# Firm Size, Corporate Governance and Disclosure Practices: Inter-relations

Pankaj M. Madhani

**Abstract**

Corporate governance and disclosure practices of firms are influenced by various internal and external variables. Among these, firm characteristics such as size, age, leverage, origin and types of firms viz. public sector, private sector and foreign firms. also have major impact on disclosure practices of firms. As there is no much research from Indian context regarding impact of specific firm characteristics such as firm size on corporate governance and disclosure practices of firms, this study aims to contribute to the understanding of this relationship. This study focuses on corporate governance practices of sample firms listed in Bombay Stock Exchange (BSE). The sample comprises 9 sectors selected from S&P BSE sectoral indices to study impact of firm size (both in terms of fixed assets as well as gross sales) on corporate governance practices of firms. By analyzing the impact of firm size on corporate governance and disclosure practices of firms, this research identifies and tests the empirical evidence for such relationship.

***Keywords:*** *Corporate governance, Disclosure, Firm characteristics, Firm Size, Agency theory*

Dr. Pankaj M. Madhani
Professor
ICFAI Business School (IBS)
IBS House, Opp. AUDA Lake
Science City Road, Off. S.G. Road
Ahmedabad – 380 060, India
E mail:pmadhani@iit.edu

The main objective of the corporate governance is to protect long-term shareholder value along with the other stakeholders. Corporate governance is a very wide term, which covers a wide range of activities that relate to the way business organization is directed and governed. It deals with the policies and practices that directly impact on the organization's performance, stewardship and its capacity to be accountable to its various stakeholders. Corporate governance is the system of relations between the shareholders, board of directors and management of a company as defined by the corporate charter, by-laws, formal policy and rule of law.

The corporate business is an increasingly important engine for wealth creation worldwide, and how companies are run will influence welfare in society as a whole. In order to serve this wealth creating function, companies must operate within a framework that keeps them focused on their objectives and accountable for their actions. That is to say, they need

to establish adequate and credible corporate governance arrangements. Management recognizes that there are economic benefits to be gained from a well-managed disclosure policy.A system of corporate governance needs a good level of disclosure and an adequate information to eliminate (or at least reduce) information asymmetries between all parties, making corporate insiders accountable for their actions (Madhani, 2014a).

Corporate governance and disclosure practices of firms are influenced by various variables such as board size, board independence, board committees, ownership concentration, cross-listing of firms, CEO duality, auditor selection, nature of industry (manufacturing versus service firms; traditional versus knowledge intensive firms; and tangible assets versus intangible assets dominated firms), and firm characteristics (size, age, leverage, origin and types of firms viz. public sector, private sector and foreign firms). As there is no much research from Indian context regarding impact of specific firm characteristics such as firm size (i.e. in terms of fixed assets and gross sales) on corporate governance and disclosure practices of firms, this study aims to contribute to the understanding of this relationship. Hence, this study focuses on corporate governance and disclosure practices of sample firms listed in Bombay Stock Exchange (BSE). By analyzing the impact of firm size on corporate governance and disclosure practices of firms, this research identifies and tests the empirical evidence for such relationship.

**Literature Review**

Corporate governance stands for responsible business management geared towards long-term value creation. Good corporate governance is a key driver of sustainable corporate growth and long-term competitive advantage (Madhani, 2007a). A good system of corporate governance will facilitate the resolution of corporate conflicts between minority and controlling shareholders, executives and shareholders, and between shareholders and stakeholders. Corporate governance typically protects investor from managers who instigate self-deal, theft of corporate assets as well as corruption (Dalton and Daily, 1999). The broader objectives of corporate governance are; to ensure shareholders value, to protect interest of shareholders and various other stakeholders including customers, suppliers, employees and society at large, to ensure full transparency andintegrity in communication and to make available complete, accurate and clear disclosure to all concerned (Shukla, 2008).

Disclosure is an important component of corporate governance since it allows all stakeholders of firms to monitor performance of the firm. Good practices in corporate governance disclosure, guidance issued by OECD (2006) also states that all material issues related to the corporate governance of a firm should be disclosed in a timely manner. Hence, disclosures have to be clear, concise and precise and governed by the substance over form principle. An effective system of governance practices should ensure compliance with applicable laws, standards, rules, rights, and duties of all interested parties, and further, should allow companies to avoid costly litigation, including those costs related to shareholder claims and other disputes resulting from fraud, conflicts of interest, corruption and bribery, and insider trading. According to Ho et al. (2008), exhaustive disclosure by firms enabled investors to make better investment decisions.

Disclosure by firms can be categorized as mandatory disclosure and voluntary disclosure. Voluntary disclosure, also defined as information in excess of mandatory disclosure, has been receiving an increasing amount of attention from researchers in recent corporate governance and disclosure studies. Because of the inadequacy of mandatory disclosure by firms, the proactive action by firms such as voluntary disclosure provides investors with the necessary information to make more informed decisions (Madhani, 2007b).

According to Jensen and Meckling (1976) agency theory provides a framework that link disclosure behavior to firm-specific characteristics as corporate governance mechanisms are introduced to control the agency problem and ensure that managers act in the interests of shareholders. The impact of internal governance mechanisms on corporate disclosures may be complementary or substitutive. If it is complementary, agency theory predicts that a greater extent of disclosures is expected since the adoption of more governance mechanisms will strengthen the internal control of firms and provide an intensive monitoring mechanism for a firm to reduce opportunistic behaviors and information asymmetry (Knutson, 1992).

In this situation, managers are not likely to withhold information for their own benefits under such an intensive monitoring environment, which lead to improvement in extent as well as quality of disclosure (Apostolou and Nanopoulos, 2009). On the other hand, if the relationship is substitutive, firms will not provide more disclosures for more governance mechanisms since one corporate governance mechanism may substitute another one. If information asymmetry in a firm can be reduced because of the existing internal monitoring packages mechanism, the need to deploy additional governance devices is smaller.

Size of the firm is the most consistently reported variable that explains the differences in voluntary disclosure by firms (Foster, 1986). The positive relationship between size and level of disclosure is attributed to agency theory, which suggests that agency cost is high for large firms (Leftwich,1981) as shareholders are widespread (Alsaeed, 2006). As large firms have more agency costs and a wider ownership distribution so they are triggered to disclose more information (Meek et al.,1995). Because, it is harder to monitor, large firms need to compensate with stricter governance mechanisms (Jensen, 1986).

Since large firms rely on capital and tend to go to the stock market for their financial needs more often than small firms, such firms provide detailed disclosure (Kamran and Nicholls, 1994). There are other explanations for positive association between size and disclosure levels. Smaller firms may be at a competitive disadvantage against larger firms in the same industry and they may not freely disclosedue to fear of competition (Singhvi and Desai, 1971) as it could endanger their competitive positions.

Moreover, the cost of generating the information may be high for smaller firms. Large firms would be in a position to bear costly process of information gathering and processing and hence exhibit higher disclosure (Buzby, 1975). Freeman (1987) and Lang and Lundholm (1993) argue that the "differential information hypothesis" results in managers from large firms providing a relatively greater level of disclosure (that is, supply of information) than their smaller firm counterparts. Consistent with the legal costs and differential information hypotheses, regulators also have assumed a posture of requiring more disclosure from larger firms (Karim et al.).

In USA, the Securities Exchange Commission (SEC) has expressed concern that smaller registrants lack sufficient qualified personnel to deal with disclosure requirements. The SEC currently designates firms with less than $75 million public float as smaller registrants. The previous threshold was less than $25 million in public common equity and less than $25 million in annual revenue. The change in threshold increased the number of smaller reporting firms to 4,976 from 3,395, an increase of 47%. Firms without calculable public float are considered small reporting firms if the previous year's revenues were less than $50 million.In March 2005, the SEC formed an Advisory Committee on Smaller Public Companies, which recommended smaller firms not be subject to further acceleration of Form 10-Q and 10-K filing dates ''because of the lack of capacity… of internal compliance personnel and external professional advisors to smaller public firms'' (SEC Advisory Committee on Smaller Public Companies, 2006). In 2008, the SEC amended Regulation S–K to expand the number of firms that qualify for scaled (by size) disclosure requirements (SEC 2008). From USA perspective, a more compelling reason for disclosure involves a consideration of costs of lawsuits brought under SEC Rule 10b-5 (Skinner, 1994).

