

A STUDY ON REITS' PERFORMANCE: COMPARISON BETWEEN MALAYSIA AND SINGAPORE

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Abstract

Over the years, REITS have emerged as one of the most promising sources of investment. Many countries around the world have been using REITS as one of the most popular tools of large scale investment. Asian continent is the home of so many things. REITS have started its journey in many of the Asian countries for a quite some time now. The Asian tiger countries particularly Malaysia and Singapore have been showing way forward to move forward like rising eagles. Both of these countries have been found using REITS as a modern tool of investment to attract foreign and local investors. Due to differences among countries and other factors, differences have also been observed in the performances of the REITS in different countries. Hence, the main objective of this study has been formulated to study the REITS in Malaysia and Singapore and find out the differences in their performances. With the analysis of the collected data, it has been found overall the REIT market in both countries i.e. Malaysia and Singapore have been performing well. It has also been found the Singaporean REITS (S-REIT) is performing better than the Malaysian REITS (M-REITS).

I. INTRODUCTION

Asia is the home for many things. Asian countries are varied in different aspects. But, many of them have one thing in common namely the road to development. Many of the countries in the Asian

region are still in the process of development. In spite of being in the developing stage, these countries are offering a favorable environment for many business sectors. The real estate sector is one of those promising sectors. Actually Asian economies have some features and these features have been helping to flourish the real estate sectors. According to CBRE's 2015 APAC Real Estate Markets Outlook report, driven by rapid urbanization, demographic growth, the expanding middle-class and increasingly wealthy households, the economic growth in Asia Pacific will remain ahead of the world average in the coming years ("Commercial Real Estate Services, Worldwide | CBRE", 2016). The real estate market in the Asian region is growing rapidly. And it is anticipated these developments in the real estate sectors are playing significant roles in the national economic development of the Asian countries. Out of all the countries in the Asia continent, two South Asian countries have been found to be more active in the arena of real estate. The two countries are Malaysia and Singapore. In these countries, real estate has been contributing as an important factor. Hence, the concept of REIT (Real Estate Investment Trust) has been flourished in these countries. REIT (Real Estate Investment Trust) has first started its journey during the 1960s in the United States. The concept of REIT is actually new for many countries in the Asian region. But, Malaysia and Singapore are exceptional

cases since they have embraced the concept of REITS.

The REITS in Malaysia and Singapore consist of the key players in the real estate market there. There are many studies conducted to explore the real estate market in Malaysia and Singapore. All of these studies have mainly looked at the key players contributing to the REITS there. Even though REITS exist in many countries around the world, there is less number of studies looking into the comparative performance of REITS in the countries around the world. The countries around the world is not same. Each country has its own charm. Hence, the performance of REITS in the countries around the world will not be the same as well. Different countries perform differently in the REITS market.

Many studies have been conducted so far exploring the performance of REITS (Kok and Khoo, 1995 ; Ting and Yunus, 2006; Hamzah, Rozali and Tahir, 2010). Seldom have these studies looked into the comparison of REITS in different countries (Tan, 2009). Since there exists differences among countries, hence the performance of REITS in these countries differ.

REITS have been contributing actively in the economic development of countries but there is less number of studies exploring the comparative performance of REITS in countries. Hence, the study will seek to review the REITS in Malaysia and Singapore and measure their comparative performance to see which REIT is performing better than the other.

Theoretical Motivation and Hypotheses Development

REIT is basically a contemporary vehicle for investment. It consist of companies that usually pool together fund from investors and invest the collected

fun in income generating real estate or relative assets and distribute the profit before tax to investors (shareholders) in the form of dividends (Ong, The, Soh and Yan, 2012). Unlike other assets, REITS are deemed to be defensive stocks since they provide a shield against inflation (Graff, 2000).

The concept of REIT is not new in this world. REIT has started its journey dated back in 1960s in the United States. In many countries around the world including the developing ones, REIT has been emerging as one of the sources for providing fixed income. REITS have been found to be popular and successful investment vehicle in the United States and Australia (Hamzah and Rozali, 2010). Usually, the REITS in the developed countries have been contributing a lot to the economy and they are always preferred by the potential investors from home and abroad.

