Acknowledgements

First and foremost, I would like to thank Ma Durga. In the process of putting the thesis together, I realized how true this gift of writing is for me. You have given me the power to believe in my passion and pursue my dreams. I could never have done this without the faith I have in you, Ma Durga.

Sincere thanks to Prof. Aditya Shastri, the Hon'ble Vice Chancellor, Banasthali Vidyapith for his kind acceptance of the application and permitting me to enroll into the doctoral program.

I would like to express my special appreciation and thanks to my Faculty Guide Professor Dr. Harsh Purohit, you have been a tremendous mentor and guide for me. I would like to thank you for encouraging my research and for allowing me to grow as a research scientist. I have words of my special appreciation for my Faculty Co Guide Professor Dr. Monika Chopra for guiding me and giving a clear vision to my thoughts on complex issues involved in my research work. Your advice on both research as well as on my career has been priceless.

Further, I would also like to thank all Committee Members, for serving as my committee members even at hardship and encouraging me. I also want to thank you for letting my defense be an enjoyable moment, and for your brilliant comments and suggestions, thanks to you.

The researcher expresses her gratitude to Research Section, Banasthali Vidyapith, for their generous support in all administrative works. The researcher did not face any administrative hassle throughout her research.
The researcher would like to express a special thanks to all her friends who have always extended their help and support for this research. The long discussions with them have always helped to polish and refine the work.

Special thanks to my family. Words cannot express how grateful I am to my mother and father, your prayers for me was what sustained me thus far. I would also like to thank you for supporting me in writing, and motivating me to strive towards my goal without which my research work might not have been possible.
Executive Summary

The corporate governance has been a growing area of management research. A comprehensive review of literature reveals that empirical work is mostly focused on the impact of corporate governance on firm’s performance or examines the influence of ownership structure on firm value (Claessens, 2002). However, relationship between corporate governance and corporate finance variables like capital structure, cost of capital and dividend policy/ payout has not been fully explored. Only few studies discuss the mentioned relationship. Berger (1997), Friend and Lang (1988), Wen (2002) and Abor (2007) discuss the influence of corporate governance on the capital structure decisions of firms for developing and emerging markets. But no such study has been conducted to investigate the relationship between corporate governance and corporate finance variables like capital structure, cost of capital and dividend policy/payout for Indian listed companies. Therefore, the thesis aimed at analysing the links between corporate governance quality and the capital structure, cost of capital and dividend policy with specific reference to India for a time frame between 2002 till 2014. The yearly data of BSE SENSEX Index companies was used for a period covering thirteen years with the six specific research objectives including the examination of the present status/Pattern of corporate governance in the companies, studying the effect of corporate governance on capital structure of companies, studying the effect of corporate governance on dividend policies of the companies, identifying and establishing link between corporate governance, capital structure, corporate dividend policies and cost of capital individually and collectively and finally to identify and establish link between corporate governance and firms accounting performance.
and market performance. The data was collected from Capitaline and Prowess Software. In case of missing data, the information was collected from various academic publications, journals, newspapers, government publications, annual reports and company websites.

The analysis of data was done using econometric methods including mean, median, mode, standard deviation, correlation, Student t-test, Panel Regression, Structural Equation Modelling, and Confirmatory Factor Analysis (CFA) etc.

The results of the analysis of trends in corporate governance variables including average Board Size, Number of outside Directors, Proportion of outside Directors and Board Meetings held during the period 2002-2014 for the sample firms indicated board size almost constant and large in size which was due to large size of the corporations.

In case of average, outside directors and proportion of outside directors during the sample period (Average OD& Average PO) almost doubled between 2002 & 2005 and then further stabilized between 45 to 47 % from 2007 onwards. The average Board meetings of the sample varied between 4 to 6 meetings during the period 2002-2014 along with that the highest numbers of Board meetings on an average were conducted from a period of 2005 till 2007. On an average, the Board size of listed Indian firms is 4 to 5 members. Further, it was seen that most of the firms had less number of outside directors in their firms in 2002. It was observed at the time of data collection also that some companies had less outside directors till the end of year 2002, even after the mandatory guidelines of having at least 50% independent directors by Kumar Mangalam Committee.
This shows that compliance with the guidelines or listing agreements left a lot of scope for improvement.

