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Risk Management Committee and Financial Instrument Disclosure

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ABSTRACT

In this paper, we empirically investigate the influence of several characteristics of firms on the extent to which Malaysian listed companies disclosed financial instruments during the voluntary and mandatory periods of MASB 24 (Financial Instruments: Disclosure and Presentation) Standard. Following prior studies, we predict that larger and more profitable firms are more likely to disclose more information on financial instruments. We also hypothesize that strong internal control mechanisms, such as the existence of a risk management committee and audit quality, also result in higher levels of disclosure. The sample consists of firms that were listed with the Main Board of Bursa Malaysia in 1999, 2000, 2002, and 2003. This study employs a multiple regression analysis over 484 firm-years. Our results indicate that, on average, the disclosure quality among Malaysian firms is low before the period of mandatory disclosure. However, the level of disclosure appears to increase immediately after the issuance of the MASB 24. We also find that the existence of a risk management committee, firm size and leverage are positively associated with the disclosure quality of financial instruments. Finally, in general, the results indicate that the implementation of financial instrument disclosure standards influence firms, to some extent, to provide high-quality reporting.

Keywords: Financial instruments; disclosure quality; risk management committee; firm characteristics

INTRODUCTION

The use of complex derivatives products has increased in recent years (ISDA 2007). A mid-year 2007 survey by the International Swaps and Derivatives Association (ISDA) indicated the notional amount outstanding of global credit derivatives increased by 32% in the first 6-month of 2007. The global volume totaled US45.46 trillion by mid-2007. A mid-year 2007 survey by the International Swaps and Derivatives Association (ISDA) indicated the notional amount outstanding of global credit derivatives increased by 32% in the first 6-month of 2007. The global volume totaled US45.46 trillion by mid-2007. The increase has enabled firms to better manage their exposures, but at the same time exposes them to greater uncertainties. Recent corporate collapses, both abroad and in Malaysia, have heightened calls from regulators and standard setters for firms to increase levels of disclosures as stakeholders are concerned about the quality of financial reporting and the effectiveness of monitoring mechanisms within firms. In Malaysia, Transmile Berhad, a listed air cargo company, was reported to have accounting irregularities in overstating its revenues in 2004, 2005, and 2006 by RM622 million. Transmile Berhad's case has opened the door to further investigations of other listed companies in Malaysia. Investors have also broadened their risk assessments to include on and off balance sheet transactions, forcing firms to increase disclosure quality, especially when they seek external funding (Skinner 1996). Recent financial crises have resulted in substantial losses due to derivatives trading as part of hedging strategies for non-financial companies in many countries (Dodd 2009). Dodd (2009) estimates that in 12 countries, including Poland, nine Asia countries and two Latin America countries, the financial crisis affected possibly 50,000 firms with derivatives losses totaling approximately USD530 billion. The significant financial losses provide a strong justification to require firms to disclose their financial instrument information. This prompted standard setters such as the Financial Accounting Standard Board (FASB) to issue Statement of Financial Accounting Standards (SFAS) 119 *Disclosure about Derivative Financial Instruments and Fair Value of Financial Instruments*, a more stringent disclosure standard, to replace SFAS 107 *Disclosures about Fair Value of Financial Instruments* (Hassan, et al. 2006). SFAS 119 was issued in 1994 and SFAS107 was issued in 1991 Due to inadequate fair value information required by SFAS 119, the standard was later superseded by FASB 133. SFAS 119 was issued to guide firms on disclosure of derivative financial instruments and fair value in the financial statements. However, SFAS 133 is more stringent where it requires firms to measure all derivative instruments at fair value and recognized in the statement of financial position either as assets or liabilities. *Accounting for Derivative Instruments and Hedging Activities* in 1998 (Hassan et al. 2006). Mandated disclosure requirements, such as FASB 133, are expected to be useful for users of financial statements in their assessments of risks associated with derivatives transactions.

As disclosure quality of financial instrument information has become increasingly important in more developed economies, the Malaysian Accounting Standard Board (MASB) has stepped up its efforts in improving

reporting quality of Malaysian public listed companies. Subsequently, in 2001, the accounting standard setter issued MASB 24 *Financial Instruments: Disclosure and Presentation*, which was based upon the International Accounting Standard (IAS) 32 *Financial Instruments: Disclosure and Presentation*. MASB 24 describes specific requirements for the disclosure of financial instruments, as well as specific information to be disclosed. This disclosure would help financial statement users to understand the importance of on-balance sheet items or off-balance sheet items in assessing a firm's financial position, performance and cash flows.

The past several years have witnessed a growth in both disclosure and determinants of disclosure practices literature. Ahmed and Courtis (1999) provide a very extensive review of literature which includes several country-specific studies on the firm-characteristic determinants of disclosure. Additionally, there is a growing body of literature that specifically attempts to link corporate governance structures within firms and the usage of derivative instruments and disclosure practices. However, the precise relationship remains questionable. For instance, Marsden and Prevost (2005) fail to find any systematic relation between board composition and derivative usages of listed firms in New Zealand. Similarly, Lopes and Rodrigues (2007) also fail to empirically prove the influence of corporate governance practices, including the board composition, on disclosure practices of Portuguese firms. These findings suggest that, in general, conventional corporate governance structures of a firm are not able to explain disclosure practices of financial instruments. Perhaps, a more specific mechanism or function within a firm's governance structures is likely to provide more meaningful insight into disclosure of derivatives usage and risk management practices of firms.

Empirical evidence suggests that a strong internal control should lead to more transparent disclosures (Chen and Jaggi 2000; Karamanou and Vafeas 2005). The supervisory and governance role of board committees is now increasingly recognized in reviews of the legislative frameworks of a number of countries, including the US and the UK. In particular, board committees, such as audit committees and risk management committees, fulfill a significant role in ensuring that financial information reporting is transparent and accurate; and that financial controls and systems of risk management are robust. For instance, the Malaysian Code on Corporate Governance states that a board of directors must maintain a sound system of internal control. Subsequently, in May 2000, Bursa Malaysia issued *A Guidance on Statement of Internal Control* which, among other things, emphasizes the need for listed firms to put in place a proper risk management mechanism and disclose firm-wide risk management practices applied within the respective firms (Yatim 2010). While there is positive movement to ensure high transparency practices, limited guidelines are available for Malaysian firms to ensure high-quality financial instrument information is disclosed.

Until 2001, there was no specific accounting standard available to guide firms in reporting the financial instruments. IAS 32 *Financial Instruments: Disclosure and Presentation* was the first of two accounting standards issued by the International Accounting Standards Board (IASB). Although IAS was adopted in Malaysia in 2001, the standards were not comprehensive. The IAS 39 *Financial Instruments: Recognition and Measurement* was the second accounting standard issued by IASB, but was not adopted until early 2010. The long delay of adopting IAS 39 may due to the fact that the standard involves highly technical issues relating to fair value accounting. This requires managers to accumulate technical expertise to be technically competent (Carlin, Finch & Laili 2009) before the standard may be adopted. The delay may also be due to fact that fair value may cause many companies to incur huge losses, which may lead to the poor performance of the companies due to volatility in the fair value of financial instruments, which might be due to change in their market value.

