THE EMPIRICAL EVIDENCE OF THE VOLUNTARY INFORMATION DISCLOSURE IN THE ANNUAL REPORTS OF BANKING COMPANIES: THE CASE OF BANGLADESH

Mohammed Hossain*, Peter J Taylor**

Abstract

This study reports the results of an empirical study of the effect of firm-specific characteristics on the voluntary disclosure in the 2000/2001 annual reports of 20 commercial banks in Bangladesh. The conceptual model underlying the study is based on economic and political incentives for providing greater detail in the annual reports and accounts. Three hypotheses have been developed and also a regression has been run to investigate the relationship between dependent and independent variables. The results indicate that size and audit firm variables to be significant in determining the disclosure. Thus, the study contributes to the enhancement of knowledge regarding financial reporting and disclosure practices of financial companies under the developing countries context, and provides a basis for the conduct of future research in this area.

Keyword: voluntary disclosure, financial institutions, bangladesh

*The School of Management, The University of Liverpool, UK, e-mail: hossain_mohammed@hotmail.com. Phone: 01616131173.
**Director, The Liverpool School of Management, UK.

1. Introduction

Disclosure is widely regarded as a necessary condition for market discipline in a modern financial sector. Voluntary disclosure, in the context of globalization of the world's financial markets, has received a great deal of attention in the accounting literature in recent years. The objectives of general purpose corporate reports is to supply economic information to a number of user groups to enable them to make decisions about the allocation of scarce resources (Cooke, 1989a). Many recent studies have hypothesised that firm's voluntary accounting and disclosure choices are aimed at controlling the interest conflicts among shareholders, debt holders, and management (see Holthausen and Leftwich, 1983; Kelly, 1983; and Watts & Zimmerman, 1986 for reviews). Since information is crucial in this process it is important to assess the extent to which voluntary disclosure occurs in corporate annual reports.

The importance of the banking system for a country's economic development has been widely reported in recent work. The recent banking crises have played a central role in the recent financial problems affecting developed and emerging market countries (Caprio & Klingebiel, 1996; Mishkin, 1997). A number of studies (Kaminsky & Reinhart, 1996; Miller, 1996, 1998) have found that problems in the banking sector are leading indicators of impending financial crises. To enhance the transparency of banking sectors, various international institutions such the G7, the Basle Committee on Banking Supervision, the World Bank, and the International Monetary Fund have recommended campaigned for improved accounting and disclosure practices (see Basle Committee 1998,1999) and this is certainly applicable to developing countries, in general and Bangladesh, in particular.

Voluntary disclosure is the information prepared and released to the public, by firms, which is beyond the level of disclosure required to comply with the firm's legal reporting requirements. Several studies have tested for relationships between firm characteristics and the voluntary disclosure of the firm. Most of these studies have found that several firm specific characteristics, such as size, influence the firm's decision to voluntarily disclose
information. However, the majority of these studies have generally excluded banks, as Kahl and Belkaoui (1978) mentioned:

"With very few exceptions, all the results referred to the disclosure adequacy of the annual reports of non-financial corporations".

The reasons for avoiding banks are due to their unique characteristics and reporting requirements, which make inter-industry comparisons difficult (Chow Wong-Boren, 1987; Cooke, 1989; Hossain and Adams, 1995). However, in the wake of worldwide financial deregulation and technological development in the financial sector, the task of bank supervision and regulation has become even more difficult. In this environment, the benefits of banks to voluntary disclosing their balance sheet positions can be even greater (Spiegel and Yamori, 2003). Self-disclosure provides a channel for enhancing market discipline in the financial sector. Market discipline plays an important role in the new Basel Banking committee framework for bank supervision, where it is considered one on the "Three pillars" of bank regulation and supervision (Basil, 1999).

Moreover, the level of information asymmetry is an important driver of investor uncertainty. Modern corporations have adopted various mechanisms, including voluntary disclosure, to mitigate the adverse effects of information asymmetry. Empirical studies on voluntary disclosure suggest that managers voluntarily enhance the visibility of their firms-financial profiles to: (1) reduce agency costs or contracting costs (Chow and Wong-Boren, 1987); (2) reduce its cost of capital (Botosan, 1997; Sengupta, 1998), and (3) enhance the value of the firm (King et al., 1990; Frankel et al., 1999). These studies have identified certain characteristics of the firm that can increase or reduce certain firm costs. They show that disclosure can individually or simultaneously reduce agency and contracting costs, cost of capital and/or increase firm value.

The most obvious significance of this study is it will examine the influences of voluntary disclosure in an industry which has generally been avoided by previous disclosure studies, and never empirically examined specifically in one national setting. Banking voluntary disclosures are of particular interest, due to the high regulatory reporting demands already placed on banks (Casser, 1997). Malone, Fries, and Jones (1993) suggest that regulators of the market for financial information should be interested in any systematic differences in the extent of disclosure among firms in the same industry.

In Bangladesh, the banking system dominates the financial sector accounting for about 97% of the market in terms of assets (Annual Report 2003, Bangladesh Bank). In 1980, the Government of Bangladesh took steps to establish an open market economy and as a consequence, a number of private banks have been established. The new Banking Companies Act 1991 and the new Company Act 1994 (which replaced the company act 1913) have been enacted during the last decade. More autonomy has been given to Bangladesh Bank (Central Bank of Bangladesh) to control the banking sector in Bangladesh. The Securities and Exchange Rules 1987, the promulgation of the Securities and Exchange Commission Act 1993 and the establishment of the Securities and Exchange Commission (SEC) in the last 10 years were major developments to regulate the capital market in Bangladesh. It can be understood that a considerable legal framework exists in Bangladesh.

Therefore the present study is an attempt to analyses the extent of voluntary disclosure and how they effect on corporate attributes of the banking companies in developing countries like Bangladesh. In other words, this paper scrutinises the commonly accepted argument that the level of disclosure depends on various corporate attributes. (see, e.g., Cooke, 1993; Ahmed and Nicholls (1995; Craig and Diga 1998 ). To this end we developed some hypotheses in order to find the relationship between the level of disclosure and the corporate attributes especially in financial institutions' perspective.

