# Fair Value Accounting and the Global Financial Crisis: The Malaysian Experience

Samuel Jebaraj Benjamin\* Athi Niskkalan\* M.Srikamaladevi Marathamuthu\*

## Abstract

While so much attention has been given in the western world to the issues surrounding Fair Value Accounting (FVA), especially in light of the recent Global Financial Crisis (GFC), little is known about its implications in the developing world. This study investigates the application of Fair Value Accounting by Real Estate Investment Trusts (REITS) in Malaysia during the recent GFC of 2007/2008. The REITs sector is chosen because the application of FVA for their investment property represents the biggest and most material item in their statements of financial position.

This study is based on the FV reporting of 11 out of the 13 REITs firms listed in the Bursa Malaysia during the years of 2008 and 2009. In contrast to the impact of FVA in US, Europe and even neighbouring Singapore that reported asset impairments during the recent GFC, this study revealed that a high majority Malaysian REITs firms reported fair value gains or mark-ups of their investment property during the period. A good number of possible reasons for this anomaly are argued and discussed. Findings from this study are expected to provide useful insights into the FVA controversies and enlighten regulators on some of the prominent application issues of FVA in the developing world.

## Keywords

Fair Value Accounting Global Financial Crisis Real Estate Investment Trusts Malaysian Asset Valuation

## Introduction

Fair Value Accounting (FVA) has been blamed for not living up its expectations to increase transparency in financial reporting (Krumwiede, 2008; Laux and Leuz, 2009). Fair Value Accounting has in fact been partly blamed for the recent credit crisis of the US in 2007/2008 which quickly transformed to a Global Financial Crisis (GFC). In fact the controversy surrounding the use of FVA and its links with the credit crisis in the US reached its climax when President Bush signed the Emergency Economic Act of 2008 (ESSA), where its Section 132 gives the Securities and Exchange Commission (SEC) the power to suspend the use of FVA under SFAS 157 in situations necessary to protect public interest as well as investors. While so much attention has been given to the issues surrounding FVA, especially in light of the recent Global Financial Crisis (GFC) in the US and the Western world, little is known about its implications in the developing world, especially Malaysia, during the recent financial crisis.

In Malaysia, the adoption of FVA as a valuation methodology into the mainstream financial reporting standards is still at its infancy stage. The Malaysian Accounting Standards Boards (MASB) adopts the International Accounting Standards Boards (IASB)'s standards. Currently only a handful financial reporting standards in Malaysia permits the use of FVA, namely FRS 140 -Investment Property, FRS 32 - Presentation of Financial Instruments - , FRS 39 - Recognition and Measurement of Financial Instruments, FRS 3 - Business Combinations and FRS 141 - Agriculture. The financial instruments standards are still not being fully adopted by Malaysian firms as at 2009 and hence the best accounting area or standard to test the application of FVA in Malaysia would be FRS 140 – Investment Property. IAS 40 (IASB) and FRS 140 (MASB) is significant as it marks the first time the International Accounting Standards Board (IASB) and Malaysian Accounting Standards Board (MASB) introduced the fair value accounting model for non-financial assets (Muller et al., 2009).

<sup>\*</sup> Multimedia University

Accordingly, the best choice of firms to test the application of FVA permitted under FRS 140 is the Real Estate Investment Trusts (REITS). REITs are the best choice of firms to investigate the application of FVA because the investment property is the biggest and most material item in the statement of financial position (i.e. balance sheet) of REITs and FVA could most likely be applied on this item (investment property). In other words, any fair value gain or loss on investment property represents an economically significant amount that is examined by analyst and investors (Dietrich et al., 2001). Therefore the REITS sector in Malaysia could exhibit some of the most profound effects of FVA accounting during the GFC of 2007/2008. This study therefore intends to:

- Investigate the nature of application of FVA in Malaysia during the recent GFC of 2007/2008; and
- Understand if FVA's application in Malaysia suffered similar setbacks as in the US or exhibited different norms.

## **Literature Review**

An investment trust is a regulated investment company consisting of professional managers who issue redeemable securities representing a portfolio of many different securities. A Real Estate Investment Trust (REIT) is best described as a corporation or trust that uses the pooled capital of many investors to purchase and manage income from property. Property income can be derived from many sources. The main source of property income for **REITS** is rental income. Accordingly rental income and property valuation are both important financial aspect of REITS. There are two main methods that are used for investment property measurement in the financial statements as per FRS 140; which is the historical cost method and the fair value accounting method.

The pertinent issue with which this paper is concerned with is the application of FVA during the GFC of 2007/2008 by REITS. FVA was originally adopted because assets and liabilities measured using fair value is more relevant for decision making and financial reports based on historical costs is irrelevant

when the assets fair value exceeds the historical costs (Foster and Shastri, 2010). In spite of FVA's noble purpose, FVA has received some of the worst criticism and highest attention among financial reporting issues in recent times. Fair value (FV) is said to enhance relevance but reduce reliability (Dietrich, Harris and Muller, 2001). The application of FVA has received more negative comments than positive feedback, especially during the recent GFC. Firms were reported to happily adopt FVA accounting when asset prices were rising but reluctant to write down impairment losses (Lonergan, 2009). FVA is also cited for bringing price bubbles into financial statements (Penman, 2007), leading financial institutions to react to market changes in the way that they would not normally act (Foster and Shastri, 2010) and thus aggravating the recent GFC in the US (Trussel and Rose, 2009).

The controversies surrounding the use of FVA for investment properties are no less sensational. The most popular argument against FVA is that it introduces subjectivity in the course of property valuation. Critics argue that fair value or mark-to-market is an unreliable estimate of real assets (AICPA, 1995; AIMR, 1993, Ratnatunga et.al, 2007). It is especially difficult to obtain market valuations for properties as compared to market value of financial securities because property assets are heterogeneous. It's almost impossible to benchmark the value of real property based on the recent sale of identical assets because of the decentralized nature of property markets and the high proportion of private information to the pricing of properties (Levy and Chuck, 2005). Valuation of investment property which is fundamental to the application of FVA for investment properties has also been subject to variations in values (Levy and Chuck, 2005). In the UK, Hager and Lord (1995) reported that only 85% of real property valuations fell within the 10% means of valuation while Adair, Hutchison, MacGregor, Mc Greal and Nanthakumaran (1996) and Crosby et al. (1998) reported only 65% of valuations fell within the 10% means of valuation. In the US almost similar results were reported too (Diaz and Wolverton, 1998). On a more serious note, in New Zealand, it has even been reported that firms with high levels of expertise and knowledge of the property market are able to exert influence on their

independent property valuers by way of expert and information power (Levy and Chuck, 2005). In view of the controversies surrounding real property fair values it is interesting and worthwhile to investigate how REITS in Malaysia applied FVA in the valuation of the investment property during the recent GFC.

