

DOES VOLUNTARY DISCLOSURE LEVEL AFFECT THE VALUE RELEVANCE OF ACCOUNTING INFORMATION?

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ABSTRACT

This paper seeks to explore whether voluntary disclosure level affects the value relevance of accounting information from an investor's perspective on Kuwait Stock Exchange (KSE). Based on the assumption that an increased focus on the informational needs of investors should increase the value relevance of the information contained in financial statements we expect that value relevance will increase along with increases in the level of voluntary disclosure. As a consequence, we expect that greater voluntary disclosure levels among companies listed on the KSE will be associated with greater value relevance in earnings and book value information for investors. The results show the average level of voluntary disclosure for KSE-listed firms in 2007 was 22%, ranging from 2% to 63%. The results for the price and returns models provide evidence that earnings and book values are significant factors in the valuation of KSE-listed firms in 2007 period. However, the results show that voluntary disclosure levels had insignificant influence on the value relevance of earnings and book values. The insignificant association found could be due in part to the large proportion of naïve investors in the KSE and could be reflective of their incapability to incorporate voluntary disclosure information in their valuations of KSE firms.

JEL: G11, G12, G15, G17, M41

KEYWORDS: Voluntary disclosure, value relevance, emerging markets

INTRODUCTION

Since the seminal work of Ball and Brown (1968), most of the literature on the value relevance of accounting information has scrupulously documented the statistical association among earnings, book values, and stock prices (or stock returns). This literature includes the studies of Barth and Clinch, 1996; Collins et al., 1997; Francis and Schipper, 1999; and Chen et al., 2001. In addition, the existing literature on value relevance also documents the value relevance of nonfinancial information and suggests that an important complementary relationship may exist between traditional financial variables (earnings, book value, and cash flow) and nonfinancial variables (Amir and Lev, 1996). It has been argued that a basic prerequisite for the value relevance of accounting information is the quality and extent of disclosure practice. High-quality disclosures are also necessary to ensure that capital markets and economies overall function well. Such disclosures are important for investors, firms, and those who set accounting standards (Hellstrom, 2006). As Arthur Levitt, former chair of the U.S. Securities and Exchange Commission (SEC), stated: I firmly believe that the success of capital markets is directly dependent on the quality of the accounting and disclosure system. Disclosure systems that are founded on high quality standards give investors confidence in the credibility of financial reporting—and without investor confidence, markets cannot thrive. (Levitt, 1998, p. 80)

When there is a high level of information asymmetry between investors and a firm, Hughes (1986) views disclosure as a way for firm managers to signal their firm's value to investors. Hughes argues that information asymmetry provides managers with an incentive to signal their firm's value through disclosure to differentiate their firm from those of lower quality. Due to a lack of information, investors

discount the price they are willing to pay for a firm's stock. To mitigate investors' undervaluation, firms are motivated to disclose all relevant financial information. Thus, firms find it beneficial to disclose additional information to investors. This argument is based on the notion that information asymmetry is created between firms and investors when firms do not fully disclose information (Petersen and Plenborg, 2006).

The existing literature on voluntary disclosure provides several possible motives for firms to provide greater financial disclosures. In general, research shows that firms might benefit from giving investors additional information to exploit the disclosure benefits that exceed disclosure costs, such as reducing information asymmetry (Petersen and Plenborg, 2006), reducing the cost of equity capital (Botosan, 1997; Botosan and Plumlee, 2002), reducing the cost of debt capital (Sengupta, 1998), and enabling the market to incorporate more future earnings news into current stock returns (Lundholm and Myers, 2002). Although, it is reasonable to assume that managers will be motivated to provide enhanced disclosure information in order to maximize reporting and disclosure benefits, the questions remain of whether voluntary disclosure levels affect the value relevance of accounting information for investors, specifically as regards earnings and book value, and whether investors are able to use this information in their evaluations of firms. Whether voluntary disclosures improve or impair the value relevance of accounting information remains an empirical question, one that we seek to address in this study.

Empirical research on the affect of voluntary disclosure on equity valuation can enhance our understanding of the role that voluntary disclosure plays in equity valuation. To date, however, little research has investigated the usefulness of voluntary disclosure in equity valuation. This study seeks to redress this gap by examining the emerging market, voluntary disclosure levels, and value-relevance issues in Kuwait.

Based on the assumption that an increased focus on the informational needs of investors should increase the value relevance of the information contained in financial statements, as better-informed investors are able to determine value more precisely (Gjerde et al., 2005), we expect that value relevance will increase along with increases in the level of voluntary disclosure. As a consequence, we expect that greater voluntary-disclosure levels among companies listed on the Kuwait Stock Exchange (KSE) will be associated with greater value relevance in earnings and book value information for investors.

One potential benefit of this study is that corporate regulators and company managers may learn to recognize the affect that voluntary-disclosure levels have on the value relevance of information in financial statements. Thus, the results of this study could inform corporate regulators and company managers as to whether moving toward greater voluntary disclosure would improve the value relevance of financial statement information among KSE-listed companies. Finding a significant association between voluntary-disclosure levels and the value relevance of accounting statements may provide evidence of the benefits that voluntary disclosure holds for the quality and value relevance of financial statements.

To examine the voluntary-disclosure levels of KSE firms, a voluntary-disclosure index (VDI) suitable to the Kuwaiti setting and applicable to KSE-listed firms in 2007 was developed. Both price and returns models were applied to examine the value relevance of accounting information produced by KSE-listed companies in 2007. The value relevance of accounting information was expected to vary cross-sectionally according to variation in the level of voluntary disclosure. To assess the influence of voluntary disclosure on the value relevance of accounting information, the interaction between accounting constructs (earnings and book values) with disclosure constructs (voluntary-disclosure levels) was incorporated in the price and returns models.

The results show the average level of voluntary disclosure for KSE-listed firms in 2007 was 22%, ranging from 2% to 63%. The results from the price and returns models provide evidence that earnings and book values were significant factors in the valuation of KSE-listed firms in 2007. However, the results also

show that voluntary-disclosure levels had a positive but insignificant influence on the value relevance of earnings. In addition, the results reveal a negative but insignificant relationship between the level of voluntary disclosure and the value relevance of book values.

