

## Chapter V

# Impact of Corporate Governance on Firms' Performance in Indian Capital Market- Analysis and Results

### INTRODUCTION

In the previous chapters, the study has seen that corporate governance scores and analysis of firm performance variables of different companies in the study period. In this chapter, the study shows the relationship of corporate governance and firm performance.

### OBJECTIVE

To examine the impact of corporate governance on firms' performance in Indian capital market.

### RESEARCH METHODOLOGY

Sample selection, data sources, variables descriptions, time of study etc. of CG and firm performance have already discussed in previous chapters.

### MODEL OF RESEARCH AND STATISTICAL TOOLS:

For fulfillment of third objective the study used Karl Pearson correlation and multiple regression models and the study therefore specifies its models:

$$Y_{it} = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \beta_4 X4_{it} + \mu_{it} \quad \dots (1)$$

Where;  $Y_{it}$  = M\_CAP (Dependent variable) for firm i at time t.

$X1_{it}$  represents BD for firm i at time t

$X2_{it}$  represents CGCD for firm i at time t.

$X3_{it}$  represents DTT for firm i at time t

$X4_{it}$  represents GD for firm i at time t.

$$Y_{it} = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \beta_4 X4_{it} + \mu_{it} \quad \dots (2)$$

Where;  $Y_{it}$  = MP i.e. adjusted closing market price of equity shares of the firm at the end of the last fiscal period according to companies financial years ending (dependent variable) for firm i at time t. Others variables Remain same as equation 1.

$$Y_{it} = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \beta_4 X4_{it} + \mu_{it} \quad \dots (3)$$

Where  $Y_{it}$  = PB i.e. market price to book value per equity share (dependent variable) for firm i at time t. Others variables Remain same as equation 1; and  $\mu_{it}$  =Error term,  $\beta_0$  is the unsystematic predictable constant component or the estimated constant i= 1 to 56 firms; t- 2003 to 2014. Beta coefficients will be tested at 5%/, 1% level of significance [Jackling & Johl(2009: 497-501); Gill',Biger, Mand & Shah(2012: 85-86); Moeinaddin &Karimianrad(2012:491,494-497) Coşkun, Sayilir(2012: 6 1- 62); Chaghadari(2011: 485-486);

#### INDUSTRY WISE RESULTS AND ANALYSIS

##### A. AUTOMOBILES AND AUTO ANCILLARIES INCLUDING CASTINGS & FORGINGS

Under this category six companies have been selected for analysis in this study, the name of companies is

1. Tata Motors Ltd. (TM)
2. M & M Ltd. (MM)
3. Bajaj Auto Ltd. (BAA)
4. Eicher Motors Ltd. (EM)
5. Bharat Forge Ltd. (BFL)
6. Amtek Auto Ltd. (AA)

Table 5.I: Correlations under Automobiles and Auto Ancillaries including Castings & Forgings industries

		M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP	Pearson Correlation	1	.193	.264(*)	.280(*)	.606(**)	.652(**)	.521(**)
	Sig. (2-tailed)		.104	.025	.017	.000	.000	.000
	N	72	72	72	72	72	72	72
MP	Pearson Correlation	.193	1	.854(**)	.306(**)	.151	.108	-.064
	Sig. (2-tailed)	.104		.000	.009	.205	.368	.593
	N	72	72	72	72	72	72	72
PB	Pearson Correlation	.264(*)	.854(**)	1	.180	.074	.073	-.179
	Sig. (2-tailed)	.025	.000		.130	.538	.542	.132
	N	72	72	72	72	72	72	72
BD	Pearson Correlation	.280(*)	.306(**)	.180	1	.616(**)	.371(**)	.373(**)
	Sig. (2-tailed)	.017	.009	.130		.000	.001	.001
	N	72	72	72	72	72	72	72
CGCD	Pearson Correlation	.606(**)	.151	.074	.616(**)	1	.592(**)	.646(**)
	Sig. (2-tailed)	.000	.205	.538	.000		.000	.000
	N	72	72	72	72	72	72	72
DTT	Pearson Correlation	.652(**)	.108	.073	.371(**)	.592(**)	1	.550(**)
	Sig. (2-tailed)	.000	.368	.542	.001	.000		.000
	N	72	72	72	72	72	72	72
GD	Pearson Correlation	.521(**)	-.064	-.179	.373(**)	.646(**)	.550(**)	1
	Sig. (2-tailed)	.000	.593	.132	.001	.000	.000	
	N	72	72	72	72	72	72	72

Sig. means Significant, \*\* Correlation is significant at the 0.01 level (2-tailed).

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

From the above table the study has seen that M\_CAP (first dependent variable) has a positive correlation with MP, PB of financial variables and it also has a positive relation with BD, CGCD, DTT and GD of CG variables and significant at 5% and 1% level. Whereas another dependent variable, MP, which is also having a significant correlation with PB and BD. It also has a positive relation with CGCD and DTT of CG variables. Third dependent variable of the study of measuring firm performance is PB. This PB is also significantly correlated with MP, but maintains a positive relationship with BD, CGCD and DTT. Therefore, the study may conclude that there is a positive relation between CG and firm performance that means CG variables can influence the performance of different companies in Indian capital markets.

