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***Research paper***

# The Dynamic of Location Attributes Toward Malaysian Real Estate Investment Trust Performance

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**Abstract**

The Malaysian real estate investment trusts (M-REITs) properties intensive location contributes toward higher rental yield. Nevertheless, the location diversification depends on the type of properties in the portfolio, puzzled shareholder in their investment decision making in M-REITs. This study aim to determine the dynamic of location attributes toward financial performance. The pearson correlation and descriptive analysis of ten years (2006 until 2015) data is used. This study indicate that there is correlation between attributes of economic location with dividend yield(DY) (cor: 0.241). Yet, the market capitalization, have a negative correlation (cor: -0.246), which contradict with prior study on REITs' location attributes. This study also show that attributes of location of M-REITs properties should located between 5km to 10km from central business district (CBD).This study conclude that in order to ensure M-REITs properties remain competitive for commercial occupancy. The investment on M-REITs proven that dynamic of location attributes is priority, which support that M-REITs design for a long term investment goal.

***Keywords***: Location; real estate investment trust; performance; investment goal.

## 1. Introduction

Malaysia was the first country in Asia to establish listed property trusts (LPTs) , which is the predecessor of Real Estate Investment Trust (REITs). Nevertheless, the development and performance of LPTs in Malaysia lagged behind their counterparts in Singapore and Japan, impeded by local structural and regulatory factors (1). In 2005, the Securities Commission (SC) of Malaysia introduced REITs Guideline, superseding earlier guidelines on LPTs. Since then, the development of Malaysia REITs market improved. Today, there have seventeen REITs traded in Bursa Malaysia (BM).
Although REITs is being listed in the stock market but the rental income of their underlying property secures the income stream. In other words, the main income of REITs companies is come from the rental of different type of underlying properties. The property portfolio of Malaysia REITs consists of different type of property which included commercial office, retail mall, industrial building, hotel, healthcare centre and educational purpose building across different locations in Malaysia (Annual Report M-REITs company, 2006-2015). Most of the underlying property of Malaysia REITs are located in the capital of Malaysia , which is Kuala Lumpur.
The Malaysian real estate investment trusts (M-REITs) properties intensive location contributes toward higher rental yield. Nevertheless, the location diversification depends on the type of properties in the portfolio, puzzled shareholder in their investment decision making in M-REITs. The study (2) revealed that the difference of property location of Malaysia REITs is one of the factor influenced the financial performance of REITs. Besides, the study of (3) stated that strategic property locations is one of the key factors influencing the performance of Malaysia REITs through their survey with property and REITs fund manager.

Hence, this study aim to determine the dynamic of location attributes toward financial performance for using Malaysia REITs sample from 2006-2015.

## 2. The Influence of Location on Reits Return

### 2.1. Social, Technology, Economic and Politic (4)

In location analysis, the social cultural environment of neighbourhood, technology relation to an location area's economic environment, the economic environment of the area and political environment of the area is the vital factors to consider when study location accessibility of an area (5)

### 2.2. Social- Cultural Environment

The social-cultural environment of an area represented by the residents or employee or user who live in or frequent the area on an on-going basis. Studying the social environment is able to know the compatibility and consistency of land use, life style of the occupants and the occupational and economic status of the area's households. The lifestyle of the residents and user drives the quality and efficiency of the potential land use associations in an area. Besides, the degree of economic or political power in a neighbourhood depend on the social group that active there. Thus, the social environment of the neighbourhood is the vital factor that influence need to take consider in doing location analysis.

### 2.3. Technological Environment

Technology is one of the major factors to be considered in relation to a property area's economic environment. The telecommunica-

tion technologies such as cable internet, wireless internet, mobile telephone, broadband and smart-home gadgets have become part of people's life today. Today, any competitive property project development are consider these technologies as part of the product package and thus technology factor become an attribute include property performance.

## 2.4. Economic/Market Environment

The economic environment of an area reflects the financial performance of the properties located in that area such as rental rate and sales price. In general, the type of property use/land use and the market participants involve is often sufficient to establish the economic status and the direction of growth of that area. Besides, the objectives of property investors also influence the market environment of an area. This can reflect through property sale price, capitalization rate and discount rate of property. In addition, the supply and demand of property in a particular location also bring effect to the market environment.