2. Incentives for Voluntary Disclosure

There is evidence that firm has several influences to voluntarily disclose information in annual reports. The influences are agency costs, financing costs, signalling, political costs and management opportunism. Associated with these influences are firm characteristics which affect the relative exposure of the firm to each of these incentives or costs (Casser, 1997).

Indeed, the theory of organisational legitimacy is frequently used as a framework to analyse managements' motivations for voluntarily disclosing non-financial information concerning environmental or social issues (Adams et al, 1998; Deegan & Rankin, 1996). Legitimacy theory is based on the concept of a social contract existing between a corporation and the societies in which it operates. The exact terms of the social contract are difficult to specify, but it is understood that the contract represents a multitude of explicit and implicit expectations that society has about how a corporation conducts its operations (Shocker & Sethi, 1974). It is assumed that failure to comply with the terms of the social contract may lead to various sanctions being imposed by society, and subsequently to a loss of legitimacy. In this perspective, corporate disclosure may be seen as a management tool to help maintain or enhance organizational legitimacy (Deegan, 2000; Gray et al, 1996).
2.1. Agency Costs

Agency theory argues that in the modern corporation, in which share ownership is widely held, managerial actions depart from those required to maximize shareholder returns (Berle and Means, 1932; Pratt and Zeckhauser, 1985). In agency theory terms, the owners are principals and the managers are agents and there is an agency loss which is the extent to which returns to the residual claimants, the owners, and fall below what they would be if the principals, the owners, exercised direct control of the corporation (Jensen and Meckling, 1976).

However, the agency costs resulting from these agency relationships consist of three components (Casser, 1997): 1) costs related to encourage the agent to behave in the principal's interest (bonding costs); 2) costs related to the monitoring of the agent's behaviours and performance (monitoring costs); and 3) the actual cost of divergence between the agent's decisions and the optimal decisions that would maximise the principal's wealth (residual loss). The optimal contracting arrangement between the agent and the principal is where these agency costs are minimised.

There are several firm characteristics which are related with agency costs. These characteristics are size, number of shareholders, ownership diffusion, foreign listing status, and leverage. All these firm characteristics are assumed to be positively related to agency costs (Chow and Wong-Boren, 1987; Cooke, 1989a, 1989b, 1991, 1993; Hossain and Adams, 1995; Leftwich, Watts and Zimmerman, 1981), therefore the relatively higher these variables are (or presence in the case of foreign listing status), the greater the agency costs and the greater the incentive to voluntarily disclose.

Chow and Wong-Boren (1987) suggested that agency costs are higher for firms with proportionally more debt in their capital structures. Hossain and Adams (1995) argued that the voluntary information disclosure helps principals to cost-efficiently monitor the activities of agents and ensure that their residual claims are not diluted. As voluntary disclosure is a cost efficient way of minimising agency costs, it is therefore argued that firms with relatively greater agency costs will have a greater incentive to voluntarily disclose information (Casser, 1997). Leftwich, Watts and Zimmerman (1981) suggest that the proportion of outside capital tends to be higher for relatively higher firms. Therefore, the agency costs for relatively larger firms will be greater than for relatively smaller firms, providing greater incentives for the relatively larger firms to voluntarily disclose information (Chow and Wong-Boren, 1987).

2.2. Signalling

Signalling theory was initially used to explain uncertainty in labour markets (Spence, 1973) and consumer behaviour (Akerlof, 1970). It has been applied in financial reporting literature to help understand accounting policy choice decisions (Healy and Palepu, 1993; Morris, 1989), voluntary disclosure of financial information (Healy and Palepu, 2001; Skinner, 1994; Trueman, 1986), changes in dividend policies (Asquith, Healy and Palepu, 1989; Nissim and Ziv, 2001), retained ownership by management (Leland and Pyle, 1977; Levy and Lazarovich-Port, 1995), and the selection of an auditor (Titman and Trueman, 1986; Beatty, 1989).

Signalling theory suggests that, due to information asymmetry, managers have an incentive to voluntarily disclose their inside information in order to reduce the firm's cost of capital (Healy and Palepu, 1993, 2001). The credibility of this information is increased if it is audited (Titman and Trueman, 1986).

According to Akerlof (1970) that firms with superior earnings and performance will disclose relatively more information than other firms to highlight their superior earning potential. However, Healy and Palepu (1993) argued that if managers have superior information on their firms' performance, they have incentives to increase disclosures when they view their firm's share price as being misvalued. On the other hands, Healy, Palepu and Sweeney (1996) show increased relative disclosure leads to a decline in the dispersion of analysts forecasts. This reduced variability in the firm's value is caused through reducing information asymmetries between investors. Therefore, management has incentives to disclose information to correct the market's perceptions for both undervaluation and overvaluation of the firm by the market. This implies if the firm's share price is mispriced, there are signalling incentives to increase voluntary disclosure to align the share price to its "true" value and also signalling adds noise to the detection of firm characteristics which are related to disclosure (Casser, 1997).

2.3. Management Opportunism

There is also assuming that if management acts opportunistically, there are other incentives to voluntarily disclose information in the annual report. By releasing information, management may manipulate the market for theirs own private benefit through insider trading. Management's ability and incentive to manipulate the market for their own benefit was originally recognised by Berle and Means (1932). It is argued that management possessed the ability in the short term to "issue financial statements of a misleading character or distribute informal news items which further its own market manipulations" (Berle and Means, 1932).\(^3\)

\(^3\) Williamson (1967) extended this argument of management opportunism.
The study of Baiman and Verrecchia (1995) developed a model which recognising insider trading gains as part of the manager's total compensation package from the firm. As we know insider trading requires information asymmetries between the "management" (insiders) and the market. An example can be set against this case. Through management buying stock then voluntarily disclosing favourable information in the annual report, the stock price might be increased and insider trading gain could be earned. Alike, by selling shares before a disclosure of relatively bad news, management can avoid losses from disclosure of unfavourable information.

