Arab Journal of Administrative Sciences
1997, Vol. 5, No.1, 241 - 268

EXTENT OF DISCLOSURE IN THE ANNUAL REPORTS OF BANKS OPERATING IN BAHRAIN

Hasan M. Al-Bastaki
Bahrain University

This study has two main objectives. The first is exploratory, documenting the nature and extent of disclosure in the annual reports of banks operating in Bahrain. The second is explanatory, addressing the bank-specific variables associated with the observed level of disclosure. Four variables (size, profitability, leverage, and stock market listing) that might be associated with the level of disclosures in the annual reports were examined using ranked (OLS) regression model. The study found that disclosures in the annual reports of Bahraini banks with respect to strategies, management, future prospects, employees, social activities, competition and market share, and market capitalization are limited. The study also found evidence supporting the hypothesis that size of banks, as measured by total assets, is positively related to level of annual reports' disclosure. However, no significant associations were found between the level of disclosure and the other three variables; profitability, leverage, and stock market listing.

KEY WORDS: Disclosure, Banks, Accounting, Annual Reports, Bahrain.

There have been many empirical studies on disclosure by companies over the last two decades. Marston and shrives (1996) reviewed the disclosure index literature and identified 32 studies, 13 of which were published in the 1990s. These studies, however, focused on disclosure practices of companies operating in developed countries. Only five of the 32 studies identified by Marston and Shrives (1996) covered developing

Submitted February 1997; accepted June 1997.

countries and none of these five examined companies were operating in the Middle East. In addition, although banks represent a significant and influential sector of the economy of various countries, no study in the past examined specifically the disclosure practices in the annual reports of banks[1]. Wallace *et al* (1994) reported that none of the previous disclosure studies, except Malone *et al* (1993) on the oil and gas industry, was industry-specific.

This paper seeks to remedy the omission of both the Middle East region and the banking industry from disclosure index literature. More specifically, this study has two purposes. The first is exploratory, documenting the nature and extent of disclosure in the annual reports of banks operating in Bahrain. The second is explanatory, addressing the firm-specific variables associated with the observed level of disclosure.

The rest of the paper is organized into six sections. The first section briefly describes the financial accounting and reporting environment for banks operating in Bahrain as a background for the study; the second provides a review of relevant literature. The third Section states the hypotheses to be tested in this study. Section four outlines the research design and methodology. Section five presents the findings of the study. The last section summarizes and concludes the study.

Financial Accounting and Reporting Environment of Banks Operating in Bahrain

Banks and other financial institutions operating in Bahrain are supervised by the Bahrain Monetary Agency (BMA) which was created in 1973 with extensive central banking power. The Agency grants three different types of banking licenses: full commercial banks, offshore banks, and investment banks. Full commercial banks are allowed to offer

1. Reconizing the importance of banks and the fact that bank operations and, thus, their accounting and reporting requirements, are different from those of other business organizations, the International Accounting Standard Committee issued in August 1990 International Accounting Standard No. 30 which specifically deals with disclosure in the financial statements of banks. It is the first international accounting standard to be issued by the IASC for adoption by a specific industry grouping.

all banking services to individuals and institutions resident in Bahrain. Offshore banks, on the other hand, are only allowed to offer banking services to non-residents of Bahrain. They are not allowed to deal with residents of Bahrain, except for the Government and full commercial banks. Offshore banks are also not allowed to offer current checking accounts. Investment banks are permitted to accept deposits from banks inside and outside Bahrain, to accept deposits from non-banks outside Bahrain, and to make loans and advances to non-residents. Investment banks are allowed to issue cheque books, offer current accounts services, or overdraft facilities. Banks operating in Bahrain under any of the above three types of licenses, can either be locally incorporated or branches of foreign banks.

The two most important legislations governing the financial reporting of banks operating in Bahrain are: Bahrain Monetary Agency Law of 1973 and Bahrain Commercial Companies Law of 1975. The Agency Law requires that banks supply information needed by the agency for supervisory and statistical purposes. Among the information required by the Agency are annual audited financial statements. In 1992, the Agency required that the audited financial statements of banks be prepared according to the International Accounting Standards (IAS) issued by the International Accounting Standards Committee (IASC). The Bahrain Commercial Companies Law of 1975 also requires that companies (including banks) incorporated in Bahrain should prepare, for each financial year, a balance sheet and a profit and loss statement (Article 166). The Law also requires that these statements be audited by independent auditors (Article 184). The Bahrain Commercial Companies Law of 1975, however, neither specifies the accounting standards which should be used in preparing companies' financial reports nor the auditing standards that should be followed by auditors in performing their audits.

Literature Review

In their review of disclosure research, Marston and Shrives (1996) divided disclosure studies into two main groups. The first group includes those studies that use disclosure index to measure disclosure level and then test the association between the observed disclosure level and various company-specific variables. The second group consists of studies with a measure of disclosure that is not an index (i.e. Beattia and Jones, 1992; Forker, 1992; Brennan, 1995; Kasznik and Lev, 1995; Zimmer, 1994). The first group of studies is more relevant to this paper and is discussed briefly below.

Cerf (1961) seems to have been the first to construct an index of disclosure by specifying and weighting the type of information that might appear in the financial statements. He used the index to examine the relationship between the level of annual report disclosure and a number of firm-specific characteristics. Following Cerf, Copeland and Fredericks (1968), Singhvi and Desai (1971), Buzby (1974), Firth (1979), Cooke (1989, 1993), Malone *et al* (1993), Ahmed and Nicholls (1994), Wallace *et al* (1994), among others, have used different types of disclosure indices to measure the extent of disclosure and relate it to various company characteristics.

Some disclosure index studies concentrate on voluntary disclosures, arguing that mandatory disclosures have to be made anyway (e.g., Lang and Lundholm, 1993). Others have also considered mandatory disclosures because, in some countries, monitoring of disclosure by authorities is poor (e.g., Ahmed and Nicholls, 1994); Schadewitz, 1984; Wallace *et al*, 1994). In such an environment, mandatory items may be perceived as voluntary.

