Corporate Governance and Voluntary Disclosure Practices of Financial and Non-Financial Sector Companies in Bangladesh

Anup Kumar Saha*
Shahnag Akter*

Abstract

This paper examines the relationship between voluntary disclosure and several attributes of corporate governance using data from the annual reports of *companies listed* on the Dhaka Stock Exchange (DSE) in 2011. *The results obtained show statistically significant differences in levels of voluntary disclosure among listed companies in Bangladesh and show that companies in the financial sector disclose more voluntary information than non-financial companies.*

Findings from this analysis indicate a negative association between voluntary disclosure and percentage of equity owned by insiders. By contrast, firm size and profitability show significant positive relationship with voluntary disclosure.

However, this study also shows that voluntary disclosure has no significant relationship with the percentage of equity held by institutions, board size, board audit committee and percentage of independent directors on the board of directors.

Keywords

Voluntary Disclosures
Corporate Governance
Corporate Annual Reports
Disclosure Index
Dhaka Stock Exchange (DSE)

*Jagannath University, Bangladesh

Introduction

In recent years, corporate voluntary disclosure has received a great deal of attention from many researchers (Ibrahim, Haron and Ariffin, 2000; Ho and Wong, 2001; Chau and Gray, 2002; Haniffa and Cooke, 2002; Eng and Mark, 2003; Li & Qi, 2008; Akhtaruddin, et al., 2009). While these findings have developed our knowledge of voluntary disclosure to an important degree, there are questions over the generalisabilty of these findings as most of the research studies in this area have focused on the industrialised western countries (e.g. McKinnon and Dalimunthe, 1993; Frost and Pownall, 1994; Skinner, 1994; Hutton, Miller and Skinner, 2003; Mercer, 2004; Schleicher and Walker, 2010; Schleicher, 2012). By contrast, a limited number of research studies have examined disclosure practices of companies in developing economies. (e.g. Ibrahim, Haron and Ariffin, 2000; Ho and Wong, 2001; Chau and Gray, 2002; Haniffa and Cooke, 2002; Eng and Mark, 2003; Li & Qi, 2008). In addition, the vast majority of the prior research in this field in all regions has examined the association between factors affecting voluntary disclosure practices and voluntary disclosure levels of listed non-financial companies.

This paper aims to reduce this gap in prior research by investigating the voluntary disclosures made by both listed financial and non-financial companies in Bangladesh and examining the factors that influence the disclosure of voluntary information in their annual reports. A further motivation for this study was to examine whether the variables that researchers have found to be significant in explaining voluntary disclosure practices of companies in developed countries also apply in a developing country like Bangladesh. The study therefore aims to add to the literature on voluntary disclosure in developing countries and extend that literature by including corporate governance variables as possible explanatory variables for voluntary disclosure.

The corporate governance variables examined in this paper include percentage of equity owned by the insiders, percentage of equity held by the institutions, board size, board audit committee, and proportion of independent directors on the board.

The remainder of this paper is structured as follows. In the following section, the significance of the study is set out. Next, the research methods, analysis and findings of the research are presented. The final section summarizes the key findings in the paper, draws conclusions based in these findings and outlines limitations and suggestions for future research.

Significance of the Study

The demand for published information about companies has increased worldwide as the users of such information have become more aware than before. Most of the prior researches focuses mainly on mandatory disclosure (Ahmed & Nicholls, 1994; Wallace & Naser, 1995; Owusa-Ansah, 1998; Akhtaruddin, 2005).

Findings of the study will help to know how much companies are concerned towards disclosing voluntary information for their users and how they are performing their duties and responsibilities regarding information disclosure. Thus this study is expected to help the regulatory authorities to formulate the rules, regulations & guidelines for the full and fair disclosure of information. The users (investors, creditors & so on) of the information disclosed in the corporate annual reports are expected to be benefited by this study in making correct decisions. Finally, findings of this study are expected to co-operate the management of the company to understand and know how much information they should disclose in the annual report for the best interest of the company.

Literature Review and Hypothesis Development

Ownership Structure

Ownership structure is a mechanism that aligns the interest of shareholders and managers (Eng and Mak, 2003; Haniffa and Cooke, 2002; Chau and Gray, 2002; Hassain, et al., 1994). Various aspects of ownership structures have been studied in previous research (e.g. ownership concentration, family ownership, government ownership, foreign ownership, institutional ownership and managerial ownership). This study examines two aspects of a firm's ownership structure, namely, management ownership and institutional ownership.