In contrast, if management wishes to purchase shares in the firm, they may be voluntarily include relatively bad news in the annual report, which will decrease the share price, and thus allowing management to purchase shares at a lower price. Voluntary disclosure therefore may be used by management to manipulate the market without reducing the benefit or amount gained from insider trading for management (Casser, 1997).

2.4. Financing Costs

The firm can improve their ability to obtain finance and decrease their cost of capital. Buzby (1975) stated that adequate disclosure may increase investor confidence. Increased investor confidence might improve the marketability of securities and make external financing through the securities market both easier and cheaper. There are empirical evidences that firms which have a relatively greater need for finance or firms which regularly access capital markets for finance, have a greater incentive to voluntarily disclose information. For example, the study of Merton (1987), Healy and Palepu (1993), and Healy, Papel and Sweeney (1996) all recognised that increased disclosure has an incentives to access to capital markets. In addition, Frankel, McNichols and Wilson (1995) showed a positive association between disclosing earnings forecasts and accessing capital market, suggesting that firms which intend to access capital markets relatively more regularly than other firms will have relatively higher disclosure levels. On the other hand, Verrecchia (1983) and Healy, Papel and Sweeney (1996) suggested that increased disclosure reduces the cost of capital. Moreover, Baiman and Verrecchia, (1996) argued that the cost of capital falls with more disclosure because the latter increases market liquidity. Models developed by Amihud and Mendelson (1986) and Baiman and Verrecchia (1996) also showed that firms' cost of capital is a decreasing function of liquidity.

2.5. Political Costs

Several empirical studies have sought to use the political cost hypothesis to explain voluntary disclosure, including value added statements (Deegan and Hallam, 1991), disclosures by statutory authorities (Lim and McKinnon, 1993), and disclosures in pursuit of reporting excellence awards (Deegan and Carroll, 1993). In theory political costs are wealth redistributions from the firm to other parties in the economy (Whittred and Zimmer, 1990). These wealth redistributions may take several varying forms such as the imposition of taxes, removal of subsidies and licences, granting of wage increases, and placement of restrictions on a firm's activities (Panchapakesan and McKinnon, 1992). They can also result in redistributions of wealth between clients and potential clients.

According to Watts and Zimmerman (1978, p. 115), politicians have the power to effect upon corporations wealth re-distributions by way of corporate taxes, regulations, subsidies etc. Moreover, certain groups of voters have incentives to lobby for the "nationalisation, expropriation, break-up or regulation of an industry or corporation"; which in turn are seen to provide incentives to politicians to propose such actions. This idea that politicians seek to intrude into the affairs of corporations and redistribute wealth away from them comes from the earlier work of Stigler (1971), Peltzman (1976) and Jensen & Meckling (1978).

Indeed, the presence or threat of political costs to a firm, in positive accounting theory, is assumed to be related to the firm's political visibility. In other words, the more politically visible the firm, the greater the chance of political costs being borne by the firm. According to Holthausen and Leftwich (1983) suggested that companies which are politically visible and subject to high political costs, may employ financial information to avoid these risks, and also may execute accounting changes to reduce such risks or even costs. Another study of Craswell and Talyor (1992) argued that disclosure of additional information is likely to enhance the corporate image, thus improving their chances to muster public support to overturn political actions. Buzby (1975) further suggests that larger firms are more closely watched by various government agencies. Therefore relatively larger firms have greater incentives to disclose information to reduce potential political costs. Singhvi and Desai (1971) suggest that firms with relatively large numbers of shareholders tend to be more in the public eye and therefore subject to stockholders and analysts pressures for better disclosure. Moreover, relatively more profitable firms are more politically visible than relatively less profitable firms (Wong, 1988). This is because high profitability may encourage interest groups to place pressure on the firm on pass on the returns to the firm's other stakeholders. This suggests that relatively profitable firms are more likely to voluntary disclose information.

Indeed, in order to survive, firms must convince stakeholders that they are legitimate entities worthy of support (Meyer & Rowan, 1977). However, the
decision to voluntarily disclose bad news or conceal such news is likely affected by individual (Zhang et al., 2005), organizational (Beneish, 1999; Benoit, 1995; Healy, 1985; Richardson et al., 2002; Simpson, 2002), and environmental factors. In this paper, we focus on the institutional and firm-level variables that may influence a firm's decision to voluntarily information that it has deliberately disclosed in the annual reports.

3. The Geographic, Economic, Accounting and Regulatory Environment in Bangladesh

Bangladesh is a developing country in South Asia with an area of 147,570 sq km. It has a population of about 128 million, with a very low per capita Gross National Product (GNP) of US$ 370 (World Bank, 2000). It has a border on the west, north, and east with India, on the southeast with Myanmar, and the Bay of Bengal is to the south.

The high population density, low economic growth, lack of institutional infrastructure, an intensive dependence on agriculture and agricultural products, geographical settings, and various other factors, all contribute to make the country weak in its economic development and quality of life (UNDP Report-2000).

Bangladesh emerged as a new nation in the wake of a bloody liberation war in 1971. Before that, Bangladesh was a province of the then Pakistan which was created at the time of the partition of the sub-continent into two countries India and Pakistan in 1947. The legal histories of these three countries have common characteristics. That is, all three received their entire legal systems from the UK. Colonisation has been identified as the most important vehicle for the transfer of accounting systems within the British Empire and Commonwealth (Briston 1978, Parker 1989). This is also true for Bangladesh. After independence in 1972, Bangladesh adopted the Indian Company Act 1913, and the Banking Companies Ordinance 1962, to regulate the corporate sector and financial sector in general, and banking sector, in particular. However, after two decades, the government enacted its own legislation with recommendations from various groups like trade bodies, professional bodies, academicians, and practitioners. Bangladesh has two Stock Exchanges, Dhaka Stock Exchange (DSE), established in 1954 where trading is conducted by Computerized Automated Trading System and Chittagong Stock Exchange (CSE), established in 1995 which is also conducted by Computerized Automated Trading System. All exchanges are self-regulated, private sector entities which must have their operating rules approved by the Security Exchange Commission (SEC) of Bangladesh.