The impact of the FVA on financial reporting during the GFC in US and other countries in the Western world has been reported voluminously. The banking sector in the US reported billions of dollars of impairment losses on the FV of its assets and liabilities (e.g. Citigroup; Goldman Sachs, 2009; IMF, 2008). Total write down of financial assets and liabilities by US banks due to the GFC exceeded the \$500 billion mark (Onaran, 2008). In the real estate sector, the recent GFC deeply impacted on virtually all asset classes. Withdrawal of cheap an abundant access to commercial mortgage battered property prices (Lamb and Larsen, 2010). The GFC has resulted in the peak-to-trough real estate pricing correction of 30% to 45% in the US and Europe. During the GFC, the correlation among most asset classes approached a value of 1, that is, virtually all asset classes were so closely correlated as to

simultaneously experience steep declines (Lamb and Larsen, 2010).

In the Eastern region, Asian REITS markets suffered their deepest ever fall in the second half 2008 (CBRE, 2008). Market capitalisation of Asian REITs shrank by almost a third over the second half of 2008. The stock index for REITS in Malaysia fell by 26.11% in 2008 (CBRE, 2008). Although the GFC started in 2007, Malaysia felt the impact of the GFC, mainly through slower export growth in the year 2008 (IBR, 2008). Another indicator of the GFC was evidenced from the deceleration of petrol prices in 2008 after reaching its peak point.

Economic growth is the single most central factor affecting trends in rents, property prices and construction activity. Property is an unusual asset as its market value can rise and fall in accordance with market conditions (Evans, French and O'Roarty, 2001).

Empirical surveys of the commercial property market confirm that most of the variation in total returns and capital appreciation, in some cases over 70 per cent, can be explained by variations in economic growth (Nordlund and Lundstrom (2011).



Figure 1: GDP Growth Rate of Malaysia (General Economic Indicator)

Source: Gross Domestic Product/Gross National Income, Department of Statistics Malaysia.



Figure 2: Summary of Property Overhang by Sectors from Quarter 4 2007 to Quarter 4 2008

Table 1: Summary of Property Overhang by Sectors from Quarter 4 2007 to Quarter 4 2008

	Q4 2007		Q1 2008		Q2 2008		Q3 2008		Q4 2008	
	Unit	Value (RM Mil)	Unit	Value (RM Mil)						
Residential (% Change)	23997	3839.06	23752	3868.2	24151	4021.08	22540	4049.38	26029	4476.48
	-2	-1.7	-1	0.8	1.7	4	-6.7	0.7	15.5	10.5
Shops	4951	1360.04	4971	1347.74	4999	1420.9	4389	1308.5	4776	1431.09
	-2.1	1.3	0.4	-0.9	0.6	5.4	-12.2	-7.9	8.8	9.4
Industrial	664	339.05	679	351.42	707	357.96	693	369.94	670	342.41
	3.9	9.8	2.3	3.6	4.1	1.9	-2	3.3	-3.3	-7.4
Total	29612	5538.15	29402	5567.36	29857	5799.94	27622	5727.82	31475	6249.98
	-1.9	-0.3	-0.7	0.5	1.5	4.2	-7.5	-1.2	13.9	9.1

Source: Adopted from "Property Market Status Report", Quarter 4 2008, Department of Valuation and Real Estate Services of the Ministry of Finance of Malaysia (available at: www.jpph.gov.my).

The association between real estate prices and general macro economy indicators such as the general stock market index and industrial production movements are found to be positively related (Laopodis, 2009). Like other markets, the real estate sector depends on economic developments (Schulte and Leopoldsberger (2007). During economic growth phase, risks perceptions of assets are generally regarded as being low and therefore risk rating of property provided by rating agencies is favourable (Alles, 2009), leading to improved assets values. However during an economic crisis, values of investment properties would experience a downward trend and this is consistent with the experiences in the US and Europe, as mentioned above.

However, how the GFC of 2007/2008 affected the FVA of investment property of REITs in

Malaysia is an empirical question that is yet to discovered and reported.

The GDP data for Malaysia in Figure 1 reflects the impact of the GFC on the Malaysian economy. The GDP growth rate clearly shows the economy significantly declined during the entire year of 2008. The economy started to recover from 2009 onwards as indicated from the direction of the GDP growth in Figure 1.

The statistics in Figure 2 compiled by the Department of Valuation and Real Estate Services of the Ministry of Finance of Malaysia shows the summary of property overhang from 2007 to 2008, indicating the general economic conditions surrounding the real estate industry in Malaysia. It can be seen from Figure 2 that the property overhang of the "Shops" and Industrial buildings" of which REITs are highly related to remained almost constant, although slight decline was

experienced in certain quarters of 2008.

<b>Table 2: Vacant Space of Commercial</b>	<b>Buildings - Malaysia</b>
--	-----------------------------

Quarter 4	2005	2006	2007	2008	2009		
Purpose Built Office (s.m)	2,235,171	2,224,896	2,256,510	2,344,494	2,432,582		
Shopping Complex (s.m)	1,403,918	1,612,748	1,651,606	1,754,633	1,838,107		
Source: National Real Estate Information Centre, Department of Valuation and Real Property Services,							
Ministry of Finance Malaysia, 2009 (available at www.jpph.gov.my).							

Table 2 presents the vacant space of commercial buildings in Malaysia from the year 2005 to 2009 compiled by the Real Estate Information Centre, Department of Valuation and Real Property Services of the Ministry of Finance Malaysia. The data above indicates that the rate of vacant commercial buildings experienced an increase in 2008 and 2009, which most likely indicates the impact of GFC on the real property sector. The information presented above thus supports the notion that the Malaysian real estate sector was not spared from the negative impacts of the GFC of 2007/2008.