Considering the less comprehensive disclosure requirements of financial instruments and the delay of adopting IAS 39 (disruption), we therefore question the quality of financial instrument information disclosed in financial statements prior to the issuance of the IAS 39 (i.e. within regime of MASB 24). We also question factors that contribute to the adoption of MASB 24 during this period. Therefore, this study aims to examine several firm-specific factors that are likely to influence the quality of financial instrument disclosures of Malaysian listed firms during the regime of MASB 24 (which is based on IAS 32). In relation to this, the decision by Malaysia to delay the adoption of IAS 39 represents an interesting opportunity to examine the impact of firm-specific factors on MASB 24 prior to the adoption of IAS 39, which was modeled closely to the International Financial Reporting Standards (IFRS) (Carlin et al. 2009). These factors are important to provide evidence regarding the influence of firms' characteristics on the adoption of accounting standards within a jurisdiction which is still in the process of development, particularly when compared with developed jurisdictions (Carlin et al. 2009).

This paper contributes to the existing literature in several ways. First, the paper provides evidence on the disclosure quality of financial instrument information prior to and immediately after the adoption of the MASB 24. Investigation into this issue would add to our knowledge on firm characteristics and management behavior that have significant effects on disclosure practices under two distinct reporting regimes: voluntary reporting regimes and mandatory reporting regimes. Unlike Norkhairul Hafiz (2003), this study expands disclosure practices to all financial instruments, including financial derivatives disclosures before and after the MASB 24.

Second, we examine the association between our measure of disclosure quality and the risk management committee. To our knowledge, this is the first study that

examines the role of risk management committees in determining the disclosure quality of financial instrument information. We believe the role of risk management committee (RMC) in managing risk, particularly with respect to financial instruments, will significantly affect the ways in which firms disclose their exposure to risks associated with the instruments. When firms establish RMCs, they demonstrate that they are systematically involved in risk mitigation and holistic management, hence they are likely to disclose more; and the management and board of directors of the firms are likely keen on dealing with risk management matters. Lopes and Rodrigues (2007) examine the role of corporate governance on financial instrument disclosure. However, in a similar fashion to many other disclosure studies, Lopes and Rodrigues' study only examines the role of independent directors in financial instrument disclosure.

Our results indicate that, generally speaking, the disclosure quality among Malaysian firms is low. However, the level of disclosure is increasing, especially in the period immediately after the issuance of the MASB 24. Our regression analysis indicates that the existence of a risk management committee is consistently related (with a positive direction) to the disclosure quality of financial instruments. Additionally, we find that the size of a given firm, as well as its ratio of debt to total assets, is associated with the disclosure quality of financial instruments. We believe this study provides important implications for standard-setters and regulators in developing and enforcing accounting standards. The issue is particularly relevant to Malaysia since the country is still in the process of rapid development, which requires a significant amount of technically competent human capital or regulatory institutions (Carlin et al. 2009).

The remaining sections of the paper are as follows. Sections two and three discuss the institutional background and existing research respectively. Section four develops the empirical predictions to be used in this study. Section five describes the methodology undertaken and results are presented in section six. Our conclusions and recommendations are presented in section seven.

Institutional Background

In the U.S., innovative derivative instruments are used by large corporations to reduce their exposure to a variety of risks (Géczy, Minton and Schrand 1997). These innovative instruments are based upon four basic derivative instruments: forward contracts, future contracts, options and swaps.

Investors have been alerted to the importance of transparent financial reporting with regard to risk and uncertainty. Most accounting standard-setters have been forced to respond by requiring more disclosures. The FASB in the United States is more advanced in regulating the accounting treatment of financial instruments when compared to the rest of the world. The first accounting pronouncement released by the FASB pertaining to financial instruments was issued in 1990. However, in Malaysia, the accounting standard pertaining to financial instruments (MASB 24) was not issued until 2001. The standard prescribes certain requirements for the presentation of on-balance sheet financial instruments and identifies the information that should be disclosed regarding both recognized and unrecognized financial instruments. The standard requires firms to 1) classify financial instruments into liabilities and equity; 2) classify related interest, dividends, losses and gains; and 3) explain the circumstances in which financial assets and financial liabilities should be off-set.

Firms are also required to disclose 1) factors that affect the amount, timing and certainty of an enterprise's future cash flows relating to financial instruments; 2) the accounting policies applied to those instruments; 3) the nature and extent of an enterprise's use of financial instruments; 4) the purposes of using financial instruments; 5) the risks associated with the financial instruments; and 6) the management's policies for controlling those risks. For the purposes of this study, the MASB 24 is assumed to be a high-quality disclosure standard. This is a reasonable claim due to the extensive nature of the disclosure requirements. Therefore, firms that prepare their annual reports based on this standard are said to provide high-quality financial instrument information. Correspondingly, failure to comply with this standard suggests that financial instrument disclosures are of low-quality. Although the standard is less comprehensive than IAS 39, it was developed based on the IAS 32. We acknowledge there are two more accounting standards (FRS 7 Financial Instruments: Disclosure; and the FRS 9 Financial Instruments) will be issued (which related to IAS 32 and 39) after the establishment of the International Financial Reporting Standards. However, these two standards are still in progress and expected to be implemented in 2013 (FRS7) and 2015 (FRS9), therefore discussion concerning these FRSs lies outside the scope of the present article.

Prior Research and Hypotheses Development

The term 'quality' has been used interchangeably with the term 'transparency'. Because the concepts of quality and transparency are elusive (Kothari 2000), there are different interpretations concerning the meaning of 'high-quality' financial information. In certain instances, 'quality' is assessed based on the timeliness of economic income recognition in accounting income (Ball, Robin and Wu 2002; Ball, Kothari and Robin 2000; and Lang, Raedy and Yetman 2003); the level of accruals (Bradshaw, Richardson and Sloan 1999); and evidence of earnings management and indications of a higher association of earnings with share price (Lang et al. 2003). Ball et al. (2000) defined 'timeliness' as the extent to which current-period accounting income incorporates current-period economic income. This definition is consistent

with Lang et al. (2003) and Ball et al. (2002). However, following Pownall and Schipper (1999), the current study defines financial information as 'high-quality' when it possesses the attributes of transparency, full disclosure and comparability. Therefore, we believe firms that comply with the MASB 24 requirement can be regarded as providing high-quality disclosure information.

Prior research examines the usefulness of financial information by investigating the extent of firm disclosures and the quality of accounting information disclosed in annual reports. Studies that relate the level of disclosure to firm characteristics include Firth (1979); Cooke (1989; 1991, and 1992); Imhoff (1992); Malone, Fries and Jones (1993); Singhvi and Desai (1971); Heflin, Shaw and Wild (2001); and Wallace and Naser (1995). These studies provide evidence of the association between disclosure levels and firm characteristics, including firm size; listing status; firm auditor; the scope of business; risk of trading; and industry type. Most of these studies utilize a disclosure index to measure disclosure level or disclosure quality.

While the majority of the aforementioned studies examine the quality of all financial information disclosed in annual reports or other media, limited studies have documented disclosure quality in regards to specific information, particularly financial instruments. Four Australian studies on the quality of derivative disclosures were conducted by Hassan et al. (2006-2007); Chalmers and Godfrey (2004 and 2000); and Chalmers (2001). However, most of these studies (Chalmers and Godfrey, 2000 and Chalmers, 2001) examine disclosure quality under a voluntary disclosure regime. Chalmers and Godfrey (2000) explore the disparity between the accounting treatment of derivative instruments, as encouraged by the 1996 Australian Accounting Standards Board (AASB) 1033 *Presentation and Disclosure of Financial Instruments*, and the current accounting practices of firms, based upon the 30 June 1998 financial statements of Australia's 500 largest firms. The study indicates that the disclosure quality is less than satisfactory.