The information items forming the basis of the disclosure index varied from a minimum of 24 (Chow and Wong-Boren, 1987) to a maximum of 289 (Spero, 1979). Different methods were used in choosing the items to be included in the disclosure index. Some researchers chose the items by reviewing international accounting standards (i.e., Cooke, 1989, 1993). Others choose the items by reviewing the accounting literature (McNally *et al*, 1982). Disclosure items may also be chosen by reviewing corporate annual reports so as to identify the best disclosure practices (Malone *et al*, 1993).

Some of the disclosure indices were weighted either subjectively, by the researcher(s) alone or by the researcher(s) using weights elicited from surveys of users' perceptions (e.g., Cerf, 1961; Buzby, 1974, 1975;

Barrett, 1976; Malone *et al*, 1993), while others were unweighted (Chow and Wong-Boren, 1987; Cooke, 1989, 1993; Raffournier, 1995). Marston and Shrives (1991) suggested that for indices with large numbers of items both unweighted and weighted items would give similar results. In addition, Robbins and Austin (1986), Chow and Wong-Boren (1987) have provided some proof that there may be no significant difference between weighted and unweighted disclosure indices. Similarly, Spero (1979) found that attaching weights was irrelevant because those firms that are better in disclosing "important items" are also better in disclosing "less important items". Cooke (1989) argued that "an approach which tried to encapsulate the subjective weights of a multitude of user groups would be unwieldy, and probably futile". Similarly, Marston and Shrives (1996) stated that "Introducing weights can be said to favor a particular user-orientation and as such introduces a further degree of subjectivity into the development of disclosure models".

The firms' characteristics that were examined as possible predictors of the extent of disclosure, ranged from two to eleven. The most popular firms' characteristics examined by previous researchers were: corporate size, leverage, industry type, listing status, profitability and size of auditors. All these variables, except industry type and size of auditors, will be tested in this study. Industry type is irrelevant in this study since all firms examined come from one industry; i.e., banking. The size of auditors cannot be tested because all banks in the sample are audited by one of the "Big Six" audit firms. The next section discusses firms' characteristics that will be tested in this study and states the hypotheses.

Research Hypotheses

Size

Almost all disclosure index studies examined the impact of firm size on the level of disclosure. Different surrogates for size were used. The most common among them were: total assets, sales/turnovers, and market capitalization. The general finding was that size is positively associated with level of disclosure (Cerf, 1961; Buzby, 1975; Firth, 1979; Chow and Wong-Boren, 1987; Cowen *et al*, 1987; Hossain *et al*, 1994).

In fact, Raffournier (1995) showed that size is not just a proxy for other variables but has a proper effect on its own.

A number of theoretical explanations for the positive relationship between size and level of disclosure were provided. Buzby (1975) pointed out that small firms may not have the necessary resources for collecting and presenting detailed information in their annual reports and accounts. Similarly, Ahmed and Nicholls (1994) argued that larger firms have the resources and expertise necessary for the production and publication of more detailed financial statements to meet the diverse needs of many shareholders and creditors. In addition, the management of small firms may believe more strongly that detailed disclosure would endanger their competitive position (Myers, 1977; Schipper, 1981). Finally, Dierkes and Coppock (1978) posited that larger firms tend to receive more public attention and, therefore, are under greater pressure to disclose more information. Considering the above, the following is hypothesized:

H01: «There is no positive association between the size of a bank and the level of disclosure in its annual reports».

Leverage

Fama and Miller (1972), Jensen and Meckling (1976), among others, have suggested that agency costs are higher for firms with higher leverage and that one way to reduce these costs is to increase the level of disclosure. In other words, there is a positive relationship between leverage and level of disclosure. Based on this theoretical argument, many disclosure index studies explored the relationship between leverage and level of disclosure. Their findings were mixed. Chow and Wong-Boren (1987), Wallace *et al* (1994), and Hossain *et al* (1994) found that leverage was not associated significantly with disclosure level. On the other hand, Malone *et al* (1993), Ahmed and Nicholls (1994), found a positive relationship between level of disclosure and a firm's leverage. Based on theoretical and empirical findings, the following is hypothesized in this study:

H02: «There is no positive association between the amount of leverage of a bank and the level of disclosure in its annual reports».

Profitability

Singhvi and Desai (1971) argued that higher earnings would stimulate managers to disclose more information in order to ensure investors of the firm's profitability and boost management's compensation. This argument was supported through empirical studies by Singhvi and Desai (1971) themselves as well as by other researchers (e.g., Cerf, 1961; Malone et al, 1993).

The above research findings lead to the following hypothesis:

H03: «There is no positive association between the profitability of banks and level of disclosure in their annual reports».

Listing Status

Many disclosure index studies suggest that companies that are listed/traded on the stock market, disclose more information than those that are not listed. Firth (1979) found a positive association between listing status and disclosure. Many other studies supported Firth's result. These include: Singhvi and Desai, 1971; Cooke, 1989; Lang and Lundholm, 1993; Hossain et al, 1994. Based on these findings, the following is hypothesized:

H04: «The level of disclosure in the annual reports of banks that are listed on the stock market is not higher than those that are not listed on the stock market».

Research Design

The Sample and Data Collection

The population for this study consists of all commercial, offshore, and investment banks incorporated in Bahrain. As of December 31, 1994, there were 29 banks incorporated in Bahrain[2]. Banks incorporated

2. As of December 31, 1994, The total number of commercial banks operating in Bahrain (i.e., whether incorporated in Bahrain or branch of foreign bank) was 19, while the total number of offshore banks was 47 and the total number of investment banks was 27 (BMA, 1994).

outside Bahrain but with either a branch or representative office in Bahrain, were excluded because they are subject to the accounting and reporting requirements of their home country; thus, their accounting practices might significantly differ from those of Bahraini banks. From the population of banks incorporated in Bahrain, nine banks were excluded because their annual reports, which represent the source of data for this study, were not available at the time of conducting study. Thus, the sample for this study consists of 20 banks (74% of the population); six commercial banks, eight offshore banks, and six investment banks.