Table 5.II: Results of regression analysis under Automobiles and Auto Ancillaries including Castings & Forgings industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.721	0.377	0.365
2. Value of R <sup>2</sup>	0.520	0.142	0.133
3. Value of adjusted R <sup>2</sup>	0.491	0.091	0.081
4. Value of "F"	18.110	2.770	2.568
5. Significance of F	0.000	0.034	0.046

Significant at 0.05 level of Significance.

From the above table the study has seen that value of R, R<sup>2</sup> and adjusted R<sup>2</sup> in first equation are 0.721, 0.520 and 0.491 respectively i.e. M\_CAP has

moderate correlation with all the independent variables i.e. CG variables. The value of R in this equation shows a “mark” degree of correlation i.e. 0.721. In another two equations value of R and R<sup>2</sup> have a low degree of correlation with CG variables. In all the three equations, the significance of F is less than 0.05, so the models can be explained as well fitted models. So from above results and analysis, the study concluded that corporate governance and firms’ performance are positively correlated. The performances of the companies are depending on corporate governance disclosures.

**B. BANKS - PUBLIC SECTOR/PRIVATE SECTOR & FINANCE -INVESTMENTS & RATING COMPANIES**

Under this category nine companies have been selected for analysis in this study, the name of companies is

1. HDFC Bank (HDFC-B)
2. ICICI Bank (ICICI-B)
3. SBI
4. .H D F C Ltd. (HDFC)
5. Axis Bank (AB)
6. ING Vysya Bank (INGVB)
7. IDBI Bank (IDBI)
8. ICRA Llt. (ICRA)
9. Manappuram Finance Ltd. (MF)

Table 5.III: Correlations under Banks - Public Sector/ Private Sector &  
Finance –investments & rating companies

		M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP	Pearson Correlation	1	.248(**)	.298(**)	.085	.297(**)	.321(**)	.457(**)
	Sig. (2-tailed)		.010	.002	.379	.002	.001	.000
	N	108	108	108	108	108	108	108
MP	Pearson Correlation	.248(**)	1	.534(**)	.429(**)	.454(**)	.406(**)	.211(*)
	Sig. (2-tailed)	.010		.000	.000	.000	.000	.028
	N	108	108	108	108	108	108	108
PB	Pearson Correlation	.298(**)	.534(**)	1	.144	.690(**)	.381(**)	.114
	Sig. (2-tailed)	.002	.000		.137	.000	.000	.242
	N	108	108	108	108	108	108	108
BD	Pearson Correlation	.085	.429(**)	.144	1	.199(*)	.259(**)	.088
	Sig. (2-tailed)	.379	.000	.137		.039	.007	.367
	N	108	108	108	108	108	108	108
CGCD	Pearson Correlation	.297(**)	.454(**)	.690(**)	.199(*)	1	.704(**)	.486(**)
	Sig. (2-tailed)	.002	.000	.000	.039		.000	.000
	N	108	108	108	108	108	108	108
DTT	Pearson Correlation	.321(**)	.406(**)	.381(**)	.259(**)	.704(**)	1	.736(**)
	Sig. (2-tailed)	.001	.000	.000	.007	.000		.000
	N	108	108	108	108	108	108	108
GD	Pearson Correlation	.457(**)	.211(*)	.114	.088	.486(**)	.736(**)	1
	Sig. (2-tailed)	.000	.028	.242	.367	.000	.000	
	N	108	108	108	108	108	108	108

Sig. means Significant

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

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

From the above table the study has seen that M\_CAP (first dependent variable) is significantly correlated with MP, PB, CGCD, DTT and GD i.e. 0.248, 0.298, 0.297, 0.321 and 0.457 respectively. It also has positive relation BD of CG variables. Whereas another dependent variable, MP, which is significantly correlated with BD, CGCD, DTT and GD i.e. 0.429, 0.454, 0.406 and 0.211 respectively. Third dependent variable of the study for measuring firm performance is PB. This PB is also positively correlated with all the variables, but significantly correlated with M\_CAP, MP, CGCD and DTT. Therefore, the study may conclude that there is a significant positive relation between CG variables and firm performance that means CG variables can influence the performance of different companies.

Table 5.IV: Results of regression analysis under Banks - Public Sector/ Private Sector & Finance –investments & rating companies industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.476	0.538	0.735
2. Value of R <sup>2</sup>	0.227	0.334	0.541
3. Value of adjusted R <sup>2</sup>	0.197	0.308	0.523
4. Value of “F”	7.556	12.894	30.339
5. Significance of F	0.000	0.000	0.000

Significant at 0.05 level of Significance.

From the above table the study has seen that value of R in all equations represents a good degree of correlation with its dependent variables and PB is highly correlated with CG variables i.e. 0.735. R<sup>2</sup> also shows a moderate range of value i.e. in between 0.20 to 0.35 in case of first two equations and 0.54 in last equation. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. So from above results and analysis, the study concluded that corporate governance and firms' performance are positively correlated. The performances of the companies are depending on corporate governance disclosures.

