The Value Relevance of Financial Instruments Disclosure in Malaysian Firms Listed in the Main Board of Bursa Malaysia

MOHAMAT SABRI HASSAN\textsuperscript{a} AND NORMAN MOHD-SALEH\textsuperscript{b}

\textsuperscript{a,b}Universiti Kebangsaan Malaysia

ABSTRACT

This paper investigates the value relevance of financial instruments disclosure in Malaysia based on MASB24 (Financial Instruments: Disclosure and Presentation) standard. Unlike most of the Western countries, the only standard available for firms in Malaysia related to financial instruments is MASB24. Therefore, in the absence of a standard on the measurement of financial instruments, it is important to know whether the disclosure of such risky activities is useful to the investors or the market. Hence, this study examines the association between i) disclosure quality of financial instruments information and ii) fair value information and the market price of firms. Disclosure quality is measured based on disclosure index developed according to the MASB24 disclosure requirements. Results indicate that disclosure quality of financial instruments information is value relevant. However, the relationship is less positive in the period after the MASB24 become mandatory. Further evidence suggests the less positive relationship is not caused by bad news but is caused by the disclosure quality of risks. Consistent with prior studies, this study also provides evidence that fair value information is value relevant. This indicates that investors value the fair value information and high disclosure quality as important factors in investment decision. These findings imply the adoption of FRS 139 Financial Instruments: Recognition and Measurement in Malaysia is justified.

Keyword: Value relevance, MASB 24, financial instruments disclosure, Malaysia

\* Corresponding author: Email: sabri1@ukm.my

Any remaining errors or omissions rest solely with the author(s) of this paper.
INTRODUCTION

Financial instruments and derivatives are recent developments in finance that trigger accounting standard setters to develop new accounting standards in order to report off-balance-sheet exposures. The importance of disclosure on the financial instruments risk exposures has gained much attention particularly after the 1997 South East Asian currency crisis and the well publicised corporate derivative disasters (McCarthy, 2000). The focus of this study is to examine the importance of financial instruments disclosure items to the market players.

Following this development internationally, Malaysian firms are required to comply with MASB 24 Financial Instruments: Disclosure and Presentation which is adopted from the IAS 32 Financial Instruments: Disclosure and Presentation from year 2001 onwards. Subsequently, when Malaysia adopted the International Financial Reporting Standards (IFRS), FRS 132 Financial Instruments: Disclosure and Presentation was made mandatory in 2006. However, the Malaysian Accounting Standards Board (MASB) has decided to postpone the adoption of FRS 139 Financial Instruments: Recognition and Measurement. Therefore, currently, firms in Malaysia (other than financial institutions) are not subjected to the FRS139. The reason behind this is that firms are not ready to change from historical cost accounting to fair value accounting as required by the FRS. Further, there are still discussion and development on this issue at the international arena. Hence, the only standard available to Malaysian firms related to financial instruments is on its disclosure and presentation.

In summary, with respect to financial instruments and derivatives accounting requirements, Malaysia moves in 3 stages i.e. stage (1) when there is no guideline from a standard (prior to year 2001), stage (2) when requirements on disclosure are provided by MASB 24 standard (year 2001-2005) and marginally improved by FRS 132 standard (year 2006-2009), and finally stage (3) when a standard on the recognition and measurement of financial instruments (FRS 139) is expected to be adopted (year 2010 onwards). This study covers the first two stages as the data for the third stage is still unavailable.

In this paper, we investigate the value relevance of financial instrument disclosure before and after the implementation of MASB 24 standard. This is the first study that investigates value relevance of financial instrument disclosure in the context where fair value recognition is not mandatory. This scenario in Malaysia provides a unique setting where investors have to rely on fair value disclosures to

---

1 MASB 24 Financial Instruments: Disclosure and Presentation was issued in 2001 and developed based on ED 24 Financial Instruments: Disclosure and Presentation. To address the perceived shortfalls associated with accounting for financial instruments, especially derivatives, the standard prescribes certain requirements for presentation of on balance sheet financial instruments and identifies the information that should be disclosed on the balance sheet and off-balance sheet.
make decision i.e. in the absence of a standard on the recognition and measurement of financial instrument. While there are many studies examined the value relevance of fair value, financial and derivatives instruments in Western countries (such as Barth, 1994; Barth, Beaver and Landsman, 1996; Eccher, Ramesh and Thiagarajan, 1996; and Venkatachalam, 1996; Ahmed, Kilic and Lobo, 2006) limited studies have been documented in Malaysia particularly with respect to financial instruments. Results from this study may provide useful information for both Malaysian and international standards setters on this issue.

Many of prior studies are based on samples from the banking industries in the United States of America (US). Therefore their findings may not represent other industries and jurisdictions especially for developing countries which are only recently exposed to derivatives. Furthermore, the standard on financial instruments disclosure applicable to Malaysian firms is more general i.e. based on principles instead of specific rules. As such, the amount of discretion used by managers in Malaysia is more than their counterparts in the US. This discretionary nature of disclosure is subject to various incentives. Incentives such as good reputation to managers or companies (Chalmers and Godfrey, 2004) will lead firms to disclose more information, especially with regard to financial instruments which has limited guideline in Malaysia. Therefore, it is necessary to investigate the value relevance of financial instruments disclosure in Malaysian large firms to indicate the significance of high financial instruments disclosure quality in decision making.

The purpose of this study is to determine whether financial instruments disclosures have an association with market value of Malaysian firms listed on the Main Board of Bursa Malaysia. This study also investigates the effect of MASB 24 disclosure requirements on the value relevance of financial instruments disclosures. Results from this study should be useful to the MASB, Bursa Malaysia, Securities Commission and other regulators to justify the adoption of FRS139. This is because some of the requirements in the MASB 24 are similar to the FRS139, particularly with respect to fair value of financial instruments. The significance of fair value information will indicate the importance of the information in investment decision. Therefore measuring financial instruments at fair value can help investors make better decision.

The following section discusses the literature review and the hypotheses development. We then discuss the methodology adopted in this study, the empirical analysis and results of the study. Finally we conclude the paper and provide some avenue for future research.

---

2 Until now, there are requests to postpone the adoption until issues related to measurement and recognition are resolved.
Disclosure Quality and Share Price

According to Pownall and Schipper (1999) financial statements are regarded as being of high quality if they possess three attributes; namely transparency, full disclosure and comparability. They define transparent financial statements are statements that “reveal the events, transactions, judgments, and estimates underlying the statements, and their implications”. Transparency allows users to see the results and implications of the decisions, judgments and estimates of the preparers. Full disclosure relates to the provision of all information necessary for decision-making, thereby providing reasonable assurance that investors are not misled. Finally, the financial statements are comparable if similar transactions and events are accounted for in the same manner, both cross-sectionally among firms and over time for a given firm.

Most literature on disclosure quality uses either a disclosure index or disclosure ratings produced by the Financial Analysts Federation (FAF), the Association for Investment Management Research (AIMR) and the Center for International Financial Analysis and Research (CIFAR) to measure disclosure quality. While these views of quality focus on the financial statements as a whole, the definition of Pownall and Schipper (1999) can be readily adapted to individual disclosures within the financial statements, such as disclosure of financial instruments information. For this reason, their interpretation of quality is used in this study. That is, this study defines financial information as being of high quality when it possesses the attributes of transparency, full disclosure and comparability. Therefore, this study assumes high quality disclosure is achieved by disclosing all information required by MASB 24.

Limited studies have examined the association between high quality information and share prices. Lang, Ready and Yetman (2003), Eccher and Healy (2000) and Gelb and Zarowin (2002) are among the researchers who investigate the association between accounting quality and share prices. Lang et al. (2003) provide evidence that cross-listed firms, compared to non-cross-listed firms, have higher accounting quality as their accounting data are more highly associated with price.

