
THE RELATIONSHIP OF MALAYSIAN REITS' PORTFOLIO AND ITS FINANCIAL PERFORMANCE

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Abstract

Malaysian real estate investment trust (M-REITs) starts since 2006, is different in term of its properties' holding in portfolio and this resulted a poor response from institutional investors. Thus, this study aims to examine the relationship of M-REITs properties portfolio and its financial performance. A ten year data had been employed and correlation analysis is adopted. This study reveals that property portfolio allocation in commercial mall had significant correlation relationship with M-REITs' size of market capitalization in such property market value analysis (r : 0.94) and property holding percentage (r : 0.63). Meanwhile, allocation in industrial building also show to have significant correlation relationship with dividend and total return index (TRI). Similarly, with property portfolio allocation in hotel and resort significant correlation relationship with M-REITs' size of market capitalization which are (r : 0.49). However, both commercial mall and industrial building had insignificant correlation relationship with M-REITs' financial performance such as dividend per unit (DPU), dividend yield (DY) and total return index (TRI). On the other hand property portfolio allocation in industrial building showed a contradict result in which they have insignificant correlation relationship with M-REITs' size of market capitalization, yet had significant correlation relationship with DPU, DY and TRI. This study reveal that the bigger portfolio allocation on commercial mall as well as hotel and resort property were unable to generate sufficient return to M-REITs, and issue on the ethical of M-REITs property acquisition warrant special attention in future. Yet, there were few insignificant correlations among property type allocation of M-REITs, in which this might indicates that potential diversification for maximize the return and minimize the risk which M-REITs could offers..

Keywords: M-REITs, correlation analysis, market capitalization, property portfolio

1.0 INTRODUCTION

Malaysia was the first country in Asia to establish listed property trusts (LPTs) in 1989. However, the development of LPTs market lagged behind their counterparts in Singapore and Japan, impeded by local structural and regulatory factors (Newell et al., 2002). In 2005, the Securities Commission (SC) of Malaysia introduced REITs Guideline, superseding earlier guidelines on LPTs. Since then, the development of Malaysian REITs market improved and in 2015 there are fifteen REITs traded in Bursa Malaysia (BM).

Studies highlight that REITs are attractive to investors as they provide a wider diversification opportunity in real estate, greater liquidity

compared to direct real estate ownership, feasibility of operation and the ability to diversify at any level of investment (Chan et al., 2003; Zietz et al., 2003). Furthermore, REITs' returns in the form of dividend yields are attractive due to unique regulations compelling REITs to distribute at least 95 percent of their taxable income to shareholders.

This paper ascertains the relationship between financial performance and quality of property owned by M-REITs, as well as to explore characteristics of REITs, such as the company size. Since the development of REITs in Malaysia is still relatively new, there is a lack of studies conducted on the influence of size and property type allocation on REITs' financial

performance. Different types of properties have a different performance magnitude, such as commercial mall, office space and industrial building are affected by the economic influences while, special property examples like healthcare building and education or hostel building produce a low building yield yet stable throughout the period. The patients received medical treatment at the hospital regardless of the economic influences, and does the education building which receives enrolment of students every year.

The focus of this paper is to ascertain the type of properties that REITs should concentrate on and optimal REITs size to maximize shareholder return using Malaysian REIT sample from 2006-2015. This study summarizes REIT data patterns in terms of size, financial performance and property type allocation. As to whether the property type allocation owned by the M-REITs has influence on M-REITs' financial performance? Which property type is benefiting M-REITs' financial performance? And which property type is not benefiting M-REITs? What is the largest property type allocation preferred by the M-REITs? Therefore, this study adopts correlation analysis in order to evaluate the existence of relationship between M-REITs' financial performance and the property type allocation owned by the M-REITs. In addition, the existence of significant relationship between these variables and REITs' return are identified. Knowledge on optimal REIT size and favourable property portfolio could guide Malaysian REITs in maximizing shareholder wealth via high dividend yield.

2.0 MALAYSIAN REITs' SIZE AND ITS PROPERTIES

2.1 M-REITs Size

An important criteria judged by investors is REIT size where a group of studies found that REITs performance positively correlates with size (Anderson et al., 2002; Ambrose & Linneman, 2001; Capozza & Lee, 1995; Linneman, 1997). Ambrose & Linneman (2001) determined that larger REITs were likely to have higher profit margins, higher rental revenue ratio, lower

implied capitalization rates and lower cost of capital. Their study tested Linneman's (1997) hypothesis on existence of economies of scale to firm size which suggested that every billion dollar increase in market capitalization (MktCap) was translated into 2.2 percent reduction in capital cost.

