# Relationship between Corporate Governance Indicators and Firm Value: A Study on Selected Indian Companies

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*Abstract*

**Good corporate governance helps ensure that corporations take into account the interests of a wide range of constituencies, as well as of the communities within which they operate. Literature review in most of the cases say that Firm value is positively correlated to corporate governance index. The objective of the study is to find out whether there is any correlation between firm value and the independent parameters such as growth in sales, promoter's holding, financial leverage, liquidity and dividend pay out ratio. We took a sample for study from Bombay Stock Exchange (BSE) 200 which is a well diversified index of 200 stocks. We used the technique of regression taking Tobin's Q as a dependent variable. The existing study covers a sample size of 200 companies for the period of two financial years starting from April 1, 2007 and ending at March 31, 2009. We divided 200 companies in three sections, namely manufacturing, financial and other services. We have taken four parameters namely; distribution of dividend, promoter's holding, income growth and financial leverage as our independent variables and Tobin's Q as our dependent variable. The statistical techniques of correlation and regression were used to explore relationship between these variables. We have done a comparative analysis among the sections to find out the variable which is statistically significant.**

***Key words: Corporate Governance, Bombay Stock Exchange, Johansen co integration test, Granger Causality test.***

## Introduction

Corporate governance practices have received increasing attention in late 90's after the corporate frauds, with reports issued by Kumar Mangalam Birla, Narayanmurthy and Jayant Verma committee. These reports have resulted in various codes in corporate governance. As per OECD report on corporate governance (2004), The Principles are intended to assist governments in their efforts to evaluate and improve the legal, institutional and regulatory framework for corporate governance in their countries, and to provide guidance and suggestions for stock exchanges, investors, corporations, and other parties that have a role in the process of developing good corporate governance. Following the corporate governance scandals in the US, the Sarbanes Oxley Act (2002) was enacted which brought about fundamental changes in virtually every area of corporate governance and particularly in auditor independence, conflict of interest, corporate responsibility and enhanced financial disclosures. Good corporate governance helps ensure that corporations take into account the interests of a wide range of constituencies, as well as of the communities within which they operate. Further, it ensures that their Boards are accountable to the shareholders. This, in turn, helps assure that corporations operate for the benefit of society as a whole. E Dockery et.al(2000) feel that out of concern for public interest namely small investors, a supervisory commission requires that firms issuing stocks and bonds be registered with it and to comply with its own rules and regulations designed to ensure fair and complete disclosure of a firm's financial position to its current and potential investors. In an efficient market the rational investor makes just return and the companies incur just costs and no one makes abnormal profits. As per Kumar Mangalam Birla committee report, "It is important that insiders do not use their position of knowledge and access to inside information about the company, *and* take unfair advantage of the resulting information asymmetry. To prevent this from happening, corporate are expected to disseminate the material price sensitive information in a timely and proper manner and also ensure that till such information is made public, insiders abstain from transacting in the securities of the

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company. The principle should be 'disclose or desist'. This therefore calls for companies to devise an internal procedure for adequate and timely disclosures, reporting requirements, confidentiality norms, code of conduct and specific rules for the conduct of its directors and employees and other insiders." Lack of confidence in capital markets, state regulators and moral standards of top managers have been major concerns raised by disappointed investors. Corporate governance, although is analyzed from many different perspectives, is usually understood as a complex set of constraints that "managers put on themselves, or that investors put on managers to reduce the ex post misallocation and to induce investors to provide more funds ex ante" (Shleifer and Vishny, 1997). Thus, the main tasks of corporate governance refer to: assuring corporate efficiency and mitigating the rising cases of conflicts (e.g. Blair, 1999), providing for transparency and legitimacy of corporate activity (Monks, 2001), lowering risk for investments and providing high returns for investors (Cadbury Committee, 1992), and delivering framework for managerial accountability (Monks, 2001).

The importance of corporate governance proved to be crucial in line with recent corporate scandal by Satyam Computers Ltd which resulted in substantial economic losses, higher risk and decrease of confidence. The concept of corporate governance evokes the question of corporate performance and higher returns in the case of companies complying with certain rules.

## Corporate Governance in India

Corporate governance initiatives in India began in 1998 with the Desirable Code of corporate Governance – a voluntary code published by the Confederation of Indian industries, and the first formal regulatory framework for listed companies specifically for corporate governance, established by the SEBI. The latter was made in February 2000, following the recommendations of the Kumarmangalam Birla Committee Report.

Studies of corporate governance practices across several countries conducted by the Asian Development Bank (2000), International Monetary Fund (1999), Organization for Economic Cooperation and Development ("OECD") (1999) and the World Bank (1999) reveal that there is no single model of good corporate governance. This is recognized by the OECD Code. The OECD Code also recognizes that different legal systems, institutional frameworks and traditions across countries have led to the development of a range of different approaches to corporate governance. Common to all good corporate governance regimes, however, is a high degree of priority placed on the interests of shareholders, who place their trust in corporations to use their investment funds wisely and effectively. In addition, best-managed corporations also recognize that business ethics and corporate awareness of the environmental and societal interest of the communities within which they operate, can have an impact on the reputation and long-term performance of corporations.