The relationship between accounting quality and share price also holds in different market and culture. Eccher and Healy (2000) investigate the usefulness of IAS standards in the People’s Republic of China. Quality information is measured as the usefulness of accounting information based on the relevance of earnings and accruals for predicting future cash flows, and the relation of earnings and accruals to contemporaneous stock price changes. The research question is motivated by the weak findings of previous studies comparing IAS standards and foreign standards, and due to the unique opportunity to examine similar issues in China. The results indicate that the information produced using IAS standards is no more useful than information prepared using Chinese standards. This is because: a) there is no
difference in the explanatory power of IAS and Chinese accruals for future cash flows, b) international investors value IAS and Chinese earnings and accruals in an equivalent manner, and c) domestic investors value earnings based on domestic standards differently to IAS earnings.

Perhaps the study of Gelb and Zarowin (2002) is more relevant to the current study since their study examines the association between the level of corporate disclosures and stock prices. In their study, firms are grouped into two groups based on the disclosure quality of the firms; i.e. high for a disclosure rating above the industry median or low for a disclosure rating below the industry median. This study compares the groups based on the association between current stock returns and future earnings changes. In this case a stronger relationship between current returns and future earnings are expected from high disclosure firms. Their results indicate that firms with more disclosure have significantly higher future ERCs (i.e. greater price informativeness) than firms with less disclosure.

The main idea in the above discussion is how researchers infer the importance of accounting information by using share price. This will become the basis for our study. This type of study is known as value relevance study.

**Value Relevance of Financial Instruments**

*Studies on Value Relevance of Fair Value Disclosures*

The most controversial issue related to financial instruments is its valuation at fair value. Although it is widely accepted in the United States, the fair value, as required by FRS 139, was rejected in the Europe (Hitz, 2007) and still not implemented in Malaysia (at least until January 2010). Although fair value accounting is the most relevant information in predicting future cash flow, the concern is more on the reliability of fair value measures (Hitz, 2007) especially in the period of economic crisis.

While there are limited numbers of value relevance studies in Malaysia (such as Ibrahim, Mohd-Said, Abd–Latif and Abd-Shukor, 2003; Hassan, Percy and Stewart, 2006; Goh, Hassan and Md-Nor, 2008), many studies on value relevance of accounting information have been conducted in the U.S. over the last decade. The number has increased dramatically in the late 1990s\(^3\). Most of the studies address the empirical relation between accounting numbers and share market values either with or without drawing standard-setting inferences.

Barth (1994) is among the pioneer in the value relevance studies. Her study, Barth (1994), investigates how disclosed fair value estimates of banks’ investment securities and securities gains and losses (based on those estimates) are reflected in share prices in comparison with historical costs. The sample comprises the US

---

\(^3\) See Holthausen and Watts (2001) for a comprehensive summary of this type of research.
banks whose financial statement data are available on the 1990 Compustat Annual Bank Tape. The data was collected for the period 1971-1990. Using measurement error and earnings capitalisation models, Barth reports that i) fair value estimates of investment securities provide significant explanatory power beyond that provided by historical costs, ii) historical costs provide no significant explanatory power incremental to fair value, iii) fair values of investment securities are found to have less measurement error than historical costs vis-a-vis the amount reflected in share prices and iv) fair values securities gains or losses have no significant incremental explanatory power.

Eccher et al. (1996) extend the above study by examining the value relevance of fair value data disclosed under SFAS 107 Disclosures about Fair Value of Financial Instruments by 296 banks for the years 1992 and 1993. The study focused on fair values of all the major components whether on- and off-balance sheet. The study indicates that i) the fair values of investment securities are value relevant, ii) the fair value of net loans has a weaker association with market-to-book ratio than does the fair value of securities, iii) the off-balance sheet instruments are value relevant in limited settings, and the fair value of deposits is not significant; and iv) the fair value and notional value disclosures are each incrementally value relevant. Results for both studies on the value relevance of fair value were supported by others studies of Barth et al. (1996) and Park, Park and Ro (1999).

While those studies examine the value relevance of fair value on banks and financial institutions, Simko (1999) examines the fair value of financial instruments of non-financial firms under SFAS 107. He concludes that SFAS 107 liability disclosures for 1993 and 1995 are significantly associated with equity values. However financial instrument assets and related derivatives do not have incremental explanatory power above historical cost. This is due to the lack of economic significance of differences in fair value versus book value in the case of non-financial firms.

Ahmed et al. (2006) extends the above studies of Barth et al. (1996), Eccher et al. (1996) and Venkatchalam (1996) using a different methodology. The study provides evidence on the effect of recognised and disclosed derivative financial instruments’ fair value on investor valuation of these instruments. The result indicates that market participants valued differently between recognised fair values of derivative financial instruments than disclosed derivative instruments.

A most recent study by Kanagaretnam, Mathieu and Shehata (2009) extend the above studies in a different context. Kanagaretnam et al. (2009) examine the value relevance of the components of other comprehensive income for a sample of Canadian firms cross-listed in the United State in the period 1998 to 2003. Their results indicate that a change in the fair value of the available-for-sale investments component of other comprehensive income is associated with market returns and share price. The study also provides evidence that the change in fair value of cash flow hedges component is value relevant to the market.
The Value Relevance of Financial Instruments Disclosure in Malaysian Firms

The discussions above are based on studies in the North America where financial instruments are required to be measured at fair value. Hence, their studies cannot be generalized to other countries especially in the countries where accounting standard pertaining to disclosure of financial instruments is very flexible. Perhaps the most relevant study that addressed the issue on financial instruments during the flexible period is an Australian study by Hassan et al. (2006). Hassan et al. (2006) provide evidence on the value relevance of net fair value disclosure among firms in the extractive industries. They provide evidence that net fair value information is value relevant. However, the significance of net fair value is limited to the recognized financial instruments. This study is very similar to the situation in Malaysia, where the only accounting standard available to address the issue of financial instruments is MASB 24 Financial Instruments: Disclosure and Presentation. Nevertheless the study of Hassan et al. (2006) is limited to the component of fair value information. Therefore, findings from our study will contribute to the literature within the limited guideline environment.

HYPOTHESES DEVELOPMENT

Value Relevance of Financial Instruments Disclosure

Disclosure Quality and Market Value of the Firms

It is generally believed that the quality of financial reporting affects capital market participants (Kothari, 2000; Heflin, Shaw, and Wild, 2001). If market participants value the information as higher quality, a positive association between the information and the share prices is expected, and vice versa. Hence, enhanced disclosure not only is of benefit to the disclosing firms but also benefits to the investors (Gelb and Zarowin, 2002). Therefore it is expected that more transparent disclosures will have an impact on the share prices of the firms.

A large body of literature assesses the value relevance of accounting data by examining its association with share prices (Barth, 1994; Barth, Beaver, and Landsman, 1996; Nelson, 1996; and Venkatachalam, 1996). Barth, Beaver, and Landsman (2001) argue that accounting information can be value relevant if it reflects the relevance of information to investors in valuing the firm, and it is measured reliably enough to be reflected in share prices.

