The Indonesian Capital Market Review

Volume 8
Number 1 *January*

Article 1

1-30-2016

The Performance of Shariah Real Estate Investment Trust and Conventional Real Estate Investment Trust in Malaysia

Nor Edi Azhar Binti Mohamad
Department of Finance and Economics, Universiti Tenaga Nasional, NorEdi@uniten.edu.my

Recommended Citation

Mohamad, Nor Edi Azhar Binti (2016) "The Performance of Shariah Real Estate Investment Trust and Conventional Real Estate Investment Trust in Malaysia," *The Indonesian Capital Market Review*: Vol. 8 : No. 1 , Article 1.
DOI: 10.21002/icmr.v8i1.4844
Available at: https://scholarhub.ui.ac.id/icmr/vol8/iss1/1

Indonesian Capital Market Review 8 (2016) 1-11

INDONESIAN
CAPITAL MARKET REVIEW

The Performance of Shariah Real Estate Investment Trust and Conventional Real Estate Investment Trust in Malaysia

Nor Edi Azhar Binti Mohamad*
Department of Finance & Economics, College of Business Management & Accounting,
Universiti Tenaga Nasional

(Received: June 2015 / Revised: August 2015 / Accepted: September 2015 / Available Online: February 2016)

This study examines the performances of two Real Estate Investment Trust (REITs) structure in Malaysian capital market by comparing the Dividend Yield (DY), Distribution per Unit (DU), Net asset Value (NAV), and Earning per Unit (EU) of shariah (iREITs) and conventional (cREITs) REITs from Malaysia perspective. The secondary data are retrieved from Bloomberg's Database for 13 listed REITs in the Bursa Malaysia main board for a five-year period from 2009 to 2013 with yearly observation. Applying One Way-Anova analysis, an Independent Sample Kruskal-Wallis Test is used to determine any differences in the performance of the two REITs structure. The results provide evidence indicating that the two structures had distinctive and significantly different performances. It also indicates the better performance of iREITs compared to cREITs. The results of this study are useful to provide additional evidence towards the viable of Islamic funds as a significant initiative to broaden and deepen the product base of Islamic capital market in Malaysia.

Keywords: *Real Estate Investment Trust; Dividend Yield; Distribution per Unit; Net Asset Value; Earning per Unit*

JEL classification: G11

Introduction

Towards revelation of Malaysia's Capital Market, the introduction of Islamic Capital Market (ICM) had imminent tremendously by becoming Islamic fund management hub in the region. Malaysia has pioneered various innovative shariah-compliant investment products which are free from usury (riba'), gambling (maisir), and uncertainty (gharar) (Shahrom, undated). Yet, the remarkable success of Malaysia's Islamic capital market was emerged through the growth of shariah approved securities, Islamic bonds, Islamic unit trusts, shariah indices, warrants, crude palm oil futures, Islamic asset securitization (Sukuk) and of importance is the introduction of the first Islamic real estate investment trusts (iREITs).

In line with Malaysia's Capital Market Masterplan to promote the country as an international Islamic financial hub, Securities Commission (SC) of Malaysia has issued the iREITs Guidelines in November 2005. This guideline outlined by the Shariah Advisory Council (SAC) of the SC to facilitate the establishment of iREITS in Malaysia. These guidelines must

* Corresponding author's email: NorEdi@uniten.edu.my

be adhered to by the market players and be read together with the Guidelines on Real Estate Investment Trusts (SC, 2005). Consequently with the introduction of iREITs Guidelines, Malaysia was recognize as the first jurisdiction in the global financial sector to issue such Guidelines in the industry (Shariff, 2007) and first in the world to have an iREIT listed on the stock exchange (Ngadimon, 2012) which had forms a resilient pillar for Malaysia's progression in Islamic capital market.