By disclosing more information and in a timelier fashion, management subjects its firms to lower settlement costs in lawsuits. Large firms have "deeper pockets" and are therefore more susceptible to lawsuits than smaller firms (Ettredge, et al., 2011). Hence, large firms have the incentive to increase their levels of disclosure to avoid litigation costs (Field, *et al.,* 2005). Therefore, from the litigation risk perspective, managers from larger firms are more likely to disclose information than their smaller firm counterparts. This association may also occur because larger firms are more likely to have resources, including adequate officers' and directors' insurance, available to pay plaintiffs and their attorneys (Bonner et al., 1998).

However, in the Indian context, such research has not been fully explored. Hence, the impact of firm size on corporate governance and disclosure practices is studied in this research and accordingly it identifies and tests the empirical evidence for such relationship for firms listed in Indian stock market BSE.

**Firms Size and Corporate Governance and Disclosure Practices**

Cooke (1989a) analyzed disclosure in Swedish firms and based on regression analysis indicated that listing status and size were major explanatory variables for voluntary disclosure. Cooke (1991), and Chow and Wong Boren (1987) have examined the factors influencing the disclosure levels in different countries. These studies examined the influence of size, country, industry, leverage, multi nationality (extent of multi-national operations), profitability, institutional and other block shareholding and international listing status on disclosure. Meek et al., (1995) studied the voluntary disclosure practices of firms from the international perspective. Their study examined the various factors influencing the voluntary disclosures of mainly three types of information: strategic, nonfinancial and financial information contained in the annual report. The sample of the study with sample size of 226 firms was drawn from various countries such as UK (64 firms), US (116 firms), France (16 firms), Germany (12 firms) and Netherlands (18 firms). Their study revealed that, firm size; country or region and the listing status were very important factors in explaining the voluntary disclosures of firms.

Many studies have examined the relationship between firm-specific characteristics and voluntary disclosure level. Naser *et al.* (2002), Fama and Jensen (1983), Camfferman and Cooke (2002), Donnelly and Mulcahy (2008), studied the association between firm size, debt ratio, ownership and auditor firm size and the level of disclosure. Firm size has consistently been found to be positively associated with various firm disclosures (Francis et al., 1994, Kasznik and Lev, 1995; Raffournier, 1995; Leung and Srinidhi, 2006). This suggests that large firms follow better disclosure practices (Ahmed and Courtis, 1999). Reasons why large firms might disclose more information than other firms can also be found in earlier research of Choi (1973), Schipper (1981) and Cooke (1989b). However, Stanga (1976) has found that the size of the firm did not significantly explain an association with the level of disclosure and its variability. Hossain, *et al.,* 1995 found a positive association between firm size and levels of disclosures. Study by Cullen and Christopher (2002) examined the association of governance disclosures of a sample of 100 industrial companies to firm characteristics. They found significant positive associations between governance disclosures and firm size.

The larger the firm, the greater the incentive to disclose information to reduce perceived political costs as larger firms may consider their size to be a variable which encourages the public to take notice, pay more attention or scrutinize their operations (Eilbirt and Parket, 1973).
According to Watts and Zimmerman (1978) the extent of political costs impacting on a firm is highly dependent on firm size. As a result, additional disclosure will be needed to reduce these costs (Watts and Zimmerman, 1983). Consequently, these firms might publish more information in their reports to supply information relevant to different users.

Firth (1979) argued that large firms tend to be in the public eye and attract more interest from government bodies, and thus may disclose more information to enhance their reputation and public image. Higher disclosure allays public criticism and government intervention in their corporate affairs. This is analogous to arguments concerning political visibility put forward by Watts and Zimmerman (1986), as the annual reports of larger firms are more likely to be scrutinized by financial and stock market analysts than those of smaller firms and investors may interpret nondisclosure as bad news, which could adversely affect firm value.

Large firms can have bigger impact on the economy as these companies account for a significant proportion of goods and services produced, raw materials consumed and number of people employed. As such, large firms are likely to come under the scrutiny of various interested parties and hence tend to disclose adequate information in their annual reports (Wallace and Naser, 1995) and are more likely to issue forecasts (Lev and Penman, 1990).

As large firms have the access to resources (Hossain et al., 1994), they tend to allocate larger resources for generation of this information (Stigler, 1961). These firms may have multi products and have operations covering larger areas. These firms require and produce more information for their own internal decision-making or management information systems (MIS) and for evaluating different divisions. The larger firms are likely to have a higher level of internal reporting to keep senior management informed and therefore are likely to have relevant information available (Owusu-Ansah, 1998). Thus, for larger firms no additional cost may be required for generating voluntary disclosures.

Hassan *et al.* (2006) justify the positive association between firm size and disclosure practices as largefirms are more likely to have enough resources to afford the cost of producing in-depth information for annual reports and they are more likely to be of interest to different entities including government agencies. Larger firms tend to attract more analysts' followings than smaller ones, and may therefore be subjected to greater demand by analysts for private information (McKinnon and Dalimunthe, 1993).Karim et al., (2013) found larger firms disclose more items than smaller firm. They have used assets and revenue of firm as proxies for firm size. In summary, the above arguments indicate that there is an interactive effect between firm size and disclosure levels. This research study seeks to examine how large size firms and small size firms differ in corporate governance and disclosure practices and accordingly following hypotheses are formulated.

**Development of Hypotheses**

*Testable Hypotheses*

The relation between corporate governance and disclosure practices and firm characteristics, has become a subject of much interest in recent years. The current study develops hypotheses on the association between firm size and corporate governance and disclosure levels. As mentioned earlier, large firms show higher standard of corporate governance and disclosure practices compared to small firms. Thus, based on these arguments following alternate hypotheses are proposed:

$H1_{01}$:

*There is an association between firm size and levels of corporate governance and voluntary disclosure practices in India.*

From literature review, it may be emphasized that one of the important variables studied in corporate governance and disclosure research is the size of the firm. There are three measures of firm size namely assets, sales and market capitalization of the firm (Malone et al., 1993). Fixed assets and gross sales were most highly correlated with disclosure level (Cooke, 1992). Hence, based on this, following two alternate hypotheses are proposed:

$H1_{02}$:

*Large firms have better corporate governance and disclosure practices compared to small firms, when fixed assets are used as firm size criteria.*

$H1_{03}$:

*Large firms have better corporate governance and disclosure practices compared to small firms, when gross sales are used as firm size criteria.*

**Research Design and Methodology**

*Objective of the Study*

1. To measure extent of corporate governance and disclosure practices of sample firms with the help of an appropriate instrument as an evaluation tool.
2. To know that to what extent firms from different size disclosed through their annual reports.
3. To know how size of the firms influences their corporate governance and disclosure practices.

*Scope of the Study*

This study will help us to understand that whether intangible assets dominance of firms is associated with corporate governance and disclosure practices of firms in Indian context.

*Sources of Data*

This study employs a method of content analysis of published annual reports of firms. Content analysis can be a great source of information as it involves codifying both qualitative and quantitative information into pre-defined categories in order to track patterns in the presentation and reporting of information (Guthrie et al., 2006). Content analysis is widely used in accounting research to reveal useful insights into accounting practice (Steenkamp and Northcott, 2007). Annual reports are important documents for assessing and analyzing the company performance in regard to corporate governance standards and compliance. The annual reports of 54 firms for the financial year 2011-12 i.e. for the period ending March 2012 or December 2012 (based on the sample firms' financial year) have been downloaded from the CMIE Prowess database (4.14 version).

*Sampling Technique Applied*

Stratified sampling was used for obtaining data of firms listed in Bombay Stock Exchange (BSE) and is constituent of S&P BSE sectoral indices.

