Asian Journal of Accounting and Governance **5**: 1–13 (2014) ISSN 2180-3838

Value Relevance of Investment Properties' Fair Value and Board Characteristics in Malaysian Real Estate Investment Trusts

TAN MEI ZI, MOHAMAT SABRI HASSAN & ZAINI EMBONG

ABSTRACT

Prior studies in Malaysia indicate that fair value of investment properties are not value relevant in various industries. Unlike those industries, Malaysian Real Estate Investment Trusts (MREITs) is a capital-intensive industry where the investment properties made up the majority of the MREITs total assets. Furthermore this industry is subjected to stringent monitoring by the Securities Commission (SC) which requires MREITs to adopt the fair value model and revalue their investment properties for at least once in every three years. Therefore, results from previous studies cannot be generalized to this industry. Hence, this study investigates whether fair value on investment properties is value relevant in the MREIT industry. It also examines the effect of board characteristics on the share prices of MREITs. Secondary data was obtained from annual reports of twelve listed MREITs on Bursa Malaysia from 2006 to 2011 and analyzed using multiple regression analysis. The results indicate that the information on the fair value of investment properties (as presented in balance sheet) is significantly related to share price of MREITs. However, the changes in fair value (revaluation surplus), as presented in income statement is not significantly related to the share price. The findings suggest that only fair value of investment properties (FVIP) is useful for investors to make their investment decisions. This study also found a positive and significant association between board independence and share prices of MREITs. It indicates that independence of directors in MREIT firms is also important to investors that it is reflected in the share price. This study adds to the limited literature on MREITs. The results indicate that investors do value the fair value information provided by MREITs and support the fair value accounting in REITs. The findings of this study could be used by regulators in improving the future revaluation guidelines for the REIT industry.

Keywords: Value relevance; fair value on investment properties; board characteristics; Malaysian Real Estate Investment Trusts (MREITs)

INTRODUCTION

This study examines the value relevance of fair value of investment property and board characteristics in Malaysian real estate investment trust (MREIT) industry. Unlike other industries, MREITs industry is not only subjected to Malaysian Financial Reporting Standards (MFRS) 140 *Investment Property* (which is in line with IAS 40 *Investment Property*) but is also subjected to additional requirement issued by the Security Commission (SC). While MFRS 140 allows firms to measure their entire class of investment properties either at cost or fair value, the *Guidelines on Real Estate Investment* issued by SC requires all listed MREITs industry to revalue their investment portfolio once every three years (clause 10.03).

The additional requirement of MREITs is a unique feature that made results of prior studies within other industries and jurisdictions (such as Owusu-Ansah & Yeoh 2006; So & Smith 2009; Lourenco & Curto 2008; Pappu & Devi 2011; Ishak, Saringat, Ibrahim & Wahab 2012) might not be applicable to MREITs industry. The revaluation of investment properties may reduce the opportunistic behaviour among managers and less information asymmetry between managers and investors. The additional requirement may help the SC to protect the investors and at the same time facilitate the development of MREITs industry. However, studies on the value relevance of fair value of investment properties in REITs are limited and almost non-existent in Malaysia. This is due to the industry being at its infancy stage as MREITs are only actively traded or listed on Bursa Malaysia since 2005 and their numbers are small compared to REITs in other countries. Therefore results from previous studies in other countries might not reflect Malaysian environment. Studies on value relevance of fair value of investment property in Malaysia are limited to the property industry (Pappu & Devi 2011; Ishak et al. 2012). In addition, prior studies (Lourenco & Curto 2008; Owusu-Ansah & Yeoh 2006; So & Smith 2009; Ishak et al. 2012; Pappu & Devi 2011) provide mixed results. Similar value relevance study in new context is therefore necessary to provide further understanding on what information is deemed as relevant by investors.

Although MREITs are only required to revalue their investment properties once in every three years, they may also choose to conduct revaluations more regularly at their own discretion. Initial investigation indicates majority of MREITs voluntarily revalue their investment properties more than once in every three years. This could be due to

several factors such as to enhance the performance of the trust, signal additional borrowing capacity, avoid violation of debt covenant and achieve transparent reporting. Good corporate governance practices may also motivate MREITs to revalue their investment properties more often than what is required by the Guidelines on REITs. According to the Malaysian Code on Corporate Governance 2012 (Securities Commission Malaysia 2012), disclosure or transparency are both essential for informed decision-making. Therefore, firms with stronger corporate governance mechanisms are more likely to provide timely and accurate information to protect their investors' interests.

Real Estate Investment Trusts (REITs) are often seen as having stronger governance mechanisms due to their transparency (Shakir 2009). These mechanisms can prevent management level corruption and enhance shareholders' value by minimizing the conflict of interest between the agents and the principals (Samontaray 2010). Among corporate governance practices, board characteristics are considered important. This is due to the ability of board to influence top management to provide more transparent and non-misleading accounting information (Johari Mohd-Saleh, Jaffar & Hassan 2008). Hence, this study also aims to provide evidence on the role of board characteristics (i.e. board independence and CEO duality) in investment decision making. Therefore, the objective of this study is to examine the value relevance of investment property's fair value, board independence and CEO duality of MREITs.

The study is motivated by: first, limited study on fair value accounting in REITs, where most of prior studies on fair value revaluation of investment property focused on other industries. The findings from the literature cannot be generalized to MREITs. Second, the Guidelines on REITs that mandatorily require MREITs to revalue their investment properties at least once every three years provide a unique setting for this study to assess the impact of revaluations on the share prices of MREITs. Third, this study focuses on Malaysian REITs because most of the prior literature regarding REITs focused on developed countries (example Bauer, Eichholtz & Kok 2010; Ghosh & Sirmans 2003; Han 2006; Hartzell, Sun & Titman 2006). Little attention has been given to emerging REITs such as MREITs (Pham 2012). MREITs should receive more research attention as they showed impressive growth and outperformed most REITs in Asia Pacific. The market capitalisation of MREITs in 2013 is RM35 billion and the industry is expected to generate RM47 billion to the Malaysian's GDP in 2014 (Ministry of Finance Malaysia 2013). Currently, MREITs are ranked fourth in terms of market capitalization in the Asian Pacific region (Kaur 2013). In Malaysia, the REIT industry made up 28% of the total listed property equity on Bursa Malaysia.

Our findings indicate that the information on the fair value on investment property (as presented in balance sheet) is significantly related to the share price of MREITs. However, the changes in fair value (revaluation surplus), as presented in income statement is not significantly related to the share price. This study also found a positive and significant association between board independence and share prices of MREITs.

This paper is organised as follows. The next section discusses on the background of MREITs and the Securities Commission's Guidelines on REITs. This is followed by the literature review and hypothesis development. The fourth section explains the research methodology used in this study. Research results are presented and discussed in section five. Finally, section six concludes the article.

Background

Malaysian Real Estate Investment Trusts (MREITs)

Real estate investment trusts (REITs) are unit trust schemes that invest primarily in income-generating real estate such as office buildings, commercial buildings, residences, shopping malls, hospitals and lands. The main source of income of REITs is the rental income received from tenants. The rental income is then distributed to the unit-holders of REITs as dividends. Due to the stable flow of income, REITs are considered as a low risk investment for investors (Alias & Soi Tho 2011). They provide an opportunity for small investors to invest in quality large-scale commercial real estate without having to buy the properties directly (Bursa Malaysia 2012).