The similarity of an iREIT with conventional REITs (cREITs) built within the structure requirements such as valuation, trustee, and management company and property manager. The difference between these two structures lies within the main compulsion that an iREIT needs to adhere with the requirements of the shariah where the income must be generated from *halal* activities. This is highlight by the definition of iREITs in the iREITs Guidelines as "a collective investment scheme in real estate, in which the tenants operate permissible activities according to the shariah*"* (SC 2005). From SC (2005), real estate is defined as a *"*physical land and those human made items which are attached to the land*"* by which definition is applicable for both REITs structure. According to Dusuki (2007), iREITs differs from conventional property funds mainly due to the requirement to strictly observe Islamic investment guidelines and shariah principles. Thus, it provides new investment opportunity for investors who wish to invest in real estate through shariah-compliant capital market instruments and the international investors seeking shariah-compliant instruments can buy into iREITs without the need for direct ownership of such properties (Osmadi, 2007).

Notwithstanding on debates in highlighting the virtues of Islamic fund management in the literature, studies on the iREITs are still insufficient compared to its conventional counterpart as opposed to its tremendous growth and development. In the addendum towards investor's interest on the area of Islamic capital markets, there is indeed a surge to provide an empirical analysis on the performance of Islamic and conventional REITs. Predominantly, as both funds are expected to have different return performance since Islamic unit trust are subject to both capital market rules and shariah principles while conventional unit trust subject only to the capital market rules. Therefore, this paper seeks to enrich the iREITs literature by evaluating the relative performance of iREITs and its conventional funds in the context of the Malaysia capital market and essentially gauges the resilience of the iREITs due to changing economic environment. Consequently, the main objective of this study is to compare the performance of iREITs and cREITs from Malaysia capital market perspective.

Literature Review

Previous Study on REITs in Malaysia

One of the earliest study on REITs in Malaysia was by Kok and Khoo (1995) examining the performance of three listed property trusts, which were Amanah Harta Tanah PNB, First Malaysia Property Trust, and Arab Malaysian First Property Trust, for the period 1991 to 1995. They found that listed property trusts are generally out-performed the market during bear markets, but performed poorly during bull markets.

Newell, Ting, and Acheampong (2002) examined the performance of four listed property trusts in Malaysia, namely Maybank Property Trust Fund One, Amanah Harta Tanah PNB, First Malaysia Property Trust, and Arab Malaysian First Property Trust. This study used annual returns as a measurement of returns while standard deviation represents risks and coefficient of variations as risk-adjusted performances. Their studies provide evidence that the annual return of Amanah Harta Tanah PNB is higher than the market return. whereas the standard deviation of Maybank Property Trust Fund One, Amanah Harta Tanah PNB, and First Malaysia Property Trust are higher than market risk. The coefficients of variation of each of the listed property trusts are under-performed the KLCI.

Furthermore, Abdullah and Wan Zahari (2008) investigated the performance of Malay-

https://scholarhub.ui.ac.id/icmr/vol8/iss1/1
DOI: 10.21002/icmr.v8i1.4844

sian listed property companies in the pre-crises, during and post-crisis period using Adjusted Sharpe Index, Sharpe Index, Treynor Index, Adjusted Jensen Index and Jensen Index. The Kuala Lumpur Property Index (KLPI) and Kuala Lumpur Composite Index (KLCI) were used as market benchmarks. Their results showed that the listed property companies significantly out-performed the market portfolio. Ong, Teh, and Chong (2011) investigated the development and performance of Malaysia REITs by using Net Value approach (NAV). They indicate that Malaysian REITs generally traded at a premium to NAV and are much better companies for transparency, disclosure, share liquidity, depth of management, and corporate democracy.

Alias and Soi Tho (2011) performed a comparative study with United Kingdom REITs by analyzing the performance of six (6) selected REITs in both countries. The findings demonstrated that the total revenue was the main factor affecting the performance for both the largest REITs and indicating that for every billion increase in market capitalization, the profit margins generated by the REITs is raised by approximately 9%.