## Literature Review

Securities Exchange Board of India (SEBI) report 2003 clearly states that the companies that do not follow governance pay a significant premium while competing for scarce resources. The report says that there is an increased appreciation for correlation between the governance and the returns.

Several studies find a connection between a measure of governance and share price in a single country. Related papers studying emerging markets include Black (2001); Black, Jang and Kim (2006); Black, Kim, Jang and Park (2005). Another strand of this literature finds similar results on a cross-country basis (Durnev and Kim, 2005; Klapper and Love, 2004). The positive share price reaction to cross-listing (e.g., Doidge, Karolyi and Stulz, 2004) also suggests that governance can predict share price. Black, et.al found an economically important and statistically strong correlation between governance and market value in OLS with firm clusters and in firm random effects and firm fixed effects regressions. They also found significant differences in the predictive power of different indices, and in the components of these indices. Maria Aluchna , (2009) in her paper found that complying with corporate governance best practice in Poland is associated with lower return on investment. However, the tendency changes into negative but statistically insignificant for the second and third years, and positive but statistically insignificant when only rated companies are included in the research sample. The paper indicates that implementing corporate governance standards is a complex process in terms of costs, investor activism and companies awareness. Its importance increases along with the development of institutional regime as well as market participants' skills and experience. Arriff et.al, (2007) conducted a study on Malaysian companies and their results suggest that firm size has a strong influence with corporate governance ratings but not so for profitability, leverage, growth, market valuation, age, ownership structure and countries of operation. This suggests that corporate governance issue in Malaysia is becoming more apparent. Gompers et al. (2003) examine the relationship between corporate governance and long -term equity returns, firm value and accounting measures of performance. Their results reveal that well-governed firms have higher equity returns, command higher values and their accounting statements show a better operating performance compared to their poorly governed counterparts. These findings are likely to encourage investors to consider corporate governance in their investment decisions. Similarly, Brown and Caylor (2005) find that better-governed firms are relatively more profitable, more highly priced, and pay out more cash to their shareholders. Drobetz et al. (2004) document a positive relationship between governance practices and firm valuation for German public firms. They report that for the median firm, a one standard deviation change in the governance rating results in a 24 percent increase in the value of Tobin's Q. Black et al. (2006) find a positive relationship between their corporate governance index and Tobin's Q for a sample of 526 Korean public firms. Durnev and Kim (2005) find that firms with better corporate governance and better disclosure standards have, on average, higher Tobin's Qs and larger investments. Foerster and Huen (2004) conducted a research to study the relationship between excess returns and a corporate governance score index for Canada. Their results suggest a positive and significant relation between stock performance and the corporate governance index.

Akmalia Mohamad Ariff et.al (2007) provided in their paper an extension of the Corporate Governance Reporting Initiative (CGI) 2004, which reports on Malaysia's first corporate governance ratings. They classified the firms into those at the top 50 percent and the bottom 50 percent of the corporate governance ratings list to examine whether there were any differences in the characteristics of firms in both classified samples. The characteristics of firms that were examined were firms' profitability, leverage, growth, market valuation, size, age, ownership structure and countries of operation based on the Logit analysis. The results suggested that firm size has a strong influence with corporate
governance ratings but not so for profitability, leverage, growth, market valuation, age,
ownership structure and countries of operation. Evidence also shows that the level of equity held by the firm's management does influence the firm's efficiency, profitability and capital structure and therefore its value (McConaughy et.al., 2001). The study by Morck et.al, (1988) shows that the firm value (as measured by Tobin's Q) increased when the promoter family held top position in the firm.

## Objective of the Study

To find out whether there is any correlation between firm value and the parameters such as growth in sales, promoter's holding, financial leverage and dividend payout ratio.

## Research Methodology

We have taken our sample for study from BSE 200. Of the 22 stock exchanges in the country, Mumbai's (earlier known as Bombay), Bombay Stock Exchange is the largest, with over 6,000 stocks listed. The BSE accounts for over two thirds of the total trading volume in the country. Established in 1875, the exchange is also the oldest in Asia. Among the twenty-two Stock Exchanges recognised by the Government of India under the Securities Contracts (Regulation) Act, 1956, it was the first one to be recognised .Approximately 70,000 deals are executed on a daily basis, giving it one of the highest per hour rates of trading in the world. There are around 3,500 companies in the country which are listed and have a serious trading volume. The market capitalization of the BSE is Rs.5 trillion. The BSE `Sensex' is a widely used market index for the BSE. BSE has 10 indices namely sensex, BSE 100, BSE 200, sectoral indices etc. We have taken BSE 200 for our study which has representations of 200 companies selected on the basis of market capitalization. We took a period of two financial years from 2007- 2008 and 2008-2009. The period starts from April 1$^{st}$ 2007 till March 31$^{st}$ 2009. We thought that this period will include the period when Indian stock market was in its peak as well as the period post Lehman brother crash, i.e. the period starting from 15$^{th}$ September 2008. The data were taken from CMIE Prowess database. .

