# CORPORATE GOVERNANCE AND VALUE CREATION INDEX

Niraj Satnalika*, S.V.D. Nageswara Rao*

*SJMSOM, IIT Bombay, India

## Abstract

This study aims to create a methodology to measure good governance and value creation with the help of an index composed of two sub-indices which corresponds to corporate governance and value creation (CGVC). The proposed index measures corporate governance quality that collapse into one number (a governance rating or index) and helps in analysing the effectiveness of corporate governance index in predicting value creation. We believe there is no one "best" measure of corporate governance, however, the most effective governance system depends on context and firm related circumstances. Thus, it is generally difficult for an index, or any one variable, to capture such nuances which may be critical for making informed decisions. Having said that, the index beautifully helps in giving a fair idea about governance practices followed by companies' in India. The CGVC index is constituted after investigating governance practices in BSE 100 companies which accounts for nearly 66% of the market capitalisation (as of March 2014). The study investigates corporate governance practices followed by the company in terms of 11 parameters identified (based on various recommendations given by the several committees) coupled with value created for different stakeholders. The period under study (2006-07 to 2013-14) is known for several volatilities and has remained one of the key themes in the global business environment. Economic uncertainties and changing business landscape left investors unnerved. While growth in largest economies declined, it had ripple effect on emerging economies. We have followed a two-step methodology where equal weightage is assigned to both the sub-indices. For sub-indices we have followed survey methodology where we interviewed personnel including board members, entry and mid-level employees of companies, regulatory participants, and stock brokers. Lastly, the paper aims to fill the gaps and conduct a thorough review of corporate governance and its relationship with value creation for one of the fastest growing emerging markets i.e., Indian economy.

**Keywords:** Corporate Governance, Value Creation Index, Stakeholders, Market Capitalisation

## 1. INTRODUCTION

Corporate governance, in a layman's term, stands on pillars of trust, ethics, moral values and value creation. It is a mechanism which is employed to align incentives between principals and agents and to monitor and to control agents. The mechanism provides a framework through which the objectives of a company are set, and the means of attaining those objectives and monitoring performance are determined. The framework is utilised to ensure that the agents act in a manner that is in the best interests of their principals *(Hill & Jones, 2004).* Standard & Poor's define corporate governance as:

*"The way in which a company organizes and manages itself to ensure that all financial stakeholders receive their fair share of a company's earnings and assets".*

We believe that definition of corporate governance varies widely and it tends to fall in two categories. The first set of definitions relates with behavioral patterns which involves the actual behaviour of corporations, in terms of measures such as performance, efficiency, growth, treatment of shareholders' and other stakeholders. The second set concerns with normative framework including rules under which firms are operating such as legal system, the judicial system, financial markets, and factor (labor) markets.

We believe corporate governance standards cannot be measured or achieved with rules and structures as it is a framework which encourages and supports good governance. In good governance it is assumed that the senior executives of a company conduct affairs transparently, legally, honestly and morally. However, conflict of interest and disclosure in financial reports remain some of the areas of concern.

During the crisis in 1998 in Russia, Asia, and Brazil, the behavior of the corporate sector affected economies and deficiencies in corporate governance norms resulted in endangered financial stability. Further, few years later, confidence in the corporate sector was sapped by corporate governance scandals in the United States and Europe which triggered some of the largest insolvencies of the world. These scams resulted in the establishment of code of corporate governance by all the developed countries aiming at improving transparency thereby resulting in restoring investor confidence. However, very less has expanded into emerging markets and developing countries.

## 2. CORPORATE GOVERNANCE

### 2.1. Current Literature and the gaps

The East Asian crisis that started in 1997 brought several countries at the brink of economic collapse revealing several shortcomings in their governance structures (Woo et al., 2000; Claessens and Fan, 2002; OECD, 2003). The crisis was soon followed by accounting scandals and corporate failures involving some of the largest firms in the world, such as Enron and Worldcom in the US, large retailer Ahold in the Netherlands and the global diary company Parmalat in Italy (Hopt, 2002; Holmstrom and Kaplan, 2003; Healy and Palepu, 2003; Maddaloni and Pain, 2004; ECB, 2005). These developments have brought corporate governance to the full attention of both policymakers and researchers in both developed and developing economies.

### 2.2. Literature from developed market

Anderson et al. (2004) showed that sound corporate governance practice has helped in lowering the cost of debt for US firms. The quality of the corporate governance framework affects not only the access to the external capital but also the cost of capital and firm valuation. Outsiders are less willing to provide financing and are more likely to charge higher rates if they are less assured that they will get an adequate rate of return. Also, it was shown that good governance add value by improving firm performance, through more efficient management, better asset allocation, better labor policies. Researchers found that quality of governance can affect firms' behavior in times of economic shocks and actually contribute to the occurrence of financial distress. Lemmon and Lins, (2003) stated that during the East Asian financial crisis, cumulative stock returns of firms where managers had high degree of control but little direct ownership, were 10 to 20 percentage points lower than those of other firms.