It was expected that an increased focus on the informational needs of investors would increase the value relevance of the information contained in financial statements, as better-informed investors would be able to determine value more precisely. However, this did not seem to be the case for KSE-listed firms with regard to voluntary disclosures in 2007. A possible explanation for the insignificant association found in this study could be attributed to the nature of KSE investors. Similar to other emerging markets, the KSE has a large portion of unsophisticated, naïve investors. Thus, the insignificant association found could be due in part to the large proportion of naïve investors in the KSE and could be reflective of their incapability to incorporate voluntary-disclosure information in their valuations of KSE firms. Another explanation for the lack of statistical significance observed between voluntary-disclosure levels and the value relevance of accounting data could be attributed to the distribution of voluntary-disclosure scores across KSE-listed firms: Although the voluntary-disclosure scores ranged from 2% to 63%, the results show that 82% of KSE firms received a voluntary-disclosure score below 34%. This distribution could indicate that the voluntary-disclosure variable is a weak discriminator.

This study's findings raise questions about KSE investors' capability in incorporating voluntary-disclosure information in their valuation models. In addition, this study contributes to the literature on voluntary disclosure and the value relevance of accounting information by exploring the affect of voluntary disclosure on value relevance. Although recent research shows some interest in this topic, no research had yet been conducted on companies listed on the Kuwait Stock Exchange. The emerging stock market in Kuwait provides an interesting setting for the further investigation and exploration of the relationship between the level of voluntary disclosure and the value relevance of accounting information. The rest of this paper is organized as follows. Section 2 provides a brief overview of corporate financial reporting and regulation in Kuwait. Section 3 provides an overview of corporate motives for voluntary disclosure and considers prior research on the value relevance of voluntary disclosures. Section 4 presents the authors' theory development and research hypotheses, and section 5 discusses the research design used to test these hypotheses. Section 6 analyzes the test results. Section 7 concludes with a summary of findings, an outline of this study's contributions, and suggestions for future research.

THE REGULATORY FRAMEWORK FOR ACCOUNTING IN KUWAIT

Corporate Financial Reporting in Kuwait

The key law regulating financial reporting in Kuwait is the Commercial Companies Law No.15/1960. This law was established to handle the formation of new companies and to legalize the affairs of existing companies. The law requires companies to prepare an annual report, including a profit and loss account and balance sheet. It also requires that the accounts provide an "honest and fair" view. "Honest and fair" might be reasonably understood to be the equivalent of the traditional British "true and fair" dictum. Companies are required to provide shareholders with a copy of the balance sheet of the expired financial year, the profit and loss account, and the reports of both the directors and the auditor. Directors are required, within two months of the annual general meeting, to approve the accounts and to publish the balance sheet of the expired year with a list of the directors' and auditors' names in the official gazette. There are no further requirements concerning the form and content of financial statements, however. Law No. 15/1960 fails to indicate the level of information that companies should disclose. No particular formats for accounting reports are prescribed nor even specific content required. Therefore, it is reasonable to conclude that corporate disclosure rules and regulations in Kuwait are relatively unsophisticated and require minimal disclosure, though it might be considered that what disclosures they

do specify are not inconsistent with those now delineated in the International Financial Reporting Standards (IFRS).

Another regulation that influences financial reporting in Kuwait is Ministerial Resolution No. 18 of 1990. This ruling compels all companies in Kuwait, whatever their legal status, to prepare financial statements in accordance with IFRS. According to the Ministry of Commerce and Industry, after the adoption of IFRS, the quality of financial information available to users improved significantly.

Brief Background on the Kuwait Stock Exchange

In August 1983, the Amir of Kuwait decreed that the Kuwait Stock Exchange was an independent financial institution, managed by an executive administration and committee (KSE, 2005). Since that time, the KSE has witnessed significant growth, which has brought the exchange to the attention of both domestic and international investors, particularly in recent years. In 2007, 179 companies were listed on the KSE, according to the 2007 Kuwait Stock Exchange Investor Guide. KSE administrators divide listed companies into seven sectors: banking, insurance, investment, real estate, industry, services, and food. Listing requirements for companies are established under article 4 of KSE regulations and final approval is subject to the approval of the Market Committee. The minimum capital required for a company to be listed on the KSE is 10 million Kuwait dinars (US\$34 million). The company must have been in operation for at least five years and must have published audited financial statements for three financial years prior to its listing application. In addition, the company must have achieved a net profit in the last two years, with a minimum yearly net profit of 7.5% of the company's capital (KSE, 2007).

As Kuwaiti financial reporting requirements apply to all companies listed on the KSE, all such companies must comply with IFRS and with all local regulations, such as the Commercial Companies Law. An audited balance sheet and income statement, directors' report, and auditor's report must be submitted to the KSE within three months of the financial year-end. Unaudited reports must be filed quarterly. Stockholders of listed companies must immediately disclose to the KSE if their holding reaches (directly or indirectly) 5% of a company's capital. Similarly, listed companies must immediately disclose the names of shareholders whose ownership reaches 5% of their total shares. In addition, listed companies must immediately disclose to the KSE any material information that may affect their business or financial position. The KSE instantly displays this information on trading screens. Stockholders who violate these rules are denied the right to vote for the extra number of respective stocks, in two consecutive annual general meetings.

LITERATURE REVIEW

Motives for Voluntary Disclosures

The influential works of Grossman (1981) and Milgrom (1981) explain possible motives for firms to provide full disclosure to investors. The authors argue that, in the absence of disclosure, investors must obtain and analyze data from other sources, and that firms incur costs if they do so. Due to a lack of information, investors lower the price they are willing to pay for a firm's stock. Firms are thus motivated to disclose all relevant information to mitigate undervaluation. This argument is based on the notion that information asymmetry is created between firms and investors when firms do not fully disclose information (Petersen and Plenborg, 2006). According to economic theory, information asymmetry can increase a firm's capital cost because imperfect information can lead to "adverse selection" between buyers and sellers of a firm's securities. This adverse selection tends to reduce the liquidity of a firm's securities (Copeland and Galai, 1983; Glosten and Milgrom, 1985). In contrast, increased disclosure improves comparability and permits potential investors to recognize more efficient firms. Thus, in the

absence of full disclosure, firms must discount share issues to provide extra compensation to potential investors who may be hesitant to hold shares in firms that offer limited liquidity. Because of the discount, the firm receives less capital from the issue of equity, ultimately increasing the firm's capital cost. By raising their level of disclosure, firms are likely to mitigate information asymmetry between firms and investors, which should reduce capital costs (Diamond and Verrecchia, 1991). The reduction in capital costs motivates firms to disclose information in their reports to attract investors.

Botosan (1997) presents an empirical assessment of the quantifiable benefits of increased disclosure. Using a sample of U.S. firms, Botosan examines the association between disclosure level and the cost of equity capital. Similar to Botosan (1997), Botosan and Plumlee (2002) explore the association between disclosure and equity cost. They confirm Botosan's 1997 findings and provide evidence that firms with greater disclosure in their annual reports experience lower equity capital costs. This disclosure benefit also extends to reducing the cost of debt capital (Sengupta, 1998).