In Malaysia, the development of REITs started with the introduction of Listed Property Trust (LPT) in 1989. The first LPT listed on Kuala Lumpur Stock Exchange (KLSE) in August 1989, Arab Malaysia First Property Trust, was the first LPT in Asia (Alias & Soi Tho 2011). However up until year 2005, there were only four LPTs listed on KLSE, namely Arab-Malaysian First Property Trust, Mayban Property Trust Fund One, First Malaysia Property Trust and Amanah Harta Tanah PNB (Sing, Ho & Mak 2002). The slow growth in LPT industry was due to poor regulatory framework and structural factor such as lack of tax transparency (Newell, Ting, & Acheampong 2002).

In January 2005, LPTs in Malaysia have been renamed as REITs following the issuance of Guidelines on REITs by the Securities Commission Malaysia to supersede the Guidelines on Property Trust Funds (PTFs). This effort is to accelerate the growth, and promote the competitiveness of MREITs locally and internationally (Securities Commission Malaysia 2005). The new Guidelines on REITs have major improvements from the old Guidelines on Property Trust Funds. The improvements include liberalization of the borrowing limit of MREITs, relaxation of rules on acquisitions of leasehold properties, flexibility in the acquisition of real estate that is encumbered by financial charges, enhancement of reporting requirements which is consistent with international standards (Hamzah, Rozali & Tahir 2010). Basically, the Guidelines on REITs oversee the establishment of REITs and cover areas such as appointment of trustee, management of company, valuation, reporting and audit, fees and expenses, related party transactions and other operational matters (Securities Commission Malaysia

2011). In August 2008, the Guidelines on REITs have been revised to govern MREITs more effectively.

Currently, there are 16 REITs listed on Bursa Malaysia. Out of the 16 listed MREITs, only Amanah Harta Tanah PNB was converted from a LPT. Other 15 REITs were established since 2005. Most of the MREITs invest in office buildings and commercial malls (retail). There are also MREITs that invest in hotels, hospital and plantation. MREITs are given full exemption on income tax if they distribute 90% of their total income to the unit holders (2012 Budget Commentary and Tax Information 2011). This tax incentive aims to further promote the REITs industry in Malaysia. Table 1 reports all MREITs listed on Bursa Malaysia, their listing dates and types of assets.

FAIR VALUE REVALUATION OF INVESTMENT PROPERTIES

The fair value of an investment property is defined as "the price at which the property could be exchanged between knowledgeable, willing parties in an arm's length transaction" (Malaysian Accounting Standards Board 2011, para 36). The fair value model that reflects the market value of investment property is said to be more relevant than the historical cost model for investors to make economic decisions. Although there were arguments on the reliability of fair value of investment property, it should not be an issue because valuations are conducted by external valuers (Securities Commission Malaysia 2011). According to Dietrich, Harris and Muller III (2001) the engagement of external valuers enhances the reliability of the fair value of investment property.

In Malaysia, MREITs are subjected to the Guidelines on REITs issued by the Securities Commission Malaysia. The first guideline on REITs was introduced in January 2005, which superseded the Guidelines on Property Trust Funds. The latest revision of Guidelines on REITs was issued in August 2008, and is currently used to govern MREITs. These guidelines require MREITs to revalue their investment properties at least once every three years (Securities Commission Malaysia 2011). However, the guidelines allow REITs to revalue more frequently to suit the changes in fair value of their investment properties. An investigation conducted in this study indicates that some of MREITs voluntarily revalued their investment properties more than once in every three years. This can be due to several reasons such as to avoid violations of debt covenants and to achieve transparent reporting (Missonier-Piera 2007). Higher disclosure has been found to relate to governance structure. If this is so, it is expected that good governance may lead to the information on fair value disclosed to be more reliable and trustable. If this is so, investors will react to governance mechanism of the company and reflected in share price.

CORPORATE GOVERNANCE AND MREITS

Separation between managers and the owners of the firm may create conflict between them (Jensen & Meckling 1976). Therefore an effective monitoring mechanism on the management is necessary to ensure the shareholders' interests are guaranteed (Johari et al. 2008). One of the mechanisms that has been practiced by companies is good corporate governance. According to Yasser, Entebang and Mansor (2011), corporate governance is "the mode through which entities are managed and governed". The main objective of corporate governance is to enhance the accountability, transparency, fairness, disclosure and responsibility of all businesses (Malik 2012). Therefore, a good, sound and healthy corporate governance policy is an important criterion for making investment decision (Samontaray 2010).

During the Asian financial crisis in 1997 and 1998, many investors lost confidence in capital market and shied away from making investments for fear of losing

TABLE 1. REITs listed on Bursa Malaysia

	REIT	LISTING DATE	ASSET TYPE
1.	Amanah Harta Tanah PNB*	28/12/1990	Office
2.	Axis REIT	3/8/2005	Office, Industrial
3.	Starhill REIT	16/12/2005	Hotel, Residences
4.	UOA REIT	30/12/2005	Office
5.	Tower REIT	12/4/2006	Office
6.	Al-Aqar KPJ REIT	10/8/2006	Hospital
7.	Hektar REIT	4/12/2006	Retail
8.	AMFirst REIT	20/12/2006	Office
9.	Quill Capita Trust	8/1/2007	Diversified
10.	Al-Hadharah Boustead REIT	8/2/2007	Plantation
11.	Amanahraya REIT	26/2/2007	Diversified
12.	Atrium REIT	2/4/2007	Industrial
13.	Sunway REIT	8/7/2010	Retail/hotel/office
14.	CapitaMalls Malaysia Trust	16/7/2010	Retail
15.	Pavilion REIT	7/12/2011	Retail
16.	IGB REIT	21/9/2012	Retail

Source: Extracted from Bursa Malaysia (2012)
*Established as Property Trust Funds (PTFs), and converted to REITs since August 2005

money. Since then, Securities Commission Malaysia has undertaken numerous initiatives to restore investors' confidence, one of which was the issuance of the Malaysian Code on Corporate Governance (MCCG) to strengthen the corporate governance framework (Securities Commission Malaysia 2012). The MCCG provides recommendations on good corporate governance practices for Malaysian firms. Although the observance of MCCG by companies is voluntary, all listed companies (including MREITs) are however required to report their compliance with the MCCG in their annual reports (Securities Commission Malaysia 2012).

Studies of corporate governance in REITs are becoming more relevant as international property investment flows are increasingly allocated through indirect property investment vehicles such as REITs rather than directly into property investments (Bauer et al. 2010). Many countries have introduced REITs to facilitate capital flows to the real estate sector (Bauer et al. 2010). Thus, part of the objective of this study is to examine the value relevance of corporate governance mechanisms of MREITs as corporate governance is one of the important determinants of share price (Malik 2012).

Literature Review and Hypotheses Development

Value Relevance Studies on Fair Value of Investment Property

Value relevance research investigates the usefulness of accounting information to investors for making investment decisions. Accounting information is denoted as 'value relevant' if there a statistical association between the accounting information and market value of equity (Beisland 2009). Many value relevance studies have been conducted to examine the association between market value and accounting information such as inventory accounting treatment (Biddle & Lindahl 1982), intangible assets (Aboody & Lev 1998), choice of depreciation (Kang & Zhao 2009) and fair value of financial instruments (Hassan & Mohd-Saleh 2010) .