Effective corporate governance is at the core of an efficient market economy. At a macroeconomic level, studies have shown that in countries where higher investor protection measures existed, and where corporate governance standards were higher, the impact of economic crises was relatively milder. A study by Paul Gompers and Joy Ishii of the Harvard Business School and Andrew Metrick of the Wharton School in 2001 found strong relationship between corporate governance and stock returns. The study showed that strategy of buying stocks with good governance and selling those with poor governance would have produced increased returns of 8.5 per cent per annum through the 1990s.

Montserrat Manzaneque, Alba María Priego, Elena Merino (2014) in their study of the economic and financial crisis during 2007–2013 period highlighted the important consequences of businesses' financial distress on stakeholders. The study highlighted the importance of effectiveness of corporate governance mechanisms in crisis contexts (Husson-Traore, 2009). Black and Kim (2012) reported a positive share price impact of boards with 50% or greater outside directors and some evidence of a positive impact from the creation of an audit committee in developed economies'. Beiner et al. (2004) constructed a corporate governance index on the basis of a research made on all companies listed in the Swiss Stock Exchange and found that 1 point increase in the index caused an average increase of 8.5% in the market capitalization.

### 2.3. Literature from emerging market

The view that poor corporate governance of individual firms can have economy-wide effects is not limited to developed countries. A study of the stock performance of listed companies from Indonesia, Korea, Malaysia, the Philippines, and Thailand found that performance is better in firms with higher accounting disclosure quality (proxied by the use of Big Six auditors) and higher outside ownership concentration (Mitton, 2002). In the last decade, many emerging markets have reformed parts of their corporate governance systems. Many of these changes are in response to crises (Black et al., 2001). These reforms triggered restructuring activities by Korean firms (Park and Kim, 2008), with important effects on valuation and operating performance (Choi et al., 2007).

In 2000, researcher Johnson et al has measured the relationship between the deficiencies in corporate governance and the stock and financial asset prices for 25 countries. He identified that during financial crisis, the capital flows were very rapid and had negative effects for the countries with weak corporate governance practices. Bai et al (2002) examined the problems of corporate governance in China and concluded that well managed companies in corporate governance have reached higher stock market values and the investors are willing to pay a premium of a significant rate for better corporate governance standards.

Several researchers have identified different parameters for assessing corporate governance. While Mishra et al (2001) focused on parameters such as firm age, board size; Arunima Haldar (2012) used parameters like board of directors, audit committee, disclosures as right measure for corporate governance. Jayati Sarkar et al (2012) used board of directors, ownership structure, auditor and audit committee as primary measure of corporate governance whereas Sarkar and Sarkar (2000) used "shareholder activism" as corporate governance measure.

Dr. Vrajlal K. Sapovadia Mishra (2011) in his paper focused on developing corporate governance index after investigating corporate governance practices in selected top Indian companies with reference to value distribution while in 2012 Palanisamy Saravanan (2012) studied the impact of corporate governance in the determination of firm value in the manufacturing firms in India. Also, Palanisamy Saravanan (2009) studied the impact of corporate governance in the determination of firm value in the manufacturing firms in India. However, there have been several gaps in terms of identifying the parameters which assess corporate governance. Also, focus of value creation has largely remained restricted to shareholders and value creation for stakeholders (such as government, employee and creditors) has remained neglected.

## 2.4. Why this index is required

In 1912 it was an iceberg that brought about the demise of the Titanic, 89 years later it was the submerged components that sank the "unsinkable" Enron vessel. Literature suggests that information asymmetry and opportunistic behaviour of agents (executives, auditors and legal firms) and the inability of the principals (owners and agents) to control led to the Enron collapse more catastrophic. The main purpose of this research paper is to construct an index which would highlight the lacuna in the Indian corporate governance. We believe good corporate governance practice helps to engender confidence in the stock market and hence in the economic environment as a whole thereby creating a more attractive environment for investment. Yildiz Ayanoglu Pekcan et al. (2012) concluded that index makes provision of funds cheap and easy with obtained trust and reputation as a result of proper applications of it. Sıvacıoglu, (2008) stated that there are such applications in five countries in the world:

- Turkey - ISE Corporate Governance Index
- South African Republic - Johannesburg Stock Exchange Socially Responsible Investing Index
- South Korea - Korea Corporate Governance Stock Price Index
- Brazil - Nova Mercado
- Italy - Milano Stock Exchange STAR Exchange

The index can be used to help restore investor confidence in markets that have experienced financial crises. The index will also help government agencies identify the perceived quality of corporate governance in their country compared to other countries in their region, or in other regions, whose companies may be competing for limited foreign investment.