REITS is not new to Malaysia. Malaysian REITS is also known as M-REIT collectively. Currently, there are 17 listed REITS in Malaysia (Securities Commission Malaysia, 2015).

For Singapore, REIT is not nothing new as well. Singapore has been attracting investors for a quite long mainly due to its good economic structure, favorable investment weather and above all a healthy return on investment. REITS have been introduced in Singapore during the July, 2012 (Ooi, Newell, and Sing, 2006). Currently, there are 20 listed REITS in the Singapore Stock Exchange (SGX) ("Singapore Exchange Ltd | SGX", 2016).

There are many studies performed the arena of REITS. Most of the previous studies have looked into the inclusion of international property in a mixed-asset portfolio (Ling and Naranjo, 2002; Wilson and Zubruegg, 2003; Worzala and Sirmans, 2003). And

then many of these studies have into the benefit of diversification for investing in REITs.

Lately, interest has been grown up among the researchers to conduct study assessing the performance of REITs. Many studies have been performed to explore the performance of REITS existing in different countries around the world. These studies can be divided into two types namely developed country perspective and developing country perspective.

Since the concept of REITs exist in many developed economies around the world, hence there are many studies conducted to explore the performance of REITs in those countries.

REITs are supposed to be contributing to the economic growth of developed countries and in these countries the performance of REITs are really promising. One study performed to explore the performance of REITs in the US and it has concluded that REIT properties perform better than the non-REIT properties (Brady and Conlin, 2004).

Several studies have been conducted on the performance of REITs available in many European countries as well. Study conducted by Adair and Nguyen (2013) has concluded that French REITs have superior risk-adjusted returns (Newell, Adair and Nguyen, 2013). Study conducted on Finish REITs has concluded that Finish REITs provide moderate returns (Falkenbach, Niskanen and Kiehela, 2013). In Italy, the REITs have been found to be providing superior performance (Morri and Lee, 2009). In Japan, The Japanese REITs have been found to be providing the best risk-adjusted returns (Newell, Peng & De Francesco, 2011)

In Australia, there is also existence of REITs. In the study conducted by G. Newell and W.P. Hsu

(2007), Australian REITs provide substantial risk adjusted returns (Newell, and Peng Hsu, 2007).

REITs are available in many Asian countries. Hence, many studies have been conducted in the Asian context to see the performance of REITs available in many Asian countries.

Study conducted in Vietnam has concluded that REIT is contributing in the economic development of Vietnam (Kim Nguyen, 2010). In Thailand, REIT has been observed gaining a significant position in the asset market (Khoi Pham, 2011).

Another study conducted in Hong Kong perspective has found that HK-REITs usually provide strong risk-adjusted returns (Newell, Yue, Kwong Wing & Siu Kei, 2010).

Study conducted in the Philippines context has found that, Philippines REITs in gaining importance and it is developing rapidly (Nguyen, 2011).

In Malaysian context, one study has been conducted during the year 1995 and it has concluded that listed property trusts are out-performing than market during bear markets but it has poor performance in bull markets (Kok and Khoo, 1995).

Some studies have tried to look at the performance of REITS in terms of statistical measures. Using statistical measures, it has been found that the coefficients of variation of the four major listed property trusts are under performed in terms of KLCI comprising a period from March 1991 to March 2000 (Newell, Ting and Acheampong, 2002).

During the financial crisis, the performance of REITS has been slowed down. Many studies have been conducted during that period exploring more into the performance of REITS during and after the financial crisis. One study has been conducted in the Malaysian context by Abullah and Zahari in 2008.

According to them, the listed property markets significantly outperformed the market portfolio (Abdullah and Zahari, 2008).

Singapore is an ideal example of a country with multifaceted developments. In Singapore, the REIT market is flourishing every day. A number of studies has been conducted in the Singapore perspective.

Study conducted by Patrick and Ooi has found that, Singapore REITs provided a better risk adjusted returns (Lecomte and Ooi, 2013). Another study conducted by Kim has found that, Singapore property stocks provide better return (K.H. Liow, 1997).