## 2.5. Political Environment

The political organizations have influence on the location of property development as political environment comprises of public laws and rules of behaviour as well as area planning and services. Generally, the level of political organisation is reflected in the size of the area bureaucracy, the strength of district representation in elections, neighbourhood associations, and the power of local authority's planner. All these organisations influence the availability of community services in a specific neighbourhood and thus influence the property price of the area.

## 2.6. The Influence of Economic Location

Location is the vital factor to explain the value of direct real estate and the financial performance of indirect real estate investment vehicle such as REITs. Diversification across property location for REITs portfolio would minimize the risk and improve the return performance, thus portfolio diversification through property location can be considered as effective portfolio investment strategy (6, 7).

It is common to use geographical location to assess the performance of the property, yet, this study is use economic location. Mahoney (8) stated that the quality of property location is dependent on the economic activities occur on these locations. The study of Hartzell (2) resulted that the economic location diversification is more effective than the traditional geographical location diversification by test the data using correlation analysis. Later, this study was support by Anderson (9) by imputing REITs return into each of the economic location and their results showed that the return correlation coefficients are low between the economic locations. Hence, they suggest that diversification across economic location of REITs is significant and can reflect the performance of REITs. In general, property location is the important factor which determines the rent level of properties, thus it is important to all immovable property. This also signifies that the financial performance of REITs is correlated to the location of property.

Location is a vital factor towards Malaysia REITs. (5) pointed out that the unique difference of Malaysia REITs underlying property make it difficult for investors to evaluate the REITs performance. This may be the factor which cause Malaysia REITs become unattractive to investors. For example, the underlying properties in property portfolio of Sunway REITs are mainly located at the Central Business District (CBD) in Kuala Lumpur, as Sunway REITs focus on retail and hotel business. On the other hand, most of the properties of Axis REITs are located in industrial area due mainly of their underlying property are industrial property, which have different economic location values compare to Sunway REITs. This obviously shows that Malaysia REITs companies are locating their underlying properties in those locations which are essential and add value to the business. Thus, the economic location is the factor which able to reflect the performance of Malaysia REITs.

## 2.7. REITs Financial Performance

Many past studies on REITs financial performance have suggested that the important criteria assess by investors are REITs size and these study found that REITs performance positively correlates with size (10-13)). Larger REITs were likely to have higher profit margins, higher rental revenue ratio, lower implied capitalization rates and lower cost of capital (11). Additionally, the level of institutional investors' involvement in REITs is significantly related to REITs size, where REITs company with large market capitalization tend to have higher institutional ownership levels. ((14, 15).There is differences in capital value of each property which able to skew the performance of the REITs portfolio towards the risk return characteristics of the largest properties. Brown and Matysiak (16)stated that the systematic risk of each portfolio can change as each new property is added in to the portfolio. It was evident that the risk of a value-weighted portfolio will be dominated by properties with largest capital value (17) From the previous study, the market capitalization value of the REITs company is influence by the property in the REITs portfolio and it is also the common financial indicator for investor to assess the REITs' performance.

This study employed total return index as one of the REITs' financial performance indicator. Total return index is a common financial performance indicator observed by investors. It is a type of stock index that tracks both the capital appreciation and dividend of a particular stock, thus, it can effectively reflect the market performance of REITs' stock. Return index data are commonly used by researcher to study the performance of real estate securities and common stocks. Myer and Webb (3) use return data of property type to explain the performance of REITs. Besides, the study of Muller and Laposa (18) had used return of different REITs underlying property and found that the return of REITs property are more diverged across different property type. The different property types in the portfolio are able to bring positive relationship to the return on asset and return on equity of REITs (19). This study shows that the underlying property of REITs with different type and location are bring effect to the return of REITs.For local study, Newell (1) have use the annual return of four listed property trust in Malaysia for the period from 1991 to 2000 to examine their performance. Their results show that the annual return of Amanah Harta Tanah PNB is higher than market return. Then, the study of Pham (20) found that Malaysia REITs have the highest average return (0.053%) among others Asian REITs market. All these previous study use return data as performance indicator to study REITs performance and shows that return data are effectively explain the performance of REITs.