Although many studies have used value relevance in examining various aspects of accounting information, the value relevance studies on fair value of investment properties remain limited (Ishak et al. 2012). The first value relevance study on investment property has been carried out by Owusu-Ansah and Yeoh (2006) in New Zealand. Prior to the introduction of IAS 40 *Investment Property* on 1 January 2005, the New Zealand SSAP No.17 Accounting for Investment Properties and Properties Intended for Sale allowed New Zealand companies to recognize unrealized gains or losses either in the income statement or in the revaluation reserve account. Since the IAS 40 came into effect, it eliminates the option of recognizing unrealized gains in the revaluation reserve. Owusu-Ansah and Yeoh (2006) examined the relative value relevance of two alternative accounting treatments for unrealized gains on investment properties using a sample of New Zealand companies from 1990 to 1999 when the option was is still available. They found that recognizing unrealized gains in the income statement (as required by the IAS 40) is not superior to recognition in the revaluation reserve account in terms of their value relevance.

So and Smith (2009) extended Owusu-Ansah and Yeoh's (2006) study to the similar situations in Hong Kong. Prior to 1 January 2005, Hong Kong accounting standards (HKAS) SSAP 13 (2000) *Accounting for Investment Properties* required companies to present the changes in fair value of investment property in the revaluation reserve account. After HKAS has become fully converged with International Financial Reporting Standards (IFRS) on 1 January 2005, HKAS 40 which follows IAS 40 *Investment* Property requires all changes in the fair value of investment property to be presented in the income statement. Hence, So and Smith (2009) investigates the value relevance of revaluation method required by the old SSAP 13 (2000) and the revaluation method allowed under HKAS 40. Based on 2004 to 2006 data of a sample of listed property companies in Hong Kong, their results showed higher market reaction and returns when companies presented the changes in fair value of investment property in the income statement. So and Smith (2009) support the decision usefulness of information presented in accordance to the IFRS. The inconsistent results in the above studies could be due to the different degree of development in their financial markets. Therefore examining the same issue within Malaysian context might be relevant to provide additional information within the current literature.

Lourenco and Curto (2008) investigated the value relevance of cost model and fair value model for investment property in four European countries, namely France, Germany, Sweden and the UK. They focused on the real estate firms and found that overall, investors distinguish the recognized cost and recognized fair value of investment property but they do not seem to distinguish the fair value of investment property across four countries.

In Malaysia, Pappu and Devi (2011) studied the relative value relevance of investment property information under the cost model and the fair value model. They examined 411 listed companies in various industries and their results showed that the historical cost model is more relevant than the fair value model. Pappu and Devi (2011) argued that investors are more comfortable using the cost model than the fair value model. Consistent with Pappu and Devi (2011), Ishak et al. (2012) provided evidence that fair value is not value relevant. They suggested that the fair value model is not dissimilar from the cost model. Both studies by Pappu and Devi (2011) and Ishak et al. (2012) used MFRS 140 *Investment Property* as a reference.

The limited numbers of studies on fair value model of investment properties provide mixed results. This inconsistency may be influenced by the external factor such as stage of development in the capital market (So and Smith 2009; Owusu-Ansah and Yeoh 2006) or type

of industry (Pappu & Devi 2011). The mixed findings of previous studies indicate the possibility that other factors may influence the value relevance of information on fair value. Given previous studies that mainly focus on property industry where the use of fair value is not mandatory, we on the other hand focus on REIT industry. The focus on REIT industry is because the structure and principal activity of REIT are different from other industries. REIT has its own guidelines, and investment property represents the majority of its total assets and directly affects its income. Hence the fair value information may be more relevant to investors and is expected to be reflected in share price.

According to the theory of efficient markets, capital markets react in an efficient and unbiased manner to all publicly available information (Deegan 2010). Basically, there are three forms of market efficiency which are weak form market efficiency, semi-strong form efficiency and strong-form efficiency (Valentine 2010). Weak form market efficiency assumes that share prices simply reflect past information. Semi-strong form efficiency assumes that a firm's share price reflects all publicly available information. Lastly, a strong-form of market efficiency assumes that share prices will reflect all information known to anyone at the point in time including private information (Deegan 2010). Findings by Cheah (2005) indicate that the equity market in Malaysia is in a semi-strong form efficient. This efficiency due to the fact that share prices of firms listed in the stock market (Bursa Malaysia) are found to react rapidly to all publicly available information. Hence, any information disclosed in the annual report is expected to be reflected in the share price if the information is deemed useful. For a MREIT firm, information on fair value revaluation of investment property is required to be disclosed in the annual report. If this information is important to investors, the share price is predicted to response to this information.

In many prior studies, fair value accounting has been argued to be more relevant and useful than historical cost accounting (such as Dietrich et al. 2001; Herrmann et al. 2006). Although the opponents of fair value accounting argue that historical cost accounting is more reliable than fair value, studies like Dietrich et al. (2001) indicate that fair value estimates are more accurate than the historical costs. Barth and Clinch (1998) argue that fair values of all assets are likely to be relevant to financial statement users. Their findings indicate that fair values of different classes of assets are significantly associated with the share prices as they have implications for firms' future profitability (Barth & Clinch, 1998). Their results are supported by Aboody et al. (1999), Courtenay and Cahan (2004) and Hassan and Mohd-Saleh (2010).

Aboody et al. (1999) indicate that revaluations of fixed assets among UK firms are positively related to share prices. Courtenay and Cahan (2004) extended Aboody et al. (1999) study and indicate that revaluations of fixed assets are more value relevant for firms with low leverage than for firms with high leverage. The most relevant study to the current setting is by Hassan and Mohd-Saleh (2010). Hassan and Mohd-Saleh (2010) examine the value relevance of fair value information among Malaysian firms. Their study indicates that fair value information on financial instruments is value relevant. Based on the theory of efficient markets and the discussions in prior studies, we hypothesize that:

H_1: There is a positive relationship between fair value of investment properties and share prices of MREITs.

VALUE RELEVANCE STUDIES ON CORPORATE GOVERNANCE

Beside fair value information, corporate governance mechanism also plays an important role in REITs. This study examines the value relevance of corporate governance mechanisms in MREITs. Despite the fact that there are many studies on corporate governance practices in various industries (such as Mohd Ghazali 2010; Shakir 2009; Johari et al. 2008; Mohd Saleh, Mohd Iskandar & Rahmat 2005, 2007; Peasnell, Pope & Young 2005, 2007) including REITs (Bauer et al. 2010; Han 2006; Hartzell et al. 2006; Ghosh & Sirmans 2003; Friday, Sirmans & Conover 1999), limited studies examine this issue within Malaysian REITs (Pham 2012).

Among the above REITs studies, Friday et al. (1999), Han (2006) and Bauer et al. (2010) specifically examine the effect of corporate governance mechanism (i.e. ownership structure) on firm value as measured by market to book value ratios and Tobin's Q. The other studies investigate the relationship between corporate governance and performance (Bauer et al. 2010: Ghosh & Sirmans 2003) as well as investment choices (Hartzell et al. 2006). There are also studies that examine the value relevance of corporate governance such as by Samontaray (2010) and Malik (2012). Samontaray (2010) examines the value relevance of corporate governance factors of 50 listed companies on NIFTY index, India in 2007 and 2008. The researcher developed corporate governance scores using the guidelines of Narayan Murthu committee report on Corporate Governance. Cross-sectional regression analysis was used to analyze the relationship between share price and corporate governance factors. The results indicate that corporate governance had significantly affected the share price of the 50 listed companies. Hence, Samontaray (2010) concludes that corporate governance is an important predictor of a firm's share price.