Managerial ownership is the percentage of ordinary shares held by the CEO and executive directors, and includes their deemed interests. Using agency theory, it is argued that firms with higher management of ownership structure may disclose less information to shareholders through voluntary disclosure. It is because the determined ownership structure provides firms lower incentives to voluntarily disclose information to meet the needs of non-dispersed shareholders groups. McKinnon and Dalimunthe (1993) note that companies with a single ownership structure disclose more voluntary information. Hossain, et al (1994) suggested a negative association between the management ownership structure and the level of voluntary disclosure by Malaysian listed firms. In addition, Lakhal (2005) proposes that share management ownership is statistically and negatively associated with voluntary earnings disclosures. Oliveira, et al (2006) also reported that firms with a lower shareholder management voluntarily disclosed more information. The significant role of management ownership influences voluntary disclosures practices of firms from the prior researchers. So it is expected that ownership structure will influence the voluntary disclosure information. The hypothesis is formally stated as:

H1*: A higher proportion of inside share ownership is negatively associated to the level of voluntary disclosure.*

Due to large ownership stake, institutional investors have strong incentives to monitor corporate disclosure practices. Thus, managers may voluntarily disclose information to meet the expectations of large share-holders. Dulacha (2007) found that there is a significant positive relationship between the percentage ownership by institutional investors and voluntary disclosure of corporate governance practices by listed companies in Kenya. Similarly, Bushee and Noe (2000) documented a significant positive association between institutional shareholdings and corporate disclosure practices, as measured by the Association for Investment Management and Research (AIMR). Given shareholder activism and the monitoring potential of institutional shareholders, the following hypothesis is tested:

***H2**: A higher proportion of institutional share ownership is positively related to the level of voluntary disclosure.*

Board Audit Committee

The presence of an audit committee is associated with reliable financial reporting, such as, reduced incidence of errors, irregularities, and other indicators of unreliable reporting (Ho and Wong, 2001; McMullen, 1996). In addition, Bradbury (1990) argued that audit committees are commonly viewed as monitoring mechanisms that enhance the audit attestation function of external financial reporting. The board usually delegates responsibility for the oversight of financial reporting to the audit committee to enhance the breadth of relevance and reliability of annual report (Wallace, et al., 1995). Thus, audit committees can be a monitoring mechanism that improves the quality of information flow between firm owners (shareholders and potential shareholders) and managers, especially in the financial reporting environment where the two have disparate information levels. Given the influence of audit committees on the context and content of corporate annual reports, the following hypothesis is tested:

***H3:** The firm having audit committee is associated positively with the level of voluntary disclosure.*

Independent Non-executive Directors

A board is generally composed of inside and outside members. Inside members are selected from among the executive officers of a firm. They either belong to the management group or are the family that owns the firm. Outside directors are members whose only affiliation with the firm is their directorship. Empirical evidence on the importance of non-executive directors has been mixed. Klein (1998) suggests that inside directors can contribute more to a firm than outside directors due to their firm-specific knowledge and expertise.

The results of Agrawal and Knoeber (1996) suggest that outside representation on the board is not positively related to firm value. Ho and Wong (2001) do not find an association between the number of outside nonexecutive directors and the extent of voluntary disclosure. Rouf (2011) also dose not find any relation between the proportion of independent non-executive directors on a board and the level of voluntary disclosure. In contrast, Kosnik (1990) argues that board performance is associated with the composition of directors. Outside directors are arguably more effective than inside directors in maximizing shareholders' wealth. Leftwich, Watts and Zimmerman (1981) demonstrate that firms can expect more voluntary disclosure with the inclusion of a larger number of independent non-executive directors on the board. Further, inclusion of independent non-executive directors on corporate boards improves the comprehensiveness and quality of disclosure (Forker, 1992; Chen and Jaggi, 2000). Support for these assertions is further provided by Goodstein, Guatam and Boeker (1994); Pearce and Zahra (1992); Daily and Dalton in their study (1994); Haniffa and Cooke (2002); Akhtaruddin, et al (2009). The presence of outside directors plays a critical role in the release of adequate information. A firm may have a higher level of disclosure if the board consists of more outside directors. These observations and arguments as a whole suggest the following hypothesis:

***H4:** A higher proportion of independent nonexecutive directors on a board is positively related to the level of voluntary disclosure.*

Board Size

Board size may influence the level of voluntary disclosure. The level of disclosure is a strategic decision made by the board of directors. As a top-level management body, the board of directors formulates policies and strategies to be followed by managers. It has been argued that a greater number of directors on the board may reduce the likelihood of information asymmetry (Chen and Jaggi, 2000). Research emphasizes the importance of strategic information and resources in a highly uncertain environment. Birnbaum (1984) suggests that uncertainty and the lack of information may be minimized by a larger board. The size of the board is believed to affect the ability of the board to monitor and evaluate management and small board encourages faster information processing

(Zahra, et al., 2000). Further, the ability of directors to control and promote value-creating activities is more likely to increase with the increase of directors on the board. With more directors, the collective experience and expertise of the board will increase, and therefore, the need for information disclosure will be higher. The following hypothesis is examined:

H5: *The higher number of directors on a board is positively related with the level of voluntary disclosure.*

Controllable Variable Hypothesis

A review of literatures on voluntary disclosure led to the decision of including these control variables in the multiple regression models for testing the main hypotheses. These are firm size and Profitability.