*Sampling and Data Collection*

The sample for the study was collected from the firms listed in BSE in the form of S&P BSE sectoral indices. Sectoral indices at BSE aim to represent minimum of 90% of the free-float market capitalization for sectoral firms from the universe of S&P BSE 500 index. This sector index consists of the firms classified in that particular sector of the BSE 500 index. The sample firms represent different sectors viz.: Metal, Oil & Gas, Power, FMCG, Health Care, IT, Auto, Consumer Durables and Capital Goods. In each of these sectors, top 6 firms as per market capitalization are selected for sample.

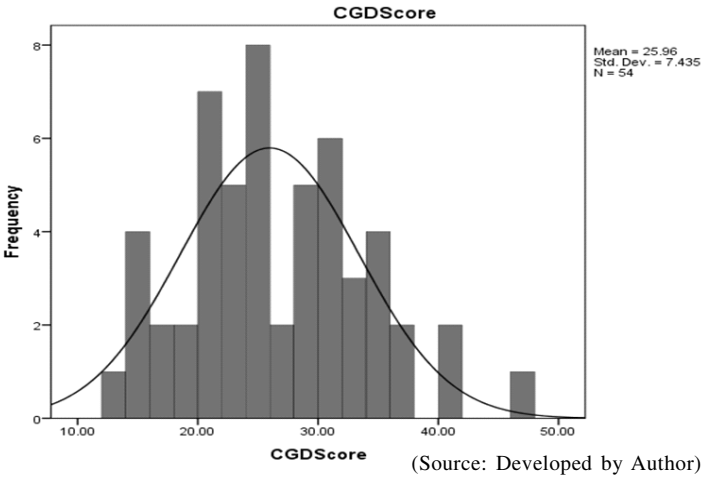
In most of the earlier studies on disclosure, firms were taken as the top largest firms listed on their respective stock exchanges which have been selected on the basis of their market capitalization. Such studies also employed content analysis of published annual reports (Joshi et al., 2012). As shown below in Table 1, these 54 firms selected from 9 different sectors represent more than 91% of overall sectoral index weight. Hence, these samples of 54 firms truly represent selected 9 sectors.

**Table 1: Weight of Sample Firms in Their Respective Sectoral Indices**

| Sr. No. | S&P BSE Sectoral Indices | No. of Firms Studied | Weight in Index |
|---|---|---|---|
| 1 | S&P BSE Auto | 6 | 89 % |
| 2 | S&P BSE Capital Goods | 6 | 94 % |
| 3 | S&P BSE Consumer Durables | 6 | 90 % |
| 4 | S&P BSE Healthcare | 6 | 88 % |
| 5 | S&P BSE IT | 6 | 95 % |
| 6 | S&P BSE Metal | 6 | 82 % |
| 7 | S&P BSE Oil & Gas | 6 | 94 % |
| 8 | S&P BSE Power | 6 | 97 % |
| 9 | S&P BSE FMCG | 6 | 91 % |
| **Total Sample Size** | | **54** | **91 %** |

(Source: Calculated by author form BSE Web Site)

Figure 1 shows relationship of CGD scores of sample firms, along with frequency distribution in terms of histogram.




**Mean CG Score = 25.96**
**Std. Deviation = 7.435**
**Sample Size = 54**

(Source: Developed by Author)

**Figure 1: CGD Scores of Sample Firms: Frequency Distribution**

The Research Instrument: Measurement of Corporate Governance Disclosure Score

In this study, corporate governance and disclosure practices of firms are measured by using index developed by Subramaniana and Reddy (2012). They developed a new instrument to measure corporate governance and disclosure levels of firms, considering only voluntary disclosures in the Indian context. On the basis of the S&P instrument, the instrument also classifies corporate governance-related disclosures under two categories: ownership structure and investor relations (ownership), and board and management structure and process (board) (Annexure-I). This instrument was also used in prior research on corporate governance and disclosure studies in India (Madhani, 2014b; Madhani, 2014c; Madhani, 2015a; Madhani, 2015b; Madhani, 2015c; Madhani, 2015d; Madhani, 2015e; Madhani, 2016).

The final instrument had 67 items: 19 questions in the ownership disclosure category and 48 in the board disclosure category. The annual reports of the selected 54 firms were carefully examined for the financial year 2011-12. Hence, to arrive at the overall disclosure score for each category, i.e. ownership and board, annual reports of each firm under study was scrutinized for the presence of specific items under the above mentioned categories. One point is awarded when information on an item is disclosed and zero otherwise. All items in the instrument were given equal weight, and the scores thus arrived at (for each category), with a higher score indicating greater disclosure. Final corporate governance and disclosure (CGD) score (Maximum: 67) for each firm was calculated by adding overall score received in ownership (Maximum: 19) as well as and board category (Maximum: 48).

Data Analysis and Interpretation

As explained earlier, with the help of instrument, corporate governance and disclosure practices of firms were calculated by thoroughly scrutinizing annual report of firms. The CGD score was calculated for all 54 firms of sample. Firmsize in terms of fixed assets as well as gross sales and CGD score for sample firms across various sectors is shown in Annexure-II.

Summary of Findings and Empirical Results

The explanatory variables used in the present research are fixed assets and gross sales of firm. The study aims to find out if corporate governance and disclosure scores of large firms and small firmsare significantly different. This study considers all these three measures of firm size i.e. fixed assets, gross sales and market capitalization to understand impact of firm size on disclosure practices. As explained earlier in sampling and data collection part of research methodology, sample firms comprise of top 6 firms as per market capitalization are selected from 9 sectors of S&P BSE sectoral indices. Hence, within sample of large firms (according to market capitalization), further segregation is made to divide firms in to large and small firms using fixed assets and gross sales as firm size criteria. As per frequency distribution analysis, firm size criteria for large firms is considered as fixed assets >INR 10,000 Croreswhile for small firms it is considered as fixed assets <INR 10,000 Crores. Similarly, firm size criteria for large firms is considered as gross sales > INR 20,000 Crores while for small firms it is considered as gross sales <INR 20,000 Crores.

For sample of 54 firms, mean value of fixed assets is INR 29,809.65 Crores while mean value of gross sales is INR 48,121.66 Crores. In the sample firms, 26 firms are large firms (fixed assets >INR 10,000 Crores), while 28firms are small firms (fixed assets <INR 10,000 Crores). Similarly, out of 54 firms, 28 firms are large firms (gross sales >INR 20,000 Crores, while 26 firms are small firms (gross sales <INR 20,000 Crores). According to these criteria, segregation of large and small firms (in terms of fixed assets) is shown in Table 2 and Table 3 respectively.Similarly, Table 4 and Table 5 respectively showsegregation of large and small firms (in terms of gross sales).

**Table2: Large Firms (According to Fixed Assets) across Various Sectors**

| Sector | Sr. No. | Firm | Fixed Assets (INR Crores) |
|---|---|---|---|
| Oil & Gas | 1 | ONGC | 254,415.39 |
| | 2 | Reliance Industries | 233,475.00 |
| | 3 | IOC | 107,630.59 |
| | 4 | Bharat Petroleum | 42,549.62 |
| | 5 | Cairn India | 35,703.86 |
| | 6 | GAIL | 31,769.19 |
| Metal | 7 | Tata Steel | 130,491.21 |
| | 8 | Hindalco Industries | 53,961.03 |
| | 9 | JSW Steel | 42,689.51 |
| | 10 | Coal India | 38,096.41 |
| | 11 | Sterlite | 37,289.83 |
| | 12 | Jindal Steel & Power | 22,421.80 |
| Power | 13 | NTPC | 88,882.13 |
| | 14 | Power Grid | 64,519.19 |
| | 15 | Tata Power | 38,256.23 |
| | 16 | NHPC | 30,293.05 |
| | 17 | Reliance Infrastructure | 17,045.07 |
| Auto | 18 | Tata Motors | 94,012.06 |
| | 19 | Mahindra & Mahindra | 35,007.94 |
| | 20 | Maruti Suzuki | 15,055.70 |
| Capital Goods | 21 | L & T | 25,778.14 |
| | 22 | BHEL | 10,017.20 |
| FMCG | 23 | ITC | 15,519.38 |
| IT | 24 | Wipro | 18,277.30 |
| | 25 | TCS | 12,991.29 |
| Consumer Durables | 26 | Videocon Industries | 14,892.29 |
| **Mean Value** | | | **58,116.94** |

