

# Influence of Corporate Governance Practices on Firm Performance in India: A Study on Structural Equation Model Analysis

Karpagam Venkatraman<sup>1</sup>, Murugesan Selvam<sup>2</sup> & Raja Mariappan<sup>3</sup>

<sup>1</sup>Ph.D Research Scholar, <sup>2</sup>Professor and Head, Department of Commerce and Financial Studies  
Bharathidasan University, Tiruchirappalli, Tamil Nadu, India

<sup>3</sup>Assistant Professor and Head, Department of Commerce,  
Bharathidasan University Constituent College, Lalgudi, Tamil Nadu, India

**Abstract:** Corporate Governance identifies the role and responsibilities as well as the rights of the company. Investors believe that a company, with good corporate governance, would perform well over a period of time and that effective governance could reduce the risks and attract further investment. The objective of the study is to examine the influence of Corporate Governance Practices on Firm's Performance. The paper analyzed board variables and financial performance of listed companies in the National Stock Exchange (CNX Midcap), using Structural Equation Modeling (SEM) during the study period. The study suggests that the corporate governance mechanism, which included Tobin's Q, Insider Ownership and Board Independence, is crucial for better performance of firms. Therefore, good governance structures must be designed and implemented to improve the quality of monitoring the board decisions and for enhancing the performance of Indian firms. Good governance practices would result in an increase in the shareholders' returns.

**Key Words:** Corporate Governance, Firm's Performance, Tobin's Q, Structural Equation Modeling

**JEL Classification:** G34, G32 and H23

## Introduction

The concept of corporate governance identifies their role and responsibilities as well as their rights in the context of a 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.Knobeber, 1996). Good governance should address all issues that lead to 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 benefit of shareholders, creditors, employees, customers and suppliers, complying with all the legal and regulatory requirements (Merita Maher and Thomas Anderson, 2000). In India, SEBI issued necessary guidelines for effective implementation of Corporate Governance. The details are briefly explained below.

## Main Provisions of Clause 49 of SEBI Guidelines on Corporate Governance

Guidelines	Objective	Impact
Board of Directors	Independence Overseeing	Professionalisation of directorial oversight, transparency of board remuneration and processes.
Audit Committees	Risk Assurance	Improvement of Quality of Financial Oversight and thereby in Firm Performance.
Subsidiary Companies	Capital Protection	Greater oversight of unlisted companies by Shareholders of holding company.
Disclosures	Financial	Better control mechanism being implemented for better

	Transparency	risk management processes.
CEO/CFO Certification	Accountability	Wider Ownership of Financial affairs of the company, leading to better oversight mechanism.

## 1.2 Effectiveness of the Board

The effectiveness of the board, which includes the following, is important for proper implementation of Corporate Governance.

- Board Independence – The degree, to which board members are dependent on the current CEO or organization, is considered key to the effectiveness of board monitoring.
- Board consisting primarily of insiders is considered to be less effective in monitoring because of their dependence on the organization (Sanjeev Gupta, 2013).

## 2. Review of Literature

The research studies already conducted on the firm's performance under different periods are summarized below.