There are two professional accountancy bodies in Bangladesh i.e., the Institute of Chartered Accountants of Bangladesh (ICAB) and the Institute of Cost and Management Accountants of Bangladesh (ICMAB). The Institute of Chartered Accountants of Bangladesh (ICAB) is the National Professional Accounting Body of Bangladesh established under the Bangladesh Chartered Accountants Order 1973 (Presidential Order No. 2 of 1973). The ICMAB is a member of the IASC and as such has accepted responsibility for developing accounting standards in Bangladesh. The members of ICMAB are entitled to attest to the validity of accounts and to report to shareholders whether a company's financial statements comply with statutory provisions (Nicholls and Ahmed 1995). The Institute of Cost and Management Accountants (ICMAB) of Bangladesh, an autonomous professional body under the Ministry of Commerce, Government of People's Republic of Bangladesh is the only institution in the country dedicated to Cost and Management Accounting education and research. Institute's mission is to develop and promote Cost and Management Accounting profession by maintaining highest professional standards of its members in order to enable them to provide better services to the society. The Institute spearheads the formulation and implementation of national cost accounting standards.

The Securities and Exchange Commission (SEC) was established on 8th June 1993 under the Securities and Exchange Commission Act, 1993 in order to protect the interests of securities investors, develop and maintain fair, transparent and efficient securities markets as well as ensure proper issuance of securities and compliance with securities laws. However, in 1987 the Investment Wing of the Finance Division of the Ministry of Finance passed and enforced the Securities and Exchange Rules (SER) 1987. The SER became effective in September 1987 following the establishment of the Securities and Exchange Authority to regulate the disclosure and accounting practices of listed companies in Bangladesh (Nicholls and Ahmed 1995).

The Companies Act 1994 and the Securities and Exchange Rules 1987 are the most important laws which regulate the financial reports. The financial reporting practices of listed companies in Bangladesh are made mainly based on the legal requirements of the Companies Act 1994 and SER 1987. Proper issuance of securities, protections of the interest of the investors and promotion of development, regulation of the capital and securities market are the basic strategies of the Securities and Exchange Commission. These rules have sought to increase the disclosure requirements of the listed companies in Bangladesh.

The Banking Companies Act 1991 was effective from 24th February 1991. The provisions of this Act are "in addition to, and not, save as hereinafter expressly provided, in derogation of the Companies Act 1994 and any other law for the time being in force" (Section 2 of the Banking Companies Act 1991).
The annual reports of banks in Bangladesh are required to contain balance sheet, profit and loss account, auditor’s report, a report on the working of the bank during the year, notes to accounts and other particulars.

The Banking Companies Act 1991 makes it mandatory for private sector commercial banks to furnish to Bangladesh Bank (the central bank) and Registrar of Joint Stock Companies, copies of the audited balance sheet and profit and loss account together with the auditor’s report. Basically section 38-41 of the Banking Companies Act 1991, has laid down the provision of financial reports of the Banking Companies. In addition, Bangladesh Bank, the Central Bank of Bangladesh, regulates and supervises the activities of all banks.

4. The Current Status of the Banking Sector

The Bangladesh banking sector relative to the size of its economy is comparatively larger than many economies of similar level of development and per capita income. The total size of the sector at 26.54% of GDP dominates the financial system, which is proportionately large for a country with a per capita income of only about US$370. The non-bank financial sector, including capital market institutions is only 3.22% of GDP, which is much smaller than the banking sector. The market capitalization of the Dhaka Stock Exchange was US$1.025 million or 2.19% of GDP as at mid-June 2002 (AIMS 2002).

Access to banking services for the population has improved during the last three decades. While population per branch was 57,700 in 1972, it was 19,800 in 1991. In 2001 it again rose to 21,300, due to winding up of a number of branches and growth in population.

Compared to India’s 15,000 persons per branch in 2000, Bangladesh is not far behind in this regard. This indicates that access to the banking system in the country is not a significant problem (AIMS 2002). The banking sector in Bangladesh comprises four types of scheduled banks. These are Nationalised Commercial Banks (NCBs), Private Commercial Banks (PCBs), Foreign Banks (FBs), and Development Financial Institutions (DFIs). As per Bangladesh Bank Annual Report 2002, the number of banks in all now stands at 51 in Bangladesh. Out of the 51 banks, four are Nationalised Commercial Banks (NCBs), 30 Private Commercial Banks, 12 Foreign banks and the rest five are Development Financial Institutions (DFIs). It is dominated by the four NCBs that held 46.5 percent of industry assets as of year-end 2001.

As of year-end 2001, the PCBs held over 37 percent of industry assets and FBs held almost 8 percent (Bangladesh Bank’s Annual Report 2002).

The following Table-1 gives a general idea at a glance of the banking sector of Bangladesh position in terms of branches, net assets, and deposits.

<table>
<thead>
<tr>
<th>Bank Types</th>
<th>Number of Banks</th>
<th>Number of Branches</th>
<th>Net Assets (billion Taka*)</th>
<th>Deposits (billion Taka)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCBs</td>
<td>4</td>
<td>3608</td>
<td>511.52</td>
<td>486.97</td>
</tr>
<tr>
<td>PCBs</td>
<td>30</td>
<td>1331</td>
<td>409.22</td>
<td>349.81</td>
</tr>
<tr>
<td>DFIs</td>
<td>5</td>
<td>1298</td>
<td>104.50</td>
<td>53.96</td>
</tr>
<tr>
<td>FBs</td>
<td>12</td>
<td>34</td>
<td>85.80</td>
<td>65.53</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>6271</td>
<td>1100.06</td>
<td>956.28</td>
</tr>
</tbody>
</table>

Source: Bangladesh Bank Annual Report 2002

5. A Brief Overview of Literature

There have been numerous studies of corporate disclosure published in academic journals during the past 25 years. Many of these studies are reviews of voluntary (and sometimes also mandatory) corporate disclosures in various countries, including Australia, Bangladesh, Hong Kong, Japan, Malaysia, New Zealand, Spain, Sweden, and Switzerland. Several studies have also examined corporate disclosure practices in a U.K. and U.S. setting (Buzby, 1975; Firth, 1979; Frost & Pownall, 1994; Meek et al, 1995). Apart from presenting an overview of the current status of corporate disclosure in each country, most of these studies have also sought to explain the development of voluntary disclosures by relating the extent of such disclosures e.g. to corporate characteristics such as size, industry, and profits. The selection and interpretation of these assumed relationships usually relies on one of two main theoretical bases – agency theory or legitimacy theory – partly depending on the particular type of disclosure that has been examined in the earlier section.