Firm Size

Most of the studies found that firm size has featured as an important determinant of disclosure levels (Belkaoui-Riahi, 2001; Chow and Wong-Boren, 1987; Lang and Lundholm, 1993; Owusu-Ansah, 1998; Singhvi and Desai, 1971; Wallace and Naser, 1995; Wallace et al., 1994). The empirical results of the research on the relationship between firm size and disclosure level are mixed. Some researches got negative association like Rouf (2011); Akhtaruddin, et al (2009), but most of the research found positive relationship. Barako, et al. (2006) Brammer and Pavelin (2006) reported that the larger the firm, the more likely they will make voluntary disclosures which is consistent with Watson, et al. (2002); Wallace, et.al. (1994); Ho and Wong (2001); Cooke (1993); Lang & Lundholm (1993); and Lobo & Zhou (2001). The reasons proposed are that managers of larger companies are more likely to realize the possible benefits of better disclosure and small companies are more likely to feel that full disclosure of information could endanger their competitive position. Thus, the impact of firm size is expected to be positively associated with the extent of voluntary disclosures. In this study, total assets will be used as the measures of company size. The following specific hypothesis has been tested regarding size of the firm:

H6: *The extent of voluntary disclosures is positively associated with the total assets of the firm.*

Profitability

Prior empirical studies have shown that profitability influences the extent of disclosure in annual reports (Wallace and Naser, 1995; Inchausti, 1997; Owusu- Ansah, 1998). Inchausti (1997) argued from the perspective of agency theory, that management of a very profitable firm will use information in order to obtain personal advantages. Therefore, they will disclose detailed information as a means of justifying their position and compensation package (Singhvi and Desai, 1971). It may also be argued, that poorly performing firms may disclose less information to conceal the poor performance, presumably from the shareholders. Wallace, et al. 1994 found no relationship between profitability and disclosure, and Lang and Lundholm (1993) suggested that the direction of the relationship is not clear. However, it is more likely that the management of a profitable enterprise will voluntarily disclose more to the market to enhance the value of the firm, as this also determines their compensation as well as the value of their human capital in a competitive labor market. In this study, profitability is measured by return on equity (net profit after tax divided by average shareholders' equity). In light of the above discussion, the following hypothesis is examined:

H7: *The extent of voluntary disclosures is positively associated with the higher return on equity of the firm.*

Research Design and Methodology

Sample Selection and Data Collection

In this study, sample is taken from 40 listed companies under Dhaka Stock Exchange (DSE) where 20 from financial sector and 20 from non-financial sector. The sample covers the annual reports of the listed companies for the year 2011 (See Appendix B). The main criteria used for sampling the firms were: (i) annual reports must be available at the stock exchange and (ii) the firm must have been listed for the entire period of the study 2011. The companies listed on the DSE are classified into thirteen categories, out of which only seven (7) are studied: banking, food & allied, fuel & power, textile & clothing, pharmaceuticals & chemicals, cement and ceramics. Out of these seven categories, one is from financial sector and others six are from non-financial sector. Table 1 presents the composition of the sample companies below.

Information Items Included in the Voluntary Disclosure Index

Disclosure Index Approach has been used to provide an evaluation of the voluntary disclosure in corporate annual reports. The major task of the present study is to develop a suitable disclosure index comprising items of voluntary information that are expected to be disclosed in corporate annual report from the view point of Bangladesh. But there is a problem as to the measurement of corporate voluntary disclosure. There is no generally accepted theory to predict user information needs and there is an absence of an appropriate generally accepted model for the selection of the items of voluntary information to be included in a disclosure index. The items of voluntary information included in the disclosure were selected from the prior researches. The list of this voluntary disclosure information can be found as **Appendix-A**. The disclosure index constructed for this study included 40 items, which are classified into eight (8) categories:

(i) General corporate information,
(ii) Corporate governance/directors information,
(iii) Financial information,
(iv) Financial review information,
(v) Employee information,
(vi) Future forecast information,
(vii) Social responsibility information, and
(viii) Graphical information.

Table 1: Composition of the Sample Companies by Sectorwise

Sector	Frequency	Percentage
Financial Sector		
Banking	20	50.00
Non-Financial Sector		
Food & Allied	2	5.00
Fuel & Power	3	7.50
Textile & Clothing	5	12.50
Cement	2	5.00
Ceramics	3	7.50
Pharmaceutical & Chemicals	5	12.50
TOTAL	**40**	**100.00**

Scoring in the Voluntary Disclosure Index

There are various approaches available to develop a scoring scheme to determine the disclosure level of corporate annual reports from the works of other researchers. Among those approaches, unweighted disclosure index approach has been used in this study to measure the extent of disclosure of voluntary information. Under an unweighted voluntary disclosure index, all items of information in the index are considered equally important to the average user and the items of information are numerically scored on a dichotomous basis. According to this approach, a firm is scored “1” for an item disclosed in the annual report and “0” if it is not disclosed. The Total Voluntary Disclosure Index (TVDI) is then computed for each sample firm as a ratio of the total disclosure score to the maximum possible disclosure by the firm. The disclosure index for each firm is then expressed in percentage.

Data Analysis

In order to obtain the objectives of the study, statistical tools like mean. median, mode, standard deviation, co-efficient of variance, correlation, regressions and T tests, and F tests have been used to analyze and interpret the data through the Statistical Packages for Social Science (SPSS) 16.0 for windows and Tables and Charts have been used for data presentation.