Chalmers (2001) examines Australian firm derivative instrument disclosures over three phases: a pure voluntary disclosure phase; a coercive voluntary disclosure phase; and a mandatory voluntary reporting period. The study examines the responses of firms to information demands in the changing regulatory environment between 1992 and 1998. Chalmers utilizes a voluntary reporting disclosure index to capture derivative disclosures. The index is constructed using the disclosures suggested in the Australian Society of Corporate Treasurer's Industry Statement and the Exposure Draft (ED) 65: *Presentation and Disclosure of Financial Instruments*. This industry statement was issued in March 1995 and requested firms to include information on derivatives in their financial statements. The results indicate that firms are responsive to quasi-contractual disclosure regulations, since the number of firms registering a positive voluntary reporting disclosure index increased from phase to phase. The release of the ED 65, combined with the increased development of relevant AASB standards, is influential in achieving enhanced derivative instrument reporting.

Chalmers and Godfrey (2004) expand upon the aforementioned studies by examining the voluntary disclosure practices from 1992 to 1996. This study provides evidence on factors that drive responses to voluntary derivative financial instrument disclosure regimes. They argue that a firm's reputation and legitimacy is affected by its response to the new disclosure requirements. Results from this study indicate that voluntary derivative financial instrument disclosure is associated with reputation considerations, including a firm's affiliations with professional bodies, firm size, type of industry and the extent of its media attention.

Hassan et al. (2006-2007) extends these studies by examining the transparency of derivative disclosures among firms in extractive industries prior to the adoption of international accounting standards in Australia. The study examines the association between a measure of transparency and various firm characteristics. Unlike the above two studies, Hassan et al. (2006-2007) measures transparency based on the re-issued AASB 1033 *Presentation and Disclosure of Financial Instruments* disclosure requirement. Results from this study indicate that large firms and firms with high price-earnings ratios and debt-to-equity ratios provide more transparent derivative disclosures.

Similar to our study, Lopes and Rodrigues (2007) examine the determinants of voluntary financial instrument disclosure among Portuguese companies. The study analyzes disclosures based upon an index developed according to the IAS 32 *Financial Instruments: Disclosure and Presentation* and IAS 39 *Financial Instruments: Measurement and Recognition* requirements. The study provides evidence that size, type of industry and auditor listing status are significantly related to disclosure quality.

We adopt an approach similar to Lopes and Rodriques (2007) to measure disclosure quality. However, unlike Lopes and Rodriques (2007) our index is based solely upon the MASB 24, which is the equivalent of the IAS 32. This approach is due to the impending of adoption IAS 39 (IFRS 139) in Malaysia. Therefore, our study will provide evidence on management behavior which due to the flexibility of the disclosure of financial instruments. While Lopes and Rodrigues (2007) examined 55 listed firms in 2001, our study provides evidence on the disclosure practices of publicly-listed Malaysian firms before and after the MASB 24 became mandatory.

In Malaysia, Norkhairul Hafiz (2003) provides evidence relating to the association between the voluntary disclosure of derivative financial instruments and two specific firm characteristics: firm size and level of foreign activity. A disclosure index, based on the MASB's ED 24 *Financial Instruments: Disclosure and Presentations* was used to measure the level of voluntary disclosure. The study provides evidence that the level of voluntary disclosure of derivative financial instruments is low, possibly due to the

lack of a control mechanism in Malaysia. The study also provides evidence that the level of voluntary disclosures among companies with a high percentage of foreign subsidiaries is low when compared to companies with a low percentage of foreign companies. Furthermore, the study finds that there is no difference in the level of voluntary disclosure of derivative financial instruments with regard to companies with substantial foreign sales as opposed to those with a low percentage of foreign sales; nor is there an observed difference between companies with large assets and those with small assets. This is argued to be the result of conflicts of interest between management and stakeholders.

While the present study acknowledges the contribution of Norkhairul Hafiz (2003); his study only focused on part of the ED 24 disclosure requirement. Moreover, similar to the above Australian and Portugal studies, Norkhairul Hafiz (2003) provides evidence on the level of disclosure before the standard become mandatory. Therefore, the results might be biased towards certain firms that are more capable in terms of money and human resources. Hence, further study is required to understand disclosure quality during mandatory regimes. Therefore, the current study will expand upon results of the aforementioned studies by examining disclosure quality among publicly-listed firms in Malaysia prior to and after the MASB 24 was issued. Most importantly, our study will provide evidence on the role of risk management committee to ensure high-quality financial information is reported. Results from this study are important, since they constitute evidence on the disclosure quality among firms in a developing country in which compliance with accounting standards is not always rigidly enforced (Hope 2003).

Financial instruments expose firms to financial, economic and operational risks. To reduce or eliminate the risks, firms may use derivative instruments (Hassan 2004; Géczy, Minton and Schrand 1997). However, due to their nature, derivative financial instruments also may expose firms to risks. Barings Plc.; Proctor and Gamble; and Gibson Greetings are among corporations that suffered significant losses due to the inappropriate use of derivatives (Hassan 2004). Since then, financial reporting has witnessed an increase in disclosure risk information in the U.S. and the UK. This is because the failure to appreciate risk issues may have serious consequences (Fraser and Henry 2007).

Some firms may take a pro-active stance in protecting their investors by establishing effective internal controls and appropriate corporate governance. With good corporate governance practices, firms are expected to act in the interests of their shareholders. Internal audit functions and internal audit committees are becoming increasingly frequent in risk management (Fraser and Henry 2007). However, it is not clear whether these internal monitoring bodies are the optimal means of dealing with risk management issues (Fraser and Henry 2007). In Malaysia, the oversight of risk management and control activities is usually embedded within the internal audit functions. The internal audit function will subsequently report to audit committees about the firm's internal controls and risks. A survey indicates that only 58 percent of Malaysian firms have their own internal audit function (IIA Malaysia 2003).

In addition to audit committees, some firms establish RMCs. Similar to an audit committee, the RMC ensures that management is not too involved in high-risk activities and also ensures that firms provide high-quality financial instrument information in their annual reports. Generally, from an agency theory perspective, the purpose of the committee is to act on behalf of shareholders in assisting firms to understand and manage risk. The RMC also monitors the management involvement in high risk activities that would affect the firm's objectives, alerting management when such activities include an unacceptable degree of risk. However, compared to an audit committee, the establishment of a RMC within a firm shows a concerted effort to address risk issues. The RMC will be more proactive in planning a continuous process that identifies, measures, and manages risk in the firm. The focus of overall governance in a firm is now becoming broader, from legal and regulatory compliance to firm-wide business risk management (Power 2000; Yatim 2010). Therefore, this committee has the obligation to provide proper disclosure about the risk of financial instruments and derivative contracts to shareholders, to whom they are accountable. Disclosure about the risk of financial instruments and derivative is also a way to manage business risk. Without proper disclosure, the firms face non-disclosure risks that may lead to the initiations of formal litigation proceedings by investors.

Furthermore, the RMC is able to direct the identification, prioritization and management of risk, as well as support internal audit functions, of the audit committee (Fraser and Henry 2007). We expect the quality of financial instrument disclosure in firms with RMCs is higher than in firms without such committees. This is because the RMC oversees and controls various risks faced by the firm, hence the financial reporting quality is greatly enhanced (Yatim 2010). Research on RMC is scarce because, in most circumstances, the role of risk management falls under the jurisdiction of the audit committee. However, Yatim (2010) suggests that the establishment of a risk management committee in Malaysia is not only associated with strong board structure, the size of the firms and the complexity of a firm's operations, but also the use of one of the Big 4 audit firms which have been associated with high-quality disclosure. As RMCs have been reported to be associated with strong board structure (Yatim 2010), we believe the committee will influence managers to provide high-quality disclosure of financial instruments. Therefore, our first hypothesis is:

H_1: The quality of financial instrument information disclosed in the annual report is positively associated with the existence of a risk management committee (RMC) within the firm.