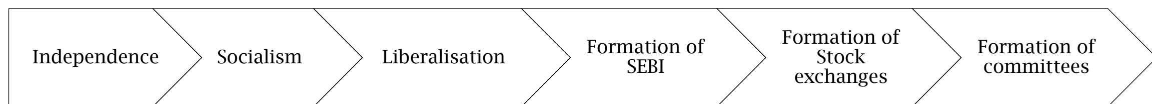
In emerging-market countries in particular, companies with a corporate governance infrastructure will, other things being equal, be less subject to cronyism. A desire for improved transparency and accountability to help ensure that companies are perceived as attractive investments has led to significant corporate governance reform in countries as diverse as India, Greece, Hong Kong (China), Japan, Malaysia and Poland.

Such index will be a useful benchmark for the majority of investors and stakeholders who identify good corporate governance with a well-run and well-managed company.

## 3. CORPORATE GOVERNANCE IN INDIA-INTRODUCTION

Corporate Governance is a mechanism through which outside investors protect themselves against expropriation by the insiders (La Porta et al. 2000, p. 4). It is the framework that influences the decision made by managers when there is a separation of ownership and control. Omkar Goswami et al. (2002) stated several interesting contrasting facts about the development of Indian corporate laws. The evolution of Indian financial system can be very well represented by the chart below:

**Figure 1.** Economic Development in India and Corporate Governance




*Source: Author's note*

The start of financial liberalisation began in 1991 and soon India underwent significant corporate governance change after the formation of the Securities and Exchange Board of India (SEBI) in 1992 (Aggarwal, Reena, Leora Klapper, and Peter D. Wysocki, 2005). By the mid-1990s the economy began to grow steadily while the firms began to look for equity capital to finance expansion into the market. The need of capital resulted in corporate governance reforms. There have been several corporate frauds which can into limelight since Independence. The frauds can be broadly classified into three phases:

**Figure 2.** Different phases of corporate frauds in India

| | |
|---|---|
| Post Independence phase | 1947-1960 |
| | Non-existence of regulatory mechanism |
| Socialist phase | 1960-1990 |
| | Power restricted with government |
| Liberalisation phase | 1991-current |
| | Started with economic liberalisation in 1991 |

*Source: Author's note*

Pande, Kaushik (2011) stated that corporate governance in India gained prominence in the wake of liberalization during the 1990s and was introduced, by the industry association Confederation of Indian Industry (CII) as a voluntary measure to be adopted by Indian companies. The

final document titled "Desirable Corporate Governance: A Code" was publicly released in April 1998. Though the code was welcomed with much fanfare, soon a new initiative was taken by Securities and Exchange Board of India (SEBI) in this regard with the constitution of a committee under Kumar Mangalam Birla to evaluate the code in 1999. The committee specifically placed emphasis on independent directors and made specific recommendations regarding the code which was later absorbed as Clause 49 of the Listing Agreement. The code continued to evolve with few committees appointed by SEBI and MCA (Ministry of Corporate Affairs). In its present form, Clause 49 contains mandatory and non-mandatory recommendations tabled below:

**Table 1.** Mandatory requirements of CG

| Mandatory recommendations for corporate governance | |
|---|---|
| **Board of Directors** | Composition, category of directors, attendance, other board membership |
| **Audit Committee** | Qualified, independent audit Committee |
| **Remuneration Committee** | Remuneration policy, Details of remuneration to all the directors |
| **Shareholders Committee** | Number of shareholders' complaints received and solved |
| **Means of communication** | Quarterly results, website, newspaper, presentations etc. |
| **Disclosures** | Related party transactions, accounting treatment |
| **CEO/CFO certification** | Reviewed and certified financials |
| **Report on corporate governance** | Detailed compliance report on corporate governance |

*Source: Author's note*

**Table 2.** Non-mandatory requirements of CG

| Non-mandatory recommendations for corporate governance | |
|---|---|
| **The Board** | A non-executive chairman may be entitled to maintain chairman's office at companies expense |
| **Remuneration Committee** | Remuneration committee to determine remuneration packages for senior management |
| **Shareholder Rights** | Half-yearly declaration of financial performance along with significant events during half year to be sent to shareholders |
| **Audit qualifications** | May move towards a regime of unqualified financial statements |
| **Training of Board Members** | Training board members on business model and risk profile of company |
| **Mechanism for evaluating non-executive Board Members** | Performance evaluation done by peer group comprising the entire Board of Directors |
| **Whistle Blower Policy** | Mechanism to report concerns about unethical behaviour, actual or suspected fraud to management |

*Source: Author's note*

## 4. VALUE CREATION

Value creation in a layman's term is the performance of actions which leads to the increase in worth of goods/services/business. Profit (or value creation at an overall level) provides a fair value of the value created by a business. However, it lacks several areas of importance such as value creation for different stake holders.