Ezzati (2013) evidenced the significant influence of market capitalization, dividend yield, and interest rate towards effectiveness and efficiency of REITs performance in Malaysia. While, Olanrele, Said, and Bin Daud (2014) established a sector predicted benchmark for REIT performance in Malaysia for competitive comparison across Asian REIT using NAV, Leverage, Income, Dividend forecast, and Star rating of investment. Their studies indicate that none of the predicting variables have a one direction of influence with dividend where the decline in the Size, NAV, or FFO does not rigidly lead to a fall in dividend and vice-versa.

Previous Study on Islamic REITs in Malaysia

Though the issue on REITs has been widely studied, largely missing from literature is the focus on Malaysia REITs particularly that address the issues on the performance comparison of iREITS with cREIT. Osmadi (2006) evaluated the development of Islamic M-REITs from the year 2006 to 2008. His study confirmed that iREITs exhibiting the protective characteristics of low-risk levels and shows a differentiation in terms of property investment product compared to cREITs. This was further clarified by Newell and Osmadi (2010) with a sample of Malaysia REITs from the year 2006 to 2008. The study which accessed the risk-adjusted performance, significance, and portfolio diversification benefit of Islamic and conventional REITs in Malaysia justified that Islamic REITs provide portfolio diversification benefit and low-risk level features compared to conventional REITs.

Ibrahim and Ong (2008) investigated the performance of operational Islamic-compliant REITs for both restricted and non-restricted scheme. The non-compliant REITs outperform complaint REITs for an equally-weighted portfolio. However, it was in contradiction with the study by Alhenawi and Hassan (2011) which also examined the relative performance REITs for both restricted and non-restricted scheme. Their study revealed that the compliant REITs have out-performed non-compliant REITs with less volatile investment vehicle.

Further, Ong et al. (2012) examined the investment performance of Malaysia conventional and Islamic REITs before and after the global financial crisis (GFC) period for the year 2005 to 2010. Their study revealed that both conventional and Islamic REITs experienced negative monthly return during 2008 GFC period, and positive monthly return post-GFC period. Osmadi and Razali (2014) provided an analysis on the financial and management strength of iREITs during the global financial crisis (GFC) from 2007 to 2009. The result revealed the competitiveness of I-REITs in terms of financial and management strength although hit by GFC. The study also evidenced that the Islamic principles outdid the more volatile conventional principles during the GFC.

Therefore, from the previous literature, this study aims to identify the significant difference of the two REITs structure by differentiating from other studies in examining other types of variables considered important in REITs analysis.

Overview of Islamic REITs in Malaysia

Structure of iREITs

Real Estate Investment Trusts (REITs) is known as collective investment vehicles that pooled capital from investors through a trust for buying, managing, and selling real estate property. REITs are proposed to invest at least 50 percent of its total assets in real estate, whether through direct ownership or a single-purpose company whose principal asset comprises of real assets (MIFC, 2013). In addition, REITs essentially distributes most or all of their net income to unitholders as dividends.

In Malaysia, the development of REITs industry intensifies through the issuance of REITs guidelines by the Securities Commission (SC). Subsequently, the SC release of I-REITs Guidelines in the year 2005 facilitated the introduction of shariah-compliant REITs in Malaysia (Shariff, 2007) and addressed the Islamic issues on asset classification of shariah-compliant real estate investments (Zainal Azam, undated). This has set the global benchmark for the development of I-REITs in providing a clear guidance on new investment opportunities through a shariah-compliant capital market instrument. The guidelines provide an alternative investment opportunity for those who wish to invest in real estate through shariah compliant capital market instruments. The I-REITs Guidelines expedited the construction of a new asset class for investors and further allows fund managers to diversify their investment sources and portfolios. The guidelines also widen new opportunity to international investors seeking shariah compliant instruments to invest in Malaysian real property without the need for direct ownership of such assets.