REITs company are require to distribute 90% of income in the form of dividend to shareholder. Thus, investors will observe the dividend yield of REITs when making investment decision. The study of Casey (21) stated that dividend yield is significant to the capital structure of REITs, this may due to REITs are pay put significantly more dividend than other common securities. The study of Wang (22) and Lee (12) on the influence of dividend yield towards REITs performance had pointed out that manager pay more dividend when REITs perform poorly and dividend payout are able to convey information to capital market and thus can gaining access to fund acquisition. In addition, Bradley, (12) stated that the REIT with greater leverage and with smaller, specialized asset bases offer lower dividend yield compared to other REITs. Also, those REITs with higher cash flow volatility are having lower dividend payout ratios (23). These study shows that dividend yield is a significant performance indicator to assess the performance of REITs.

## 3. Methodology

This study aimed to determine the dynamic of location attributes toward financial performance of M-REITs. The pearson correlation and trend analysis of ten years (2006 until 2015) data is used. Trend analysis is used in this study to explain the general pattern of the data by average the data of rental yield, occupancy rate and distance of property in M-REITs portfolio from Central Business District (CBD). Pearson correlation is employed in this study to examine the influence of location attributes of property in M-REITs' portfolio towards financial performance of M-REITs. The Formula 1 below shows the calculation of correlation.

Location attributes in this study is proxy by rental yield, occupancy rate and distance of property from CBD of properties in M-REITs property portfolio. The financial performance of M-REITs is represented by market capitalization, dividend yield and total return index of M-REITs, in which all these data are gathered from DataStream. In order to gather market capitalization and dividend yield of M-REITs, it is required a calculation according to the Formula 2 and Formula 3 show below.

$$r = \frac{N\Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{[N\Sigma x^2 - (\Sigma x)^2][N\Sigma y^2 - (\Sigma y)^2]}} \quad \textit{Formula 1}$$

Where :
N = Number of pairs of scores
Σxy = Sum of the products of paired scores
Σx = Sum of x scores
Σy = Sum of y scores
Σx2= Sum of squared x scores
Σy2 = Sum of squared y scores

$$\textit{Market capitalization} = \textit{Units in Circulation} \times \textit{Market price per share} \quad \textit{Formula 2}$$

$$\textit{Dividend yield} = \frac{\textit{Dividend per unit}}{\textit{Market price per share}} \quad \text{Formula 3}$$

There have fifteen M-REITs companies included in this study and the detail is shows in Table 1 below.

**Table 1:** List of Malaysia Real Estate Investment Trust Companies.

| No. | Reits Company | Year Start Traded | Location Of Property |
|---|---|---|---|
| 1. | AHP REIT | 2006 | • Pulau Pinanag<br>• Kuala Lumpur<br>• Selangor<br>• Negeri Sembilan<br>• Melaka<br>• Johor Bahru<br>• Sabah |
| 2. | AL AQAR REIT | 2006 | |
| 3. | AXIS REIT | 2006 | |
| 4. | STARHILL REIT | 2006 | |
| 5. | TOWER REIT | 2006 | |
| 6. | UOA REIT | 2006 | |
| 7. | AMANAHRAYA REIT | 2007 | |
| 8. | HEKTAR REIT | 2007 | |
| 9. | AMFIRST REIT | 2007 | |
| 10. | ATRIUM REIT | 2007 | |
| 11. | QUILL CAPITA REIT | 2007 | |
| 12. | CAPITAL MALL REIT | 2010 | |
| 13. | PAVILLION REIT | 2011 | |
| 14. | SUNWAY REIT | 2011 | |
| 15. | IGB REIT | 2012 | |

## 4. Findings and Discussions

### 4.1. Analysis on The Trend of Property Location Attributes

The following figure show the trend analysis on M-REITs' property location attributes selected in this study which are rental yield, occupancy rate and distance of property from central business district (CBD) from year 2006 to 2015.