Based on the above, it is expected that the quality of financial instruments disclosures have a positive relation with the share price of firms. This is due to most firms are motivated to provide high quality information when the firms believe that the information is a good news to the market, and vice versa. The market would in turn react positively to the news. Therefore, the quality of information disclosed would have a positive effect on firm’s share price. Hence, our hypothesis 1(a) is:

Hypothesis 1a: There is a positive relation between disclosure quality of financial instruments information and firm’s share price.
Firms are required by MASB24 to disclose information that is useful for decision-making. This includes qualitative and quantitative information. However, market may react differently to accounting information which varies in accounting quality (Imholf, 1992). Because of subjectivity, it is very difficult to determine whether qualitative information is of higher quality than quantitative information, or vice versa. For example in some cases users are more interested in qualitative information (such as forward looking information) rather than quantitative information (such as earnings forecasts) since users may have their own ability to determine the quantitative amounts. However, if these two components of information are important for decision making we might expect similar value is given by market participants, i.e. significant relationship is expected for qualitative and quantitative information. Therefore our next hypothesis is:

Hypothesis 1b: There is a relation between disclosure quality components and firm’s share price.

Value Relevance of Fair Value Disclosures
Fair value accounting has become the preferred option of accounting for financial instruments as opposed to historical cost (Hassan, 2004). A move to fair value is believed to be due to the belief that market-based information is the most relevant financial data for financial statement users. The disclosure of fair value information is expected to provide more useful information for users to assess the effects of derivative transactions (Rasch and Wilson, 1998).

Prior studies investigate the usefulness of fair value information based on the relevance and reliability of information recognised and disclosed in the financial statements required by the accounting standards. Most value relevance studies examine the value relevance of fair value information (for example Barth, 1994; Eccher, et al., 1996; Nelson, 1996; Venkatachalam, 1999; and Hassan et al., 2006). Barth (1994) and Barth et al. (1996) provide evidence that the fair value estimates provide significant explanatory power beyond the historical costs. Their studies have been supported by Ahmed et al. (2006), Hassan et al. (2006) and Kanagaretnam et al. (2009). While Hassan et al. (2006) indicate that the fair value disclosure value relevant, Ahmed et al. (2006) indicate that recognised fair value is more value relevant compared to the disclosed fair value of derivative instruments. Similar to Hassan et al. (2006) and Ahmed et al. (2006), Kanagaretnam et al. (2009) provide evidence on the association between market return and stock price and change in the fair value of both the available for sale investment component and cash flow hedges components. Since fair values of financial instruments are not recognized in Malaysia, market participants only have one option i.e. to rely on the
The Value Relevance of Financial Instruments Disclosure in Malaysian Firms

disclosure in order to assess the exposure to financial instrument risk. Therefore, based on the discussion we hypothesise that:

Hypothesis 2: Fair value disclosure is positively related with share price of the firms.

METHODOLOGY

Sample Selection

Sample for our study is firms that are listed on the main board of Bursa Malaysia, in 1999, 2000, 2002 and 2003. Financial data is gathered from the Datastream and in case of unavailable data, we refer to annual reports of the respective firms. We select year 1999 and 2000 to represent the period prior to the issuance of MASB24, and 2002 and 2003 to represent the period after the issuance of MASB24. There were 203 firms listed on the main board of Bursa Malaysia in 1999. Accordingly, the same company will represent the sample for 2000, 2002 and 2003. We exclude sample for 2001 since it was the first year where firms were subjected to the MASB24. The sample was further reduced by excluding companies: i) that are not in Datastream’s list and neither their annual reports are available, ii) that change their financial date, and iii) with no available or incomplete data. Table 1 summarises the sample selection procedure.

Table 1 Summary of sample selection procedure

<table>
<thead>
<tr>
<th>Selection criteria</th>
<th>No of firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed firms in Main Board</td>
<td>812</td>
</tr>
<tr>
<td>- Firms that changed financial date</td>
<td>10</td>
</tr>
<tr>
<td>- Firms not in the Datastream @ without annual reports</td>
<td>85</td>
</tr>
<tr>
<td>- Firms with incomplete data</td>
<td>233</td>
</tr>
<tr>
<td>Total number of firms used for the study</td>
<td>484</td>
</tr>
</tbody>
</table>

Multiple Regression Models

Ohlson Model and Disclosure Quality of Financial Instruments Information

Value relevance studies examine the relevance and reliability of information recognised and disclosed in the financial statements required by the accounting standards. These studies are an empirical operationalisation of the criteria, relevance and reliability. Information can be value relevant if it reflects the relevance of
information to investors in valuing the firm, and it is measured reliably enough to be reflected in share prices (Barth et al., 2001). Financial statements present the economic events of a business entity, which occurred during the reporting period, and therefore the information may be value relevant to the investors. Unlike managers, shareholders and investors have limited access to the information, and therefore the disclosed information, such as hedge and fair values information, may be of value relevance to them.

To examine whether MASB 24 disclosure requirements are useful in equity valuation, this study develops regression models based on Ohlson (1995). Ohlson’s model (equation 1) provides a direct link between accounting amounts and firm value which is absent from other models (Barth, 2000). More importantly, the model specifies how to estimate firm value from accounting amounts rather than relying on market prices, permitting researchers to specify tests relating to perceived mispricing of shares and provides a link between financial analysis and valuation (Barth, 2000).

\[
P_D = \ln(P) = \alpha_0 + \alpha_1 B + \alpha_2 E + \varepsilon
\]

where:
\[P\] = natural log market value of firms’ common equity measured three months following the financial year
\[BV\] = book value of equity at year end
\[E\] = earnings for year available to firm’s common shareholders
\[i\] = firm
\[t\] = year

We extend the above equation to estimate the value relevance of MASB 24 disclosure requirement. We include disclosure quality (\(DQ\)) score in equation 1 to represent the disclosure quality (equation 2).

\[
DQ = \frac{\text{Component Score}}{\text{Number of Items in Component}}
\]

In this study we measure quality based on an unweighted index developed based on the information required by the MASB 24. Appendix 1 presents a list of information required by the MASB24 that form a disclosure index for financial instruments. Similar to Hassan et al. (2006), we divide the component score by the number of items in that component, so that each component of score adds equally to the total score. Then, we divide the total score for each firm by the number of possible score for a firm to represent the disclosure quality. However, firms are not penalised for not disclosing the information which are not relevant to them. The disclosure quality (\(DQ\)) is measured as:

\[\text{The expanded version of equation 1 also has been reported in other value relevance studies (e.g. Barth and Clinch, 1996 and Kanagaretnam et al. 2009). Inclusion of this information in the model allows us to examine ‘other information’ that are not included in the original Ohlson (1995) model. The information might be relevant in investment decision.}\]
The Value Relevance of Financial Instruments Disclosure in Malaysian Firms

\[
DQ = \frac{\text{Firm’s actual disclosure score}}{\text{Firm’s total possible disclosure score}}
\]

The purpose of including this variable is to provide evidence on whether market participants value disclosure quality of financial instruments information as an important factor in firm valuation. Moreover incorporating disclosure quality provide direct evidence on the relationship between market value of the firm and the quality of information rather than relying on proxies (such as earnings) or assumption of high quality (such as in Lang et al., 2003).

\[
P_{it} = \alpha_0 + \alpha_1BV_{it} + \alpha_2E_{it} + \alpha_3DQ + \varepsilon_{it}
\]

where
\[
P = \text{natural log market value of firms’ common equity measured three months following the financial year}
\]
\[
BV = \text{book value of equity per share at year end}
\]
\[
E = \text{earnings per share}
\]
\[
DQ = \text{disclosure quality of financial instruments information disclosed in the annual report}
\]
\[
i = \text{firm}
\]
\[
t = \text{year}
\]

However, since the standard become mandatory in 2001, therefore we believe that the level of disclosure quality of financial instruments is higher in period after 2001. Hence, we multiply \(DQ\) with a dummy variable 1, to represent disclosure quality (\(DQ\)) for period after 2001, and 0, otherwise. This is represented in equation 3.

