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Interaction between compulsory and voluntary disclosure in Saudi Arabian corporate annual reports

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Abstract *This study investigates the interaction between the compulsory and voluntary disclosures in the annual reports of Saudi Arabian companies. The sample comprises both listed and non-listed companies. The data were analyzed by constructing three separate disclosure indices relating to mandatory disclosure, voluntary disclosure that closely relates to mandatory disclosure and voluntary disclosure that is not closely related to mandatory disclosure. The results reveal that there is a significant, positive correlation between mandatory disclosure and voluntary disclosure related to the mandatory disclosure index. The study also reports a correlation between voluntary disclosure and the other two indices is found to be weak and insignificant. These weak relationships suggest an absence of effective co-ordination between the parties involved in preparing the annual report. The analysis also reveals no clear pattern of relationships to exist between mandatory disclosure and the types of disclosure in the different industrial sectors examined in this study. The non-correlation between these groups of disclosure may suggest low co-ordination between the board of directors and the management in writing parts of the annual report.*

Introduction

External financial disclosure is defined as any financial information, quantitative or qualitative, that is deliberately released by the firm through formal or informal channels (Gibbins *et al.*, 1990; Lev, 1992). It is also reasonable to expect some conflict of interest to exist between managers and other outside parties since each party attempts to maximise their own interests (Healy and Palepu, 1993). Managers may therefore not fully report all the information they possess (Lev and Penman, 1990; Samuels, 1990). Even in the presence of regulation, full disclosure is not guaranteed. This is because corporate reporting regulation is intended to provide outside investors with the minimum quantity of information needed to decide on their investment (Wolk *et al.*, 1992). Essentially, management has the difficult task of deciding as to how much information should be disclosed. After all, public disclosure exerts notable effects, sometimes contradictory, on various stakeholder groups (Bartov and Bodnar, 1996; Frankel *et al.*, 1995; Gigler, 1994; Newman and Sansing, 1993). For example, such disclosure will be seen by both the capital market (investors and creditors) and competitors (Samuels *et al.*, 1999; Gigler, 1994; Seligman, 1983). Therefore, firms have to trade-off between information that attracts capital market (leading to greater competition) and information that deters competitors.

In this context, Dye (1986) proposed that the value maximising manager who observes the mandatory disclosure has the incentive to disclose fully the information about his firm, since partial disclosure (i.e. mandatory disclosure) may negatively

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affect the share price. Therefore, a positive relationship between the mandatory disclosure and voluntary disclosure is expected for those companies that abide by the disclosure requirement. This can be seen in the sense that the voluntary disclosure complements the mandatory one. To the best of our knowledge, no empirical work has been undertaken to date that test such a proposition.

This study is of importance because the Saudi Arabian environment resembles to some extent the environments of both the developed and developing countries. For instance, the free market system, the availability of capital, and the ease of obtaining management skills make the Saudi environment closer to the developed countries. However, the almost absence of the professional analysts' community, the brokerage houses, and financial databases makes the Saudi environment very much like that of developing countries. Also, the stock market is still embryonic and the accounting profession only started to be effectively regulated since the early 1990s. Therefore, the results of this study are expected to be of interest to regulators, preparers, users of the companies' annual reports, and international accounting researchers.

The following section reports on the data collection, hypothesis to be tested and describes the methodology employed followed by an analysis and discussion of our findings and the final section concludes the paper.

Data collection and methodology

The aim of this study is to examine the relationship between the mandatory and voluntary disclosure practices in Saudi Arabia. We do this by testing the following hypothesis, which is stated in its null form below:

> There is no association between the level of mandatory disclosure and the level of voluntary disclosure in the Saudi companies' annual reports.

Data collection was undertaken by requesting the finance directors of the 59 Saudi listed companies and the finance directors of the 20 largest unlisted companies for their annual and report and accounts. We received 68 annual report and accounts as a result of our efforts thus representing 3 per cent of all listed companies and 65 per cent of the non-listed companies in our sample. In order to test our hypotheses, we constructed three disclosure indices and a discussion of these is provided below.