Structurally, there is no difference between iREITS and CREITs (Dusuki, 2007). Nonetheless, similar to others shariah finance compliances product, the main uphold objective is forbidding an investment in properties associated with activities deemed unethical under Islamic law. Properties classified under an iREIT must generate rental income from permissible activities. The I-REITs Guideline had provide answers to some of the pertinent questions about Islamic REIT by providing the mix tenants operating permissible and non-permissible activities which cannot exceed 20% of the total turnover as determined by SAC (Shahrom,undated). The guideline also lay out specific rental activities that are classify as non-permissible, such as alcohol products, tobacco products, pork-derived products, weapons or defense, non-permissible entertainment activities, hotels and resorts interest-based financial services, conventional insurance, and stock broking or share trading in non-shariah compliant (SC, 2005).

Apart from the activities listed above, the Shariah committee adviser can apply *Ijtihad* for other non-permissible activities to be included as a criterion in assessing the rental income for Islamic REITs (SC, 2005). As refer to Kamali (1989), *Ijtihad* is the process of reasoning by Islamic jurists to obtain legal rulings from the sources of shariah. However, in order to protect the image of the Islamic REIT, it was highlight in the I-REITs Guideline that an Islamic REIT is not permitted to own real estate in which all the tenants operate non-permissible activities, even if the percentage of rental from that building to the total turnover of the Islamic REIT is still below the 20% benchmarks (SC, 2005). In addition, the return to the investor should be in the forms of dividends or distribution and capital gains for the holding period, received by the unit holders which are similar with C-REIT. Yet, to differentiate from its counterpart, for Islamic REIT, these incomes must be from Syariah compliant activities or from the above mention non-compliance activities within the 20% benchmark.

Development of REITs industry in Malaysia

The growth of REITs industry in Malaysia marks it invasion starting from years 1989 with the first introduction of Arab-Malaysian First Property Trust (AMFPT) in September 1989 which currently was known as AmFirst REITs. Then, it followed by First Malaysia Property Trust (FMPT) in December 1990. Unfortunately, it was delisted from Bursa Malaysia in July 2002. Further, Amanah Harta Tanah PNB was

https://scholarhub.ui.ac.id/icmr/vol8/iss1/1
DOI: 10.21002/icmr.v8i1.4844

Table 1. Historical Growth of Malaysian Listed Property Trusts and REITs

No	Listed Property Trust/REIT	KLSE/ Bursa Malaysia Listing	Market Capitalization as at 2014 (million)	Asset Type
1	First Malaysia Property Trust[1]	November 1989	N/A	
2	AmanahHarta Tanah PNB	28 December 1990	RM 113	Office
3	AmanahHarta Tanah PNB 2[2]	25 March 1997	N/A	
4	Axis REIT *[6]	29 July 2005	RM 1351.431	Office
5	YTL Hospitality REIT[5]	16 December 2005	RM 1,007.95	Diversified
6	UOA REIT	30th December 2005	RM 613.1641	Office
7	Tower REITs	12 April 2006	RM 420.75	Office
8	Al-Aqar KPJ REITs*	10 August 2006	RM 925.9812	Healthcare
9	Hektar REIT	4 December 2006	RM 600.9512	Retail
10	AmFirst REITs[4]	21 December 2006	RM 686.4016	Office
11	Quill Capital Trust	8 January 2007	RM 460.3546	Office
12	Al-Hadharah Boustead REIT*[3]	8 February 2007	RM 1297.692	plantations
13	Atrium REIT	2 April 2007	RM 158.3413	Industrial
14	Amanahraya-REIT	26 February 2007	RM 573.2198	Retail
15	Capital Malls Malaysia Trust	16 July 2010	RM 2500	Malls
16	Sunway REITs	8 July 2010	RM 3625.37	Diversified
17	Pavilion REITs	7 December 2011	RM 3,852,396	Malls
18	IGB REITs	21 sept 2012	RM 4,593.	Malls
19	KLCC REITs *	9 May 2013	RM 10,561	Diversified