Measuring the Level of Disclosure (the Disclosure Index)

The level of disclosure in annual reports of banks will be measured through a disclosure index (DI). The initial step in developing the index is to develop a disclosure checklist of information items that are expected to appear in firms' annual reports. For this study, a disclosure checklist that consists of 78 items was developed (Table 1). These items were selected using a two-stage process. First, a comprehensive list of disclosure items was compiled by the researcher through a review of disclosure index studies and banks annual reports. The list was then evaluated for its comprehensiveness and relevance to Bahrain by a group of five individuals consisting of a senior banker, an audit firm partner, an accounting professor, a senior official from the Bahrain Monetary Agency, and an investor who is actively involved in trading in the Bahrain Stock Exchange. These individuals, who have knowledge and expertise in banks' financial reporting, were identified by the researcher through his personal contacts. Based on the feedback and comments received, a disclosure checklist that consists of 78 items was developed. The 78 items were classified into two main categories. The first category consists of 37 items of information which relate to banks' operating results (income statement items), financial position (balance sheet items), off balance sheet transactions, and maturity and concentration of banks' assets and liabilities. The second category, which consists of 41 disclosure items, covers information about banks' strategies, future prospects, management, employees, competitors, and stocks.

Table 1

Extent of Disclosure of Each Item in the 1994 Banks' Annual Reports
(Percentage Analysis)

#	Disclosure item	Commercial Banks (N=6)	Offshore Banks (N=8)	Investment Banks (N=6)	All Banks (N=20)
	General Corporate Information				
1	Brief history of company	50%	88%	67%	70%
2	Organisational structure	0%	25%	17%	15%
	Corporate Strategy:				
3	Statement of strategy and objectives - general	33%	63%	50%	50%
4	Statement of strategy and objectives - financial	0%	13%	0%	5%
5	Statement of strategy and objectives - marketing	17%	38%	17%	25%
6	Statement of strategy and objectives - social	0%	0%	0%	0%
7	Impact of strategy on current results	0%	25%	0%	10%
8	Impact of strategy on future results	0%	13%	0%	5%
	Future Prospects				
9	Qualitative forecast of sales	0%	25%	0%	10%
10	Quantitative forecast of sales	0%	0%	0%	0%
11	Qualitative forecast of profits	0%	0%	0%	0%
12	Quantitative forecast of profits	0%	0%	0%	0%
	Information about Board of Directors:				
13	Name of the Directors	100%	100%	100%	100%
14	Educational Qualifications (Academic and Professional)	0%	0%	0%	0%
15	Commercial experience of the executive director	0%	13%	0%	5%
	Information about Executive Management:				
16	Name of the Executive	83%	100%	83%	90%
17	Educational Qualifications (Academic and Professional)	0%	0%	0%	0%
18	Commercial experience of the executive	0%	0%	0%	0%
	Employee Information:				
19	Number or % of Bahraini employees	50%	0%	0%	15%*
20	Categories of employees by gender	0%	0%	0%	0%
21	Amount spent on training	0%	0%	0%	0%
22	Nature of training	33%	0%	0%	10%
23	Categories of employees trained	33%	0%	0%	10%
24	Number of employees trained	17%	0%	0%	5%
25	Recruitment policy	0%	0%	0%	0%
	Social Information:				
26	Charitable donations (amount)	50%	0%	17%	20%
27	Community programs (general)	66%	0%	0%	20%**
	Competition Information:				
28	Competitor analysis - qualitative	0%	0%	0%	0%
29	Competitor analysis - quantitative	0%	0%	0%	0%
30	Market share analysis - qualitative	0%	0%	0%	0%
31	Market share analysis - quantitative	0%	0%	0%	0%
	Financial Review:				
32	Profitability ratios	33%	75%	50%	55%
33	Cash flow ratios	0%	13%	0%	5%

Table 1 (Cont.)

Extent of Disclosure of Each Item in the 1994 Banks' Annual Reports
(Percentage Analysis)

#	Disclosure Item	Commercial Banks (N=6)	Offshore Banks (N=8)	Investment Banks (N=6)	All Banks (N=20)
34	Liquidity ratios	17%	50%	33%	35%
35	Gearing ratios	17%	50%	33%	35%
36	Dividend payout policy	0%	0%	0%	0%
37	Financial history or summary-five or more years	33%	38%	50%	40%
	Stock Price Information:				
38	Market capitalization at year-end	0%	0%	0%	0%
39	Market capitalization trend	0%	0%	0%	0%
40	Size of shareholdings	0%	0%	0%	0%
41	Type of shareholder	40%	20%	0%	21%
	Revenue Items:				
42	Interest and mimilar income	100%	100%	100%	100%
43	Dividend income	67%	75%	75%	65%
44	Fee and commission income	100%	87%	50%	80%
45	Gains less losses arising from dealing securities	50%	63%	20%	47%
46	Gains less losses arising from investment securities	50%	87%	50%	65%
47	Gain less losses arising from dealing in foreign currencies.	50%	50%	13%	40%
	Expense Items:				
48	Interest expense and similar charges	100%	100%	100%	100%
49	Fee and commission expense	33%	50%	13%	35%
50	General administrative expenses	100%	100%	100%	100%
	Losses on loans and advances :				
51	The accounting policy which describes the basis on which uncollectable loans and advances are recognized as an expense and written off.	50%	38%	20%	37%
52	Details of movements in the provision for losses on loans and advances during the period.	83%	87%	40%	74%
	The amount charged/credited to income in the period for :				
53	Losses on uncollectable loans & advances	83%	87%	60%	79%
54	Loans & advances written off	100%	63%	20%	63%*
55	Loans and advances previously written off that have been recovered.	83%	75%	60%	74%
56	The aggregate amount of the provision for losses on loans & advances at the balance sheet date.	100%	75%	60%	79%
57	The aggregate amount included in the balance sheet for loans and advances on which interest is not being accrued.	83%	63%	60%	68%
58	The basis used to determine the carrying amount of loans and advances on which interest is not being accrued.	0%	13%	20%	11%
	Assets :				
59	Cash and balances with the central bank.	100%	100%	100%	100%
60	Dealing securities	100%	86%	40%	75%
61	Placement with, and loans and advances to, other banks	100%	100%	67%	90%

Table 1 (Cont.)