Construction of the disclosure indices

In general, annual corporate disclosure can be subdivided into three categories:

(1) Compliance with mandatory disclosures.

(2) Depth of disclosing mandatory disclosures.

(3) The extent of other voluntary disclosures.

Distinguishing between the voluntary disclosures that are closely related to mandatory ones (i.e. the depth of disclosing mandatory disclosures) and other types of disclosures is expected to reduce the noise occurred in measuring the company's extent of voluntary disclosure. Without such distinction, it is hard to tell whether the company is complying with minimum disclosure requirements, is exceeding the requirements, or is disclosing some information that has no close relationship to the requirements.

To standardise the measurement of the extent of disclosure among the companies, researchers in this field have developed a scoring sheet to produce an index of disclosure, which allows comparison among companies. This practice is considered in the literature as a practical research tool, although it involves some degree of subjectivity in selecting the items to be included in the scoring sheet (Botosan, 1997). Such subjectivity "cannot be completely removed, nor is it reasonable to expect that it can be" (Marston and Shrives, 1991, p. 208). Researchers should, however, strive to minimise the subjectivity effect by reviewing existing practices, consulting with previous works, and considering the socio-economic environment of the country subject to the study (Owusu-Ansah, 1997). Taking into consideration the specific Saudi environment, three scoring sheets for every report in the sample of Saudi corporations were constructed. A discussion of the construction of the three disclosure indices is presented below.

Index of mandatory disclosure

The first index is for the measurement of company compliance with existing disclosure requirements in Saudi Arabia. The items of disclosure included in this index were derived from the *Saudi General Presentation and Disclosure Standard* (Ministry of Commerce, 1992). The items included in this index are expected to be applicable to almost all of the companies at almost all of the time. In other words, items such as extraordinary income and discontinued operations are not included. For such items, it is impossible, without consulting the internal records of a company, to determine that the absence of disclosure means nondisclosure. Such absence may be owing to the inapplicability of the item to the company (for example, no extraordinary income). It may also be owing to the company not reporting such an item deliberately. The items used to calculate the index of mandatory disclosure are shown below:

- providing current year and previous year figures;
- classification of assets and liabilities as current and non-current;
- arranging assets in the following order: current assets, investments, fixed assets, and intangible assets;
- current assets classified in the statement by major components (e.g. cash, marketable securities, and inventory);
- showing the total current assets in the balance sheet statement;
- fixed assets classified by major components (e.g. land, buildings, and equipment);
- depreciable assets shown net of depreciation;
- arranging liabilities in the following order: current liabilities, non-current liabilities;
- current liabilities classified in statement by major components (e.g. short-term loan, suppliers, dividends payable);
- showing the total of the current liabilities in the balance sheet statement;
- non current liabilities classified by major components (e.g. long term debt, post retirement benefits);
- arranging owners' equity in the following order: paid-up capital, donated capital (if any), reserve, appropriated retained earnings, non appropriated retained earnings;
- amount of sales or net sales;
- cost of sales;
- gross margin;
- administrative and general expenses;
- selling expenses;

- other revenues (losses);
- net income (loss);
- the presence of the statement of retained earnings;
- the presence of the statement of changes in the owners' equity;
- brief description of the nature of the entity's activities; and
- brief description of the significant accounting policies.

Index of voluntary disclosure closely related to the mandatory disclosure

The second disclosure index includes the disclosure items that usually relate to the mandatory items (i.e. items in the area of legal requirements but above the minimum requirements). For example, companies in Saudi Arabia are required to disclose the amount of the fixed assets. However, there are no requirements about the level of details to be given about these assets. This index is an indication of the degree of quality of disclosing mandatory items. The items used to calculate the index of voluntary disclosure related to mandatory one are shown next:

- description of property, plant, and equipment;
- description of pension and post retirement plans;
- advertising expenses for the current year;
- description of the calculation of the Zakat due;
- amount of annual directors' remuneration;
- amount of annual top management's remuneration;
- percentage of total wages paid to Saudi employees;
- amount of revenue generated from foreign markets;
- details of revenue sources;
- details of equity investment (name of the company, number of shares held, and their cost and market value);
- market value of the inventory;
- description of the components of the inventory;
- market value and breakdown of non equity investment (e.g. bonds, land, buildings);
- monetary amount of locally produced raw materials and other products used by the company in its operation;
- details of long term debt (source, amount, interest rate, and maturity);
- audit fees;
- summary of the ageing of the accounts receivables; and
- earnings per share.

