR (12.7035) while the values of firms for PM (-0.3182) and BOUT (-6.4968) were negatively insignificant. Besides, there was no significant value for P/E at 5% level. It is seen that the value of R^2 was 0.9951 for P/E, with 99% of variation, during the study period. From the analysis of F value, it is understood that there was insignificant P/E value (3.5122) and the p-value of F-statistics was 0.1281. The F-statistics indicates that the overall model was

poor during the study period. The values of Variance Inflation Factors (VIF) were correlated with PM (2.2091), BOUT (4.6112) and INOWN (9.9022) while the sum of the variables was not correlated with SIZE, LEV and PERGR in multicollinearity. The Durbin-Watson Statistic of 3.2542 indicates the autocorrelation in the residuals. Based on this, the null hypothesis (NH1), “**There is no significant impact for corporate governance factors on firm performance**”, is accepted. It is suggested from the interaction of Researchers with officials of few companies that the regulatory authorities may assess periodically the procedures for the appointment of insider directors and grey directors for better performance of the firm.

Figure-2 describes the Price Earnings Ratio (P/E) for sample companies during the study period from January 2005 to December 2011. It is to be noted that variables like SIZE, Lev, INOWN and PERGR did influence the firm performance of the sample companies during the study period.

f) Impact of Tobins Q on Corporate Governance Factors of CNX Midcap Companies

The results of OLS Regression for CNX Midcap for the period from January 2005 to December 2012, are given in **Table-7**. The Table clearly shows the fact that there were insignificant and positive coefficient values for SIZE (1.6751), PM (0.0692), BOUT (1.7475), INOWN (0.2382) and negative values for remaining variables like LEV (-0.2221) and PERGR (-4.4619) during the study period. The value of R^2 was 0.5044 for Tobins Q, which indicates 50% variation at 5% level. It is to be noted that the Coefficient was positive while their F-value (0.1691) and P-value (0.9499) were low. The F-statistic indicates that the overall model was poor during the study period. It is inferred from the Table that the Variance Influence Factor (VIF) of multicollinearity with

PM (2.2091), INOWN (10.0023) and PERGR (7.2758) was correlated and for SIZE (50.0142), LEV (14.3688), BOUT (16.6112), it was not correlated. This indicates the fact that there was no multicollinearity among the independent variables. It is significant to note that the value of Durbin-Watson Statistic (3.2541) indicates autocorrelation in the residuals. Therefore, the Null Hypothesis (NH1), “**There is no significant impact for corporate governance factors on firm performance in Indian Companies**”, is accepted. It is suggested that retail investors may carefully make the investment decision after taking into consideration the above information.

Figure-3 exhibits the relationship between Tobins Q and Corporate Governance Factors for the sample companies. According to the Figure, insignificant values were recorded for Board Size, Profitability margin, Board Independence and Insider Ownership during the study period. Retail investors may carefully note this information.

10. DISCUSSION AND CONCLUSION

A good corporate governance practice in the corporate form of organization mainly relies on an effective board of directors. The performance and ownership structure of a board of directors rely on the level of its independence. Companies need more qualified people to work as independent directors and grey directors to improve board performance that may lead to better performance of firms. From the interaction with officials, it was found that the major challenge of corporate governance in India was not properly addressed. Besides, there was conflict between dominant shareholders and minority shareholders. Hence the corporate governance policy should aim at strengthening the benefits and restricting the scope for intensity. It is therefore essential to improve the effectiveness of independent directors in

monitoring managers, especially to strengthen their independence. It is pertinent to mention that there was no conflicting evidence that directors destroy the value of the firm. The results of some studies suggest that independent directors have so far failed to perform their monitoring role effectively. This can be attributed to the fact that ‘board independence’ is something that has just started getting importance and is catching on in India.