\[
P_{it} = \alpha_0 + \alpha_1BV_{it} + \alpha_2E_{it} + \alpha_3DQ + \alpha_4DQYR_{it} + \varepsilon_{it}
\]

where
\[
P = \text{natural log market value of firms’ common equity measured three months following the financial year}
\]
\[
BV = \text{book value of equity per share at year end}
\]
\[
E = \text{earnings per share}
\]
\[
DQ = \text{disclosure quality of financial instruments information disclosed in the annual report}
\]
\[
DQYR = \text{interaction variable between disclosure quality (\(DQ\)) and a dummy variable 1, which represent year after 2001, or 0, which represent year before 2001}
\]
\[
i = \text{firm}
\]
\[
t = \text{year}
\]
Ohlson Model and the Component of Disclosure Quality

Including disclosure quality score ($DQ$) alone in Ohlson’s model does not recognise the importance of each component of the disclosure index in firm valuation. Therefore including each component of $DQ$ helps us understand users’ perceptions of the worth of qualitative and quantitative information disclosed in financial statements. This enables us to identify which information is more valuable to market participants and hence it should help standard-setters in developing new standards. These components are important since they may unmask the risks attached to the instruments and will help investors identify the potential benefits and costs of their investment. Therefore we extended the above equations by including the $DQ$ components in equation 1. The extended model is specified in equation 4.

$$P_t = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 E_{it} + \alpha_3 CIRM_{it} + \alpha_4 CIPOL_{it} + \alpha_5 CIIR_{it} + \alpha_6 CICR_{it} + \alpha_7 CIFV_{it} + \alpha_8 CIH_{it} + \alpha_9 CIO + \varepsilon_{it}$$

(4)

where:
- $P$ = natural log market value of firms’ common equity measured three months following the financial year
- $BV$ = book value of equity per share at year end
- $E$ = earnings per share
- $CIRM$ = component score of risk management information
- $CIPOL$ = component score of terms, condition and accounting policies information
- $CIIR$ = component score of interest rate risk information
- $CICR$ = component score of credit rate risk information
- $CIFV$ = component score of fair value
- $CIH$ = component score of hedge information
- $CIO$ = component score of other information

Value Relevance of Fair Value Disclosure

Three models were developed based on Ohlson (1995) to estimate the value relevance of fair value information. These models were developed based on a recent study of Hassan et al. (2006). Unlike most of the previous studies in the U.S, U.K. and Canada where fair value accounting has been implemented, the current study is based on a different environment where fair value accounting still voluntary. Therefore, the models developed in this study examine the value relevance of voluntary information of (as well as unrecognised) fair value. Therefore, unlike Kanagaretnam et al. (2009) and some of previous studies, our earnings ($E$) represent the traditional net income component. The models are described in equations 5 and 6. A significant value for coefficients $\alpha_4$ and $\alpha_5$, for both equations, will indicate the value relevance of fair value information in this model. A positive coefficient
The Value Relevance of Financial Instruments Disclosure in Malaysian Firms

being significantly different from zero would provide evidence of the incremental explanatory power of MASB24 fair value conditional on other included explanatory variables (Barth, 1994; Venkatachalam, 1996; Simko, 1999; Hassan et al., 2006).

\[ P_{it} = \alpha_0 + \alpha_1 BVNFI_{it} + \alpha_2 E_{it} + \alpha_3 BVFI_{it} + \alpha_4 FVFI_{it} + \alpha_5 CIFV_{it} + \varepsilon_{it} \]  

(5)

where;

\( P \) = natural log market value of firms’ common equity measured three months following the financial year

\( E \) = earnings per share

\( BVNFI \) = book value per share of non financial instruments

\( BVFI \) = total book value per share of financial instruments

\( FVFI \) = fair value per share of financial instruments

\( CIFV \) = component score of fair value

Similar to Hassan et al. (2006) we expect that multicollinearity could be a problem when estimating equation 5 since BVFI and FVFI are correlated. This is because FVFI is equal to BVFI plus the unrealised gain or loss (Barth, 1994). Therefore, we estimate equation 5 without BVFI so that the effect of FVFI can be estimated.

We also developed an alternative model which focused on the unrealised gain or loss (URGL) on financial instruments, which is a continuous variable. To investigate the value relevance and the explanatory power of unrealised gain or loss, the unrealised gain or loss of financial instruments (URGL), total book value per share of financial instruments (BVFI), book value per share of non-financial instruments (BVNFI) and earnings per share (E) are included in the model. Following Simko (1999) and Hassan et al. (2006), the URGL is separated into broad class of financial instruments: URGL of financial assets (DFFA) and URGL of financial liabilities (DFFL). However, in this study we exclude off-balance sheet derivative financial instruments (OBDI) since we discover that majority of companies in our sample do not disclose this information. This might be due to the fact most of Malaysian companies do not extensively involve with derivative instruments. This is specified in equation 6.

\[ P_{it} = \alpha_0 + \alpha_1 BVNFI_{it} + \alpha_2 E_{it} + \alpha_3 BVFI_{it} + \alpha_4 DFFA_{it} + \alpha_5 DFFL_{it} + \alpha_6 CIFV_{it} + \varepsilon_{it} \]  

(6)

where;

\( P \) = natural log market value of firms’ common equity measured three months following the financial year

\( E \) = earnings per share

\( BVNFI \) = book value per share of non financial instruments
Analogous to equation 5, $BVFI$ is excluded from the model to examine the explanatory power of the unrealised gain or loss on financial instruments beyond the book value of non-financial instruments and earnings.

RESULTS

Descriptive Statistics

Table 2 presents descriptive statistics on the dependent and independent variables. Table 2 indicates that our data are not normally distributed. However, the mean values of $P$, $DQ$ and some of $DQ$’s components are close to their median. Other data such as $BV$, $E$, $BVNFI$, $BVFI$, $FVFI$ and $DFFA$ are reported with higher maximum values. These had caused the mean values of these data are more than their median and the standard deviation is very high. Therefore, we examine the distribution of the residuals to be consistent with the OLS assumption.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>0.3913</td>
<td>0.3646</td>
<td>3.8816</td>
<td>-2.3026</td>
<td>1.0320</td>
</tr>
<tr>
<td>E</td>
<td>0.1734</td>
<td>0.1205</td>
<td>3.0710</td>
<td>-3.8480</td>
<td>0.4699</td>
</tr>
<tr>
<td>BVNFI</td>
<td>2.8424</td>
<td>1.9439</td>
<td>139.1375</td>
<td>-175.4991</td>
<td>17.4702</td>
</tr>
<tr>
<td>BVFI</td>
<td>5.9840</td>
<td>2.7318</td>
<td>368.5990</td>
<td>0.0015</td>
<td>21.9961</td>
</tr>
<tr>
<td>FVFI</td>
<td>6.1082</td>
<td>2.5368</td>
<td>368.4765</td>
<td>0.0015</td>
<td>28.5789</td>
</tr>
<tr>
<td>DFFA</td>
<td>-0.1675</td>
<td>0.0000</td>
<td>16.3373</td>
<td>-90.3660</td>
<td>4.2085</td>
</tr>
<tr>
<td>DFFL</td>
<td>-2.04E-05</td>
<td>0.0000</td>
<td>0.0000</td>
<td>-0.0060</td>
<td>0.0003</td>
</tr>
<tr>
<td>DQ</td>
<td>0.3349</td>
<td>0.2857</td>
<td>0.9714</td>
<td>0.0357</td>
<td>0.1760</td>
</tr>
<tr>
<td>DQYR</td>
<td>0.1976</td>
<td>0.0273</td>
<td>0.9714</td>
<td>0.0000</td>
<td>0.2503</td>
</tr>
<tr>
<td>BNEWS</td>
<td>0.3574</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.0000</td>
<td>0.4797</td>
</tr>
<tr>
<td>CIRM</td>
<td>0.3120</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.0000</td>
<td>0.3565</td>
</tr>
<tr>
<td>CIPOL</td>
<td>0.9117</td>
<td>1.0000</td>
<td>1.0000</td>
<td>0.2500</td>
<td>0.1627</td>
</tr>
<tr>
<td>CIIR</td>
<td>0.8709</td>
<td>1.0000</td>
<td>1.0000</td>
<td>0.0000</td>
<td>0.2737</td>
</tr>
<tr>
<td>CICR</td>
<td>0.1880</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.0000</td>
<td>0.3735</td>
</tr>
<tr>
<td>CIFV</td>
<td>0.3793</td>
<td>0.2500</td>
<td>1.0000</td>
<td>0.0000</td>
<td>0.3080</td>
</tr>
<tr>
<td>CIH</td>
<td>0.0835</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.0000</td>
<td>0.2153</td>
</tr>
<tr>
<td>CIO</td>
<td>0.0917</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.0000</td>
<td>0.1678</td>
</tr>
</tbody>
</table>
The Value Relevance of Financial Instruments Disclosure in Malaysian Firms