Regression Model and Variables Defined

The ordinary least squares regression model has been employed to examine the relationship between explanatory variables (independent variables) and voluntary disclosure (dependent variable). The following regression equation is estimated for the study:

$$TVD = \alpha + \beta1\ PEOI + \beta2\ PEINS + \beta3\ BAC + \beta4\ PIND + \beta5\ BSZE + \beta6\ TA + \beta7\ PROE + \varepsilon$$

Dependent Variable

TVD = Total Voluntary Disclosure score received by each sample company

Independent Variables

PEOI =Percentage of Equity Owned by the Insiders
PEINS = Percentage of Equity held by the Institutions
BAC = Board Audit Committee
PIND =Percentage of Independent Directors
BSZE = Board Size
TA = Total Assets
PROE = Percentage of Return on Equity
α = Constant and
β = Error Term

Table 2: List of Variables, Labels, Expected Signs and Relationships in the Regression

Variable Labels	**Description of Variables**	**Expected Sign & Relationship**
PEOI	Percentage of equity owned by the insiders represents proportion of equity owned by the insiders to all equity of the firm.	(-) PEOI is negatively associated with the level of voluntary disclosure.
PEINS	Percentage of equity held by the institutional shareholders represents proportion of equity held by the institutional shareholders to all equity of the firm.	(+) PEINS has a significant positive relationship with the level of voluntary disclosure.
BAC	Board audit committee, 1 for presence or 0 Others.	(+) BAC is associated positively with the level of voluntary disclosure.
PIND	Percentage of independent directors indicates Proportion of independent directors to total number of directors on board.	(+) PIND has positive relationship with the level of voluntary disclosure.
BSZE	Board size represents the total number of members on each board.	(+) BSZE is positively related to the level of voluntary disclosure.
TA	Total assets represent the size of the firm.	(+) TA is associated positively with the level of voluntary disclosure.
PROE	Percentage of return on equity as net profit after tax to average shareholders' equity.	(+) PROE is associated positively with the level of voluntary disclosure.

Analysis and Findings

Descriptive Statistics for All Sample Companies

Table 3 reports descriptive statistics for the sample firms. The results from the disclosure index indicate (TVD) the highest score achieved by a firm is 80% and the lowest score is 37.50% with a standard deviation of 9.447%. So, the firms are widely distributed with regard to voluntary disclosure. The mean of the percentage of equity owned by the insiders to all equity of the firm (PEOI) is 24.14% with standard deviation is 18.092%. The average of the percentage of equity held by institutions to all equity of the firm (PEINS) is 14.18% with standard deviation is 8.118%. The average BAC and BSZE is 0.98 and 10.88; standard deviation is 0.158 and 5.552 with minimum and maximum of 0.00 & 1.00 and 4.00 & 23.00 respectively.

Table 3: Descriptive Statistics (N=40)

Variables	Minimum	Maximum	Mean	Std. Deviation
TVD	37.50	80.00	66.21	9.447
PEOI	0.00	60.00	24.14	18.092
PEINS	0.00	29.01	14.18	8.118
BAC	0.00	1.00	0.98	0.158
PIND	0.00	40.00	9.40	8.051
BSZE	4.00	23.00	10.88	5.552
TA	604.04	199950.49	56555.37	57613.822
PROE	2.37	29.04	15.23	7.384

TVD = Total Voluntary Disclosure score received by each sample company
PEOI = Percentage of Equity Owned by the Insiders to all equity of the firm
PEINS = Percentage of Equity held by the Institutions to all equity of the firm
BAC = Board Audit Committee, 1 for presence or 0 Others.
PIND = Percentage of Independent Directors to total number of directors on board.
BSZE = Total number of members on each board.
TA = Total Assets of the firm
PROE = Percentage of Return on Equity

The mean of the percentage of independent directors (PIND) to total number of directors on the board is 9.40% which indicates that an insignificant number of directors are independent directors. The average firm size is (Taka Bangladeshi) Tk. 56555.37 million in terms of total assets (TA) with minimum and maximum amount of Tk. 604.04 million and Tk. 199950.49 million respectively. Again, the mean profitability in terms of Percentage of Return on Equity (PROE) is 15.23% with minimun and maximum of 2.37% and 29.04% respectively.

Table 4: Voluntary Disclosure Levels made by the Sample Companies

Disclosure Score (%)	No. of Companies	Percentage
<=40	1	2.50
41-50	2	5.00
51-60	9	22.50
61-70	15	37.50
71-80	13	32.50
>80	0	0.00
Total	40	100

Thus, it can be concluded that the firm size and profitability proxied by total assets (TA) & Percentage of Return on Equity (PROE) respectively indicating that the sample firms are widely distributed.

Table 4 shows the distribution of disclosure performance by expressing the number of items disclosed as percentages of the total of 40 comprising the voluntary disclosure score. Column one of Table 4 distinguishes ranges of disclosure performances in these terms. Table shows that maximum companies are lying in scale of 61 to 70 (which in number is 15) and they occupy 37.50% of the total surveyed companies. 13 companies are standing holding 32.50% of total in scale of 71 to 80. Least number of companies is seen in the scale both in less than and equal to 40 & 41 to 50. So from the table it can be said that most of the company's voluntary disclosure level are higher than 51& lower than 80, indicating a relatively high levels of voluntary disclosure for the sample companies in Bangladesh.

