Does Corporate Governance Influence Voluntary Disclosure? 
Evidence from India

Rupjyoti Saha* | Kailash Chandra Kabra²

¹North-Eastern Hill University, Department of Commerce, Shillong (Meghalaya), India
²North-Eastern Hill University, Department of Commerce, Shillong (Meghalaya), India

*Correspondence to: Rupjyoti Saha, North-Eastern Hill University, Department of Commerce, Shillong (Meghalaya), India.
E-mail: rupjyoti.1122@rediffmail.com

Abstract: The purpose of this study is to examine the influence of different corporate governance (CG) attributes on voluntary disclosures (VD) made by 100 companies listed on the Bombay Stock Exchange (BSE) in their annual reports. To this end, the paper uses appropriate panel data regression technique, whereby the results indicate that three CG attributes—board independence, board gender diversity, and its risk management committee—have significant influence on VD. In particular, board independence is found to have weak negative influence on VD while its gender diversity and risk management committee indicate strong positive influence on VD. The other CG attributes, specifically the board size, role duality, ownership concentration, audit committee independence, and nomination and remuneration committees, do not reveal any significant influence on VD. Overall, the finding suggests that one of the conventional attributes of CG, i.e. board independence, acts with VD as an alternate control mechanism to reduce agency costs and protect investor interests. Meanwhile, VD co-exists with some of the latest CG attributes, including board gender diversity and its risk management committee, to monitor managers. The results of this paper should be relevant to regulators, practitioners, and other market participants in the Indian context, as well as other emerging markets with similar institutional settings.

Keywords: corporate governance attributes, India, voluntary disclosure index.

Article info: Received 31 May 2019 | revised 27 July 2019 | accepted 14 August 2019

Recommended citation: Saha, R., & Kabra, K. C. (2019). Does Corporate Governance Influence Voluntary Disclosure? Evidence from India. Indonesian Journal of Sustainability Accounting and Management, 3(2), 203–214. https://doi.org/10.28992/ijsam.v3i2.97.

INTRODUCTION

In view of information asymmetries in the capital market, voluntary disclosure (VD) is often used by managers, over and above what is required by regulations (Healy & Palepu, 2001; Morris & Tronnes, 2018). Prior literature provides evidence that, decision to disclose information voluntarily is driven by several underlying motives such as reducing cost of capital (Botosan, 1997), improving liquidity (Kim & Verrecchia, 1994), increasing stock compensation (Brockman et al., 2010), getting better analyst coverage (Lang & Lundholm, 1993; Shehata, 2014). Further, literature also highlights different cost associated with VD, such as proprietary costs (Dye, 1985),
litigation cost (Darrough & Stoughton, 1990), information production and dissemination cost (Hassan & Marston, 2019) and political cost (Cormier et al., 2005). Thus, a trade-off between associated cost–benefit takes place every time information is disclosed publicly (Gisbert et al., 2014).

Considering the accounting scandals around the world in the recent past (Enron, WorldCom, Satyam etc.), market regulators have regarded corporate governance (CG) and disclosure as two key inseparable instruments for both protection of investors as well as for efficient working of capital market (Patelli & Prencipe, 2007). Agency Theory states that both CG and VD can be used as control mechanisms in mitigating agency costs arising from separation of ownership and management (Jensen & Meckling, 1976). Effectiveness of both the control mechanisms is also supported by literature (Ahmed & Courtis, 1999; Erhardt et al., 2003). However, despite of large amount of research on control mechanisms the question remains as to whether CG and VD coexist or they are used as alternate control mechanisms? Though, several studies were undertaken to address this issue, most of them have explored the same in context of developed countries and some in case of emerging countries showing both complementary and substitutive relationship between CG and VD (Adams & Hossain, 1998; Eng & Mak, 2003; Barako et al., 2006; Patelli & Prencipe, 2007; Elfeky, 2017; Alfraih & Almutawa, 2017; Maskati & Hamdan, 2017; Odoemelam & Okafor, 2018; Munther, 2019). In particular, literature lacks empirical evidence on the relationship between CG and VD in Indian context with the exception of Hossain & Reaz (2007); Charumathi & Ramesh (2015), though they have used single conventional attribute of CG only as its proxy measure with small number of firm–year observations.

India is an interesting case to explore because of its unique institutional setting. Firstly, ownership pattern of listed firms in India are highly concentrated with considerable proportion of shares are held by domestic promoters (family groups) or government while in case of developed market it is widely scattered and this contextual disparity leads to an alteration of agency problems (i.e., from vertical or type–I to horizontal or type–II agency problem) experienced by firms (Balasubramanian & Anand, 2013). Secondly, Indian financial market is not as developed as that of advanced countries in form of liquidity, investors’ protection, disclosure and other CG practices (Singh & Gaur, 2009; Kaur et al., 2016). Finally, though Indian government has recently imported a series of CG reforms from developed countries with a focus on improving transparency and protecting the interest of minority shareholders, their enforcement are relatively weaker as compared to other emerging market (Rajagopalan & Zhang, 2008). These exceptional features of Indian institutional setting provides an impetus to investigate the relationship between CG and VD as it might yield different results from that of other developed and emerging economies.