Extent of Disclosure of Each Item in the 1994 Banks' Annual Reports
(Percentage Analysis)

#	Disclosure Item	Commercial Banks (N=6)	Offshore Banks (N=8)	Investment Banks (N=6)	All Banks (N=20)
62	Loans and advances to customers.	100%	100%	100%	100%
63	Investment secvrities.	100%	100%	100%	100%
	The market value, if different from the carrying amount, of :				
64	Dealing securities	25%	43%	25%	33%
65	Marketable investment securities	100%	100%	83%	95%
	Liabilities :				
66	Deposits from other banks	100%	100%	100%	100%
67	Amounts owed to other depositors	100%	100%	100%	100%
	Contingencies and Commitments :				
68	The nature and amount of commitments to extend credit that are irrevocable because they cannot be withdrawn at the dicretion of the bank without the risk of incurring a significant penalty or expense.	100%	75%	33%	76%
	The nature and amount of contingencies and commitments arising from off balance sheet items including those relating to :				
69	Direct credit substitutes (including general guarantees of indebtedness, bank acceptance guarantees and standby letters of credit serving as financial guarantees for loans and securities).	83%	100%	100%	94%
70	Certain transaction-related contingencies (including performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions).	67%	75%	100%	76%
71	Short-term self-liquidating trade-related contingencies arising from the movement of goods, such as documentary credits where the underlying shipment is used as security.	33%	50%	67%	47%
72	Interest and foreign exchange rate reiated items (including swaps, options and futures)	20%	75%	60%	56%
	Maturity grouping of :				
73	Assets	100%	87%	67%	80%
74	Liabilities	100%	87%	67%	80%
	Significant concentrations (geographical, industry, etc.) of:				
75	Assets	100%	87%	83%	90%
76	Liabilities	100%	87%	83%	90%
77	Off balance-sheet items	100%	63%	67%	75%
78	The amount of significant net foreign currency exposure	0%	13%	17%	10%

* Statistically significant at 5% level or better.
** Statistically significant at 1% level or better.

After selecting the disclosure items, a decision needs to be made on whether or not to assign weight to each item so reflecting its importance. For this study, it has been decided to unweight the disclosure items. The implied assumption is that each disclosure item is equally important. This is a valid assumption since this study does not seek to measure the quality of disclosure, but whether or not the information is disclosed. Argument and support for the unweighted index approach can be found in Spero (1979), Robbins and Austin (1986), Chow and Wong-Boren (1987), Cooke (1989), Raffournier (1995), Marston and Shrives (1996).

The next step in developing the index is to select a scoring scheme to capture levels of disclosure. A dichotomous scoring, in which an item scores one if it is disclosed and zero if it is not disclosed, was adopted in this study. The dichotomous scoring procedure is commonly used in disclosure index studies (Firth, 1979; Wallace, 1987; Cooke, 1989; Raffournier, 1995). However, if a specific item of information is not disclosed because it is irrelevant for a specific bank, then it is marked as irrelevant.

Once all the items have been scored, an index is created to measure the relative level of disclosure by a specific bank. The index is a ratio of the total scores awarded to a given bank, to the maximum score that the respective bank is expected to earn. The maximum score that a bank is expected to earn, equals the total number of disclosure items in the checklist (i.e., 78 items) less the number of items irrelevant to the given bank. Thus;

$$\mathbf{DIi} = \sum \mathbf{Si/Mi}$$

Where

DI = disclosure index for bank i.

S = total scores awarded to bank i.

M = maximum score which bank is expected to earn.

i = subscript denoting bank, (i = 1,......, 20).

Since the maximum score (M) that a bank can earn varies among banks, a bank is not penalized for those items that are not relevant to it. Therefore, comparison among banks, based on DI, is possible.

The Independent Variables

Four independent variables are examined in this study. These are: size, leverage, profitability, and stock market listing. Total assets is used as a measure of size. Leverage is measured by the ratio of a bank's total liabilities to total assets. Profitability is measured by the return on average shareholders' equity (ROE). Finally, stock market listing is a dichotomous variable that is measured by whether or not a bank is listed on the Bahrain Stock Exchange; the only stock exchange in the country. Banks listed on the Exchange were assigned a value of 1. Those that are not listed on the Exchange were assigned a value of 0.

The measures used for size, leverage, and profitability variables were rank transformed when testing for their association with the level of annual reports disclosure. This rank transformation mitigates the impact of measurement errors and outliers. Nevertheless, the sensitivities of the selected measures were tested using three alternative measures, one for each variable. These were; total shareholders' equity (size measure), return on assets (profitability measure), and ratio of long-term debt to total debt (leverage measure). Correlation between each measure used in the study and its alternative were calculated using Spearman R correlation. The results show that statistically significant correlation (at $p \leq 0.05$) exists between each measure used in the study and its alternative. Thus, the results of the study are not sensitive to the alternative measures of size, leverage, and profitability.

Statistical Analysis and Tests

The associations between the disclosure index (DI) and the four explanatory variables were tested using ranked (OLS) regression (Table 2). Lang and Lundholm (1993) have recommended the use of ranked (OLS) regression as a powerful method for coping with data sets with non-linear and monotonic relationships between the dependent variable and explanatory variables. Cheng *et al* (1992) have also suggested that rank transformation provides additional confidence in statistical results because it: (1) yields a distribution-free date; (2) provides results similar to the ones that can be derived from ordinal transformation; and (3) mitigates the impact of measurement errors, outliers, and residual heteroscedasticity on the regression results[3]. Recognizing these benefits, Wallace *et al* (1994) used ranked (OLS) regression to test the relationship between level of disclosure and various explanatory variables.

Table 2

Descriptive Statistics of the Variables*

Variable		Commercial Banks (N=6)	Offshore Banks (N=8)	Investment Banks (N=6)	All Banks (N=20)
The Dependent Variable					
Disclosure Index (%)	Mean	0.42	0.46	0.33	0.41
	Std. Dev.	(0.09)	(0.10)	(0.11)	(0.11)
The Explanatory Variables					
Total Assets (BD 000's)**	Mean	356,058	1,372,837	158,251	703,427
	Std. Dev.	(361,715)	(2,600,168)	(201,873)	(1,690,161)
Leverage (%)	Mean	0.87	0.76	0.49	0.71
	Std. Dev.	(0.04)	(0.15)	(0.33)	(0.25)
Profitability (%)	Mean	0.12	0.09	0.05	0.09
	Std. Dev.	(0.02)	(0.05)	(0.06)	(0.05)
Listing Status	Listed	5	5	4	14
	Unlisted	1	3	2	6

* Data Source: Banks 1994 annual reports. The classification of banks by type is based on the Bahrain Monetary Agency's classification of these banks (Bahrain Monetary Agency, 1994).