Ahmed and Nicholls (1994) empirically assessed the extent of statutory information disclosure in the corporate annual reports of 63 listed non-financial companies in Bangladesh during the 1987-88 fiscal year. Their findings showed that the degree of compliance in Bangladesh was low, none of the sampled companies complied with statutory requirements by disclosing all mandatory
information (p. 73). Multiple regression techniques were used to show that the degree of disclosure compliance was significantly associated with subsidiaries of multinational companies and companies whose accounts were audited by large audit firms. However, their study also showed that the qualification of the principal accounting officer of a company had little impact (p = 0.08) on disclosure compliance.

Nicholls and Ahmed (1995) empirically assessed the quality of disclosure in non-financial listed companies in Bangladesh. They surveyed 63 companies' annual reports. A total of 87 items selected and a dichotomous procedure were used in the study. The results revealed that during the period between 1984 to 1988, the quality of disclosure improved significantly, particularly because of the enforcement of the Securities Exchange Rules (SER) and the adoption of 12 IASs by the ICAB. Despite this improvement, overall quality in 1988 remained low.

Karim (1995) examined empirically the association between a number of corporate attributes and levels of disclosure in corporate annual reports in Bangladesh. He applied both weighted and unweighted disclosure indices to 161 corporate annual reports. He examined the association between the extent of disclosure and various corporate characteristics by using multiple linear regression models. It was found that size, profitability, active trading on the stock exchange, employment of qualified accountants, size and international link of company auditor and multinational subsidiary are all significantly associated with the extent of disclosure.

Kahl and Belkaoui (1981) empirically investigated the overall extent of disclosure by 70 commercial banks located in 18 countries during 1975. Disclosure scores are computed and disclosure consensus is sought. Thirty weighted items based on the literature and the judgment of the author, professors, and CFAs are observed. Differences are found to exist in disclosure adequacy internationally. U.S. banks, it is learned, are leaders in the extent of disclosure. A positive correlation, they learn, exists between size and disclosure. There is a low consensus between producers of audit report accounts relative to the total possible details. A total of 530 items of information were included in the disclosure index. Multiple regression analysis was applied in order to measure the extent of level of disclosure. The result revealed that statistically significant differences existed among companies in terms of their disclosure scores, assets sizes, turnover or sales, and Debt-equity ratios. They found that in terms of disclosure scores, Indonesian companies (46) disclosed significantly less than Malaysian (87), Singaporean (103) and Thai companies (66). Philippine companies (62) disclosed significantly less than companies in Malaysia (87) and Singapore (103), while Thai companies (66) disclosed significantly less than those in Singapore (103). Overall, except for Malaysian companies, publicly-listed companies in all other ASEAN countries disclosed less, on average, than Singapore companies (p. 265).

Cooke (1989b) examined the annual reports of 90 firms: 38 unlisted, 33 listed on the Swedish Stock Exchange, and 19 listed on both the Swedish and at least one foreign stock exchange during the year 1985. Regression analysis is performed on 146 unweighted items. Listing status and size are found to be major explanatory variables for voluntary disclosure. In addition, firms categorized as trading disclose less voluntary information than do other industries.

Wallace et al (1994) examined 'comprehensiveness' of the financial disclosure in the annual reports and accounts of 50 non-financial Spanish firms. Comprehensiveness was measured by an index representing the extent of details given on 16 items of required information in a firm's annual report accounts relative to the total possible details that each firm is expected to give (p .50). They classified the independent variables into three non-mutually exclusive categories: structure-related, performance-related, and market-related variables. The findings of the study indicated that the relationship between asset size and index of comprehensive disclosure was significantly positive. The results also indicated a variation between the level of comprehensive disclosure and the listing status variable.

Cerf (1961) studies the annual reports of 258 NYSE listed firms, 113 firms listed on other exchanges, and 156 OTC firms over the period: July 1956-June 1957. Regression analyses are performed on 31 weighted items. He finds a positive relation between disclosure and: (1) asset size, (2) number of stockholders, and (3) profitability. A decade later, Singhi & Desai (1971) follows the research design introduced by Cerf (1961) and reports similar results.

Haniffa and Cooke (2002) examined the relationship between a number of corporate governance, culture and firm-specific characteristics

natural resources 8 companies, property development 19 companies, and other services 18 companies.
and the extent of voluntary disclosure in the annual reports of Malaysian companies. A total of 65 items selected and unweighted disclosure index used in the study. The findings indicated that significant association between corporate governance and the extent of voluntary disclosure. In addition, one cultural factor (proportion of Malay directors on the board) is significantly associated with the extent of voluntary disclosure.

Spiegal and Yamori (2003) investigated the determinants of voluntary disclosure by Japanese Shinkin banks in 1996 and 1997. The study revealed that the banks with more serious bad loan problems, more leverage, less competitive pressure, and smaller banks were less likely to choose to voluntarily disclose, however, larger Shinkin banks were more likely disclose information, consistent with the corporate literature on disclosure.

Casser (1977) studied the voluntary disclosure practices of 12 Australian banking practices. He mainly examined the influence of firm characteristics on the level of voluntary disclosure and social responsibility disc (SRD) by banks in their annual reports for the year 1996. He constructed 47 items developed based on the research by Hossain and Adams (1995) and the level of SRD in the annual report, measured by word count through a criteria established by Ernst and Ernst (1977).

