MODELLING EQUITY VALUATION BASED ON ACCOUNTING POLICY FOR INVESTMENT PROPERTY

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ABSTRACT

The goal of this study is to look at the value relevance of accounting policy for an investment property of Malaysian listed companies. The sample was drawn from Malaysian publicly traded companies using simple random sampling to ensure that all publicly traded companies had an equal probability of being chosen. From 2018 to 2019, a final sample of 108 firm-years from diverse sectors was chosen. Landsman (1986) equity valuation method was used to analyse the value relevance of investment property used by Malaysian listed companies. The model was used to determine whether the value of a pooled sample, a fair value sample or a cost sample was valued relevant. Regardless of whether a cost model or a fair value model is used, the results suggest that enterprises' investment properties are value relevant. According to the findings, the cost model is more useful in determining the value of an investment property. The outcome gives standard setters useful information about the impact of choosing a fair value model and a cost model on share market value.

Keywords: investment property, cost model, fair value model, value relevance, Malaysia

1. INTRODUCTION

Accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements. The accounting policy for investment properties (IP) in Malaysia was introduced in 2012. Its nomenclature MFRS 140 – Investment Property stands for Malaysian Financial Reporting Standard 140. This standard sets the definition, recognition, measurement and accounting treatment for investment properties.

The accounting policy (MFRS 140) requires Malaysian companies to initially measure their investment properties at cost but allows companies to choose either cost model or fair value model for subsequent measurements.

Prior studies show the selection of accounting methods for IP all over the world. Previous research indicates that 76.7 percent of Nigerian firms chose the cost model (Isa, 2014), the majority of Thai companies chose the cost model over the fair value model (Acaranupong, 2017), approximately 50 percent of Chinese companies chose the cost model (Taplin, Yuan, and Brown, 2014), and the majority of Indonesian listed companies (including real estate companies) chose the cost model (Wahyuni, Soepriyanto, Avianti and Naulibasa, 2019).

Wahyuni et al. (2019) argued that size, profitability and leverage are not the determinants of valuation model selection in Indonesia. Only growth is significant in determining the selection of those models. Taplin et al. (2014) also suggest that size and leverage as not the factor for selection of valuation model in China. Isa (2014) tested profitability, leverage and size but only size was significant. Acaranupong (2017) found profitability and size to be the determinants of model selection while Isa (2014) suggested that the selection of accounting models is determined by profitability, leverage and size. However, the results of the study only found size as the determinant of accounting choice.

Some academics looked into the factors that influence accounting method choice. Size, profitability, leverage, and growth are among the variables of valuation model selection in Indonesia, according to Wahyuni et al. (2019). Only growth, however, had a substantial impact on model selection. According to Taplin et al. (2014), company size and leverage are factors of the valuation methodology

chosen for investment property in China. However, only the size of the sample was significant at the 10% level. Profitability, leverage, and scale, according to Isa (2014), decide which accounting model to use. Only size, however, was discovered to be the determining factor. Acaranupong (2017) found profitability and size to be the determinants for model selection.

Many researches on the value relevance of investment property have been undertaken. Prior researches, on the other hand, have produced mixed results. Some researchers discovered that investment properties are value relevant, whereas others did not. Acaranupong (2017), Weijun (2007), So and Smith (2009), Al-Khadash and Khasawneh (2014), Ahmad and Aladwan (2015), Selas (2009), and Zi, Hassan and Embong (2009) are among those who believe investment properties are value relevant. Ishak, Saringat, Ibrahim, and El-Shahat (2011), Abdul Jabar and Mohamed (2015), and Alhusaini and Elshamy (2015) are among those who believe investment properties are valued irrelevant (2016).

The current study looked into the situation in Malaysia with the following main goal in mind: The study's primary goal is to investigate the value relevance of investment properties among companies listed on Bursa Malaysia. As a result, the study will concentrate on the determinants and value relevance of investment properties reported in the statement of financial position using the cost model and the fair value model.

2. MATERIALS AND METHODS

A market research approach is used in a value relevance study. The value relevance of investment property of Malaysian listed businesses was tested using Landsman's (1986) value relevance model. Simple random sampling was performed to ensure that each organisation on the list had an equal chance of being chosen as a sample. The sample was chosen using simple random selection based on Sekaran, and the analysis is based on secondary data from publicly traded companies (2006). The sample was obtained on June 18, 2019, with a population of 794 businesses. A sample of 110 businesses was chosen using Excel software. However, four numbers were drawn twice. As a result, just 106 companies were chosen as a sample.

A regression model was developed to see the factors that determined the selection of the measurement model. It is based on findings of previous studies by Wahyuni et al. (2019), Taplin et al. (2014), Isa (2014), and Acaranupong (2017).

$$MOD_{jt} = \alpha + \beta_1 SIZE_{jt} + \beta_2 PROF_{jt} + \beta_3 LEV_{jt} + \beta_4 GROW_{jt} \text{ (A)}$$

Where MOD_{jt} is model selection of firm j at year t, $SIZE_{jt}$ is the natural log of total asset of firm j at year t, $PROF_{jt}$ is profitability measured by return on asset of firm j year t, LEV_{jt} is leverage measured by total liability divided by total asset of firm j at year t, and $GROW_{jt}$ is growth measured by market value divided by book value of equity of firm j at year t.