After 2005, more strict regulations were adopted and companies were even threatened for delisting if they did not add independent directors to its board to meet the minimum stipulated norms. As a result, there was remarkable increase in the proportion of outside directors of the companies. For most of the companies, this proportion increased to 50% and for some companies, it even reached more than 50%. These independent directors were added to the Board under pressure from the stakeholders on grounds of bringing in expert and diverse opinion so as to improve decision-making process. By the end of the year 2006, almost all the firms had more than minimum 50% outside directors. Along with that, this addition of outside directors was accompanied by the removal of a director in some other category; as a result, a decline in the current selected variables in 2006 was observed. After 2006, most of the firms were able to meet the mandatory requirements of maintaining the minimum amount of independent members which can be seen though stability of the indicators after 2007.

In case of analysis of the trends in the ownership patterns in terms of the percentage shares held by promoters and non-promoters, the results reveal that on an average there was an increase in promoters shares for 8 companies along with that percentage shares held by the promoters declined for 10 companies out of the sample. In case of Tata motors and Reliance industries, the company experienced both increase and decrease in promoters share-holding over a period of 13 years. Though the changes were observed in the pattern of ownership of various stakeholders, whether such changes influenced
the dividends, level of governance, capital structure etc. were studied in the consecutive chapters. In case of the results pertaining to the second main objective, the investigation of evaluating the relationship between capital structure and corporate governance variables was conducted by taking both Short and Long term Debt Equity ratio as dependent variables and a set of corporate governance variables such as board size, independent board members, number of board meetings held etc. and control variables for the purpose of analysis.

From the analysis of the basic properties of data, it was found that the data was not normal and presence of greater values compared to the mean values was observed. Further, in case of Kurtosis, the results indicate high peaks in the data. Furthermore, similar pattern was reflected if the standard deviation of the variables were noticed. Certain variables like Closing price, Dividend Rate, PBDT had a very high standard deviation reflecting high variability in these measures. The results of correlation analysis show inverse relationship between the number of board meetings and percentage of outside directors and positive relationship between board size and proportion of outside directors. The results on the relationship between number of board members and other independent variable indicate significant relationship among six of the 24 variables namely Non-promoter Corporate Bodies share holdings, Closing price on BSE, Non-promoter FII - Shares holdings, Non-promoter Individuals share holdings, Institutions as Non-promoter share holdings and Promoters shares. The relationship was not significant in case of other variables. The results of the correlation matrix also show inverse relationship between Closing price on BSE, Debt Equity, Non-promoter FII - Shares held,
Non-promoter Individuals – Shares and Non-promoter Institutions – Shares and number of board members. It was also found that there was a significant positive correlation between Shares held by Indian Promoters and board size. Further, negative relationship between Profit before dividend tax and Independent member in board was observed. Furthermore, the analysis of correlation coefficient between Debt Equity ratio (proxy of capital structure) and other explanatory variables, determined the significant relationship for Dividend (DIV), Earnings per Share (EPS), Fixed assets (FA), Individuals as Non Promoters (INDNP), Individuals as Promoters (INDP), Institutions as Non Promoters (INSTNP), Long term Debt Equity Ratio (LDE), Mutual funds as Non Promoters (MFNP), Non Promoters (NP), Profit Before Depreciation Tax Margin (PBDTM), Promoters ownership (PROM), Return on Capital Employed (ROCE) and return on Net Worth (RONW). The relationship was found to be positive in case of INDNP, INSTNP, LDE and NP; and inverse for rest of the variables. In case of correlation between LDE with other variables, a significant correlation between NP, PROM, ROCE and RONW was found.

Taking a step further, the same relationship was studied using panel data framework by taking corporate governance variables as dependent variable followed by capital structure variables and other control variables. The results indicate significant relationship between Board size (BS), Number of Board Meetings (BM), Promoters holdings (PROM), Non Promoters holdings (NP), Sales and Earnings Per Share (EPS) with capital structure. The results also indicate inverse relationship between PROM, NP, RONW and EPS with dependent variable. Further, positive relationship in case of BS and BM was also established. In case of long term debt equity ratio, a significant positive
relationship with Board Size and sales of the sample firms was found. Along with that, the results also indicate inverse relationship with EPS and number of board members. In the same line, when the relationship between long term Debt Equity ratio and individual categories of ownership structure were studied, it was found that relationship between INSTNP and long term debt equity ratio is positive. Also, an inverse relationship was found in case of Mutual funds as Non Promoters (MFNP) and Foreign Institution Investors as Non Promoters (FIINP).