Ahmadu Sandu, et al, (2005) found that the boards, with a higher proportion of outside directors, performed better than other firms. Besides, there was evidence that firms run by expatriate CEOs achieved higher levels of performance than those run by indigenous CEOs. Ekta Selarka (2005) examined the corporate governance issues in emerging economies by studying the role of block holders in influencing the firm value. The study recorded the significant role played by these shareholders, with substantial voting power, in situations when equity holding is less than the share in the hands of promoters. Neeraj Dwivedi and Roszaini Haniffa and Mohammed Hudaib (2006) examined the significant relationship between multiple directorships and market performance. It is found that duality role and managerial shareholdings were significantly associated with accounting performance. Badar Khalid Al Shabibi and Ramesh .G (2011) found that board independence, profitability, firm size and firm risk have an impact on the dividend policy decisions in the UK. The alternative ways for reducing agency cost problem were being explored as the economy in the UK was expanding day by day. Wan Fauziah Wan Yusoff and Idris Adamu Alhaji (2012) tested the structure of the board, particularly in relation to the structure of the decision making process, which needs to be transformed to enable companies to focus on sustaining high performance. The results found that the investors considered only governance practices that were important for their investment decisions. Karpagam .V, et al (2013) studied that the ownership registered insignificant impact on performance measures, which implied that indicators were mainly affected by economic and market conditions rather than ownership concentration. The study suggested that investors, policy makers and stake holders are to be educated about the relationship between ownership structure and the performance of firms. Investors must take appropriate decision on the portfolio, after taking into account these pieces of information. Karpagam .V and Selvam .M (2013) studied the independent director's added values to the firm only under pressure from the stakeholders. Karpagam .V (2013) examined the performance and ownership structures of board of directors. The study indicated that independent directors were effective in monitoring managers and their independence should be strengthened. It is pertinent to mention that there was no conflicting evidence to show that directors destroyed the value of the firm. Velnampy .T and Pratheepkanth .P (2013) investigated the board structure and corporate reporting as the determinants of corporate governance that have a significant impact on ROA, ROE and NP as the measurements of firm performance. The study found that there was positive relationship between the variables of corporate governance and firm's performance.

The above literature provides an overview of different models used to study the Ownership Structure and Corporate Performance from various parts of the world. There were a few comprehensive studies carried out on Indian Firm's Performance and Corporate Governance Practice.

### 3. Statement of the Problem

Corporate Governance is the code of conduct by which the organization manages its corporate and business structure, its culture, policies and the manner in which it deals with various stakeholders. 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 influence the decisions. 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 and effective implementation are essential to protect the interests of all types of stake holders. Besides, the evaluation on implementation of Corporate Governance should be made on a periodical basis to study its influence on the performance. Against this background, the present study entitled, "Influence of Corporate Governance Practices on Firm Performance: A Study on Structural Equation Model Analysis" was undertaken.

### 4. Need for the Study

The firm performance is affected by corporate governance practices of sample companies in India because the success or failure of corporate governance is dependent on the extent to which they are managed efficiently. The study 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 the performance of firm resulting in transparent accountability to shareholders and other stakeholders through appropriate corporate reporting which develops the value of listed companies in India. It also helps the 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 examines the influence of Corporate Governance Practices on Firm's Performance of the CNX Midcap companies listed firms in NSE.

### 6. Hypotheses of the Study

The present study tested the following null hypotheses.

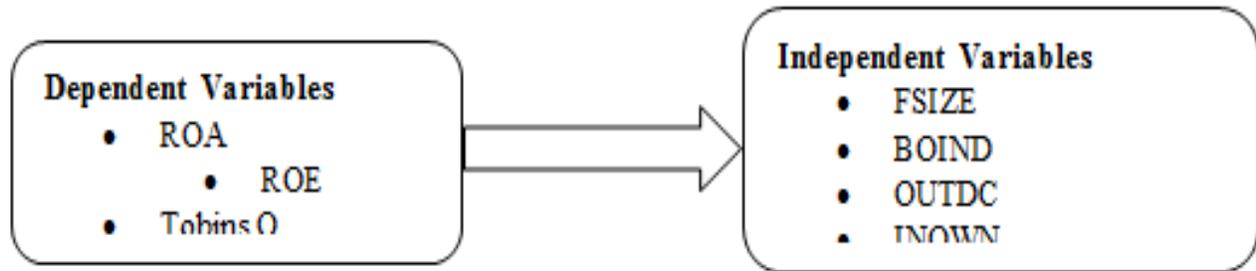
H01: There is no significant relationship between Corporate Governance Practices and Firm's Performance.

H02: There is no impact of Corporate Governance Practices on Firm's Performance.

### Formulation of Model

Figure-1 shows the model on the relationship between Corporate Governance Variables and Firm Performance. This model was developed based on the above hypotheses. The study focused on the relationship between Corporate Governance Variables and Performance of CNX Midcap firms in India.

Figure-1: Model of Corporate Governance Variables and the Firm's Performance



## 7. Methodology of the Study

### 7.1 Sample Selection

The 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 includes 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 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2013.