Although previous studies demonstrate the benefit associated with greater disclosure, such as reducing equity capital and debt costs, Verrecchia (1983) argues that disclosure is limited by a proprietary cost. Scott (1994) defines "proprietary cost" as any possible reduction in future cash flows that are attributable to disclosure. Verrecchia (1983) argues that the release of greater information about a firm, either favorable or unfavorable, could be useful to competitors, investors, and employees in ways that could threaten the firm's prospects and competitive position. This could cause reductions in future cash flows. This potential threat associated with disclosure may cause firms to limit their disclosure levels when proprietary costs arise. Healy and Palepu (2001) document that, when proprietary costs arise, companies have an incentive not to disclose information that will reduce their competitive position, even if doing so increases the cost of raising additional equity; in other words, there is a cost-benefit trade-off.

As well as the capital needs theory, previous studies have also used the signaling and agency theories to explain manager incentives to disclose (Jensen and Meckling, 1976; Morris, 1987). The signaling theory addresses problems of information asymmetry in markets and explains how this asymmetry can be reduced if the party with more information shares it with others. This theory assumes that companies have information that investors do not. If investors have no information about a specific company but do have general perceptions, investors will value all companies at the same price, which is a weighted average of their general perception. Managers of greater-quality companies incur an opportunity loss by not increasing their disclosure because their company could be valued at a higher price if investors knew about the company's superior quality, while managers of lower-quality companies have an opportunity gain. High-quality companies therefore have an incentive to leave the market unless they can communicate their superior qualities to investors and increase their share price. This communication is done by signaling (disclosure). As better-quality companies signal, investors consider all remaining companies to be of lower quality, so their average price is reassessed downward. The best of the remaining firms then try to distinguish themselves. The process of signaling continues as long as companies obtain an increase in price that exceeds the signaling costs. To be effective, firms should use credible signals (Morris, 1987).

Hughes (1986) views disclosure as a signal of corporate values when there is high information asymmetry between investors and a firm. She argues that firm managers can use disclosure to signal the firm's value to investors. These signals are credible to investors because a firm's quality can be easily observed later, and firms that send fraudulent disclosures are penalized. Hughes's study shows that information asymmetry gives managers an incentive to signal their firm's value through disclosure to differentiate their firm from those of lower quality.

In addition to signaling theory, the literature on disclosure uses agency theory to explain managers' disclosure incentives (Morris, 1987). Agency theory concerns the behavior of principals (shareholders)

and agents (managers) in their respective functions as part owners of a firm and controllers of a firm. The theory explains problems that arise when shareholders rely on managers to provide services on their behalf, due to the separation between ownership and control functions (Jensen and Meckling, 1976). If both parties act in self-interest, the conflict of interest between shareholders and managers increases. Due to these interest conflicts, agency costs rise. Managers have an incentive to reduce these agency costs, and one way to do so is by disclosing more accounting information (Morris, 1987).

Existing Studies on the Value Relevance of Voluntary Disclosures

A review of the voluntary-disclosure literature reveals that few studies have investigated the usefulness of voluntary disclosure for increasing equity valuation. Nevertheless, some interesting findings have arisen from a small number of studies. For example, Lundholm and Myers (2002) explore whether enhanced disclosure information is incorporated in the current stock price. Their findings show that companies with relatively more informative disclosures “bring the future forward” so that current stock returns reflect future earnings news more. Lundholm and Myers suggest that a firm’s disclosure activity reveals credible and relevant information not in current earnings, and that this information is incorporated in the current stock price.

Banghøj and Plenborg (2008) examine whether the level of voluntary disclosure affected the association between current returns and future earnings among Danish companies in 1996–2000. They conjecture that companies with a high level of value-relevant voluntary disclosures have a stronger association between stock returns and future earnings than companies with a low level of value-relevant disclosures. Inconsistent with their conjecture and Lundholm and Myers’s (2002) findings, the study findings show that voluntary disclosures did not strengthen the association between stock returns and future earnings, despite an observed increase in the level of voluntary disclosure during their study period. Their study raises the question of whether voluntary-disclosure information included value-relevant information about future earnings or whether market participants were not capable of incorporating voluntary-disclosure information in their equity valuations. Hassan et al. (2009) empirically examine the association between voluntary disclosures and firm value among Egyptian-listed firms. They found a positive but insignificant association between voluntary disclosure and firm value. They argue that this result, to some extent, confirms the traditional view that disclosing more information adds value to firms.

In summary, the existing literature on disclosure has explored the capital need theory, agency theory, and signaling theory as possible motives for firms to provide additional disclosure, and to explain variations in disclosure levels across firms. In general, these studies show that firms might benefit from giving investors additional information to exploit the disclosure benefits that exceed disclosure costs, such as reducing information asymmetry (Petersen and Plenborg, 2006), reducing the cost of equity capital (Botosan, 1997; Botosan and Plumlee, 2002), reducing the cost of debt capital (Sengupta, 1998), and enabling the market to incorporate more future earnings news into current stock returns (Lundholm and Myers, 2002). Although, it is reasonable to assume that managers will be motivated to provide enhanced disclosure information to maximize such benefits, a question remains about the extent to which voluntary-disclosure levels affect the value relevance of financial statement information, specifically, earnings and book values. Whether voluntary disclosure improves or impairs the value relevance of accounting information remains an empirical question, which we seek to address in this study.

THEORY DEVELOPMENT AND RESEARCH HYPOTHESES

Accounting information is expected to provide investors and other users of financial statements with solid information that can help them make informed economic decisions. The Framework for the Preparation and Presentation of Financial Statements, published by the International Accounting Standards Board, states that the objective of financial statements is to “provide information about the financial position,

performance and changes of financial positions of an entity that is useful to a wide range of users in making economic decisions” (IASB, 2001, par. 12). Therefore, any event that is likely to affect a company’s current financial position or future performance should be reflected in its financial statements. Relevance is one of the four principal qualitative characteristics that financial information should possess to be useful for decision making (IASB, 2001, par. 24). Financial statement information is relevant when it influences users’ economic decisions by (a) helping them evaluate past, present, or future events relating to an entity and (b) confirming or correcting their past evaluations (IASB, 2001, par. 26).