(Source: Table Developed by Author)

**Table 3: Small Firms (According to Fixed Assets) across Various Sectors**

| Sector | Sr. No. | Firm | Fixed Assets (INR Crores) |
|---|---|---|---|
| Healthcare | 1 | Dr Reddy | 8,842.30 |
| | 2 | Cipla | 4,626.90 |
| | 3 | Lupin | 4,191.84 |
| | 4 | Ranbaxy Laboratories | 3,258.79 |
| | 5 | Glenmark Pharmaceuticals | 2,650.96 |
| | 6 | Glaxo | 316.18 |
| Capital Goods | 7 | Cropmton Greaves | 4,408.73 |
| | 8 | PipavavDefence | 2,557.67 |
| | 9 | Siemens | 1,998.32 |
| | 10 | ABB | 1,612.31 |
| FMCG | 11 | United Spirits | 8,898.40 |
| | 12 | Nestle | 4,368.68 |
| | 13 | Godrej Consumer Products | 4,185.74 |
| | 14 | HUL | 4,016.16 |
| | 15 | Colgate | 613.16 |
| IT | 16 | HCL | 9,581.82 |
| | 17 | Infosys | 9,194.00 |
| | 18 | Mahindra Satyam | 2,320.60 |
| | 19 | Oracle Financial | 1,324.42 |
| Power | 20 | Reliance Power | 6,935.61 |
| Auto | 21 | Hero MotoCorp | 6,308.26 |
| | 22 | Bajaj Auto | 3,839.32 |
| | 23 | Cummins | 699.52 |
| Consumer Durables | 24 | Titan Industries | 813.83 |
| | 25 | Blue Star | 417.63 |
| | 26 | Gitanjali Gems | 408.65 |
| | 27 | TTK Prestige | 202.86 |
| | 28 | Rajesh Exports | 87.81 |
| **Mean Value** | | | **3,524.30** |

(Source: Table Developed by Author)

**Table 4: Large Firms (According to Gross Sales) across Various Sectors**

| Sector | Sr. No. | Firm | Gross Sales(INR Crores) |
|---|---|---|---|
| Oil & Gas | 1 | IOC | 442,458.53 |
| | 2 | Reliance Industries | 368,571.00 |
| | 3 | Bharat Petroleum | 223,314.64 |
| | 4 | ONGC | 151,121.10 |
| | 5 | GAIL | 44,861.05 |
| Capital Goods | 6 | L & T | 64,960.08 |
| | 7 | BHEL | 50,653.84 |
| Power | 8 | NTPC | 66,365.89 |
| | 9 | Tata Power | 26,019.81 |
| | 10 | Reliance Infrastructure | 24,180.76 |
| IT | 11 | TCS | 48,894.08 |
| | 12 | Wipro | 37,308.30 |
| | 13 | Infosys | 33,734.00 |
| | 14 | HCL | 20,830.55 |
| Metal | 15 | Tata Steel | 135,975.56 |
| | 16 | Hindalco Industries | 82,549.03 |
| | 17 | Coal India | 78,410.38 |
| | 18 | Sterlite | 43,115.91 |
| | 19 | JSW Steel | 36,964.23 |
| | 20 | Jindal Steel & Power | 22,472.89 |
| Auto | 21 | Tata Motors | 170,677.58 |
| | 22 | Mahindra & Mahindra | 63,030.48 |
| | 23 | Maruti Suzuki | 40,049.60 |
| | 24 | Hero MotoCorp | 25,235.02 |
| | 25 | Bajaj Auto | 20,541.41 |
| FMCG | 26 | ITC | 36,990.37 |
| | 27 | HUL | 24,506.40 |
| Consumer Durables | 28 | Rajesh Exports | 25,653.85 |
| **Mean Value** | | | **86,051.66** |

*(Source: Table Developed by Author)*

**Table 5: Small Firms (According to Gross Sales) across Various Sectors**

| Sector | Sr. No. | Firm | Gross Sales(INR Crores) |
|---|---|---|---|
| Health Care | 1 | Dr Reddy | 9855.00 |
| | 2 | Cipla | 7128.82 |
| | 3 | Lupin | 7124.93 |
| | 4 | Ranbaxy Laboratories | 6331.46 |
| | 5 | Glenmark Pharmaceuticals | 4020.64 |
| | 6 | Glaxo | 2766.92 |
| Capital Goods | 7 | Siemens | 12478.88 |
| | 8 | Crompton Greaves | 11615.12 |
| | 9 | ABB | 7610.48 |
| | 10 | PipavavDefence | 1867.23 |
| FMCG | 11 | United Spirits | 18,233.54 |
| | 12 | Nestle | 8581.88 |
| | 13 | Godrej Consumer Products | 4986.61 |
| | 14 | Colgate | 2805.54 |
| IT | 15 | Mahindra Satyam | 6395.60 |
| | 16 | Oracle Financial | 3146.68 |
| Oil & Gas | 17 | Cairn India | 11,860.65 |
| Power | 18 | NHPC | 6920.33 |
| | 19 | Power Grid | 10,311.52 |
| | 20 | Reliance Power | 2019.21 |
| Auto | 21 | Cummins | 3924.01 |
| Consumer Durables | 22 | Videocon Industries | 13,684.51 |
| | 23 | Gitanjali Gems | 12,498.28 |
| | 24 | Titan Industries | 8983.15 |
| | 25 | Blue Star | 2847.82 |
| | 26 | TTK Prestige | 1122.71 |
| **Mean Value** | | | **7273.90** |

(Source: Table Developed by Author)

**Table 6 shows firm size (in terms of fixed assets) and CGD score across various sectors.**

**Table 6: Firms Size (According to Gross Sales) across Various Sectors**

| Sr. No. | Sector | Firm Size (Fixed Assets) | | Fixed Assets (INR Crores) | | | CGD Score | |
|---|---|---|---|---|---|---|---|---|
| | | Large | Small | Min. | Max. | Mean | Min. | Max. |
| 1 | Oil & Gas | 6 | 0 | 31,769.19 | 254,415.39 | 117,590.61 | 20 | 34 |
| 2 | Metal | 6 | 0 | 22,421.81 | 130,491.21 | 54,158.30 | 17 | 35 |
| 3 | Power | 5 | 1 | 6,935.61 | 88,882.13 | 40,988.55 | 25 | 30 |
| 4 | Auto | 3 | 3 | 699.52 | 94,012.06 | 25,820.47 | 13 | 34 |
| 5 | Health Care | 0 | 6 | 316.18 | 8842.30 | 3981.16 | 14 | 40 |
| 6 | Capital Goods | 2 | 4 | 1612.31 | 25,778.14 | 7728.72 | 21 | 31 |
| 7 | FMCG | 1 | 5 | 613.16 | 15,519.38 | 6266.92 | 15 | 41 |
| 8 | IT | 2 | 4 | 1324.42 | 18,277.30 | 8948.24 | 20 | 47 |
| 9 | Consumer Durables | 1 | 5 | 87.81 | 14,892.29 | 2803.85 | 15 | 26 |
| **Total Firms (54)** | | **26** | **28** | **87.81** | **254,415.39** | **29809.65** | **13** | **47** |

(Source: Table developed by author)

As shown in Table 6, oil & gas and metal sector represents maximum number of big firms i.e. 6 in terms of fixed assets. However, all firms in health caresector are small firms. Firm size is determined based on whether fixed assets of firm are more or less than INR 10,000Crores.

Table 7 shows firm size (in terms of gross sales) and CGD score across various sectors.