To this end, the study employs a sample of top 100 firms excluding financial and utility firms based on market capitalization listed on BSE during the period of 2014–2017, uses appropriate panel data regression technique to investigate the relationship between different CG attributes and VD in an agency setting characterized by conflict of interest between dominant and minority shareholders while controlling the influence of other correlated variables, such as firm size, financial leverage, profitability, liquidity and Big4 auditor. The findings exhibit that board independence has weak negative influence on VD while board’s gender diversity and risk management committee have strong positive influence on VD. The remaining CG attributes such as board size, role duality, ownership concentration, audit committee independence and nomination and remuneration committee does not have any significant influence on VD.

The present study is a modest attempt to add some novelties to the extant literature. Firstly, it extends the ongoing research on the relationship between CG and VD in emerging market. In particular, the study provide evidence of how the relationship between different CG mechanisms and VD works in Indian context in presence of its unique characteristics such as highly concentrated family ownership structure, weak board independence and poor investors’ protection environment etc. Secondly, as compared to few prior studies in
India employing single conventional CG attribute, the present study examines the effectiveness of some major CG reforms in India by employing some prominent attributes of CG, assists in evaluating the effectiveness of these reforms in promoting transparency and disclosure and highlights the scope of further improvement.

**METHODS**

The sample used for testing the hypotheses developed in the study includes top 100 non-financial and non-utility companies based on market capitalization listed at BSE as on 31st March 2014. The study excludes financial and utility companies because of their different regulations and reporting requirements (e.g. Banking Regulation Act, 1949, Electricity Act, 2003) are the regulations under which financial and utility firms are excluded from the sample). The study is based over a period of four years i.e., from 2013–2014 to 2016–17 as the major corporate reforms such as Companies Act, 2013, SEBI’s Revised Clause 49, 2014 were implemented during this period. The necessary information regarding VD and CG have been generated through content analysis of annual reports of respective companies and information relating to control variables have been collected from corporate database called Capitaline Plus.

To capture the dependent variable, voluntary disclosure index (VDI) is used as a surrogate measure for the information disclosed by companies voluntarily in their annual reports over the study period. The following steps were undertaken in formulating the VDI: 1) Based on the extensive review of relevant literature (Meek et al., 1995; Botosan, 1997; Ho & Wong, 2001; Eng & Mak, 2003; Gul & Leung, 2004; Lim et al., 2007; Patelli & Prencipe, 2007; Akhtaruddin et al., 2009; Rouf, 2011; Charumathi & Ramesh, 2015), a preliminary list of 131 items was prepared; 2) To ensure that the items are discretionary, they are checked against applicable Indian Regulations such as Companies Act, 2013, SEBI (Listing Obligation and Disclosure Requirement) Regulation, 2015, Converged Indian Accounting Standards (Ind AS), 2016, that affect the reporting requirements of sample companies over the study period; 3) Following the prior studies (Adams & Hossain, 1998; Barako et al., 2006), the list was further scrutinized by three practicing Chartered Accountants who are associated with the institutions that influence corporate disclosure in India to ensure that all items are voluntary. Their feedback is subsequently used in modifying the list of VD items.

Following the above steps, a final list of 69 items is derived, which are further distributed over eight categories. Subsequent to the formulation of list of VD items, one of the contentious issues in literature is scoring of disclosure items. Most of the earlier approaches to scoring are unweighted, indicating only presence or absence of such information without accounting for its quality (Meek et al., 1995; Lim et al., 2007; Akhtaruddin et al., 2009; Charumathi & Ramesh, 2015). To measure disclosure quality, some studies have employed weighted index whereby they mostly followed two approaches for scoring of disclosure items—firstly, assigning more score to items disclosed in a comprehensive manner based on the amount of information disclosed (Eng & Mak, 2003; Gul & Leung, 2004) and secondly, assigning more weightage to the items disclosed in quantitative terms (Botosan, 1997; Patelli & Prencipe, 2007). Since VD includes both financial and non-financial items it may not be possible for companies to disclose all items only in quantitative terms as there are some non-financial disclosure such as corporate outlook, policy, strategy, etc., which cannot be expressed in quantitative terms but the importance of such information cannot be undermined. Thus, to capture quality of disclosure, this study uses a weighted index whereby a combination of both the prior approaches of scoring have been used and a score of ‘0’ is assigned for absence of information, ‘1’ for partial disclosure of information and ‘2’ for extensive disclosure. Then, each firm’s VDI score is calculated as percentage of actual disclosure score obtained against the maximum score.
\[
VD_{it} = \frac{\sum_{j=1}^{n} X_{ijt}}{N_j} \times 100
\]

Where, ‘\(N_j\)’ is the maximum expected score, ‘\(j\)’ refers to company, ‘\(i\)’ stands for VD items and ‘\(t\)’ refers to time. To capture VD quality ‘\(X_{ij}\)’ assumes the score of ‘0–2’.