Kothari (2000) observes that market participants seek high-quality accounting information to mitigate information asymmetry between firm managers and outside investors. Francis et al. (2004) identify seven desirable attributes of accounting quality: accrual quality, persistence, value relevance, timeliness, predictability, smoothness, and conservatism. The authors find that value relevance, even if not the only attribute, is one of the most important attributes of accounting quality. The findings of Francis et al. are supported by Barth et al. (2005), who claim that higher-quality accounting information results in less earnings management, more timely loss recognition, and more value-relevant earnings and equity book values.

Based on the assumption that an increased focus on the informational needs of investors should increase the value relevance of the information contained in financial statements, as better informed investors are able to determine value more precisely (Gjerde et al., 2005), we expect that value relevance will increase as voluntary disclosures increase. Thus, we expect greater voluntary-disclosure levels by KSE-listed companies to be associated with greater value relevance in book values and earnings for investors. Therefore, it is hypothesized that

H1: The higher the level of voluntary disclosures, the greater the value relevance of reported earnings

H2: The higher the level of voluntary disclosures, the greater the value relevance of reported book values

DATA AND RESEARCH METHODS

Sample Selection and Data Sources

In 2007, there were 179 KSE-listed companies, according to the 2007 Kuwait Stock Exchange Investor Guide. Consistent with the prior studies—for example, Ghazali and Weetman (2006), Haniffa and Cooke (2002), and Inchausti (1997)—all companies in the finance industries (banks, insurance, and investments; i.e., 60 companies for this study) were eliminated because they report under different accounting and disclosure rules and their financial transactions are not equivalent to those of the companies selected for this study’s sample. Thus, this study’s sample contained 119 of the 179 companies listed on the KSE in 2007. The primary source for data used to assess the level of voluntary disclosure and the value relevance of accounting information for the sample was 2007 year-end annual reports, available from the KSE Auto Documentation and Archival Department. The main source used for stock price data was the historical database of the KSE Public Relations Department. Table 1 provides a breakdown by industry of the 119 companies studied.

Measurement of Dependent Variable

To explore the association between voluntary-disclosure levels and value relevance of accounting information, a measure of the extent of voluntary-disclosure levels must first be established that is suitable to the Kuwaiti setting and applicable to KSE-listed firms in 2007. The voluntary disclosure index is considered a reliable and valid instrument for measuring voluntary disclosure (Cooke and Wallace, 1989). Reliability, in this context, means that the same results will be obtained by using the same index

to measure the level of disclosure by a particular company at a specific time (Marston and Shrivess, 1991). Thus, the Voluntary-Disclosure Index (VDI) was used in the current study to measure the level of voluntary disclosure.

Table 1: Breakdown by Industry of KSE-Listed Companies in 2007 Selected for this Study

Industry	Number of Companies	Percentage
Real Estate	33	28
Manufacturing (Industrial and Food)	33	28
Services	53	44
Total	119	100

Several steps were taken to develop a voluntary-disclosure index suitable to the Kuwaiti setting. First, previous studies were reviewed to construct a checklist, drawing common items used in previous voluntary-disclosure studies. These studies included Hossain and Hammami (2009), Donnelly and Mulcahy (2008), Barako et al. (2006), and Haniffa and Cooke (2002). Second, annual reports from all Kuwaiti companies were reviewed and all items voluntarily disclosed in those annual reports were included in the checklist. Third, all disclosure items mandated by Kuwaiti law, KSE rules, and IFRS were considered irrelevant to this study and were excluded from the list. The above steps produced 51 relevant items for the VDI (see VDI appendix).

Consistent with studies conducted by Hossain and Hammami (2009), Donnelly and Mulcahy (2008), Ali et al. (2004), Glaum and Street (2003), and Haniffa and Cooke (2002), equal weight was given to VDI items, with the view that voluntary-disclosure items are equally important to all users of annual reports. Consistent with prior related literature (e.g., Hossain and Hammami, 2009; Donnelly and Mulcahy, 2008; Barako et al., 2006; Glaum and Street, 2003; and Haniffa and Cooke, 2002), in this study, an item of information was assigned “1” if it was clearly disclosed, and “0” if it was clearly not disclosed. Items inapplicable for a specific company were coded “N/A.” The VDI rating for a given company was computed and a ratio formed by calculating the total number of voluntary disclosures made in the company’s annual report, divided by the maximum possible score. A higher index score indicates a greater level of voluntary disclosure.

Empirical Valuation Models for Assessing Value Relevance

Two models for assessing accounting value relevance dominate the literature: the price model and the returns model. The price model is used to examine the association between stock price and earnings and book values (e.g., Ohlson, 1995). The returns model is used to examine the association between stock returns and the level of and change in earnings (e.g., Easton and Harris, 1991). To provide comprehensive insights, this study uses both the price and returns models to examine the value relevance of accounting information and the association between level of voluntary disclosures and the value relevance of accounting information.

The Price Model: Ohlson (1995) offers a model that links a firm’s market value to its earnings and book value. In this model, current earnings serve as a proxy for abnormal earnings, while book value is a proxy for the present value of expected future normal earnings. Ohlson’s model expresses a firm’s market value (i.e., the firm’s stock price) as a linear function of earnings, book values, and other value-relevant information. The model has many appealing properties and provides a useful benchmark for conceptualizing how market value relates to accounting data and other price-relevant information. The model is specified as follows:

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVS_{it} + \varepsilon_{i,t} \quad (1)$$

where

P_{it} = stock price per share for firm i at time t , three months after the fiscal year-end of time t

EPS_{it} = the earnings per share of firm i at time t

BVS_{it} = the book value per share of firm i at time t

t = 2007, corresponding to the fiscal year 2007

ε_i = other value-relevant information

The statistical association between stock price and both earnings and book value is used as the primary metric to measure the value relevance of accounting numbers. If accounting variables—earnings and book value—are value relevant to investors, then there will be an association between stock price, and earnings and book value, and the coefficients of earnings and book value will be statistically significant. This association is measured by the explanatory power (R^2) of the regression model.

The Returns Model: Easton and Harris (1991) express the value relevance of accounting earnings (i.e., annual returns) as a function of earnings levels, earnings changes, and other unspecified factors. Thus, the basic returns model is as follows:

$$R_{it} = \beta_0 + \beta_1 EPS_{it}/(P_{it} - 1) + \beta_2 \Delta BVS_{it}/(P_{it} - 1) + \varepsilon_{i,t} \quad (2)$$

where

R_{it} = the return over 12 months, computed as the price per share three months after the fiscal year-end plus net dividends per share minus the price per share nine months before the fiscal year-end divided by the price nine months before the fiscal year-end

P_{it-1} = the share price nine months before the fiscal year-end

EPS_{it}/P_{it-1} = the earnings per share of firm i at time t deflated by the share price of firm i at time $t-1$

$\Delta EPS_{it}/P_{it-1}$ = the change in earnings per share from time $t-1$ to time t deflated by the share price of firm i at time $t-1$

t = 2007, corresponding to the fiscal year 2007

ε_i = other value-relevant information

Accounting earnings are considered value relevant if there is an association between returns, as reflected in positive and significant earnings levels and earnings change coefficients.