Similar to Samontaray (2010), Malik (2012) examines the relationship between corporate governance score and the stock price of 30 companies listed on Karachi Stock Exchange (KSE) 30 index in 2009 and 2010. The author reports that corporate governance score is significantly related to the share price of a firm. Thus, Malik (2012) suggests that firms that seek to enhance their stock prices should implement governance reforms to gain investors' confidence and reduce firms' risks.

In Malaysia, study on the value relevance of corporate governance is limited, especially in MREITs.

However, there are studies that examine the relationship between corporate governance mechanisms and firm performance in other industries. These studies include Shakir (2009), which examines the effect of corporate governance in Malaysian property firm performance and Mohd Ghazali (2010), which examines the impact of corporate governance on corporate performance of non-financial companies. Therefore this study wishes to fill the gap by examining the value relevance of board characteristics (board independence and CEO duality) in MREITs.

Board Independence and Share Price According to Jensen and Meckling (1976), the separation of ownership and control gives rise to the issue of agency costs. In a situation where agency relationship exists in which the principal (i.e. shareholders) engages the agent (i.e. manager) to perform services on their behalf, it is assumed that both parties are self-centered and the agent will behave opportunistically to maximize his or her own wealth (Jensen and Meckling 1976). Conflict of interest may also arise between managers and minority shareholders. However, the existence of independent directors could limit managerial opportunisms and result in effective board monitoring (Mohd Ghazali 2010). More independent directors on board could enhance protection of interests for all shareholders and hence, better corporate performance. Therefore companies should ensure the existence of external or/non-executive directors in their board (Johari et al. 2008).

Prior studies provided evidence that external directors may prevent firms from managing earnings (Peasnell et al. 2005, 2006) and limit big bath activity (Mohd Saleh et al. 2005). These findings are consistent with Johari et al. (2008). Specifically in REITs study, Ghosh & Sirmans (2003) provided evidence that board independence improves firm's performance. We believe these consequences might be relevant to investors in their decision making, hence will be reflected in the share price of the firms. However, contrary to the above, Bauer et al. (2010) indicated that corporate governance, including board characteristics, is not-significantly related to REITs' firm value (Tobin's Q). Insignificant result of outside board (proxy for board independence) and investment behavior was reported in Hartzell et al. (2006). Based on the above discussion we hypothesize:

H_2: Board independence is systematically related to the share prices of MREITs.

CEO Duality and Share Price The MCCG recommends that the positions of chairman and CEO to be held by different persons to ensure a balance of power and authority (Securities Commission Malaysia 2012). The role of the directors is to monitor the top management of a firm. Hence, the duality role as chairman and CEO could lead to the chairman evaluating his or her own performance. This may result in poorer corporate performance. However, studies on the role of CEO duality are mainly related to earnings management (Johari et al. 2008; Mohd Saleh et al. 2005) and REITs performance (Ghosh & Sirmans 2003). We believe that if CEO duality influenced the firm performance and this relationship is fully incorporated by the market, then the firm's share price should quickly adjust to the change (Gompers, Ishii & Metrick 2003). Based on the above arguments, we hypothesize that:

H_3: CEO duality is systematically related to the share prices of MREITs.

Research Methodology

This study focuses on 12 MREITs that are listed on Bursa Malaysia from 2006 to 2011. We exclude four companies that are newly listed in the Bursa Malaysia and this lead to a total of 59 firm-year observations used in this study. The excluded firms are Sunway REIT, CapitaMalls Malaysia Trust, Pavilion REIT and IGB REIT. These four firms are excluded since these firms are only listed after year 2011. There are no data for the firms from 2006 until just before they are listed. According to Roscoe (1975), sample size of larger than 30 and less than 500 are appropriate for most research. The study period starts from 2006 because the REITs sector in Malaysia became active in late 2005 (Newell and Osmadi 2010). The data was collected from the annual report of each firm.

Data Source and Measurement of Variables

Following prior value relevant studies such as Hassan and Mohd-Saleh (2010) and Ishak et al. (2012), this study uses share price as a dependent variable. The share prices of MREITs are obtained from Yahoo!Finance (www.finance.yahoo.com). This study takes the share price of MREIT four month following the closing of each financial year. This consideration is taken because Paragraph 9.23(2) of Bursa Main Market Listing Requirement requires every listed company to announce their annual audited report within a period of not more than 4 months from the close of the financial year. For example, the financial data of annual report ended on 31 December 2009 will be matched with the REIT's share price on 30 April 2010. The use of lagged share price ensures that investors have sufficient time to acquire annual report information and react to the information (Barth, Beaver & Landsman 1996).

The independent variables for this study are derived from the MREITs' annual reports downloaded from www.bursamalaysia.com. This study only takes into account annual reports with 12-month financial data. The independent variables for this study consist of financial and non-financial data. The financial data include book value of net assets per share (*NetBV*), fair value of investment property per share (*FVIP*), earnings per share before revaluation surplus (*NetE*), and revaluation

surplus of investment property per share (*RevS*). These variables are disclosed in the financial statements. Two non-financial data are used in this study to represent board characteristics. These include board independence (*BInd*), which is measured by ratio of independent directors over total board, and CEO duality (*Dual*) which is measured by a dummy variable 1 if CEO and chairman is the same person, or 0 for otherwise. The summary of variables and the measurements is given in Table 2.

MULTIPLE REGRESSION MODEL

This study aims to examine the value relevance of fair value of investment property of MREITs. It adopts Ohlson's valuation model (Ohlson 1995) for constructing the regression model to test the hypotheses. The model is represented as Equation 1.

$$P_{it} = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 E_{it} + \varepsilon_{it} \quad (1)$$

where:

P = share price of firm i at time t
BV = book value of equity per share of firm i at time t
E = earnings per share of firm i at time t
ε = error term

In the Ohlson's model, the book value of equity and earnings are the explanatory variables of a firm's share price. To analyse the value relevance of revaluation surplus, the study separates 'book value of equity' into 'book value of net assets without fair value of investment property' (*NetBV*) and 'fair value of investment property' (*FVIP*). The earnings are also split into 'earnings before revaluation surplus' (*NetE*) and 'revaluation surplus' (*RevS*) to see the effect of revaluation of investment properties as required by the Guidelines on REITs. These separations give rise to Equation 2:

$$P_{it} = \alpha_0 + \alpha_1 NetBV_{it} + \alpha_2 FVIP_{it} + \alpha_3 NetE_{it} + \alpha_4 RevS_{it} + \varepsilon_{it} \quad (2)$$

where:

P = share price of firm i at time t
NetBV = book value of net assets minus fair value of investment properties of firm i at time t (per share)
FVIP = fair value of investment property of firm i at time t (per share)
NetE = earnings per share before revaluation surplus of firm i at time t (change in FV)
RevS = Revaluation surplus of investment property of firm i at time t (per share)
ε = error term