**Table 1 Independent Variables**

| Variables                      | Measurement                                                                 |
|--------------------------------|-----------------------------------------------------------------------------|
| Board Size (BS)                | Total number of directors on board                                           |
| Board Independence (BI)        | Percentage of independent non-executive directors to total number of directors on board |
| Role Duality (RD)              | ‘1’, if CEO is also the chairman of board, otherwise ‘0’                    |
| Gender Diversity (GD)          | Percentage of female directors to total number of directors on board        |
| Ownership Concentration (OC)   | Percentage of shareholding by majority shareholders divided by total share capital |
| Audit Committee Independence (ACI) | Percentage of independent non-executive directors to total number of directors in audit committee |
| Nomination and Remuneration Committee (NRC) | ‘1’, for presence of a nomination and remuneration committee, otherwise ‘0’ |
| Risk Management Committee (RMC) | ‘1’, for presence of a risk management committee, otherwise ‘0’ |

**Table 2 Control Variables**

| Variables           | Measurement                                      | Key Reasoning                                                                 |
|---------------------|--------------------------------------------------|------------------------------------------------------------------------------|
| Firm Size (Ln_FSIZE) | Natural logarithm of total sales                 | There are a number of factors for large firms to disclose more information voluntarily such as to reduce information gap as the firm gets bigger, information asymmetry problem emerges (Jensen & Meckling, 1976). Further, they are considered to be more sensitive to political cost (Watts & Zimmerman, 1978) and litigation cost (Skinner, 1994). |
| Financial Leverage (LEV) | Ratio of total debt by equity share capital plus reserve | Firms with higher debt attempt to reduce monitoring costs through better VD (Gul & Leung, 2004; Barako et al., 2006). |
| Profitability (PROF)  | Ratio of earnings before interest and tax to equity share capital | Managers of highly profitable firms disclose more information voluntarily in order to avail different compensation arrangement as well as to signal the market (Cerbioni & Parbonetti, 2007; Kaur et al., 2016). |
| Auditor Type (BIG4)   | ‘1’ for companies audited by BIG4 audit firms otherwise ‘0’ | Big4 audit firms generally ensure that their clients reporting practices should be of higher quality as their reputation is primarily associated with it and thus they encourage more VD (Liu, 2015; Nahar et al., 2016). |
| Liquidity (LIQ)       | Ratio of total current assets to total current liabilities | Firms with poor liquidity position might opt for more VD in order to justify their liquidity status (Wallace et al., 1994). |

To examine the influence of CG attributes on VD, prior works have mostly used pooled ordinary least square (OLS) regression model. However, pooled OLS regression model does not take into consideration the uniqueness/heterogeneity existing within each cross-section unit or time and thus fails to control for potential omitted bias due to firm-specific characteristic related to VD. Moreover, this study also conducted Breusch–Pagan Lagrange Multiplier (LM) test to know the suitability of using pooled OLS regression whereby the Chi-Square value = 286.82, p-value = 0.000, indicates that pooled OLS model is not appropriate for the data set.
Further, to choose appropriate panel data model [Fixed Effect Model (FEM) or Random Effect Model (REM)], the outcome of Hausman specification test is considered whereby the results advocates in favor of FEM. While REM assume that each firm’s intercept value are random drawn from a large population of firms, FEM allow each firm to have its own intercept value, thereby controls the effect of time-invariant factors so that the net effect of predictors on the outcome variable can be assessed over time. The functional form of FEM is:

\[ Y_{it} = \beta X_{it} + \alpha_i + u_{it} \]

Where, \( \alpha_i \) is the unknown intercept for each firm and \( u_{it} \) denotes the error term.

The following model is employed to examine the influence of different CG attributes on VD after controlling the influence of different firm characteristics.

\[ VDI_{it} = \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 RD_{it} + \beta_4 GD_{it} + \beta_5 OC_{it} + \beta_6 NRC_{it} + \beta_7 RMC_{it} + \beta_8 LnFSIZE_{it} + \beta_9 LEV_{it} + \beta_{10} PROF_{it} + \beta_{11} LIQ_{it} + \beta_{12} BIG4_{it} + \alpha_i + u_{it} \]

Where, \( \beta_1, ..., \beta_{13} \) are the slopes of CG attributes and firm characteristics, \( \alpha_i \) is the intercept for each firm, \( u_{it} \) is the error term, ‘i’ = 1, ..., 100 sample firms; ‘t’ = 2014–2017.

**RESULTS AND DISCUSSION**

Table 3 presents the descriptive statistics for all variables. The average percentage of VDI scores is 32.96 with a wide range of 11.53 to 61.53. The average score of BS is 10.85 which are consistent with literature (Jackling & Johl, 2009). The mean value of INDS on board is 50.47 percent only with a minimum and maximum value of 0 and 85.71 respectively. Though SEBI’s listing agreement requires boards to be consist of minimum 50% INDS when board’s chairman is an executive director, two sample companies did not have any INDS over the study period. Regarding RD, 33% of the sample companies have CEO who is also the chairman of the board. GD indicates a mean of 11.88 percent whereas it was 5.3 percent in 2009 (Balasubramanian, 2013), suggesting an upward trend in participation of women on corporate board. In terms of OC, the average percentage of shares owned by majority shareholders is 91.81 percent indicating that sample firms have highly concentrated ownership structure. On an average, 84.50 percent of the audit committees are occupied by INDS. With regard to other board committees, the mean value of NRC indicates that 92.5 percent of sample companies have NRC in existence whereas in case of RMC, it is relatively lower as only 67.5 percent companies have constituted a separate RMC.