**Table 7 : Firms Size (According to Gross Sales) across Various Sectors**

| Sr. No. | Sector | Firm Size (Gross Sales) | | Gross Sales (INR Crores) | | | CGD Score | |
|---|---|---|---|---|---|---|---|---|
| | | Large | Small | Min. | Max. | Mean | Mean | SD* |
| 1 | Oil & Gas | 5 | 1 | 11,860.65 | 442,458.53 | 207,031.16 | 27.83 | 5.08 |
| 2 | Metal | 6 | 0 | 22,472.89 | 135,975.56 | 66,581.33 | 26.33 | 7.12 |
| 3 | Capital Goods | 2 | 4 | 1867.23 | 64,960.08 | 24,864.27 | 24.83 | 3.87 |
| 4 | Auto | 5 | 1 | 3924.01 | 170,677.58 | 53,909.68 | 23.67 | 7.55 |
| 5 | Power | 3 | 3 | 2019.21 | 66,365.89 | 22,636.25 | 28 | 1.79 |
| 6 | IT | 4 | 2 | 3146.68 | 48,894.08 | 25,051.54 | 32 | 10.20 |
| 7 | Health Care | 0 | 6 | 2766.92 | 9855.00 | 6204.63 | 23.83 | 8.68 |
| 8 | Consumer Durables | 1 | 5 | 1122.71 | 25,653.85 | 10,798.39 | 19.67 | 4.59 |
| 9 | FMCG | 2 | 4 | 2805.54 | 36,990.37 | 16,017.39 | 27.50 | 10.82 |
| **Total Firms (54)** | | **28** | **26** | **1122.71** | **442,458.53** | **48,121.66** | **25.96** | **7.44** |

*SD = Standard Deviation

(Source: Table developed by author)

As shown in Table 7, metal sector represents maximum number of big firms i.e. 6 in terms of gross sales. However, all firms in health care sector are small firms. Firm size is determined based on whether gross sales of firm are more or less than INR 20,000 Crores.

*Research Procedures for Testing Hypotheses*

This research conducted an inferential statistical analysis for testing the hypotheses. In order to study relationship between firm size and CGD score, correlation matrix has been used while to test the significant differences in the CGD scores of large firms and small firms, parametric *t*-test has been used.

Table 8, below shows key statistics for large firms and small firms along with CGD score.As shown in Table 8, mean size (in terms of fixed asset) of sample firm is INR 29809.65 Crores, while mean size (in terms of gross sales) of sample firm is INR 48121.66 Crores.

**Table 8: Firm Size and CGD Score**

| Sr. No. | Firm Size Criteria | Size of Firms | No. of Firms | Firm Size (INR Crores) | | | CGD Score | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Min. | Max. | Mean | Min. | Max. | Mean | SD |
| 1 | Fixed Assets (FA) | Large | 26 | 10,017.20 | 254,415.39 | 58,116.94 | 17 | 47 | 28.58 | 6.95 |
| | | Small | 28 | 87.81 | 9581.82 | 3,524.30 | 13 | 40 | 23.54 | 7.15 |
| 2 | Gross Sales (GS) | Large | 28 | 20,541.41 | 442,458.53 | 86,051.66 | 17 | 47 | 28.79 | 7.32 |
| | | Small | 26 | 1122.71 | 18,233.54 | 7273.90 | 13 | 40 | 22.92 | 6.39 |
| **Overall** | | | **54** | **87.81**(FA) | **442,458.53** (GS) | **29809.65** (FA) **48121.66** (GS) | **13** | **47** | **25.96** | **7.44** |

(Source: Table developed by author)

Values of minimum, maximum, mean and standard deviation of CGD score for large firms and small firms have also been reflected. Results show that there is a difference between mean and standard deviation of CGD score for large firms and small firms. Analysis of the result shown in Table 8, indicates that mean of CGD score is higher for large firms at 28.58 and 28.79 respectively for fixed assets and gross sales. While, mean of CGD score is lower for small firms at 23.54 and 22.92 respectively for fixed assets and gross sales

$H1_{01}$:

*There is an association between firm size and levels of corporate governance and voluntary disclosure practice in India.*

To test above hypothesis correlation matrix has been used to examine the correlation between the dependent and independent variables; Pearson product moment correlation (r) was computed to test the hypothesis. A correlation matrix of all the values of 'r' for the explanatory variables along with dependent variables was constructed and is shown in Table 9. Correlation matrix shows pair wise correlation coefficients between the CGD score and firm size (measured by fixed assets) as well as CGD score and firm size (measured by gross sales). When Pearson r is close to '0' it means that there is a weak relation between two variables. Thus, value of 'r' = .427 (for Sales) and 'r' = .500 (for Fixed Assets), shows that relationship exists between these independent variables and corporate governance and disclosure practices of firms as variables are correlated. Table 9shows correlation matrix of dependent and independent variables.

**Table 9: Correlation Matrix Dependent and Independent Variables**

| Independent Variables | CGD Score | Ln (Sales) | Ln (Fixed Assets) |
|---|---|---|---|
| **CGD Score** | 1 | 0.427* (0.001) | 0.500* (0.000) |
| **Ln (Sales)** | | 1 | 0.760* |
| **Ln (Fixed Assets)** | | | 1 |

Note: * indicates significance at 1% levels.

(Source: Table developed by author)

Result also revealed a positive relationship between gross sales and fixed assets (r = .760).As significance valueis < .05 for both fixed assets and gross sales we can conclude that there is statistically significant correlation between firm size(measured in terms of fixed assets as well as gross sales) and CGD score. Hence, it is evident from the Table 9 that there is significant relationship between corporate governance and disclosure practices of firms and variables such as size of firms in terms of fixed assets as well as gross sales.

$H1_{02}$:

Large firms have better corporate governance and disclosure practices compared to small firms, when fixed assets are used as firm size criteria.

$H1_{03}$:

Large firms have better corporate governance and disclosure practices compared to small firms, when gross sales are used as firm size criteria.

Both hypotheses $H1_{02}$ and $H1_{03}$ have been tested using the univariatet-test. Group statistics and independent sample test output is given in Table 10 and Table 11 respectively.Results of parametric test, as indicated in Table 10, show that significance value p is less than 0.05, therefore at 5% level of significance; null hypothesis of equality of means is rejected. Thus, there exists statistically significant difference between corporate governance and disclosurescores of large firms and small firms (segregated in terms of fixed assets) and as such corporate governance and disclosure practices oflarge firms are better than small firms.

**Table 10: Results of Univariate Test – Hypothesis 2**

| Null Hypothesis | *t* - Value | Significance Level |
|---|---|---|
| No significant difference between corporate governance disclosure scores of large firms and small firms (segregated according to fixed assets) | 2.6241 | .005689 |

(Source: Table developed by author)

Results of parametric test, as indicated in Table 11, show that significance value *p* is less than 0.05, therefore at 5% level of significance; null hypothesis of equality of means is rejected. Thus, there exists statistically significant difference between corporate governance and disclosure scores of large firms and small firms (segregated in terms of gross sales) and as such corporate governance and disclosure practices oflarge firms are better than small firms.

**Table 11: Results of Univariate Test - Hypothesis 3**

| Null Hypothesis | *t* -Value | Significance Level |
|---|---|---|
| No significant difference between corporate governance disclosure scores of large firms and small firms (segregated according to gross sales) | 3.12549 | .001451 |

(Source: Table developed by author)

**Discussion and Conclusion**

This research focus oncorporate governance and disclosure practices of firms listed in BSE. Research found that in Indian environment, firm size is an important variable influencing corporate governance and disclosure practices of firms. Research study used both fixed asset as well as gross sales as proxies for firm size and concluded that large firms have higher disclosure compared to small firms.

There are many reasons for higher disclosure by larger firms as explained below:

1. As financial analysts and the media focus more on financial statements of large firms, they may consider a low level of disclosure as a signal for hiding bad news. Therefore, large firms are more motivated to increase the level of disclosure to gain investors' confidence.
2. As large firms have more expertise and financial resources compared with small firms, the costs of dissemination of financial information are lower for them and hence large firms disclose more compared to small firms.
3. Large firms require more finance to support and expand their operations and hence for financing purposes, such firms are more likely to voluntary disclose additional information.
4. Large firms require more funding than smaller firms and have a need to raise large capital at the lowest cost; hence such firms will comply with mandatory disclosures and also provide voluntary disclosures.