#### Data

The data for this study was hand collected from the annual reports of REITS listed in the Bursa Malaysia (the Malaysian stock exchange). The REITS sector of Bursa Malaysia consists of 13 firms. Out of the 13 firms, 11 firms whose financial statements were available for the period of 2007 to 2009 were selected in this study. Key financial information relating to FVA and investment properties of these firms are presented and discussed. The information is gathered from the year 2008 to 2009. The year 2008 is the year Malaysia was impacted the most due to the GFC and 2009 was the start of recovery period.

## **Results and Findings**

In Malaysia which is the focus of our study, a total of 8 out of the 11 firms reported a fair value gain or upward mark-up of their investment property in the GFC year of 2008. The balance of 3 firms modestly chose not to report any fair value change of their investment property. In contrast to 2008, in the year 2009, which was a recovery year (albeit the persistent negative sentiments were still prevailing) 9 firms out of 11 firms reported fair value gain of their investment property while only 2 firms did not report any FV gain of their investment property.

		2008	2009
1	Total number of firms	11	11
2	Number of firms and reporting of FV changes		
2a	No of firms that report FV gain of Investment property	8	9
2b	No of firms that report FV loss of Investment property	0	0
2c	No of firms that report nil FV gain of Investment property	3	2
3	FV Gain (FVG) as a Proportion of Revenue (%)		
3a	Number of firms that report FVG / Revenue between 0 - 50%	7	8
3b	Number of firms that report FVG / Revenue between 51 - 100%	3	1
3c	Number of firms that report FVG / Revenue between 51 - 100%	1	2

Table 3: Key Financial Information of Fair Value of Investment Property of REITs(2008-2009).

Significantly, Point 3 of Table 3 shows the magnitude of the reported FV gain of investment property among the sample firms in 2008. This magnitude is measured as FV gains reported in the Income Statement divided with the total revenue from rental and other sources of income. One firm actually reported a fair value gain amount which was higher than its total revenue for that year the 2008. Three firms reported fair value gains of between 51% - 100% of their total revenue for 2008 while 7 firms reported fair value gain of between 0 - 50% of their total revenue for 2008. Comparative results for this information in 2009 are given in Table 3. Generally it can be concluded a high majority Malaysian REITS reported fair value gain or mark-up of their investment property during the recent GFC of 2007/2008. The magnitude or proportion of FV gain of investment reported in the year 2008 during the GFC can also be considered high when viewed as proportion of total revenue of REITs firms.

It is accepted that to value any property, the economic and business context is a vital element (Sayce and Conellan, 2002). Although one could argue that drawing parallel comparison between the US market and the Malaysian market during the recent GFC in the context of fair value accounting should be fraught with caution, it was undeniable that the effect of the crisis was felt globally. The impact of the GFC on the US market, and on the Singapore market (Malaysia's neighbouring country) was almost similar. It would therefore be pertinent at this juncture to determine if Singaporean REITS displayed similar characteristics to their Malaysian counterparts with regards to FVA of investment property during the year 2008.

Overall, the Singaporean economy suffered similar fate as Malaysia with its GDP growth steadily declining from 17.6 percent, -12.5 percent, -3 percent and -11 percent from quarter one to quarter four of 2008 respectively. The Singapore real estate investment trust market is slightly bigger than Malaysia with 20 firms listed on the Singapore Stock Exchange (SGX). Out of 20 firms, reports from 11 firms whose financial statements for the year 2008 are available in the website of SGX show that 5 firms reported a fair value reduction of investment properties in 2008. Two firms reported fair value gain or

increase which were not material as the amounts represented only 0.2 percent and 2 percent as a proportion of their revenue respectively. Only 4 firms reported a moderate fair value gain on investment property within the range of 10 - 30 percent as a proportion of their revenue in 2008. In was further determined that 2 out of the 4 firms which reported fair value gain of investment property were REITS with assets in Indonesia and China respectively and only headquartered in Singapore. In contrast all the REITS in Malaysia have local investment property only. From the results above, is can be construed that a good number of REITS which are predominantly Singapore based devalued their investment properties during the GFC year of 2008 (in line with the expectation of FVA during a crisis), while majority of Malaysian **REITS** re-valued their investment property upwards with none devaluing it during the corresponding period. As both countries are situated next to each other and experienced similar economic impact from the GFC, the fact that majority of Malaysian firms re-valued their investment properties upwards while none reported any fair value loss further raises questions on the application of fair value accounting principles in light of the GFC.

# Application of Fair Value Accounting Principles

In order to grasp the use of FVA by Malaysian firms in the REITS sector, it is worth exploring the basis used in arriving at the fair values. The four property valuation methods used and disclosed by sample firms are the (1) investment method, (2) cost method, (3) comparison method and (4) the discounted cash flow (DCF) method. Sample firms however did not provide any further information on the estimates used in the valuation methods apart from the brief definition of its methodology and in some cases the yield rates used.

The *investment method* uses a three year average of operating income which is capitalized using an appropriate yield. Unless appropriate adjustments are made, the resulting value derived from this method would be the value in use or investment value rather than the market value. However for accounting purposes, the property element within a business is an estimate of the market value on the date of accounts (French, 2005). Although this method is complex, it is widely used by professional valuers for buy-tooperate assets.

The cost method estimates the replacement value of a property by measuring the free market value of land as if it is vacant and adding the construction cost of the building less the accumulated depreciation suffered over the years. The reproduction or replacement cost of building is derived from estimates of current market prices for materials, labour and present construction techniques. This method seems to approximate the market value for a property as the land is measured at market value and the building cost is also made of market price of materials and labour. However the of use cost of 'present construction techniques' may not augur well in terms of valuation for an real estate acquired years ago and thus constructed under construction techniques prevalent at that point in time. A new property constructed under 'present construction techniques' could fetch a higher value because the latest techniques used could translate to safer and more durable building. Certainly a buyer would be willing to pay more for a newly constructed building compared to building constructed years ago although both building could be of similar type. Thus the cost method could provide a higher valuation of an existing property and in turn result in uplift from the previous value of a property a year ago or sometime in the past. Other methodological problems on valuation include the issue of how to value an improved property to which an owner holds property rights but for which there is no occupant and therefore should the valuer appraise the property "as is" (as vacant) or can the valuer assume a lease on the property? (Milgrim, 2001). The existence of such ambiguities in valuation could only increase the discretion of REITS and valuers in arriving at the fair value.