To test the influence of firm characteristics on banking voluntary disclosures and SRD, this study tested the affect of firm characteristics on voluntary disclosure and SRD levels. The study revealed that size influences the level of voluntary disclosure in bank annual reports however, the relationship between size and SRD was not found by this study. This study has found evidence which suggests that certain voluntary disclosures may be influenced by political visibility. In particular, this study found evidence that social responsibility disclosure words may be influenced by political visibility. The other variables, profitability, leverage and press coverage are also identified influencing variables in the level of disclosure.

6. Objectives of the Study

The specific objectives are:

i) To observe whether or to what extent the banking companies of Bangladesh disclose voluntary information?

ii) To examine the relationship between a number of firm-specific characteristics (i.e. size, profitability and audit firm link) and the level of disclosure of the banking companies in Bangladesh.

7. Development of Hypothesis

A number of explanations have been advanced in the literature to explain why a firm may provide more information than is mandated. Gibbins et al. (1990) pointed out that companies develop disclosure strategies in response to both internal and external conditions.

Therefore, the firms' disclosure decisions are likely to the theories of (i). Agency costs (Leftwich et al. 1981); (ii). Litigation costs (Skinner 1984); (iii). Information asymmetries (Hughes 1989); (iv) Disclosure related costs (Ali et al. 1994). Agency theory postulates that where there is a separation of ownership and control of a firm the potential for agency costs exists because of the conflicts of interest between principles and agents.

This study largely employs agency theory as the framework for performing empirical analysis. Agency theory is based on the premise that, assuming other things equal, managers have economic and political incentives to determine the extent of disclosure in annual reports.

Agency relationships give rise to agency costs, which include monitoring costs and bonding costs (Jensen and Meckling 1976), related to the costs incurred in maintaining the contractual relationship between principals (owners) and agents (managers) in equilibrium.

The variables used in this study that capture the constructs of agency theory include firm size, profitability and audit firm link. Hence, the tenets of agency theory and their association with the extent of corporate voluntary disclosure are used in developing the hypotheses.

Three important variables that capture the constructs of agency theory in respect of voluntary disclosure are discussed below:

7.1. Size of the Bank

The size of the bank is a potentially important variable to establish an association with the extent of disclosure. Most researchers in this area find a close relationship between these two variables both in developing and developed countries.

A number of reasons have advanced in the literature in an attempt to justify this relationship on a priori grounds. Ahmed and Nicholls (1994, p.65) argued that it is more likely that large firms will have the resources and expertise necessary for the production and publication of more sophisticated financial statements and therefore cause less disclosure non-compliance. Firth (1979, p.274) suggests that 'Collecting and disseminating information is a costly exercise and perhaps it is the large firms who can best afford such expenses. Furthermore, smaller firms may feel that full disclosure of their activities will put them at a competitive disadvantage with other, large, companies in their industry'.

Another explanation put forward in the literature for the existence of a positive association between size of the firm and the extent of voluntary disclosure is the demand for information by financial analysts. For instance, Lang and Lundholm (1993) pointed out that 'large firms tend to have more
7.2. Profitability of the Bank

Profitability is no doubt an important ingredient to measure the performance of any business organization. Profitability can be measured in various ways and measurement techniques depend on the nature of the business. Most researchers have found a positive relationship between profitability and the extent of disclosure.

Banks are engaged in the kind of business where return is expected. The profit earning mechanism depends *inter alia* on how effectively the banks conduct their lending and borrowing activities.

The basic philosophy of banks is to collect deposits and sanction advances and makes loans to customers. Within this framework, a bank hopes to build up a profitable investment portfolio to generate a return to their investment.

If a bank fails to earn a profit there is a possibility that confidence of customers is lost which ultimately creates a bad impression of the bank or equally seriously, its equity capital is eroded and its ability to make loans reduced. It may be true that banking companies with higher profits feel comfortable to disclose more information than that of banks with lower profits. Customers, shareholders, financial analysts and also the regulating authority will be more satisfied to have news of good profit earnings, and management of a bank may also be pleased to disclosed information without any hesitation.

Thus, banks by their nature of business and also being obliged by law, may try to earn profit and disclose more information within their own capacities. Keeping in mind the above factors, the following hypothesis has been established and tested under the study:

\[ \text{H1: Banks with different values of total assets disclose varying amount of financial information.} \]

7.3. Audit Firm Links


It can be argued that audit firms can influence the disclosure strategies of companies. An audit firm with an international link may be very much more committed to ensuring disclosure of the mandatory and voluntary information of an auditee. Because of the reputation as well as expectation from outsiders, the attitude of the international audit firm may always be to ensure the best reporting within the capabilities of a company.

This assumption may lead to a conclusion that an audit firm with an international link may work to ensure more disclosure of information than would domestic audit firms.

International audit firms are not directly represented in Bangladesh. Rather, the Big-five* international audit firms had a linkage with domestic audit firms in Bangladesh. The name and linkage of firms is shown in the following Table 2.

It is hypothesized that the extent of bank disclosure will be positively associated with a firm having a link with an international audit firm instead of a link purely with a domestic audit firm.

\[ \text{H2: Banks whose accounts are subject to audit by an audit firm that has an association with an international audit firm will trend to disclose more voluntary information than will those audited by a domestic audit firm.} \]

8. Methodology of the study

8.1. Sample Size

Basically, the financial system of Bangladesh consists of Bangladesh Bank (BB) as the Central Bank, 4 nationalized commercial banks (NCB), 5 government owned specialized banks, 30 domestic private banks, 12 foreign banks and 22 non-bank financial institutions (Bangladesh Bank Annual Report-2001). However, the study covered only 20 domestic private banks (Appendix-I) as these banks are regulating the Banking Companies Act, 1991 and


\[ \text{8 The Big-five firms are Arthur Anderson, Coopers and lybrand, Deloitte Touche Tohmatsu, Ernst and Young, and KPMG Peat Marwick.} \]
the reason for covered this figure is due to only availability of annual reports for the year 2000.