** 1 BD= 2.65 US$.

Variable Description:

Disclosure Index: The total score awarded to a bank devided by the maximum score which a bank is expected to earn.

Total Assets : Total assets of a bank at year end.

Leverage: The ratio of a bank's total liabilities to total assets at year end.

Profitability: The ratio of net profit to average shareholders' equity. The average here is defined as (beginning of the year balance + end of the year balance) /2.

Listing Status: A dummy variable: 1 if listed in the Bahrain Stock Exchange, and 0 if unlisted.

3. One problem with rank-transformed data is that it may reduce the levels of reported significance (Cheng *et al*, 1992).

In this study, the following model was estimated using the ranked OLS regression:

$DI\,i = \beta 0 + \beta 1$ asseti $+ \beta 2$ ROE $i + \beta 3$ leverage $i + \beta 4$ listingi $+$ e i

where;

DIi = the disclosure index for bank i (i = 1,.....,20).

$\beta 0$ = the intercept.

$\beta 1$ = the parameter for the size variable, i.e., total assets.

$\beta 2$ = the parameter for the profitability variable, i.e., return on equity (ROE)

$\beta 3$ = the parameter for the leverage variable, i.e., leverage ratio.

$\beta 4$ = dichotomous variable; 1 = bank is listed in the Bahrain Stock Exchange

0 = bank is not listed in the Bahrain Stock Exchange

e i = the residual

Descriptive statistics for the dependent variable and the independent variables are presented in Table 2. The Table shows that the average total assets for the sample is BD 703,427,000 with a standard deviation of BD 1,690,161,000. The ratios of banks' total liabilities to total assets range between 0.3% and 92.6%, with a mean of 71%. Profitability ratios, as measured by the ratio of net profit to average shareholders' equity, for the 20 banks ranged between - 4.7% and 17.3%. Finally, with respect to stock market listing, 14 banks were listed on the Bahrain Stock Exchange and six were unlisted.

To examine whether statistically significant differences exist among the three types of banks with respect to size, leverage, profitability, and stock market listing, Kruskal- Wallis One- Way ANOVA tests were performed. Only the level of leverage was found to be statistically significant at $p \leq 0.01$. The percentage of leverage is highest for commercial banks (87%) and lowest for investment banks (49%). This is not surprising as commercial banks depend, more than the other two types of banks, on customer deposists as a source of fund.

Correlation Among Variables

Table 3 presents correlation coefficients between all variables. The results suggest that collinearity is a potential statistical problem in the multivariate model. A symptom of collinearity was the reversal of the sign of the coefficients of leverage and profitability variables between the correlation matrix and the regression model. To evaluate the potential effect and seriousness of the collinearity problem, the variance inflation factor (VIF) was calculated for each variable in the model[4]. Collinearity is considered a problem only when VIF exceeds 10 (Mendenhall and Sincich, 1989). As shown in table 3, the highest VIF for the variables in the regression model was 2.6629. Thus, collinearity did not appear to be a serious problem in interpreting the regression results.

Table 3
Correlation Coefficients Among All Variables
(N= 20)

	RankIndex	RankAssets	RankLeverage	RankProfit	Listing
RankIndex	1.0000				
RankAssets	0.8326* (p=0.000)	1.0000			
RankLeverage	0.5182 (p=0.019)	0.6316* (p=0.003)	1.0000		
RankProfit	0.2791 (p=0.233)	0.4977 (p=0.026)	0.6571* (p=0.002)	1.0000	
Listing	0.1041 (p=0.662)	0.3784 (p=0.100)	-0.0378 (p=0.874)	0.1135 (p=0.634)	1.0000

* Coefficient of correlation significant at 1% level or better, p-value for 2-tailed test.

Variable Description:

RankIndex: Rank transformation of the total score awarded to a bank devided by the maximum score which a bank is expected to earn.

RankAssets: Rank transformation of the total assets of a bank at year end.

RankLeverage: Rank transformation of the ratio of a bank's total liabilities to total assets at year end.

RankProfit: Rank transformation of the ratio of net profit to average shareholders' equity. The average here is defined as:
(Beginning of the year balance + end of the year balance) /2.

Listing: A dummy variable: 1 if listed in the Bahrain Stock Exchange, and 0 if unlisted.

4. VIF is equal to 1/(1-R-sequare), where R-sequare is derived from the regression of an explanatory variable on all other explanatory variables (Mendenhall and Sincich, 1989).

Findings

The Extent of Disclosure

The overall disclosure level for the 20 banks based on the 78 disclosure items was low. The average score for the sample in the disclosure index was 41%, with a standard deviation of 11% (see Table 2). Only 5 of the 20 banks (or 25% of the sample) had a disclosure index of 50% or more. In addition, the highest score achieved in the disclosure index was 62%. On average, offshore banks have the highest level of annual report disclosure (46%), followed by commercial banks (42%), and investment banks (33%).

Detailed analysis of disclosure level by item of information, is presented in Table 1. The Table shows that disclosures with respect to strategies, future prospects, management, employees, social activities, competitors and market shares, and market capitalization data are limited. Of the 20 banks, only ten (50%) provided a general statement of strategy and objectives, five banks (25%) disclosed information about their marketing strategy, one bank (5%) disclosed its financial strategy, and none provided any information about their social strategy and objectives. Similarly, less than 10% of the banks disclosed information about the impact of their strategies on current and future results. Future oriented and forecast information is almost nonexistent. No single bank provided a quantitative forecast of revenues or profits, or even qualitative information about future profits. Only two of the banks (10%) disclosed some qualitative information about future revenues. With respect to disclosure about management, the only information provided by Bahraini banks are the names of the board of directors and management team. None of the twenty banks, published in their annual reports' information about educational qualifications (academic and professional) or commercial experience of either their board of directors or management team. Disclosure about employees is also limited as no more than 10% of the banks examined in this study, provided information about any of the following: the number and percentage of local employees, category of employees by gender, amount spent on training, nature of training, number of trained employees, and recruitment policy. Similarly, none of the twenty banks provided any information or analysis of competitors or market share. Finally, the fourteen banks that are listed on the Bahrain Stock Exchange did not publish information about their market capitalization at year end, market capitalization trend, or number of shareholders.