Control Variables

Several studies have documented that the value relevance of earnings and book value can be influenced by numerous factors. These factors include the earnings sign (positive or negative) (Collins et al., 1997; Barth et al., 1998; Collins et al., 1999), industry categories (Barth et al., 1998; Francis and Schipper,

1999; Ballas and Hevas, 2004; Hellstrom, 2006), and firm size (Collins et al., 1997; Barth et al., 1998; Babalyan, 2001). Consequently, the price and returns models incorporate proxies for profitability, industry categories, and firm size as control variables. Assessing the Association between the Level of Voluntary Disclosures and the Value Relevance

The purpose of this study is to explore whether the extent of voluntary disclosure is associated with the value relevance of accounting information. Assuming that a greater voluntary-disclosure level is valued by investors, then the voluntary-disclosure level represents additional information that investors incorporate in their valuation models. To test hypotheses 1 and 2, the voluntary-disclosure level obtained from the VDI is included in the price and returns models to capture the influence of the level of voluntary disclosure on the value relevance of accounting earnings and book value. We expect that firms with high levels of voluntary disclosure will have high levels of value-relevant earnings and book values. To examine this conjecture, the interaction between accounting constructs (earnings and book value) and disclosure constructs (voluntary-disclosure level) is incorporated in the price and returns models. To control for the impact of loss observations, we interact a loss dummy variable with the earnings variable. In addition, profitability, industry categories, and firm size are included in the price and returns models as control variables to capture their influence. As the purpose of the study is to examine whether voluntary-disclosure levels affect the value relevance of accounting data, the main coefficients of interest would be β_4 and β_5 (the interaction between accounting constructs and disclosure constructs). Based on the potential increase in the value relevance of accounting information resulting from increasing voluntary disclosure, it is predicted that the higher the level of voluntary disclosures, the greater will be the value relevance of earnings (H1) and book values (H2). Accordingly, significant positive β_4 and β_5 coefficients in the valuation models (as depicted in equations 3 and 4 below) will indicate that greater voluntary disclosures are considered value relevant to investors.

The Extended Price and Returns Models

The extended price and returns models that incorporate the level of voluntary disclosures, profitability, industry categories, and firm size are as follows:

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVS_{it} + \beta_3 VD_{it} + \beta_4 EPS_{it} * VD_{it} + \beta_5 BVS_{it} * VD_{it} + \beta_6 LOSS_{it} * EPS_{it} + \beta_7 IND_INDUS_{it} + \beta_8 IND_SERV_{it} + \beta_9 LSIZE_{it} + \varepsilon_i \quad (3)$$

$$R_{it} = \beta_0 + \beta_1 EPS_{it}/P_{it-1} + \beta_2 \Delta EPS_{it}/P_{it-1} + \beta_3 VD_{it} + \beta_4 EPS_{it}/P_{it-1} * VD_{it} + \beta_5 \Delta EPS_{it}/P_{it-1} * VD_{it} + \beta_6 LOSS_{it} * EPS_{it} + \beta_7 IND_INDUS_{it} + \beta_8 IND_SERV_{it} + \beta_9 LSIZE_{it} + \varepsilon_i \quad (4)$$

where

- P_{it} = stock price per share for firm i at time t , three months after the fiscal year-end of time t
- EPS_{it} = earnings per share of firm i at time t
- BVS_{it} = the book value per share of firm i at time t
- R_{it} = the returns over 12 months, computed as the price per share three months after the fiscal year-end plus net dividends per share minus the price per share nine months before the fiscal year-end divided by the price nine months before the fiscal year-end
- P_{it-1} = the share price nine months before the fiscal year-end
- EPS_{it}/P_{it-1} = earnings per share from time $t-1$ to time t deflated by the share price of firm i at

- $\Delta EPS_{it} / P_{it-1}$ time $t-1$
the change in earnings per share from time $t-1$ to time t deflated by the share price of firm i at time $t-1$
- $LOSS$ = dummy variable that equals 1 if the firm achieves negative earnings and 0 otherwise
- IND_INDUS = dummy variable that equals 1 for firms in the industrial category and 0 otherwise
- IND_SERV = dummy variable that equals 1 for firms in the services category and 0 otherwise (the real estate category is omitted when all categories are 0)
- $LSIZE$ = the natural logarithm of total assets of firm i at time t
- VD = the voluntary-disclosure score
- t = 2007 fiscal year

RESULTS

Descriptive Statistics for the Extent of Voluntary Disclosures

Table 2 presents descriptive statistics for the VDI. Panel A shows the mean VDI for KSE-listed firms in 2007 was 22%, ranging between 2% and 63%; this mean was higher than in some earlier studies (e.g., Ferguson et al. in Hong Kong at 13%, 2002; Meek et al. in the United States, United Kingdom, and Continental Europe at 18%, 1995) and lower than in other earlier studies (e.g., Hossain and Hammami in Qatar at 37%, 2009; Ghazali and Weetman in Malaysia at 31%, 2006, and Leventis and Weetman in Greece at 37%, 2004). Table 2, panel B, reports the frequency distribution of VDI scores for the 119 KSE-listed firms. The statistics show that 39 companies (33%) scored between 0.02–0.12 of the applicable disclosure, 25 (21%) scored between 0.13–0.23, 33 (28%) scored between 0.24–0.34, 16 (13%) scored between 0.35–0.45, 4 (3%) scored between 0.46–0.56, and only 2 (2%) scored between 0.57–0.63.