One characteristic that has been extensively related to disclosure policy is firm size. There are many reasons why large firms might disclose more information (Cooke 1991). Singhvi and Desai (1971) indicate that larger firms are expected to provide more transparent information, as they incur lower costs of accumulating detailed information, have more marketable securities and have a greater ease in obtaining financing. In addition, larger firms tend to provide greater transparency to reduce political costs (Cooke 1989). Cooke (1989; 1991); Firth (1979); Singhvi and Desai (1971); Wallace, Naser and Mora (1994); Wallace and Naser (1995); Ahmed and Nicholls (1994); Riahi-Belkaoui (2001); Ali, Ahmed and Henry (2003); Norkhairul Hafiz (2003); Chalmers and Godfrey (2004); Hassan et al. (2006-2007); and Lopes and Rodrigues (2007) provide evidence that firm size is positively associated with disclosure level or high disclosure quality. Therefore, we expect that large firms will disclose high-quality financial instrument information. This leads to our second hypothesis:

H_2: The quality of financial instrument information disclosed in the annual report is positively associated with size of the firm.

Prior studies also provide evidence that firm performance also affects disclosure quality. A profitable firm may provide more detailed information to communicate good news to investors in order to improve firm value (Ali et al. 2003) and boost management compensation (Wallace et al. 1994). However, while Ali et al. (2003) provides evidence of a positive relationship between profitability and compliance level, Wallace and Naser (1995) identify a negative relationship between these variables. However, more relevant to the current study, Hassan et al. (2006-2007) demonstrates that high-performance extractive firms provide more transparent, and thus higher-quality, derivative disclosure. Based upon the aforementioned studies, we expect high performance firms will provide a high-quality of financial instrument information. Therefore, our third hypothesis is:

H_3: The quality of financial instrument information disclosed in the annual report is positively associated with firm performance.

Auditors play an important role in determining the quality of information disclosed by their clients. According to Jensen and Meckling (1976) and Watts and Zimmerman (1983), a high-quality audit process will reduce agency conflict between the agents and the principals. Large auditing firms appear to be associated firms with substantial agency costs and high-quality reporting. DeAngelo (1981) and Fama and Jensen (1983) indicate that this is because large audit firms tend to have many clients and have an incentive to maintain their independence from clients. Therefore, such audit firms tend to report mis-statements, as well as non-compliance, regarding mandatory reporting requirements. Moreover, the reputations of large auditing firms are diminished when their clients provide low-quality annual reports (Ali et al. 2003; Chalmers and Godfrey 2004); when they commit fraud; or when they mislead stakeholders by asking auditing firms to certify their annual reports (Owusu-Ansah 1998). The best example on this point is the collapse of Arthur Anderson, Enron's auditing firm. Therefore, larger auditing firms tend to pressure their clients to provide high-quality information. However, empirical studies have shown inconclusive results regarding this relationship. Singhvi and Desai (1971); Ahmed and Nicholls (1994); Wallace and Naser (1995); and Lopes and Rodrigues (2007) found that size of auditing firms is positively associated with disclosure levels. However, no significant association is documented in Firth (1979); Malone at al. (1993); Wallace et al. (1994); Ali et al. (2003); and Hassan et al. (2006-2007). We believe that large auditing firms have the necessary expertise relating to financial instrument disclosure and therefore may require firms to provide high-quality disclosure of financial instrument information. Therefore, our fourth hypothesis is:

H_4: The quality of financial instrument information disclosed in the annual report is positively associated with the size of the auditing firm.

Methodology

Sample Selection

Our sample includes firms that were listed on the main board of Bursa Malaysia in 1999, 2000, 2002 and 2003. Concerns regarding the use of outdated data in this study are understandably valid. Nevertheless, the data is important and relevant to the context of the study. Irrespective of the period considered in this study, little has changed with respect to the requisite information for disclosure requirements mandated in MASB 24 *Financial Instruments: Disclosure and Presentation* and FRS 132 *Financial Instruments: Presentation and Disclosure*. Based upon our examination of both standards, we find that three major differences exist between these two standards. First, FRS 132 requires companies to disclose more information on hedges and risks involved, whereas MASB 24 requires firms to disclose hedging policies of major transactions. Second, FRS 132 mandates firms to disclose fair value and provide explanations as to why fair value cannot be reliably measured, while MASB 24 requires firms to disclose fair value of financial instruments if the value can be reliably estimated. Third, FRS 132 requires further disclosures in other specific areas, including information regarding derecognition; collateral; financial instruments with multiple embedded derivatives; impairment; and default breaches. In general, the information required for mandatory disclosures in the FRS 132 standard is included in the MASB 24 standard, with the exception of the fact that FRS 132 requires enhanced disclosures on this information.

Therefore, for the purpose of the present study, the outdated data used in this study does not jeopardize qualitative or quantitative results and conclusions drawn from said results. Financial data was gathered from Datastream. In instances where data was unavailable from Datastream, we referred to the annual reports of the respective firms. We selected the years of 1999 and 2000 to represent the period prior to the issuance of MASB 24, while the years of 2002 and 2003 represent the period after the issuance of MASB 24. There were 203 firms listed on the main board of Bursa Malaysia in 1999. Accordingly, the same companies are represented in the samples from 2000, 2002 and 2003. The sample was further reduced by excluding companies that 1) are not in Datastream's list and have no available annual report; 2) that have changed their financial reporting date; and 3) that have no available or incomplete data. Table 1 summarizes the sample selection procedure.

DISCLOSURE QUALITY

Financial statement users employ several techniques when evaluating accounting information. These techniques may include an assessment of information quality (Imhoff 1992). Prior studies have measured quality based upon corporate disclosure practices provided by the Financial Analysts Federation (FAF) and the Association for Investment Management and Research (AIMR). Studies have also used a self-constructed disclosure index developed based upon voluntary and/or mandatory disclosures.

In this study, we measure quality based upon an unweighted index that utilizes information required by the MASB 24. The index is classified based upon the seven categories of information required by the MASB 24 *Financial Instruments: Disclosure and Presentation*. The MASB is responsible for developing and promulgating approved standards. Once an MASB standard becomes an applicable accounting standard, firms are expected to comply with its requirements. For the purposes of this study, the MASB 24 is assumed to be a high-quality disclosure standard since it is based on the standard issued by the IASB, a set of internationally-accepted accounting standards. This assumption is reasonable because of the extensive nature of the MASB 24's disclosure requirements, which were designed to address the lack of guidance with regards to financial instrument (Hassan 2004). Appendix 1 presents the information required by the MASB 24, which in turn forms an index of disclosure for financial instruments.

We examine financial statements to develop our index. We group information into seven components, namely 1) the disclosure of risk management policies information; 2) terms, conditions and accounting policies information; 3) interest rate risk information; 4) credit risk information; 5) fair value information; 6) hedge of anticipated transactions; and 7) other disclosures. A score of 1 is assigned to the item of each component disclosed, otherwise 0 is assigned. Similar to Hassan et al. (2006-2007) and Lopes and Rodrigues (2007), we divide the component score by the number of items in that component so that each component score contributes equally to the total score (Cooke 1991). Then, we divide the total score for each firm by the possible score to represent disclosure quality. However, in a case where the information is not relevant, firms are not penalized for not disclosing information. Therefore the denominator for the disclosure index will be adjusted. Disclosure quality (DQ) is thus measured:

$$DQ = \frac{\text{A firm's actual disclosure score}}{\text{A firm's total possible disclosure score}}$$

INDEPENDENT VARIABLES

The existence of a RMC represents a corporate governance characteristic. This is relevant to the present study since this committee ensures that management is not too involved in high-risk activities and also seek to ensure that firms provide high-quality financial instrument information in their annual reports. This is because the monitoring mechanism will include a stringent risk management procedure (Yatim 2010). We measure RMC based on a dichotomous variable.