Top and Lowest Ranking Companies

The sample companies have been ranked on the basis of the value of the disclosure for each of the companies. Table 5 shows the top and bottom ranked companies by the size of the disclosure score. The table also provides insights about which industries are disclosing more voluntary information in the corporate annual reports.

Table 5 indicates that the highest disclosure score has been obtained by 3 companies, namely Dhaka Bank Limited, MJL Bangladesh Limited and Prime Bank Limited. Further, when these companies were classified into industrial categories, it has been found that out of 12 companies nine (9) come from the "Banking" category which indicates most of the top ranking companies are from "Financial sector".

Table 5: Top Ranking Companies

Name of the Companies	Disclosure Score	Ranking	Industry Type
Dhaka Bank Limited	80.00	1	Banking
MJL Bangladesh Limited	80.00	1	Fuel & Power
Prime Bank Limited	80.00	1	Banking
Dutch Bangla Bank Limited	77.50	4	Banking
Ranata Limited	77.50	4	Pharmaceutical & Chemicals
Bank Asia Limited	75.00	6	Banking
BRAC Bank Limited	75.00	6	Banking
Premier Bank Limited	75.00	6	Banking
Mutual Trust Bank Limited	72.50	9	Banking
Estern Bank Limited	72.50	9	Banking
Southeast Bank Limited	72.50	9	Banking
RAK Ceramics Limited	72.50	9	Ceramics

Table 6 presents the lowest ranked twelve (12) companies in Bangladesh using the unweighted disclosure index as the basis of the rankings. The lowest scores are obtained by Orion Infusion Ltd., Apex Foods Ltd., Beximco Synthetics Ltd., GBB Power Ltd., and so on. It is interesting to note that of 12 companies only two are from "Financial sector" belonging to "Banking" category. So from the table, it can be said that a significant portion of lowest ranking companies come from "Non-financial sector".

Table 6: Lowest Ranking Companies			
Name of the Companies	**Disclosure Score**	**Ranking**	**Industry Type**
Orion Infusion Ltd.	37.50	40	Pharmaceutical & Chemicals
Apex Foods Ltd.	47.50	39	Food & Applied
Beximco Synthetics Ltd.	50.00	38	Textile & Clothing
GBB Power Ltd.	52.50	37	Fuel & Power
Malek Spinning Mills Ltd.	55.00	36	Textile & Clothing
Dacca Dyeing & Manufacturing co. Ltd.	57.50	34	Textile & Clothing
ICB Islamic Bank Ltd.	57.50	34	Banking
Standard Bank Ltd.	60.00	29	Banking
M. I. Cement Factory Ltd.	60.00	29	Cement
Fuwang Ceramics Ltd.	60.00	29	Ceramics
Fuwang Foods Ltd.	60.00	29	Food & Applied
Salvo Chemical Industry Ltd.	60.00	29	Pharmaceutical & Chemicals

Comparative Descriptive Based on Disclosure Index

Table 7 repersents the comparative descriptive statistics between Financial & Non-financial sample companies. The result of the descriptive statistics indicates that the average voluntary disclosure score of the sample financial & non-financial companies is 70.38 & 62.00; standard deviation is 5.98 & 10.47 with median and mode of 70.00 & 61.25 and 67.50 & 60.00 respectively.

Table 7: Comparative Descriptive Statistics between Financial & Non-financial Companies		
Particulars	**Financial Companies**	**Non-financial Companies**
N	20	20
Mean	70.38	62.00
Median	70.00	61.25
Mode	67.50	60.00
Std. Deviation	5.98	10.47
Minimum	57.50	37.50
Maximum	80.00	80.00

The minimum disclosure score obtained by the sample financial & non-financial companies is 57.50 & 37.50 respectively where maximum disclosure level for both is 80.00. All of these indicate that the voluntary disclosure level of Financial companies is significantly higher than Non-financial companies in Bangladesh. This result is supported by our previous analysis on “Top & Lowest ranking companies” where most of the top ranking companies were from financial sector and in contrary, only a small portion of lowest ranking companies was from this sector.

Correlation Analysis, Results & Interpretation

Of the several mathematical methods of measuring correlation, the Pearson product-moment correlation is widely used in practice. It is used universally for describing the degree and direction of relationship among variables. Table 8 reports the Pearson product-moment correlation coefficients of the continuous explanatory variables as well as the dependent variable included in the survey.

