

The Association between Profitability and the Extent of Voluntary Disclosure of Financial Information in the Annual Reports: A Study on Listed Banks of Bangladesh

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ABSTRACT: The aim of this paper is to measure the extent of disclosure of voluntary financial information in the annual reports of listed banks in Bangladesh. An effort has also been made to identify the impact of profitability on the level of voluntary disclosure. An unweighted disclosure index with 14 financial items has been used to measure the extent of disclosure. The study reveals that most of the listed banks of Bangladesh are not making satisfactory level of voluntary disclosure with average score of about 42.86%. The findings also show that profitability is not significant in explaining the level of voluntary disclosure of financial information.

KEYWORDS: Finance, profitability, Bank of Bangladesh, voluntary.

1 INTRODUCTION

The demand for company information from the part of the various stakeholder groups is increasing day by day. Corporate financial reporting and in particular annual reports are important avenues for communicating company's financial and non-financial information. All stake holders such as investors, employees, suppliers, customers and creditors are able to access to the company's annual report. It is necessary for the company to provide its information to fulfill their needs and build their own style of company image. Information contained in the company's annual report consists of both mandatory and voluntary information. The company has to follow laws, regulations and accounting standard to provide the mandatory information while voluntary information is depended on management's judgment to be included in the annual report.

It is really mattered what kind of voluntary information the company has disclosed as they have to consider the benefit and risk of providing information to the public. Financial information relate to the decision making of the investors and creditors. With financial information, we can figure out how the company performed by computing the financial ratio. For example, Liquidity ratio is the ratio of current assets to current liabilities. This ratio uses to measure company's ability to pay-off short time obligations. Leverage ratio measure the capital structure of company with the ratio of non-current liabilities to equity which is of interest to creditor and investor. Also, financial history or summary - three or more years are useful for investors to review compared figure and convenient to calculate ratios themselves since they do not have to spend time to summarize figures.

In reviewing disclosure literature, it can be noticed that disclosure practices are affected by several variables. The current study has mainly focused on the impact of profitability on the extent of voluntary disclosure of financial information in the annual reports.

The remainder of this paper is organized as follows. Section two and three outlines the research questions and objectives of the study. Literature review and hypotheses development are discussed in section four and five. Section six describes research method. Section seven discusses findings of the study. Section eight outlines limitations and section nine makes concluding remarks of the study.

2 RESEARCH QUESTIONS

- To what extent do Bangladeshi listed banks disclose voluntary financial information in their annual reports?
- Is profitability a significant factor responsible for disclosing voluntary information in the annual reports of Bangladeshi listed banks?

3 RESEARCH OBJECTIVES

- To measure the extent of voluntary disclosures of financial information in the corporate annual reports of listed banks in Bangladesh.
- To assess the association between total voluntary disclosure and profitability in the listed banks of Bangladesh.

4 LITERATURE REVIEW

Extensive research has been carried out in the developed and developing countries to measure the corporate disclosure in both financial and non-financial companies. (See for example, Cerf, 1961; Singhvi and Desai, 1971; Buzby, 1974; Kahl and Belkaoui, 1981; Marston, 1986; Wallace, 1987; Cooke, 1989a, 1989b, 1991, 1992, 1993; Malone et al., 1993; Hossain et al., 1994; Ahmed and Nicholls, 1994; Wallace and Naser, 1995; Inchausti, 1997; Craig and Diga, 1998; Hossain, 2000; Hossain, 2001; Haniffa and Cooke, 2002; Akhtaruddin, 2005).

The study of Kahl and Belkaoui (1981) investigated the overall extent of disclosure by 70 banks located in 18 different countries. Their results showed that the extent of disclosure was different among the countries examined, and that there was a positive relationship between size of the bank and the level of disclosure indicated.

Hossain (2001) empirically investigates the extent of disclosure of 25 banks in Bangladesh and associations between company size, profitability, and audit firm with disclosure level. A total of 61 items of information, both voluntary and mandatory, were included in the disclosure index, and the approach to scoring items was dichotomous. The results showed that size and profitability of the banks are statistically significant in determining their disclosure levels. However, the audit firm variable was not significant at conventional levels in the model.