Firm size has been found to consistently relate to disclosure policy (example, Chalmers and Godfrey 2004; Hassan et al. 2006-2007; Lopes and Rodrigues 2007). Following prior studies, log transformation of total assets is used to measure size. Firm performance has also been identified as a factor impacting disclosure quality (e.g. Ali et al. 2003; Hassan et al. 2006-2007). Consistent with previous studies, we use profit before tax over total assets (PTA) and the price-earnings ratio (PE) to proxy for firm performance. The former measures current performance, while the latter provides a me asure of the market's perception of a firm's expected future performance. Similar to prior studies, the size of the auditor is a dummy variable that takes the value of 1 if the company is audited by a

TABLE 1. Summary of Sample Selection Procedure

Selection criteria	No of firm-year
Listed firms on the Main Board	812
- Firms that change financial reporting date	10
- Firms that are not in the Datastream and for which annual reports are not available	85
- Firms with data not available or for which data are incomplete	233
Total number of firm-year used in study	484

Note: There were 203 firms listed on the main board of Bursa Malaysia in 1999. Accordingly, the same company is represented in the sample in 2000, 2002 and 2003. Therefore the total sample for this study is 812 firm-year.

Big 4 auditor (Pricewaterhouse-Coopers, Deloitte Touche Tohmatsu, Ernst and Young and KPMG); 0 if otherwise. We also include two additional variables to our regression analysis: a dichotomous variable that represents the effect of the disclosure practice before and after the MASB 24 (YRafter); and the debt-to-total-assets ratio (DTA) to represent leverage. We include DTA as a control variable, since prior studies (Ahmed and Courtis 1979; Malone et al. 1993; Hassan et al. 2006-2007) have indicated that firms with high leverage tend to disclose greater financial information.

We examine the association between the quality of financial instrument disclosure and firm characteristics using the model specified in Equation 1:

$$DQ = \alpha_0 + \alpha_1 Size + \alpha_3 PTA + \alpha_4 PE + \alpha_5 DTA + \alpha_6 Audit + \alpha_7 RMC + \alpha_8 YRafter + \varepsilon \quad (1)$$

Where

Size = log of total assets
PTA = Profit before tax over total assets
PE = Price earnings ratio
DTA = Debt to total assets ratio
Audit = Dichotomous variable 1 for firm that audited by Big 4, 0 if otherwise
RMC = Dichotomous variable 1 for firm with RMC, 0 if otherwise
YRafter = Dichotomous variable (1 to represent year after 2001, 0 if otherwise)
ε = Error term

RESULTS

DESCRIPTIVE RESULTS

Disclosure Quality Table 2 presents the average disclosure quality results for the period under study. On average, the disclosure quality of financial instrument information is low. Column 6 of Table 2 indicates that the level of quality in disclosure (hereinafter called the level of disclosure) is 33.49%. However, the level of disclosure increased from 25.67% in 1999 to 58.88% in 2003. This indicates that the level of disclosure among Malaysian firms was low before the standard become mandatory. Table 2 also indicates that, on average, there is a steady increase in the level of disclosure for each component of information required by the MASB 24 after the standard became mandatory.

Comparing each component, the results reveal that Malaysian firms tend to disclose more information regarding terms, conditions and accounting policies; and interest rate risk. On average, the level of disclosure for each component is 91.17% and 87.09%, respectively. The level of disclosure for information pertaining to terms, conditions and accounting policies increased from 84.30% (in 1999) to 98.55% (in 2003). This item's score is higher than the other items required by the MASB 24 and is followed closely by interest rate risk information, which increased from 73.97% (in 1999) to 97.93% (in 2003). Comparatively, the level of disclosure for each item increased dramatically in 2003 above DQ, with the exception of credit risk information (42.6%); hedge of anticipated transaction information (15.21%); and other disclosures information (25.62%). The relatively lower level of documented hedge of anticipated transaction information may be due to the fact that the number of Malaysian firms that actively hedge their anticipated transactions is low or non-existent because Malaysian firms are not ready to take risks in such activities. While the level of disclosure for other information steadily increased from 1999 to 2003, our study indicates that the level of fair value information decreased from 16.40% (in 1999) to 16.34% (in 2000). However, it dramatically increased from 50.72% (in 2002) to 68.24% (in 2003).

Descriptive Statistics. Table 3 presents the descriptive statistics for the dependent and independent variables. Table 3 indicates that the level of quality of financial instrument disclosure among Malaysian firms is 33.49%. However, the highest score of disclosure is 97.14% and the minimum is 3.57%. This indicates that Malaysian firms are generally not ready to provide high-quality financial instrument information. Therefore, regulators have to actively play their role to educate managers on how to comply with the standards' requirements to increase confidence among stakeholders, especially the investors and market participants.

TABLE 2. Mean Disclosure Components

	1999	2000	2002	2003	Pooled
Sample	121	121	121	121	484
Disclosure Quality of Financial Instruments	0.2567	0.2925	0.4840	0.5888	0.3349
Disclosure of Risk Management Policies Information	0.0289	0.0455	0.5372	0.6405	0.3110
Terms, Conditions and Accounting Policies Information	0.8430	0.9008	0.9174	0.9855	0.9117
Interest Rate Risk Information	0.7397	0.8512	0.9132	0.9793	0.8709
Credit Risk Information	0.0000	0.0289	0.2975	0.4256	0.1880
Fair Value Information	0.1640	0.1634	0.5072	0.6824	0.3793
Hedge of Anticipated Transaction	0.0198	0.0281	0.1339	0.1521	0.0835
Other disclosures	0.0017	0.0298	0.0793	0.2562	0.0917

Correlation Matrix. Table 4 reports the Pearson correlation matrix for dependent and independent variables. Table 4 indicates that DQ, size, PTA, PE, DTA and RMC are correlated with at least one other variable. Nevertheless, the highest coefficient recorded is 0.526 between RMC and YRafter. This suggests that multi-collinearity is unlikely to be a major problem. This is followed by the correlation coefficient for DQ and YRafter (0.343).

MULTIPLE REGRESSION RESULTS

Table 5 presents the results for the regression analysis of the association between disclosure quality and firm characteristics. Unless otherwise indicated, the regression results are based on White's (1980) Heterocedasticity-Corrected Standard Errors due to the presence of heterocedasticity. Our study indicates that firm RMC, firm size and DTA are significantly related to financial

TABLE 3. Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std Deviation
DQ	0.3349	0.2857	0.9714	0.0357	0.1760
Size	20.4722	20.3641	24.3034	17.6478	1.1724
PTA	0.0590	0.0417	4.4149	-1.0918	0.2327
PE	26.1406	8.1804	3500.000	-865.2174	209.1645
DTA	0.3881	0.3547	4.1225	0.0009	0.2990
RMC	0.2231	0.0000	1.0000	0.0000	0.4168
Audit	0.7438	1.0000	1.0000	0.0000	0.4370
YRafter	0.5000	0.5000	1.0000	0.0000	0.5005

Where:
DQ = Disclosure quality
Size = log of total assets
PTA = Profit before tax over total assets
PE = Price earnings ratio
DTA = Debt to total assets ratio
Audit = Dichotomous variable 1 for firm that audited by Big 4, 0 if otherwise
RMC = Dichotomous variable 1 for firm with RMC, 0 if otherwise
YRafter = Dichotomous variable (1 to represent year after 2001, 0 if otherwise)