Table 8: Pearson Correlation Analysis Results (N=40)

Variables	TVD	PEOI	PEINS	BAC	PIND	BSZE	TA	PROE
TVD	1	-.541**	.027	-.237	-.206	.430**	.569**	.325*
PEOI	-.541**	1	.118	.216	-.241	.098	-.090	.017
PEINS	.027	.118	1	.283	-.030	.079	.071	.143
BAC	-.237	.216	.283	1	.189	.142	.127	.131
PIND	-.206	-.241	-.030	.189	1	-.567**	-.437**	-.259
BSZE	.430**	.098	.079	.142	-.567**	1	.771**	.254
TA	.569**	-.090	.071	.127	-.437**	.771**	1	.345*
PROE	.325*	.017	.143	.131	-.259	.254	.345*	1
Sig.(2-tailed) TVD		.000	.867	.141	.201	.006	.000	.041
PEOI	.000		.469	.180	.134	.549	.580	.915
PEINS	.867	.469		.076	.852	.629	.666	.378
BAC	.141	.180	.076		.242	.381	.435	.420
PIND	.201	.134	.852	.242		.000	.005	.107
BSZE	.006	.549	.629	.381	.000		.000	.113
TA	.000	.580	.666	.435	.005	.000		.029
PROE	.041	.915	.378	.420	.107	.113	.029	

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

TVD = Total Voluntary Disclosure score received by each sample company
PEOI = Percentage of Equity Owned by the Insiders to all equity of the firm
PEINS = Percentage of Equity held by the Institutions to all equity of the firm
BAC = Board Audit Committee, 1 for presence or 0 Others
PIND = Percentage of Independent Directors to total number of directors on board
BSZE = Total number of members on each board
TA = Total Assets of the firm
PROE = Percentage of Return on Equity

The result of Pearson product-moment correlation indicates that Total Voluntary Disclosure (TVD) is positively correlated with Board Size (BSZE) and Total Assets (TA) at significant level 0.006 & 0.000 respectively ($P<0.01$, two-tailed). Similar results appear for Percentage of Return on Equity (PROE) at the level of significance 0.04 ($P<0.05$, two-tailed). On the other hand, TVD has negative relationship with Percentage of Equity Owned by the Insiders (PEOI) and is significant at the level of 0.000 ($P<0.01$, two-tailed). Similar results appear for Board Audit Committee (BAC) and Percentage of Independent

Directors (PIND) but not significant at the level of 0.141 & 0.201 respectively (P<0.01 & P<0.05, two-tailed). However, TVD has a positive relationship with Percentage of Equity held by Institutional Shareholders (PEINS) but not significant at the level of 0.867 (P<0.01 & P<0.05, two-tailed).

Multiple Regression Analysis, Results & Interpretation

Table 9 shows the results of the multiple regression analysis in the study. The table shows the association between voluntary disclosure index and experimental variables. The coefficient of determination R-square, F ratio, beta coefficients and t-statistics for the regression model and summarized results of the dependent variable on the explanatory variables can be seen in the Table 9.

The results show an R-square of 0.666, which indicates that the model is capable of explaining 66.60% of the variability of the voluntary disclosure information in the sample companies under study. The adjusted R-square indicates that 59.30 percent of the variation in the dependent variable in the model used here is explained by variations in the independent variables. The F value of 9.112 (which is significant at the 0.000 levels) indicates that the model significantly explains the variations in voluntary disclosure of annual reports in Bangladesh. All of these values suggest that a significant percentage of the variation in voluntary disclosure can be explained by the variations in the whole set of independent variables.

The most significant variable is PEOI (Percentage of Equity Owned by the Insiders to all equity of the firm). The coefficient for PEOI is -0.473 which is statistically significant at the 0.000 level. The result suggests that firms have a higher percentage of equity owned by insiders is negatively associates with voluntary information. This result is similar to that of McKinnon and Dalimunthe (1993); Hossain, et al.(1994); Lakhal (2005); Oliveira, et al.(2006). Thus, hypothesis 1 is supported.

Table 9: Regression Analysis Results (N=40)

Variables	Coefficient	Standard Error	Beta t Values	Significance
PEOI	-0.473	0.060	-4.087	0.000***
PEINS	0.092	0.125	0.860	0.396
BAC	-0.276	7.222	-2.280	0.029**
PIND	0.067	0.167	0.472	0.640
BSZE	0.243	0.307	1.343	0.189
TA	0.329	0.000	1.910	0.065*
PROE	0.199	0.143	1.777	0.085*

*P < 0.1, two-tailed, ** P < 0.05, two-tailed, *** P < 0.01, two-tailed

R square = 0.666
Adjusted R square = 0.593
F value = 9.112
F significance = 0.000
Durbin-Watson test = 2.437

TVD = Total Voluntary Disclosure score received by each sample company
PEOI = Percentage of Equity Owned by the Insiders to all equity of the firm
PEINS = Percentage of Equity held by the Institutions to all equity of the firm
BAC = Board Audit Committee, 1 for presence or 0 others.
PIND = Percentage of Independent Directors to total number of directors on board.
BSZE = Total number of members on each board.
TA = Total Assets of the firm
PROE = Percentage of Return on Equity

The Percentage of Equity held by the Institutions to all equity of the firm (PEINS) is another important explanatory variable in the regression model for which the coefficient is positive (0.092) but statistically insignificant. The result thus suggests that Percentage of Equity held by the Institutions does not impact the level of disclosure which is inconsistent with Dulacha (2007); Bushee and Noe (2000), and therefore, hypothesis 2 is not supported.