Table 4 shows the distribution of sample firms by year grouped in quartile of VDI_score. Considering the percentage of firms lying in different quartile every year, there exists less variation among them and thus it can be inferred that VDI_score of the sample firms are somehow normally distributed. However, the percentage of firms falling under 4th quartile over the years is lowest indicating a general tendency among sample firms to disclose less information.

Table 5 reports Pearson correlation coefficients for all variables. Consistent with the prior studies, the correlation matrix indicates that VDI is positively correlated with some firm specific characteristics like firm size, leverage and big4 audit firms while negatively correlated with liquidity. The findings also show significant positive correlation between VDI and BS while NRC is negatively correlated with VD. These correlation statistics
are consistent with the prior studies (Ahmed & Courtis, 1999; Barako et al., 2006; Akhtaruddin et al., 2009; Liu, 2015) and thus provide some support for the VDI used in this study.

Table 3 Descriptive Statistics

| Variables    | Mean   | Standard Deviation | Minimum | Maximum |
|--------------|--------|--------------------|---------|---------|
| VDI_Score    | 32.96  | 8.49               | 11.53   | 61.53   |
| BS           | 10.85  | 2.58               | 5       | 20      |
| BI           | 50.47  | 12.90              | 0       | 85.71   |
| RD           | 0.33   | 0.47               | 0       | 1       |
| GD           | 11.88  | 7.59               | 0       | 37.5    |
| OC           | 91.81  | 6.09               | 66.28   | 99.78   |
| ACI          | 84.5   | 17.2               | 0       | 100     |
| NRC          | 92.5   | 0.26               | 0       | 1       |
| RMC          | 67.5   | 0.46               | 0       | 1       |
| FSIZE        | 3.94   | 0.59               | 2.31    | 5.68    |
| LEV          | 0.31   | 0.40               | 0       | 2.29    |
| PROF         | 19.95  | 19.02              | -27.68  | 130.01  |
| LIQ          | 1.49   | 1.20               | 0.22    | 13.44   |
| BIG4         | 0.34   | 0.47               | 0       | 1       |

Table 4 Distribution of Sample Firms Based on Quartiles of VDI_Score

| Quartile of VDI_Score | 2014 | 2015 | 2016 | 2017 |
|-----------------------|------|------|------|------|
| Percentage of Firms   |      |      |      |      |
| 1st                   | 31%  | 26%  | 25%  | 25%  |
| 2nd                   | 20%  | 25%  | 29%  | 26%  |
| 3rd                   | 28%  | 25%  | 23%  | 27%  |
| 4th                   | 21%  | 24%  | 23%  | 22%  |

Table 5 Pearson Correlation for All Variables

|       | VDI    | BS     | BI     | RD     | GD     | ACI    | OS     | NRC    | RMC    | FSIZE  | LEV    | PROF   | LIQ    | BIG4   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| VDI   | 1      |        |        |        |        |        |        |        |        |        |        |        |        |        |
| BS    | 0.144***| 1      |        |        |        |        |        |        |        |        |        |        |        |        |
| BI    |        | 1      |        |        |        |        |        |        |        |        |        |        |        |        |
| RD    | -0.075 | 0.111***| 0.024 | 1      |        |        |        |        |        |        |        |        |        |        |
| GD    | 0.074  | -0.204***| 0.125***| -0.080*| 1      |        |        |        |        |        |        |        |        |        |
| ACI   | 0.032  | 0.362***| 0.482***| 0.035 | -0.108***| 1      |        |        |        |        |        |        |        |        |
| OS    | -0.051 | 0.036  | -0.112***| 0.087*| 0.071  | 0.062  | 1      |        |        |        |        |        |        |        |
| NRC   | -0.180***| 0.053 | -0.075 | 0.321***| -0.007 | -0.104***| -0.092 | 1      |        |        |        |        |        |        |
| RMC   | -0.053 | -0.001 | -0.076 | 0.028  | 0.188***| -0.053 | -0.031 | 0.410*** | 1      |        |        |        |        |        |
| FSIZE | 0.434***| 0.205***| -0.031 | 0.046  | -0.106***| 0.051  | -0.050 | -0.112***| -0.151***| 1      |        |        |        |        |
| LEV   | 0.191***| 0.013  | -0.043 | -0.006 | -0.028 | 0.051  | -0.022 | 0.041  | 0.044  | 0.380***| -0.107***| -0.304***| 1      |        |
| PROF  | 0.007  | -0.073 | -0.038 | -0.028 | 0.023  | -0.088*| -0.092*| -0.007 | -0.069 | -0.127***| -0.304***| 1      |        |        |
| LIQ   | -0.222***| -0.062 | -0.052 | 0.195***| 0.071  | -0.166***| 0.207***| 0.030  | 0.060  | 0.166***| -0.309***| 0.123***| 1      |        |
| BIG4  | 0.181***| 0.173***| -0.225***| 0.053  | 0.039  | -0.129***| -0.072 | 0.043  | 0.211***| 0.0028 | -0.125***| 1      |        |        |

*** significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level

The presence of multicollinearity is tested using both Variance Inflation Factor (VIF) and correlation matrix. VIF for all variables are calculated and the highest VIF obtained is 1.45 which is much below the threshold limit of 10. In addition, the Pearson correlation matrix (Table 5) gives the highest correlation coefficient of 0.48 suggesting that multicollinearity is not a cause of concern in this study. Table 6 presents the regression results. Since the outcome of Hausman test shows that Chi-Square statistic is highly significant, hence the results obtained from FEM are considered for interpretation.
Table 6 Results of Fixed and Random Effect Regression

| Variables | Fixed Effect Regression | Random Effect Regression |
|-----------|-------------------------|-------------------------|
|           | Coefficient | t-statistic | Coefficient | t-statistic |
| BS        | -0.0100 | -0.64 | 0.0066 | 0.05 |
| BI        | -0.0647 | -1.88* | -0.0455 | -1.46 |
| RD        | -0.0470 | -0.66 | -1.119 | -1.07 |
| GD        | 0.1567 | 3.71*** | 0.1745 | 4.34*** |
| OC        | -0.0813 | -0.61 | -0.0395 | -0.45 |
| ACI       | 0.0283 | 1.35 | 0.0235 | 1.17 |
| NRC       | -0.0785 | -0.08 | -0.7025 | -0.68 |
| RMC       | 2.568 | 4.65*** | 2.220 | 4.03*** |
| FSIZE     | 9.835 | 4.06*** | 6.472 | 5.98*** |
| LEV       | 0.5387 | 0.39 | 0.7282 | 0.64 |
| PROF      | -0.0178 | -0.64 | 0.0015 | 0.07 |
| LIQ       | -0.4382 | -1.16 | -0.5235 | -1.58 |
| BIG4      | 0.1534 | 0.20 | 0.3745 | 0.53 |
| Constant  | 1.213 | 0.08 | 9.161 | 0.96 |

Dependent Variable: Voluntary Disclosure Index (VDI)

- R² Overall = 0.1714
- F–Statistic = 7.72***

- R² Overall = 0.1881
- Wald Chi² = 110.83***

Hausman test result: Chi² Value = 191.74 (p-value = 0.000)

Notes:
1) *** significant at 1% level; ** significant at 5% level; * significant at 10% level.
2) Normality of the error term was examined by using Jarque–Bera test. The null hypothesis of normality of error term cannot be rejected for both FEM and REM as the Chi² statistic of [109.01 (p–value = 2.10)] and [33.25 (p–value = 6.08)] respectively are insignificant in both the cases.

Nevertheless, the results obtained from REM are also somewhat consistent with the FEM results. The observed value of overall R–Square and highly significant value of F–statistic purports in favour of goodness of fit of the model. The results also indicate that size of board is positively associated with VD; however, this lacks statistical significance at conventional level, thus rejecting H₁. This finding suggests that though large board is expected to bring greater pool of human resources in developing countries (Jackling & Johl, 2009), in Indian context large proportion of family owned firms leads to mere increase in board size due to appointment of family members who does not actively contributes towards its overall decision making (including VD decision).

Contrary to the expectation, proportion of INDs on board is found to have inverse influence on VD. This finding is consistent with Eng & Mak (2003); Gul & Leung (2004); Barako et al. (2006) suggesting that INDs act as a substitute for VD. Another explanation for this finding in case of Indian companies might be due to the prevalence of closely held ownership structure whereby substantial owners generally develops ties with INDs and thus they may not be considered independent in real sense. Moreover, CG reforms in India over the past few years emphasized on implementing more strict norms for classifying INDs advocates in favour of this reasoning.

Though, coefficient of role duality is consistent with its expected negative impact, the hypothesis is not statistically significant. This is parallel with the findings of Ho & Wong (2001); Arcay & Vázquez (2005); Barako et al. (2006); Liu (2015) suggesting that separating both the positions does not necessarily improves VD. Further, in case of sample firms, since most of them (67%) have already adopted a separate leadership structure, in can be inferred that there are limited instances for this attribute to have statistical signficance.

Consistent with the expected H₄, female representation on board reveals strong positive influence on VD. Though, women representation on board for the sample companies is relatively meagre as compared to...
developed countries like Norway, Spain, Iceland, Australia, Denmark, Germany etc. yet this finding suggests that this minimum percentage of women directors are given equal opportunity to play active role in the decision making process and thus their strong monitoring behaviour assists in reducing information asymmetry through better VD. Moreover, in Indian context an upward trend in participation of women on corporate board can be noticed over the past few years as discussed under descriptive statistics section indicating the interest of practitioners to increase more women involvement in their decision-making process.