TABLE 4. Pearson Correlation Matrix

	DQ	*Size*	*PTA*	*PE*	*DTA*	*RMC*	*Audit*	*YRafter*
DQ	1.000							
Size	0.191**	1.000						
PTA	0.034	0.002	1.000					
PE	-0.016	-0.030	-0.013	1.000				
DTA	0.159**	0.041	-0.017	-0.001	1.000			
RMC	0.308**	0.101*	0.013	0.026	-0.064	1.000		
Audit	-0.001	-0.070	-0.056	-0.016	-0.030	0.008	1.000	
YRafter	0.343**	0.040	-0.050	0.014	-0.130**	0.526**	-0.076	1.000

**. Correlation is significant at the 0.01 level (two-tailed)
*. Correlation is significant at the 0.05 level (two-tailed)

Where:
DQ = Disclosure quality
Size = log of total assets
PTA = Profit before tax over total assets
PE = Price earnings ratio
DTA = Debt to total assets ratio
Audit = Dichotomous variable 1 for firm that audited by Big 4, 0 if otherwise
RMC = Dichotomous variable 1 for firm with RMC, 0 if otherwise
YRafter = Dichotomous variable (1 to represent year after 2001, 0 if otherwise)

instrument information disclosure quality, with $p < 0.001$. The significance of RMC indicates that our study supports H_1. This result indicates that the RMC plays an important role in ensuring that management and/or firms provide high-quality financial instrument information in their annual reports. Hence, indicating that the existence of a RMC as a monitoring body of a firm's risk strengthens the good governance of the firm. Therefore, this study supports the establishment of RMC to improve the effectiveness of firm systems operation (Fraser and Henry 2007).

Table 5 also indicates that firm size is positively related to disclosure quality and is highly significant at $p < 0.001$, thus confirming H_2. This indicates that large firms tend to disclose more financial instrument information as compared to small firms. This is consistent with prior studies by Wallace and Naser (1995); Riahi-Belkaoui (2001); and Ali et al. (2003), as well as more recent studies by Hassan et al. (2006-2007) and Lopes and Rodrigues (2007). As discussed in the context of agency theory, this may due to the tendency of large firms to incur lower information processing costs, as well as higher political costs, thereby encouraging them to disclose greater information. Additionally, our study also indicates that firms with high DTA tend to disclose high-quality financial instrument information. This is consistent with Ahmed and Courtis (1999), Malone et al. (1993) and Hassan et al. (2006-2007), it also appears that H_3 and H_4 are not supported.

Time may play an important role in influencing disclosure behavior. Therefore, we have extended the above results by including a dummy variable for year to represent the year after and the year before the MASB 24 became mandatory. We include YR after in the above estimation; note that 1 represents years 2002 and 2003 (i.e., after the MASB 24 become mandatory); otherwise it is 0. We predict that the disclosure quality of financial instrument information is influenced by the time at which the accounting standard was issued. Table 6 presents the results for Equation 1. Our study indicates that the disclosure quality of financial instrument information is significantly related to period after the MASB 24 was issued. This result indicates that firms tended to disclose high-quality financial instrument information after the standard became mandatory. Table 6 also presents results similar to Table 5, as size and DTA are positively related to disclosure quality at $p < 0.001$. Nevertheless, RMC is consistently positively related to disclosure quality at $p < 0.05$.

SENSITIVITY ANALYSIS

Ranked Regression. We have taken several steps to ensure that all assumptions are met. Nevertheless, our residuals for regression results presented in Tables 5 and 6 are not normal, despite some transformations to the non-normal variables. However, we believe that the results are acceptable, since kurtosis and skewness are almost equal to 3 and 0 respectively. However, as conducted in prior studies, we also perform non-parametric estimations on our sample. We repeat the regression analysis utilizing the ranked regression procedure used by Lang and Lundholm (1993); Wallace et al. (1994); Owusu-Ansah (1998); Ali et al. (2003); and Hassan et al. (2006-2007). Similar to the above studies, we replaced the continuous variables (size, PTA, PE and DTA) with their rank. Results for this analysis are presented in Tables 7 and 8. Tables 7 and 8 indicate that the ranked regression results are consistent with the results presented in Tables 5 and 6.

TABLE 5. Results of Regression Analysis of the Association between Disclosure Quality and Firm Characteristics (n=484)

	Coefficient	Std. Error	t-Statistic	Prob
Constant	-0.2113	0.1363	-1.5499	0.1218
Size	0.0231	0.0067	3.4698	0.0006**
PTA	0.0247	0.0228	1.0823	0.2797
PE	-1.52E-05	3.59E-05	-0.4244	0.6714
DTA	0.1017	0.0274	3.7111	0.0002**
RMC	0.1284	0.0222	5.7761	0.0000**
Audit	0.0057	0.0162	0.3547	0.7230

R^2 0.1519 Adjusted R^2 0.1412 Durbin-Watson stat 0.7377 F-statistic 14.2374 Prob(F-statistic) 0.0000

** indicates significance at $p < 0.001$. The t-statistics are based on White Heteroscedasticity Standard Errors.

Where:

Size = log of total assets
PTA = Profit before tax over total assets
PE = Price earnings ratio
DTA = Debt to total assets ratio
Audit = Dichotomous variable 1 for firm that audited by Big 4, 0 if otherwise
RMC = Dichotomous variable 1 for firm with RMC, 0 if otherwise
YRafter = Dichotomous variable (1 to represent year after 2001, 0 if otherwise)

Conclusion

In this study, we examine the role of the RMC on the disclosure quality of financial instrument information among Malaysian firms listed in Bursa Malaysia. Our study indicates that the score of disclosure quality among Malaysian firms is still low (33.5%). Comparing the two periods (voluntary and mandatory), the disclosure quality of financial instrument information is less than 30% in practice during the voluntary regime, which is well understood. However, the disclosure level appears to be increasing during the mandatory period (48.4% and 58.9%). The findings indicate that effective enforcement

TABLE 6. Results of Regression Analysis of the Association between Disclosure Quality and Firm Characteristics (n=484)

	Coefficient	Std. Error	t-Statistic	Prob
Constant	-0.2756	0.1347	-2.0453	0.0414
Size	0.0237	0.0065	3.6267	0.0003**
PTA	0.0385	0.0242	1.5921	0.1120
PE	-1.46E-05	3.14E-05	-0.4652	0.6420
DTA	0.1187	0.0274	4.3271	0.0000**
RMC	0.0648	0.0267	2.4245	0.0157*
Audit	0.0159	0.0161	0.9840	0.3256
YRafter	0.1012	0.0178	5.6924	0.0000**

R^2 0.2101 Adjusted R^2 0.1985 Durbin-Watson stat 0.7170 F-statistic 18.0892 Prob(F-statistic) 0.0000

** and * indicate significance at $p < 0.001$ and $p < 0.05$, respectively.

Where:
Size = log of total assets
PTA = Profit before tax over total assets
PE = Price earnings ratio
DTA = Debt to total assets ratio
Audit = Dichotomous variable 1 for firm that audited by Big 4, 0 if otherwise
RMC = Dichotomous variable 1 for firm with RMC, 0 if otherwise
YRafter = Dichotomous variable (1 to represent year after 2001, 0 if otherwise)

TABLE 7. Results of Regression Analysis of the Association between Disclosure Quality and Firm Characteristics: Ranked Transformation (n=484)

	Coefficient	Std. Error	t-Statistic	Prob
Constant	-0.1077	0.0769	-1.3998	0.1622
NSize	0.1748	0.0442	3.9577	0.0001**
NPTA	0.0352	0.0465	0.7563	0.4498
NPE	0.0160	0.0412	0.3883	0.6980
NDTA	0.2116	0.0400	5.2840	0.0000**
RMC	0.5071	0.1193	4.2510	0.0000**
Audit	-0.0072	0.0914	-0.0788	0.9373