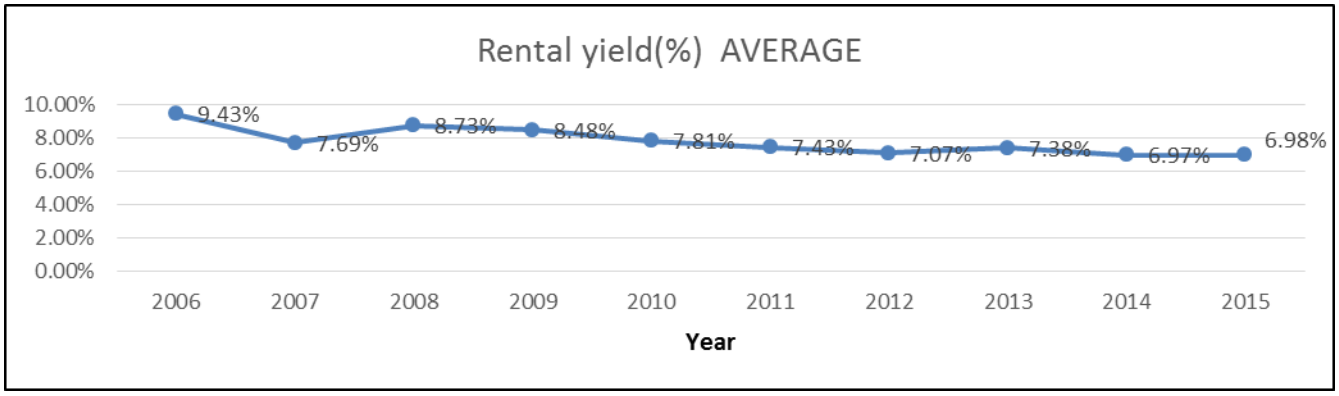



**Fig. 1:** The average rental yield of Malaysia REITs from year 2006 to 2015
Source: Authors compilation

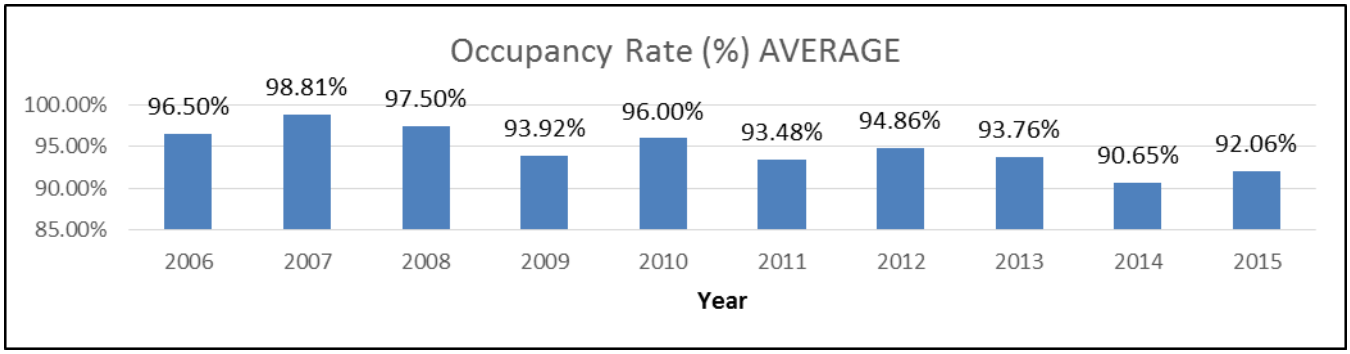



**Fig. 2:** The average occupancy rate of Malaysia REITs from year 2006 to 2015
Source: Authors compilation

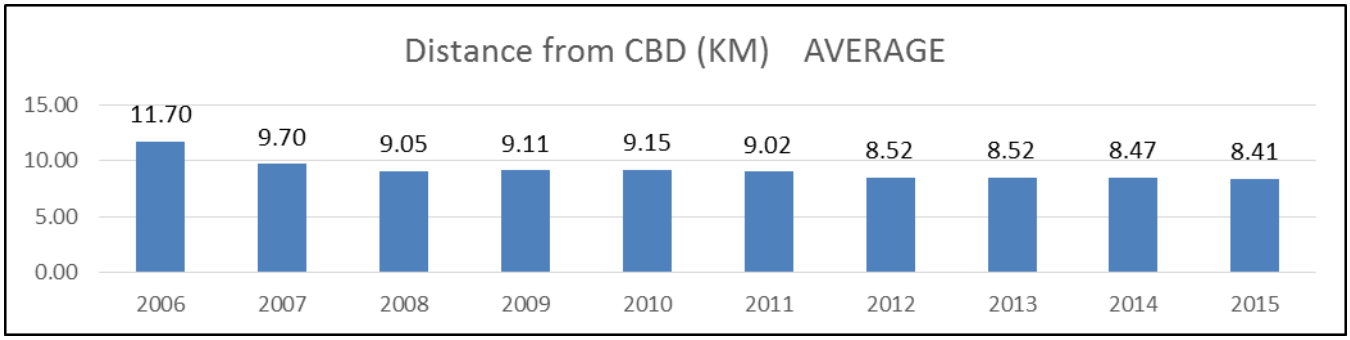


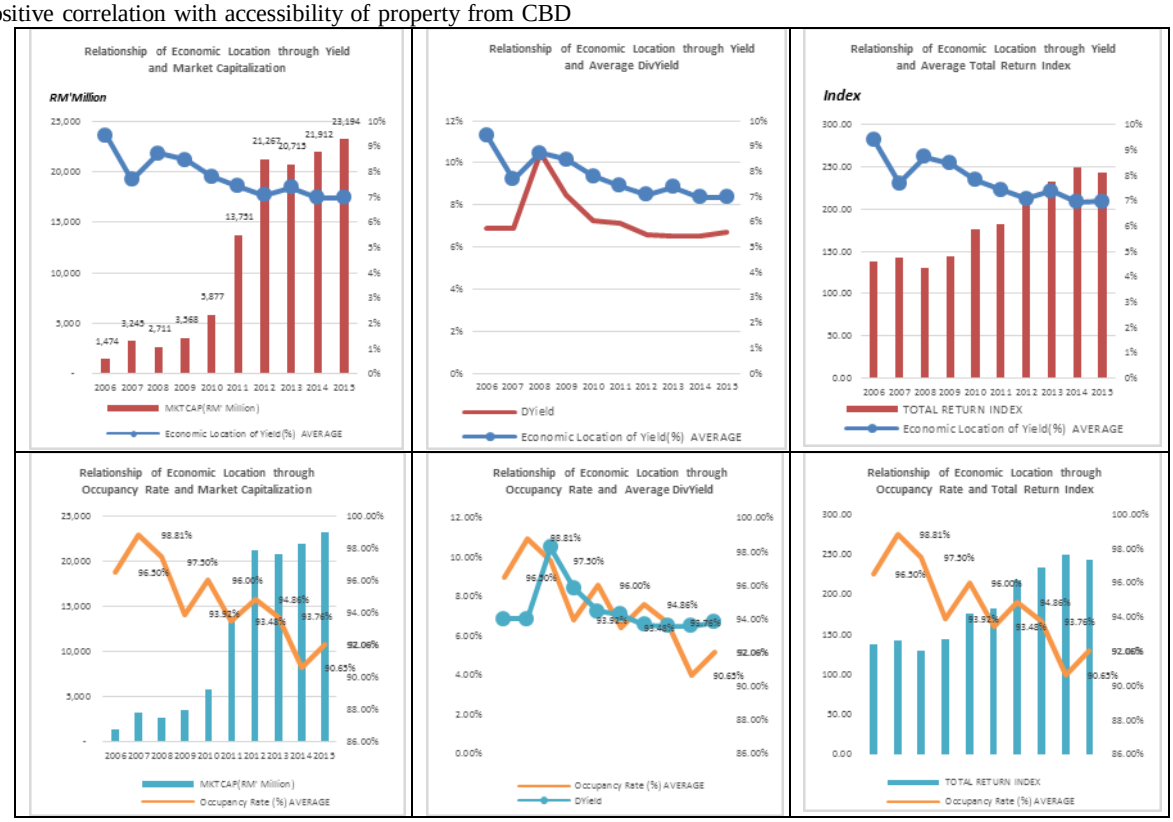

**Fig. 3:** The average distance of M-REITs' property from CBD from year 2006 to 2015
Source: Authors compilation

| | Rental Yield | Occupancy Rate | Accessibility from CBD | MktCap | Div Yield | Total Return Index |
|---|---|---|---|---|---|---|
| **Rental Yield** | | | | | | |
| **Occupancy Rate** | 0.034 | | | | | |
| **Accessibility from CBD** | -0.086 | 0.044 | | | | |
| **MktCap** | -0.236 | -0.199 | 0.007 | | | |
| **Div Yield** | 0.238 | 0.007 | -0.033 | -0.368 | | |
| **Total Return Index** | 0.078 | -0.123 | -0.123 | 0.171 | -0.14 | |