Overall, the results provide evidence that capital structure does influences the corporate governance variables and ownership structure variables as significant relationship among the dependent and Independent variables were observed. Finally, the last objective was approached wherein the relationship between corporate governance, dividend and firm performance variables was explored. For measuring financial performance, both accounting and market measures of firm performance were considered. In case of corporate governance measures, an index of corporate governance indicators including the number of independent directors, total board members, number of board meetings held, percentage shares held by promoters and various other indicators was created. For creation of index, Principal component analysis was used where in the variables which were highly correlated were removed. The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy was found to be .810 and value of Bartlett's Test of Sphericity was 3077.141 and the results were statistically significant indicating data to be fit for pattern detection.

Further, the results of principal component analysis indicate four main factors having eigen values more than 1 .The four components in total explained
around 81 percent of the total variability. Further, component 1 explained around 45% of the variability followed by component 2, 3 and 4 explaining 16, 12 and 8 % of the variations. In case of first factor, the main variables are Non promoters share (NP), Indian promoters (indp), institution as non-promoters (instnp), shares held by banks as non-promoters (BankNP), Foreign Institutional Investors as non-promoters (FIINP) and Individuals as Non-promoters (Indnp). The second factor consisted of three components namely shares held by Mutual funds as Non Promoters (MFNP), Non institutions as Non Promoters (Nonninstnp) and Corporate bodies as Non promoters (CBNP). The third factor had board size (BS) and Independent members on board (IM) as main variables and the fourth factor comprising of number of board meetings in each year (BM) and Promoters shares held (prom).

The estimated correlation coefficients among the selected indicate significant correlation among corporate governance index variable (CGAGG) and Closing Price of share (CP), Closing Price in percentage (CPM), earning per share (EPS), Long run earning per share (EPS1), Long term debt equity ratio (LDE), Return on capital employed (ROCE) and return on net worth (RONW). The relationship were found to be positive for all the variables and were significant excluding Long term debt equity ratio (LDE) indicating higher governance leads to lower amount of debt in a company and vice versa. Further, in case of both accounting as well as market performance measures, a positive relationship with the CG score was observed. For the major results of this chapter, the least square method in panel framework was applied to unravel the relationship among corporate governance variables and firm characteristic variables. The relationship with the composite variable i.e.
average of the four factors of corporate governance and four factors individually was tested. In case of first model, corporate governance score was taken as dependent variable and financial performance variables were taken as independent variables along with control variables like size, capital structure, dividend payout, sales of the firm. The results showed significant relationship between corporate governance score and four firm performance variables i.e. Return on Capital Employed (ROCE), Return on Net worth (RONW), Long term Earnings Per Share (EPS01) and Earnings Per Share (EPS). Further, the relationships were positive for all variables except for EPS01. Furthermore, the relationship was not significant for other independent variables like PBDTM, CPM etc.

In case of individual components of corporate governance index, the results indicate significant relationship among three variables i.e. Return on Capital Employed (ROCE), RONW and EPS. Further, the relationship is inverse in case of RONW. In case of other variables, the relationship was not statistically significant. In case of the other three models, the relationship for RONW, Debt Equity ratio (DE) for second model was found to be significant. Fixed assets (FA), PBDTM (adjusted gross profit/sales)*100), CPM for third and EPS, DIV for the fourth model were found to have significant relation.

Overall, the present study could not establish link between governance and dividend policy of the firm, however in case of firm performance, significant relationship was established, as indicated by the results.
List of Research Publications

Publications:

i. **Corporate Governance and Firm Characteristic** - Published in Journal "Innovative Research in Engineering & Management" (IJIREM) Volume-03, Issue-03, May-2016 edition


iii. **Trends and Patterns in Corporate Governance Indicators: Indian Experience** – Accepted for publication in "International Journal of Society and Humanities" (IJSH)ISSN-2319-2070/VOL 8/2016 Jan- June 2016
# TABLE OF CONTENTS

## 1 INTRODUCTION

1.1 **NEED OF CORPORATE GOVERNANCE**: ......................................................... 26  
1.2 **INDIAN SCENARIO OF CORPORATE GOVERNANCE** .............................. 27  
1.3 **SIGNIFICANCE OF CORPORATE GOVERNANCE IN TRANSITION PERSPECTIVE**...... 29  
  