According to the results of earlier research studies undertaken by **Vijaya B Marisetty (2003)**, **Manoranjan Pattanayak (2007)**, **Pavithra Siriwardhane (2008)**, **Naveen Kumar et al (2012)** and **Karpagam et al (2013)**, there was no significant relationship between Corporate Governance Factors and Firm Performance. In the same way, the present study also confirmed the findings of these studies. However, there are few other studies undertaken earlier by **Rozzini Haniffa et al (2006)**, **Sudipta Basu et al (2007)**, **Pallab Kumar Biswas et al (2008)** and **Ohannes G.Paskelian et al (2010)** which found that there was significant difference between Corporate Governance Factors and Firm performance. The present study did not confirm the findings of these studies.

11. SCOPE FOR FURTHER RESEARCH

The present study was an attempt to study mainly the corporate governance factors and firm performance in India. The scope for further research is summarized below.

- Companies from CNX 100, CNX 500 and Bank Nifty could be taken up for further research with similar objectives.
- The study with similar objectives could be made from time to time.
- Sample companies from various indices of BSE could also be taken up for studies of this nature.

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Table - 1
Summary of Select Literature Review

Author(s) and Year(s)	Methodology	Sample	Results
Vijaya B Marisetty and A.V.Vedpuriswar (2003)	Correlation and Auto Covariance	S&P Nifty for 1996-2003	The share mispricing, which is more exogenous and market determined, is a simple but effective measure of corporate governance.
Roszaini Haniffa and Mohammed Hudaib (2006)	Multivariate Regression	Kuala Lumpur Stock Exchange (KLSE) for 1996-2000	The study found that the significant relationship between multiple directorships and market performance while role duality and managerial shareholdings are significantly associated with accounting performance.
Sudipta Basu, Lee-Seok Hwang, Toshiaki Mitsudome and Joseph Weintrop (2007)	Descriptive Statistics and Regression	Japanese Corporations for 1992-1996	The excess pay related to ownership and monitoring variables is negatively associated with subsequent accounting performance, consistent with the presence of an agency problem. These results suggest managerial entrenchment although it is possible that they reflect higher dividend income rather than excessive pay.
Manoranjan Pattanayak (2007)	Descriptive Statistics and OLS Regression	BSE companies for 2000-2004	The market discipline may force the insiders to pursue value maximization, despite their lack of personal incentives to do so at this low level of stake in the firm. Therefore, the policy makers must maintain utmost care while formulating policy which may reduce the ownership structure in the firm.
Pavithra Siriwardhane (2008)	Descriptive Statistics, Pearson Correlation and Simple Regression	Colombo Stock Exchange for 2001-2002	The study indicates that the board size and company performance is positively related to ROE. The results conclude that there is a need for greater flexibility in acceptable governance if shareholder interests are to be promoted.

Pallab Kumar Biswas and Md. Hamid Ullah Bhuiyan (2008)	OLS Regression	Corporate Governance Disclosure	The results indicate that the issue of endogeneity often causes confusion in identifying the direction of causality between corporate governance and firm performance.
Naveen Kumar and J.P.Singh (2012)	Descriptive Statistics, Correlation and OLS Regression.	BSE 200 Companies for 2008	In their study, they found that the negative effect of outside directors on the firm value of Indian companies is mainly due to the grey directors. The result indicates that the policy makers to should find a suitable board model for companies and define the role of independent directors.
Palanisamy Saravanan (2012)	Descriptive Statistics, Means Test, Correlation and Regression	BSE Companies for 2001-2010	The study examined impact of corporate governance on the determination of firm value. The results indicate significant differences in the corporate governance characteristics between manufacturing firms and non-manufacturing firms.
Karpagam.V and Selvam.M (2013)	Descriptive Statistics, Cross Correlation and OLS Regression	BSE 100 companies for 2005-2012	The study found that corporate governance mechanism, which incorporated promoters' ownership and profitability, creates more opportunity and resources for better performance. The board independence is something that has just started getting importance and is catching on in India.
Karpagam.V, et.al., (2013)	Descriptive Statistics and OLS Regression	BSE Sensex companies for 2007-2011	The study indicates that ownership registered insignificant impact on performance measures, which implied that indicators were mainly affected by economic and market conditions rather than ownership concentration.