#### **C. COMPUTERS - SOFTWARE & TELECOMMUNICATIONS - SERVICE PROVIDER**

Under this category five companies have been selected for analysis in this study, the name of companies is

1. TCS Ltd. (TCS)
2. Infosys Ltd. (INF)
3. Wipro Ltd. (WP)
4. Bharti Airtel Ltd. (BA)
5. Polaris Financial Technology Ltd. (PFT)



Table 5.V: Correlations under Computers - Software & Telecommunications -  
Service Provider industries

	M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP Pearson Correlation	1	.944(**)	.365(**)	.570(**)	.318(*)	.303(*)	.517(**)
Sig. (2-tailed)		.000	.004	.000	.013	.019	.000
N	60	60	60	60	60	60	60
MP Pearson Correlation	.944(**)	1	.360(**)	.476(**)	.337(**)	.163	.385(**)
Sig. (2-tailed)	.000		.005	.000	.008	.213	.002
N	60	60	60	60	60	60	60
PB Pearson Correlation	.365(**)	.360(**)	1	.360(**)	.164	-.011	.057
Sig. (2-tailed)	.004	.005		.005	.210	.936	.667
N	60	60	60	60	60	60	60
BD Pearson Correlation	.570(**)	.476(**)	.360(**)	1	.780(**)	.757(**)	.639(**)
Sig. (2-tailed)	.000	.000	.005		.000	.000	.000
N	60	60	60	60	60	60	60
CGCD Pearson Correlation	.318(*)	.337(**)	.164	.780(**)	1	.749(**)	.640(**)
Sig. (2-tailed)	.013	.008	.210	.000		.000	.000
N	60	60	60	60	60	60	60
DTT Pearson Correlation	.303(*)	.163	-.011	.757(**)	.749(**)	1	.853(**)
Sig. (2-tailed)	.019	.213	.936	.000	.000		.000
N	60	60	60	60	60	60	60
GD Pearson Correlation	.517(**)	.385(**)	.057	.639(**)	.640(**)	.853(**)	1
Sig. (2-tailed)	.000	.002	.667	.000	.000	.000	
N	60	60	60	60	60	60	60

Sig. means Significant

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

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

From the above table the study has seen that M\_CAP (first dependent variable) is significantly correlated with all the variables and highly correlated with BD of CG elements i.e. 0.570. Whereas second dependent variable, MP, which is also significantly correlated with all variables of the study except DTT. Third dependent variable of the study for measuring firm performance is PB. This PB is also positively correlated with all the variables, but significantly correlated with M\_CAP, MP, and BD. Therefore, the study observed that there is a significant positive relation between CG variables and firm performance that means CG variables can influence the performance of different companies.

Table 5.VI: Results of regression analysis under Computers - Software & Telecommunications - Service Provider industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.801	0.745	0.580
2. Value of R <sup>2</sup>	0.642	0.555	0.337
3. Value of adjusted R <sup>2</sup>	0.615	0.523	0.288
4. Value of "F"	24.661	17.148	6.980
5. Significance of F	0.000	0.000	0.000

Significant at 0.05 level of Significance.

From the above table the study has seen that value of R, R<sup>2</sup> and Adjusted

$R^2$  are a high degree of correlation with all the independent variables under this group. Here M\_CAP and MP are highly correlated with all CG variables because here R,  $R^2$  and adjusted  $R^2$  are valued more than 0.50. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. So from above results and analysis, the study concluded that corporate governance and firms' performance are positively correlated. The performances of the companies are depending on corporate governance disclosures.

**D. OIL EXPLORATION / ALLIED SERVICES/ OIL DRILLING/  
REFINERIES/MINING/MINERALS**

Under this category six companies have been selected for analysis in this study, the name of companies is

1. Reliance industries Ltd. (RIL)
2. ONGC Ltd. (ONGC)
3. Coal India Ltd. (CI)
4. Hindustan Petroleum Corporation Ltd. (HP)
5. Petronet LNG Ltd. (PLNG)
6. Aban Offshore Ltd. (AO)

Table 5.VII: Correlations under Oil Exploration / Allied Services/ Oil  
Drilling/ Refineries/Mining/Minerals industries

		M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP	Pearson Correlation	1	.239(*)	.120	-.194	.712(**)	.667(**)	.677(**)
	Sig. (2-tailed)		.043	.314	.103	.000	.000	.000
	N	72	72	72	72	72	72	72
MP	Pearson Correlation	.239(*)	1	.624(**)	.274(*)	.229	.489(**)	.307(**)
	Sig. (2-tailed)	.043		.000	.020	.053	.000	.009
	N	72	72	72	72	72	72	72
PB	Pearson Correlation	.120	.624(**)	1	.158	.200	.360(**)	-.011
	Sig. (2-tailed)	.314	.000		.184	.092	.002	.924
	N	72	72	72	72	72	72	72
BD	Pearson Correlation	-.194	.274(*)	.158	1	.205	.299(*)	.017
	Sig. (2-tailed)	.103	.020	.184		.084	.011	.885
	N	72	72	72	72	72	72	72
CGCD	Pearson Correlation	.712(**)	.229	.200	.205	1	.789(**)	.777(**)
	Sig. (2-tailed)	.000	.053	.092	.084		.000	.000
	N	72	72	72	72	72	72	72
DTT	Pearson Correlation	.667(**)	.489(**)	.360(**)	.299(*)	.789(**)	1	.740(**)
	Sig. (2-tailed)	.000	.000	.002	.011	.000		.000
	N	72	72	72	72	72	72	72
GD	Pearson Correlation	.677(**)	.307(**)	-.011	.017	.777(**)	.740(**)	1
	Sig. (2-tailed)	.000	.009	.924	.885	.000	.000	
	N	72	72	72	72	72	72	72