REITs size is significantly related to the level of institutional investors' involvement in REITs (Below et al., 2000a; 2000b) where larger REITs have greater ability to attract institutional investors (Below et al., 2000a). Larger REITs tend to have higher institutional ownership levels, thus influence on its performance. The size plays a significant role in influencing investor's preferences on REITs (Brown, 1991; Brown & Matysiak, 2000). There are differences in capital value of each property which will skew the performance of the portfolio towards the risk return characteristic of the largest properties. The systematic risk of each portfolio can change as each new property is added to the portfolio (Brown & Matysiak, 2000). It was evident that the risk of a value-weighted portfolio will be dominated by those properties which have the largest capital value (Brown, 1991).

An alternative group of studies on optimal REITs size and diseconomies of return conjure up mixed argument on size of REITs (Bers & Springer, 1997; Bers & Springer, 1998; Devaney & Weber, 2005; Vogel, 1997; Yang, 2001). REITs were able to operate in the range of increasing return to scale and advantage from expansion when risk was incorporated into efficiency. However, when the size of REITs firm became large enough and reached an optimal point, diseconomies of scale will take place (Yang, 2001). These studies do not suggest a positive, linear relationship between REITs size and performance. Rather, there is an optimal size for REITs, further which there is a negative relationship between REIT size and performance.

REITs size has significant effect on all expenditure cost categories besides interest expenses. General and administrative (G&A) expenses as well as management fees demonstrated the largest economies of scale but operating expenses showed only modest effect (Bers & Springer, 1998). The economies of scale in REITs were found to increase the efficiency of operations in one way which may be helpful to

improving the performance of REIT (Bers & Springer, 1997). At a certain size, REITs firm might decrease in terms of economies of scale due to cost function of REITs that is quadratic to the size of REITs firm (Vogel, 1997). Thus, Malaysian REITs need to identify their right size for them, in order to avoid the increase of G&A and diseconomies of scale.

2.2 REITs Financial Performance

In stock markets, investors are basically looking at the total return and the volatility of stock in making an investment decisions. Nevertheless, because of the tax regulations of the REITs which require REITs to distribute 90 percent of taxable income to shareholders, thus, dividend pay-out or dividend yield of REITs is a significant performance measurement for REITs investors (Chan et al., 2003). In addition, dividend yield also reflect the return of REIT as the net property rental income of underlying properties of REIT is directly proportional with dividend yield.

The study of Gentry, Kemsley and Mayer (2002) investigate the relationship between the market value of equity and the market value of asset and tax flow which they found that REIT value is related with the tax base and share prices reflect future dividend taxes. Furthermore, the study of Bradley et al. (1998) stated that the REIT with greater leverage and the REIT with smaller and specialized asset bases offer lower dividend yield when compared to other REITs. The study of Zietz et al. (2013), the REITs with lower dividend pay-out ratios are those REITs have higher cash flow volatility. In addition, dividend pay-out play an important role in determine the REITs' future cash flow as the dividend policies or dividend pay-out can uses as a tool to convey information to capital market in order to gain access on fund acquisition (Lee et al., 2010; Wang et al.,1993). This probably will affect the stock price of REITs as some investors will make investment decision based on the dividend yield of REIT companies.

There have two important factors REITs 'investor look at when invest in REIT which are the share price and the income from underlying property. The share price indicate the capital appreciation of REITs whereas the property income determine the dividend distribution of

REIT (Olanrele et al., 2015). Therefore, it is reasonable to use total return index as a financial performance indicator of REIT as total return index is a stock index that tracks both the capital appreciation and dividend of a particular stock. In general, return data are commonly used by researcher in real estate securities performance analysis. The study of Myer and Webb (2000) stated that the return data of the property type allocation are useful in explaining the performance of REITs. In addition, Muller and Laposa (1996) had examined differences in return characteristics of various property type of REITs and found that the return of REITs are more diverged more across property types. Anderson et al. (2015) had examine the effect of property-type diversification in REITs of the period from year 1995 to 2006. They found that the property-type diversification bring the positive relationship to the return on asset and return on equity of REITs. This show that the property type in REIT portfolio are bring effect to the return of REITs. For M-REITs or predecessor of M-REITs which is listed property trust, Newell et al. (2002) have use annual return of four listed property trust in Malaysia for the period from 1991 to 2000 to examine their performance. The results show that the annual return of Amanah Harta Tanah PNB are higher than market return. Later, Hamzah et al. (2010) had using Sharpe ratio, Treynor Index and Jensen Ratio to examine the performance of M-REITs for pre-global financial crisis (GFC), during GFC and post-GFC period by employed monthly return from period 1995 to 2005. In the study of Pham (2012) who use average return as the performance indicator for the Asian emerging and developed REITs markets, found that the M-REITs have the highest average return (0.053%) among the seven Asian REITs market in the study.