### 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 Asset (ROA), Earnings Per Share and Tobins Q were also used.
- 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

### a. Structural Equation Modeling

A measure of the amount of change in the variable expected, given a one unit change in the causal variable and no change in any other variable. Although a regression coefficient, this coefficient may not be estimable by multiple regression.

$$X_3 = aX_1 + bX_2 + U_1$$

$$X_4 = cX_1 + dX_2 + eX_3 + U_2$$

Where,

$X_3$  and  $X_4$  are endogenous (i.e., caused),

$X_1$  and  $X_2$  are exogenous (not caused), and

$U_1$  and  $U_2$  are disturbances.

Table-1: The Variables used in the Study

Name of the Variables	Abbreviation	Measure of Variables
Return on Asset	ROA	Return on Asset (Net Income / Total Asset)
Return on Equity	ROE	Return on Equity (Net Profit / Shareholders Equity)
Tobin's Q	Tobin's 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.
Firm Size	FSIZE	Number of years of establishment of the firm
Board Independence	BOIND	Independent directors/Number of directors
Insider Ownership	INOWN	Percentage of promoters or promoter group ownership in firm.
Outside Director	OUTDC	Number of non-executive directors divided by the total number of directors on the board.

### 8. Limitations of the Study

The present study suffers from the following major limitations.

1. The non-availability of complete ownership data of companies was a constraint in the assessment of ownership structure.
2. Many factors influence performance and not all of them could be controlled.
3. To test the governance practice and performance of companies, it may be necessary to collect data for a longer time horizon.
4. This study used the statistical tools which have certain inherent limitations.

### 9. Analysis of Corporate Governance Practices and the Performance of Firms

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

- a) Descriptive Statistics for Corporate Governance Practices and the performance of CNX Midcap Firms.
- b) Cross Correlation for Corporate Governance Practices and the Performance of CNX Midcap Firms.
- c) Structural Modeling Equation (SME) of CNX Midcap Firms.

#### a) Descriptive Statistics for Corporate Governance Practices and the Performance of CNX Nifty Firms

Table-2 reveals the results of Descriptive Statistics for the performance of sample companies listed in CNX Midcap and Corporate Governance Practices during the study period from 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2013. It is to be noted that the performance of sample companies was measured with reference to Return on Asset (ROA), Return on Equity (ROE) and Tobin's Q as these are considered as the important parameters to measure the firms' performance. The mean value of Tobin's Q was 16.4094 while its standard deviation was at 26.9683. The values of ROA (0.7383) and ROE (5.8679) were lower than that of other parameters during the study period. It indicates the fact that the Tobin's Q was a more important factor than the other two parameters (ROA and ROE) as far as the sample companies in India were concerned during the study period (2008 to 2013). Besides, the performance of sample companies was positively skewed in respect of ROA (1.1841), ROE (5.2244) and Tobin's Q (2.2467). The results of Kurtosis (ROA with 4.1112, ROE with 3.2670 and Tobin's Q with 6.8341) were leptokurtic distribution over the level of three. It is understood from the analysis of kurtosis that all the three variables taken for this study were not perfectly skewed in a normal bell curve.

The Table also reveals the results of descriptive statistics in respect of four Corporate Governance Variables, namely, Firm Size (FSIZE), Board Independence (BOIND), Insider Ownership (INOWN) and Outside Directors (OUTDC). The analysis of the Table shows the fact that the mean proportions of Insider Ownership (57.6143) was higher than the values of other three variables - FSIZE (7.6993), BOIND (0.6318) and OUTDC (0.6085). The value of standard deviation for Insider Ownership was 16.3892, followed by Firm Size (2.6997), Board Independence (0.2114) and Outside Directors (0.1531). The highest mean value for INOWN (57.6143) clearly reflects the fact that Board of Directors of most sample companies in India comprised of majority of promoters and directors as members. The number of insider ownership ranged from a minimum value of 16.9840 to a maximum value of 85.4000. According to the Table, the board variables were negatively skewed in respect of FSIZE (-0.1143), BOIND (-1.4898), INOWN (-0.3951) and OUTDC (-1.2436). Besides, the results of kurtosis for two variables, namely, FSIZE (2.3669) and INOWN (2.6087) were platykurtic while two variables, namely, BOIND (4.7975) and OUTDC (6.0165) were leptokurtic during the study period.