R^2 0.1312 Adjusted R^2 0.1203 Durbin-Watson stat 1.0199 F-statistic 12.0046 Prob(F-statistic) 0. 0000

** indicates significance at $p < 0.001$.

Where:
NSize = Ranked size
NPTA = Ranked Profit before tax over total assets
NPE = Ranked Price earnings ratio
NDTA = Ranked Debt to total assets ratio
Audit = Dichotomous variable 1 for firm that audited by Big 4, 0 if otherwise
RMC = Dichotomous variable 1 for firm with RMC, 0 if otherwise

TABLE 8. Results of Regression Analysis of the Association between Disclosure Quality and Firm Characteristics: Ranked Transformation (n=484)

	Coefficient	Std. Error	t-Statistic	Prob
Constant	-0.2743	0.0832	-3.2966	0.0011
NSize	0.1753	0.0438	4.0053	0.0001**
NPTA	0.0456	0.0453	1.0071	0.3144
NPE	0.0170	0.0409	0.4143	0.6788
NDTA	0.2447	0.0402	6.0900	0.0000**
RMC	0.2668	0.1426	1.8702	0.0621#
Audit	0.0309	0.0925	0.3341	0.7384
YRafter	0.3839	0.1033	3.7168	0.0002**

R^2 0.1567 Adjusted R^2 0.1443 Durbin-Watson stat 1.0367 F-statistic 12.6402 Prob(F-statistic) 0.0000

** and # indicate significance at $p < 0.001$ and $p < 0.10$, respectively.

Where:
NSize = Ranked size
NPTA = Ranked Profit before tax over total assets
NPE = Ranked Price earnings ratio
NDTA = Ranked Debt to total assets ratio
Audit = Dichotomous variable 1 for firm that audited by Big 4, 0 if otherwise
RMC = Dichotomous variable 1 for firm with RMC, 0 if otherwise
YRafter = Dichotomous variable (1 to represent year after 2001, 0 if otherwise)

mechanisms are important to ensure high-quality reporting, especially in developing countries such as Malaysia. Among the types of information required by the standard, hedge of anticipated transaction information possesses the lowest disclosure quality, while terms, conditions and accounting information policies information possess the highest disclosure quality. Our regression analyses indicate that RMC, leverage, size and the implementation of financial instrument disclosure standards are significantly related to disclosure quality. These results are consistent with prior studies. One of the significant contributions of our study pertains to the existence of the RMC as a corporate governance mechanism that plays a significant role in ensuring high disclosure quality.

One implication of this study is to suggest the establishment of a RMC within Malaysian firms that would act on behalf of shareholders in managing and disclosing risk exposure relating to financial instruments. This is important, since a study by Yatim (2010) indicates that the establishment of RMC is associated with strong board structures. Furthermore, the establishment of this committee indicates the commitment of the board of directors to improve internal control and to provide high-quality information. As for regulators, such as Malaysian Institute of Corporate Governance (MICG), Security Commission and Bursa Malaysia, this findings can be used to justify for the requirement for firms to establish the RMC. However, more research on the composition of such a committee, member roles, and the specific procedures or processes that would enhance risk management are still needed.

While the study contributes to corporate governance literature, we acknowledge several limitations inherent in this study. First, the focus of this study is on disclosure practices during the voluntary and early mandatory periods. Therefore, this limits our sample years (1999, 2000, 2002 and 2003) and the relevant accounting standard. Second, our study could be biased since we do not categorize firms that incorporate the role of RMC into internal audit functions as firm that possess established RMCs. Future research might extend this study to a more recent year and also incorporate an updated accounting standard. In addition, future research might also consider firms that incorporate the role of RMCs in the internal audit function as firms that possess established RMCs.

REFERENCES

Ahmed, K. & Courtis, J.K. 1999. Associations between corporate characteristics and disclosure levels in annual reports: a meta-analysis. *British Accounting Review* 31(1): 35-61.

Ahmed, K. & Nicholls, D. 1994. The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: the case of Bangladesh. *The International Journal of Accounting* 29(1): 62-77.

Ali, M.J., Ahmed, K. & Henry, D. 2003. Disclosure compliance with international accounting standards by listed companies in South Asia. Paper Presented at the 2003 AFAANZ Conference, Brisbane, Australia.

Ball, R., Robin, A. & Wu, J.S. 2003. Incentives versus standards: properties of accounting income in four East Asian countries. *Journal of Accounting and Economics* 36(1-3): 235-270.

Ball, R., Kothari, S.P. & Robin, A. 2000. The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics* 29(1): 1-51.

Barkhausen, H.A. 2010. Derivatives in bankruptcy: Some lessons from Lehman Brothers, *Journal of Structured Finance* 15(4): 7-10.

Bradshaw, M.T., Richardson, S.A. & Sloan, R.G. 1999. Earnings quality and financial reporting credibility: an empirical investigation. Working Paper, University of Michigan.

Carlin, T.M., Finch, N. & Laili, N.H. 2009. Investigating audit quality among Big 4 Malaysian firms. *Asian Review of Accounting* 17(2): 96-114.

Chalmers, K. & Godfrey, J.M. 2004. Reputation costs: The impetus of voluntary derivative financial instrument reporting. *Accounting, Organizations and Society* 29(2): 95-125.

Chalmers, K. 2001. The progression from voluntary to mandatory derivative instrument disclosures – look who's talking. *Australian Accounting Review* 11(1): 34-45.

Chalmers, K. & Godfrey, J.M. 2000. Practice versus prescription in the disclosure and recognition of derivatives. *Australian Accounting Review* 11(2): 40-50.

Chen, C.J.P. & Jaggi, B. 2000. Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public Policy* 19: 285-310.

Cooke, T.E. 1992. The impact of size, stock market listings and industry type on disclosure in the annual reports of Japanese listed corporations. *Accounting and Business Research* 22 (87): 229-237.

Cooke, T.E. 1991. An assessment of voluntary disclosure in the annual reports of Japanese corporations. *The International Journal of Accounting* 26(3): 174-189.

Cooke, T.E. 1989. Disclosure in the corporate annual reports of Swedish companies. *Accounting and Business Research* 19(74): 113-124.

DeAngelo, L.E. 1981. Auditor size and auditor quality. *Journal of Accounting and Economics* 3(3): 183-199.

Dodd, R. 2009. Exotic derivatives losses in emerging markets: Questions of suitability, concerns for stability. *IMF Working Paper*, WP/09/.

Fama, E.F. & Jensen, M.C. 1983. Separation of Ownership and Control. *Journal of Law & Economics* 26: 301-326

Firth, M. 1979. The impact of size, stock market listing and auditors on voluntary disclosure in corporate annual reports. *Accounting and Business Research* 9(Autumn): 273-280.

Fraser, I. & Henry, W. 2007. Embedding risk management: structures and approaches. *Managerial Auditing Journal* 22(4): 392-409.

Géczy, C., Minton, B.A. & Schrand, C. 1997. Why firms use currency derivatives. *The Journal of Finance* 52(4): 1323-1354.

Hassan, M.S. 2004. The Information Quality of Derivative Disclosures in Corporate Annual Reports of Australian Firms in the Extractive Industries. Unpublished PhD Dissertation, Queensland University of Technology.

Hassan, M.S., Percy, M. & Stewart, J. 2006. The Value Relevance of Fair Value Disclosures in Australian Firms in the Extractive Industries. *Asian Academy of Management Journal of Accounting and Finance* 2(1): 41-61.