Table 2: Descriptive Statistics for the Dependent Variable—Voluntary Disclosure Index (VDI)

Panel A: Descriptive Statistics for VDI						
Dependent Variable	N	Mean	Median	Stand Dev.	Minimum	Maximum
VDI	119	0.22	0.22	0.14	0.02	0.63

Panel B: Frequency Distribution of VDI Scores			
VDI Range	Number of Firms	Percentage	Cum. Percentage
0.02–0.12	39	33	33
0.13–0.23	25	21	54
0.24–0.34	33	28	82
0.35–0.45	16	13	95
0.46–0.56	4	3	98
0.57–0.63	2	2	100
Total	119	100	

Table 3 presents descriptive statistics for dependent and independent variables used in the price and returns models. The results show that all variables used in the valuation models have a reasonable degree of variation. For the price model variables, table 3 reports the mean (median) stock price per share for the year 2007 at about Kuwaiti dinar (KD) 0.56 (KD 0.38). This table indicates that the mean (median) earnings per share during the study period was KD 0.03 (KD 0.02) and the mean (median) book value per share was KD 0.30 (KD 0.20). For the returns model variables, table 3 shows that the mean (median) stock returns of KSE-listed companies in 2007 was –6% (–8%). Table 3 shows that firm size varied significantly, ranging from KD 3.48 million to KD 3490.93 million, with a mean (median) of KD 135.08

(48.77) million. Due to the variation from normality, the non-normality in the stock price, stock returns, and size variables was corrected with a natural logarithm transformation of the size variable. The transformation process dramatically reduced the skewness and kurtosis in the raw data.

Table 3: Descriptive Statistics for Dependent and Independent Variables Used in the Valuation Models

Variable	N	Mean	Median	Std. Dev.	Min.	Max.
P_{it}	119	0.56	0.38	0.56	0.11	3.20
R_{it}	119	-0.06	-0.8	0.25	-0.53	0.50
BVS_{it}	119	0.30	0.20	0.25	0.10	1.60
EPS_{it}	119	0.03	0.02	0.05	-0.25	0.24
EPS_{it} / P_{it-1}	119	0.06	0.07	0.07	-0.19	0.23
$\Delta EPS_{it} / P_{it-1}$	119	-0.07	-0.03	0.13	-0.80	0.15
SIZE	119	135.08	48.77	376.46	3.48	3490.93
VD_{it}	119	0.22	0.22	0.14	0.02	0.63

All numbers are in Kuwaiti dinar (KD). Variables are defined as follows: N is the number of observations; P_{it} is the stock price per share for firm i at time t; EPS_{it} is the earnings per share of firm i at time t; BVS_{it} is the book value per share of firm i at time t; R_{it} is the return over 12 months computed as the price per share three months after the fiscal year-end plus net dividends per share minus the price per share nine months before the fiscal year-end divided by the price nine months before the fiscal year-end; P_{it-1} is the share price nine months before the fiscal year-end; EPS_{it} / P_{it-1} is the earnings per share of firm i at time t deflated by the share price of firm i at time t-1; $\Delta EPS_{it} / P_{it-1}$ is the change in earnings per share from time t-1 to time t deflated by the share price of firm i at time t-1; SIZE is the total assets of firm i at time t (KD million); VD is the voluntary-disclosure score; and t = 2007, corresponding to the year 2007.

Bivariate Correlation Results

Pearson’s correlation and Spearman’s rank correlation among the variables are calculated and presented in table 4. Examination of the correlation matrix of the independent variables of both price and returns models in table 4 found no pair-wise correlation coefficient above 0.8. This suggests that multicollinearity is not likely to be a serious problem (Gujarati, 2003). Variance inflation factors (VIF) were also examined and found to be well within acceptable limits.

Regression Analysis

Table 5 presents the results of the price model after incorporating the voluntary-disclosure level, profitability, industry categories, and firm size. The regression results show that the price model is highly significant ($p < 0.01$) and explains about 70% of the association between the dependent variable and the independent variables. Furthermore, the estimated coefficients of accounting earnings ($p < 0.01$) and book values ($p < 0.05$) are strongly positively correlated with firm value, suggesting that earnings and book values reported by KSE-listed firms played an important role in the equity valuation of KSE-listed firms in 2007.

After controlling for profitability, industry, and firm size, the results show that the coefficients of the interaction between accounting constructs and voluntary-disclosure constructs (β^4 and β^5) are insignificant. For coefficient β^4 (EPS*VD), the results show that there is a positive but insignificant association, suggesting a positive but insignificant influence of voluntary disclosure on the value relevance of earnings. For coefficient β^5 (BVS*VD), the results reveal a negative but insignificant relationship between the value relevance of book value and the level of voluntary disclosure.

The results further show that the control variables related to industry categories have coefficient estimates that are strongly positively related to firm value. These results are consistent with the value-relevance literature findings and confirm the influence of industry categories on the value relevance of earnings and book values. In addition, the results reveal that the coefficient estimates of the profitability variable (LOSS*EPS) are negative and significant ($p < 0.10$), suggesting that the value relevance was lower for

loss firms than for profit firms. In contrast to industry categories and profitability, the estimated coefficient size variables were not statistically significant at any conventional level.

Table 4: Bivariate Correlations among Dependent and Independent Variables

Variable	P_{it}	EPS_{it}	BVS_{it}	R_{it}	EPS_{it}/P_{it-1}	$\Delta EPS_{it}/P_{it-1}$	SIZE	VD
P_{it}	1.00	0.77**	0.71**	0.47**	0.32**	0.29**	0.43**	0.17
EPS_{it}	0.79**	1.00	0.74**	0.41**	0.64**	0.37**	0.56**	0.24*
BVS_{it}	0.69**	0.69**	1.00	0.25*	0.25*	0.13	0.53**	0.24*
R_{it}	0.49**	0.44**	0.18	1.00	0.47**	0.38**	0.18	0.02
EPS_{it}/P_{it-1}	0.37**	0.78**	0.37**	0.50**	1.00	0.46**	0.13	0.19
$\Delta EPS_{it}/P_{it-1}$	0.29**	0.52**	0.16	0.46**	0.63**	1.00	0.10	0.12
LSIZE	0.22**	0.27**	0.44**	0.18**	0.28**	0.05	1.00	0.25**
VD	0.09	0.19	0.20*	0.00	0.18	0.09	0.30**	1.00

Notes: *, ** Correlation is significant at ≤ 0.05 and 0.01 levels, respectively (two-tailed). Upper-right diagonal presents Spearman's correlation and lower-left diagonal presents Pearson's correlation of variables. Variables are defined as follows: P_{it} is the stock price per share for firm i at time t ; EPS_{it} is the earnings per share of firm i at time t ; BVS_{it} is the book value per share of firm i at time t ; $R_{it} = ((P_{it} + d_{it} - P_{it-1}) / P_{it-1})$ is the return over 12 months; d_{it} is the dividends per share of firm i at time t ; EPS_{it}/P_{it-1} is the earnings per share of firm i at time t deflated by the share price of firm i at time $t-1$; and $\Delta EPS_{it}/P_{it-1}$ is the change in earnings per share from time $t-1$ to time t deflated by the share price of firm i at time $t-1$; LSIZE is the natural log of the total assets of firm i at time t ; VD is the voluntary-disclosure score; and $t = 2007$, corresponding to the year 2007.