#### **b) Cross Correlation for Corporate Governance Practices and the Performance of CNX Midcap Firms**

**Table-3** gives the results of Cross Correlation for Corporate Governance Practices and the Performance of CNX Nifty companies in India for a period from 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2013. An attempt has been made here to study whether there was relationship between the Dependent Variables (namely ROA, ROE and Tobin's Q) and Independent Variables (like FSIZE, BOIND, INOWN and OUTDC). The Table clearly reveals the fact that out of seven variables (28 sets of variables), only three sets were significant and recorded positive relationship between INOWN – Tobin's Q (0.323) and its two tailed p-value was 0.029 at 5% level. Besides, there was strong significant relationship between sets of variables like Tobin's Q – ROA (0.447) and BOIND – FSIZE (0.424) at 1% significant level while their p-values were 0.002 and 0.003 respectively during the study period.

From the analysis of the Table, it is inferred that there was no significant relationship between the corporate governance practices and firms' performance as far as the sample companies were concerned in India. Hence the null hypothesis (NH1), namely, There is no significant relationship between Corporate Governance Practices and Firms' Performance, is rejected. It is to be noted that the other sets of independent variables (25 sets), as given in the Table, were insignificantly correlated at 1% and 5% significant levels. Hence the Null Hypothesis (NH1) in respect of 25 sets of variables (ROE - ROA, Tobin's Q - ROE, FSIZE - ROA, FSIZE - ROE, FSIZE - Tobin's Q, BOIND - ROA, BOIND - ROE, BOIND - Tobin's Q, INOWN - ROA, INOWN - ROE, INOWN - FSIZE, INOWN - BOIND, OUTDC - ROA, OUTDC - ROE, OUTDC - Tobin's Q, OUTDC - FSIZE, OUTDC - BOIND and OUTDC – INOWN) was accepted during the study period. It is suggested that shareholders may carefully take their investment decisions after taking into consideration the above information.

### c) Analysis of Structural Modeling Equation (SME) of CNX Midcap Firms

Table-4 shows the overall Structural Equation Modeling (SEM) for sample companies during the study period from 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2012. It is to be noted that the analysis of unstandardized regression coefficient clearly reveals the amount of change in the dependent or mediating variable for each one unit change in the independent variable.

According to the results of Structural Equation Modeling (SEM) for sample companies as given in **Table-4**, the Critical Ratio was the highest for the factor of Outside Directors on Tobin's Q. The probability value of critical ratio (2.416) was absolute, which is less than 0.05. In other words, the regression weight for Tobin's Q in the prediction of Outside Directors (OUTDC) is significantly different from zero at 5% level (two-tailed test). It is to be noted that in the case of the next highest set (INOWN on Tobin's Q, BOIND on ROE and BOIND on Tobin's Q) its critical ratio was 1.095, 0.262 and 0.050 (absolute value) which is less than 0.053, 0.001 and 0.007 at 1% and 5% significant level.

It is observed that sample variables like OUTDC on ROA and FSIZE on Tobin's Q received negative critical values (-0.106 and -0.778) and the absolute value is less than 0.001 while the other set of variables (FSIZE on ROA, BOIND on ROA, INOWN on ROA, FSIZE on ROE, INOWN on ROE, OUTDC on ROE) were greater at 5% significant level. . The regression weights for ROA and ROE were insignificant at 1% level. It indicates the fact that the OUTDC on Tobin's Q was a more important variable than the other sample variables (FSIZE, BOIND and INOWN) considered for this study.

The results of Structural Equation Modeling (SEM) model which is fit to study are shown in Table-5. It is to be noted that the values of all the variables were less than the suggested value of 0.05. According to the Table, the value of chi square test was 23.410, with 9 degrees of freedom and a probability of less than 0.005 ( $p < 0.001$ ). This reveals the fact that the data fit the hypothesized model. The result of Goodness of Fit Index (GFI) reveals the value of 1.000 at 90% confidence intervals (greater than 0.90) while the value (0.001) of Root Mean Square Residual (RMR) was less than 10% (less than 0.10) significant level. It is clearly understood that the values of CFI and RMSE were good. Thus there was goodness of fit. Hence the null hypothesis (NH2), namely, - There is no impact of Corporate Governance Practices on Firms' Performance, is rejected for the period from 2008 to 2013.