8.2. Selection of Voluntarily Items

In considering the selection of items of information, the researcher considered the research on developing or developed countries where disclosure indices have been used as a methodology. In addition Disclosure for financial institutions as required the International Accounting Standard-30 has been considered in preparing the voluntary items of information included in the disclosure index.

The study included items of information having considered potential interest to the user groups i.e. shareholders, financial analysts, government authorities, and professional accountants. Having considered the above factors, a total of 45 items of information (see Appendix-2) was identified as relevant and could be expected to disclose voluntarily in the annual reports of the banking companies in Bangladesh.

8.3. Scoring of the disclosure index

Several approaches are available to develop a scoring scheme to determine the disclosure level of annual reports. In this case, unweighted disclosure index adopted in the study as it approach a dichotomous procedure in which an item scores one if disclosed and zero if not disclosed.

Thus, the unweighted disclosure method measures the voluntary disclosure (VD) score of a banking as additive (suggested by Cooke 1992) as follows:

\[ VD = \sum_{i=1}^{n} d_i \]

\( D = 1 \) if the item \( d_i \) is disclosed
\( D = 0 \) if the item \( d_i \) is not disclosed
\( n = \) number of items

However, the fundamental theme of the unweighted disclosure index is that all items of information in the index are considered equally important to the average user.

9. Regression Model

A regression model was developed to investigate the relationships between the dependent variable and the independent variables discussed above.

Incorporating all these variables, the regression model is expressed as

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \]

Where, \( Y = \) disclosure index
\( X_1 = \) size of the firm: log of total assets
\( X_2 = \) audit firm: 0 if none or majority of the audit firms have no international link = 1 other wise
\( X_3 = \) return on total assets
\( \beta = \) parameter
\( \epsilon = \) error term
\( i = \) the \( i \)th observation

The model was tested for its overall significance (at \( p \leq .2 \)) in explaining the extent of disclosure, whereas individual regression coefficients were tested to determine their ability to explain extent of disclosure, given the other independent variables in the model.

Thus, the significance of individual regression coefficients was used for testing the study’s hypotheses.

9.1. Dependent Variable

The unweighted disclosure index (UDI) has been used as the dependent variable.

9.2. Independent Variables

The independent variables have been considered in the study are size of the bank as measured by log of assets, profitability measured by Return of Assets (ROA), and audit firm as measured by link of audit firm to an international audit firm.

9.3 Correlation among the variables and multicollinearity

As it well known, an attempt to assess the relative importance of independent variables must be done with caution due to the variety of problems created by correlated independent variables. The simple correlations between the variables were computed using Pearson product-moment correlation coefficients. A correlation matrix is shown in Table-3. The highest simple correlation between ROA and AUDIT is .578. Farrar and Glauber (1967), and Bryman and Cramer (1997) suggest that simple correlation between independent variables should not be considered harmful until they exceed .80 or .90. Simple correlations of .80 or .90 are usually associated with Variance Inflation Factor (VIF) of between 6 and 10. Variance Inflation Factors (VIF) in excess of 10 should be considered an indication of harmful multicollinearity (Neter et al. 1989). In the present model, the largest VFI was observed in ROA at 1.51 (see Table-4). Therefore, the observed

---

8 i.e. 1 denotes a substantial potential audit input from internationally linked auditors.
9 Natural log transformations were used to reduce skewness in the data set. This approach was used by Hossain et al. (1994) Hossain et al. (1995), Patton and Zelenka (1997), Inchausti (1997) and Craig and Diga (1998).
10 VIF measures the variance of an estimator compared to what the variance would have been if the independent variable was not collinear with any of the other explanatory variables (Aczel 1995).
correlations were not considered harmful. These findings suggest that multicollinearity between the independent variables is unlikely to pose a serious problem in the interpretation of the results of the multivariate analysis.

10. Regression Results

A summary of the regression results is presented in Table-4. The multiple regression model is significant (P<0.005). The adjusted coefficient of determination (R squared) indicates that 24% of the variation in the independent variable is explained by variations in the independent variables.

The coefficient representing assets (log of assets) and audit firm link are statistically significant at a 5% level and has a positive sign, while the coefficients for ROA is not statistically significant.

11. Discussion of Regression Results

The adjusted R square of 0.24 compares favorably with similar studies using disclosure indices. Lower adjusted R square statistics were reported by Wallace (1988) at 0.07, Hossain (1999) at 0.10, Malone et al. (1993) at 0.29, Ahmed (1996) at 33.2%. A detailed discussion of the regression result is now offered here on the basis of hypotheses.

H1: SIZE: The empirical evidence derived from the regression model indicates that size by assets is statistically related to the level of information disclosed by the sample of banks in their annual reports. It is significant at a 5% level. The variable assets size (log of assets) was significantly positive and in line with the results from previous research. The positive sign on the coefficient suggests that size has a direct influence on level of disclosure in the banking sector in Bangladesh. In other words, banks with greater total assets trend to disclose more voluntary information than do banks with fewer total assets.

H2: PROFITABILITY: The sign of the correlation coefficient, as predicted, was positive but not significant at conventional levels of 10% to 20%. This is inconsistent with the view that more profitable banking companies disclose significantly more financial information than do less profitable ones.

H3: AUDIT FIRM: The variable of audit firm (link with international audit firm) is positive as predicted, and also significant at 5% which suggests that the relevant hypothesis can be accepted. This result is somewhat different/dissimilar to some previous studies (Firth 1979, p.279; Malone et al. 1993, p.268; Wallace et al. 1994, p.51; Hossain et al. 1994, p.344; and Hossain et al. 1995, p.81).

12. Conclusion

This study set out to investigate the relationship between firm-specific characteristics and the extent of voluntary disclosure of a sample of banking companies in Bangladesh. Three hypotheses have been developed and also a regression has been run to investigate the relationship between dependent and independent variables. The results indicate that size and audit firm link to be significant in determining the disclosure levels of the banks. The profitability variable was not significant. These results suggest that voluntary disclosure by banking companies in Bangladesh systematically differ depending upon the firm size and characteristics of its audit market (whether it is audited by Big Five audit firms or not) and thus discharging the corporate accountability to the various stakeholders of the society.