**Fig. 4:** Correlation analysis of M-REITs financial performance and property location

## 4.2. Correlation Analysis between Property Locations with M-Reits' Financial Performance

Figure 4 above shows the correlation analysis between property location and M-REITs financial performance which are market capitalization, dividend yield and total return index. The correlation analysis through property location proxy by rental yield, occupancy rate and property accessibility from CBD reveals that market capitalization value of M-REITs have negative correlation with rental yield (-0.236), occupancy rate (-0.199) and insignificant positive correlation with accessibility of property from CBD (0.007). Meanwhile, dividend yield of M-REITs have low positive correlation with rental yield (0.238) and occupancy rate (0.007), and has negative correlation with property accessibility from CBD (-0.033). Also, total return index of M-REITs has insignificant positive correlation with rental yield (0.078), and have negative correlation with occupancy rate (-0.123) and property accessibility from CBD (-0.123). These results indicate that property location attributes which are property rental yield, occupancy rate and property accessibility from CBD have no influence or little influence on the financial performance of M-REITs.



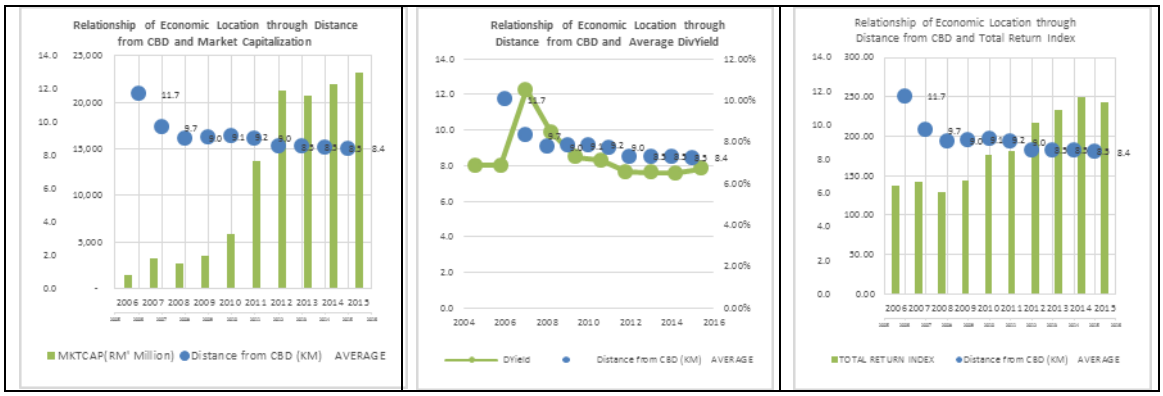



**Fig. 5:** Relationship of property location attributes with financial performance of M-REITs

## 5. Conclusion

This study reveals that the property location attributes in M-REITs property portfolios which are property rental yield, occupancy rate and property accessibility from CBD have no significant influence towards financial performance of M-REITs. This due to M-REITs financial performance is influence by property type, management style and capital structure of the company. In future, this study is attempt to use Geographic Information System (GIS) to further examine the influence of location attribute towards financial performance of M-REITs.

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