Table-2
Results of Descriptive Statistics for Firm performance of CNX Midcap Companies
from 1st January 2005 to 31st December 2012

Variables Descriptive Statistics	ROE	P/E	Tobins Q
Mean	0.6375	20.0737	2.0537
Standard Deviation	0.4662	2.5144	2.9221
Minimum	0.2501	8.6222	0.1822
Maximum	1.4121	44.9901	8.9532
Kurtosis	1.7060	2.9045	5.1457
Skewness	0.6561	1.1048	1.8801

Source: Collected from PROWESS database and Computed using E-Views (5.0)

Note: ROE-Return on Equity, P/E-Price Earnings Ratio.

Table-3
Results of Descriptive Statistics for Corporate Governance Factors of CNX Midcap
Companies from 1st January 2005 to 31st December 2012

Variables Descriptive Statistics	SIZE	LEV	PM	BOUT	INOWN	PERGR
Mean	5.7937	13.8575	16.3437	2.4501	26.068	0.0462
Standard Deviation	0.4737	6.7175	12.0701	2.6173	4.4145	0.0311
Minimum	5.0201	27.7322	6.4222	0.9111	18.9511	0.0211
Maximum	6.2522	23.6012	44.2011	7.5334	29.4121	0.0987
Kurtosis	1.7327	1.3540	4.7726	2.7793	2.1916	1.3583
Skewness	-0.6306	-0.3125	1.6974	1.2610	-0.9930	0.4945

Source: Collected from PROWESS database and Computed using E-Views (5.0)

Note: Size-Board Size, Lev-Leverage, PM-Profit Margin, Bout-Board Independence, Inown- Insider Ownership, PERGR- Grey Directors

Table-4

**Results of Cross Correlation for Corporate Governance factors on the Firm performance of
CNX Midcap Companies from 1st January 2005 to 31st December 2012**

Variables	Pearson Correlation	ROA	P/E	TOBINSQ	SIZE	LEV	PM	BOUT	INOWN	PERGR
ROA	Pearson Correlation	1.0000								
	Sig. (2-tailed)									
P/E	Pearson Correlation	-0.0898	1.0000							
	Sig. (2-tailed)	0.8325								
TOBINSQ	Pearson Correlation	-0.0332	0.0101	1.0000						
	Sig. (2-tailed)	0.9378	0.9812							
SIZE	Pearson Correlation	-0.9871**	0.0759	-0.1020	1.0000					
	Sig. (2-tailed)	0.0000	0.8582	0.8100						
LEV	Pearson Correlation	-0.9285**	-0.1035	-0.1938	0.9645**	1.0000				
	Sig. (2-tailed)	0.0009	0.8073	0.6456	0.0001					
PM	Pearson Correlation	-0.4885	-0.3350	-0.1453	0.5376	0.5799	1.0000			
	Sig. (2-tailed)	0.2194	0.4172	0.7313	0.1693	0.1318				
BOUT	Pearson Correlation	-0.3820	-0.3560	-0.3770	0.4966	0.6507	0.5951	1.0000		
	Sig. (2-tailed)	0.3503	0.3868	0.3572	0.2106	0.0806	0.1197			
INOWN	Pearson Correlation	-0.9101**	0.3495	-0.0980	0.9299**	0.8717**	0.4213	0.4654	1.0000	
	Sig. (2-tailed)	0.0017	0.3960	0.8174	0.0018	0.0048	0.2986	0.2452		
PERGR	Pearson Correlation	0.9725**	0.0437	0.0163	-0.9601**	-0.9439**	-0.4403	-0.3818	-0.8519**	1.0000
	Sig. (2-tailed)	0.0001	0.9182	0.9694	0.0002	0.0004	0.2749	0.3507	0.0072	

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

Source: Collected from PROWESS corporate database and Computed using SPSS (11.5)