Regarding ownership concentration, though its coefficient is negative, it lacks statistical significance at conventional level, thus rejecting H₅. One possible reason for such insignificant finding might be due to passive attitude of substantial owner with respect to disclosure as they have more efficient and timely channels of obtaining relevant information (Eng & Mak, 2003; Donnelly & Mulcahy, 2008). The findings also reveal insignificant influence of ACI on VD, thus discarding H₆, however supports the findings of Ho & Wong (2001); Othman et al. (2014). This result cast doubt about the motive for formation of an independent audit committee because if it is actually formed for the purpose of overseeing firm’s reporting process, it is ought to assist in reducing information gap through better disclosure. Unfortunately, in case of India active participation of substantial owners in corporate decision making alleviates information asymmetry problem, whereby formation of an independent audit committee is often viewed as compliance requirement rather than genuine necessity which might account for such insignificant impact.

In relation to H₇, NRC does not reveal any significant influence on VD extending support to the finding of Allegrini & Greco (2013). This finding suggests that in Indian context, the functioning of NRC is undermined due to frequent intervention of dominant shareholders and promoters in selection of directors and KMPs and fixing their remuneration. Finally, consistent with the expectation in H₈, existence of RMC reveals strong positive influence on VD. This finding suggests that as RMC is formed with members of the board and senior executives having better understanding of business complexities and special expertise in risk management, it assists them in maintaining better transparency and disclosure and thus, upholding resource dependency perspective (Ali et al., 2018). With regard to control variables, only firm size is found to have statistically significant positive influence on VD, thus supporting agency theory and positive accounting theory argument.

CONCLUSION

The study aims to investigate the influence of some major CG reforms pertaining to board attributes and ownership concentration on VD after controlling the influence of some firm characteristics for top listed companies on BSE over 2014–2017. Eight research hypotheses stating the expected influence of different CG attributes on VD are examined, based on comprehensive data set which are manually collected from annual report of sample companies as well as from corporate database ‘Capitoline Plus’. The findings reveal that board independence, board’s gender diversity and risk management committee have significant influence on VD. In particular, board independence is found to have weak negative influence on VD while board’s gender diversity and risk management committee indicates strong positive influence on VD.

The remaining CG attributes such as board size, role duality, ownership concentration, audit committee independence and nomination and remuneration committee does not have any significant influence on VD. Overall, finding suggests that, one of the conventional proxies of CG i.e., board independence has negative influence on VD, while some recently introduced CG mechanisms like board’s gender diversity, risk management committee positively influences VD. Thus, it can be inferred that, the direction of impact of CG on VD depends on the type of CG mechanism considered, as under conventional CG mechanism, level of VD.
decreases, because it is considered as costly affair together with the presence of such mechanism while some latest mechanisms of CG boosts VD as they emphasize more on transparency and disclosure in order to maintain investors’ confidence.

The result of this paper should be of relevance to regulators, practitioners and other market participants in Indian context and other emerging market having similar institutional setting. Firstly, the positive influence of gender diversity on VD extends support to the recent regulatory initiative of mandating minimum one women director on board. It further encourages regulators and practitioners to increase current levels of women representation of board in order to promote transparency among Indian corporate. Secondly, the co-existence of risk management committee and VD suggest the regulators to mandate formation of separate risk management committee for all listed companies so as to have better and more transparent risk management process for welfare of all stakeholders concerned. Thirdly, the negative impact board independence on VD suggest the regulators that though companies are appointing independent directors to fulfil statutory requirement, they are not functioning in their true spirit due to convergence of owner-manager interest. Finally, the finding also draws a clear picture about ineffectiveness of other CG mechanisms in promoting transparency and thus signalling the need for further improvement of CG structure in Indian context.

The study is based on annual reports as the only one avenue of VD, without considering other ways of VD such as websites, press release, etc. constitutes a limitation. Further, this study employs some variables of CG only whereas ownership structure related variables such as family ownership, managerial ownership are also prominent and need be included in future to know their impact on VD. Moreover, since prior literature provide evidence for positive relationship between VD and firm value, studies in future can extend the linkages between CG, VD and firm value.

ORCID

Rupjyoti Saha https://orcid.org/0000-0002-5666-061X

REFERENCES

Adams, M., & Hossain, M. (1998). Managerial Discretion and Voluntary Disclosure: Empirical Evidence from the New Zealand Life Insurance Industry. Journal of Accounting and Public Policy, 17(3), 245–281. https://doi.org/10.1016/S0278-4254(98)10003-0

Ahmed, K., & Courtis, J. K. (1999). Associations between Corporate Characteristics and Disclosure Levels in Annual Reports: A Meta-Analysis. The British Accounting Review, 31(1), 35–61. https://doi.org/10.1006/bare.1998.0082

Akhtaruddin, M., Hossain, M. A., Hossain, M., & Yao, L. (2009). Corporate Governance and Voluntary Disclosure in Corporate Annual Reports of Malaysian Listed Firms. Journal of Applied Management Accounting Research, 7(1), 1–19.