Index of voluntary disclosure not closely related to the mandatory disclosure

The third index includes the disclosure items that companies are expected to disclose voluntarily and has no close relationship to mandatory disclosure (i.e. outside the area of legal requirements such as the names of directors). Although there is an element of subjectivity in the assignment of items to this category of disclosure, the following criteria were used to minimise such subjectivity and to make this category somehow more distinguishable from the former:

- the item is not a direct part of the revenues or the expenses of doing the business, such as donation to, and support given, to the charity;
- the item is qualitative in nature, such as description of major types of products; and
- the item is about policy matter, such as dividend policy.

The list of items used to calculate the index of voluntary disclosure that have no close relationship to mandatory one is now shown:

- donation to, and support given to charities;
- university graduate recruitment policy and achievement;
- plan and expenditure on human resources development;
- statement of cash flow;
- discussion of major factors affecting current year operations;
- discussion of major factors expected to affect future operations;
- percentage of Saudi employees in different levels of the organisation;
- description of future capital expenditure;
- list of names of directors;
- list of names of top management;
- company policy regarding dividends;
- significant shareholders;
- description of major types of products;
- information about the management of excess of cash; and
- financial accounting information for more than two years.

The method of assigning scores to the information items is provided in the ensuing discussion.

Scoring the information items and the calculation of the index

Usually, the information items in an annual report are of two types. The first one is the single element information items, such as earnings per share. In the scoring sheet, such an information item was awarded a full point if it is disclosed and zero otherwise. The second type of information items in the annual reports relates to those items that contain multiple information elements. One such example is the amount of long-term debt. A company may disclose only the amount of debt. It may also disclose its sources, the maturity dates, and the interest rates. Therefore, a company is awarded 25 per cent of a point for each element. For example, if a company disclosed only the amount of the debt, it is awarded 0.25 of the point. If it disclosed both the amount and source of the debt, it was awarded 0.50 of the point and so on. This procedure, which was first suggested by Buzby (1974), is expected to reduce the subjectivity of the scoring process and produce a more reliable measure of the level of the annual corporate disclosure.

After assigning scores to the information items, the disclosure index was computed, (i.e. the results of the total scores earned by a company divided by the total possible scores). The total possible scores are not the same for every company because not all of the information items are applicable to all of the companies. For example, a local electricity company has nothing to disclose about revenue from foreign sources. Similarly, a company that did not show a "long-term liability" in the balance sheet could not be assumed to have a long-term debt and consequently penalised for the non-disclosure of the source of the debt, its maturity date, and the interest rate on such a debt.

The different indices of disclosure were constructed by using unweighted as well as weighted scores. The weighting was made by the mean rating of a group of annual report users. The paper reports the results based on the unweighted indices because the statistical analysis shows almost identical results using either the weighted or unweighted scores.

Analysis and discussion

The descriptive statistics relating to the disclosure indices are presented in Table I. Table II reports the coefficients of correlation between the values of the indices of mandatory and voluntary corporate disclosures, along with their significance levels.

It can be observed from Table I that the null hypothesis could not be rejected for most of the pair-wise correlation. There are, however, some exceptions where the null hypothesis was rejected. For instance, as far as the entire sample is concerned, there is a significant, positive correlation between the index of mandatory disclosure and the index of voluntary-related to mandatory disclosure ($r = 0.53$). For the whole sample, the correlation between the index of the voluntary disclosure on the one hand and the other two indices on the other hand is weak and thus insignificant. The weak relationships between voluntary disclosure (which is usually found in the directors' report) and the mandatory and voluntary-related to mandatory disclosures (which are usually found in the statements and notes) suggest an absence of coordination between the parties involved in preparing the annual report.