Next, Equation 2 is expanded to include two corporate governance mechanisms (board independence and CEO duality) and one control variable, REIT's size (Equation 3). Firm size is commonly controlled for in value relevance studies (So & Smith 2009).

$$P_{it} = \alpha_0 + \alpha_1 NetBV_{it} + \alpha_2 FVIP_{it} + \alpha_3 NetE_{it} + \alpha_4 RevS_{it} + \alpha_5 Bind_{it} + \alpha_6 Dual_{it} + \alpha_7 Size_{it} + \varepsilon_{it} \quad (3)$$

where:

P = share price of firm i at time t
NetBV = book value of net assets minus fair value of investment properties of firm i at time t (per share)
FVIP = fair value of investment property of firm i at time t (per share)
NetE = earnings per share before revaluation surplus of firm i at time t (change in FV)
RevS = Revaluation surplus of investment property of firm i at time t (per share)
Bind = Board independence of firm i at time t (ratio of independent directors over total board)
Dual = Role duality of firm i at time t (1 if CEO and chairman is the same person, 0 for otherwise)
Size = Size of firm i at time t (natural log of book value of total assets)
ε = error term

TABLE 2. Variables and measurements

Variable	Definition	Measurement
P	Share price	Price of share four months after closing date of financial year
NetBV	Book value of net assets	Book value of net assets deflated by outstanding share
FVIP	Fair value of investment property	Fair value of investment property deflated by outstanding sharea
NetE	Earnings per share before revaluation surplus	Recognized earnings before changes in fair value of investment properties deflated by outstanding share.
RevS	Revaluation surplus of investment property per share	Changes in fair value of investment properties deflated by outstanding share
Bind	Board independence	ratio of independent directors over total board
Dual	CEO duality	measured by a dummy variable 1 if CEO and chairman is the same person, or 0 for otherwise

RESULTS

DESCRIPTIVE STATISTICS

Table 3 presents the descriptive statistics for all the dependent and independent variables. The minimum book value of net assets excluding the fair value of investment property (*NetBV*) is a negative value because investment properties made up a very large portion of the total assets of MREITs. Table 3 indicates that our data is normally distributed as the median for each variable is not significantly different from the mean. Table 4 presents a bivariate relationship between independent variables and share price. Table 4 indicates that three of the main variables, i.e. revaluation surplus (*RevS*), Board Independence (*Bind*) and duality (*Dual*) are not significantly related with share price. This indicates that these variables have no influence on firm's share price. Table 4 also presents a Pearson correlation matrix among the variables used in this study. It indicates that the strongest correlation is between *NetBV* and *FVIP* (-0.8576). This is followed by the correlation between *SP* and *NetE* (0.8485) and *FVIP* and *NetE* (0.7854). As our sample is quite small (59 firm year), the non-parametric approach is also employed.

Table 4 indicates the Spearman's Rank Order Correlation (in italic) provides consistent findings as reported for Pearson correlation. In order to identify the problem of multicollinearity, this study also performs a collinearity diagnostics test using Tolerance and VIF values (Table 5). However this is not a concern since only a tolerance value of less than 0.1 and a VIF value of more than 10 indicate multicollinearity problem (Pallant, 2011). Further the two variables are expected to be highly correlated because the basic value of the property is the same. In addition we also performed a robustness test for both main regression models (Equation 2 and 3), where variable *NetBV* is excluded from Equation 2 and 3 because of high correlation with *FVIP*. The results are reported in the next section.

MULTIPLE REGRESSION RESULTS

Table 6 presents results of regression analysis for Equation 2. The regression is performed on a pooled data of 59 firm-year observations from 2006 to 2011. The equation estimates an association between mandatory fair value revaluation and share price. The White test shows that the model is not subjected to heteroskedasticity problem. The result indicates that H_1 is partly supported where

TABLE 3. Descriptive statistics for all variables

	n	Minimum	Maximum	Mean	Median	Standard Deviation
SP	59	0.6500	2.6800	1.1869	1.1300	0.3807
NetBV	59	-1.2495	0.7466	-0.5243	-0.5543	0.4407
FVIP	59	0.4196	3.6000	1.9038	1.9827	0.5960
NetE	59	0.0264	0.1706	0.0953	0.0864	0.0296
RevS	59	0.0000	0.3486	0.0691	0.0225	0.0961
Size	59	11.8453	14.3203	13.3476	13.5312	0.6916
Bind	59	0.2857	1.0000	0.4136	0.4000	0.1027
Dual	59	0.0000	1.0000	0.1695	0.0000	0.3784

TABLE 4. Pearson and Spearman's Rank Order Correlation coefficients between variables

	SP	*NetBV*	*FVIP*	*NetE*	*RevS*	*Bind*	*Dual*	*Size*
SP	1.0000	*-0.4500***	*0.6825***	*0.8425***	*0.2723**	*0.0395*	*-0.1566*	*0.0865*
NetBV	-0.4397**	1.0000	*-0.8370***	*-0.4620***	*-0.1555*	*0.2171*	*0.0769*	*-0.3333***
FVIP	0.7345**	-0.8576**	1.0000	*0.7260***	*0.3081**	*-0.2210*	*-0.1645*	*0.2408*
NetE	0.8485**	-0.5510**	0.7854**	1.0000	*0.3587***	*0.1092*	*-0.1300*	*0.0370*
RevS	0.2151	-0.0748	0.2203*	0.2611*	1.0000	*0.2515*	*-0.1095*	*-0.0370*
Bind	0.0506	0.1322	-0.1004	0.0266	0.2481*	1.0000	*-0.1151*	*-0.1851*
Dual	-0.1447	0.1821	-0.2638*	-0.1340	-0.0436	-0.1341	1.0000	*0.3581***
Size	0.2455*	-0.3308	0.2667*	0.1999	0.1185	-0.2898*	0.3480**	1.0000

** and * indicate correlation is significant at p<0.01 and p<0.05 level respectively. Correlations in italic and bold refer to Spearman's Rank Order Correlation.

TABLE 5.Tolerance and VIF values for all independent variables

	NetBV	*FVIP*	*NetE*	*RevS*	*Bind*	*Dual*	*Size*
Tolerance	0.2030	0.1080	0.3060	0.8050	0.8000	0.7190	0.6580
VIF	4.9320	9.2800	3.2660	1.2420	1.2500	1.3900	1.5190

fair value of investment property (*FVIP*) is positive and significantly related to share price, but mandatory fair value revaluation (*RevS)* is not significantly related to the share price.

Table 6 also indicates that the book value of net assets without fair value of investment property (*NetBV*), and earnings before revaluation surplus (*NetE*) are positive and significantly related to share price. The result indicates that investors still regard book value of assets and earnings as important factors in making their investment decisions. This is consistent with Barth, Beaver and Landsman (1998). Our study is also consistent with a study by Hassan and Mohd-Saleh (2010) in Malaysia where fair value information is found to be value relevant for investment decision. However, the insignificance of *RevS* might be due to the fact that it is considered as realized by MREITs. Therefore investors perceive the information as not relevant for decision making. However one of the findings is inconsistent with Hassan and Mohd-Saleh (2010) that where the realized gains and losses on financial assets was found to be significant. We believe the contradictory result is due to the options available for firms in determining the fair value of investment properties.