Bahraini banks, however, disclosed relatively more information about their operating results (income statement items), financial position (balance sheet items), off balance sheet transactions, and maturity and concentration of their assets and liabilities. With respect to income statement items, more than 65% of the sample disclosed the following information: interest and similar income, dividend income, fee and commission income, net gains/ losses arising from investment securities, interest expense and similar charges, general administrative expenses, details of the movements in the provision for losses on loans and advances during the period, losses on uncollectable loans and advances, loans and advances written off, loans and advances previously written off that have been recovered, the aggregate amount of the provision for losses on loans and advances at the balance sheet date, and the aggregate amount included in the balance sheet for loans and advances on which interest is not being accrued. However, only 11% of the sample disclosed information about the basis used to determine the carrying amount of loans and advances on which interest is not being accrued, and only 37% of the sample disclosed the accounting policy which describes the basis on which uncollectable loans and advances are recognized as an expense and written off.

The level of disclosure is also high with respect to balance sheet items. Ninety percent or more of the banks examined in this study disclosed the following information in their balance sheets: cash and balances with the central bank; placements with, and loans and advances to, other banks; loans and advances to customers; the carrying amount and the market value of investment securities; deposits from other banks; and, amounts owed to other depositors.

The majority of banks examined in this study, provided information related to their contingencies and commitments. Seventy-six percent of the sample disclosed information about the nature and the amount of commitments to extend credit that are irrevocable because they cannot be withdrawn at the discretion of the bank without the risk of incurring a significant penalty or expense. Similarly, 76% of the sampled banks provided information about the nature and amount of transaction-related contingencies, such as performance bonds, bid bonds, warranties, and standby letters of credits.

Finally, most of the twenty banks disclosed information about the maturity and concentration of their assets and liabilities. Eighty percent of the banks provided maturity grouping data for their assets and liabilities. In addition, 90% provided information on significant geographical and industrial concentration of assets, liabilities, and off balance-sheet items. However, only two banks (10%) disclosed the amount of net foreign currency exposure.

Factors Associated with Disclosure

The estimates of the ranked (OLS) regression model are reported in Table 4. The results indicate that there is a statistically significant positive relationship between the level of disclosure in the annual reports of banks and their size, as measured by total assets, i.e., large banks disclose more information in their annual reports than small banks. Thus, we reject the first null hypothesis; H01. This result is consistent with those found by other researchers (i.e., Cerf, 1961; Buzby, 1975; Firth, 1979; Chow and Wong-Boren, 1987; Cowen *et al*, 1987; Hossain *et al*, 1994; Raffournier, 1995).

However, no statistically significant association at $p < 0.05$ was found between the disclosure index and banks' leverage. This finding adds to the existing mixed research findings. As suggested earlier, Chow and Wong-Boren (1987), Wallace *et al* (1994), Hossain *et al* (1994) found that leverage was not associated with disclosure level. Malone *et al* (1993), Ahmed and Nicholls (1994) found a positive relationship between levels of disclosure and firms' leverages. A possible explanation for the observed insignificant relationship between levels of disclosure and leverages is the nature of the banking industry. Unlike other types of businesses, banks are characterized by high levels of leverage that come from a large number of depositors. These depositors, however, do not represent a strong source of pressure for increased disclosures in banks' annual reports'.

Similarly, a statistically insignificant association between disclosure index and profitability exists at $p \leq 0.05$. This is consistent with the findings of Cerf (1961) Singhvi and Desai (1971), but inconsistent with the findings of Belkaoui and Kahl (1978), Wallace *et al* (1994). The observed absence of any significant association between banks levels of disclosure and their profitability, may be due to the lack of motivations in part of banks' management to disclose more information in response to increased profitability. As suggested earlier, higher earnings would stimulate managers to disclose more information in order to assure investors of the firm's profitability and boost management's compensation. This is not, however, the case with respect to Bahraini banks. Bahraini investors are not sophisticated enough in reading and analyzing annual reports to demand greater disclosure in response to higher profitability. In addition, management's compensation in Bahrain is not related to the level of annual reports disclosure.

It is important to point our here that the signs of both leverage and profitability coefficients in the regression model were negative, which is inconsistent with the expected signs. This is due to the presence of collinearity in the multivariate model. The potential effect and seriousness of the collinearity problem were discussed in the section entitled "Correlation Among Variables", page number 256.

The relationship between the levels of disclosure in banks' annual reports and stock market listing is also statistically insignificant at $p \leq 0.05$. Therefore, we fail to reject H04. This is inconsistent with the previous research findings of Singhvi and Desai (1971), Firth (1979), Cooke (1989), Lang and Lundholm (1993), Wallace *et al* (1994), Hossain *et al* (1994). However, two possible explanations may be provided. First, the Bahrain Stock Exchange (BSE) is quite new as it was established in 1989 and its impact on the accounting and disclosure practices of listed firms is yet to be seen. Until now, the BSE does not have specific disclosure or reporting requirements from listed firms. Second, investors in the BSE are not sophisticated enough to demand greater disclosure. In fact, more investors in the BSE are long-term investors who rarely trade in their investments. In 1994 for example, the BSE reported that less than 3% of the outstanding shares of listed companies, were traded. The exchange also reported that transactions in 1994 totalled 5,986 i.e., an average of 23 transactions per day. (Bahrain Stock Exchange, 1996).

Type of Banks and Extent of Disclosure

The impact of the types of banks on the level of annual report disclosure was examined using both univariate and multivariate tests. The univariate test was based on Kruskal-Wallis One-Way ANOVA. The multivariate test, on the other hand, was based on the following ranked OLS regression model:

$DI\,i = \beta 0 + \beta 1\ \text{asset}i + \beta 2\ \text{ROE}\,i + \beta 3\ \text{leverage}\,i + \beta 4\ \text{listing}\,i + \beta 5\ \text{type}\,i + e\,i$

where;

$DI\,i$ = the disclosure index for bank i (i = 1,.....,20).