Few studies have been performed exploring the performance of REITS in Singapore. In Singapore, the property trust market is booming sector since there are many local as well as international investors are looking forward eagerly to invest there. Recently, there has been one study conducted to explore the performance of Singaporean REITS. It is concluded that the S-REIT has become best performed asset class.

The performance of REITS changes as per the period as it is evident from the previous studies. There are some studies which have tried to differentiate the performance of REITs in the short run and long run. One study found that there exist positive abnormal returns in the long-run compared with short run period (Richard J. Buttimer, David C. Hayland, Anthony B. Sanders, 2001).

In Malaysian context, one study has been conducted to explore the performance of M-REITS before crisis, between crisis and after crisis periods. It has been found that M-REITs has underperformed during both pre-crisis (2001-2007) and post crisis (2009-2010), meanwhile performed to the boarder market during financial crisis of 2008 (Chai, Choong, Koh and Tham, 2011).

Another study conducted by has found the long run positive buy-and-hold abnormal return is consistent with an expected decline in cost of equity after requisition (Sahin, 2005).

By suggesting the literature pertaining to this study, it is evident that there is less number of significant studies in this arena. Even though REITS have been proving to be one of the prominent contributors to the development of financial markets as well as the economy, seldom studies have given them the utmost importance. Thus, the objective of this study has been formulated as to see the comparative performance of REITS in Malaysia and Singapore.

Hypothesis is an educated hue's made by researchers based on information available (Kumar, Talib and Ramayah, 2013). Two important hypotheses have been set up for this study. The hypotheses are:

Hypothesis 1: The REIT in Malaysia and Singapore performing well in terms of standard deviation.

Hypothesis 2: The REIT in Singapore is performing better than the REIT in Malaysia.

Data and Method

In Malaysia, there 17 listed companies in the REITS under Securities Commission of Malaysia. On the other hand, in Singapore there are 20 listed companies in REITS under Singapore Stock Exchange. So, the total population here is 31. Out of 37, only 16 companies have been included.

For data collection technique, mono method has been used where data been collected from annual report and financial statements of the companies. The collected data have been analyzed using IBM Statistical Package for the Social Science 22.0

Blanche et al. (2006) has stressed that the sample should be large enough in order to allow inferences to be made about the population. Here, the sample size is 17 since 17 companies have been selected. For these 17 companies, 6 years data starting from 2010 to 2015 have been collected. So, the total number of observations is $17 \times 6 = 102$ which is large enough to represent a valid study.

Formulas for Study

In this study, several ratios have been utilized. These are basically performance ratios namely-

Sharpe Ratio : The Sharpe ratio (aka Sharpe's measure), developed by William F. Sharpe, is the ratio of a portfolio's total return minus the risk-free rate divided by the standard deviation of the portfolio, which is a measure of its risk. The Sharpe ratio is simply the risk premium per unit of risk, which is quantified by the standard deviation of the portfolio.

Risk Premium = Total Portfolio Return – Risk-free Rate

Sharpe Ratio = Risk Premium / Standard Deviation of Portfolio

While the Sharpe ratio measures the risk premium of the portfolio over the portfolio risk, or its

standard deviation, Treynor's ratio, popularized by Jack L. Treynor, compares the portfolio risk premium to the systematic risk of the portfolio as measured by its beta.

Treynor Ratio = (Total Portfolio Return – Risk-Free Rate) / Portfolio Beta

Empirical Results

Hypothesis 1.

H1: The REIT in Malaysia and Singapore performing well in terms of standard deviation.

Standard deviation is a measure of volatility here. The less the value of standard deviation, the better is the performance of REITS. From the calculation, it is evident that both REITS (M-REITS and S-REITS) are having different values from company to company as well as year to year.

Following is a table showing the standard deviation of the selected companies included in the M-REITS-

Table 1: Standard Deviation of M-REITS' Companies

Serial No.	2010	2011	2012	2013	2014	2015
1	4.03	4.01	3.83	3.88	4.10	4.20
2	5.92	5.10	6.10	6.42	6.86	7.60
3	6.02	6.10	7.10	8.70	9.10	9.30
4	2.56	2.80	2.90	3.16	4.10	5.02
5	4.52	4.33	4.80	4.88	4.90	4.95
6	3.82	3.67	3.90	4.10	4.20	5.03
7	1.99	2.26	2.78	3.10	3.67	4.02
8	3.00	3.89	3.95	4.00	4.18	4.56

From the above table, it is evident that even though the values of standard for the selected companies in the M-REITS ranging between the value of 1.99 and 9.30 where 1.99 is the smallest value of standard deviation and 9.30 is the highest value of standard deviation. Hence, it can be concluded that the M-REIT is performing well in terms of standard deviation.