To answer the main objective, an equity valuation model based on the Landsman (1986) model was chosen to be used throughout the research. The basic concept of the equity valuation model is known as The Balance Sheet Identity model. Kane and Unal (1990), Shevlin (1991), Jennings et al (1996), and Pfeiffer (1998) are some of the other scholars have used this model in their research.

Basic Landsman (1986) model:
$$MVOE_{jt} = \alpha + \beta_1 BVOE_{jt} \text{ (1)}$$

Modified model to facilitate the inclusion of investment property:

$$MVOE_{jt} = \alpha + \beta_1 BVENOIP_{jt} + \beta_2 IP_{jt} \text{ (2)}$$

Where, $MVOE_{jt}$ is market value of equity of firm j at year t, $BVOE_{jt}$ is book value of equity of firm j at year t, $BVENOIP_{jt}$ is book value of equity net off investment property of firm j at year t and IP_{jt} is investment property of firm j at year t.

3. RESULTS AND DISCUSSION3.1: Descriptive statistics

A total of 54 firms are eligible to be researched based on a sample picked using simple random sampling. The cost model was chosen by 50% (27/54) of the companies under study, while the fair value model was chosen by the other 50%. Fair value model was chosen by 40% of small businesses, while cost model was chosen by 60% of small businesses. The fair value model was chosen by 65.5 percent of large enterprises, while the cost model was chosen by 34.5 percent of large enterprises. Malaysian listed businesses are following the trends in China Taplin et al. (2014) in terms of valuation model selection.

3.2: Regression on Determinants of Model Selection

Table 1. Determinants of model selection

Variables	Coefficient (sig)
Constant	1.5290 (.017)
SIZE	-.0517 (.130)
PROF	-.5058 (.376)
LEV	.0311(.904)
GROWH	.0014 (.000)

$$MODjt = \alpha + \beta_1 SIZEjt + \beta_2 PROFjt + \beta_3 LEVjt + \beta^1 GROWjt$$

Table 1 show that Size, Profitability and Leverage do not determine the selection of valuation model. Instead, selection of IP valuation model is determined by Growth represented by Market-to-Book Value Ratio. This study only supports Wahyuni et al. (2019) but does not support Taplin et al. (2014) Isa (2014) and Acaranupong (2017).

3.3: Regression on value relevance of accounting policy for investment property

The study's goal is to see if the accounting policies for investment properties are value relevant. Investment properties are value relevant for pooled sample. The pooled data was used to test model 1, which is the link between market value and book value of equity, in the first regression. With an adjusted R^2 of.8644, the results suggest that BVOE is significantly associated to MVOE at the 5% confidence level. It means that BVOE contains information and can explain 86.44 percent of the variation in MVOE. To put it another way, BVOE is value relevant. This finding backs with Landsman's (1986) finding that BVOE of equity was value related to MVOE.

The second regression model seeks to establish a link between the MVOE and the BVOE, which is divided into BVENOIP and IP. With an explanatory power of 86.68 percent (R^2 =.8668), the results reveal that BVENOIP and IP are significant at the 95 percent confidence level. It shows that, despite being split into BVENOIP and IP, BVOE is still substantial and can explain MVOE variation individually with slightly higher explanatory power. It also illustrates how the market captures the information content of IP and incorporates it into the MVOE components. In other words, IP is value relevant.

Table 2. Relationship of BVOE, BVENOIP, IP and IP towards MVOE

	Pooled sample		Cost sample		Fair value sample	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
	Coef. (Sig)	Coef. (Sig)	Coef. (Sig)	Coef. (Sig)	Coef. (Sig)	Coef. (Sig)
Constant	-1.79**	-2.40*	-4.56**	-6.80*	-2.95*	-2.95*
BVOE	3.69*		2.15*		4.54*	

BVENOIP		3.60*		2.13*		4.54*
IP		11.47*		5.21*		4.67*
N	108	108	54	54	54	54
F Stat	683.1*	349.1*	2516.1*	1496.0*	908.0*	445.3*
R2	.8657	.8693	.9798	.9832	.9458	.9458
Adj. R^2	.8644	.8668	.9794	.9826	.9448	.9437
Two-tailed regression models were utilised. *=significant at 1% level, **=significant at 5% level						

Regressions for cost sample and fair value sample also provided similar results to pooled sample. But cost sample provided more explanatory powers to market value as compared to fair value sample.

4. CONTRIBUTION AND USEFULNESS / COMMERCIALISATION

The study's model produces results and current data that may be utilised to demonstrate the value relevance of accounting policy for investment property in Malaysia. Prior research in Malaysia reveals that investment properties (in general) do not value relevant, even though investment properties of property businesses are. Governing bodies, researchers, and academics would greatly benefit from this. The study also gives standard-setters around the world a better grasp of the impact of choosing between a fair value model and a cost model on share market value. The research was also significant in determining the importance of accounting policy in the stock market.

5. CONCLUSION

First, the study concluded that 50% of the sample selected cost model and the other 50% selected fair value model. Second, the study concluded that the selection of valuation model is determined by company Growth. Third, the study also concluded that investment property is value relevant regardless of whether the companies chose cost model or fair value model and regardless of whether an investment property is included in book value of equity or separated from book value of equity. Lastly, the study also concluded that cost model is more value relevant than fair value model in Malaysia.

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