Table-5
Results of OLS Regression for ROA of CNX Midcap Companies from
1st January 2005 to 31st December 2012

Variables	Coefficient	Std. Error	t-Statistic	Prob.	VIF
SIZE	-1.0281	2.1152	-2.3421	0.2571	55.8123
LEV	0.0041	0.4399	1.1666	0.4511	14.6881
PM	-0.0001	0.0043	-0.3631	0.7782	2.2091
BOUT	-0.2401	0.0031	-0.5098	0.7001	14.6112
INOWN	-0.0022	0.0401	-0.0391	0.9452	10.0022
PERGR	9.7762	0.0208	1.3582	0.0401	62.7585
C	5.6311	2.1151	2.6634	0.2291	
R-squared	0.9971		F-statistic		4.9575
Durbin-Watson stat	3.2541		Prob(F-statistic)		0.1091

Source: Collected from PROWESS corporate database and Computed using E-Views (5.0)

* Significant at 0.05 level.

Table-6
Results of OLS Regression for P/E of CNX Midcap Companies from
1st January 2005 to 31st December 2012

Variables	Coefficient	Std. Error	t-Statistic	Prob.	VIF
SIZE	11.6691	13.8961	0.8401	0.5552	58.6122
LEV	0.3491	0.1198	2.9322	0.2091	43.3688
PM	-0.3182	0.1066	-3.0012	0.2055	2.2091
BOUT	-6.4968	1.2567	-5.1722	0.1223	4.6112
INOWN	3.9111	0.6433	6.0843	0.1046	9.9022
PERGR	12.7035	17.7381	5.5788	0.1133	72.7281
C	23.4852	14.9021	-3.5101	0.1777	
R-squared	0.9951		F-statistic		3.5122
Durbin-Watson stat	3.2542		Prob(F-statistic)		0.1281

Source: Collected from PROWESS corporate database and Computed using E-Views (5.0)

* Significant at 0.05 level.

Table-7

Results of OLS Regression for Tobins Q of CNX Midcap Companies from 1st January 2005 to 31st December 2012

Variables	Coefficient	Std. Error	t-Statistic	Prob.	VIF
SIZE	1.6751	33.2411	0.0501	0.9681	50.0142
LEV	-0.2221	0.2344	-7.8231	0.5788	14.3688
PM	0.0692	0.2511	0.2722	0.8311	2.2091
BOUT	1.7475	3.0041	0.5821	0.6655	16.6112
INOWN	0.2381	1.5389	0.1555	0.9021	10.0023
PERGR	-4.4619	5.4475	-0.8191	0.5633	7.2758
C	31.8901	16.0031	0.1991	0.8755	
R-squared	0.5044		F-statistic		0.1691
Durbin-Watson stat	3.2541		Prob(F-statistic)		0.9499

Source: Collected from PROWESS corporate database and Computed using E-Views (5.0)

* Significant at 0.05 level.