Stakeholders for an organisation can be broadly classified into two categories:

- A group which obtain powers by virtue of laws
- A group with little power

While the first group includes financial market participants' such as investors, creditors, the state; the latter constitute of employees, customers who hold little power. It became difficult for the companies to concile the two groups consisting of varied members with different interests. For example: it is difficult for an organisation to offer high compensation to employees while offering products at a very cheap price to its customers.

Task of managing interest of stakeholders have remained one of the critical aspect of value creation while executives in organisations are under pressure to create shareholder's value. This rising pressure has resulted in a gradual shift of focus from stakeholders thereby leading to considerable dissatisfaction within the stakeholders' community barring the shareholders. In a governance system focus should be on the creation of economic value for all the stakeholders and not just the shareholders.

As found in the literature, the normal definition of profit provides us only the rosy picture of an organisation. However, in order to understand the real operational efficienct, value creation needs to be assessed for different stakeholders.

We have identified the major stakeholders for a business to be the following:

**Table 3.** List of Stakeholders

| Category | Parameter |
|---|---|
| **Creditors** | Companies count on creditors to meet their financing needs (when internal accruals are not sufficed). Moreover, companies also tend to benefit from leverage in their financial structure. Interest paid to creditors is used as a parameter to assess value creation for creditors. |
| **State** | A business runs with the use of natural resources. The use of resources is taxed by the government where the proceeds are used to build infrastructure for the country. Taxes paid is used as parameter to assess value creation for government |
| **Human Resource** | Employee commitment and engagement is most important competitive advantage. Employee compensation is used as a parameters to assess value creation for employees |
| **Shareholders** | Shareholders' provide the initial capital for the company. Dividend is used as a measure to assess value creation for shareholders. |

*Source: Author's note*

Thus we will use realistic and simple measures for assessing value creation for different stakeholders as stated above.

## 5. CORPORATE GOVERNANCE AND VALUE CREATION INDEX

### 5.1. Corporate governance sub-index

Corporate Governance covers a number of internal and external factors which helps in reduction of

agency costs (a type of internal cost that arises from, or must be paid to, an agent acting on behalf of a principal). Agency costs arise because of core problems such as conflict of interest between shareholders and management. We will cover the following important corporate governance parameters. The parameters listed below covers all the aspect of mandatory and non-mandatory recommendations as covered in Clause 49.

**Table 4.** Parameters to be used for CG sub-index

| Component | Definition / Literature |
|---|---|
| **Ownership structure (O)** | Shareholders with considerable holdings mitigate free-riding problems due to control on the board (Shleifer & Vishny, 1986) |
| **Board of directors (B)** | Board act as middlemen providing balance between owners and controllers of an organisation who needs to work in the best interest of stakeholders (Monks & Minow, 2010) |
| **Board size (BS)** | Carter and Lorsch (2004) concluded a board with 10 directors is right size. In Indian context however there is no regulation which regulates the size of board except minimum requirement of 2 directors for private limited company and 3 for public limited companies. Balasubramanian et al (2005) found median size of boards ranged from 8-11 directors. |
| **Independence (I)** | The Cadbury Committee (1992) sought majority members of the board to be non-executive and independent. In Indian context, the requirement is articulated in Clause 49 which states no less than 50 per cent of directors of the board should comprise of non-executive directors in case the board has an executive chairman. In case the chairman is non-executive, at least one-third of the Board should comprise of independent directors. |
| **CEO Duality (CD)** | CEO is responsible for managing day to day company affairs which chairman is responsible to carry out board activities efficiently. Cadbury committee mandates separation of responsibilities of chairman, and CEO; no such requirement is seen in Indian code of conduct. |
| **Audit (A)** | An audit committee is set up comprising of members who are well versed with systems and rules of information communication. Also responsible to ensure that the laws and regulations enacted by the State about information disclosure are strictly observed. |
| **Remuneration (R)** | Dennis (2001) raised two concerns i.e., level of pay and relation of pay to performance. Thus presence of remuneration committee works in the best interest of the organisation as it helps in determining fair compensation. |
| **Nomination (N)** | Responsible for formulating policies and recommending the board of directors on appointment of directors, and board succession. Currently in India, composition of nomination committee is voluntary. |
| **Shareholder's grievances (S)** | Clause 49 of listing agreement mandates composition of shareholders' grievance committee to check if the grievances raised by shareholders are addressed or not. |
| **Disclosures (D)** | In India, Clause 49 of the listing agreement mandates the audit committee to approve and disclose all related party transactions to shareholders. |
| **Transparency (T)** | Hill & Jones (2004) stated that board is responsible for ensuring that financial statements represent true and fair picture of firm's financial health. |

*Source: Author's note*

## 5.2. Value creation sub index

From an economist point, value is created when revenue generated is over and above the economic costs to generate these revenues. Cost is a combination of several sources such as employee wages and benefits; cost of raw materials, and depreciation of assets; taxes; and opportunity cost of using capital. The linkage between strategy and value creation can be divided into two basic corporate requirements/laws:

- Management must create value for shareholders
- All other stakeholders should also be satisfied in a way that contributes to shareholder value

Availability of capital, operations, generating revenue and creating value for shareholders are interlinked. We will use the following main parameters which will determine value creation by company for its stakeholders.