As found in this research, large firms have considerably higher CGD score (for both criteria of firm size i.e. fixed assets and gross sales) compared to mean CGD score of sample firms. Similarly, small firms have considerably lower CGD score (for both criteria of firm size i.e. fixed assets and gross sales) compared to mean CGD score of sample firms.The empirical evidence found in this study is consistent with prior research. Hence, it is concluded that large firms have better corporate governance and disclosure practices compared to small firms as large firms provides more voluntary disclosure than their smaller firm counterparts.

**References**

Ahmed, K. and J. K. Courtis(1999). "Associations Between Corporate Characteristics and Disclosure Levels in Annual Reports: A Meta-Analysis." *The British Accounting Review,* Vol. 31, No. 1, pp. 35-61.

Alsaeed, K. (2006). "The Association between Firm-specific Characteristics and Disclosure: The Case of Saudi Arabia." *Managerial Auditing Journal*, Vol. 21, No. 5, pp. 476-96.

Apostolou, A. K. and K. A. Nanopoulos (2009). "Voluntary Accounting Disclosure and Corporate Governance: Evidence from Greek Listed Firms." *International Journal of Accounting and Finance*, Vol. 1, No. 4, pp. 395-414.

Bonner, S. E., Z. Palmrose and S. Young (1998). "Fraud Type and Auditor Litigation: An Analysis of SEC Accounting and Auditing Enforcement Releases." *The Accounting Review*, Vol. 73, No. 4, pp. 503-532.

Buzby, S. L. (1975). "Company Size, Listed vs. Unlisted Stock and Extent of Financial Disclosure." *Journal of Accounting Research,* Vol. 13, No. 1, pp.16-37.

Camfferman, K. and T. E. Cooke (2002). "An analysis of disclosure in the annual reports of UK and Dutch companies." *Journal of International Accounting Research*, Vol. 1, No. 1, pp. 3-30.

Choi,F. D. S. (1973). "Financial Disclosure and Entry to the European Capital Market." *Journal of Accounting Research,* Vol. 11, No. 2, pp. 159-175.

Chow, C. W. and A. Wong Boren (1987). "Voluntary Financial Disclosure by Mexican Corporations." *The Accounting Review*, Vol. 62, No. 3, pp. 533-541.

Cooke, T. E. (1989a). "Disclosure in the Corporate Annual Reports of Swedish Companies." *Accounting and Business Research,* Vol. 19, No. 74, pp. 113-124.

Cooke, T. E. (1989b). *An Empirical Study of Financial Disclosures by Swedish Companies,* New York: Garland Publishing.

Cooke, T. E. (1991). "An Assessment of Voluntary Disclosure in the Annual Reports of Japanese Corporations." *The International Journal of Accounting,* Vol. 26, No. 3, pp. 174-189.

Cooke, T. E. (1992). "The Impact of Size, Stock Market Listing and Industry Type on Disclosure in the Annual Reports of Japanese Listed Corporations." *Accounting and Business Research,* Vol. 22, No. 87, pp. 229-237.

Cullen, L. and T. Christopher (2002). *Governance Related Information and Firm Characteristics of Listed Industrial companies*. Unpublished research paper, Edith Cowan University, Perth Western Australia.

Dalton, D. R. and C. M. Daily (1999). "What's Wrong with Having Friends on the Board?." *Across the Board,* Vol. 36, No. 3, pp. 28-32.

Donnelly, R. and M. Mulcahy (2008). "Board Structure, Ownership, and Voluntary Disclosure in Ireland." *Journal Compilation Blackwell Publishing Ltd*., Vol. 16, No. 5, pp. 16-29. .

Eilbirt, H. and I. R. Parket (1973). "The Practices of Business: The Current Status of Corporate Social Responsibility." *Business Horizons*, Vol. 16, No. 4, pp. 5-14.

Ettredge, M., K.Johnstone, M. Stone and Q. Wang (2011). "The Effects of Firm Size, Corporate Governance Quality, and Bad News on Disclosure Compliance." *Review of Accounting Studies*, Vol. 16, No. 4, pp. 866-889.

Fama, E. and M. Jensen (1983). "Separation of Ownership and Control." *The Journal of Law and Economics*, Vol. 25, No. 2, pp. 301-325.

Field, L., M. Lowry and S. Shu(2005). "Does Disclosure Deter or Trigger Litigation?." *Journal of Accounting and Economics*, Vol. 39, No. 3, pp. 487-507.

Firth, M. (1979). "The Impact of Size, Stock Market Listing and Auditors on Voluntary Disclosure in Corporate Annual Reports." *Accounting and Business Research,* Vol. 9, No. 36, pp. 273-280.

Foster, G. (1986). *Financial Statement Analysis*, Englewood Cliffs, NJ: Prentice-Hall, 1986.

Francis, J., D. Philbrick, and K. Schipper (1994). "Shareholder Litigation and Corporate Disclosure." *Journal of Accounting Research*, Vol. 32, No. 2, pp. 137-164.

Freeman, R. (1987). "The Association between Accounting Earnings and Security Returns for Large and Small Firms." *Journal of Accounting and Economics*, Vol. 9, No. 2, pp. 195-228.

Hassan, O., G. Giorgioni, and P.Romilly(2006). "The Extent of Financial Disclosure and its Determinants in An Emerging Capital Market: The Case of Egypt." *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 3, No. 1, pp. 41-67.

Ho, P-L, G. Tower, and D. Barako (2008). "Improving Governance Leads to Improved Communication." *Corporate Ownership and Control,* Vol. 5, No. 4, pp. 26-33.

Hossain, M., L. M. Tan and M. Adams (1994). "Voluntary Disclosure in an Emerging Capital Market: Some Empirical Evidence from Companies Listed on the Kuala Lumpur Stock Exchange." *The International Journal of Accounting,* Vol. 9, No. 4, pp. 334-351.

Hossain, M., M. H. B. Perera, and A. R. Rahman(1995). "Voluntary Disclosure in The Annual Reports of New Zealand Companies." *Journal of International Financial Management and Accounting*, Vol. 6, No. 1, pp. 69-87.

Jensen, M. C. (1986). "Agency Costs of Free Cash Flow, Corporate Governance, and Takeovers." *American Economic Review,* Vol. 76, No. 2, pp. 323-329.

Jensen, M. C. and W. H. Meckling (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics*, Vol. 3, No. 4, pp. 306-360.

Kamran, A. and D.Nicholls (1994). "The Impact of Non-Financial Company Characteristics on Mandatory Disclosure in Developing Countries: The Case of Bangladesh." *International Journal of Accounting Education and Research,* Vol. 29, No. 1, pp. 62-77.

Karim, K. E., R. Pinsker and A. Robin (2013). "Firm Size and the Voluntary Disclosure of Nonfinancial Information by Private versus Public Firm Managers." *Managerial Auditing Journal*, Vol. 28, No. 9, pp. 866-892.

Kasznik, R. and B. Lev (1995). "To Warn or Not to Warn: Management Disclosures in the Face of An Earnings Surprise." *Accounting Review*, Vol. 70, pp. 113-134.

Knutson, P. (1992). *Financial Reporting into the 1990's and Beyond*, New York, Association for Investment Management and Research.

Lang, M. and R. Lundholm (1993). "Cross-sectional Determinants of Analyst Ratings of Corporate Disclosures." *Journal of Accounting Research*, Vol. 31, No. 2, pp. 246-271.

Leftwich, R.(1981). "Evidence of the Impact of Mandatory Changes in Accounting Principles on Corporate Loan Agreements." *Journal of Accounting and Economics,* Vol. 3, No. 1, pp. 3-36.

Leung, S. and B. Srinidhi (2006). "The Effect of the Private Securities Litigation Reform Act on Analyst Forecast Properties: The Impact of Firm Size and Growth Opportunities." *Journal of Business Finance & Accounting*, Vol. 33, pp. 767-792.

Lev, B. and S. H. Penman (1990). "Voluntary Forecast Disclosure, Nondisclosure and Stock Prices." *Journal of Accounting Research*, Vol. 28, No. 1, pp. 49-76.