Sig. means Significant

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

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

From the above table the study has seen that M\_CAP (first dependent variable) is significantly correlated with CGCD, GD and DTT i.e.0.712, 0.667, and 0.677 respectively of CG variables. Here BD has a negative impact on M\_CAP under this industry. In case of second dependent variable, MP, which is also a positive correlated with CG variables, namely, BD, DTT and GD i.e. 0 .274, 0.489 and 0.307 respectively. Third dependent variable of the study of measuring firm performance is PB. This PB and other variables have a positive correlation. PB has correlated significantly with MP and DTT i.e. 0.624 and 0.360 respectively. Therefore, the study may conclude that there is a significant positive relation between CG variables and firm performance that means CG variables can influence the performance of different companies.

Table 5.VIII: Results of regression analysis under Oil Exploration / Allied Services/ Oil Drilling/Refineries/Mining/Minerals industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.833	0.571	0.558
2. Value of R <sup>2</sup>	0.694	0.326	0.312
3. Value of adjusted R <sup>2</sup>	0.675	0.286	0.251
4. Value of "F"	37.921	8.093	7.588
5. Significance of F	0.000	0.000	0.000

Significant at 0.05 level of Significance.

From the above table the study has seen that value of R, R<sup>2</sup> and Adjusted R<sup>2</sup> are a high degree of correlation with equation 1 i.e. 0.833,0.694 and

0.675 respectively that means representative of firms' performance (M\_CAP) is highly correlated with all CG independent variables. In other equations, these values are also representing a positive correlation between CG variables and firms' performance. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. So from above results and analysis, the study concluded that corporate governance and firms' performance are positively correlated. The performances of the companies are depending on corporate governance disclosures.

**E. PERSONAL CARE & CONSUMER GOODS - WHITE, BEVERAGE, FOOD  
PROCESSING AND TEA/COFFEE INDUSTRIES**

Under this category eight companies have been selected for analysis in this study, the name of companies is:

1. .ITC Ltd. (ITC)
2. Hindustan Unilever Ltd. (HUL)
3. Godrej industries Ltd. (GI)
4. Procter & Gamble Hygiene & Healthcare Ltd. (P&G)
5. Britannia industries Ltd. (BI)
6. Emami Ltd. (EMAMI)
7. Tata Global Beverages Ltd. (TGB)
8. Blue Star Ltd. (BSL)

Table 5.IX: Correlations under Personal Care & Consumer Goods – White,  
Beverage, Food processing and Tea/Coffee industries

	M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP Pearson Correlation	1	-.032	.408(**)	-.038	.346(**)	.555(**)	.374(**)
Sig. (2-tailed)		.756	.000	.714	.001	.000	.000
N	96	96	96	96	96	96	96
MP Pearson Correlation	-.032	1	.214(*)	.563(**)	-.373(**)	.050	.225(*)
Sig. (2-tailed)	.756		.037	.000	.000	.626	.028
N	96	96	96	96	96	96	96
PB Pearson Correlation	.408(**)	.214(*)	1	.453(**)	.134	.319(**)	.240(*)
Sig. (2-tailed)	.000	.037		.000	.194	.002	.019
N	96	96	96	96	96	96	96
BD Pearson Correlation	-.038	.563(**)	.453(**)	1	-.051	-.036	.211(*)
Sig. (2-tailed)	.714	.000	.000		.619	.727	.039
N	96	96	96	96	96	96	96
CGCD Pearson Correlation	.346(**)	-.373(**)	.134	-.051	1	.506(**)	.399(**)
Sig. (2-tailed)	.001	.000	.194	.619		.000	.000
N	96	96	96	96	96	96	96
DTT Pearson Correlation	.555(**)	.050	.319(**)	-.036	.506(**)	1	.649(**)
Sig. (2-tailed)	.000	.626	.002	.727	.000		.000
N	96	96	96	96	96	96	96
GD Pearson Correlation	.374(**)	.225(*)	.240(*)	.211(*)	.399(**)	.649(**)	1
Sig. (2-tailed)	.000	.028	.019	.039	.000	.000	
N	96	96	96	96	96	96	96

Sig. means Significant

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

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

From the above table the study has seen that M\_CAP (first dependent variable) is significantly correlated with PB, CGCD, DTT and GD i.e. 0.408, 0.346, 0.555 and 0.374 respectively. Here BD has a negative impact on M\_CAP under this industry. Whereas another dependent variable, MP, which is also a significant positive correlation with PB, BD and GD i.e. 0.214, 0.563 and 0.225 respectively. Third dependent variable of the study of measuring firm performance is PB. This PB is also significantly correlated with BD, DTT and GD variables i.e. 0.453, 0.134 and 0.240 respectively. Therefore, the study may conclude that there is a significant positive relation between CG variables and firm performance that means CG variables can influence the performance of different companies.