For example, the electricity sector is the one sector where all of the pair wise correlation's between the indices of disclosure are significant and strong[1]. The correlation between the index of mandatory disclosure and the index of voluntary-related to mandatory disclosure is also significant, strong, and positive. This is an indication that those companies in the electricity sector that comply better with the requirements are also better in extending the required information by offering voluntarily more than the minimum required disclosure. This result could also be owing to the same personnel in the company preparing the two types of disclosure.

Furthermore, the correlation's between the index of voluntary disclosure on the one hand and both of the indices of mandatory disclosure and voluntary-related to mandatory disclosure in the electricity sector are significant, strong, and negative. In an earlier study undertaken by Alrazeen (1999) showed that the electricity companies, on average, seem to be the best in disclosing some of the information elements that have no close relationship to the mandatory disclosure, especially information relating to employee welfare. It seems likely that these companies substitute the compulsory disclosure and its related voluntary disclosure by the voluntary disclosures that have no close relationships to the mandatory disclosure. As noticed in a previous study relating to the Saudi Arabian environment (Alrazeen, 1999), these companies do not make profits and are heavily subsidized by the Saudi government. Moreover, the shareholders of such companies are guaranteed a minimum return on their investment. Therefore, if their reports are of any use, they is as a provision of information that is not related directly to their financial performance.

Essentially, the significant and positive relationship between mandatory disclosures and voluntary disclosures that relate to the mandatory ones for the

	Index of mandatory disclosure scores	Index of voluntary related to mandatory disclosures	Index of voluntary disclosures
Agriculture listed: N = *9*			
Median	0.943	0.359	0.300
Mean	0.932	0.365	0.278
SD	0.055	0.052	0.067
Minimum	0.841	0.281	0.133
Maximum	0.989	0.456	0.367
Cement listed: N = *9*			
Median	0.898	0.353	0.400
Mean	0.896	0.329	0.409
SD	0.049	0.076	0.092
Minimum	0.807	0.221	0.267
Maximum	0.972	0.442	0.533
Petroleum listed: N = *4*			
Median	0.920	0.318	0.417
Mean	0.912	0.329	0.367
SD	0.071	0.032	0.174
Minimum	0.818	0.304	0.133
Maximum	0.989	0.375	0.500
Unlisted: N = *1*			
Mean	0.514	0.300	0.167
Manufacturing listed: N = *10*			
Median	0.921	0.365	0.333
Mean	0.908	0.354	0.337
SD	0.048	0.046	0.094
Minimum	0.829	0.292	0.200
Maximum	0.966	0.426	0.533
Unlisted: N = *9*			
Median	0.908	0.328	0.300
Mean	0.919	0.336	0.249
SD	0.044	0.082	0.096
Minimum	0.868	0.227	0.067
Maximum	1.00	0.479	0.357
Real-estate listed: N = *5*			
Median	0.909	0.317	0.318
Mean	0.875	0.355	0.324
SD	0.075	0.108	0.125
Minimum	0.795	0.250	0.172
Maximum	0.955	0.533	0.496
Unlisted: N = *1*			
Mean	0.966	0.300	0.181
Services listed: N = *11*			
Median	0.932	0.309	0.287
Mean	0.911	0.318	0.334
SD	0.060	0.055	0.118
Minimum	0.784	0.233	0.214
Maximum	1.00	0.412	0.508

(*continued*)

Table I. Descriptive statistics of the indices of Saudi corporate disclosure

	Index of mandatory disclosure scores	Index of voluntary related to mandatory disclosures	Index of voluntary disclosures
Unlisted: N = *2*			
Median	0.932	0.307	0.247
Mean	0.932	0.307	0.247
SD	0.017	0.080	0.053
Minimum	0.920	0.250	0.209
Maximum	0.944	0.364	0.284
Electricity listed: N = *7*			
Median	0.693	0.200	0.305
Mean	0.674	0.199	0.284
SD	0.143	0.115	0.187
Minimum	0.420	0.050	0.000
Maximum	0.875	0.367	0.472
Whole sample: N = *68*			
Median	0.908	0.321	0.320
Mean	0.881	0.324	0.323
SD	0.108	0.082	0.121
Minimum	0.420	0.050	0.000
Maximum	1.00	0.533	0.549