MFRS 140 identifies three ways to estimate the fair value of their investment properties. However, the most common method used (Level 3 inputs[1]) is too subjective as the fair value is determine based on the firms estimate of discounted future cash flows (MFRS 140, para 46C). However, this approach is less reliable as the value is not observable from the market (Danbolt & Rees 2008; Landsman 2007; Laux & Leuz 2009; Lefebvre et al. 2009; Penman 2007; Song, Thomas & Yi 2010). Level 3 inputs require firms to make assumptions about the future cash flows associated with the asset and discount it using an appropriate discount rate. Therefore, these might affect investors' views on the relevancy and reliability of the revaluation surplus (*RevS*) recognised in the comprehensive income statement. Further this could probably due to the fact that the REIT industry in Malaysia is still at its young age and many investors are not aware of REIT investment and cannot respond to the revaluation information released by the MREITs (Sarif 2010).

Table 7 presents a regression analysis for Equation 3, which includes board independence CEO duality and REIT size. The adjusted R^2 of this model is 0.7791 which is higher than the adjusted R^2 of the earlier model in Table 6 (0.7659). Table 7 indicates similar results as in Table 6, where *RevS* is not significantly related to share price while fair value of investment property (*FVIP*) is significantly related to share price. Table 7 also indicates that book value of net assets without fair value of investment property (*NetBV*) and earnings before revaluation surplus (*NetE*) remain significantly related to the share price. The results on corporate governance factors indicate that board independence is positively related to the share price at $p < 0.05$. Therefore, Hypothesis 2 is supported. The CEO duality however, is not significantly related to share price. Hypothesis 3 is therefore not supported and hence rejected. Further, our results indicate that REIT size is positive and significantly related to share price. The significance of board independence indicates that independence of board is considered as an important factor by investors as their existence will ensure their interest is protected. This is consistent with Peasnell et al. (2005, 2006), Mohd Saleh et al. (2005) and Johari et al. (2008). Specifically our study supports a REITs study by Ghosh and Sirmans (2003). We believe that the insignificant result for CEO duality is due to the fact that the number of CEO with duality function in MREITs is low (17%).

ROBUSTNESS TESTS

We acknowledge sample size for our study is small. Therefore, to ensure our findings are reliable, several robustness tests were performed. First, we excluded one of highly correlated variables, which is net book value (*NetBV*) as our interest is fair value of investment properties (*FVIP*). This is discussed in the next section. Second, we performed a regression analyses for both

TABLE 6. The association between fair value of investment properties and share price (n59)

$$(P_{it} = \alpha_0 + \alpha_1 NetBV_{it} + \alpha_2 FVIP_{it} + \alpha_3 NetE_{it} + \alpha_4 RevS_{it} + \varepsilon_{it})$$

Variables	Coefficient	Std Error	t-Statistic	Prob
NetBV	0.4138	0.1177	3.5157	0.0009*
FVIP	0.4542	0.1169	3.8838	0.0003*
NetE	7.3026	1.4323	5.0984	0.0000*
RevS	-0.2141	0.2656	-0.8061	0.4237
Constant	-0.1420	0.1101	-1.2896	0.2027

R^2=0.7820 Adjusted R^2 = 0.7659 F-statistic = 48.4388 Prob = 0.000
* indicates significance at p<0.01

where:

P = share price of firm *i* at time *t* (4 months after financial year end)
NetBV = book value of net assets minus fair value of investment properties of firm *i* at time *t* (per share)
FVIP = fair value of investment property of firm *i* at time *t* (per share)
NetE = earnings per share before revaluation surplus of firm *i* at time *t* (change in FV)
RevS = Revaluation surplus of investment property of firm *i* at time *t* (per share)

equations 2 and 3 using a winsorized data. Finally we performed a non-parametric regression for equations 2 and 3. These analyses are reported in winsorized data and non-parametric analysis.

MULTIPLE REGRESSION ANALYSES WITHOUT *NetBV*

Although Table 4 and Table 5 indicate that multicollinearity is not a concern, however due to a high score of correlation coefficient between *NetBV* and *FVIP*, we therefore exclude *NetBV* from Equation 2. Results for the analyses are presented in Table 8. Column 2 indicates that excluding *NetBV* affects our earlier findings as presented in Table 6. Column 2 (Model 4) indicates that only *NetE* is value relevant. The result is consistent after we include *Size* (which is measured by log of total assets) as a control variable (the results are not reported). The significance of *NetE* also remain when both board independent (*Bind)* and CEO duality (*Dual*) are included (Model 5). Further, Model 5 provides evidence that *Bind* is also marginally significant at p<0.10. Therefore, we believe our earlier findings reported in Tables 6 and 7 should be read with caution as *NetBV* many have might influenced the results as the variable is highly correlated with *FVIP*. We therefore further analyze the sample using winsorized data and non-parametric approach. The results are reported in the following section.

WINSORIZED DATA AND NON-PARAMETRIC ANALYSIS

We examine normality of residuals for both findings reported in Table 6 and 7 based on skewness and kurtosis. According to Tabachnik and Fidell (2007), a normally distributed variable will have a skewness and kurtosis value of zero (0). Results for both analyses indicate the skewness of residuals for Tables 6 and 7 are 0.1864 and 0.4870, respectively. The kurtosis for both Tables 6 and 7 is 3.5667 and 4.1679. Although the values are within the acceptable range, we winsorized our data for both ends (the lowest and the highest score) to the forth value to confirm our results. We then re-estimate Equations 2 and 3 based on the new values. Our findings indicate that earnings per share before revaluation surplus (*NetE*) and fair value of investment properties (*FVIP*) are positively and significantly related with share price. For Equation 2 the coefficient values for *NetE* and *FVIP* are 8.273 (p = 0.00) and 0.224 (p = 0.054), respectively. Similar results are reported for Equation 3 with coefficient values for *NetE* and *FVIP* are 7.799 (p = 0.000) and 0.255 (p = 0.048). These findings are consistent with findings reported in Tables 6 and 7.

To address the possible bias of small sample size, we had performed a non-parametric analysis using rank transformed regression. Our results indicate that only *NetE* is significantly related with share price for both Equations 2 and 3. These findings are not consistent with the parametric analyses. Therefore, our findings need to be read with caution. Although the sample is small, but according to Pallant (2011) it is acceptable for the regression analysis. Therefore we believe findings from the parametric analyses are more relevant.