We argued that an increased focus on the informational needs of investors should increase the value relevance of the information contained in financial statements, because better-informed investors are able to determine value more precisely. Consequently, we hypothesized that the value relevance of earnings and book value would increase as the level of voluntary disclosures increased. However, this does not seem to be the case for KSE-listed firms with regard to voluntary disclosures. While the insignificant finding is unexpected, it is consistent with the findings of Hassan et al. (2009), who find that voluntary disclosure has a positive but insignificant association with firm value.

A possible explanation for the insignificant association found could be attributed to the nature of the KSE. Similar to other emerging markets, the KSE has a large portion of unsophisticated, naïve investors. Thus, the insignificant association observed could be partially due to the large proportion of naïve investors in the KSE and their incapability to incorporate voluntary-disclosure information in their valuations of firms. This finding is likely to provide support for Banghøj and Plenborg's (2008) notion that although the objective of voluntary disclosure is to inform investors about firm value, investors might not be capable to precisely incorporate voluntary information in their estimates of firm value. Another explanation for the lack of statistical significance observed in the correlation between the level of voluntary disclosure and the value relevance of accounting data could be attributed to the distribution of voluntary-disclosure scores across KSE-listed firms. Although the levels of voluntary-disclosure scores ranged from 2% to 63%, the results show that 82% of KSE firms achieved a voluntary-disclosure score below 34%. This distribution of scores may result in the voluntary-disclosure variable being a weak discriminator.

Table 5: Results of Regression of Price on Earnings, Book Values, and Voluntary-Disclosure Level

$$P_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVS}_{it} + \beta_3 \text{VD}_{it} + \beta_4 \text{EPS}_{it} * \text{VD}_{it} + \beta_5 \text{BVS}_{it} * \text{VD}_{it} + \beta_6 \text{LOSS}_{it} * \text{EPS}_{it} + \beta_7 \text{IND_INDUS}_{it} + \beta_8 \text{IND_SERV}_{it} + \beta_9 \text{LSIZE}_{it} + \varepsilon_{it}$$

(3)

Dependent Variable: *Stock Price*

Variable	Coefficient	T-Statistic
Intercept	-2.36	-6.73***
EPS	7.43	2.87***
BVS	1.50	2.30**
VD	0.64	1.32
EPS*VD	2.95	0.35
BVS*VD	-2.58	-1.33
LOSS*EPS	-6.18	-1.76*
IND_INDUS	0.50	4.19***
IND_SERV	0.44	4.18***
LSIZE	0.04	1.21

N	R ²	Adj. R ²	F-Statistic	P-Value (F-Statistics)
119	0.72	0.70	26.46	0.000

Notes: *, **, *** significant at the 0.1, 0.05, and 0.01 levels respectively. P_{it} is the stock price per share for firm i at time t , three months after the fiscal year-end of time t ; EPS_{it} is the earnings per share of firm i at time t ; BVS_{it} is the book value per share of firm i at time t ; VD is a voluntary-disclosure score; LOSS is a dummy variable that equals 1 if the firm achieves negative earnings and 0 otherwise; IND_INDUS is a dummy variable that equals 1 for firms in the industrial category and 0 otherwise; IND_SERV is a dummy variable that equals 1 for firms in the service category and 0 otherwise (the omitted industry category when all categories are 0 is the real estate category); LSIZE is the natural log of the total assets of firm i at the end of time t ; and $t = 2007$.

Table 6 shows the results of the extended returns model. The model had significant explanatory power for stock returns (adjusted R2 = 32%, F = 5.35, p < 0.1). Moreover, the estimated coefficient of earnings levels ($\beta^1 \text{EPS}_{it}$) is strongly positively related with firm value (p < 0.01). This result confirms the price-model findings that earnings level was a significant factor in KSE-listed firms' valuations in 2007. In contrast, an insignificant positive association was observed for earnings changes ($\beta^2 \Delta \text{EPS}_{it}$). The insignificant result regarding the association between earnings changes and stock returns might suggest that, in 2007, KSE investors had a very short-term horizon as they focused heavily on contemporaneous earnings (earnings levels) rather than changes in earnings. Similar to the price model, the findings based on the returns model show that the coefficients of the interaction between accounting constructs and voluntary-disclosure constructs (β^4 and β^5) are positive but insignificant, suggesting a positive but insignificant influence of the voluntary disclosure on the value relevance of earnings. For control variables, the results show that the estimated coefficients of the profitability variable (LOSS*EPS) are negative but insignificant. In addition, the results reveal that the coefficient estimates of size and one of the industry categories were not statistically significant.

Table 6: Results of Regression of Annual Returns on Earnings Levels, Earnings Changes, and Voluntary-Disclosure Level

$$R_{it} = \beta_0 + \beta_1 \text{EPS}_{it}/P_{it-1} + \beta_2 \Delta\text{EPS}_{it}/P_{it-1} + \beta_3 \text{VD}_{it} + \beta_4 \text{EPS}_{it}/P_{it-1} * \text{VD}_{it} + \beta_5 \Delta\text{EPS}_{it}/P_{it-1} * \text{VD}_{it} + \beta_6 \text{LOSS}_{it} * \text{EPS}_{it} + \beta_7 \text{IND_INDUS}_{it} + \beta_8 \text{IND_SERV}_{it} + \beta_9 \text{LSIZE}_{it} + \varepsilon_{it}$$

(4)
Dependent Variable: Stock Returns

Variable	Coefficient	T-Statistic
Intercept	-0.60	-2.65***
EPS	2.21	2.43***
ΔEPS	0.18	0.47
VD	0.10	0.22
EPS*VD	2.81	0.71
ΔEPS *VD	1.87	0.79
LOSS*EPS	-1.56	-1.36
IND_INDUS	0.21	3.14***
IND_SERV	0.08	1.22
LSIZE	0.03	1.38

N	R ²	Adj. R ²	F-Statistic	P-Value (F-Statistics)
119	0.39	0.32	5.35	0.000

Notes: *** significant at the 0.01 levels. R_{it} is the return over 12 months, which is computed as the price per share three months after the fiscal year-end plus net dividends per share minus the price per share nine months before the fiscal year-end divided by the price nine months before the fiscal year-end; P_{it-1} is the share price nine months before the fiscal year's end; EPS_{it}/P_{it-1} is the earnings per share of firm i at time t deflated by the share price of firm i at time $t-1$; $\Delta\text{EPS}_{it}/P_{it-1}$ is the change in earnings per share from time $t-1$ to time t deflated by the share price of firm i at time $t-1$; VD is a voluntary-disclosure score; LOSS is a dummy variable that equals 1 if firm achieves negative earnings and 0 otherwise; IND_INDUS is a dummy variable that equals 1 for firms in the industrial category and 0 otherwise; IND_SERV is a dummy variable that equals 1 for firms in the service category and 0 otherwise; LSIZE is the natural log of the total assets of firm i at end of time t ; and $t=2007$.