Table 5.X: Results of regression analysis under Personal Care & Consumer Goods – White, Beverage, Food processing and Tea/Coffee industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.561	0.732	0.573
2. Value of R <sup>2</sup>	0.315	0.535	0.329
3. Value of adjusted R <sup>2</sup>	0.285	0.515	0.299
4. Value of “F”	10.448	26.221	11.144
5. Significance of F	0.000	0.000	0.000

Significant at 0.05 level of Significance.



From the above table the study has seen that value of R in equation 1 is 0.561, in equation 2 is 0.732, and in equation 3 is 0.573 i.e. a moderate degree of correlations exists with CG variables. Here CG variables have highly influenced to firm's market price. In all equations, these values are also representing a positive correlation between CG variables and firms' performance. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. So from above results and analysis, the study concluded that corporate governance and firms' performance are positively correlated. The performances of the companies are depending on corporate governance disclosures.

#### **F. POWER GENERATION AND SUPPLY/ELECTRIC EQUIPMENT /TRADING**

Under this category six companies have been selected for analysis in this study, the name of companies is:

1. NTPC Ltd. (NTPC)
2. Havells India Ltd. (HI)
3. JSW Energy Ltd. (JSWE)
4. Crompton Greaves Ltd. (CGL)
5. PTC India Ltd. (PTC)
6. Greaves Cotton Ltd. (GCL)

Table 5.XI: Correlations under Power Generation and Supply/Electric equipment /Trading industries

	M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP Pearson Correlation	1	.602(**)	-.071	.082	.125	.542(**)	.369(**)
Sig. (2-tailed)		.000	.552	.494	.297	.000	.001
N	72	72	72	72	72	72	72
MP Pearson Correlation	.602(**)	1	.413(**)	.319(**)	.458(**)	.635(**)	.580(**)
Sig. (2-tailed)	.000		.000	.006	.000	.000	.000
N	72	72	72	72	72	72	72
PB Pearson Correlation	-.071	.413(**)	1	.198	.272(*)	.300(*)	.338(**)
Sig. (2-tailed)	.552	.000		.095	.021	.010	.004
N	72	72	72	72	72	72	72
BD Pearson Correlation	.082	.319(**)	.198	1	.357(**)	.343(**)	.187
Sig. (2-tailed)	.494	.006	.095		.002	.003	.116
N	72	72	72	72	72	72	72
CGCD Pearson Correlation	.125	.458(**)	.272(*)	.357(**)	1	.740(**)	.682(**)
Sig. (2-tailed)	.297	.000	.021	.002		.000	.000
N	72	72	72	72	72	72	72
DTT Pearson Correlation	.542(**)	.635(**)	.300(*)	.343(**)	.740(**)	1	.835(**)
Sig. (2-tailed)	.000	.000	.010	.003	.000		.000
N	72	72	72	72	72	72	72
GD Pearson Correlation	.369(**)	.580(**)	.338(**)	.187	.682(**)	.835(**)	1
Sig. (2-tailed)	.001	.000	.004	.116	.000	.000	
N	72	72	72	72	72	72	72

Sig. means Significant

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

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

From the above table the study has seen that M\_CAP (first dependent variable) has a significant positive correlation with MP, DTT and GD i.e. 0.602, 0.542 and 0.369 respectively. Whereas another dependent variable, MP, which is also a significant positive correlation with all the variables and highest positive correlation with DTT of CG variables i.e. 0.635. Third dependent variable of the study of measuring firm performance is PB. This PB is also significantly correlated with MP, CGCD, DTT and GD i.e. 0.413, 0.272, 0.300 and 0.338 respectively. Therefore, the study may conclude that there is a significant positive relation between CG variables and firm performance that means CG variables can influence the performance of different companies.

Table 5.XII: Results of regression analysis under Power Generation and Supply/Electric equipment /Trading industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.689	0.657	0.365
2. Value of R <sup>2</sup>	0.475	0.432	0.134
3. Value of adjusted R <sup>2</sup>	0.443	0.398	0.082
4. Value of "F"	15.143	12.735	2.581
5. Significance of F	0.000	0.000	0.045

Significant at 0.05 level of Significance.

From the above table the study has seen that values of R in three equations are 0.689, 0.657, and 0.365 respectively. Therefore, in first two equations it represents moderate correlations with CG variables. Whereas the values of R<sup>2</sup> in first two equations are 0.475 and 0.432 respectively, it represents that more than 40 % variation in average M\_CAP and MP explained by average CG variables. Here CG variables have influenced to firms' performance. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. So from above results and analysis, the study concluded that corporate governance and firms' performance are positively correlated. The performances of the companies are depending on corporate governance disclosures under Power Generation and Supply/Electric equipment /Trading industries.