**Table 5.** Parameters to be used for Value creation sub-index

| Stakeholder | Parameters |
|---|---|
| Shareholders | Dividend |
| Creditors | Total interest |
| Government | Total tax |
| Employees | Employee compensation as a percent of Operating Cost |

*Note: Total interest includes short term and long term interest; Total tax includes direct and indirect tax*

*Source: Author's note*

## 6. METHODOLOGY

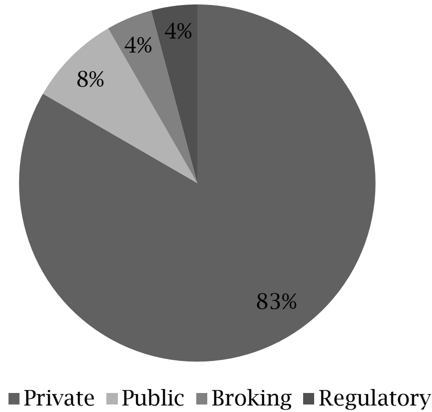
First of all, we identified the dimensions needed to measure corporate governance and value creation. In the construction of the overall CGVC index, assigning of weights to different components will play a major role. Changing weightage to any of the components will have a significant impact on the composite index thus constructed. There are several weighting techniques which can be applied. Some of the models are derived statistically like factor analysis while others include fundamental methods like analytical hierarchy process. However, for constructing the said CGVC index we have used EW method (or the equal weight) methodology for the two broad sub-indices in order to ensure that the two categories namely corporate governance and value creation are equally placed. Going further deeper, the sub-indices will be computed based on weights assigned with the help of survey.

This methodology will overcome the shortcomings of the index creation discussed by Brozec and Brozec (2012). The authors say that the construction of index with the help of EW method is a major shortcoming as it leads to tweaking of commercial ratings leading to a biased inference in case the parameters are not assessed equally by the market participants.

In the survey, a total of 141 numbers of participants participated among the 600 targeted. The targeted participants were selected using stratified sampling and covered people from different region, different institutions and different seniority from the corporate world in India. The participants represent different stakeholders' community such as employees, shareholders, bankers, and government official. The target audience comprises of people with different seniority and includes (senior management such as CXO, chairman of public and private organisations, mid-level to entry level employees). This helps in gauging a complete picture about the important parameters of corporate governance thereby eliminating any type of biasness which may have

aroused due to focus towards a single group. The charts below represent the distribution of participants:

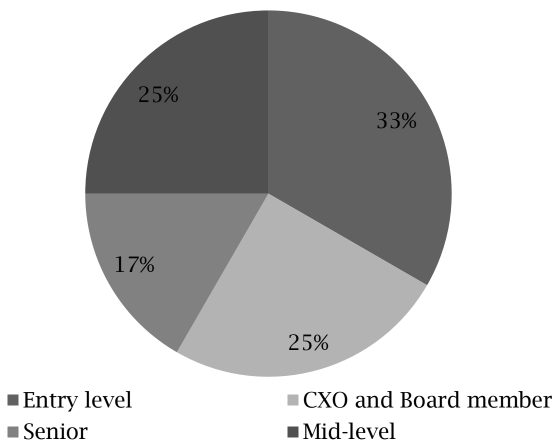
**Figure 3.** Category of organization/affiliation (Targeted)




■ Private ■ Public ■ Broking ■ Regulatory

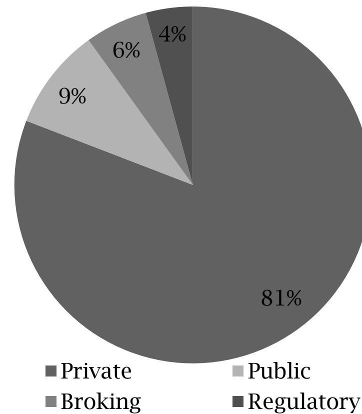
*Note: A total of 600 individuals were targeted*
*Source: Author's note*