The *comparison method* or sales comparison method considers the sales of similar or substitute properties and related market data and establishes a value by processes involving comparison. Generally, a property being valued (a subject property) is compared with sales of similar properties that have been transacted in the market (International Valuation Standards Council, 2006). For each of the stated comparables, the minimum information required to be disclosed are the identification of the comparable, the date of the transaction, the consideration for the transaction, a brief description of the property and the land area (Standard 11, International Valuation Standards Council, 2006). The date of transactions used for comparable purposes is important as any transactions carried out before the commencement of the GFC might not be suitable as the conditions surrounding such transactions could have changed after the advent GFC. As spelled out in Standard 1 of IVSC, the estimated Market Value is timespecific as of a given date and since markets and market conditions may change, the estimated value may be incorrect or inappropriate at another time (IVSC, 2006). In the absence of the minimum information mentioned above in published annual reports of REITs firms, users of the financial reports are left in a dark as the appropriateness of estimates used.

The *discounted* cash flow (DCF) method has been one of the newer methods introduced in relation to property valuation (Maliene, 2010). The DCF method values real property based on the expected future cash flows that will accrue to the business. The DCF method requires the explicit assumptions of future income and expenses and the application of an appropriate discount rate (International Valuation Standards Council, 2011). Respondents to an Exposure Draft in 2011 on the use DCF for real property valuations draw encouraging comments on its usability by the Property Institute New Zealand other similar institutes worldwide (Property Institute of New Zealand, 2011). The discount rate to be used should reflect the risk associated with the cash flows and requires consideration of matters such as the certainty and the security of the income, the strength of any counterparty and the prospects for future income growth. In the context of REITS, it is obvious that 'the strength of any counterparty' mentioned here most likely relates to the tenants of business premises of REITS owned properties.

The valuation process of real estate property should have taken into account the continuous decline in the GDP growth of Malaysia with the sharpest decline experienced in the last quarter of 2008, as shown in Figure 1 above. Professional valuers' report attached as part of annual report of sample REITS include the following quotes;

"The office market recovered fully after the Asian Financial Crisis in 1997 with prices of office space peaking in mid 2008 and the rise came to a halt in the third quarter of 2008 as a result of the US Subprime Crisis" - Annual report of a sample firm for financial year end 31 December 2008.

"There may be pressure in 2010 as there is an anticipated oversupply of office space and it is anticipated that the market value of most office buildings will decline slightly, corresponding to the decline in office rental values" - Annual report of a sample firm for financial year end 31 December 2009.

"Towards the end of this year, it seems inevitable that the market will succumb to overpoweringly negative sentiment"- Annual report of a sample firm for financial year end 31 December 2008.

"According to the Property Market Status Report Quarter 3 2008, Kuala Lumpur did not have any overhang, unsold under construction and unsold not constructed industrial properties since 2007 till Quarter 3 2008" -Annual report of a sample firm for financial year end 31 December 2008.

Given such comments about a gloomy and uncertain economic future, it is unclear how the estimates of property valuation could have produced fair value gains of investment property as at 31 December 2008. The use of the discounted cash method as at 31 December 2008 to arrive at the fair value of investment property for reporting purposes should take into account the uncertainty surrounding the prospects of cash flows attributable to the asset. Crucial factors like 'the strength of any counterparty' and 'security of the income' mentioned by Malaysian Valuation Standard (MVS) 3 (2006) for the DCF method should factor in the contraction of exports and reduction in business volume for the trading and services sector which ultimately caused the negative GDP growth in 2008 and would most certainly translate into lower demand for purchase and rental of investment property at that point in time and in the near future. This

line of argument seems to correspond to the reported increase in vacant space for commercial buildings in Malaysia in 2008 as shown in Table 2 above. As such, valuations of property should have been rightfully sensitive to the negative sentiment prevalent due to the GFC and one could argue that even the most optimistic position in such adverse conditions would be to maintain the previous estimates of the fair value of investment property and not increase the fair value estimates. Additionally, FVA for non-financial assets like investment properties is associated with a certain degree of uncertainty since market prices are often not available (Promper, 2010). A lack of current real estate prices further increases the danger of management bias leading to an overvaluation of investment properties (Hoffman and Freiberg, 2008). In addition to the anomalies discussed thus far, it is worth highlighting at this juncture that investment properties owned by REITS in Malaysia comprise a balanced mix of specialised and non-specialised properties. The types of property that would be referred to as non-specialised properties are the dominant property types of residential, office, shop, industrial unit and warehouse. The types of property that would be referred to as specialised assets are those properties (where there is insufficient market data to value them using some form of comparative valuations) comprise of bars and restaurants, casinos and clubs, cinema and theatres, hotels, hospitals and others (French, 2005). Hunt and Hilton (1997) caution that even valuation of property for which there is a market value (i.e. a nonspecialised property) should be exercised with skill, judgement and adjustments. Thus the problem of valuing specialised properties are significant. Specialised properties are such that the types of properties do not transact sufficiently to enable determination of its value by comparison of previous sales. Applying valuation model to approximate the market value of heterogeneous specialised properties would most certainly be subject to subjectivity and biasness.

One reason for the noticeable incidence of majority of Malaysian REITS reporting fair value gain of investment properties during the recent GFC stems from the apparent inconsistency of fundamentals approached in the valuation of investment property. While from one view point, negative outlook for the REITS industry seemed to have been apparent, on the other hand fair value fain of investment property has been recognised, thus painting a blurred picture. The second cause for the fair value reporting phenomena reported above could have stemmed from the possible gaps and non-alignments between the current requirements of the accounting standards bodies and the valuation bodies.

The definitions of real property valuations method outlined above represent the definitions of the International Valuations Standards Committee and its Malaysian counterpart. The Boards of Valuers, Appraisers and Estate Agents Malaysia permit the adoption of the comparison method, income method, cost method, investment method and residual method in the valuation of real property in Malaysia (Fernandez, 2010; Malaysian Valuation Standard, 2006). The Malaysian Valuation Standards uses the term 'market value' for all its standards on the valuation of properties and no mention of the term 'fair value' exists. Market value has been defined in Malaysia and internationally as the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an armslength transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.