A look at the values of standard deviation for the selected companies of S-REITS reveal that the values are varied in nature. But, the variation is not that large enough.

Following page is a table showing the values of standard deviation for the selected companies in S-REITS-

Table 2: Standard Deviation of S-REITS' Companies

Serial No.	2010	2011	2012	2013	2014	2015
1	4.00	4.01	3.83	3.88	4.00	4.80
2	5.90	5.10	6.10	6.42	6.86	7.60
3	6.10	6.10	7.10	8.70	9.10	8.50
4	2.96	2.80	2.90	3.16	4.10	5.02
5	4.30	4.33	4.80	4.88	4.90	4.95
6	3.90	3.67	3.90	4.10	4.20	5.03
7	1.68	2.26	2.78	3.10	3.67	4.02
8	3.60	3.89	3.95	4.00	4.18	4.56

From the above table, it is evident that even though the values of standard for the selected companies in the S-REITS ranging between the value of 1.68 and 9.10 where 1.68 is the smallest value of standard deviation and 9.10 is the highest value of standard deviation. Hence, it can be concluded that the S-REIT is performing well in terms of standard deviation.

Hence, the hypothesis 1 is accepted and it can be concluded that the both types of REITS (M-REITS and S-REITS) are performing better in terms of standard deviation where the values of volatility is limited to a certain range and hence it is not affecting the overall performance of both types of REITS that much.

H2: The REIT in Singapore is performing better than the REIT in Malaysia.

Hypothesis Performance is a relative measure.

For measuring the performance of both types of REITS (M-REITS and S-REITS), two main types of widely used ratios have been utilized namely Sharpe ratio and Treynor ratio.

To see whether S-REITS is performing better than the M-REITS, we will look into the performance ratios i.e. Sharpe and Treynor ratio for these two REITS from year to year on basis –

Following is a table showing the performance of M-REITS and S-REITS in the year 2010 as per the Sharpe Measure and Treynor Measure

Table 3: Value of Sharpe and Treynor Ratios for M-REITS and S-REITS, 2010

Serial No.	Sharpe Ratio		Treynor Measure	
	M-REITS	S-REITS	M-REITS	S-REITS
1	0.55	1.05	1.60	1.80
2	0.04	0.80	1.50	1.90
3	0.29	1.10	1.00	2.00
4	1.32	1.56	0.80	1.20
5	3.63	3.75	2.10	2.30
6	1.24	1.43	2.50	2.90
7	1.10	1.30	2.78	3.10
8	0.70	1.90	3.00	3.50

From the table in the previous page, it is observable for both ratios i.e. Sharpe ratio and Treynor ratio, the companies in the S-REITS are performing better than the M-REITS companies.

Again for the year 2011, the values of Sharpe ratio and Treynor ratio for the M-REITS and S-REITS are –

Table 4: Value of Sharpe and Treynor Ratios for M-REITS and S-REITS, 2011

Serial No.	Sharpe Ratio		Treynor Measure	
1	1.20	1.50	1.00	1.80
2	1.30	1.60	1.10	1.60
3	1.60	1.90	1.30	2.00
4	1.80	2.00	0.80	1.00
5	2.10	2.30	1.15	1.50
6	2.67	2.88	1.50	2.90
7	2.89	3.10	1.78	3.10
8	3.10	3.80	2.00	3.50

From the table in the above, it is observable for both ratios i.e. Sharpe ratio and Treynor ratio, the companies in the S-REITS are performing better than the M-REITS companies.