CONCLUSION

In recent years, Real Estate Investment Trusts (REITs) have become an important investment vehicle in Malaysia (Newell & Osmadi 2010). Malaysian Real Estate Investment Trusts (MREITs) are subjected to the Guidelines on REITs issued by the Securities Commission Malaysia that require them to revalue their investment

TABLE 7. The association between fair value of investment properties, board independence, CEO duality and share price (n: 59)

$$P_{it} = \alpha_0 + \alpha_1 NetBV_{it} + \alpha_2 FVIP_{it} + \alpha_3 NetE_{it} + \alpha_4 RevS_{it} + \alpha_5 Bind_{it} + \alpha_6 Dual_{it} + \alpha_7 Size_{it} + \varepsilon_{it}$$

Variables	Coefficient	Std Error	t-Statistic	Prob
NetBV	0.4832	0.1394	3.4674	0.0011*
FVIP	0.5004	0.1464	3.4169	0.0013*
NetE	6.8096	1.6707	4.0760	0.0002*
RevS	-0.4052	0.3018	-1.3428	0.1853
Bind	0.4172	0.1832	2.2779	0.0270**
Dual	-0.0163	0.0661	-0.2460	0.8066
Size	0.0914	0.0373	2.4508	0.0177**
Constant	-1.5235	0.5854	-2.6024	0.0121

R^2 = 0.8058 Adj. R^2 = 0.7791 F-statistic = 30.2258 Prob = 0.000
* and ** indicate significance at p<0.01 and p<0.05 respectively

where:

P = share price of firm *i* at time *t* (4 months after financial year end)
NetBV = book value of net assets minus fair value of investment properties of firm *i* at time *t* (per share)
FVIP = fair value of investment property of firm *i* at time *t* (per share)
NetE = earnings per share before revaluation surplus of firm *i* at time *t* (change in FV)
RevS = Revaluation surplus of investment property of firm *i* at time *t* (per share)
Bind = Board independence of firm *i* at time *t* (ratio of independent directors over total board)
Dual = Role duality of firm *i* at time *t* (1 if CEO and chairman is the same person, 0 for otherwise)
Size = Size of firm *i* at time *t* (natural log of book value of total assets)

TABLE 8. Additional analyses without NetBV
White's heteroscedasticity-correction

Variables	Model 4	Model 5
FVIP	0.1138	0.1038
	(1.5752)	(1.2418)
NetE	9.1408	9.0477
	(5.9547)*	(5.4134)*
RevS	-0.0390	-0.1527
	(-0.1472)	(-0.4937)
Bind	-	0.3068
		(1.9112)***
Dual	-	-0.0337
		(-0.4059)
Size	-	-0.0559
		(1.3327)
Constant	0.1017	-0.7304
	(0.6835)	(-1.3014)
Adj R2	0.7175	0.7126
F Stat	50.1143*	24.9703

Note: * and *** indicate significance at $p < 0.01$ and $p < 0.10$, respectively.

properties at least once every three years. This study takes this opportunity to examine the impact of fair value on investment properties including its revaluation on the share price of MREITs. Besides, the fair value of investment properties corporate governance is also a key determinant of share price. Hence, this study aims to examine the value relevance of fair value of investment properties and its revaluation as well as corporate governance mechanism in MREITs.

The results indicate inconsistent findings, where insignificant relationship between fair value revaluations (an item in profit or loss) made by MREITs and their share prices was reported. This finding could probably be due to lack of awareness among investors on the effect of unrealized gains or losses from changes in the fair value of the investment properties (revaluation surplus) on decision making. This is because MREITs are still at the infancy stage therefore many investors are not aware of REIT investment and therefore they cannot respond to the revaluation information released by MREITs. Nevertheless, it provides evidence that the fair value of investment property (an item in the statement of financial position) and board independence are value relevant. This study adds to the limited value relevance research that examines MREITs. However, it has a limitation. This study only focused on the twelve MREITs listed on Bursa Malaysia. We acknowledge the small sample size and the limitation of generalizing the findings. This however is inevitable considering the nature of the industry and the choice of this industry is made consciously. The use of fair value is seen as more important in REITs. However, most research in fair value excludes this industry due to different requirement and regulation. Therefore, part of the objectives of this study is to fill this gap and REITs is chosen as the focus of the study. Future research can extend this study by comparing the REITs in Malaysia with its neighboring countries with similar REITs industry.

ENDNOTES

[1] There are three levels of fair value hierarchy available for firms to value their investment properties. Level 1 inputs are those based on current price of similar properties in an active market. However, Level 1 inputs may be a problem in Malaysia as there are limited active markets available. Therefore, firms may choose either level 2 or 3 inputs which is more subjective.

REFERENCES

2012 Budget Commentary and Tax Information. 2011.

Aboody, D. & Lev, B. 1998. The value relevance of intangibles: The case of software capitalization. *Journal of Accounting Research* 36: 161-191.

Alias, A. & Soi Tho, C.Y. 2011. Performance analysis of REITs: Comparison between M-REITS and UK-REITS. *Journal of Surveying, Construction and Property* 2(Special Issue): 38-61.

Barth, M.E., Beaver, W.H. & Landsman, W.R. 1996. Value relevance of banks fair value disclosures under SFAS 107. *The Accounting Review* 71(October): 513-537.

Barth, M.E., Beaver, W.H. & Landsman, W.R. 1998. Relative valuation roles of equity book value and net income as a function of financial health. *Journal of Accounting and Economics* 25(1): 1-34.

Barth, M.E. & Clinch, G. 1998. Revalued financial, tangible, and intangible assets: associations with share prices and non-market-based value estimates. *Journal of Accounting Research* 36: 199-233.

Bauer, R., Eichholtz, P. & Kok, N. 2010. Corporate governance and performance: The REIT effect. *Real Estate Economics*: 1-29.

Beisland, L.A. 2009. A review of the value relevance literature. *The Open Business Journal* 2: 7-27.

Biddle, G.C. & Lindahl, F.W. 1982. Stock price reactions to LIFO adoptions: The association between excess returns and LIFO tax savings. *Journal of Accounting Research* 20(2): 551-588.

Bursa Malaysia. 2012. *Real Estate Investment Trust (REIT)*. http://www.bursamalaysia.com/market/securities/equities/products/real-estate-investment-trusts-reits/ [20 October 2012].

Cheah, E.T. 2005. A quality award and stock market reaction: Evidence from Malaysia. *Total Quality Management* 16(6): 681-691.

Courtenay, S.M. & Cahan, S.F. 2004. The impact of debt on market reactions to the revaluation of noncurrent assets. *Pacific-Basin Finance Journal* 12: 219-243.

Danbolt, J. & Rees, W. 2008. An experiment in fair value accounting: UK investment vehicles. *European Accounting Review* 17(2): 271-303.

Deegan, C. 2010. *Financial Accounting Theory*. 3rd edition. Australia: McGraw-Hill Australia Pty Ltd.

Dietrich, J.R., Harris, M.S. & Muller III, K.A. 2001. The reliability of investment property value estimates. *Journal of Accounting and Economics* 30: 125-158.

Friday, H.S., Sirmans, G.S. & Conover, C.M. 1999. Ownership structure and the value of the firm: The case of REITs. *Journal of Real Estate Research* 17: 71-90.

Ghost, C. & Sirmans, C.F. 2003. Board independence, ownership structure and performance: evidence from real estate investment trusts. *The Journal of Real Estate Finance and Economics* 26: 287-318.

Gompers, P.A., Ishii, J.L. & Metrick, A. 2003. Corporate governance and equity prices. *Quarterly Journal of Economics* 118(1): 107-155.

Hamzah, A.H., Rozali, M.B. & Tahir, I.M. 2010. Empirical investigation on the performance of the Malaysian real estate investment trusts in pre-crisis, during crisis and post-crisis period. *International Journal of Economics and Finance* 2(2): 62-69.

Han, B. 2006. Insider ownership and firm value: Evidence from real estate investment trusts. *The Journal of Real Estate Finance and Economics* 32: 471-493.

Hartzell, J.C., Sun, L. & Titman, S. 2006. The effect of corporate governance on investment: Evidence from real estate investment trusts. *The Journal of Real Estate Finance and Economics* 34: 343-376.