where,

\[ P = \text{natural log market value of firms' common equity measured three months following the financial year} \]

\[ BV = \text{book value of equity per share at year end} \]

\[ E = \text{earnings per share} \]

\[ BV_{NFI} = \text{book value per share of non financial instruments} \]

\[ BV_{FI} = \text{total book value per share of financial instruments} \]

\[ FV_{FI} = \text{fair value per share of financial instruments} \]

\[ DQ = \text{disclosure quality of financial instruments information} \]

\[ DQ_{YR} = \text{interaction between DQ and a dummy variable 1, which represent year after 2001, or 0 otherwise} \]

\[ BNEWS = \text{dummy variable 1, which represent bad news, or 0, otherwise} \]

\[ CIRM = \text{component score of risk management information} \]

\[ CIPOL = \text{component score of terms, condition and accounting policies information} \]

\[ CIIR = \text{component score of interest rate risk information} \]

\[ CICR = \text{component score of credit rate risk information} \]

\[ CIFV = \text{component score of fair value} \]

\[ CIH = \text{component score of hedge information} \]

\[ CIO = \text{component score of other information} \]

Table 3 presents a correlation matrix among the variables used in this study. Panel A Table 3 indicates the strongest correlation is between \( BV_{FI} \) and \( FV_{FI} \) (0.9800). Therefore, we exclude \( BV_{FI} \) from our estimation since our objective is to examine \( FV_{FI} \). Panel B Table 3 indicates the strongest correlation between variables is \( CIRM \) and \( CIFV \) (0.6605) and this is follow by the correlation between \( CIRM \) and \( CIH \) (0.6041). However, this is not a concern since the value is less than 0.8, which according to Kennedy (2003) indicates high correlation between variables. Nevertheless, we also examine the variance inflation factors (VIF). The highest VIF is 2.891 (3.256) for \( DQ \) (\( CIRM \)) followed by 2.872 (2.260) for \( BVE \) (\( CIFV \)) as presented in Panel A (Panel B). VIF being less than 10 indicates that there is no need to be concerned about the correlation between the independent variables.
Table 3 Correlation coefficients between variables

<table>
<thead>
<tr>
<th>Panel A</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BV</td>
<td>0.1628*</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BVFI</td>
<td>0.1788**</td>
<td>0.1028</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BVNFI</td>
<td>-0.0069</td>
<td>0.6039**</td>
<td>-0.5648**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFFA</td>
<td>-0.1444*</td>
<td>-0.0700</td>
<td>-0.2214**</td>
<td>0.3046**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFFL</td>
<td>0.0320</td>
<td>0.0190</td>
<td>0.0143</td>
<td>0.0096</td>
<td>-0.0600</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNEWS</td>
<td>-0.1909***</td>
<td>-0.0257</td>
<td>0.1442*</td>
<td>-0.1306*</td>
<td>-0.1118</td>
<td>-0.0076</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DQ</td>
<td>0.2472**</td>
<td>-0.1054</td>
<td>0.1493*</td>
<td>-0.1559*</td>
<td>-0.1048</td>
<td>-0.0913</td>
<td>-0.2280**</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPS</td>
<td>0.4826**</td>
<td>0.2806*</td>
<td>0.1030</td>
<td>0.1369*</td>
<td>-0.0923</td>
<td>0.0454</td>
<td>-0.0827</td>
<td>0.1110</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>FVFI</td>
<td>0.1539*</td>
<td>0.0911</td>
<td>0.9800*</td>
<td>-0.5169**</td>
<td>-0.0231</td>
<td>0.0135</td>
<td>0.1250</td>
<td>0.1317*</td>
<td>0.0867</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BV</td>
<td>0.1682**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>0.4711**</td>
<td>0.2594**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIRM</td>
<td>0.0656</td>
<td>0.0844</td>
<td>0.0511</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIPOL</td>
<td>-0.0438</td>
<td>0.0080</td>
<td>0.0780</td>
<td>0.2842**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIIR</td>
<td>-0.1377***</td>
<td>0.0437</td>
<td>0.0066</td>
<td>0.2599**</td>
<td>0.5918**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CICR</td>
<td>0.0027</td>
<td>0.0165</td>
<td>-0.0412</td>
<td>0.5109**</td>
<td>0.1163</td>
<td>0.1772**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIFV</td>
<td>-0.0689</td>
<td>0.0059</td>
<td>-0.0130</td>
<td>0.6605**</td>
<td>0.3588**</td>
<td>0.2851**</td>
<td>0.3140**</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIH</td>
<td>0.2507**</td>
<td>0.1175**</td>
<td>0.1904**</td>
<td>0.6041**</td>
<td>0.1607**</td>
<td>0.1271**</td>
<td>0.2112**</td>
<td>0.2943**</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td>-0.0142</td>
<td>0.0135</td>
<td>-0.0061</td>
<td>0.4653**</td>
<td>0.2253**</td>
<td>0.2178**</td>
<td>0.3386**</td>
<td>0.5493**</td>
<td>0.2850**</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

** and * indicate correlation is significant at p< 0.01 and p< 0.05 level respectively.
Where, $P$ is a natural log market value of firms’ common equity measured three months following the financial year, $BV$ is book value of equity per share at year end, $E$ is earnings per share, $BV_{NFI}$ is book value per share of non financial instruments, $BV_{FI}$ is total book value per share of financial instruments, $FV_{FI}$ is fair value per share of financial instruments, $DQ$ is disclosure quality of financial instruments information, $DQYR$ is interaction between $DQ$ and a dummy variable 1, which represent year after 2001, or 0 otherwise, $BNEWS$ is dummy variable 1, which represent bad news, or 0, otherwise, $CIRM$ is component score of risk management information, $CIPOL$ is component score of terms, condition and accounting policies information, $CIIR$ is component score of interest rate risk information, $CICR$ is component score of credit rate risk information, $CIFV$ is component score of fair value, $CIH$ is component score of hedge information and $CIO$ is component score of other information.

**Multiple Regression Results**

**Value Relevance of Financial Instruments Disclosure**

Hypotheses 1(a) and 1(b) explore the association between the disclosure quality of financial instruments information and firms’ share prices. To explore these research questions, two models are developed as specified in equations 3 and 4. Since both models are subject to heteroscedasticity, White’s heteroscedasticity-correction is employed. The results of the regression estimates are reported in Tables 4 and 5.