Table I.

whole sample may lend empirical support to the aforementioned theory promulgated by Dye (1986). He had proposed that the increase in compulsory disclosures (partial disclosures) would lead to more voluntary disclosures (that attain full disclosure pertaining to the requirements). The Dye (1986) theory assumes a value maximizing firm manager. It also assumes a sophisticated financial market. In Saudi Arabia, quoted companies rarely, if ever, use the financial market for additional financing. In general, their additional equity comes from retaining much of the earnings and capitalizing such earnings from time to time. For instance, in the case of debt finance, Saudi companies generally resort to bank borrowing and do not issue bonds. Saudi companies are also prohibited from engaging in the trade of their own securities. Given these circumstances, companies' management in Saudi Arabia could not be assumed to disclose information about their companies in order to maximize the value of their companies.

Conclusion

In summary, this paper examines the interrelationship between the mandatory and voluntary corporate disclosure in the annual reports of Saudi Listed companies. Our analysis reveals no clear pattern of relationships to exist between mandatory disclosure and the different types of voluntary disclosure in the different industrial sectors. The non-correlation between these groups of disclosure may suggest low co-ordination between the board of directors and the management in writing parts of the annual report. Most, if not all, of the items of voluntary disclosure that has no close relationship to mandatory disclosure were found in the directors' report, while the other types of disclosure were found in the statements and the notes. Another important conclusion drawn from this analysis is that the investors are advised not to assume that the companies that are better in observing the mandatory disclosure are

Table II. The correlation between the values of the indices of mandatory and voluntary corporate disclosures in Saudi Arabia

	Index of mandatory disclosure scores	Index of voluntary related to mandatory disclosure
Agriculture listed: N = *9*		
Index of voluntary related to	−0.187[a]	
mandatory disclosure	(0.315)[b]	
Index of voluntary disclosure	−0.259	(0.250)
	0.052	(0.447)
Cement listed: N = *9*		
Index of voluntary related to	0.507	
mandatory disclosure	(0.082)	
Index of voluntary disclosure	−0.192	0.476
	(0.310)	(0.098)
Petroleum listed: N = *4*		
Index of voluntary related to	0.214	
mandatory disclosure	(0.393)	
Index of voluntary disclosure	0.457	0.677
	(0.271)	(0.161)
Manufacturing listed: N = *10*		
Index of voluntary related to	−0.619	
mandatory disclosure	(0.028)	
Index of voluntary disclosure	0.188	−0.128
	(0.301)	(0.362)
Unlisted: N = *9*		
Index of voluntary related to	−0.022	
mandatory disclosure	(0.477)	
Index of voluntary disclosure	−0.731	−0.66
	(0.013)	(0.433)
Real-estate listed: N = *5*		
Index of voluntary related to	0.561	
mandatory disclosure	(0.162)	
Index of voluntary disclosure	−0.234	−0.059
	(0.352)	(0.463)
Services listed: N = *11*		
Index of voluntary related to	−0.059	
mandatory disclosure	(0.432)	
Index of voluntary disclosure	−0.016	0.054
	(0.481)	(0.437)
Electricity N = *7*		
Index of voluntary related to	0.778	
mandatory disclosure	(0.020)	
Index of voluntary disclosure	−0.798	−0.815
	(0.016)	(0.013)
Whole sample: N = *68*		
Index of voluntary related to	0.525	
mandatory disclosure	(0.000)	
Index of voluntary disclosure	−0.093	−0.061
	(0.226)	(0.310)

Notes: [a] The Pearson's correlation coefficient; [b] The actual level of significance (one-tailed test) also the companies that disclose voluntarily most of the information they want about their companies.

Note

1. Although the sample of the electricity companies appears very small, the total population only comprises of ten companies.

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