#### **G. ENGINEERING - TURNKEY SERVICES/INFRASTRUCTURE/ CEMENT**

Under this category three companies have been selected for analysis in this study, the name of companies is:

1. Larsen & Toubro Ltd. (LT)
2. Prism Cement Ltd. (PC)
3. National Buildings Construction Corporation Ltd. (NBCC)

Table 5.XIII: Correlations under Engineering - Turnkey  
Services/Infrastructure/ Cement industries

	M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP Pearson Correlation	1	.997(**)	.644(**)	.468(**)	.298	.496(**)	.260
Sig. (2-tailed)		.000	.000	.004	.077	.002	.125
N	36	36	36	36	36	36	36
MP Pearson Correlation	.997(**)	1	.665(**)	.473(**)	.315	.533(**)	.289
Sig. (2-tailed)	.000		.000	.004	.061	.001	.087
N	36	36	36	36	36	36	36
PB Pearson Correlation	.644(**)	.665(**)	1	.623(**)	.472(**)	.525(**)	.281
Sig. (2-tailed)	.000	.000		.000	.004	.001	.097
N	36	36	36	36	36	36	36
BD Pearson Correlation	.468(**)	.473(**)	.623(**)	1	.909(**)	.691(**)	.702(**)
Sig. (2-tailed)	.004	.004	.000		.000	.000	.000
N	36	36	36	36	36	36	36
CGCD Pearson Correlation	.298	.315	.472(**)	.909(**)	1	.807(**)	.788(**)
Sig. (2-tailed)	.077	.061	.004	.000		.000	.000
N	36	36	36	36	36	36	36
DTT Pearson Correlation	.496(**)	.533(**)	.525(**)	.691(**)	.807(**)	1	.831(**)
Sig. (2-tailed)	.002	.001	.001	.000	.000		.000
N	36	36	36	36	36	36	36
GD Pearson Correlation	.260	.289	.281	.702(**)	.788(**)	.831(**)	1
Sig. (2-tailed)	.125	.087	.097	.000	.000	.000	
N	36	36	36	36	36	36	36

Sig. means Significant

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

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

From the above table the study has seen that M\_CAP (first dependent variable) has a significant positive correlation with all the variables, including CG variables BD and DTT i.e. 0.468 and 0.496 respectively. MP (Second dependent variable) and all CG variables have positively correlated, but significantly correlated with BD and DTT i.e. 0.473 and 0.533 respectively. Third dependent variable of the study of measuring firm performance is PB. This PB is also significantly correlated with all the CG variables except GD i.e. 0.623, 0.472, and 0.525 for BD, CGCD, and DTT respectively. The study concluded that there is a significant positive relation between CG variables and firm performance that means CG variables can influence the performance of different companies.

Table 5.XIV: Results of regression analysis under Engineering - Turnkey Services/Infrastructure/ Cement industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.803	0.817	0.819
2. Value of R <sup>2</sup>	0.646	0.667	0.672
3. Value of adjusted R <sup>2</sup>	0.600	0.624	0.629
4. Value of "F"	14.114	15.552	15.842
5. Significance of F	0.000	0.000	0.045

Significant at 0.05 level of Significance.

From the above table the study has seen that values of R for all the equations have reached a high degree of correlations with CG variables i.e. 0.803 0.817 and 0.819 for three equations. Whereas the values of R<sup>2</sup> are 0.646, 0.667 and 0.672 i.e. , it represents that more than 60 % variation in average M\_CAP, MP and PB explained by average CG variables. Here CG variables have highly influence to all firm's performance variables. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. So from above results and analysis, the study concluded that corporate governance and firms' performance are positively correlated. The performances of the companies are depending on corporate governance disclosures in high degree under Engineering - Turnkey Services/Infrastructure/ Cement industries.

#### **H. PHARMACEUTICALS.**

Under this category five companies have been selected for analysis in this study, the name of companies is:

1. Sun Pharmaceutical industries Ltd. (SPI)
2. Aurobindo Pharma Ltd. (AP)
3. Ipca Laboratories Ltd. (IL)
4. Kappac Pharma Ltd. (KP)
5. Wyeth Ltd. (WYE)

Table 5.XV: Correlations under Pharmaceuticals industries

	M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP Pearson Correlation	1	.161	.270(*)	.078	-.107	.235	.156
Sig. (2-tailed)		.219	.037	.552	.416	.071	.234
N	60	60	60	60	60	60	60
MP Pearson Correlation	.161	1	.362(**)	.608(**)	.431(**)	.491(**)	.419(**)
Sig. (2-tailed)	.219		.004	.000	.001	.000	.001
N	60	60	60	60	60	60	60
PB Pearson Correlation	.270(*)	.362(**)	1	.185	-.106	.191	.112
Sig. (2-tailed)	.037	.004		.156	.419	.144	.394
N	60	60	60	60	60	60	60
BD Pearson Correlation	.078	.608(**)	.185	1	.477(**)	.501(**)	.517(**)
Sig. (2-tailed)	.552	.000	.156		.000	.000	.000
N	60	60	60	60	60	60	60
CGCD Pearson Correlation	-.107	.431(**)	-.106	.477(**)	1	.740(**)	.862(**)
Sig. (2-tailed)	.416	.001	.419	.000		.000	.000
N	60	60	60	60	60	60	60
DTT Pearson Correlation	.235	.491(**)	.191	.501(**)	.740(**)	1	.915(**)
Sig. (2-tailed)	.071	.000	.144	.000	.000		.000
N	60	60	60	60	60	60	60
GD Pearson Correlation	.156	.419(**)	.112	.517(**)	.862(**)	.915(**)	1
Sig. (2-tailed)	.234	.001	.394	.000	.000	.000	
N	60	60	60	60	60	60	60