Madhani, P. M. (2007a). "Corporate Governance from Compliance to Competitive Advantage." *The Accounting World*, Vol. 7, No. 8, pp. 26-31.

Madhani, P. M. (2007b). "Role of Voluntary Disclosure and Transparency in Financial Reporting." *The Accounting World*, Vol. 7, No. 6, pp. 63-66.

Madhani, P. M. (2014a). "Corporate Governance and Disclosure Practices of Indian Firms: An Industry Perspective." *The IUP Journal of Corporate Governance*, Vol. 13, No. 2, pp. 27-41.

Madhani, P. M. (2014b). "Corporate Governance and Disclosure: Public Sector vs Private Sector." *SCMS Journal of Indian Management*, Vol. 11, No. 1, pp. 5-20.

Madhani, P. M. (2014c). "Corporate Governance and Disclosure Practices in India: Domestic Firms Versus Cross-Listed Firms." *The IUP Journal of Corporate Governance*, Vol. 13, No. 4, pp. 24-51.

Madhani, P. M. (2015a). "MNC Subsidiaries vs Domestic Firms." *SCMS Journal of Indian Management*, Vol. 12, No. 1, pp. 5-24.

Madhani, P. M. (2015b). "A Study on the Corporate Governance and Disclosure Practices of Tangible Assets Dominated and Intangible Assets Dominated Firms and Their Relationship." *The IUP Journal of Corporate Governance*, Vol. 14, No. 2, pp. 7-29.

Madhani, P. M. (2015c). "Corporate Governance and Disclosure Practices of MNC Subsidiaries and Cross-Listed Firms: An Institutional Environment Perspective." *The IUP Journal of Corporate Governance*, Vol. 14, No. 3, pp. 48-71.

Madhani, P. M. (2015d). "The Impact of Board Characteristics on Corporate Governance and Disclosure Practices of Firms Listed in Indian Stock Exchange." *The IUP Journal of Corporate Governance*, Vol. 14, No. 4, pp. 14-46.

Madhani, P. M. (2015e). "Study of Relationship between Board Committees and Corporate Governance Practices of Indian Firms." *Global Management Review*, Vol. 9, No. 3, pp. 1-19.

Madhani, P. M. (2016). "Study of Relationship Between Ownership Types and Corporate Governance and Disclosure Practices of Firms Listed in Indian Stock Exchange." *The IUP Journal of Corporate Governance*, Vol. 15, No. 1. pp. 7-29.

Malone, D., C. Fries, and T. Jones (1993). "An Empirical Investigation of the Extent of Corporate Financial Disclosure in the Oil and Gas Industry." *Journal of Accounting, Auditing & Finance,* Vol. 8, No. 3, pp. 249-273.

McKinnon, J. and L. Dalimunthe(1993). "Voluntary Disclosure of Segment Information by Australian Diversified Companies." *Accounting &*Finance, Vol. 33, No. 1, pp. 33-50.

Meek, G. K.,C. B. Robertsand S. J. Gray (1995). "Factors Influencing Voluntary Annual Report Disclosures by U.S., U.K. and Continental European Multinational Corporations." *Journal of International Business Studies*, Vol. 26, No. 3, pp. 555-572.

Naser, K., K. Alkhatib and Y. Karbhari (2002). "Empirical Evidence on the Depth of Corporate Information Disclosure in Developing Countries: The Case of Jordan." *International Journal of Commerce and Management*, Vol. 12, No. 3/4, pp. 122-134.

Organization for Economic Cooperation and Development (OECD) (2006). "Guidance on Good Practices in Corporate Governance Disclosures." *OECD Publications,* pp. 1-52.

Owusu-Ansah, S. (1998). "The Impact of Corporate Attributes on the Extent of Mandatory Disclosure and Reporting by Listed Companies in Zimbabwe." *International Journal of Accounting*, Vol. 33, No. 5, pp. 605-631.

Raffournier, B. (1995). "The Determinants of Voluntary Financial Disclosure by Swiss Listed Companies." *The European Accounting Review*, Vol. 4, No. 2, pp. 261-280.

Schipper, K. (1981). "Discussion of Voluntary Corporate Disclosure. The Case of Interim Reporting." *Journal of Accounting Research,* Vol. 19, Supplement, pp. 85-88.

SEC (2008). "Final Rule: Smaller Reporting Companies Regulatory Relief and Simplification Act." Securities and Exchange Commission Release Nos. 33-8876; 34-56994; 39–2451 (January 4).

SEC Advisory Committee on Smaller Public Companies (2006). "Final report to the United States Securities and Exchange Commission (April 23)."

Shukla, H. J. (2008). "Corporate Governance Practices by Indian Corporates." *Asia Pacific Business Review,* Vol. 4, No. 3, pp. 124-29.

Singhvi, S. S., and H. B. Desai (1971). "An Empirical Analysis of the Quality of Corporate Financial Discussion." *The Accounting Review,* Vol. 46, No. 1, pp. 129-138.

Skinner, D. J. (1994). "Why Firms Voluntarily Disclose Bad News." *Journal of Accounting Research*, Vol. 32, No. 1, pp. 38-60.

Stanga, K. G. (1976). "Disclosure in Published Annual Reports." *Financial Management,* Vol. 5, No. 4, pp. 42-52.

Stigler, G. J. (1961). "The Economics of Information." *Journal of Political Economy,* Vol. 64, No. 3, pp. 213-225.

Subramanian, S. and V. N. Reddy (2012). "Corporate Governance Disclosures and International Competitiveness: A Study of Indian Firms." *Asian Business & Management,* Vol. 11, No. 2, pp. 195-218.

Wallace, R. S. O. and K. Naser (1995). "Firm Specific Determinants of the Comprehensiveness of Mandatory Disclosure in the Corporate Annual Reports of Firms Listed on the Stock Exchange of Hong Kong." *Journal of Accounting & Public Policy*, Vol. 14, No. 4, pp. 311-368.

Watts, R. L. and J. L. Zimmerman (1978). "Towards a Positive Theory of the Determination of Accounting Standards." *Accounting Review,* Vol. 53, No. 1, pp. 112-134.

Watts, R. L. and J. L. Zimmerman (1983). "Agency Problems, Auditing and Theory of The Firm: Some Evidence." *Journal of Law & Economics*, Vol. 12, No. 26, pp. 613-633.

Watts, R. L. and J. L. Zimmerman (1986). *Positive Accounting Theory,* Englewood Cliffs, NJ: Prentice Hall.

**Annexure – I**

**Corporate Governance and Disclosure (CGD) Index**

| Component 1: | Board and Management Structure and Process | |
|---|---|---|
| | *Sr. No.* | *Disclosure of:* |
| | 1 | Details about current employment/position of directors provided? |
| | 2 | Details about previous employment/positions provided? |
| | 3 | When each of the directors joined the Board? |
| | 4 | Details about whether the chairman is executive or non -executive? |
| | 5 | Detail about the chairman (other than name and executive status)? |
| | 6 | Details about the role of the Board of Directors in the company? |
| | 7 | Are the dates of Board meetings disclosed? |
| | 8 | Is the aggregate Board attendance disclosed for each meeting? |
| | 9 | Are directors attending over 60 per cent of the Board meetings? |
| | 10 | Are attendance details of individual directors at Board meetings disclosed? |
| | 11 | Do independent directors constitute at least 1/3 of the Board? |
| | 12 | Do independent directors constitute more than 1/2 of the Board? |
| | 13 | Do independent directors constitute more than 2/3 of the Board? |
| | 14 | A list of matters reserved for the Board? |
| | 15 | Is the list of audit committee (AC) members disclosed? |
| | 16 | Is the majority of AC independent? |
| | 17 | Is the chairman of the AC independent? |
| | 18 | Is disclosure made of the basis of selection of AC members? |
| | 19 | Is the aggregate attendance of AC meetings disclosed? |
| | 20 | Is the attendance of individual directors at AC meeting disclosed? |
| | 21 | Does the company have a remuneration committee? |
| | 22 | Is the list of remuneration committee members? |
| | 23 | Is the majority of RC independent? |
| | 24 | Is the remuneration committee chaired by an independent director? |
| | 25 | Is the frequency of RC meetings disclosed? |