Figure-2 clearly displays the results of Structural Equation Modeling (SEM) in respect of model on the relationship between Corporate Governance Variables and the Performance of sample CNX Midcap companies in India from 2008 to 2013. It is understood from the Figure that only two sets of variables, namely Board variables on ROE and Tobin's Q were significant at 1% level. The analysis of ROA shows that only one sample variable, namely, OUTDC (0.001) was significant at 1% level. The other three variables, namely, Firm Size (0.143), Board Independence (0.118) and Insider Ownership (0.443) were insignificant (values were greater than 0.001). Investors may carefully note this information and take investment decisions accordingly.

## 10. Suggestions of the Study

In the light of the analysis of this study and discussion with experts and corporate officials, the following suggestions are offered for the effective implication of corporate governance in India.

1. It is suggested that the role and responsibilities of directors on various committees (such as Ownership Structure, Directors Remuneration, Shareholder Information and Grievances Committee of Companies) have to be clearly defined so that the performance of firms in India would be enhanced in the long run.
2. The market value of Indian firms may grow with a greater proportion of independent directors in the board. However, the promoters who are the owners and controllers of Indian companies,

negatively impact the performance of independent directors. Hence the policy makers have to try to find a suitable board model for Indian companies and define the role of independent directors.

3. Policy makers and other stake holders may take appropriate steps to improve the effective implementation of corporate governance in India. The retail investors may note this information while investing their hard earned money in the stocks of the sample firms.
4. The investment opportunities of firms in these markets that raised the incentives of controlling shareholders to expropriate minority shareholders. The large separation between ownership and control rights that arises from the use of pyramidal ownership structure in these markets suggests that insiders have both the incentives and the ability to engage in expropriation.

## 11. Discussion and Conclusion

The present study investigated the influence of corporate governance practices on the performance of sample companies in India. The results of this study confirmed that good corporate governance is an important factor in determining and enhancing the firm performance. Many business failures are linked to the board's inability to enhance the overall performance of firms in an effective and consistent manner. The correct structure of the board for best decision making needs to be in place and this would enable the companies to focus on sustaining high performance in the face of a rapidly changing business atmosphere. Therefore, good governance structures must be designed and implemented to improve the quality of monitoring the board decisions and for enhancing the performance of Indian firms. Good Governance Practices would result in an increase in the shareholders returns.

According to the results of earlier research studies undertaken by Agrawal .A & Knoeber, C. R (1996), Badar Khalid Al, Shabibi, & Ramesh, G. (2011), Wan Fauziah Wan Yusoff, & Idris Adamu Alhaji (2012) and Karpagam.V. & Selvam.M (2013), there was no significant relationship between Corporate Governance Practices and Firm's Performance. In the same way, the present study also confirmed the findings of these studies. However, there are few other studies undertaken earlier by Ahmadu Sandu, Aminu S Mikailu, & Tukur Garba (2005), Maria Maher, & Thomas Indesson (2000) and Velnampy .T & Pratheepkanth .P (2013), which found that there was significant relationship between Corporate Governance Practices and Firm's Performance. The present study did not confirm the findings of these studies.

## 12. Scope for Further Research

The following are pointers toward further research.

1. The study with similar objectives could be made with reference to other indices.
2. Similar research study could be made for longer period.
3. A study could be made with other variables like Audit Committee, CEO Duality, Remuneration, Corporate Reporting, Leadership Structure etc.,
4. Corporate Governance variables could be calculated by using Score Card Method.
5. A research study may be conducted in India to investigate the impact of Corporate Governance Practices/Factors on Ownership Structure.