$\beta 0$ = the intercept.

$\beta 1$ = the parameter for the size variable, i.e., total assets.

$\beta 2$ = the parameter for the profitability variable, i.e., return on equity (ROE)

$\beta 3$ = the parameter for the leverage variable, i.e., leverage ratio.

$\beta 4$ = dichotomous variable;

1 = bank is listed in the Bahrain Stock Exchange.

0 = bank is not listed in the Bahrain Stock Exchange.

$\beta 5$ = nominal variable representing type of banks;

1 = Commercial bank

2 = Offshore bank

3 = Investment bank

$e\,i$ = the residual

The results of both tests suggest that the type of banks has no impact on the overall level of annual reports disclosure. The p-value of Kruskal-Wallis One-Way ANOVA corrected for ties was highly insignificant (p= 0.263). Similarly, the significance of the coefficient the of type of banks, in the ranked OLS regression model was 0.558. (Table 4).

Table 4

Estimates from the Ranked (OLS) Regression Model

(N= 20)

Source	SS	df	MS
Model	516.487	4	129.122
Residual	148.013	15	9.867

Number of observations = 20
F(4, 15)= 13.08552
Prob>F = 0.0001
R-Square = 0.77726
Adj. R-Square = 0.71786

RankIndex	Coef.	Std. Err.	t	p> |t|	VIF
RankAssets	1.0491	0.1841	5.698	0.0000	2.2848
RankLeverage	-.02689	0.1987	-0.135	0.8942	2.6629
RankProfit	-.1947	0.1646	-1.183	0.2554	1.8271
Listing	-.3421	0.1810	-1.890	0.0783	1.3949
Constant	5.4030	2.2492	2.402	0.0297	

p-values are for 2-tailed tests.

Chi-Square tests were also performed to examine whether significant differences exist among the three types of banks, with respect of each of the 78 disclosure items examined in this study. The results, presented in Table 1, show statistically significant (at $p \leq 0.05$) differences among the three types of banks with respect to only 3 of the 78 disclosure items. These are disclosures of: (1) number or percentage of Bahraini employees, (2) general information on community or social programs, and (3) loans and advances written off. Commercial banks have the highest disclosure level for each of the above 3 items. This is not surprising: unlike offshore and individuals and, thus, under higher public pressure to disclose information of social interest, such as the number or percentage of Bahraini employees and information on community or social programs. On the other hand, the level of leverage may be a possible explanation for having more commercial banks disclosing information about loans and advances written off. All commercial banks examined in this study disclosed the amount of loans and advances written off, while only 20% of the investment banks disclosed such information. The average level of leverage for commercial banks was 87% compared to 49% for investment banks.

Summary and Conclusions

The purpose of this study was to assess the level of disclosure in the annual reports of banks operating in Bahrain and to determine the impact of size, leverage, profitability, and stock market listing on disclosure levels. A disclosure checklist consisting of 78 items, was developed to assess the level of disclosure in the 1994 annual reports of 20 banks incorporated in Bahrain. The results show that the average score in the disclosure index for the 20 banks was only 41%, with a high of 62%, a low of 17%, and a standard deviation of 11%. Further analysis suggests that banks incorporated in Bahrain, disclose more information about their operating results (income statement items), financial position (balance sheet items), off balance sheet transactions, and maturity and concentration of banks' assets and liabilities, than information about their strategies, future revenue and profits, management, employees, social activities, competitors, and stock market data. This may be due to the adoption of International Accounting Standard No. 30 (IAS# 30) by Bahraini banks. IAS# 30 was issued by the International Accounting Standards Committee in 1990 and deals specifically with disclosures in the financial statements of banks. The study also found that the level of disclosures in annual reports of Bahraini banks is positively associated with their size. However, no statistically significant association was found between the disclosure levels and leverage, profitability, or stock market listing.

Two main contributions can be claimed by this study. First, it is the first study to examine levels of disclosures in annual reports of banks. As reported by Wallace *et al* (1994), none of the previous disclosure studies, except Malone *et al* (1993) on the oil and gas industry, was industry-specific. Second, this study is the first to examine in detail the extent of disclosures in the annual reports of Bahraini banks; thus, adding to the current extremely limited literature relating to accounting and reporting practices in developing countries in general and the Middle East in particular.

There are, however, several limitations in this study. First, the study focused on 78 selected disclosure items. The results may have been different if the number of items had been changed or another set of disclosure items examined. Second, the sample of firms examined in this study was made up of banks only. Thus, the findings may be industry-specific and not generalizable to other industries. Finally, the findings of this study are based on a small sample of twenty banks. However, it is important to point out here that the twenty banks examined in this study make up 69% of the banks incorporated in Bahrain and, thus, are a representative sample.

References

Ahmed, K. and Nicholls, D. 1994. The Impact of Non-financial Bank Characteristics on Mandatory Disclosure Compliance in Developing countries: The case of Bangladesh. ***International Journal of Accounting Education and Research***, 29(1): 62-77.

Bahrain Stock Exchange. 1996. ***Facts and Figures***. Manama, Bahrain: Bahrain Stock Exchange.

Bahrain Monetary Agency. 1994. ***Bahrain- An International Financial Center***. 5th ed. Manama, Bahrain: Bahrain Monetary Agency.

Barett, M.E. 1976. Financial Reporting Practices: Disclosure & Comprehensiveness in an International Setting' ***Journal of Accounting Research***' (Spring): 1-26.

Beattie, V. & Jones, J.J. 1992. The Use and Abuse of Graphs in Annual Reports: Theoretical Framework and Empirical Study. ***Accounting and Business Research***, 22 (88): 291-303.

Belkaoui, A. & Kahl, A. 1978. Corporate Financial Disclosure in Canada', Vancouver, The Canadian Certified General Accountant's Association.

Brennan, N. 1995. Disclosure in profit forecasts: Evidence from UK takeover bids, unpublished conference paper, ***18th Annual Congress of the European Accounting Association***, Birmingham, England.