The regression result for the Board Audit Committee (BAC) is significant at the 0.029 level but not positive. This result is inconsistent with hypothesis 3 and dissimilar to that of Ho and Wong (2001); McMullen (1996); Dulacha (2007); Chen and Jaggi (2000); Wallace, et al. (1995).

The coefficient for Percentage of Independent Directors to total number of directors on board (PIND) is positive (0.640) but not statistically significant, and hence, unrelated to voluntary disclosure. This is consistant with the results reported by Ho and Wong (2001), but inconsistent with Barako, et al. (2006); Simon and Kar (2001); Pettigrew and McNulty (1995). However, hypothesis 4 is rejected. The coefficients for Board Size is also insignificant indicating that size of the board dose not influence the extent of voluntary disclosure, contrary to H5.

With regard to control variables, this study suggests that profitability of the firm in respect to percantage return on equity (PROE) is significant. Thus, hypothesis 7 is supported. Finally, the regression result for firm size (poxies by total assets) is also significant and positive. This result is dissimilar with Watson, et al. (2002); Wallace, et al. (1994); Ho and Wong (2001); Hossain, et al. (2006).

Table 10 shows the summarized result of regression analysis indicating expected signs and actual signs with significant levels.

Table 10: Summary of the Regression Results

Variable Labels	Expected Sign	Actual Sign	Significance Level
PEOI	_	_	***
PEINS	+	+	
BAC	+	_	**
PIND	+	+	
BSZE	+	+	
TA	+	+	*
PROE	+	+	*

* Significance level at 10%, ** Significance level at 5%, ***Significance level at 1%

Discussion, Conclusions and Implications for Further Studies

This study is an extension of previous studies where a set of corporate governance variables were considered to examine their association with the level of voluntary disclosure for non-financial companies. The purpose of the study has been to examine corporate governance factors and their influence on voluntary disclosure for both financial & non-financial companies. These factors include percentage of equity owned by the insiders, percentage of equity held by the institutions, board size, board audit committee, and proportion of independent directors on the board. In addition, control variables (firm size and profitability) suggested in prior researches as significant contributors to voluntary disclosure are also considered. In particular, this study aimed to determine which of these factors have significantly related to increased disclosure. A disclosure index has been used to measure the extent of voluntary disclosure on a sample of 40 Bangladeshi listed financial and non-financial companies.

The results of this paper have several implications. The first hypothesis of the study is that a higher proportion of inside share ownership is negatively associated to the level of voluntary disclosure. Findings from this study are supportive of this hypothesis which is also consistent with the findings of prior researchers (e.g. McKinnon and Dalimunthe, 1993; Hossain, et al, 1994; Lakhal, 2005; Oliveira, et al, 2006). But the second hypothesis regarding ownership structure which is supported by many previous researches did not find support in this research and therefore could not be accepted. No significant association identified between proportion of institutional ownership and voluntary disclosure. Control variables (firm size and profitability) by contrast, show significant positive relation with voluntary disclosure. That is, firms which are larger in size and profitability disclose more voluntary information than firms with smaller in size and profitability. Other factors such as board audit committee, board size and proportion of independent directors on the board do not show statistically significant relationship with levels of voluntary disclosure.

The paper has much contribution to know how much companies are concerned towards disclosing voluntary information for their users and how they are performing their duties and responsibilities regarding information disclosure. Findings of this study would help the regulatory authorities to formulate the rules, regulations & guidelines to ensure the full and fair disclosure of information. Investors, managers and other internal and/or external users may benefit from the study for efficient decision making. However, the study considers only one year of data. The results may differ across different years if multiple years are considered for analysis. The researchers constructed disclosure index has been used in the study. The index is very sensitive and can affect the results if the selected items of information improperly. While a larger number of samples might have bolstered this data collected, within the context of Bangladesh, where company annual reports are not always available, this is seen as representing a sufficient sample on which to base the relevant findings and conclusions. The results may be different if the numbers of disclosure items were increased or another set of voluntary disclosure items has been examined. Finally, the study investigates the extent of voluntary disclosure leaving the other facet of disclosure i.e., mandatory disclosure. The higher levels of voluntary disclosures, therefore, do not necessarily mean higher transparency. The results of the study should be interpreted with these limitations in mind.

Future research on voluntary disclosure should seek to take into account all listed firms under the financial and non-financial groups. Additionally, studying the same research issues found here but in a different industry sector would be an interesting extension of this study. This may reveal interesting results in terms of variations within the industrial sectors. Further, future research should focus on the issues which are raisen in this paper using a disclosure index, weighting in on financial analysts and investors' evaluations rather than a researcher-generated index. Finally, this study covers the annual reports for a single year. Further research can be undertaken to measure the extent of voluntary disclosure longitudinally to determine whether quality of disclosure has improved over time. Such a study would provide additional insights on corporate disclosure practices in Bangladesh.