However is should be noted that for financial reporting purposes, the definitions above should fall in line with the wording of FRS 140 – Investment Property, FRS 140 permits two choice of measurement of investment property. The first method is the cost method which requires investments properties to be carried at the cost of acquisition of the asset minus the accumulated depreciation and impairment to the date of the statement of financial position (Balance sheet). All the firms in the REIT sector in Malaysia have opted for the second choice, i.e. the fair value method, and it is therefore crucial to examine the definition of FRS 140 on fair value. The concept of fair value derived from accounting standards is the over-arching principle upon which property assets should be included in financial accounts (Sayce and Conellan, 2002). The fair value of investment property

according to FRS 140 is the price at which the property could be exchanged between knowledgeable, willing parties in an arm's length transaction. Fair value specifically excludes an estimated price inflated or deflated by special terms or circumstances such as atypical financing, sale and leaseback arrangements, special considerations or concessions granted by anyone associated with the sale.

At the surface, the term market value by Valuation Standards Council Malaysia (MVS, 2006) and fair value by FRS 140 appears similar. However a number of observable differences prevail between the two definitions (Savce and Conellan, 2002). Although some studies have argued that the fair value definition by IASB and IVSC show no material differences and thereby use it interchangeably (Hoffman and Freiberg, 2008), in the Malaysian context it is worth exploring the possible differences, in part, because while firms in the US and Europe have mostly reported fair value loss of properties during the GFC, the opposite was experienced in Malaysia. Accordingly in certain countries like Australia and New Zealand, the Valuation Standards Committee of Australia and New Zealand (VSCANZ) have explicitly stated in their standards that the expression market value and the term fair value (as it commonly appears in the accounting standards) are generally compatible but not in every instances (VSCANZ, 2008).

In Valuation Standard 1 of the VSCANZ, fair value has been explained as not necessarily synonymous with market value and it has been further explained that when market value of an asset cannot be established, the eventual market value modelled may not equate the fair value. However the valuation standards committee of Malaysia has to date yet to clarify any possible deviation of the market value from the fair value to its valuers.

FRS 140 maintains fair value is time-specific as of a given date (i.e. the balance sheet date) and because market conditions may change, the amount reported as fair value may be incorrect or inappropriate if estimated as of another time. Fair value should replicate the market condition at the reporting date (Promper, 2010). Market Value on the other hand is measured as the most probable price reasonably obtainable in the market on the date of valuation. The fair value definition strictly requires the fair value to be reported on the balance sheet date while the market value stipulates the value on the date of valuation. Hence the timing differences between the valuation date and balance sheet could cause differences in the final value of property arrived, especially during a financial crisis.

Some sample firms with financial year ending on 31 December have reported that the dates of valuation exercise of property by professional valuers was as early as August 2008<sup>1</sup> while some firms did not disclose the dates of the valuation at all. As such, while the values of property may have reflected its market value on the date of valuation, it is not clear whether it reflected its fair value on the balance sheet date of say 31 December 2008. On top of that whilst the date of valuation as early as August for example is a cause for concern as to its true fair value for firms with year ending 31 December, the actual date of recent transactions used as a benchmark for the various valuation methods like the cost method and comparison method could further push the relevance of the market value to an earlier date. For example a valuation of a property done in August 2008 could have used a selling price of a similar property transacted in July 2008, which in turn is reported by REIT firms as the fair value of the property as at 31 December 2008. The movements of the fair value of property within a couple of months might not have been drastic in a year of economic stability, but could be material during a financial crisis and as such relying on estimation of market value by independent valuers carried out months before year end for reporting the fair value as at year ending 31 December 2008 is a cause for concern in the context of financial reporting.

Increasingly preparers of financial statements turn to external valuation professionals to assist then in the valuation of investment properties. A bridge is needed between valuation standards and accounting standards (Ernst and Young, 2010). However neither the accounting standards (e.g. International

Financial Reporting Standards and Malaysian Financial Reporting Standards) always align measurements requirements with valuation theory, nor are accounting standards written for valuers. However it is desired that accountants and valuers could speak the same language. Both the IVSC and IASB have taken steps in the right direction to demonstrate that there are robust and effective standards in the wake of the financial crisis. However the current lack of in-depth guidance by IVSC on valuation of properties could be understandable from Ernst and Young's IFRS Outlook 2010 (Ernst and Young, 2010) which suggests that it would be helpful if IVSB could provide valuers with detailed application on the methodologies it supports and hope for the acceleration of the IVSC plan to develop detailed technical guidance.

Although convergence of terminology between IASB and IVSC or MASB and MVSC is critical, it has been outlined that in view of the possible divergence from the definitions by both sides, terms that derived from valuation framework should be owned by IVSC or MVSC and terms that are derived from an accounting framework should be owned by the accounting standard setters, prepares of financial statements and auditors (Ernst and Young, 2010). Since the standard setting property valuation body (IVSC) at the international arena is still in the midst of developing detailed guidelines on valuation methods coupled with the fact that gaps currently exists in the terminologies of market value and fair value, it is imperative at this stage for financial reports preparers and auditors alike to assume full ownership of fair value information release in annual reports. The IVSB is not a professional body and has no regulatory power of its own (Ernst and Young, 2010) or enforcement power of its own (Fernandez, 2010; Sayce and Conellan, 2002). It should be the onus of the financial statement preparers to ensure estimates presented in the financial statement are as accurate as possible as ownership of this information fall within the ambit of financial statement preparers and should be verified by auditors. Investment properties fall under the purview of auditor examination (Muller et al, 2009). Auditors especially should investigate the assumptions made by the valuers, choice of valuation model, its limitations and related inputs

<sup>&</sup>lt;sup>1</sup> Note that the GFC bit only in September 2008 with the collapse of Lehman Brothers.

according to the international standards (Akgun et al., 2011; Pannese and DelFavero, 2010) in light of revelations that fair value estimates made by professional valuers deviate 10 percent on average (King, 2006). Fair values estimates have since been cautioned to be subject to error and manipulation (Danbolt and Rees, 2008) and are therefore considered the least useful measurement concept for nonfinancial assets like investment property in Europe by the European professional investors themselves (Gassen and Schwedler, 2008). The International Standard on Auditing (ISA) 620 on 'Using The Work of An Expert' in fact requires the auditor to evaluate the appropriateness of an expert's work in the light of the auditor's overall knowledge of the business and the results of other audit procedures. If the expert's reports are not consistent with that of other audit evidence, ISA 620 requires the auditor to resolve the matter. It is therefore vital for auditors to carry out the verification activities on the fair value estimates and state their final assessment in relation to its inclusion in the financial statements. Financial statement users may not be aware of the uncertainty inherent to real estate appraisal and its eventual fair values since the disclosures in the notes of financial statements do not contain such detailed information (International Accounting Standards Board, 2008). The IASB has since embarked on efforts aimed at tackling this uncertainty as it realizes not all real estate appraisals by external valuers seem to be reliable.