**Figure 4.** Distribution of seniority in organization (Targeted)




*Note: A total of 600 individuals were targeted*
*Source: Author's note*

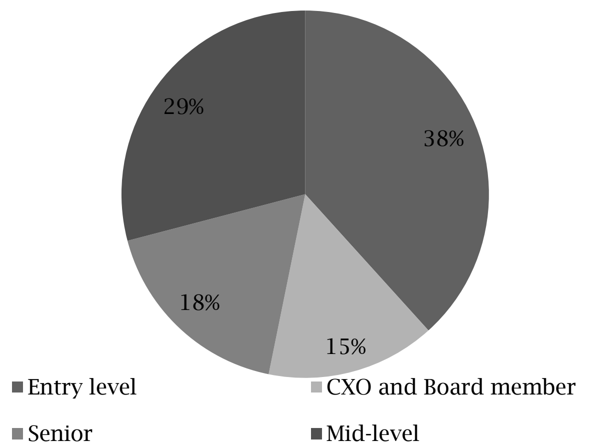
**Figure 5.** Category of organization/affiliation (Responded)




■ Private ■ Public
■ Broking ■ Regulatory

*Note: A total of 141 individuals responded*
*Source: Author's note*

**Figure 6.** Distribution of seniority in organization (Responded)




*Note: A total of 141 individuals responded*
*Source: Author's note*

**Table 6.** Weightage of parameters for CG sub-index

| | Median Ranking | Median weightage |
|---|---|---|
| Ownership structure | 2 | 5 |
| Board Size | 8 | 10 |
| Board Independence | 4 | 10 |
| Independent Chairman | 4 | 10 |
| CEO Duality | 8 | 5 |
| Audit Committee | 5 | 10 |
| Nomanation Committee | 7 | 10 |
| Remuneration | 8 | 10 |
| Shareholder's grievance | 7 | 10 |
| Disclosures | 8 | 10 |
| Transparency | 5 | 10 |

*Note: Survey method is followed in order to understand the importance of different parameters in overall corporate governance structure. A total of 141 respondents participated in the survey*
*Source: Author's note*

**Table 7.** Weightage of parameters for value creation sub-index

| Stakeholder | Parameters | Weightage |
|---|---|---|
| Shareholders | Dividend | 25% |
| Creditors | Total Interest | 25% |
| Government | Total Tax | 25% |
| Emloyees | Employee compensation as a percent of COGS | 25% |

*Note: Survey method is followed in order to understand the importance of different parameters in overall corporate governance structure. A total of 141 respondents participated in the survey*

*Source: Author's note*

## 6.1. Filing missing data

The data collected for the companies were not available for certain period due to various reasons such as non-disclosures, improper disclosure, not following the practice, etc. Luengo, J. (2011) introduced three major problems associated with missing values. The problems are loss of efficiency, complications in handling and analyzing the data, and biased result due to missing data.

These problems make it important to use tools to impute missing values. Several methods are available to impute missing values such as common value, mean or median, closest fit approach and methods based on data mining algorithms like k-nearest neighbour.

Kantardzic, M. in 2003 stated three main strategies for dealing with missing data. The simplest solution for the missing values imputation problem is the reduction of the data set and elimination of all samples with missing values. However, the same is not possible in the given case as the number of companies and the years under consideration are low. Reducing the companies with missing value will result in small sample size. Thus it is wise to impute missing values. Imputed values are not exactly the same as known values of completed data set and should not be handled the same way. Thus we will go with replace missing value with mean. This method replaces each missing value with mean of the attribute (Kantardzic, M. 2003). The mean is calculated based on all known values of the attribute. This method is usable only for numeric attributes and is usually combined with replacing missing values with mean. However, the mean is affected by the presence of outliers it seems natural to use the median instead just to assure robustness. However, in the case where the score varies from 1-5, any significant outlier is unlikely and thus we restrict to mean (Acuña, E. & Rodriguez, C. 2004).

Lastly, we analysed the correlations between indicators of corporate governance and value creation. We used the initial hypothesis that there is a positive correlation between corporate governance and value creation.

## 7. HYPOTHESES

Based on the literature we have formulated the following hypotheses to test:

***Hypothesis A:***

Ho: Strong correlation exist between corporate governance and value creation (causal relation)

Ha: Corporate governance is independent of Value creation

***Hypothesis B:***

Ho: Corporate governance is dependent on parameters of corporate governance

Ha: Corporate governance is not dependent on parameters of corporate governance

***Hypothesis C:***

Ho: Corporate governance for companies across capitalisation has deteriorated over time; small cap companies follow higher degree of CG while large companies follow lower degree of CG

Ha: Above not applicable

## 8. DATA

Data is primarily collected from prowess database of Centre for Monitoring Indian Economy (CMIE) and ACE Equity analyser. Following Data collected for 78 companies in BSE 100 for 8 years (2006-07 to 2013-14):

- Shareholding pattern
- Total number of board of directors
- Independent directors information, chairman information, CEO & MD information
- Presence of audit, remuneration and nomination committee
- Auditors information (change in auditor)
- Disclosures such as accounting policy, related party transaction, CEO/CFO certification
- Corporate governance report
- Number of AGM held, gap between two meetings, external communication
- Score of 1-5 is used for each parameter, score calculated based on intervals arrived at using median.