Hossain and Reaz (2007) analyzed voluntary disclosure practices in the corporate annual reports of 38 listed banking companies in India. The researchers also tested the association between corporate attributes and the level of voluntary disclosure of the sample banks. Their results revealed that sample listed banks were disclosing a satisfactory amount of voluntary information and out of corporate attributes only size and assets-in-place were significant factors in explaining the level of voluntary disclosure.

Das and Das (2008) tried to find out the extent of voluntary disclosure by the financial institutions in Bangladesh by examining annual reports of 37 banking and 7 non-banking financial institutions. He replicated the disclosure index constructed by Hossain and Reaz(2007), which consisted of 65 items under 9 categories. The results showed that voluntary disclosure varied widely within the sample companies. The companies were focusing more on general corporate information, corporate strategy and accounting policy and little focus was placed on financial performance, corporate social disclosure and corporate governance. The authors concluded that sample companies were not very much aware and interested about the disclosure of voluntary information in their annual reports.

5 HYPOTHESIS DEVELOPMENT

Profitability is considered to be one of the most common explanatory variables that have been used in disclosure literature. Banks having higher profitability may be hypothesized to disclose more information in their annual reports than the banks with lower profitability (or losses) for a number of reasons. According to political costs theory, managers of profitable companies are motivated to disclose more information to justify their higher profits (Inchausti, 1997). Based on the signaling theory it can be assumed that profitable companies want to distinguish themselves from less profitable

companies through more disclosure (Inchausti, 1997). Stakeholder theory also supports the idea as profitability is considered to be one of the main information needs of many stakeholders, other than shareholders. However, if the profitability of a company is low, management may disclose less information in order to cover up the reasons for losses or lower profits. On the other hand, in case of low profitability, managers may be motivated to disclose more information to reduce the risk of legal liability and severe share devaluation or loss of reputation (Skinner, 1994). So different theories can predict different direction of the relation between profitability and disclosure.

The prior studies provide contradictory evidence of the relation between profitability and the level of disclosure. While some studies report a significant positive association between profitability and the level of disclosure (Such as Singhvi,1968; Singhvi and Desai,1971; Wallace, 1987; Owusu-Ansah, 1998; Hossain, 1998; Haniffa and Cooke,2002), other studies report a negative association (such as Belkaoui and kahl,1978, Wallace and Naser,1995; Inchausti,1997). On the other hand, Wallace et al. (1994), Raffounier(1995), Meek et al.(1995) reported insignificant association between profitability and the extent of disclosure.

Different measures for profitability have been used in the disclosure literature such as ROE, ROA, ROI, and EPS. A number of studies combine some measure in one measure while others use one measure. However, there is no criterion to choose the best proxy of profitability. The current study measures bank size by total assets.

The following specific hypothesis has been tested regarding profitability.

Hypothesis: There is a positive association between profitability measured by ROE and the level of voluntary disclosure in annual reports of listed banks.

6 METHODOLOGY

Selection of Sample

Out of financial institutions, the study concentrates only on the banking sector in Bangladesh. All the banking companies listed on the Dhaka Stock Exchange are considered to be included in the sample. On December 31, 2012 there are 30 banking companies listed on DSE. Annual reports for the year 2011 have been used for the study.

Scoring of the Disclosure Index

Generally weighted and unweighted disclosure index are used to measure disclosure level in disclosure studies. The weighted approach (Adopted by Barrett,1977; Marston, 1986) provide different weights (Above zero but less than one) to items of disclosed information according to importance given by the researcher. Zero weight is given for non-disclosure of any information item.