Figure-1
OLS Regression for ROA of CNX Midcap Companies

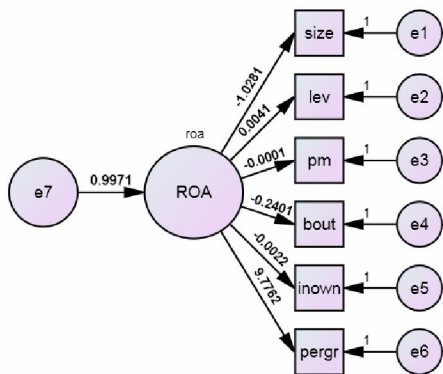


Figure-2
OLS Regression for P/E of CNX Midcap Companies

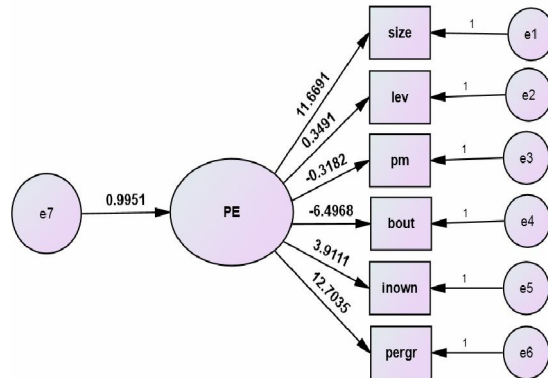
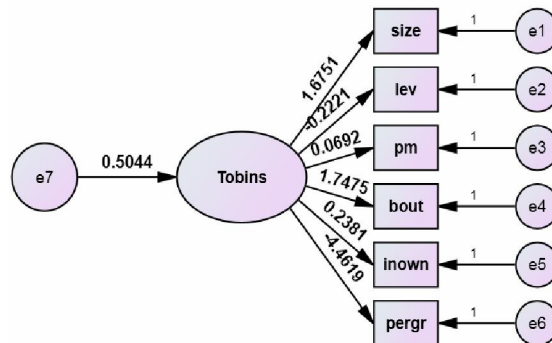


Figure-3
Impact of Tobins Q on Corporate Governance Factors of CNX Midcap Companies



ANNEXURE-1

Market Capitalization of CNX Midcap Companies (top 50 Companies) on 1st January 2005 to 31st December 2012

S.No	List of the Companies	Market Capitalization Rs.
1	Power Finance Corpn. Ltd.	99297.0
2	N H P C Ltd.	92809.1
3	Oil India Ltd.	89960.0
4	G M R Infrastructure Ltd.	68113.6
5	Adani Power Ltd.	64801.6
6	Oracle Financial Services Software Ltd.	64177.1
7	A B B Ltd.	61325.2
8	Union Bank Of India	53371.7
9	Sun T V Network Ltd.	53142.3
10	Reliance Capital Ltd.	51215.7
11	Bharat Electronics Ltd.	50359.2
12	Essar Oil Ltd.	49637.9
13	Cadila Healthcare Ltd.	46721.6
14	Hindustan Petroleum Corpn. Ltd.	42259.0
15	Unitech Ltd.	41706.9
16	Cummins India Ltd.	41377.3
17	Godrej Consumer Products Ltd.	39647.4
18	Exide Industries Ltd.	38655.3
19	Torrent Power Ltd.	38542.3
20	I D B I Bank Ltd.	37934.7
21	Mphasis Ltd.	34486.0
22	Divi' S Laboratories Ltd.	34196.1
23	Engineers India Ltd.	34109.2
24	Aditya Birla Nuvo Ltd.	33529.5
25	Indian Bank	31560.2
26	Tech Mahindra Ltd.	31367.4
27	Suzlon Energy Ltd.	29945.3
28	Lanco Infratech Ltd.	29692.7
29	Marico Ltd.	29664.6
30	Tata Chemicals Ltd.	28855.1
31	Allahabad Bank	28358.4
32	Piramal Enterprises Ltd.	28076.4
33	Glenmark Pharmaceuticals Ltd.	27215.1
34	Corporation Bank	25200.3
35	I R B Infrastructure Developers Ltd.	24438.7
36	United Phosphorus Ltd.	23786.7
37	Housing Development & Infrastructure Ltd.	23456.4
38	Bharat Forge Ltd.	23377.3
39	Thermax Ltd.	22997.2
40	Tata Global Beverages Ltd.	22660.6
41	Motherson Sumi Systems Ltd.	22596.5
42	Andhra Bank	22537.4
43	Indian Hotels Co. Ltd.	21468.8
44	Apollo Hospitals Enterprise Ltd.	21437.8
45	Syndicate Bank	20723.7
46	Jain Irrigation Systems Ltd.	20464.1
47	Biocon Ltd.	20233.0
48	Godrej Industries Ltd.	20129.5
49	Dish T V India Ltd.	20109.7
50	Britannia Industries Ltd.	18697.8

Source: Collected from PROWESS database