Sources: Company annual reports and Bloomberg's Database.
Notes
* Islamic Fund
1. First Malaysia Property Trust delisted in July 2002
2 AmanahHarta Tanah PNB 2 delisted in November 2009
3. Al-Hadharah Boustead REIT delisted in February 2014
4. Formerly known as Arab Malaysian First Property Trust (change of name on December 2006)
5. Formerly known as Starhill Real Estate Investment Trust (change of name on 11 December 2013)
6. Axis REITs converted to iREITs in December 2008

listed in December 1990 followed by Amanah Harta Tanah PNB 2 (AHT2) in December 1997; however, AHT2 ceased its listing in the year 2009.

In an effort to create a vibrant REITs industry in Malaysia with the introduction of the new *Guidelines on Real Estate Investment Trusts* on 3rd January 2005, Malaysia has seen the debut of Axis REITs listed in Bursa Malaysia on July 29, 2005, and was converted to iREITs in December 2008. The REITs market broadens its segments in year 2005 by the listing of Starhill REITs on December 16, and UOA REITs on December 30.

In 2006, the market witnessed the listing of Al-Aqar KPJ REITs as the first iREITS in Malaysia listed on August, and another two cREITs which are Tower REITs on April followed by Hektar REITs on December. In 2007, the second iREITs was emerged by the listed of Al-Hadharah Boustead REITs in February with another three cREITs which are Quill capital trust on January, Amanahraya-REIT on February and Atrium REITs on April. The REITs industry continues its debut in 2010 by witnessing the listing of Capital Malls Malaysia Trust and Sunway REITs both on July, followed by Pavilion REITs on December 2011 and IGB REITs on September 2012.

The latest listed REIT was KLCC REIT which is the world's first Syariah-compliant stapled REIT, listed on 9 May 2013, and parked as the fourth iREITs in Malaysia. Stapled REITs are investment vehicles which include two or more separate entities 'stapled together' to trade using a single new financial instrument (MIFC, 2013). Whilst, three funds were considered to be syariah compliant REITs namely Al-Aqar KPJ, Axis REITs, and KLCC REITs after Al-Hadharah Boustead REITs ceased its listing in the year 2014.The evolution of the listed REITs in Malaysia was shown in Table 1. Being a relatively new market, Malaysia REIT provides the investor an exposure to the high growth potential in Malaysia and Asia. Prior to 2015, Malaysia has in existence of 16 actively traded REITs fund as per Table 2.

Table 2. Listed REITs that still actively traded in Bursa Malaysia prior 2015

No.	Funds Under Management	Trustee	Management Company
1	AmFirst Real Estate Investment Trust	Maybank Trustees Berhad	AmARA REIT Managers SdnBhd
2	Axis Real Estate Investment Trust *	RHB Trustees Berhad	Axis-REIT Managers Berhad
3	AmanahRaya Real Estate Investment Trust	CIMB Islamic Trustee Berhad	AmanahRaya-REIT Managers SdnBhd
4	Atrium Real Estate Investment Trust	CIMB Commerce Trustee Berhad	Atrium REIT Managers SdnBhd
5	CapitaMalls Malaysia Trust	AmTrusteeBerhad	CapitaMalls Malaysia REIT Management SdnBhd
6	Al-`Aqar Healthcare REIT *	AmanahRaya Trustees Berhad	Damansara REIT Managers SdnBhd
7	Tower Real Estate Investment Trust	AmTrusteeBerhad	GLM REIT Management SdnBhd
8	Hektar Real Estate Investment Trust	AmTrusteeBerhad	Hektar Asset Management SdnBhd
9	IGB Real Estate Investment Trust	AmTrusteeBerhad	IGB REIT Management SdnBhd
10	KLCC Real Estate Investment Trust *	Maybank Trustees Berhad	KLCC REIT Management SdnBhd
11	Pavilion Real Estate Investment Trust	AmTrusteeBerhad	Pavilion REIT Management SdnBhd
12	AmanahHarta Tanah PNB	AmanahRaya Trustees Berhad	PelaburanHartanah Nasional Berhad
13	YTL Hospitality REITs	Maybank Trustees Berhad	PintarProjekSdnBhd
14	Quill Capita Trust	Maybank Trustees Berhad	Quill Capita Management SdnBhd
15	Sunway Real Estate Investment Trust	RHB Trustees Berhad	Sunway REIT Management SdnBhd
16	UOA Real Estate Investment Trust	RHB Trustees Berhad	UOA Asset Management SdnBhd