Researchers such as Wallace et al. (1994), Cooke (1991&1992), Karim (1995), Hossain et al. (1994), Ahmed and Nicholls (1994) and Hossain (2000 &2001) used unweighted approach in their studies. In unweighted approach the key fact is whether a company discloses an item of information or not. If a company discloses an item of information in its annual report, then '1' will be awarded and if the item is not disclosed, then '0' will be awarded. This convenient procedure is also termed as dichotomous procedure.

As prior experience suggests that the use of unweighted and weighted disclosure index for disclosure in the annual reports can make little or no difference to the findings (Coombs&Tayib,1998). We have chosen the unweighted disclosure index method where all items of information in the index are considered equally important to the average user. The following formula has been used to measure the total voluntary disclosure score:

$$\text{Where, } d = \begin{cases} 1 & \text{if the item } d_i \text{ is disclosed} \\ 0 & \text{if the item } d_i \text{ is not disclosed} \end{cases}$$

$$n = \text{number of items}$$

The Selection of Voluntary Items

The selection of voluntary items is a subjective judgment. Moreover, such selection depends on the nature and context of the industry and the country (e.g. what industrial sector or sectors is being considered and whether the companies are in a

developing or developed country. A total of 14 items are identified as relevant and expected to be disclosed in the annual reports of Bangladesh Banking companies. The total list of the voluntary items is presented in the Appendix A.

Model Development

The following Ordinary Least Square (OLS) regression model is used in order to assess the effect of independent variable (profitability) on the dependent variable (voluntary disclosure level):

$$Y = \beta_0 + \beta_1 X + e$$

Where, Y= Total Voluntary disclosure score for each bank

β_0 = The intercept

e= Residual error

7 FINDINGS

7.1 EXTENT OF DISCLOSURE

This section aims to answer the first research question related to the extent of voluntary disclosure in the annual reports of listed banks. Table 1 reports the descriptive statistics of the total voluntary disclosure scores. The panel A in the table 1 indicates that the mean of total voluntary disclosure score is about 42.86%. The table also shows that the extent of voluntary disclosure has a considerable range. While the minimum disclosure score obtained is 36%, the maximum is 71%.

Table 1

Panel A: Descriptive Statistics of Total Voluntary Disclosure (Dependent Variable)

Year	N	Mean	Minimum	Maximum	S.D.
2011	30	42.86	36	71	1.241

Panel B: Frequency of Total voluntary Disclosure Score

Total Voluntary Disclosure Score (%)	Number of Banks	Proportion of Sample (Percent)
< 40	6	20.00
40-49.99	18	60.00
50-59.99	4	13.04
60-69.99	1	3.3
70-70.99	1	3.3
> 80	0	0.00
Total	30	1.00

To shed more lights on the voluntary disclosure practice in the annual reports of the listed banks, Panel B in the table 1 reports the frequencies of total voluntary disclosure scores. In 2011, six banks (20%) disclosed less than 40% items of the disclosure checklist. 60% of the sample banks attained voluntary disclosure score ranging from 40% to 50% of the checklist. Only one bank disclosed over 70% voluntary items but no bank disclosed more than 80% of the voluntary checklist.

7.2 DETERMINANTS OF VOLUNTARY DISCLOSURE

This section aims to answer the second research question related to the profitability as a determinant of voluntary disclosure practice in the annual reports of listed banks.

7.2.1 DESCRIPTIVE STATISTICS

Table 2 shows the descriptive statistics for the independent variable in the current study. As indicated in the table, profitability has wide ranges. Profitability ranges from -23.63% to 29.96% with average 15.18%.

Table 2: Descriptive Statistics for Independent Variable

Variable	Mean	Minimum	Maximum	S.D.	Skewness	Kurtosis
Profitability	15.18	-23.63	29.96	9.16990	-2.563	10.814

7.2.2 SIMPLE REGRESSION ANALYSIS

We have used the Variance Inflation Factor (VIF) to test the multicollinearity in the regression model. The VIF in excess of 10 should be considered an indication of harmful multicollinearity (Neter et al., 1989). The Variance Inflation Factors for all independent variables are less than 10. Thus, this confirms that collinearity is not a problem for this model and is unlikely to pose a serious problem in the interpretation of the results of the regression analysis.