Hassan, M.S., Percy, M. & Goodwin-Stewart, J. 2006-2007. The Transparency of Derivative Disclosures by Australian Firms in the Extractive Industries, *Corporate Ownership and Control* 4(2): 257-270.

Heflin, F., Shaw, K.W. & Wild, J.J. 2001. Disclosure quality and market liquidity. Working Paper. Purdue University.

Hope, O.K. 2003. Disclosure practices, enforcement of accounting standards, and analysts' forecast accuracy: an international study. *Journal of Accounting Research* 41(2): 235-272.

Imhoff, E.A. Jr. 1992. The relation between perceived accounting quality and economic characteristics of the firm. *Journal of Accounting and Public Policy* 11(2): 97-118.

IIA Malaysia. 2003. 2002 survey on IAF of public listed companies in Malaysia. Kuala Lumpur: The Institute of Internal Auditors Malaysia.

Jensen, M.C. & Meckling, W.H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3(4): 305-360.

Karamanou, I. & Vafeas, N. 2005. The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. *Journal of Accounting Research* 43: 453-486.

Kothari, S.P. 2000. The role of financial reporting in reducing financial risks in the market. Federal Reserve Bank of Boston Conference Series, June (Series 44), 89-102.

Lang, M., Raedy, J.S. & Yetman, M.H. 2003. How representative are cross-listed in the United States? An analysis of accounting quality. *Journal of Accounting Research* 41(2): 363-386.

Lang, M. & Lundholm, R. 1993. Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research* 31(2): 246-271.

Lopes, P.T. & Rodrigues, L.L. 2007 Accounting for financial instruments: An analysis of the determinants of disclosure in the Portuguese stock exchange. *The International Journal of Accounting* 42: 25-56.

MASB 24 Financial Instruments: Disclosure and Presentation, Malaysian Accounting Standard Board.

Malone, D., Fries, C. & Jones, T. 1993. An empirical investigation of the extent of corporate financial disclosure in the oil and gas industry. *Journal of Accounting, Auditing and Finance* 8(3): 249-273.

Marsden, A. & Prevost, A.K. 2005. Derivative use, corporate governance, and legislative change: An empirical analysis of New Zealand listed companies. *Journal of Business Finance & Accounting* 32(1) & (2): 255-295.

Norkhairul Hafiz, B. 2003. Tahap Pendedahan Sukarela: Kajian ke atas Pendedahan Instrumen Kewangan Derivatif, Saiz Syarikat dan Tahap Aktiviti Luar Negara (Voluntary Disclosures Level: A Study on Disclosure of Derivatives Financial Instruments, Company Size and Foreign Activity Level). Unpublished Master of Accounting Dissertation, Universiti Kebangsaan Malaysia

Owusu-Ansah, S. 1998. The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe. *The International Journal of Accounting* 14 (3): 347-370.

Philips, M. 2008. The monster that ate Wall Street: How credit default swap – an insurance against bad loans – turned from a smart bet to a killer. *Newsweek*, 6 October.

Power, M. 2000. The audit society – second thoughts. *International Journal of Auditing* 4(1): 111-119.

Pownall, G. & Schipper K. 1999. Implications of accounting research for the SEC's consideration of International Accounting Standards for U.S. securities offerings. *Accounting Horizons* 13(3): 259-280.

Rasch, R.H. & Wilson, A.C. 1998. Comprehensive accounting for derivatives and hedging activities. *The Ohio CPA Journal* 57(3): 34-36.

Riahi-Belkaouhi, A. 2001. Level of multinationality, growth opportunities, and size as determinants of analysts ratings of corporate disclosures. *American Business Review* 19(2): 115-120.

Scot, W.R. 1997. *Financial Accounting Theory*. New Jersey: Prentice Hall.

Singhvi, S.S. & Desai, H.B. 1971. An empirical analysis of the quality of corporate financial disclosure. *The Accounting Review* 46(1): 129-138.

Skinner, D.J. 1996. Are Disclosures about Bank Derivatives and Employee Stock Options Value-Relevant? *Journal of Accounting and Economics* 22: 393-404.

Wallace, R.S.O. & Naser, K. 1995. Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the Stock Exchange of Hong Kong. *Journal of Accounting and Public Policy* 14: 311-368.

Wallace, R.S.O., Naser, K. & Mora, A. 1994. The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain. *Accounting and Business Research* 25(7): 41-53.

Watts, R.L. & Zimmerman, J.L. 1983. Agency problem, auditing and the theory of the firm: Some evidence. *Journal of Law and Economics* 26b(3): 613-633.

White, H. 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* 48(4): 817-838.

Yatim, P. 2010. Board structures and the establishment of a risk management committee by Malaysian listed firms. *Journal of Management Governance* 14(1): 17-36.

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APPENDIX 1

Components of financial instruments disclosure index

	Reference	Score
Disclosure of Risk Management Policies Information		
❑ Firm's financial risk management objective & policies	Para 49 & 50	1
❑ Objectives for holding or issuing derivative financial instruments		
❑ Policy for hedging each major type of forecasted transaction	Para 49 & 50	1
Component score		**2**
Terms, Conditions and Accounting Policies Information		
❑ a) Extent and nature of the underlying financial instruments, b) Significant terms and conditions that may affect the amount, timing and certainty of future cash flows.	Para 55(a)	2*
❑ a) Accounting policies and method adopted, b) Criteria for recognition and basis of measurement applied	Para 55(b)	2*
Component score		**4**
Interest Rate Risk Information		
❑ Contractual repricing or maturity dates for interest rate risk	Para 64 (a)	1
❑ Effective interest rates	Para 64 (b)	1
Component score		**2**
Credit Risk Information		
❑ The amount that best represents financial asset maximum credit risk exposure	Para 74 (a)	1
❑ Significant concentrations of credit risks for each class of financial assets	Para 74(b)	1
Component score		**2**
Fair Value Information		
❑ Fair value information for each class of financial asset and financial liability (recognized and unrecognized).	Para 86	1
❑ When it is not practicable to determine the fair value (within the constraint of time at cost), a) the fact should be disclosed with b) information about principal characteristics of the underlying financial instrument that are pertinent to its fair value	Para 86	2*
❑ a) Method adopted and b) any significant assumptions made in determining fair value.	Para 88	2*
Financial Assets carried at an amount in excess of fair value		
❑ The carrying amount and the fair value of either the individual asset or appropriate groupings of those individual assets.	Para 97 (a)	1
❑ a) The reasons for not reducing the carrying amount, b) the nature of the evidence that provides the basis for management's belief that the carrying amount will be recovered.	Para 97 (b)	2*
Component score		**8**
Hedge of Anticipated Transaction		
❑ a) A description of the anticipated transaction, b) the period of time until they are expected to occur.	Para 100 (a)	2*
❑ A description of the hedging instruments.	Para 100 (b)	1
❑ a) Amount of any deferred or unrecognized gain or loss, b) the expected timing of recognition as income or expense.	Para 100 (c)	2*
Component score		**5**
Other disclosures		
❑ The total amount of change in the fair value of FA and FL that has been recognized as income or expense during the period under consideration.	Para 103 (a)	1
❑ The total amount of deferred or unrecognized gain or loss in hedging instruments other than those relating to hedges of anticipated future transactions.	Para 103 (b)	1
❑ a) The average aggregate carrying amount during the year of recognized FA and FL, b) the average aggregate principal, stated, notional or other similar amount during the year of unrecognized FA and FL, c) the average aggregate fair value during the year for all FA and FL, particularly when the amounts on hand according to the balance sheet date are unrepresentative of amounts on hand during the year.	Para 103 (c)	3*
Component score		**5**

* A score of one is allocated for each item disclosed in the financial statements.