Standard 3 of the Malaysian Standards in fact clearly spells out the need for valuers to possess knowledge and understanding of the requirements of the accounting standards which are issued by MASB from time to time, especially those which relate to the treatment and measurement of assets in the accounts, more particularly FRS 116 (Property, Plant and Equipment) and Financial Reporting Standards 140 (Investment Property) (Malaysian Valuation Standards, 2006).

However since neither the Malaysian valuation council known as Boards of Valuers, Appraisers and Estate Agents nor its affiliate organizations like the Institute of Surveyors Malaysia and Malaysian Institute of Estate Agent are professional bodies, no compulsory professional development training, including training on Malaysian accounting standards are mandated at present for its members. Hence it is unclear if valuers who carry out the valuation of investment properties of REITs are familiar with the requirements FRS 140. In view of this it is imperative for preparers of financial statements and more importantly for auditors (as per International Standard of Auditing 620) to assess the qualification of valuers to determine the acceptability of fair value estimates provided by the latter.

The third possible cause for the 'apparent' fair value application experienced during the recent GFC could stem from equivocal concept of fair value within the accounting profession itself. Fair value measurement in financial accounting has evolved without a coherent theoretical framework (Milburn, 2008; Aliabadi et al., 2011). The fair value concept need to be clearly stated and convincingly supported (Milburn, 2008). Whilst the controversies holding fair value accounting partly responsible for the GFC remain mixed as the underlying reasons for the crisis run much deeper (Lonergan, 2009) comprising a combination of government pressure, complex financial instruments and market timing (Trussel and Rose, 2009), it is more imperative to examine the confusion surrounding the application of fair value accounting itself. In response to the vagueness surrounding the fair value concept, the FASB of the US issued the Statement of Financial Accounting Standards No. 157: Fair Value Measurement (Statement of Financial Accounting Standards (SFAS) 157). SFAS 17 intends to reduce the problem with fair value estimation where guidance for different levels of inputs to assets and liabilities are prescribed (Gottlieb et al., 2009). It states that firms should report the fair value of their assets and liabilities using a three-level fair value hierarchy based on the nature and observeability of the inputs used to determine the fair value (Goh et al., 2009). Level 1 of fair value assets known as marked-to-market assets are assets traded in active markets and hence there is little or no discretion to this estimation (Aliabadi et al., 2011). In comparison, Level 2 and Level 3 assets are illiquid assets that are marked-to-model. These last two levels are designed for cases where identical or similar assets are not available and thus would include

unobservable inputs. Fair value models are expected to identify and process all information that is relevant in determining the reasonably efficient market price for a particular asset on the measurement date. Starting from level two to level three, the ambiguity of estimation creates opportunities for discretion and earnings management (Ratnatunga, et.al. 2007; Aliabadi et al., 2011). Danbolt and Rees (2008) further provide evidence that fair values are biased where valuation is ambiguous for tangible assets like investment property.

In practice appraisers rarely observe contemporaneous transactions for identical property due to the heterogeneous attributes of investment property (Dietrich, Harris and Muller, 2001). The art of valuation has since been reported to involve subjective adjustments to transactions evidence, including adjustments relating to the interpretation of trends in value (Hunt and Hilton, 1997). Appraisers should exercise skill, experience and judgment in valuing and in making such adjustments and comparisons in the absence of any direct transaction evidence (even to extend of making a open market valuation for a property for which there would have been a market value), Hunt and Hilton (1997) further argue. Since appraisers rely on subjective assumptions and exercise considerable judgment, managers could have the discretion to manipulate property appraisal estimates, explains Dietrich, Harris and Muller (2001). Consequently, the problem of determining a reliable market value is intensified by non-perfect market conditions in the real estate sector (Promper, 2010). In fact, Ratnatunga, et.al (2007) claim that the various expert opinions obtained for FVA results in 'multiple delusions' in financial statements.

SFAS 157 for the first time requires the use of valuation techniques consistent with the market approach, income approach and/or cost approach to measure fair value. It seems that FASB has aligned itself closer to IVSC in the valuation estimates of assets by adopting the methods mentioned above. Although the US has issued SFAS 157 to clarify the confusion and ambiguity surrounding the application of fair value, the IASB have not progressed beyond issuing a Discussion Paper titled *Measurement Bases for Financial Accounting* 

– Measurement on Initial Recognition (DP) in the year 2006. However to date no eventual Exposure Draft (ED) or equivalent standard to SFAS 157 has been issued by IASB. The Malaysian financial reporting and valuation environment has been akin to that of an 'adopter' where the Malaysian accounting standards board and Malaysian valuation standards body largely adopts standards developed by their international parent bodies normally after one or two year of issue of standards by the latter. As such, the current void in clear guidelines on the application of fair value in the Malaysian accounting environment could not have mitigated the fair value application by Malaysian REITS during the recent GFC. In summary the issues discussed above could have all contributed to the 'reverse direction' in the application of FVA by Malaysian REITS during the recent GFC.