2.3 REITs Property Quality

If Malaysian REITs were to expand, properties from which sector should be acquired? Would property allocation in terms of specialization or diversification be preferred, in order to minimize risk and maximize return? Capozza and Lee (1995) found that retail REITs traded at significant premium relative to the average REIT while warehouse/industrial REITs traded at discounts, while, hotel REITs exhibited

contrasting performance (Brady & Conlin, 2004; Kim et al., 2002; Newell & Seabrook, 2006). Meanwhile, residential REITs are more leveraged with higher long-term debt and lower earnings volatility compared to industrial, office and retail REITs with greater earnings volatility (Morri & Cristanziani, 2009).

There are mixed arguments on the different property types and performance (Capozza & Seguin, 1999; Morri & Beretta, 2008; Myers & Webb, 2000). The property type difference implies different performance and diversification benefits to a property portfolio. The different property types held by REITs result in a difference of excess return (Myers & Webb, 2000). On the other hand, specialized property type benefited REITs more than diversified property type (Geltner & Kluger, 1998; Morri & Beretta, 2008; Mueller & Anikeeff, 2001). While, diversified REITs seem to be riskier and less levered due to the low collateral value of their assets (Morri & Beretta, 2008). REITs were found to benefit from being specialized (Geltner & Kluger, 1998) although specialized REITs had higher market risk than diversified REITs (Ro & Ziobrowski, 2009).

The disadvantages of specialized REIT strategy are less risk reduction, lower property diversification and multiple geographic location choices. The specialized REITs also have a greater exposure to larger fluctuation in income stream. Studies determined that diversified REITs performance was superior to specialized REITs. In fact, the method of classification between specialized and diversified show significant differences in performance of REITs (Benefield, 2006; Benefield et al., 2008). Benefield (2006) classified property type as "specialized REITs" if a REIT had 75 percent or more of its portfolio invested in one particular property type and "diversified REITs" otherwise. Benefield (2006) found diversified REITs performed better than specialized REITs. However, Benefield et al. (2008) determined that specialized REITs perform better when overall market condition were not favourable.

3.0 RESEARCH SPECIFICATION AND RESULTS

This study had been carried out through two correlation analysis. First, the correlation analysis between M-REITs' financial performance that are market capitalization (MktCap), dividend per unit (DPU), dividend yield (DY) and total return index (TRI) with property type allocation by market value that are (i) property type office space (PTOS); (ii) property type commercial mall (PTCM); (iii) property type industrial building (PTIB); (iv) property type hotel & resort (PTHR); and (v) property type specialized building (PTSB). Second, the correlation analysis between M-REITs' financial performance that are MktCap, DPU, DY and TRI with property type allocation by percentage that are PTOS, PTCM, PTIB, PTHR and PTSB. As much as fifteen REITs companies traded in Bursa Malaysia (BM) are been used and a ten year historical data of M-REITs financial performance started 2006 until 2015 had been employed.

The financial performance of M-REITs is represented by market capitalization (MktCap), dividend per unit (DPU), dividend yield (DY) and total return index (TRI), in which all of these data are gathered from DataStream. Nevertheless, in order to gather MktCap and DY, it required a calculation according to the following Formula 1 and Formula 2. Meanwhile, the constituents of property type allocation in portfolio are classified as office space (PTOS), commercial mall (PTCM), industrial building (PTIB), hotel & resort (PTHR) and specialized building (PTSB). All the information about the property type portfolio are taken from M-REITs Annual Report publish in official website of BM.

$$\text{Market capitalization} = \frac{\text{Units in Circulation} \times \text{Market price per share}}{\text{Market price per share}} \quad (\text{Formula 1})$$

$$\text{Dividend yield} = \frac{\text{Dividend per unit}}{\text{Market price per share}} \quad (\text{Formula 2})$$

The Table 1 showed correlation analysis of M-REITs' financial performance that is MktCap, DPU, DY and TRI with property type allocation by market value. The analysis through market value of properties owned by M-REITs reveals that MktCap have significant positive correlation with PTCM (r: 0.94) and PTHR (r: 0.50). While DPU have significant positive correlation with

PTIB (r: 0.614) and with PTOS (r: 0.29). The TRI have significant positive correlation with PTIB (r: 0.48). On the other hand, the properties type portfolio allocation by market value showed that insignificant positive correlation that is PTOS with PTIB (r: 0.16), PTCM with PTHR (r: 0.37) and PTHR with PTSB (r: 0.1).