Alfraih, M. M., & Almutawa, A. M. (2017). Voluntary Disclosure and Corporate Governance: Empirical Evidence from Kuwait. International Journal of Law and Management, 59(2), 217–236. https://doi.org/10.1108/IULMA-10-2015-0052

Ali, M. M., Bakar, R. A., & Ghani, E. K. (2018). The Effect of Firm Internal and External Characteristics on Risk Reporting Practices among Malaysian Listed Firms. Indonesian Journal of Sustainability Accounting and Management, 2(2), 121–135. https://doi.org/10.28992/ijsam.v2i2.53
Allegrini, M., & Greco, G. (2013). Corporate Boards, Audit Committees and Voluntary Disclosure: Evidence from Italian Listed Companies. *Journal of Management and Governance, 17*(1), 187–216. https://doi.org/10.1007/s10997-011-9168-3

Arcay, M. R. B., & Vázquez, M. F. M. (2005). Corporate Characteristics, Governance Rules and the Extent of Voluntary Disclosure in Spain. *Advances in Accounting, 21*, 299–331. https://doi.org/10.1016/S0882-6110(05)21013-1

Balasubramanian, B. N., & Anand, R. (2013). Ownership Trends in Corporate India 2001-2011: Evidence and Implications (No. 419). Retrieved from https://ssrn.com/abstract=2303684

Balasubramanian, N. (2013). Gender Equality, Inclusivity and Corporate Governance in India. *Journal of Human Values, 19*(1), 15–28. https://doi.org/10.1177/0971685812470327

Barako, D. G., Hancock, P., & Izan, H. Y. (2006). Factors Influencing Voluntary Corporate Disclosure by Kenyan Companies. *Corporate Governance: An International Review, 14*(2), 107–125. https://doi.org/10.1111/j.1467-8683.2006.00491.x

Botosan, C. A. (1997). Disclosure Level and the Cost of Equity Capital. *The Accounting Review, 72*(3), 323–349.

Brockman, P., Martin, X., & Unlu, E. (2010). Executive Compensation and the Maturity Structure of Corporate Debt. *The Journal of Finance, 65*(3), 1123–1161. https://doi.org/10.1111/j.1540-6261.2010.01563.x

Cerbioni, F., & Parbonetti, A. (2007). Exploring the Effects of Corporate Governance on Intellectual Capital Disclosure: An Analysis of European Biotechnology Companies. *European Accounting Review, 16*(4), 791–826. https://doi.org/10.1080/09638180701707011

Charumathi, B., & Ramesh, L. (2015). On the Determinants of Voluntary Disclosure by Indian Companies. *Asia-Pacific Journal of Management Research and Innovation, 11*(2), 108–116.

Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental Disclosure Quality in Large German Companies: Economic Incentives, Public Pressures or Institutional Conditions? *European Accounting Review, 14*(1), 3–39. https://doi.org/10.1080/0963818042000339617

Darrough, M. N., & Stoughton, N. M. (1990). Financial Disclosure Policy in an Entry Game. *Journal of Accounting and Economics, 12*(1-3), 219–243. https://doi.org/10.1016/0165-4101(90)90048-9

Donnelly, R., & Mulcahy, M. (2008). Board Structure, Ownership, and Voluntary Disclosure in Ireland. *Corporate Governance: An International Review, 16*(5), 416–429. https://doi.org/10.1111/j.1467-8683.2008.00692.x

Dye, R. A. (1985). Disclosure of Nonproprietary Information. *Journal of Accounting Research, 23*(1), 123–145.

Elfeky, M. I. (2017). The Extent of Voluntary Disclosure and Its Determinants in Emerging Markets: Evidence from Egypt. *The Journal of Finance and Data Science, 3*(1-4), 45–59. https://doi.org/10.1016/j.jfds.2017.09.005

Eng, L. L., & Mak, Y. T. (2003). Corporate Governance and Voluntary Disclosure. *Journal of Accounting and Public Policy, 22*(4), 325–345. https://doi.org/10.1016/S0727-4254(03)00037-1

Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of Director Diversity and Firm Financial Performance. *Corporate Governance, 11*(2), 102–111. https://doi.org/10.1111/1467-8683.00011

Gisbert, A., Navallas, B., & Romero, D. (2014). Proprietary Costs, Governance and the Segment Disclosure Decision. *Journal of Management and Governance, 18*(3), 733–763. https://doi.org/10.1007/s10997-012-9243-4

Gul, F. A., & Leung, S. (2004). Board Leadership, Outside Directors’ Expertise and Voluntary Corporate Disclosures. *Journal of Accounting and Public Policy, 23*(5), 351–379. https://doi.org/10.1016/j.jaccpubpol.2004.07.001

Hassan, O. A. G., & Marston, C. (2019). Corporate Financial Disclosure Measurement in the Empirical Accounting Literature: A Review Article. *The International Journal of Accounting, 54*(2). https://doi.org/10.1142/S1094406019500069

Healy, P. M., & Palepu, K. G. (2001). Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. *Journal of Accounting and Economics, 31*(1-3), 405–440. https://doi.org/10.1016/S0165-4101(01)00018-0
Ho, S. S., & Shun Wong, K. (2001). A Study of the Relationship between Corporate Governance Structures and the Extent of Voluntary Disclosure. *Journal of International Accounting, Auditing and Taxation*, 10(2), 139–156. https://doi.org/10.1016/S1061-9518(01)00041-6

Hossain, M., & Reaz, M. (2007). The Determinants and Characteristics of Voluntary Disclosure by Indian Banking Companies. *Corporate Social Responsibility and Environmental Management*, 14(5), 274–288. https://doi.org/10.1002/csr.154