## 9. ASSUMPTIONS AND LIMITATIONS

Following are the limitations and assumptions of this study:

Companies operating in financial services sector (such as banks, NBFCs) are not considered in the analysis. Due to high leverage and significant amount of capital involved in financial institutions, the requirement of corporate governance structure is very different from manufacturing sector. Thus, we have screened the sample further and removed the financial institutions such as banks, NBFC companies from the sample.

In total time frame of 8 years data for some parameters were missing for several companies. In these cases, past 3 year average of score is taken for those parameters

## 10. RESULT

Corporate Governance and Value Creation sub-indices for 78 Indian companies under study during the period have remained stagnant thereby indicating no major change in the governing policies by the companies.

Also, the score for Corporate Governance has remained less than 3.5 (on a scale of 5) thereby signalling significant scope of improvement in the governance practice.

### 10.1 Correlation

We find that strong correlation exist between corporate governance and value creation (to the tune of 88%) which very well depicts the causality of value creation. It can be said that effective corporate governance practices leads to the value creation of stakeholders at large.

**Table 8.** Scoring Table

| Year | CG | VC | CGVC |
|---|---|---|---|
| 2007 | 3.33 | 3.38 | 3.28 |
| 2008 | 3.28 | 3.25 | 3.16 |
| 2009 | 3.37 | 3.38 | 3.33 |
| 2010 | 3.39 | 3.38 | 3.40 |
| 2011 | 3.34 | 3.38 | 3.28 |
| 2012 | 3.36 | 3.38 | 3.30 |
| 2013 | 3.34 | 3.38 | 3.28 |
| 2014 | 3.42 | 3.50 | 3.36 |

*Note: Median value for all 78 companies CG and VC is shown for the respective years*
*Source: Author's note*

**Table 9.** Correlation across Parameters with CGVC Index

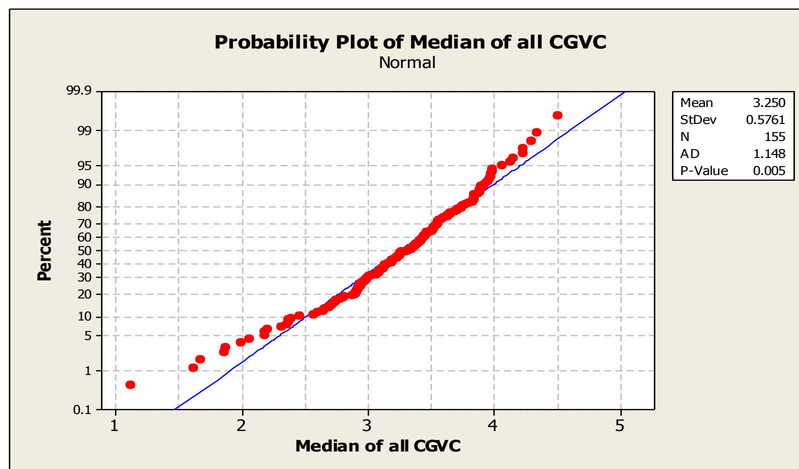
| | CGVC |
|---|---|
| Audit committee | * |
| Remuneration and compensation policy | 41% |
| Nomination | 41% |
| Transparency | 74% |
| CEO Duality | 28% |
| Board size | 42% |
| Disclosures | 74% |
| Board Chairman (Independence) | 26% |
| Ownership structure | 24% |
| Independence | 63% |
| Shareholder's grievance | * |

*Note: Median value for all 78 companies across years is used*
*Source: Author's note*

### 10.2. Normality test

Corporate governance and Value creation index at an overall level follows normal distribution. Based on the Anderson Normality test, the p value is found to be 0.005 which is very well within the alpha-range thereby indicating normalcy of the index.

**Figure 7.** Results of the Anderson Normality test




### 10.3. Regression Analysis

$$CG = X + 0.1*R + 0.1*N + 0.1*T + 0.05*CD + 0.1*BS + 0.1*D + 0.1*B + 0.05*O + 0.1*I \quad (1)$$

where,

X = constant and includes Audit Committee (A) and Shareholders (S) score due to both being constant at 5

Other symbols have usual meaning as described above

$R^2$ = 100% while P value is significant at 0.0005

This concludes that the model is significant and determines the corporate governance score in an accurate manner.