Table 4 shows the results for the first model (equation 3) which estimates the association between the total disclosure score and firm market value. Table 4 indicates that earnings per share and the quality of financial instrument disclosure ($DQ$) are positive and significantly related to market value at $p < 0.01$. Hence our Hypothesis 1(a) is supported. Our results are consistent with Hassan (2004). These indicate that market participants regard the disclosure quality of financial instruments as an important factor in determining market value. Our findings support the general belief that high quality disclosures (or transparency) benefit the share market (Miller, 2001; Miller and Bahnson, 2002). Investors are more confident with high quality information and therefore, they will be satisfied with lower returns as the risk is reduced, which leads to higher security prices (Miller and Bahnson, 2002). Most importantly, the current study contributes to the literature by providing evidence of the importance of high quality of financial instruments information as it has been considered as being value relevant by market participants.

Table 4 also indicates that disclosure quality after the standard become mandatory does influence the market value of the firms positively. However, the association between disclosure quality and market value of firms is less positive in the period of the standard become mandatory. This indicates that investors perceive the information less positively after the MASB 24 implementation, than
before. This could be due to the nature of information disclosed related to financial instruments in Malaysia. The observed relation of this balance sheet item could also be related to bad news to the investors as the investors may see more risks associated with the firm’s financial instruments.

Table 4  Results for association between disclosure quality of financial instruments and market value (n: 484)

\[ P_i = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 E_{it} + \alpha_3 DQ + \alpha_4 DQYR_{it} + \epsilon_{it} \]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.0857</td>
<td>0.1184</td>
<td>-0.7233</td>
<td>0.4699</td>
</tr>
<tr>
<td>DQ</td>
<td>1.1990</td>
<td>0.4474</td>
<td>2.6802</td>
<td>0.0076**</td>
</tr>
<tr>
<td>BV</td>
<td>0.0086</td>
<td>0.0121</td>
<td>0.7128</td>
<td>0.4763</td>
</tr>
<tr>
<td>E</td>
<td>0.9752</td>
<td>0.1978</td>
<td>4.9293</td>
<td>0.0000**</td>
</tr>
<tr>
<td>DQYR</td>
<td>-0.6174</td>
<td>0.3044</td>
<td>-2.0280</td>
<td>0.0431*</td>
</tr>
</tbody>
</table>

R² = 0.2389  Adj R² = 0.2325  F-statistic = 37.58561  Prob = 0.0000

** and * indicate significance at p < 0.01 and p < 0.05 respectively.

where,

\( P \) = natural log market value of firms’ common equity measured three months following the financial year

\( BV \) = book value of equity per share at year end

\( E \) = earnings per share

\( DQ \) = disclosure quality of financial instruments information disclosed in the annual report

\( DQYR \) = interaction variable between disclosure quality (DQ) and a dummy variable 1, which represent year after 2001, or 0, which represent year before 2001

\( i \) = firm

\( t \) = year

We investigate the impact of good and bad news of financial instruments and disclosure quality on firm’s share price. Good (bad) news will result in an increase (decrease) in firms’ share price (Sinnadurai, 2008). We use a dummy variable to indicate bad news (\( BNEWS \)). We define \( BNEWS \) as 1 when there is unrealised loss to financial assets or financial liabilities, and 0 otherwise. Our results are presented in Table 5. Table 5 indicates that the type of news does not influence investors in decision making. We suspect the result could be driven by the fact that the price within the capital market in Malaysia is highly synchronised. Therefore, the market is not influenced by whether the news is bad or good. However, \( DQ \) and earnings per share are consistently significant with market value.
The Value Relevance of Financial Instruments Disclosure in Malaysian Firms

Table 5 Results for the impact of good or bad news on the association between disclosure quality of financial instruments and market value

\[ P_{it} = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 E_{it} + \alpha_3 DQ + \alpha_4 DQ \times BNEWS_t + \varepsilon_{it} \]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.047333</td>
<td>0.103417</td>
<td>0.457688</td>
<td>0.6474</td>
</tr>
<tr>
<td>BV</td>
<td>0.008188</td>
<td>0.012488</td>
<td>0.655693</td>
<td>0.5123</td>
</tr>
<tr>
<td>E</td>
<td>0.977941</td>
<td>0.197563</td>
<td>4.950008</td>
<td>0.0000**</td>
</tr>
<tr>
<td>DQ</td>
<td>0.555172</td>
<td>0.197563</td>
<td>2.285155</td>
<td>0.0227*</td>
</tr>
<tr>
<td>DQ*BNEWS</td>
<td>-0.342523</td>
<td>0.258450</td>
<td>-1.325294</td>
<td>0.1857</td>
</tr>
<tr>
<td>R² = 0.2343</td>
<td>Adj R² = 0.2279</td>
<td>F-stat = 36.6438</td>
<td>Prob = 0.0000</td>
<td></td>
</tr>
</tbody>
</table>

** and * indicate significance at p < 0.01 and p < 0.05 respectively.

where,

\[ P \] = natural log market value of firms’ common equity measured three months following the financial year

\[ BV \] = book value of equity per share at year end

\[ E \] = earnings per share

\[ DQ \] = disclosure quality of financial instruments information disclosed in the annual report

\[ DQ \times BNEWS \] = interaction variable between disclosure quality (DQ) and a dummy variable assigned as 1, for bad news, or 0, otherwise

\[ i \] = firm

\[ t \] = year

As the weaker positive relation between market price and disclosure quality post 2001 cannot be explained by the type of news i.e. good or bad news, we test whether disclosure quality of risks could explain the result.

The second model (equation 4) identifies the components of the disclosure index that may be valuable to users. Results are reported in Table 6 which shows that the earnings per share (E), the component score of interest rate (CIIR) and hedge information (CIH) are significantly related with market value at p < 0.01. However, unlike E and CIH, CIIR is negatively related to share price. This indicates that market participants regard this information as a risk. Therefore, more disclosure of risk information will reduce the share price. The adjusted R² of this model is 0.2705, which is higher than the adjusted R² of the model presented in Table 4. This suggests that the components of financial instrument disclosure provide additional explanation for variations in share price compared to the composite disclosure index.

These results are important to accounting standard setters because it indicates that market participants are very selective in determining the most important financial instruments information in firm valuation. The significant of interest
rate components and hedge information may also help investors to identify risks attached to the financial instruments.

Table 6 Results for association between components of disclosure quality of financial instruments and market value (n: 484)

\[ P_i = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 E_{it} + \alpha_3 CIRM_{it} + \alpha_4 CIPOL_{it} + \alpha_5 CIIR_{it} + \alpha_6 CICR_{it} + \alpha_7 CIFV_{it} + \alpha_8 CIH_{it} + \alpha_9 CIO_{it} + \varepsilon_{it} \]  

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.673417</td>
<td>0.239114</td>
<td>2.816303</td>
<td>0.0051</td>
</tr>
<tr>
<td>BV</td>
<td>0.005888</td>
<td>0.012221</td>
<td>0.481785</td>
<td>0.6302</td>
</tr>
<tr>
<td>E</td>
<td>0.926146</td>
<td>0.174743</td>
<td>5.300048</td>
<td>0.0000**</td>
</tr>
<tr>
<td>CIRM</td>
<td>-0.001568</td>
<td>0.197896</td>
<td>-0.007924</td>
<td>0.9937</td>
</tr>
<tr>
<td>CIPOL</td>
<td>0.070929</td>
<td>0.291844</td>
<td>0.243036</td>
<td>0.8081</td>
</tr>
<tr>
<td>CIIR</td>
<td>-0.580167</td>
<td>0.176659</td>
<td>-3.284110</td>
<td>0.0011**</td>
</tr>
<tr>
<td>CICR</td>
<td>0.087011</td>
<td>0.138440</td>
<td>0.628507</td>
<td>0.5300</td>
</tr>
<tr>
<td>CIFV</td>
<td>-0.317089</td>
<td>0.207623</td>
<td>-1.527238</td>
<td>0.1274</td>
</tr>
<tr>
<td>CIH</td>
<td>0.978690</td>
<td>0.269032</td>
<td>3.637820</td>
<td>0.0003**</td>
</tr>
<tr>
<td>CIO</td>
<td>0.013682</td>
<td>0.337589</td>
<td>0.040527</td>
<td>0.9677</td>
</tr>
</tbody>
</table>