The results of the regression analysis of the association between the profitability and the extent of voluntary disclosure in the annual reports of listed banks are documented in the following section.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.370 ^a	.137	.106	1.173
a. Predictors: (Constant), Profitability in terms of ROE				

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.128	1	6.128	4.453	.044 ^a
	Residual	38.538	28	1.376		
	Total	44.667	29			
a. Predictors: (Constant), Profitability in terms of ROE						
b. Dependent Variable: Voluntary Disclosure						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.906	.419		14.079	.000		
	Profitability in terms of ROE	.050	.024	.370	2.110	.044	1.000	1.000
a. Dependent Variable: Voluntary Disclosure								

The result shows that the F-ratio is 4.453 ($P=.044$), which statistically supports the significance of the model. R Square of .137 implies that 13.7 percentage of the variation in the level of voluntary disclosure can be explained by the variations in the independent variable.

Profitability coefficient shows that this variable is not significant and therefore, hypothesis related with profitability is not supported. This implies that profitability does not explain significantly the variation of voluntary financial disclosure level among the listed banks. The result is thus inconsistent with other previous studies such as Singhvi and Desai (1971) Owusu-Ansah (1998), Naser (1998) and Hossain and Reaz (2007).

8 LIMITATIONS

One of the limitations of the present study is that it covers only a single year, a single country and one specific sector. The findings would be more generalized if the study would undertake five or ten years' data and also consider other financial institutions such as insurance, non- the banking financial organizations etc.

9 CONCLUSION AND SCOPE FOR FUTURE RESEARCH

In order to improve disclosure quality and transparency, which is imperative to build up investors' and depositors' confidence, banks of any country need to disclose additional financial information voluntarily in addition to mandatory disclosure requirements. The current study shows that voluntary financial information has been disclosed in the annual reports of the listed banks to a moderate level. The study has considered profitability in assessing its effect on the extent of voluntary disclosure and reaches the conclusion that profitability is not significant in explaining the variations in voluntary disclosure level.

The scope of the study can be expanded by including unlisted banks, non-bank financial institutions, manufacturing companies etc. The study has considered only profitability in measuring their effect on the level of disclosure. Other corporate attributes such as size, age board composition, liquidity, complexity of business can be investigated as determinants of voluntary disclosure.

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APPENDIX A

Voluntary Disclosure Checklist

Serial No.	Items
1	Brief discussion and analysis of a bank's financial position
2	Discussion of the bank's liquidity position and about additional financing
3	Qualitative forecast of earnings
4	Return on equity
5	Net interest margin
6	Cost-to-income ratio
7	Liquidity ratio
8	Loan to deposit ratio
9	Debt-to-equity ratio
10	Dividend per share
11	Remuneration of the Directors
12	Average compensation per employee
13	Performance at a glance-5 years
14	Graphical presentation of financial information

APPENDIX B

Serial No.	Name of The Listed Bank
1	AB Bank Ltd.
2	AL-Arafah Islami Bank
3	Bank Asia Ltd.
4	BRAC Bank Ltd.
5	City Bank
6	Dhaka Bank
7	Dutch-Bangla Bank
8	Eastern Bank Ltd.
9	EXIM Bank of Bangladesh
10	First Security Islami Bank Ltd.
11	ICB Islami Bank Ltd.
12	IFIC Bank
13	Islami Bank
14	Jamuna Bank Ltd.
15	Mercantile Bank Ltd.
16	Mutual Trust Bank Ltd.
17	National Bank Ltd.
18	NCC Bank Ltd.
19	One Bank Ltd.
20	Premier Bank Ltd.
21	Prime Bank
22	Pubali Bank
23	Rupali Bank
24	Shajalal Islami Bank Ltd.
25	Social Islami Bank Ltd.
26	Southeast Bank
27	Standard Bank Ltd.
28	Trust Bank Ltd.
29	United Commercial Bank Ltd.
30	Uttara Bank