Buzby, S.L. 1974. Selected Items of Information and their Disclosure in financila statements. ***The Accounting Review***, (July): 423-435.

Buzby, S.L. 1975. Company size, Listed Versus Unlisted Stocks, and the Extent of Financial Disclosure. ***Journal of Accounting Research***, (Spring): 16-37.

Cerf, A.R. 1961. ***Corporate Reporting and Investment Decisions***. Berkeley, Cal: The University of California Press.

Cheng, C.S., Hopwood, W. and Mckeown, J.C. 1992. Non-Linearity and Specification Problems in Unexpected Earnings Response Regression Model. ***Accounting Review***, 67 (July): 533-41.

Chow, C.W. and Wong-Boren, A. 1978. Voluntary financial disclosure by Mexican corporations. ***The Accounting Review***, LXII(3): 533-541.

Cooke, T.E. 1989. Disclosure in the Corporate financial statements of Swedish Banks. ***Accounting and Business Research***, (Spring): 113-124.

Cooke, T.E. 1993. Disclosure in Japanese Corporate Financial Statements. ***Journal of Business, Finance & Accounting***, 20 (June): 521-35.

Copeland, R.M. and W. Fredericks. 1968. "Extent of Disclosure". ***Journal of Accounting Research*** (Spring): 106-113.

Cowen, S.S., Ferreri, L.B. and Parker, L.D. 1987. The impact of corporate characteristics on social responsibility disclosure. A typology and frequency-based analysis. ***Accounting, Organizations and Society***, 12(2): 111-122.

Fama, E.F. and Millar, M. 1972. ***The Theory of Finance***, Hisdale, IL: Dryden Press.

Firth, M. 1979. The Impact of Size, Stock market Listing, and Auditors on Voluntary Disclosure in Corporate financial statements. ***Accounting and Business Research***, (Autumn): 273-280.

Forker, J.J. 1992. Corporate Governance and Disclosure Quality. ***Accounting and Business Research***, 22(86): 111-124.

Hossain, M., Tan, L.M. and Adams, M. 1994. Voluntary Disclosure in an Emerging Capital Market: Some Empirical Evidence from Companies Listed on the Kuala Lumpur Stock Exchange. ***International Journal of Accounting***, 29: 334-351.

Jensen, J.C. and Meckling, W.H. 1976. Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure ***Journal of financial Economics***, : 305-360.

Kasznik, R. & Lev, B. 1995. To Warn or Not to Warn: Management Disclosures in the face of an Earnings Surprise. ***The Accounting Review***, 70(1): 113-143.

Lang, M. and Lundholm, R. 1993. Cross-sectional Determinants of Analyst Ratings of Corporate Disclosures. ***Journal of Accounting Research***, 31(Autumn): 246-71.

Malone, D., Fries, C. and Jones, T. 1993. An Empirical Investigation of the Extent of Corporate Financial Disclosure in the Oil and Gas Industry. ***Journal of Accounting Auditing & Finance***, 8 (New Series), Summer: 249-73.

McNally, G.M., Eng., L.H. and Hasseldine, C.R. 1982. Corporate financial reporting in New Zealand: An analysis of user preferences, corporate characteristics and disclosure practices for discretionary information. ***Accounting and Business Research***, (Winter): 11-19.

Marston, C.L. and Shrives, P.J. 1991. The Use of Disclosure Indices in Accounting Research: A Review Article. ***British Accounting Review***, 23: 195-210.

Marston, C.L. and Shrives, P.J. 1996. ***A review of the Development and Use of Explanatory Models in Financial Disclosures Studies.*** A Paper

Presented in the 19th Annual Congress of the European Accounting Association, Bergen Norway.

Mendenhall, W. and Sincich, T. 1989. A Second Course in Business Statistic: Regression Analysis. (Riverside, New Jersey: Dellen Publishing Company).

Myers, S.C. 1977. Determinants of Corporate Borrowing. ***Journal of Financial Economics***, r,(November): 147-75.

Raffournier, B. 1995. The determinants of voluntary financial disclosure by Swiss listed companies. ***European Accounting Review***, 4(2): 261-280.

Robbins, W.A. and Austin, K.R. 1986. Disclosure Quality in Governmental Financial Reports. ***Journal of Accounting Research***, 24(Autumn): 412-21.

Schadewitz, H.J. 1994. ***Development and determinants of disclosure policy in interim reports***. Paper presented at the 17th EAA congress, Veriice.

Schipper, K. 1981. Discussion of Voluntary Corporate Disclosure: The Case of Interim Reporting. ***Journal of Accounting Research***, 19, Supplement: 85-88.

Sighvi, S. and H. Desai. 1971. An Empirical Analysis of the Quality of Corporate Financial Disclosure. ***The Accounting Review***, 46(January): 129-138.

Statsoft, Inc. 1986-1991. ***CSS: Statistica***, 1. Tulsa: OK 74104.

Spero, L.L. 1979. ***The Extent and Causes of Voluntary disclosure of Financial Information in Three European Capital markets: An Exploratory Study*** (unpublished doctoral dissertation, Graduate School of Business, Harvard University).

Stanga Keith G. 1976. Disclosure in Published Financial Statements. ***Financial Management***. Winter: 42-52.

Wallace, R.S.O. 1987. ***Disclosure of Accounting Information in Developing Countries: A Case Study of Nigeria*** (unpublished doctoral dissertation, Exeter University).

Wallace, R.S., Naser, K. and Mora, A. 1994. The Relationship Between the Comprehensiveness of Corporate Financial Satatements and Bank Characteristics in Spain. ***Accounting and Business Research***, 25(97): 41-53.

Zimmer, I. 1994. Determinants of Equity Accounting Disclosures. ***Accounting and Business Review***, 1(2): 233-255.

Hasan M. Al-Bastaki. (Ph.D. University of North Texas, USA, 1993) Assistant Professor of Accounting, Department of Accounting, University of Bahrain. Research Interest: Activity - Based Costing (ABC) and Cost of Quality Reporting, Accounting Standard and their Relevance to the GCC Countries, Disclosure Practices in Developing Countries.