  1.3.1 **Foreign Investment Promotion** .............................................................. 30  
  1.3.2 **Minority Shareholder’s Right** ............................................................... 30  
  1.3.3 **In Case of Social Responsibility** ............................................................ 31  
  1.3.4 **Growth in quantity of scams:** ............................................................... 31  
  1.3.5 **Minimization of Risk** ........................................................................... 31  
  1.3.6 **Acceptance through public** ................................................................. 32  
1.4 **CONCLUSION** ......................................................................................... 32  
1.5 **STATEMENT OF THE PROBLEM** ............................................................ 34  
1.6 **AIM OF THE STUDY** .............................................................................. 35  
1.7 **RESEARCH OBJECTIVES** ....................................................................... 35  
1.8 **OUTLINE OF THE THESIS** ...................................................................... 36  

## 2 LITERATURE REVIEW

2.1 **OVERVIEW OF THE CHAPTER** ................................................................. 38  
2.2 **CORPORATE GOVERNANCE AND CAPITAL STRUCTURE** ....................... 39  
2.3 **CORPORATE GOVERNANCE AND FIRM CHARACTERISTICS** .................. 42  
  
  2.3.1 **Corporate governance and Board Size** ............................................... 42  
  2.3.2 **Corporate governance and Board Composition** ................................. 45  
  2.3.3 **Corporate governance and Board Activity Intensity** ............................ 47  
  2.3.4 **Corporate governance and Non-executive directors and capital structure:** ................................................................. 49
2.3.5 Corporate governance and Ownership concentration ...................... 50
2.3.6 Corporate governance and Institutional Ownership ....................... 51
2.3.7 Corporate Governance and Corporate Dividend Policy .................... 55
2.3.8 Corporate governance and Firm Performance ................................. 55
2.4 INDIAN STUDIES ............................................................................. 68
2.5 KEY OBSERVATIONS AND RESEARCH GAP .................................... 75

3 RESEARCH DESIGN AND METHODOLOGY ....................................... 78
3.1 OVERVIEW OF THE CHAPTER ............................................................. 78
3.2 OBJECTIVES OF THE STUDY ............................................................... 78
3.3 RESEARCH OBJECTIVES .................................................................. 78
3.4 RESEARCH METHODOLOGY ............................................................... 79
  3.4.1 Sample ......................................................................................... 79
  3.4.2 Study period ................................................................................. 79
  3.4.3 Data collection ............................................................................. 79
  3.4.4 Tool of Data analysis ................................................................. 80
3.5 RESEARCH HYPOTHESES OF THE STUDY ....................................... 80
  3.5.1 Estimation Techniques .............................................................. 81

4 PRESENT STATUS/ PATTERN OF CORPORATE GOVERNANCE IN INDIA 84
4.1 OVERVIEW OF THE CHAPTER ............................................................. 84
4.2 TRENDS IN BOARD STRUCTURE ....................................................... 84
4.3 OWNERSHIP STRUCTURE OF THE FIRMS ...................................... 94
4.4 DISCUSSION ..................................................................................... 95

5 CORPORATE GOVERNANCE, CAPITAL STRUCTURE AND COST OF CAPITAL .......................................................... 107
5.1 OVERVIEW OF THE CHAPTER ........................................................ 107
List of Tables

TABLE 1 BOARD CHARACTERISTICS IN DIFFERENT COMPANIES OF BSE SENSEX .....86

TABLE 2 AVERAGE CG VARIABLES IN DIFFERENT COMPANIES OF BSE SENSEX OVER
THE YEARS ........................................................................................................................................89

TABLE 3 CORRELATION AMONG BOARD CHARACTERISTICS VARIABLES IN DIFFERENT
COMPANIES OF BSE SENSEX ..................................................................................................90

TABLE 4 DESCRIPTIVE STATISTICS OF VARIABLES .........................................................110

TABLE 5 CORRELATION MATRIX I .....................................................................................111

TABLE 6 CORRELATION MATRIX II ....................................................................................116

TABLE 7 CORRELATION MATRIX III ....................................................................................119

TABLE 8 RESULTS OF PANEL OLS FOR DETERMINING THE EFFECT OF CORPORATE
GOVERNANCE ON CAPITAL STRUCTURE OF COMPANIES .............................................122

TABLE 9 PANEL OLS MODEL SUMMARY ........................................................................122

TABLE 10 PANEL OLS FOR INDIVIDUAL CATEGORIES .....................................................125

TABLE 11 MODEL SUMMARY II ............................................................................................126

TABLE 12 PANEL OLS MODEL III, LONG TERM DEBT EQUITY RATIO AS DEPENDENT
VARIABLE ..................................................................................................................................127