Sources: Security Commission, retrieved from http://www.sc.com.my/wpcontent/uploads/eng/html/resources/stats/REIT.pdf
* Islamic Fund

Methodology

The period cover in the study starts on January 1, 2009, and ends on December 31, 2013, with five-year yearly observation. To date, 16 actively traded REITs are available in Malaysia's REITs industry; however, for the purposes of analysis, only 13 REITs funds are chosen for the analysis. The sample encompasses three iREITs and ten cREITs funds. Even though the Al-Hadharah Boustead REIT was delisted by the end of 2014, yet the sample is still considered because the data up to 2013 is available. On the other hand, three more REITs are excluded because of unavailability of the data. The data gathered directly from Bloomberg's database and the measurement performance used are distribution per unit (DPU), dividend yields (DY), net asset value (NAV), and earnings per unit (EPU).

DPU and DY are chosen to represent REITs performance due to its ability in forecasting the REITs growth. According to Aharony and Swary (1980), dividend payments can serve as market signals, clarifying asymmetric information concerning the firm's future earnings. Further, supported by Kallberg et al. (2003), dividend payout of REITs serve as a reliable signal of REITs future growth and the dividend pricing model is also reported to be a better model that fit REITs than for other equities. Any increase or decrease in REITs dividend payment is a signal of information about its future earning to the stock market appreciation (Ghosh and Sirman, 2006). Further, Chan et al. (2003) noted that REIT's dividend policy is not constrained by the payout ratio set by tax regulations and pay out more significant dividends than the requirement of the regulation.

The NAV of a REIT is the market value of its assets portfolio, minus any debts which are secured by the property. It does not directly affect unitholders' return, however, it's per unit metric is used to determine the REITs valuation. By comparing NAV per unit of a REIT to its current stock price, the higher the NAV per unit compared to REIT stock price, it is said to be undervalued and traded at a premium, and vice-versa. According to Clayton et al. (2007), NAV can be considered as a simplest technique and reliable valuation method to capture similar items among different markets and funds, also is used to measure per share of company's net assets market value. As per Malaysia REITs, Ong et al. (2011) in their study found evidence that Malaysia REITs are traded at NAV premium. While Clayton and MacKinnon (2001) indicated that NAV discount can impact REIT's ability to raise funds and tend to slow down company development.

In the attempt to find the mean difference, the one-way ANOVA analysis is used in this study to test the hypothesis of means equality between two REITs structure, namely iREITs

Table 3. Tests of Normality

Variable	Structure	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
DPU	iREITs	.084	15	.200*	.980	15	.970
	cREITs	.141	50	.015	.918	50	.002
DY	iREITs	.228	15	.035	.873	15	.038
	cREITs	.323	50	.000	.709	50	.000
NAV	iREITs	.198	15	.118	.888	15	.062
	cREITs	.125	50	.050	.946	50	.024
EPU	iREITs	.219	15	.051	.794	15	.003
	cREITs	.140	50	.016	.923	50	.003

and cREITs. The hypotheses for equality of means as per below:

Hypothesis 1 H0: there is no difference in DPU between iREITs and cREITs ($\mu DPU_1 = \mu DPU_2$)
H1: there is a significant difference in DPU between iREITs and cREITs ($\mu DPU_1 \neq \mu DPU_2$)