Sig. means Significant

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

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



From the above table the study has seen that M\_CAP (first dependent variable) has a significant positive correlation with PB i.e. 0.270 but no any significant relation with any one of the CG variables. Whereas another dependent variable, MP, which is also a significant positive correlation with all the CG variables and highest significant relation with BD of CG variables i.e. 0.608. Third dependent variable of the study for measuring firm performance is PB. This PB is not representing a significant correlation with CG variables. Hence, the study concluded that there is a low significant relation between CG variables and firm performance except MP in the case of this industry.

Table 5.XVI: Results of regression analysis under Pharmaceuticals industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.516	0.682	0.466
2. Value of R <sup>2</sup>	0.267	0.465	0.217
3. Value of adjusted R <sup>2</sup>	0.213	0.426	0.160
4. Value of "F"	5.00	11.938	3.808
5. Significance of F	0.002	0.000	0.008

Significant at 0.05 level of Significance.

From the above table the study has seen that values of R for all the equations have reached a moderate degree of correlations with CG variables i.e. 0.516, 0.682, and 0.466 for three equations. Whereas the value

of  $R^2$  is 0.465 in equation two, i.e. it represents that more than 46 % variation in average MP explained by average CG variables. Here CG variables have influenced of all firm's performance variables. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. Therefore, from the above results and analysis, the study concluded that corporate governance and firms' performance have a positive correlation under Pharmaceuticals industries. The performances of the companies are depending on corporate governance disclosures.

#### **I. TEXTILES, PLASTICS, STEEL & ALUMINIUM**

In the above category, five companies selected for analysis in this study, the name of companies is:

1. Bhushan Steel Ltd. (BS)
2. National Aluminium Company Ltd. (NAC)
3. Astral Poly Technik Ltd. (APT)
4. SRF Ltd. (SRF)
5. Raymond Ltd. (RM)

Table 5.XVII: Correlations under Textiles, Plastics, steel & Aluminium

	M_CAP	MP	PB	BD	CGCD	DTT	GD	
M_CAP	Pearson Correlation	1	.033	.300(*)	-.536(**)	.061	.337(**)	.456(**)
	Sig. (2-tailed)		.803	.020	.000	.641	.008	.000
	N	60	60	60	60	60	60	60
MP	Pearson Correlation	.033	1	.222	.380(**)	.465(**)	.240	.321(*)
	Sig. (2-tailed)	.803		.088	.003	.000	.065	.012
	N	60	60	60	60	60	60	60
PB	Pearson Correlation	.300(*)	.222	1	.193	.045	.358(**)	.268(*)
	Sig. (2-tailed)	.020	.088		.139	.731	.005	.039
	N	60	60	60	60	60	60	60
BD	Pearson Correlation	-.536(**)	.380(**)	.193	1	.506(**)	.409(**)	.190
	Sig. (2-tailed)	.000	.003	.139		.000	.001	.147
	N	60	60	60	60	60	60	60
CGCD	Pearson Correlation	.061	.465(**)	.045	.506(**)	1	.740(**)	.751(**)
	Sig. (2-tailed)	.641	.000	.731	.000		.000	.000
	N	60	60	60	60	60	60	60
DTT	Pearson Correlation	.337(**)	.240	.358(**)	.409(**)	.740(**)	1	.914(**)
	Sig. (2-tailed)	.008	.065	.005	.001	.000		.000
	N	60	60	60	60	60	60	60
GD	Pearson Correlation	.456(**)	.321(*)	.268(*)	.190	.751(**)	.914(**)	1
	Sig. (2-tailed)	.000	.012	.039	.147	.000	.000	
	N	60	60	60	60	60	60	60

Sig. means Significant

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

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

From the above table the study has seen that M\_CAP (first dependent variable) has a significant positive correlation with DTT and GD of CG variables i.e. 0.337 and 0.456 respectively. Whereas another dependent variable, MP, which is also a significant positive correlation with three CG variables, namely, BD, CGCD and GD i.e. 0.380, 0.465 and 0.321 respectively. Third dependent variable of the study of measuring firm performance is PB. This PB is also significantly correlated with DTT and GD of CG variables i.e. 0.358 and 0.268 respectively. The study has observed that there is a significant positive relation between CG variables and firm performance that means CG variables can influence the performance of different companies.

Table 5.XVIII: Results of regression analysis under Textiles, Plastics, steel & Aluminium industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.812	0.620	0.517
2. Value of R <sup>2</sup>	0.660	0.384	0.268
3. Value of adjusted R <sup>2</sup>	0.635	0.340	0.214
4. Value of "F"	26.707	8.586	5.022
5. Significance of F	0.002	0.000	0.002

Significant at 0.05 level of Significance.