Table 2. International links of audit firms

<table>
<thead>
<tr>
<th>Name of the firm</th>
<th>International firm with which linked</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rahman</td>
<td>KPMG</td>
</tr>
<tr>
<td>Rahman Haq and Co.</td>
<td>Arthur Andersen</td>
</tr>
<tr>
<td>2. Acsabin &amp; Co.</td>
<td>Ernst &amp; Young</td>
</tr>
<tr>
<td>3. Howlader Younas and Co.</td>
<td>Deloitte Touch Tohmatsu</td>
</tr>
<tr>
<td>5. M.J. Abedin and Co.</td>
<td>Pricewaterhouse Cooper</td>
</tr>
<tr>
<td>6. A. Quasem and Co.</td>
<td>Ernst &amp; Young</td>
</tr>
<tr>
<td>7. S.F. Ahmed and Co.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Imam et al. (2001), p.131

Table 3. Correlations

<table>
<thead>
<tr>
<th></th>
<th>AUDIT</th>
<th>LOGASS</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDIT</td>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>.643</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.008</td>
</tr>
<tr>
<td>LOGASS</td>
<td>Pearson Correlation</td>
<td>.110</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.643</td>
<td>.592</td>
</tr>
<tr>
<td>ROA</td>
<td>Pearson Correlation</td>
<td>.578**</td>
<td>.128</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.008</td>
<td>.592</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
Table 4. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>600</td>
<td>.360</td>
<td>.340</td>
<td>6.1189</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), ROA, LOGASS, AUDIT a Dependent Variable: DISCLOS

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>18.731</td>
<td>13.754</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AUDIT</td>
<td>7.534</td>
<td>1.661</td>
<td>.405</td>
<td>2.058</td>
</tr>
<tr>
<td></td>
<td>LOGASS</td>
<td>2.984</td>
<td>1.438</td>
<td>.419</td>
<td>2.076</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>-1.319</td>
<td>1.103</td>
<td>-2.94</td>
<td>-1.196</td>
</tr>
</tbody>
</table>

a Dependent Variable: DISCLOS

References

Appendix

Appendix 1. List of Banks Surveyed and Disclosure Index

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of the banks</th>
<th>Disclosure Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arab Bangladesh Bank Limited</td>
<td>55.00</td>
</tr>
<tr>
<td>2</td>
<td>National Commerce and Credit Ltd.</td>
<td>40.00</td>
</tr>
<tr>
<td>3</td>
<td>International Finance and Investment Corporation (IFIC)</td>
<td>45.00</td>
</tr>
<tr>
<td>4</td>
<td>National Bank Limited</td>
<td>52.00</td>
</tr>
<tr>
<td>5</td>
<td>United Commercial Bank (UCB) Ltd.</td>
<td>38.00</td>
</tr>
<tr>
<td>6</td>
<td>Eastern Bank Ltd.</td>
<td>55.00</td>
</tr>
<tr>
<td>7</td>
<td>City Bank Ltd.</td>
<td>52.00</td>
</tr>
<tr>
<td>8</td>
<td>Pubali Bank Ltd.</td>
<td>39.00</td>
</tr>
<tr>
<td>9</td>
<td>Uttara Bank Ltd.</td>
<td>50.00</td>
</tr>
<tr>
<td>10</td>
<td>Islamic Bank (Bangladesh) Ltd.</td>
<td>57.00</td>
</tr>
<tr>
<td>11</td>
<td>Al-Baraka Bank Bangladesh Ltd.</td>
<td>45.00</td>
</tr>
<tr>
<td>12</td>
<td>Al-Farah Islamic Bank Bangladesh Ltd.</td>
<td>56.00</td>
</tr>
<tr>
<td>13</td>
<td>Social Investment Bank Ltd.</td>
<td>49.00</td>
</tr>
<tr>
<td>14</td>
<td>Prime Bank Ltd.</td>
<td>51.00</td>
</tr>
<tr>
<td>15</td>
<td>Dhaka Bank Ltd.</td>
<td>36.00</td>
</tr>
<tr>
<td>16</td>
<td>Dutch Bangla Bank Ltd.</td>
<td>35.00</td>
</tr>
<tr>
<td>17</td>
<td>SouthEast Bank Ltd.</td>
<td>35.00</td>
</tr>
<tr>
<td>18</td>
<td>Mercantile Bank</td>
<td>52.00</td>
</tr>
<tr>
<td>19</td>
<td>Standard Bank Bangladesh Ltd.</td>
<td>45.00</td>
</tr>
<tr>
<td>20</td>
<td>Bangladesh Commerce Bank Ltd.</td>
<td>40.00</td>
</tr>
</tbody>
</table>

Appendix 2. List of Items of Information

A. General Corporate Information

1. Brief history of bank/status of the bank
2. Statement of bank objectives and mission
3. List of shareholders
4. General outlook of the economy
5. Web page address
6. Date & details of incorporation
7. Top management list

B. Information About Directors

1. Name of the directors
2. Age of the directors
3. Academic qualifications of directors
4. Directors/Managing Director’s business experiences
5. Shares held by directors

C. Financial Overview

1. Historical summary 5+ years
2. Cash Flow Statement
3. Liquidity ratio
4. Deb/equity ratio
5. ROE

D. Research and Development

1. Bank’s policy on Research & Development
2. No. of research personnel employed

E. Employee Information

1. Employee appreciation
2. Recruitment information

F. Information Regarding Banks Activities

1. No. of branch and future policy
2. Present facilities regarding computerized
3. Future plans regarding ATM
4. On-line banking facilities
5. Credit cards providing
6. List of branches including address
7. Historical summary 5+ years
8. Shares held by govt.
9. Factors affecting future business of the bank
10. Report of the chairman/CEO
11. Dividend declared
12. Multiple language presentation

G. Others Information

1. Legal action against defaulters
2. Disclosure of accounting policies
3. No. of assets pledge as security
4. Environmental protection program
5. Description of charitable
6. Bank’s policy on employee training
7. Discussion of employee welfare