R² = 0.2840  Adj R² = 0.2705  F-statistic = 20.8975  Prob = 0.0000

** and * indicate significance at p < 0.01 and p < 0.05, respectively.

Where,

\( P \) = natural log market value of firms’ common equity measured three months following the financial year

\( BV \) = book value of equity per share at year end

\( E \) = earnings per share

\( CIRM \) = component score of risk management information

\( CIPOL \) = component score of terms, condition and accounting policies information

\( CIIR \) = component score of interest rate risk information

\( CICR \) = component score of credit rate risk information

\( CIFV \) = component score of fair value

\( CIH \) = component score of hedge information

\( CIO \) = component score of other information

In explaining our result found in Table 4, we run the same regression on separate sub-samples i.e. before and after the implementation of MASB 24. The result is consistent to Table 6. \( CIIR \) and \( CIH \) are consistently significant. However, we found that while \( CIIR \) is significant at 5% in the period before MASB 24, the significance level improves to 1% level for period after MASB 24. This shows that the negative
The Value Relevance of Financial Instruments Disclosure in Malaysian Firms

relation between $CIIR$ and price is stronger after MASB 24 implementation. In contrast, while remain significant, $CIH$ is found to be less positive after MASB 24 compared to the period before MASB 24 implementation. These results support our earlier results presented in Table 4 that disclosure quality is less positively related to price after the implementation of MASB 24. This is generally due to improved disclosure of risks, in particular, interest rate risk and hedging activities. However, we are not sure how the market reacts to different risk management approaches in firms. For example, more disclosure about interest rate risk and how the company manage this risk could have positive and negative market reaction (both at a varying degree) depending on how the market believe that the risk has been minimized. Investigation into this issue requires a careful analysis of risk and risk management approaches in firms, which is beyond the scope of this research.

**Value Relevance of Fair Value Disclosure**

Hypothesis 2 raises the issue of the importance of fair value information in firm valuation. Given that fair value is relevant for decision-making, two models were developed (equations 5 and 6). Panel A Table 7 indicates that earnings per share $(E)$ and Book value of financial instruments $(BVFI)$ are significantly related with market value at $p < 0.01$. This is consistent with prior study of Hassan (2004), which indicates that book value is significant in decision making. Panel A Table 7 also indicates that fair value information is value relevant. Panel A Table 7 indicates that $FVFI$ is negatively related with market value at $p < 0.01$, which is consistent with Hassan et al. (2006). Unlike Hassan et al. (2006) we find no association between $CIFV$ and share price. Similar to the above argument (in Tables 4 & 6) result could be due to fair value of assets (liabilities) indicates the current value of financial instruments which is lower (higher) than the book value. The negative relationship indicates that fair value information $(FVFI)$ do not provide incremental explanatory power above other information.

Since there is collinearity between $BVFI$ and $FVFI$, the book value of financial instruments was excluded from the model. Panel B Table 7 provides evidence that $FVFI$ being positive and significant at $p < 0.10$. The result is consistent with Hassan et al. (2006). However, the fair value of financial instruments does not provide any incremental explanatory power of fair value of financial instruments (Barth, 1994; Venkatachalam, 1996; Simko, 1999; Ahmed et al., 2006). This relationship indicates that in the absence of the book value, investors are unable to compare the book and fair value information, and hence they may take an opposite action in their investment decision. Generally our findings support the findings of Ahmed et al. (2006) which indicate that the aggregate fair value of financial assets $(FVFA)$ and the aggregate fair value of financial liabilities $(FVFL)$ are significantly related to market value of equity $(MVE)$ or share price. However, in their study $FVFL$ is negatively related to $MVE$. 

263
Table 7  Results for Association between Fair Value Disclosure and Market Value
(n= 484)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.020626</td>
<td>0.156434</td>
<td>0.131851</td>
<td>0.8952</td>
</tr>
<tr>
<td>BVNFI</td>
<td>0.001923</td>
<td>0.004967</td>
<td>0.387201</td>
<td>0.6990</td>
</tr>
<tr>
<td>E</td>
<td>0.967249</td>
<td>0.323442</td>
<td>2.990485</td>
<td>0.0031**</td>
</tr>
<tr>
<td>BVFI</td>
<td>0.019354</td>
<td>0.006937</td>
<td>2.790141</td>
<td>0.0057**</td>
</tr>
<tr>
<td>FVFI</td>
<td>-0.014563</td>
<td>0.005223</td>
<td>-2.788149</td>
<td>0.0057**</td>
</tr>
<tr>
<td>CIFV</td>
<td>0.106601</td>
<td>0.214961</td>
<td>0.495907</td>
<td>0.6204</td>
</tr>
</tbody>
</table>

R2 = 0.2565  Adj R2 = 0.2408  F-statistic = 16.2852  Prob(F-statistic) = 0.0000

Panel B

\[ P_{it} = \alpha_0 + \alpha_1BVNF_{it} + \alpha_2E_{it} + \alpha_3FVF_{it} + \alpha_4CIF_{it} + \varepsilon_{it} \]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.020999</td>
<td>0.156381</td>
<td>0.134283</td>
<td>0.8933</td>
</tr>
<tr>
<td>BVNFI</td>
<td>-0.000839</td>
<td>0.004574</td>
<td>-0.183424</td>
<td>0.8546</td>
</tr>
<tr>
<td>E</td>
<td>1.005275</td>
<td>0.326382</td>
<td>3.080056</td>
<td>0.0023**</td>
</tr>
<tr>
<td>FVFI</td>
<td>0.003942</td>
<td>0.002294</td>
<td>1.718666</td>
<td>0.0870</td>
</tr>
<tr>
<td>CIFV</td>
<td>0.132689</td>
<td>0.215192</td>
<td>0.616607</td>
<td>0.5381</td>
</tr>
</tbody>
</table>

R2 = 0.2469  Adj R2 = 0.2342  F-statistic = 19.4264  Prob(F-statistic) = 0.0000

** and * indicate significance at p < 0.01 and p < 0.05, respectively.

where;

- \( P \) = natural log market value of firms' common equity measured three months following the financial year
- \( E \) = earnings per share
- \( BVNFI \) = book value per share of non financial instruments
- \( BVFI \) = total book value per share of financial instruments
- \( FVFI \) = fair value per share of financial instruments
- \( CIFV \) = component score of fair value

Table 8 presents the multiple regression results on the association between the URGL on financial assets (DFFA), URGL on financial liabilities (DFFL), CIFV, earnings and the market value of the firm. Table 8 indicates that earnings per share (E) and DFFA are positively related to market value at p < 0.01. However, DFFA is negatively related to market value. This indicates that URGL is assumed important in decision making. This finding is not consistent with previous study of Hassan et al. (2006).
The Value Relevance of Financial Instruments Disclosure in Malaysian Firms