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Appendix A

Voluntary Disclosure Check List

A. General Corporate Information

1. Company's mission statement
2. Brief history of the company
3. Corporate structure / chart
4. Description of major goods/services produced/provided
5. Stock exchanges on which shares are held
6. Statement of corporate strategy and objectives

B. Corporate Governance/Directors Information

7. Name of principal shareholders
8. List of Directors
9. Shares held by directors of the company
10. Meeting held and Attendance
11. Educational qualifications of the directors
12. Experience of the directors
13. Remuneration of the directors

C. Financial Information

14. Amount and sources of revenue/income
15. Dividend payout policy
16. Retained earnings
17. Foreign currency information
18. Policies regarding the amortization of intangible assets

D. Financial Review Information

19. Liquidity/current ratios
20. Debt equity ratio
21. Return on capital employed
22. Return on shareholders' equity
23. Dividend per ordinary share for the period
24. Net assets value per share
25. Effects of inflation on operations- qualitative
26. Effects of interest rates on results- qualitative

E. Employee Information

27. Total number of employees for the company
28. Category of employees by sex
29. Number of employees trained
30. Welfare information
31. Policy on employee training

F. Future Forecast Information

32. Future cash flow forecast- qualitative
33. Market share forecast- qualitative
34. Profit/sales forecast- qualitative
35. Planned capital expenditure- qualitative

G. Social Responsibility Information

36. Information on safety measures
37. Environmental protection programs
38. Information on community services

H. Graphic Information

39. Graphic presentation of financial information
40. Graphic presentation of non- financial information

Appendix B

Name of Companies	TDS	PEOI	PEINS	BAC	PIND	BSZE	TA (mn)	PROE
Apex Foods	47.50	50.42	14.89	1	16.67	6	1571.42	2.80
Summit Power	70.00	0.01	29.01	1	8.33	12	20031.29	27.09
Beximco Pharma	72.50	2.71	11.61	1	11.11	9	23033.34	7.24
Beximco Synthetic	50.00	32.64	6.29	1	14.29	7	3082.71	5.23
M.I. Cement	60.00	58.11	7.30	1	14.29	7	7004.46	13.69
Dacca Dyeing	57.50	48.21	17.47	1	0.00	8	3324.03	6.64
Envoy Textile	62.50	20.80	15.96	1	14.29	7	6912.44	10.81
Fuwang Ceramics	60.00	17.34	23.00	1	16.67	6	1108.94	9.86
Fuwang Foods	60.00	5.03	16.89	1	40.00	5	999.90	10.71
GBB Power	52.50	36.74	12.84	1	20.00	5	1603.22	10.79
Heidelberg cement	70.00	0.89	19.00	1	10.00	10	8010.82	14.96
Malek Spinning Mills	55.00	41.76	23.20	1	14.29	7	7254.50	2.37
MJL BD Ltd	80.00	0.00	0.00	0	0.00	6	11409.01	9.26
Orion Infusion	37.50	40.61	17.92	1	0.00	4	619.01	19.21
RAK Ceramics	72.50	7.34	9.95	1	16.67	6	7726.31	14.79
Renata	77.50	0.00	15.03	1	14.29	7	7691.60	27.48
Salvo Chemicals	60.00	22.67	0.00	1	12.50	8	604.04	6.24
Shinepukur Ceramics	65.00	0.00	3.38	1	20.00	5	7154.05	4.67
Square Pharma	62.50	41.67	16.95	1	14.29	7	21453.78	19.26
Square Textile	67.50	17.50	16.58	1	11.11	9	7225.74	16.25
Southeast Bank	72.50	15.46	19.06	1	6.25	16	157952.81	10.47
One Bank	67.50	24.69	0.00	1	9.09	11	67619.04	25.84
Mercantile Bank	70.00	42.10	18.44	1	0.00	22	116553.01	17.95
IFIC Bank	70.00	4.83	0.00	1	8.33	12	91507.54	11.60
ICB Bank	57.50	52.76	16.87	1	0.00	5	18015.16	26.80
Eastern Bank	72.50	6.73	12.46	1	9.09	11	117580.72	19.03
Dhaka Bank	80.00	29.49	19.46	1	0.00	19	104725.65	23.49
City Bank	67.50	14.00	9.15	1	0.00	13	115735.97	13.70
BRAC Bank	75.50	0.00	23.48	1	16.67	6	133201.05	17.90
Bank Asia	75.50	36.94	25.00	1	7.14	14	117729.41	19.61
Shahjalal Bank	67.50	42.40	0.00	1	5.00	20	107228.86	13.80
Prime Bank	80.00	20.53	20.12	1	4.76	21	199950.49	20.32
Trust Bank	65.00	60.00	21.13	1	11.11	9	58276.33	29.04
Al- Arafa Bank	67.50	25.82	16.12	1	5.56	18	103518.73	18.34
Mutual Trust Bank	72.50	22.06	28.97	1	0.00	13	76503.82	8.80
UCBL	70.00	19.97	12.68	1	0.00	23	168891.78	18.45
Premier Bank	75.00	29.38	21.07	1	6.67	15	74780.50	7.66
Jamuna bank	65.00	36.58	4.73	1	0.00	18	87065.13	19.43
DBBL	77.50	3.43	4.31	1	12.50	8	122853.85	27.03
Standard Bank	60.00	34.17	17.06	1	5.00	20	74704.36	20.75