Hypothesis2 H0: there is no difference in DY between iREITs and cREITs ($\mu DY_1 = \mu DY_2$)
H1: there is a significant difference in DPU between iREITs and cREITs ($\mu DY_1 \neq \mu DY_2$)

Hypothesis 3 H0: there is no difference in NAV between iREITs and cREITs ($\mu NAV_1 = \mu NAV_2$)
H1: there is a significant difference in NAV between iREITs and cREITs ($\mu NAV_1 \neq \mu NAV_2$)

Hypothesis 4 H0: there is no difference in EPU between iREITs and cREITs ($\mu EPU_1 = \mu EPU_2$)
H1: there is a significant difference in EPU between iREITs and cREITs ($\mu EPU_1 \neq \mu EPU_2$)

Result and Discussion

This study aims to investigate whether there is any difference exists between the means of iREITs and cREITS on a continuous dependent variable in the REITs performance. The study uses one-way ANOVA analysis for an unbalanced design since the sample size is not equal for each REITs structure. In providing a valid result for a one-way ANOVA, the necessary test is performed in order to identify the assumptions of one-way ANOVA is hold. This analysis assumes that the dependent variable is normally distributed for each group of the independent variable and there are no outliers in any group. There are many different methods that can be used to detect for outliers and to assess if data is normally distributed, however, this study used boxplot to identify outliers and a Shapiro-Wilk Test for Normality to determine whether data is normally distributed.

The Shapiro-Wilk test is used to identify the second assumptions of one-way ANOVA in this study. The null hypothesis of the Shapiro-Wilk test indicates that data's distribution is equal to a normal distribution, while the alternative hypothesis indicating otherwise. Based on the test of normality, we can see from Table 3 that DPU, DY, NAV, and EPU scores are not normally distributed for the iREITs and cREITs as measured by Shapiro-Wilk's test of normality. The test signifies that the null hypothesis is rejected since the significant level of p-value ($p < .05$). Even though the results indicated non-normality, however, it does not affect Type I error rate substantially and the one-way ANOVA can be considered robust to non-normality (Maxwell & Delaney, 2004).

The boxplot analysis is employed to demonstrate the existence of outliers in the data, as measured by inspection of a boxplot for values greater than 1.5 box lengths from the edge of the box. After checking for the outliers from the data, it is confirmed that the outlier is most likely an indisputably odd data point, either from the consequence of a data entry error or meas-

Table 4. The Test Statistics and Descriptive Statistic for REITs performance for both structures

						Test Statistics		
		N	Mean	Minimum	Maximum	Test Statistic	Degree of Freedom	Asymptotic sig. (2-sided test)
DPU	iREITs	15	.1122	.03	.19	6.323	1	0.012
	cREITs	50	.0811	.02	.11			
	Total	65	.0883	.02	.19			
DY	iREITs	15	7.2047	4.37	12.32	0.761	1	0.383
	cREITs	50	6.4369	.00	10.03			
	Total	65	6.6141	.00	12.32			
NAV	iREITs	15	1.6571	1.10	2.23	3.972	1	0.046
	cREITs	50	1.4045	.99	1.89			
	Total	65	1.4628	.99	2.23			
EPS	iREITs	15	18.0233	7.73	48.78	6.132	1	0.013
	cREITs	50	12.0085	.00	37.69			
	Total	65	13.3966	.00	48.78			

Table 5. Hypothesis Test Summary

	Null Hypothesis	Test	Sig	Decision
1	The distribution of DPU is the same across categories of REITs structure	Independent Sample Kruskal-Wallis Test	0.012*	Reject the null hypothesis
2	The distribution of DY is the same across categories of REITs structure	Independent Sample Kruskal-Wallis Test	0.383	Accept the null hypothesis
3	The distribution of NAV is the same across categories of REITs structure	Independent Sample Kruskal-Wallis Test	0.046*	Reject the null hypothesis
4	The distribution of EPU is the same across categories of REITs structure	Independent Sample Kruskal-Wallis Test	0.013*	Reject the null hypothesis

Asymptotic significances are displayed. *The Significance level is 0.05

urement error. Therefore, we do not remove the outlier and further run the non-parametric Kruskal-Wallis H test which is not affected by outliers. In addition, Kruskal-Wallis H test is generally considered as the nonparametric alternative to the one-way ANOVA, which can be used if the data failed the assumptions of the one-way ANOVA.