TABLE 13 MODEL SUMMARY III ........................................................................................127

TABLE 14 PANEL OLS MODEL IV ........................................................................................128

TABLE 15 MODEL SUMMARY IV ..........................................................................................129

TABLE 16 PANEL OLS MODEL V ........................................................................................129
TABLE 17 MODEL SUMMARY MODEL V ............................................................... 130
TABLE 18 PANEL OLS MODEL VI ...................................................................... 130
TABLE 19 MODEL SUMMARY VI ...................................................................... 131
TABLE 20 DESCRIPTIVE STATISTICS OF THE CORPORATE GOVERNANCE MEASURED BY INDIVIDUAL FACTORS ........................................................................... 134
TABLE 21 CORRELATION MATRIX ..................................................................... 135
TABLE 22 KMO AND BARTLETT’S TEST .............................................................. 143
TABLE 23 TOTAL VARIANCE EXPLAINED .......................................................... 144
TABLE 24 PATTERN MATRIX A ......................................................................... 145
TABLE 25 STANDARDIZED REGRESSION WEIGHTS: (GROUP NUMBER 1 - DEFAULT MODEL) ................................................................................................................. 147
TABLE 26 RESULTS OF CORRELATION ANALYSIS .............................................. 148
TABLE 27 CORRELATION AMONG DIFFERENT VARIABLES .............................. 148
TABLE 28 PANEL OLS AGGREGATE SCORE AS DEPENDENT VARIABLE .......... 150
TABLE 29 PANEL OLS, FIRST COMPONENT AS DEPENDENT VARIABLE CG1 .... 151
TABLE 30 OLS RESULTS, THIRD COMPONENT AS DEPENDENT VARIABLE ........ 154
TABLE 31 SUMMARY OF FINDINGS .................................................................. 158

19
LIST OF FIGURES

FIGURE 1 TRENDS OF THE SIZE OF BOARD, OUTSIDERS’ PROPORTION, BOARD MEETINGS FROM 2002-2014 ................................................................. 91

FIGURE 2 AVERAGE PROPORTION OF SIZE OF BOARD, OUTSIDERS’ PROPORTION, BOARD MEETINGS IN DIFFERENT SECTORS OF MANUFACTURING INDUSTRY DURING THE PERIOD 2002-2014 ........................................ 91

FIGURE 3 SHARE HOLDINGS OF PROMOTERS/NON PROMOTERS IN SELECTED STOCKS FROM 2012-14 ................................................................. 96

FIGURE 4 FOUR IDENTIFIED FACTORS, METHOD CFA AMOS ........................................ 146
List of Appendices

APPENDIX 1 LIST OF SAMPLE COMPANIES .................................................. 196
**LIST OF ABBREVIATIONS AND ACRONYMS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI</td>
<td>AUDIT COMMITTEE INDEPENDENCE</td>
</tr>
<tr>
<td>BANKNP</td>
<td>SHARES HELD BY BANKS AS NON PROMOTERS</td>
</tr>
<tr>
<td>BI</td>
<td>BOARD INDEPENDENCE</td>
</tr>
<tr>
<td>BM</td>
<td>BOARD MEETINGS</td>
</tr>
<tr>
<td>BS</td>
<td>BOARD SIZE</td>
</tr>
<tr>
<td>BSE</td>
<td>BOMBAY STOCK EXCHANGE</td>
</tr>
<tr>
<td>CBNP</td>
<td>CORPORATE BODIES AS NON PROMOTERS</td>
</tr>
<tr>
<td>CFA</td>
<td>CONFIRMATORY FACTOR ANALYSIS</td>
</tr>
<tr>
<td>CGAGG</td>
<td>CORPORATE GOVERNANCE INDEX VARIABLE</td>
</tr>
<tr>
<td>CP</td>
<td>CLOSING PRICE OF SHARE</td>
</tr>
<tr>
<td>CPM</td>
<td>CLOSING PRICE IN PERCENTAGE</td>
</tr>
<tr>
<td>DE</td>
<td>DEBT EQUITY RATIO</td>
</tr>
<tr>
<td>DIV</td>
<td>DIVIDEND</td>
</tr>
<tr>
<td>FA</td>
<td>FIXED ASSETS</td>
</tr>
<tr>
<td>EPS</td>
<td>EARNINGS PER SHARE</td>
</tr>
<tr>
<td>EPS01</td>
<td>LONG TERM EARNINGS PER SHARE</td>
</tr>
</tbody>
</table>