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Table-2: Analysis of Descriptive Statistics for Corporate Governance Practices and the Performance of CNX Midcap Firms from 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2013

	ROA	ROE	TOBIN'S Q	FSIZE	BOIND	INOWN	OUTDC
Mean	0.7383	5.8679	16.4094	7.6993	0.6318	57.6143	0.6085
Std. Dev.	0.6475	12.5480	26.9683	2.6997	0.2114	16.3892	0.1581
Maximum	2.8342	82.8368	102.1296	13.1667	0.8950	85.4000	0.8604
Minimum	0.0350	4.1881	0.1175	1.6667	0.0000	16.9840	0.0000
Skewness	1.1841	5.2244	2.2467	-0.1645	-1.4898	-0.3951	-1.2436
Kurtosis	4.1112	3.2670	6.8341	2.3669	4.7975	2.6087	6.0165

**Source:** Collected from Prowess Database and Computed using E-Views (6.0)

**Note:** ROA- Return on Asset, ROE-Return on Equity, FSIZE-Firm Size, BOIND-Board Independence, INOWN-Insider Ownership, OUTDC-Outside Directors.

Table-3: Analysis of Cross Correlation for Corporate Governance Practices and the Performance of CNX Midcap Firms from 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2013

		ROA	ROE	TOBIN'SQ	FSIZE	BOIND	INOWN	OUTDC
ROA	Pearson Correlation	1.000						
	Sig. (2-tailed)	.						
ROE	Pearson Correlation	-0.038	1.000					
	Sig. (2-tailed)	0.800	.					
TOBIN'SQ	Pearson Correlation	<b>0.447**</b>	0.086	1.000				
	Sig. (2-tailed)	0.002	0.570	.				
FSIZE	Pearson Correlation	0.150	0.228	0.004	1.000			
	Sig. (2-tailed)	0.321	0.127	0.981	.			
BOIND	Pearson Correlation	0.228	0.030	0.112	<b>0.424**</b>	1.000		
	Sig. (2-tailed)	0.127	0.843	0.459	0.003	.		
INOWN	Pearson Correlation	0.141	-0.078	<b>0.323*</b>	0.160	0.256	1.000	
	Sig. (2-tailed)	0.351	0.605	0.029	0.287	0.086	.	
OUTDC	Pearson Correlation	-0.036	-0.102	0.100	0.009	0.084	0.158	1.000
	Sig. (2-tailed)	0.812	0.498	0.509	0.955	0.568	0.294	.

\*\*Correlation is significant at the 0.01 level (2-tailed), \*Correlation is significant at the 0.05 level (2-tailed)

Sources: Collected from Prowess Corporate Database and Computed using SPSS (16.0)

Table-4: Results of Structural Equation Modeling (SEM) for Analysis of Sample Companies from 1<sup>st</sup> January 2003 to 31<sup>st</sup> December 2012

Factor	Estimate	S.E	C.R	P
FSIZE <-----ROA	0.870	0.594	1.465	0.143
BOIND<-----ROA	0.074	0.047	1.561	0.118
INOWN<-----ROA	-0.027	0.036	-0.767	0.443
OUTDC<-----ROA	-0.378	3.549	-0.106	<b>0.001*</b>
FSIZE <-----ROE	0.053	0.031	1.726	0.084
BOIND<-----ROE	0.001	0.002	0.262	<b>0.001*</b>
INOWN<-----ROE	-0.002	0.002	-0.822	0.411
OUTDC<-----ROE	-0.141	0.183	-0.771	0.441
FSIZE <-----Tobin's Q	-0.011	0.014	-0.778	<b>0.005*</b>
BOIND<----- Tobin's Q	0.000	0.001	0.050	<b>0.007**</b>
INOWN<----- Tobin's Q	0.001	0.001	1.095	<b>0.053**</b>
OUTDC<----- Tobin's Q	0.206	0.085	2.416	<b>0.016**</b>

Sources: Collected from Prowess Corporate Database and computed using AMOS-20 Software

Note: \*significant at 1% level, \*\*significant at 5% level

Table-5: Results of Structural Equation Modeling (SEM) Model Fit for the Corporate Governance Variables and the Performance of CNX Nifty Firms from 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2013