CONCLUSION

This study examines empirically whether voluntary-disclosure levels affect the value relevance of accounting information, specifically, earnings and book values. It argued that the quality and extent of disclosure practice is a fundamental prerequisite for high-quality accounting information. High-quality disclosures are also necessary to ensure that capital markets and the economy as a whole function well. Such disclosures are important for investors, firms, and those who set accounting standards. Consequently, it was expected that the value relevance of accounting information would be influenced by the level of voluntary disclosure. To date, however, little research has investigated the usefulness of voluntary disclosure on equity valuation and whether the voluntary-disclosure level affects the value relevance of accounting information. This study seeks to redress this gap by examining the emerging market, voluntary-disclosure levels, and value-relevance issues in Kuwait. We hypothesized that an increased focus on the informational needs of investors should increase the value relevance of the information contained in financial statements, as better-informed investors would be able to determine value more precisely. We expected that value relevance would increase as voluntary disclosures

increased. Consequently, we expected greater voluntary-disclosure levels by KSE-listed companies to be associated with a greater value relevance of book values and earnings for investors.

The research design of this study consists of two parts. First, in accordance with prior voluntary-disclosure research, the level of voluntary disclosure is examined using a voluntary-disclosure index. Second, the affect of voluntary-disclosure levels on the value relevance of financial statement information, specifically, earnings and book value, is examined empirically using two valuation models: the price and returns models. The combined empirical evidence that results from the application of both models provides comprehensive insights into the affect of voluntary-disclosure levels on the value relevance of accounting information in an emerging-market setting. A voluntary disclosure index comprised of 51 items relevant to the Kuwaiti commercial context was developed and used to investigate the level of voluntary disclosure in a sample of 2007 annual reports of 119 Kuwait listed companies. The outcomes show that the mean VDI score for KSE-listed firms in 2007 was 22%, with scores ranging from 2% to 63%. The results for the price and returns models provide evidence that earnings and book values are significant factors in the valuation of KSE-listed firms in 2007. However, the results show a positive but insignificant influence for voluntary-disclosure levels on the value relevance on earnings. In addition, the results reveal a negative but insignificant relationship between the value relevance of book value and the level of voluntary disclosure.

It was argued that an increased focus on the informational needs of investors should increase the value relevance of the information contained in financial statements, as better informed investors are able to determine value more precisely. However, this does not seem to be the case for KSE-listed firms with regard to voluntary disclosures. A possible explanation for the insignificant association found could be attributed to the nature of the KSE. Similar to other emerging markets, the KSE has a large portion of unsophisticated, naïve investors. Thus, the insignificant association observed could be due in part to the large proportion of naïve investors in the KSE and their incapability to incorporate the voluntary-disclosure information in their valuations of KSE firms. Another explanation for the statistically insignificant correlation between the level of voluntary disclosure and the value relevance of accounting data could be attributed to the distribution of voluntary-disclosure scores across KSE-listed firm. Although the levels of voluntary-disclosure scores range from 2% to 63%, the results show that 82% of KSE firms achieved disclosure voluntary-disclosure score below 34%. This distribution of scores may result in the voluntary-disclosure variable being a weak discriminator.

The findings of this study raise questions about KSE investors' capability to incorporate voluntary-disclosure information in their valuation models. In addition, by investigating the affect of voluntary disclosure on value relevance, the results of this study contribute to the literature on voluntary disclosure and value relevance in accounting information. Although recent research shows some interest in the connection between value relevance of accounting information and voluntary disclosure, no research had previously been conducted on Kuwait. Kuwait's emerging stock market provides an interesting setting for further investigation of this issue. As with any research, certain limitations should be considered when interpreting the results. Similar to previous disclosure studies, the subjectivity inherent in VDI scoring is a concern. However, consistent with previous studies, several approaches were undertaken to minimize and overcome this potential bias and uncertainty in determining firm disclosure scores. In addition, the conclusions drawn are subject to an unavoidably small sample size as the KSE is a relatively small market. This study has been a cross-sectional examination. How the current pattern of disclosure will change over time and affect the value relevance of accounting information will be an interesting area for future research. Clearly, a longitudinal study will be needed to obtain a fuller understanding and greater insight into the affect of voluntary-disclosure levels on the value relevance of information in financial statements.

APPENDIX

Appendix: Voluntary Disclosure Index

A: General corporate information	D: Capital market data
1 Mission statement 2 Brief history of corporate 3 Corporate structure 4 Major plants, warehouses, projects 5 Information about the economy 6 Information about the industry 7 Corporate establishment's date	23 Volume of shares traded (trend) 24 Volume of shares traded (year end) 25 Share prices information (trend) 26 Share prices information (year end) 27 Domestic and foreign shareholdings 28 Distribution of shareholdings by type of shareholders 29 Year of listing at KSX 30 Foreign stock market listing information
B: Information about directors	E: Financial review information
8 Picture of chairperson only 9 Picture of all directors 10 Academic qualification of directors 11 Position held by executive directors 12 Identification of senior management 13 Number of shares held by directors 14 Directorship of other companies 15 Number of BOD meetings held 16 Directors' remuneration 17 Age of directors	31 Financial summary 3+ years 32 Return on equity ratio 33 Return on assets ratio 34 Liquidity ratios 35 Leverage ratios 36 Other ratios
C: Corporate strategy	F: Corporate social information
18 General strategy and objectives 19 Financial strategy and objectives 20 Marketing strategy and objectives 21 Impact of strategy on current results 22 Impact of strategy on future results	37 Participation in government social campaigns 38 Community programs (health & education) 39 Employees' appreciation 40 Recruitment policy 41 Picture of employees' welfare 42 Number of employees 43 Corporate policy on employee training 44 Nature of training 45 Percentage of foreign and national labor force 46 Discussion of major types of product (services) 47 Picture of major types of product 48 Improvement in product quality 49 Improvement in customer services 50 Information on donations to charitable organizations 51 Distribution of marketing network of products

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