Jackling, B., & Johl, S. (2009). Board Structure and Firm Performance: Evidence from India’s Top Companies. *Corporate Governance: An International Review*, 17(4), 492–509. https://doi.org/10.1111/j.1467-8683.2009.00760.x

Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Kaur, S., Raman, V. A., & Singhania, M. (2016). Impact of Corporate Characteristics on Human Resource Disclosures. *Asian Review of Accounting*, 24(4), 390–425. https://doi.org/10.1108/ARA-09-2014-0103

Kim, O., & Verrecchia, R. E. (1994). Market Liquidity and Volume Around Earnings Announcements. *Journal of Accounting and Economics*, 17(1-2), 41–67. https://doi.org/10.1016/0165-4101(94)90004-3

Lang, M., & Lundholm, R. (1993). Cross-Sectional Determinants of Analyst Ratings of Corporate Disclosures. *Journal of Accounting Research*, 31(2), 246–271.

Lim, S., Matolcsy, Z., & Chow, D. (2007). The Association between Board Composition and Different Types of Voluntary Disclosure. *European Accounting Review*, 16(3), 555–583. https://doi.org/10.1080/09638180701507155

Liu, S. (2015). Corporate Governance and Forward-Looking Disclosure: Evidence from China. *Journal of International Accounting, Auditing and Taxation*, 25, 16–30. https://doi.org/10.1016/j.intaccaudtax.2015.10.002

Maskati, M. M. Al, & Hamdan, A. M. M. (2017). Corporate Governance and Voluntary Disclosure: Evidence from Bahrain. *International Journal of Economics and Accounting*, 8(1), 1–28. https://doi.org/10.1504/IJECA.2017.084876

Meek, G. K., Roberts, C. B., & Gray, S. J. (1995). Factors Influencing Voluntary Annual Report Disclosures By U.S., U.K. and Continental European Multinational Corporations. *Journal of International Business Studies*, 26(3), 555–572. https://doi.org/10.1057/palgrave.jibs.8490186

Morris, R. D., & Tronnes, P. C. (2018). The Determinants of Voluntary Strategy Disclosure: An International Comparison. *Accounting Research Journal*, 31(3), 423–441. https://doi.org/10.1108/ARJ-10-2015-0126

Munther, A.-N. (2019). Effect of Corporate Governance Rules on Voluntary Disclosure in Jordanian Corporations Listed with the Amman Stock Exchange (ASE): (An Empirical Study). *Studies in Business and Economics*, 27(1), 154–168. https://doi.org/10.2478/sbe-2019-0012

Nahar, S., Azim, M., & Jubb, C. (2016). The Determinants of Risk Disclosure by Banking Institutions: Evidence from Bangladesh. *Asian Review of Accounting*, 24(4), 426–444. https://doi.org/10.1108/ARA-07-2014-0075

Odoemelam, N., & Okafor, R. (2018). The Influence of Corporate Governance on Environmental Disclosure of Listed Non-Financial Firms in Nigeria. *Indonesian Journal of Sustainability Accounting and Management*, 2(1), 25–49. https://doi.org/10.28992/ijsam.v2i1.47

Othman, R., Ishak, I. F., Arif, S. M. M., & Aris, N. A. (2014). Influence of Audit Committee Characteristics on Voluntary Ethics Disclosure. *Procedia - Social and Behavioral Sciences*, 145, 330–342. https://doi.org/10.1016/j.sbspro.2014.06.042

Patelli, L., & Prencipe, A. (2007). The Relationship between Voluntary Disclosure and Independent Directors in the Presence of a Dominant Shareholder. *European Accounting Review*, 16(1), 5–33. https://doi.org/10.1080/09638180701265820

Rajagopalan, N., & Zhang, Y. (2008). Corporate Governance Reforms in China and India: Challenges and Opportunities. *Business Horizons*, 51(1), 55–64. https://doi.org/10.1016/j.bushor.2007.09.005

Rouf, M. (2011). The Relationship between Corporate Governance and Value of the Firm in Developing Countries: Evidence from Bangladesh. *The International Journal of Applied Economics and Finance*, 5(3), 237–244.
Shehata, N. F. (2014). Theories and Determinants of Voluntary Disclosure. Accounting and Finance Research, 3(1), 18–26. https://doi.org/10.5430/afr.v3n1p18

Singh, D. A., & Gaur, A. S. (2009). Business Group Affiliation, Firm Governance, and Firm Performance: Evidence from China and India. Corporate Governance: An International Review, 17(4), 411–425. https://doi.org/10.1111/j.1467-8683.2009.00750.x

Skinner, D. J. (1994). Why Firms Voluntarily Disclose Bad News. Journal of Accounting Research, 32(1), 38–60.

Wallace, R. S. O., Naser, K., & Mora, A. (1994). The Relationship Between the Comprehensiveness of Corporate Annual Reports and Firm Characteristics in Spain. Accounting and Business Research, 25(97), 41–53. https://doi.org/10.1080/00014788.1994.9729927

Watts, R. L., & Zimmerman, J. L. (1978). Towards a Positive Theory of the Determination of Accounting Standards. The Accounting Review, 53(1), 112–134.