Hassan, M.S. & Mohd-Saleh, N. 2010. The value relevance of financial instruments disclosure in malaysian firms listed in the main board of Bursa Malaysia. *International Journal of Economics and Management* 4(2): 243-270.

Herrmann, D., Saudagaran, S.M. & Thomas, W.N. 2006. The quality of fair value measures for property, plant and equipment. *Accounting Forum* 30: 43-59.

Ishak, H.S., Saringat, S.M., Ibrahim, M.K. & Wahab, W.A.E. 2012. Value Relevance of Fair Value Model on Accounting for Investment Property. Proceeding of 3rd International Conference on Business and Economic Research.

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

Johari, N.H. Mohd-Saleh, N. Jaffar, R. & Hassan, M.S. 2008. The influence of board independence, competency and ownership of earnings management in Malaysia, *International Journal of Economics and Management* 2(2): 281-306.

Kang, S-H. & Zhao, Y.P. 2009. Information content and value relevance of depreciation: a cross-industry analysis. *The Accounting Review* 85(1): 227-260.

Kaur, S. 2013. Exciting times ahead for Malaysian REITs. *Business Times*, 2 January.

Landsman, W.R. 2007. Is fair value accounting information relevant and reliable? Evidence from capital market research. *Accounting and Business Research Special Issue: International Accounting Policy Forum*: 19-30.

Laux, C. & Leuz, C. 2009. The crisis of fair-value accounting: making sense of the recent debate. *Accounting, Organizations and Society* 34(6-7): 826-834.

Lefebvre, R. Simonova, E. & Scarlat, M. 2009. Fair value accounting: the road to be most travelled. *Issue in Focus*. http://www.cga-canada.org./enca/researchReports/ca_rep_2009-12_fair_value_accounting.pdf. [15 October 2013].

Lourenco, I.C. & Curto, J.D. 2008. The Value Relevance of Investment Property Fair Values. http://ssrn.com/abstract=1301683.

Malaysian Accounting Standards Board (MASB). 2011. MFRS 140 Investment Property. http://www.masb.org.my/images/MFRS2011/MFRS_140.pdf. [22 October 2012].

Malik, S.U. 2012. Relationship between corporate governance score and stock prices: Evidence from KSE-30 index companies. *International Journal of Business and Social Science* 3(4): 239-249.

Ministry of Finance Malaysia. 2013. Gross domestic product by sector 2013 - 2014. http://www.treasury. gov.my/index.php?option=com_content&view—articled=158&Itemid=207&lang=en.

Missonier-Piera, F. 2007. Motives for fixed-asset revaluation: An empirical analysis with Swiss data. *The International Journal of Accounting* 42: 186-205.

Mohd Ghazali, N.A.. 2010. Ownership structure, corporate governance and corporate performance in Malaysia. *International Journal of Commerce and Management* 20(2): 109-119.

Mohd Saleh, N., Mohd Iskandar, T. & Rahmat, M.M. 2005. Earnings management and board characteristics: Evidence from Malaysia. *Jurnal Pengurusan* 24: 77-103.

Mohd Saleh, N., Mohd Iskandar, T. & Rahmat, M.M. 2007. Audit committee characteristics and earnings management: Evidence from Malaysia. *Asian Review of Accounting* 15(2):147-163.

Newell, G., Ting, K.H. & Acheampong, P. 2002. Listed property trusts in Malaysia. *Journal of Real Estate Literature* 10(1): 109-118.

Newell, G. & Osmadi, A. 2010. Assessing the importance of factors influencing the future development of REITs in Malaysia. *Pacific Rim Property Research Journal* 16(3): 358-374.

Ohlson, J.A. 1995. Earnings, book values and dividends in equity valuation. *Contemporary Accounting Research* 11(2): 661-687.

Owusu-Ansah, S. & Yeoh, J. 2006. Relative value relevance of alternative accounting treatments for unrealized gains: Implications for the IASB. *Journal of International Financial Management and Accounting* 17(3): 232-255.

Pallant, J. 2011. *SPSS Survival Manual: A Step By Step Guide to Data Analysis Using SPSS*. 4th edition. Australia: Allen & Unwin.

Pappu, R. & Devi, S.S. 2011. The Value Relevance of International Accounting Standard 40 on Investment Property: Evidence from Malaysia. eProcedings for 2011 International Research Conference and Colloquium. 48-61.

Peasnell, K.V., Pope, P.F. & Young, S. 2005. Board monitoring and earnings management: Do outside directors influence abnormal accruals? Journal of Business Finance and Accounting 32(7-8): 1311-1346

Peasnell, K.V., Pope, P.F. & Young, S. 2006. Do outside directors limit earnings management? Corporate Finance Review 10(5): 5-10.

Penman, S.H. 2007. Financial Reporting Quality: Is fair value a plus or minus? *Accounting and Business Research Special Issue: International Accounting Policy Forum*: 33-44.

Pham, A.K. 2012. The dynamics of returns and volatility in the emerging and developed Asian REIT markets. Journal of Real Estate Literature 20(1): 79-96.

Roscoe, J.T. 1975. Fundamental Research Statistics for the Behavioral Sciences. 2nd edition. New York: Holt, Rinehart and Winston.

Samontaray, D.P. 2010. Impact of corporate governance on the stock prices of the Nifty 50 Broad Index Listed companies. *International Research Journal of Finance and Economics* 41: 7-18.

Sarif, E. 2010. Why REITs should be the choice of investment. *The Star*, 19 July.

Securities Commission Malaysia. 2005. SC REITs Guidelines to boost real estate investment trust industry. http://www.

sc.com.my/main.asp?pageid=379&menuid=328&newsid=&linkid=758&type.

Securities Commission Malaysia. 2011. Guidelines on Real Estate Investment Trusts. http://www.sc.com.my/eng/html/resources/guidelines/cis/gl_reits_110713a.pdf.

Securities Commission Malaysia. 2012. Malaysian Code on Corporate Governance. http://www.sc.com.my/eng/html/cg/cg2012.pdf.

Shakir, R. 2009. Examining the effect of leadership structure and CEO tenure on Malaysian Property firm performance. *Journal of Real Estate Literature* 17(1): 47-62.

Sing, T.F., Ho, K.H.D. & Mak, M.F. 2002. Real estate market reaction to public listing and acquisition news of Malaysian REITs. *Journal of Real Estate Management Portfolio* 8(3): 209-227.

So, S. & Smith, M. 2009. Value-relevance of presenting changes in fair value of investment properties in the income statement: evidence from Hong Kong. *Accounting and Business Research* 39(2): 103-118.

Song, C.J., Thomas, W.B. & Yi, H. 2010. Value relevance of FAS No. 157 fair value hierarchy information and the impact of corporate governance mechanisms. *The Accounting Review* 85(4): 1375-1410.

Valentine, R. 2010.The theory of efficient capital markets: A review of literature. *Feature Edition* 2010(3): 116-134.

Yasser, Q.R., Entebang, H. & Mansor, S.A. 2011. Corporate governance and firm performance in Pakistan: The case of Karachi Stock Exchange (KSE)-30. *Journal of Economics and International Finance* 3(8): 482-491.

Tan Mei Zi
Mohamat Sabri Hassan*
Zaini Embong
School of Accounting
Faculty of Economics and Management
Universiti Kebangsaan Malaysia
Bangi, 43600, Selangor

Corresponding author; email: msabri@ukm.edu.my