# Conclusion

This study analysed the application of FVA accounting in Malaysia by the REITS sector during the recent GFC. REITS were chosen purely because it represents the best sector to test the application of FVA in Malaysia. Generally it can be concluded a high majority Malaysian REITS reported fair value gains or mark-ups of their investment property during the recent GFC of 2007/2008. The results of this study indicate the impact of FVA in Malaysia did not exhibit similar characteristics as the impact of FVA in the US and Europe during the recent GFC of 2007/2008. In particular, while firms from US and Europe reported huge write down of assets during the GFC, majority of Malaysian REITS reported an increase in FV estimate of their investment property. Did the Malavsian economic sectors. especially the REITS largely escape the brunt of the impact of the GFC thus justifying the FV gain of investment properties? A comparison analysis of the application of the topic at hand by Singaporean REITS also did not draw parallel results with their Malaysian counterparts. A good number of possible reasons for this anomaly are argued and discussed. The findings of this study highlight critical issues in the adoption of fair value that needs further guidance and clarifications. Pertinent questions for regulators to ponder would include but not limited to the following

ones: Do the characteristics of FVA differ in understanding and application by geographical location, maturity of economies, orientation of or culture? As Penman (2007) explains, FVA objectives should be made clear as to who the reporting is directed to. Different stakeholders like banks, central banks or shareholders all have different and even opposing interests on FVA information. Is FVA in need of urgent and thorough review in view of the different ways in which it has been applied in different parts of the world as evidenced during the recent GFC? These questions raised above are serious food for thought for the accounting standards and valuation standards bodies, accountants, auditors, analyst and financial regulating authorities to ensure the reliability of FVA accounting and financial reporting in general. Findings from this study are expected to provide useful insights into the FVA controversies and enlighten regulators on some of the prominent application issues of FVA in the developing world as well.

#### References

Adair, A., Hutchison, N., MacGregor, B., Mc Greal, S., and Nanthakumaran, N. (1996), "An analysis of valuation variation in the UK commercial property market: Hager and Lord revisited", *Journal of Property Valuation and Investment*, 14(5): pp. 34-47.

AICPA Special Committee on Financial Reporting (1995), *Improving business reporting a customer focus: meeting the information needs of investors and creditors*, American Institute of Certified Public Accountants, New York, NY.

Aliabadi, S., Chen, H., and Dorestani, A., (2011), "Fair value determination; A conceptual framework", *Journal of Accounting, Business and Management*, 18(1): pp. 93-107.

Akgun, M., Pehlivanh, D., and Gurunlu, M., (2011), "A process design for auditing fair value", *International Journal of Economics and Finance*, 3(3): pp. 160-166.

Alles, L., (2009), "Fair value accounting, credit ratings and cyclicality: implications for the stability of financial institutions", *The* 

*Finsia Journal of Applied Finance*, 3: pp. 7-10.

AIMR (1993), "Financial reporting in the 1990s and beyond", *Association for Investment Management and Research*, Charlottesville, VA.

Australia and New Zealand Valuation and Property Standards (VSCANZ), (2008), "Your guide to being a member of an industry leading professional, property institute", *Australian Property Institute and Property Institute of New Zealand*, Retrieved February 24, 2011.

http://www.api.org.au/assets/media\_library/00 0/000/029/original.pdf?1303874039

Building a bridge between valuation and accounting standards (2010), "Insights on International GAAP", *IFRS outlook*, Ernst and Young, October 2010, Retrieved February 19, 2011.<u>www.ey.com/IFRS.</u>

Citigroup. (2009), "Industry focus: U.S. Banks", Research report by Citigroup Global Markets, March 2, 2009.

Crosby, N., Lavers, A., and Murdoch, J., (1998), "Property valuation variation and the margin of error in the UK", *Journal of Property Research*, 15(4): pp. 305-30.

Danbolt, J., and Rees, W., (2008), "An Experiment in Fair Value Accounting: UK Investment Vehicles", *European Accounting Review*, 17 (2): pp. 271-303.

Diaz, J. III., and Wolverton, M., (1998), "A longitudinal examination of the appraisal smoothing hypothesis", *Real Estate Economics*, 26(2): pp. 349-59.

Dietrich, R. J., Harris, S. M., and Muller, A. K., (2000), "The reliability of investment property fair value estimates", *Journal of Accounting and Economics*, 30(2), pp. 125-157.

Evans, M., Frech, N., and O'Roarty, B., (2001), "Accountancy and corporate property management", *Journal of Property Investment and Finance*, 19(12): pp. 211-223. Fernandez, E. (2010), "An assessment of the valuation profession and international valuation standards", *The 16<sup>th</sup> ASEAN Valuers'* Association (AVA) Congress, *The ASEAN Chapter –towards a new era of valuation*, 22-24 July 2010, Bangkok, Thailand.

Foster, P. B., and Shastri, T., (2010), "The subprime lending crisis and reliable reporting", *Accounting & Auditing, CPA Journal*, 80(4): pp. 22-25.

French, N. (2005), "The valuation of specialised property: A review of valuation methods", Working Paper, *The University of Reading*, England, Retrieved February 19, 2011.

www.reading.ac.uk/REP/fulltxt/0205.pdf

Gassen, J., and Schwedler, K. (2008), "Attitudes towards fair value and other measurement concepts: An evaluation of their decision-usefulness", *Survey: The View of European Professional Investors and their Advisors*, Retrieved February 23, 2011. <u>http://www.ieaf.es/\_img\_admin/1210001223S</u> <u>urvey\_April08.pdf (2008-07-21).</u>

Goh, B. W., J. Ng, and K. Ow Yong, (2009), "Market pricing of banks' fair value assets reported under SFAS 157 during the 2008 economic crisis", Working Paper, *Massachusetts Institute of Technology and Singapore Management University*, Retrieved February 27, 2011. www.capana.net/download/2009papers/Beng %20Wee%20Goh.pdf

Goldman, S., (2009), "United States: Banks, Making sense of the next round of government capital", *Research report*, February 26, 2009. Retrieved January 20, 2011. <u>http://www.goldmansachs.com/what-we-</u>do/research/index.html

Gottlieb, S., Meulmeester, R., and Bohlin, M., (2009), "Financial reporting for real estate", *Journal of Accountancy*, 207(1): pp. 50-55.

Hager, D., and Lord, D., (1985), *The Property Market, Property Valuations and Property Performance Measurement*, Institute of Actuaries, London. Harter, C., (2009), "Mark to market accounting: Does it provide information to investors", *The Journal of Applied Business Research*, 25(6): pp. 119-124.

Hoffmann W. D., and Freiberg, J., (2008), "16 Als Finanzinvestition (Investment) gehaltene Immobilien (Investment Properties)", *Haufe IFRS Kommentar 2008*, Edition 9.5.2008.

Hunt, D., and Hilton, D., (1997), *Property Companies*, Institute of Chartered Accountants inEngland and Wales, 5th Edition, London.

IASB (2008), Information for Observers, Retrieved March 3, 2011. http://www.iasb.org/NR/rdonlyres/0CC4C194-08D1-4B4C-832F-2C4FF2D27623/0/FVM0804b12obs.pdf (2008-09-11).