### 10.4 Grouping of companies based on market capitalisation

Going deeper further, we have divided the companies based on their market capitalisation across three buckets viz small cap, mid cap and large cap companies. The following definition is used to divide the companies across different buckets:

**Table 10.** Definition of market capitalization

| Capitalisation | Bucket |
|---|---|
| Small cap | 0 - 1 USD Billion |
| Mid cap | 1- 4 USD Billion |
| Large cap | > 4 USD Billion |

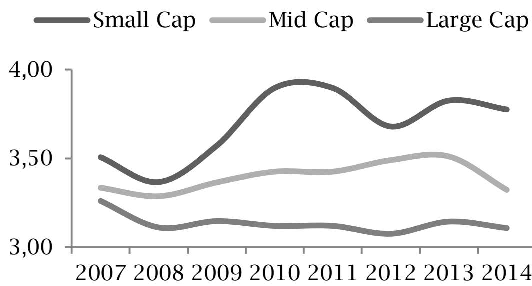
*Source: Author's note*

From the chart below, it is found that corporate governance for companies across all capitalisations has deteriorated in the recent years. It is worth noticing that after the financial crisis of 2008, the companies across capitalisation tend to improve their corporate governance practices. This was more pronounced in the case of small cap and mid cap companies where availability of capital post the crisis remained a challenge. Thus, we can infer that companies (particularly small and mid-size) improve

their corporate governance practices in order to re-instate their credibility post crisis.

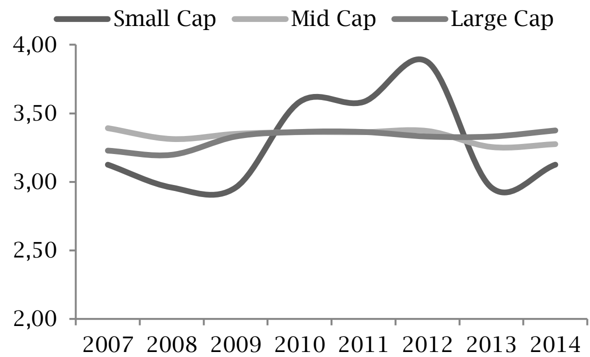
Also it is important to note that smaller sized companies follow higher degree of corporate governance practise as compared to mid-size and large-sized companies. This can be vetted true from the fact that large s companies are well established name in the capital market with higher line of credit, and easy accessibility to funds while smaller sized companies need to walk that extra mile in order to prove their credibility when it comes to raising capital.

**Figure 8.** Corporate governance index across capitalization




*Note: Mean value for value creation of all companies across different buckets is shown*
*Source: Author's note*

**Figure 9.** Value creation index across capitalization




*Note: Mean value for value creation of all companies across different buckets is shown*
*Source: Author's note*

**Table 2.** Distribution and composition of CGVC index (across capitalisation)

| | No. of firms with CGVC score between | | | | | Total no. of companies | Mean | Std Deviation |
|---|---|---|---|---|---|---|---|---|
| **Year** | **0 to 1** | **1 to 2** | **2 to 3** | **3 to 4** | **4 to 5** | | | |
| 2007 | 0 | 0 | 18 | 59 | 1 | 78 | 3.3 | 0.46 |
| 2008 | 0 | 0 | 18 | 58 | 2 | 78 | 3.2 | 0.48 |
| 2009 | 0 | 0 | 16 | 58 | 4 | 78 | 3.3 | 0.48 |
| 2010 | 0 | 2 | 17 | 57 | 2 | 78 | 3.3 | 0.47 |
| 2011 | 0 | 0 | 18 | 53 | 7 | 78 | 3.3 | 0.52 |
| 2012 | 0 | 1 | 20 | 51 | 6 | 78 | 3.3 | 0.48 |
| 2013 | 0 | 1 | 18 | 55 | 4 | 78 | 3.3 | 0.51 |
| 2014 | 0 | 0 | 19 | 50 | 9 | 78 | 3.3 | 0.44 |

*Note: The table includes companies across all capitalisations under study. Annexure I covers' the scoring of all the companies under study.*
*Source: Author's note*

## 11. CONCLUSION

We can conclude that significant correlation exist between corporate governance and value creation and also corporate governance is also an important factor in companies of smaller size which is prone to vulnerability of any market shock. Also, at an overall level the corporate governance practices in India have improved over the years. Having said that, when compared to the global landscape the practices are still substandard in the Indian economy and there is still a long way to go. Number of companies which are fully compliant with the laws of the land have increased over the years since 2007, however, that constitutes a very smaller chunk in the overall size of the corporate world which indicates that the goal of strong corporate governance and transparency is yet to be achieved.

In a nutshell, corporate governance arrangements are all about achieving the appropriate balance between the degree of commitment and control to different parties. The implications for the design of corporate governance is that all aspects of corporate governance, design, ownership, shareholder control, board structure and incentives should be focused on getting that balance appropriately related to corporate activities. Corporate governance is about the design of these features of the firm and ensuring that they promote corporate activities and values.

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