| Component 1: | Board and Management Structure and Process | |
|---|---|---|
| | *Sr. No.* | *Disclosure of:* |
| | 26 | Is the aggregate RC meeting attendance disclosed? |
| | 27 | Is disclosure made of individual members' attendance in RC meetings? |
| | 28 | Does the company have a nominating committee? |
| | 29 | Is the list of members of the nominating committee disclosed? |
| | 30 | Is the majority of nominating committee independent? |
| | 31 | Is the frequency of NC meetings disclosed? |
| | 32 | The existence of a strategy/investment/finance committee? |
| | 33 | The number of shares in the company held by directors? |
| | 34 | A review of the last Board meeting disclosed (for example, minutes)? |
| | 35 | Whether they provide director training? |
| | 36 | The decision-making process of directors' pay? |
| | 37 | The specifics on performance-related pay for directors? |
| | 38 | Is individual performance of Board members evaluated? |
| | 39 | Is appraisal of Board performance conducted? |
| | 40 | The decision making of managers' (not Board) pay? |
| | 41 | The specifics of managers' (not on Board) pay (for example, salary levels and so on)? |
| | 42 | The forms of managers' (not on Board) pay? |
| | 43 | The specifics on performance-related pay for managers? |
| | 44 | The list of the senior managers (not on the Board of Directors)? |
| | 45 | The backgrounds of senior managers disclosed? |
| | 46 | The details of the CEO's contract disclosed? |
| | 47 | The number of shares held by the senior managers disclosed? |
| | 48 | The number of shares held in other affiliated companies bymanagers? |

| Component 2: | Ownership Structure and Investor Relations | |
|---|---|---|
| | *Sr. No.* | *Does the annual report contain?* |
| | 1 | Top 1 shareholder? |
| | 2 | Top 3 shareholders? |
| | 3 | Top 5 shareholders? |
| | 4 | Top 10 shareholders? |
| | 5 | Description of share classes provided? |
| | 6 | Review of shareholders by type? |
| | 7 | Number and identity of shareholders holding more than 3 per cent? |
| | 8 | Number and identity of shareholders holding more than 5 per cent? |
| | 9 | Number and identity of shareholders holding more than 10 per cent? |
| | 10 | Percentage of cross-ownership? |
| | 11 | Existence of a Corporate Governance Charter or Code of Best Practice? |
| | 12 | Corporate Governance Charter/Code of Best Practice itself? |
| | 13 | Details about its Articles of Association (for example, changes)? |
| | 14 | Voting rights for each voting or non -voting share? |
| | 15 | Way the shareholders nominate directors to Board? |
| | 16 | Way shareholders convene an Extraordinary General Meeting (EGM)? |
| | 17 | Procedure for putting enquiry rights to the Board? |
| | 18 | Procedure for putting proposals at shareholders meetings? |
| | 19 | Review of last shareholders meeting (for example, minutes)? |

## ANNEXURE - II
## Firm Size and CGD Score across Various Sectors

| Sector | Sr. No. | Firm | Firm Size | | CGD Score |
|---|---|---|---|---|---|
| | | | Fixed Assets(INR Crores) | Gross Sales (INR Crores) | |
| Health Care | 1 | Dr Reddy | 8,842.30 | 9,855.00 | 40 |
| | 2 | Cipla | 4,626.90 | 7,128.82 | 14 |
| | 3 | Lupin | 4,191.84 | 7,124.93 | 24 |
| | 4 | Ranbaxy Laboratories | 3,258.79 | 6,331.46 | 22 |
| | 5 | Glenmark Pharmaceuticals | 2,650.96 | 4,020.64 | 23 |
| | 6 | Glaxo | 316.18 | 2,766.92 | 20 |
| Capital Goods | 7 | L & T | 25,778.14 | 64,960.08 | 31 |
| | 8 | BHEL | 10,017.15 | 50,653.84 | 24 |
| | 9 | Crompton Greaves | 4,408.73 | 11,615.12 | 23 |
| | 10 | PipavavDefence | 2,557.67 | 1,867.23 | 21 |
| | 11 | Siemens | 1,998.32 | 12,478.88 | 28 |
| | 12 | ABB | 1,612.31 | 7,610.48 | 22 |
| FMCG | 13 | ITC | 15,519.38 | 36,990.37 | 41 |
| | 14 | United Spirits | 8,898.40 | 18,233.54 | 24 |
| | 15 | Nestle | 4,368.68 | 8,581.88 | 16 |
| | 16 | Godrej Consumer Products | 4,185.74 | 4,986.61 | 36 |
| | 17 | HUL | 4,016.16 | 24,506.40 | 33 |
| | 18 | Colgate | 613.16 | 2,805.54 | 15 |
| IT | 19 | Wipro | 18,277.30 | 37,308.30 | 47 |
| | 20 | TCS | 12,991.29 | 48,894.08 | 33 |
| | 21 | HCL | 9,581.82 | 20,830.55 | 34 |
| | 22 | Infosys | 9,194.00 | 33,734.00 | 37 |
| | 23 | Mahindra Satyam | 2,320.60 | 6,395.60 | 21 |
| | 24 | Oracle Financial | 1,324.42 | 3,146.68 | 20 |
| Metal | 25 | Tata Steel | 130,491.21 | 135,975.56 | 32 |
| | 26 | Hindalco Industries | 53,961.03 | 82,549.03 | 20 |
| | 27 | JSW Steel | 42,689.51 | 36,964.23 | 35 |
| | 28 | Coal India | 38,096.41 | 78,410.38 | 24 |
| | 29 | Sterlite | 37,289.83 | 43,115.91 | 30 |
| | 30 | Jindal Steel & Power | 22,421.81 | 22,472.89 | 17 |

| Sector | Sr. No. | Firm | Firm Size | | CGD Score |
|---|---|---|---|---|---|
| | | | **Fixed Assets**(INR Crores) | **Gross Sales** (INR Crores) | |
| Oil & Gas | 31 | ONGC | 254,415.39 | 151,121.10 | 31 |
| | 32 | Reliance Industries | 233,475.00 | 368,571.00 | 34 |
| | 33 | IOC | 107,630.59 | 442,458.53 | 28 |
| | 34 | Bharat Petroleum | 42,549.62 | 223,314.64 | 24 |
| | 35 | Cairn India | 35,703.86 | 11,860.65 | 30 |
| | 36 | GAIL | 31,769.19 | 44,861.05 | 20 |
| Power | 37 | NTPC | 88,882.13 | 66,365.89 | 28 |
| | 38 | Power Grid | 64,519.19 | 10,311.52 | 25 |
| | 39 | Tata Power | 38,256.23 | 26,019.81 | 29 |
| | 40 | NHPC | 30,293.05 | 6,920.33 | 29 |
| | 41 | Reliance Infrastructure | 17,045.07 | 24,180.76 | 30 |
| | 42 | Reliance Power | 6,935.61 | 2,019.21 | 27 |
| Auto | 43 | Tata Motors | 94,012.06 | 170,677.58 | 34 |
| | 44 | Mahindra & Mahindra | 35,007.94 | 63,030.48 | 30 |
| | 45 | Maruti Suzuki | 15,055.70 | 40,049.60 | 19 |
| | 46 | Hero MotoCorp | 6,308.26 | 25,235.02 | 22 |
| | 47 | Bajaj Auto | 3,839.32 | 20,541.41 | 24 |
| | 48 | Cummins | 699.52 | 3,924.01 | 13 |
| Consumer Durables | 49 | Videocon Industries | 14,892.29 | 13,684.51 | 18 |
| | 50 | Titan Industries | 813.83 | 8,983.15 | 26 |
| | 51 | Blue Star | 417.63 | 2,847.82 | 20 |
| | 52 | Gitanjali Gems | 408.65 | 12,498.28 | 24 |
| | 53 | TTK Prestige | 202.86 | 1,122.71 | 15 |
| | 54 | Rajesh Exports | 87.81 | 25,653.85 | 15 |

(Source: Table developed by author)

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