International Valuation Standards Council (IVSC) (2011), Technical Information Paper 1 (Exposure Draft), *The Discounted Cash Flow* (*DCF*) *Method* –*Real Property and Business Valuations*, Retrieved January 19, 2011. <u>http://www.ivsc.org/pubs/exp\_drafts/1101\_dcf\_method.pdf</u>

International Business Report (IBR). (2008), SJ Grant Thornton: Malaysia, Retrieved February 19, 2011. <u>http://www.gt.com.my/assets/ibr\_2008indd.pd</u> <u>f</u>

IMF. (2008), *Global financial stability report: Fair value accounting and procyclicality,* Chapter 3, International Monetary Fund, New York.

King, A. (2006), *Fair Value for Financial Reporting*, John Wiley and Sons Publications, New Jersey.

Krumwiede, T., (2008), "The role of fair-value accounting in the credit-market crisis", *International Journal of Disclosure and Governance*, 5(4): pp. 313-331.

Lamb, M., and Larsen, T., (2010), "Private Open-End Core Real Estate Funds Ready for recovery", *Russell Research*, Russell Investment, Retrieved February 21, 2011. http://www.russell.com/institutional/research\_ commentary/PDF/open\_end\_core\_RE\_funds.p df.

Laopodis, N., (2009), "REITS, the stock market and economic activity", *Journal of Property, Investment & Finance*, 27(6): pp. 563-578.

Laux, C., and Leuz, C., (2009), "The crisis of fair accounting: Making sense of the recent debate", *Accounting, Organisation and Society*, 34 (6):pp. 826-834.

Lonergen, W. (2009), "Fact or fiction in markto-market accounting", *Banking*, Retrieved February 9, 2011. <u>http://dev.finsia.com/AM/Template.cfm?Section=August\_2009&Template=/CM/ContentDisplay.cfm&ContentID=9181.</u>

Malaysian Valuation Standards (MSV) (2006), "Valuation Standards", *The Board of Valuers*, *Appraisers and Estate Agents Malaysia*, Retrieved February 21, 2011. www.lppeh.gov.my.

Maliene, V., Deveikis, S., Kristen, L., and Malys, N., (2010), "Commercial leisure property valuation: A comparison of the cased studies in UK and Lithuania", *International Journal of Strategic Property Management*, 14(1): pp. 35-48.

Matysiak, G., and Wang, P., (1995), "Commercial property market prices and valuation: analysing the correspondence", *Journal of Property Research*, 12(3): pp. 181-202.

Milburn, J.A. (2008), "The relationship between fair value, market value and efficient markets", *Accounting Perspectives*, 7(4): pp. 293-316.

Milgrim, M., R. (2001), "International valuation standards for global property markets", Presentation by Michael R Milgrim PhD, *IVSC Lead Editor*, delivered at the Japan Real Estate Institute in Tokyo, 31 January 2001, Retrieved February 3, 2011. <u>http://www.ivsc.org/pubs/archives/papers/JRE</u> <u>I-0101.pdf</u>

Muller, K.A., Riedly, E.J., and Sellhorn, T., (2009), "Consequences of voluntary and

mandatory fair value accounting: evidence surrounding IFRS adoption in the EU real estate industry", Working Paper, 09-033, *Harvard Business School*, Harvard University, Cambridge, Mass..

Nordlund, B., and Lundstrom, S., (2011), "Commercial property and financial stability, The Riksbank's inquiry into the risks in the Swedish housing market", Retrieved March 23, 2011.

www.riksbank.com/upload/Rapporter/2011/R UTH/RUTH\_chapter5.pdf

Onaran, Y., (2008), "Banks subprime losses top USD 500 billion on write downs", *Banking*, Retrieved February 10, 2011. <u>http://www.bloomberg.com/apps/news?pid=ne</u> <u>wsarchive&sid=a8sW0n1Cs1tY</u>

Pannese, D., and Delfavero, A., (2010), "Fair Value Accounting: Affect On The Auditing Profession", *Journal of Applied Business Research*, 26(3): pp. 43-50.

Penman, H. S., (2007), "Financial reporting quality: is fair value a plus or a minus?", *Accounting and Business Research*, Special Issue: International Accounting Policy Forum, 37(1):pp.33-44.

Promper, N. (2010), "Fair value accounting in the real estate industry – An empirical investigation of the decision usefulness of accounting figures based on IFRS and US-GAAP", Working Paper, *Department of Accounting and Auditing*, Johannes Kepler University Linz, Austria.

Property Institute of New Zealand (PINZ) (2011), "Exposure draft, technical information paper 1, the discounted cash flow (DCF) method – Real property and business valuations", *Response on behalf of Property Institute of New Zealand*, Retrieved March 8, 2011.

http://www.ivsc.org/pubs/comment/2011\_dcf/ 20\_property\_inst\_of\_new\_zealand.pdf

Ratnatunga, J., Jones, S., Suwardy, T. and Mroczkowski, T. (2007) "The accounting delusion", *AACF 4th Annual International Accounting Conference*, November, Istanbul, Turkey. Retrieved April 5, 2012 http://ink.library.smu.edu.sg/soa\_research/230/ REITS Around Asia. (2008), *Asia*, CB Richard Ellis (CBRE), Retrieved March 1, 2011. <u>http://www.cbrekorea.com/asia/eng/document/</u> marketreports/reits\_2h08.pdf

Robinson, D., and Hronsky, J., (2008), "Fair or not? Fair value measurement in the sub-prime crisis", *The Finsia Journal of Applied Finance*, Special Issue 2008:pp. 76-80.

Sayce, S., and Conellan, O., (2002), "From existing use to value in use", *Property Management*, 20(4): pp. 228-251.

Schuck, E., and Levy, D., (2005), "The influence of clients on valuations: the clients' perspective", *Journal of Property Investment & Finance*, 23(2): pp. 182-201.

Schulte, K., W., and Leopoldsberger, G., (2007),, Bewertung von Immobilien, Branchenorientierte Unternehmensbewertung, Drukarczyk, *J./Ernst, D. (editors)*, Munich, pp. 515-536.

Trussel, M. and Rose, L. C. (2009), "Fair value accounting and the current financial crisis", *Accounting & Auditing, CPA Journal*, 79(6): pp. 26-30.