Following is a table showing the performance of M-REITS and S-REITS in the year 2012 as per the Sharpe Measure and Treynor Measure

Table 5: Value of Sharpe and Treynor Ratios for M-REITS and S-REITS, 2012

Serial No.	Sharpe Ratio		Treynor Measure	
1	1.60	1.90	1.78	1.80
2	1.30	1.45	1.88	1.95
3	1.40	1.80	1.70	2.00
4	1.48	1.80	0.90	1.00
5	1.10	2.20	1.15	2.50
6	1.68	2.80	1.45	2.90
7	2.36	3.00	2.90	3.10
8	2.98	3.80	2.00	2.50

From the table in the above, it is observable for both ratios i.e. Sharpe ratio and Treynor ratio, the companies in the S-REITS are performing better than the M-REITS companies.

Following is a table showing the performance of M-REITS and S-REITS in the year 2013 as per the Sharpe Measure and Treynor Measure-

Table 6: Value of Sharpe and Treynor Ratios for M-REITS and S-REITS, 2013

Serial No.	Sharpe Ratio		Treynor Measure	
1	1.50	2.00	1.80	1.85
2	1.40	1.45	1.60	1.95
3	1.50	1.80	1.70	2.00
4	1.48	1.80	0.96	1.05
5	1.10	2.20	1.18	2.40
6	1.50	2.80	1.58	2.37
7	2.50	3.00	2.65	2.90
8	3.00	3.80	2.78	3.00

From the table in the above, it is observable for both ratios the companies in the S-REITS are performing better than the M-REITS companies. S-REITS is showing promising future compared with M-REITS here.

Following is a table showing the performance of M-REITS and S-REITS in the year 2014 as per the Sharpe Measure and Treynor Measure-

Table 7: Value of Sharpe and Treynor Ratios for M-REITS and S-REITS, 2014

Serial No.	Sharpe Ratio		Treynor Measure	
1	1.10	2.00	1.90	1.85
2	1.80	1.45	1.60	1.95
3	1.50	1.80	1.70	2.10
4	1.40	1.80	1.00	1.05
5	1.60	2.20	1.88	2.40
6	2.00	2.80	1.69	2.37
7	2.20	3.00	2.35	2.90
8	3.10	3.80	2.60	3.00

From the table in the above, it is observable for both ratios the companies in the S-REITS are performing better than the M-REITS companies. S-REITS is showing promising future compared with M-REITS here.

Table 8: Value of Sharpe and Treynor Ratios for M-REITS and S-REITS, 2015

Serial No.	Sharpe Ratio		Treynor Measure	
1	2.00	3.10	1.90	1.85
2	1.80	3.00	1.60	1.95
3	2.10	2.98	1.70	2.10
4	1.40	2.50	1.00	1.05
5	1.50	2.70	1.90	2.60
6	1.96	2.60	1.56	2.38
7	2.20	3.00	2.35	3.00
8	2.40	3.20	2.60	3.10

From the table in the above, it is observable for both ratios the companies in the S-REITS are performing better than the M-REITS companies. S-REITS is showing promising future compared with M-REITS here.

So from the above tables and analysis, it is visible that the companies in the S-REITS are performing better compared with companies in the M-REITS as per the Sharpe and Treynor ratios. Hence, hypothesis 2 is accepted.

II. CONCLUSION

REITS have been being used as one of the most popular tools of modern day investment. Many countries around the world has been dealing with the business of REITS. In the Asian region, Malaysia and Singapore are two of the most prominent countries dealing with the business of REITS.

To measure the performance of REITS in Malaysia and Singapore, standard deviation has been utilized. The results suggest that both Malaysian REITS and

Singaporean REITS are performing better in terms of standard deviation. To compare the performance of REITS in both markets, Sharpe ratio and Treynor ratio have been utilized to find out the comparative performance of Malaysian REITS and Singaporean REITS. And it has been found that S-REITS are performing better than M-REITS as per the Sharpe ratios and Treynor ratios.

III. FUTURE RESEARCH

Future researchers may improve the results of the study by adding the number of companies into the sample. More firms need to be considered in order to lead to more robust findings on the issue. Furthermore, it could be good to include companies in more than one country in order to remove the systematic risk of investigating only one particular economy. This is so since the general performance of a country's economy might affect companies operating within it and hence, influence the results by a great extent.

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