Meanwhile Table 20 showed correlation analysis of M-REITs' financial performance that is MktCap, DPU, DY and TRI with property type allocation by percentage. The correlation analysis through percentage of property type portfolio,

show that MktCap had a significant positive correlation relationship with PTCM (r: 0.63) and PTHR (r: 0.40). Meanwhile, DPU have insignificant correlation relationship with TRI (r: 0.36) and PTIB (r: 0.25). The DY have insignificant correlation relationship with PTIB (r: 0.24), while TRI have insignificant correlation relationship with PTOS (r: 0.25). The correlation analysis showed that there is no correlation relationship with among properties type portfolio allocation by percentage exist.

Table 1: Correlation Analysis of M-REITs Financial Performance and Property Type Allocation by Market value

	MKTCAP (RM in Million)	DPU (RM)	DYield	TOTAL RETURN INDEX	Office space (PTOS)	Commercial mall (PTCM)	Industrial building (PTIB)	Hotel & resort (PTHR)	Specialized building (PTSB)
MKTCAP (RM in Million)	1.000								
DPU (RM)	-0.034	1.000							
DYield	-0.485	0.105	1.000						
TOTAL RETURN INDEX	-0.063	0.364	-0.247	1.000					
Office space (PTOS)	-0.120	0.288	0.016	0.184	1.000				
Commercial mall (PTCM)	0.939	-0.150	-0.412	-0.194	-0.282	1.000			
Industrial building (PTIB)	-0.027	0.614	0.141	0.478	0.156	-0.212	1.000		
Hotel & resort (PTHR)	0.496	-0.092	-0.203	-0.061	0.063	0.367	-0.073	1.000	
Specialized building (PTSB)	0.006	-0.197	-0.159	-0.057	-0.300	-0.110	-0.118	0.094	1.000

Table 2: Correlation Analysis of M-REITs Financial Performance and Property Type Allocation by Percentage

	MKTCAP (RM in Million)	DPU (RM)	DYield	TOTAL RETURN INDEX	Office space (PTOS)	Commercial mall (PTCM)	Industrial building (PTIB)	Hotel & resort (PTHR)	Specialized building (PTSB)
MKTCAP (RM in Million)	1.000								
DPU (RM)	-0.034	1.000							
DYield	-0.485	0.105	1.000						
TOTAL RETURN INDEX	-0.063	0.364	-0.247	1.000					
Office space (PTOS)	-0.430	0.067	0.089	0.253	1.000				
Commercial mall (PTCM)	0.632	-0.088	-0.221	-0.174	-0.531	1.000			
Industrial building (PTIB)	-0.209	0.249	0.244	0.014	-0.313	-0.349	1.000		
Hotel & resort (PTHR)	0.357	-0.191	-0.108	-0.140	-0.196	0.058	-0.036	1.000	
Specialized building (PTSB)	-0.086	-0.212	-0.070	-0.121	-0.359	-0.238	-0.135	0.055	1.000

4.0 DISCUSSION

The aim of this study is to ascertain the relationship of M-REITs portfolio with its financial performance. Thus, this study used

correlation analysis to achieve the objective. Based on the results showed in Figure 1.0 and 2.0 above, it is clearly showed that market capitalization has positive correlation with property type allocation by market value and by

percentage of commercial mall (0.939 & 0.632) and property type allocation by market value and by percentage of also Hotel & Resort (0.496 & 0.357). This result indicates that the market value of commercial mall and hotel & resort in M-REITs will influence the size of M-REITs. This result happened may due to that the market value of commercial mall and hotel & resort are relatively higher than other property type in M-REITs' property portfolio. This result also support by Anderson *et al.*, (2002) that the performance of REIT is positively correlated with its size.