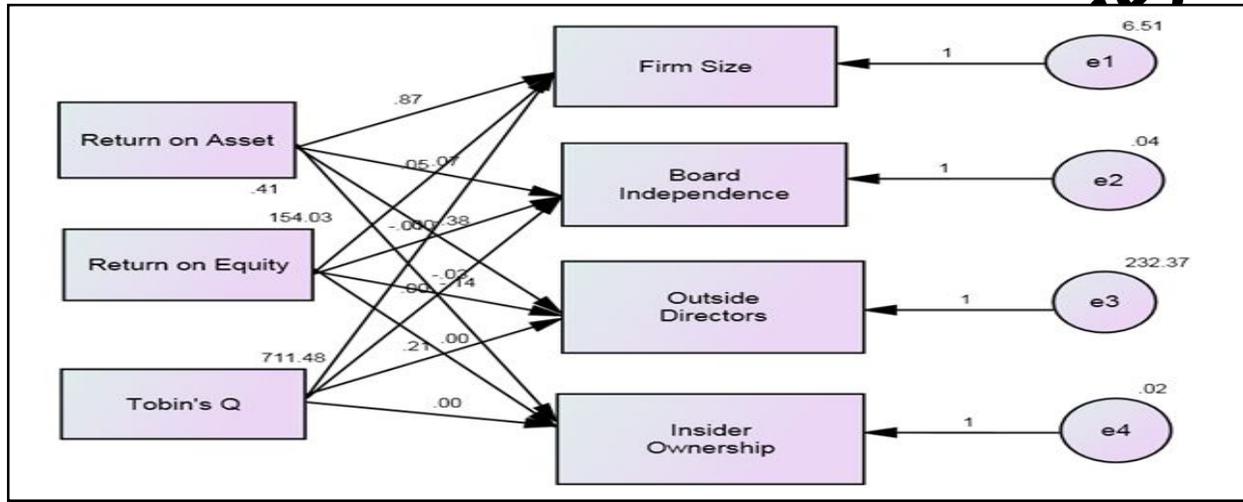
Model Fit	Value
CMIN (Chi-square test)	23.410

P-value	0.005***
GFI	1.000
RMR	0.001

Source: Computed from Table-4 using Amos-20 Software

Note: \*\*\* significant at 1% level

Figure-2: Relationship between Corporate Governance Variables and Performance of Firms from 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2013



Source: Computed from Table-4 using Amos-20 Software

Annexure-1

Name of the Sample CNX Midcap Companies in NSE as on 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2013

S.No	List of the Companies	S.No	List of the Companies
1	A B Ltd.	26	I R B Infrastructure Developers Ltd.
2	Adani Power Ltd.	27	Indian Bank
3	Aditya Birla Nuvo Ltd.	28	Indian Hotels Co. Ltd.
4	Allahabad Bank	29	Jain Irrigation Systems Ltd.
5	Andhra Bank	30	Lanco Infratech Ltd.
6	Apollo Hospitals Enterprise Ltd.	31	Marico Ltd.
7	Bharat Electronics Ltd.	32	Motherson Sumi Systems Ltd.
8	Bharat Forge Ltd.	33	Mphasis Ltd.
9	Biocon Ltd.	34	N H P C Ltd.
10	Britannia Industries Ltd.	35	Oil India Ltd.
11	Cadila Healthcare Ltd.	36	Oracle Financial Services Software Ltd.
12	Corporation Bank	37	Piramal Enterprises Ltd.
13	Cummins India Ltd.	38	Power Finance Corpn. Ltd.
14	Dish T V India Ltd.	39	Reliance Capital Ltd.
15	Divi'S Laboratories Ltd.	40	Sun T V Network Ltd.

16	Engineers India Ltd.	41	Suzlon Energy Ltd.
17	Essar Oil Ltd.	42	Syndicate Bank
18	Exide Industries Ltd.	43	Tata Chemicals Ltd.
19	G M R Infrastructure Ltd.	44	Tata Global Beverages Ltd.
20	Glenmark Pharmaceuticals Ltd.	45	Tech Mahindra Ltd.
21	Godrej Consumer Products Ltd.	46	Thermax Ltd.
22	Godrej Industries Ltd.	47	Torrent Power Ltd.
23	Hindustan Petroleum Corpn. Ltd.	48	Union Bank Of India
24	Housing Development & Infrastructure Ltd.	49	Unitech Ltd.
25	I D B I Bank Ltd.	50	United Phosphorus Ltd.

Source: www.nseindia.com

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