Table 8 Results on the association between the unrealised gain or loss, CIFV, earnings and the market value of the firm

\[ P_t = \alpha_0 + \alpha_1 BVNFI_t + \alpha_2 E_t + \alpha_3 BVFI_t + \alpha_4 DFFA_t + \alpha_5 DFFL_t + \alpha_6 CIFV_t + \epsilon_t \]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.020123</td>
<td>0.156665</td>
<td>0.128446</td>
<td>0.8979</td>
</tr>
<tr>
<td>BVNFI</td>
<td>0.001918</td>
<td>0.004971</td>
<td>0.385786</td>
<td>0.7000</td>
</tr>
<tr>
<td>E</td>
<td>0.966275</td>
<td>0.324388</td>
<td>2.978765</td>
<td>0.0032**</td>
</tr>
<tr>
<td>BVFI</td>
<td>0.004786</td>
<td>0.002610</td>
<td>1.833895</td>
<td>0.0679</td>
</tr>
<tr>
<td>DFFA</td>
<td>-0.014546</td>
<td>0.005222</td>
<td>-2.785817</td>
<td>0.0058**</td>
</tr>
<tr>
<td>DFFL</td>
<td>24.27904</td>
<td>31.49706</td>
<td>0.770835</td>
<td>0.4416</td>
</tr>
<tr>
<td>CIFV</td>
<td>0.109427</td>
<td>0.216129</td>
<td>0.506301</td>
<td>0.6131</td>
</tr>
</tbody>
</table>

R² = 0.2566 Adj R² = 0.2376 F-statistic = 13.5212 Prob = 0.0000

** and * indicate significance at p < 0.01 and p < 0.05, respectively.

where;

\( P \) = natural log market value of firms’ common equity measured three months following the financial year

\( E \) = earnings per share

\( BVNFI \) = book value per share of non financial instruments

\( BVFI \) = total book value per share of financial instruments

\( FVFI \) = fair value per share of financial instruments

\( CIFV \) = component score of fair value

\( DFFA \) = Unrealised gains or losses on financial assets

\( DFFL \) = Unrealised gains or losses on financial liabilities

CONCLUSIONS

In this paper we investigate whether financial instrument disclosure requirements are value relevant. Specifically we examine whether each disclosure requirements (from paragraph 49 to paragraph 103) and fair value information are value relevant in decision making. Overall, results indicate that firms should provide high quality information since it is useful for investment decision. However, our study suggests that financial instrument disclosure is less value relevant in the period when the standard becomes mandatory. This result may be driven by the nature of risk disclosure and how the market perceives the way firms manage their interest rate and hedging risks. Investigation into this issue is subject to future research.

Our study also provides evidence that fair value information is value relevant. This is consistent with prior studies in the US and Australia. Results from this study contribute to the literature since our sample is not restricted to certain industry (as in previous studies) and also focuses on firms in developing country which subject to only limited accounting standard on financial instruments and has been
recovered from the economic turmoil. This study is important to the respective regulators since the FRS139 *Financial Instruments: Measurement and Recognition* has been overdue for quite some times. Results from this study should be useful for them to justify the adoption of the standard although there are requests to delay the adoption due to the economic crisis.

This study is subject to several limitations. First, we measure quality based on a disclosure index developed based on MASB24 requirement. Therefore, we might exclude some information voluntarily disclosed in the annual reports of the companies. Second, the sample for this study is limited to firms listed on the Main Board of Bursa Malaysia. Therefore, results for this study cannot be generalized to other firms which are different in size and in specific industries. Future research may extend the current study on these issues.

Future study may also investigate how investors view the relevance of financial instruments disclosure through experimentation, survey or an in-depth interview. This will permit us measure investors’ belief about the importance of fair value and its effect on firm value (Koonce, Nelson and Shakespeare, 2009). Further, although our findings do not find any relationship between bad (good) news on the share price, we believe future research could examine the conditions in which good or bad news of financial instrument disclosure may have an effect in investment decision making, particularly in countries with different levels of price synchronicity.

**ACKNOWLEDGEMENTS**

- We also would like to thank Muhammad Ali, participants at the 20th Asian-Pacific Conference on International Accounting Issues, Paris, France, 9-12 Nov. 2008 and participants at the School of Accounting Research Seminar, Faculty of Economics and Business, Universiti Kebangsaan Malaysia for their constructive comments.

**REFERENCES**


267


## APPENDIX 1

### Components of Financial Instruments Disclosure Index

<table>
<thead>
<tr>
<th>Disclosure of Risk Management Policies Information</th>
<th>Reference</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Describe firm’s financial risk management objective &amp; policies</td>
<td>Para 49 &amp; 50</td>
<td>1</td>
</tr>
<tr>
<td>a) Objectives for holding or issuing derivative financial instruments</td>
<td>Para 49 &amp; 50</td>
<td>1</td>
</tr>
<tr>
<td>• Policy for hedging each major type of forecasted transaction</td>
<td>Para 49 &amp; 50</td>
<td>1</td>
</tr>
<tr>
<td><strong>Component score</strong></td>
<td><strong>2</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terms, Conditions and Accounting Policies Information</th>
<th>Reference</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>• a) Extent and nature of the underlying financial instruments, b) including significant terms and conditions that may affect the amount, timing, and certainty of future cash flows.</td>
<td>Para 55(a)</td>
<td>2*</td>
</tr>
<tr>
<td>• a) Accounting policies and method adopted, b) including criteria for recognition and the basis of measurement applied</td>
<td>Para 55(b)</td>
<td>2*</td>
</tr>
<tr>
<td><strong>Component score</strong></td>
<td><strong>4</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interest Rate Risk Information</th>
<th>Reference</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Contractual repricing or maturity dates for interest rate risk</td>
<td>Para 64 (a)</td>
<td>1</td>
</tr>
<tr>
<td>• Effective interest rates</td>
<td>Para 64 (b)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Component score</strong></td>
<td><strong>2</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Risk Information</th>
<th>Reference</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The amount that best represents financial assets’ maximum credit risk exposure</td>
<td>Para 74 (a)</td>
<td>1</td>
</tr>
<tr>
<td>• Significant concentrations of credit risks for each class of financial assets</td>
<td>Para 74(b)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Component score</strong></td>
<td><strong>2</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fair Value Information</th>
<th>Reference</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fair value information for each class of financial asset and financial liability (recognised and unrecognised).</td>
<td>Para 86</td>
<td>1</td>
</tr>
<tr>
<td>• When it is not practicable to determine the fair value (within the constrain of time @ 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</td>
<td>Para 86</td>
<td>2*</td>
</tr>
<tr>
<td>• a) Method adopted and b) any significant assumptions made in determining fair value.</td>
<td>Para 88</td>
<td>2*</td>
</tr>
</tbody>
</table>
### 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.
  - a) The reasons for not reducing the carrying amount, 
  b) including the nature of the evidence that provides the basis for management’s belief that the carrying amount will be recovered.

<table>
<thead>
<tr>
<th>Component score</th>
<th>8</th>
</tr>
</thead>
</table>

### Hedge of Anticipated Transaction
- a) A description of the anticipated transaction, 
  b) including the period of time until they are expected to occur. 
- A description of the hedging instruments. 
- a) Amount of any deferred or unrecognised gain or loss and 
  b) the expected timing of recognition as income or expense.

<table>
<thead>
<tr>
<th>Component score</th>
<th>5</th>
</tr>
</thead>
</table>

### Other disclosures
- The total amount of change in the fair value of FA & FL that has been recognised as income or expense for the period. 
- The total amount of deferred or unrecognised gain or loss on hedging instruments other than those relating to hedges of anticipated future transactions, & 
- a) The average aggregate carrying amount during the year of recognised FA and FL,  
  b) the average aggregate principal, stated, notional or other similar amount during the year of unrecognised FA & FL, c) the average aggregate fair value during the year of all FA & FL, particularly when the amounts on hand at the balance sheet date are unrepresentative of amounts on hand during the year.

<table>
<thead>
<tr>
<th>Component score</th>
<th>5</th>
</tr>
</thead>
</table>

* A score of one is allocated for each item discloses in the notes to the financial statements.