From the above table the study has seen that values of R for all the equations have reached a significant positive degree of correlations with CG variables i.e. 0.812, 0.620, and 0.517 for three equations. Here M\_CAP represents a high degree of correlation among all the CG variables i.e. 0.812. The value of R<sup>2</sup> is 0.660 in equation 1 i.e. it represents that more than 66 % variation in average MP explained by average CG variables. Here CG variables have influenced of all firm's performance variables. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. So from the above results and analysis, the study concluded that corporate governance and firms' performance are positively correlated under Textiles, Plastics, steel & Aluminium industries. The performances of the companies are dependent on corporate governance disclosures.

#### **J. TOURISMS, TRANSPORT & LOGISTICS**

Under this category three companies have been selected for analysis in this study, the name of companies is

1. Cox & Kings Ltd. (CK)
2. Allcargo Logistics Ltd. (AL)
3. Gateway Distriparks Ltd. (GDL)

Table 5.XIX: Correlations under Tourisms, Transport & Logistics industries

	M_CAP	MP	PB	BD	CGCD	DTT	GD
M_CAP Pearson Correlation	1	.897(**)	.723(**)	.633(**)	.808(**)	.859(**)	.788(**)
Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
N	36	36	36	36	36	36	36
MP Pearson Correlation	.897(**)	1	.666(**)	.637(**)	.622(**)	.727(**)	.578(**)
Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
N	36	36	36	36	36	36	36
PB Pearson Correlation	.723(**)	.666(**)	1	.543(**)	.557(**)	.625(**)	.598(**)
Sig. (2-tailed)	.000	.000		.001	.000	.000	.000
N	36	36	36	36	36	36	36
BD Pearson Correlation	.633(**)	.637(**)	.543(**)	1	.749(**)	.771(**)	.732(**)
Sig. (2-tailed)	.000	.000	.001		.000	.000	.000
N	36	36	36	36	36	36	36
CGCD Pearson Correlation	.808(**)	.622(**)	.557(**)	.749(**)	1	.945(**)	.968(**)
Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
N	36	36	36	36	36	36	36
DTT Pearson Correlation	.859(**)	.727(**)	.625(**)	.771(**)	.945(**)	1	.961(**)
Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
N	36	36	36	36	36	36	36
GD Pearson Correlation	.788(**)	.578(**)	.598(**)	.732(**)	.968(**)	.961(**)	1
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
N	36	36	36	36	36	36	36

Sig. means Significant

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

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

From the above table the study has seen that M\_CAP (first dependent variable) has a significant positive correlation with all the CG variables i.e. 0.633, 0.808, 0.859, and 0.788 for BD, CGCD, DTT and GD respectively. All the CG variables are highly influenced in firm's market capitalization. Whereas another dependent variable, MP, which is also a significant positive correlation with all the CG variables in higher percentage i.e. 0.637, 0.622, 0.727 and 0.578 for BD, CGCD, DTT and GD respectively. Third dependent variable of the study of measuring firm performance is PB. This PB is also significantly correlated with all the CG variables i.e. 0.543, 0.557, 0.625, and 0.598 for BD, CGCD, DTT and GD respectively. The study concluded that there is a highly significant positive relation between all the CG variables and firm performance that means CG variables can influence the performance of different companies.

Table 5.XX: Results of regression analysis under Tourisms, Transport & Logistics industries

STATISTICAL RESULTS	DEPENDENT VARIABLES		
	EQUATION1 (M_CAP)	EQUATION 2 (MP)	EQUATION 3 (PB)
1. Value of R	0.878	0.859	0.650
2. Value of R <sup>2</sup>	0.771	0.738	0.422
3. Value of adjusted R <sup>2</sup>	0.741	0.704	0.347
4. Value of "F"	26.078	21.794	5.658
5. Significance of F	0.002	0.000	0.002

Significant at 0.05 level of Significance.

From the above table the study has seen that values of R for all the equations have reached a high degree of correlations with CG variables i.e. 0.878, 0.859, and 0.650 for three equations. Whereas the values of R<sup>2</sup> are 0.771 and 0.738 for first two equations, i.e. it represents that more than 70 % variation in average MP explained by average CG variables. Here CG variables have highly influenced to all firm's performance variables. In all the three equations, the significance of F is less than 0.05, so the models explained as well fitted models. Therefore, from the above results and analysis, the study concluded that corporate governance and firm performance have positively correlated under Tourisms, Transport & Logistics industries. The performances of the companies are depending on corporate governance disclosures.

#### **5.5 SUMMARY**

In this chapter, the study has established a positive relationship between corporate governance and firms' performance in Indian capital market. Ultimately, it is proof that the performance of firms' is depending on the corporate governance disclosure norms under clause 49 of listing agreement. The study has used three dependent financial variables for measuring the firms' performance and four independent CG variables. The study observed that all the dependent variables are significantly positive correlation with all the independent variables and a linked between CG variables also. Hence the null hypothesis is rejected and accepted the alternative hypothesis i.e. corporate governance and firms' performance are positively correlated and performance of firms' depends



on CG disclosure norms of clause 49 under listing agreement. In the next chapter, the study has discussed about detail of the findings and conclusion of the entire study.

\*\*In the chapter findings and conclusion, the study has shown summary of significance level of correlation and regression of all the industry.