On the other hand, the results showed in Table 1 and Table 2 revealed that DPU, dividend yield and total return index of M-REITs have positive correlation with property type allocation by market value (0.288, 0.016 & 0.184) and by percentage (0.249, 0.244 & 0.014) of office space. Other than office space, the property type allocation by market value and by percentage of industrial building showed positive correlation with DPU (0.614 & 0.249), dividend yield (0.141 & 0.244) and total return index (0.478 & 0.014). This mainly due to that most of the specialized M-REITs are focus their underlying property investment in commercial mall and industrial building such as Atrium REIT, CMMT REIT, Hektar REIT, IGB REIT and Pavillion REITs. Thus, these result shows that specialized REITs are generally perform better than diversifies REITs (Morri & Beretta, 2008; Mueller & Anikeeff, 2001). In M-REITs, the commercial malls are mainly located in large and densely populated cities such as Kuala Lumpur. The location of the commercial mall encouraged the high traffic of consumer and also the tenants, thus, this directly will increase the net property rental income of commercial buildings and consequently the REITs companies will pay out high dividend yield and also have positive impact on total return index. This result is parallel with the study of Lehew (2000) who stated that the successful commercial mall properties are located in large and densely populated region. In addition, the reason industrial buildings in M-REIT has positive correlation with those financial performance is because the tenants for the industrial properties are mainly the tenants with famous brand and good reputation and they are the only tenants for that particular industrial

buildings such as BMW, Nestle and Emerson for Axis REIT and DHL Sdn Bhd for Atrium REITs. These findings are make consensus with the study of Ambrose (1990) who suggests that clientele effect will bring influenced to the value of industrial buildings.

Furthermore, the results in the Table 1 and Table 2 also revealed that office space has negative correlation with commercial mall (-0.282) and specialized building (-0.300) based on building market value, whereas, commercial mall have negative correlation with industrial building (-0.212) and specialized property (-0.110) and industrial building has negative correlation with hotel & resort building (-0.073) and specialized building (-0.118) based on property's market value. These negative correlations indicate that there has diversification potential between the two property types in M-REITs property portfolio for maximize the return and minimize the risk.

This study shows that PTCM by market value have a significant positive relationship with the MREITs' MktCap, in which indicates that larger market capitalization M-REITs are dominated by the commercial mall M-REITs. This seem to support the prior literature by Capozza and Lee (1995) found that retail and commercial REITs traded at significant premium relative to the average REIT.

Yet, this study also shows that PTCM by market value and its financial performance of DPU, DY and TRI are very poor (DPU, r : -0.150) and (DY, r : -0.412), (TRI, r : -0.194) in which indicates that larger market capitalization of property type commercial mall do not contribute for higher DPU and dividend yield.

Surprisingly the PTIB and PTOS by market value which show there are insignificant relationship of their MREITs' MktCap, revealed contradict result on their its financial performance of DPU, DY and TRI for PTIB such as (DPU, r : 0.614) and (DY, r : 0.141), (TRI, r : 0.478) and as for PTOS such as (DPU, r : 0.288) and (DY, r : 0.016), (TRI, r : 0.184).

This seem to support previous argument by Chan *et al.*, (2003) and Ambrose *et al.*, (2000) on dis-economic of scale on REITs, in which larger size seem to disadvantage the REITs financial performance. Meanwhile, there an increase in trend of property type commercial mall REITs establishment since 2010, indicate that at least 65

percent of the MktCap of M-REITs is on PTCM. This lead to an ambiguity on M-REITs' property portfolio selection and the influence of sponsor company on M-REITs establishment which seem to link to previous study on M-REITs' management advisory indicated M-REITs management advisory style is important to determine the unit holder wealth maximization since both types of advisory style portray the aggressiveness of a REIT in it expansion and growth plan.

On the other hand, the smaller size M-REIT which focus on a particular property type such as PTIB and PTOS able to produce higher financial performance such as PTIB have significant positive correlation with DPU (r: 0.614) and TRI (r: 0.48). This study seem to contradicted with finding by Capozza and Lee (1995) on US's industrial REITs that traded at discounts. While, correlation analysis showed that there is no correlation relationship with among properties type portfolio allocation by percentage exist.

5.0 CONCLUSIONS

This study highlights that although size of PTCM is growing in trend, yet PTIB showed that they have positive correlation with M-REITs' financial performance such as dividend per unit (DPU), dividend yield (DY) and total return index (TRI). Nevertheless, there are few negative correlations among property type allocation of M-REITs, in which this might indicates that potential diversification for maximize the return and minimize the risk which M-REITs could offers. All in all, growing size of M-REITs not reflected the financial performance, which indicates the effect of dis-economic of scale on certain M-REITs. Factor such as influence of majority shareholders, management advisory and property portfolio selection approach adopted by M-REITs granted further attention for empirical evidence.

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