We took four independent parameters that are debt equity ratio, dividend pay out ratios, growth in firm's sales and promoter's holding. To explore the relationship between corporate governance and firm valuation, Tobin Q is used as a valuation measure. We downloaded the data for two years of all the 200 firms and then calculated the average of each parameter. We segregated the firms as manufacturing firms, financial services firms and firms belonging to the category other than manufacturing and financial services category 141 companies belonged to the manufacturing category, out of which data of four firms had to be removed due to non availability of all relevant data. The number of firms taken in financial services category were 32. There were 27 firms belonging to the other services sector. We calculated regression for manufacturing and financial services category separately. Other services category was not considered as the data size was less than 30.

We calculated the dependent variable, Tobin's Q as a ratio of book value of debt and market value of equity with the book value of assets. Since debt market is not active in India, we took the book value of debt instead of market value for the purpose of our calculation. The variables are identified as follows:

$Y$ = Tobin's Q
$X_1$ = Average promoter's holding
$X_2$ = Averageincome growth
$X_3$ = Average debt equity ratio
$X_4$ = Average dividend payout ratio

The statistical techniques of correlation and regression were used to explore relationship between these variables.

**Data Analysis**

On the basis of the above parameters and keeping objective of our study in mind, we developed a multiple regression equation as

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

Where a is the regression constant and $b_1$, $b_2$, $b_3$ and $b_4$ are regression coefficients respectively.

The correlation matrix was constructed which showed that there was weak correlation between the various variables.

**Table -1**
**Correlation matrix of manufacturing companies**

| | Promoter's Holding | Income Growth | Leverage | Dividend Payout | Tobin's Q |
|---|---|---|---|---|---|
| Promoter's Holding | 1 | | | | |
| Income Growth | -0.004 | 1 | | | |
| Leverage | -0.03117 | 0.06545 | 1 | | |
| Dividend Payout | 0.017751 | -0.08703 | -0.14904 | 1 | |
| Tobin's Q | 0.271395 | 0.019814 | -0.13687 | 0.23927 | 1 |

**Table -2**
**Regression Results of manufacturing companies**

| | |
|---|---|
| R Square | 0.139773756 |
| Adjusted R Square | 0.113706294 |
| Standard Error | 1.576714039 |
| Observations | 137 |

| | Coefficients | P-value |
|---|---|---|
| **Intercept** | 0.624211169 | 0.132312 |
| **$X_1$ (Promotors holding)** | 0.022166315 | 0.001349 |
| **$X_2$ (Income growth)** | 0.00020649 | 0.56509 |
| **$X_3$ (DE Ratio)** | 0.134144307 | 0.231539 |
| **$X_5$ ( Dividend Payout ratio)** | 1.800865111 | 0.007094 |
| | | |

R square of 0.139 depicts that our model has accounted for 13.9 percent of the variance in the criterion variable. The t statistics show that X1, (Promoter's holding) and X5 (Dividend payout ratio) are significant at 5 percent level of significance. Thus we can interpret that distribution of dividend and promoter's holding affect Tobin's Q or firm value. The other variables are found insignificant to firm value.

**Table -3**
**Regression results in Financial Services companies**

| | |
|---|---|
| R Square | 0.3474 |
| Adjusted R Square | 0.2507 |
| Standard Error | 0.5194 |
| Observations | 32 |

| | Coefficients | P-value |
|---|---|---|
| **Intercept** | 0.124715 | 0.634 |
| **$X_1$ (Promotors holding)** | -0.00298 | 0.438651 |
| **$X_2$ (Income growth)** | 0.010852 | 0.00773 |
| **$X_3$ (DE Ratio)** | 0.064942 | 0.089125 |
| **$X_5$ ( Dividend Payout ratio)** | -0.01417 | 0.750482 |

R square of 0.347 depicts that our model has accounted for 34.7 percent of the variance in the criterion variable. The t statistics show that X3 (income growth) is the only variable that is significant at 5 percent level of significance. Thus we can interpret that in the financial services sector, growth is income affects Tobin's Q or firm value. The other variables are found insignificant to firm value.

## Conclusion

The existing study covers a sample size of 173 companies for the period of two financial years starting from April 1, 2007 and ending at March 31, 2009. The results of our study show that, in the manufacturing companies category, of the four independent parameters that we took, distribution of dividend and promoter's holding were found to be significant and had a positive coefficient. This proves that distribution of dividend affects the firm value and the companies that distributed higher proportion of dividends out of its earnings had higher firm value. Similarly, firms that had high promoter's holding had higher firm value. This supports the literature survey which says that inclusion of promoter in board increases Tobin's Q.

This study justifies the model by only 14 percent. So a researcher can include more variables and can also increase the sample size for further research on this topic.

On the contrary, statistics of financial services companies showed that income growth is the only variable that is significant at 5 percent level of significance. Thus we can interpret that in the financial services sector, growth is income affects Tobin's Q or firm value. The other variables are found insignificant to firm value

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