Further, Independent Sample Kruskal-Wallis test is employed to determine if there are differences in the performance of REITs (DPU, DY, NAV, and EPS) between different structures. These results are presented in Table 4 and Table 5. The results for DPU (χ^2 (1) = 6.323, p = 0.012), NAV (χ^2 (1) = 3.972, p = 0.046), and EPU (χ^2 (1) = 6.132, p = 0.013) indicate statistically significantly different between different REITs structure. Whilst, results for DY (χ^2 (1) = 0.761, p = 0.383) indicating insignificant results. This indicates that there is a significant difference between the REITs structure relating their performance from the Malaysian perspective.

In the light of results present in Table 4 and 5, the three hypotheses (H1, H3, and H4) are accepted indicating the existence of significant differences among the REITs performance across two different structures. Whilst, hypothesis H2 is rejected. In terms of descriptive statistics analysis as per table 4, the results indicate that iREITs pay higher DPU compare to cREITs as the results for mean, minimum and maximum of 0.11 cent, 0.03 cent, and 0.19 cent, respectively. Whilst, cREITs indicate the mean, minimum, and maximum value are 0.08 cent, 0.02 cent, and 0.11 cent, respectively.

The results for DY also show that iREITs has higher DY even though it is not significant, since the mean for iREITS is 7.2, or lower compared to cREITs with only 6.44. The statistics for NAV also portray that iREITs is outperformed REITs as the means for iREITs is RM 1.66 compare to cREITs with RM 1.40. Further, the results for EPU also evidence better performance of iREITs with means of 0.18 cent compare to 0.12 cent for cREITs. Results of the study thus corroborate with the study of Newell and Osmadi (2010) indicating that iREITs are seen to be a differentiating property investment product from cREITs and displaying the defen-

https://scholarhub.ui.ac.id/icmr/vol8/iss1/1
DOI: 10.21002/icmr.v8i1.4844

Table 6. S-REITs and C- REITs performance since initial public offering (IPO) (as of 31 December 2014)

No	Listed REIT	Initial Offer Price	Closing price as at Dec 2014	Change in Share Price (%)
S-REITs				
1	Axis REIT	1.25	2.930	57.34
2	Al-Aqar KPJREITs	0.95	1.330	28.57
3	Al-Hadharah Boustead REIT	0.99	2.070	52.17
C-REITs				
1	AmanahHarta Tanah PNB	1.00	1.130	11.50
2	YTL Hospitality REIT	0.98	0.995	1.51
3	UOA REIT	1.15	1.540	25.32
4	Tower REITs	1.07	1.240	13.71
5	Hektar REIT	1.05	1.500	30.00
6	AmFirst REITs	1.00	1.000	0.00
7	Quill Capital Trust	0.84	1.180	28.81
8	Atrium REIT	1.05	1.300	19.23
9	Amanahraya-REIT	0.94	1.000	6.00
10	Capital Malls Malaysia Trust	0.98	1.430	31.47
11	IGB REITs	1.25	1.310	4.58
12	Pavilion REITs	0.88	1.460	39.73
13	Sunway REITs	0.90	1.520	40.79

Sources: company annual reports and Bloomberg's database

sive characteristics of low-risk levels and portfolio diversification benefits to those seen by cREITs. Further support by Osmadi and Razali (2014) indicating a competitiveness of iREITs in terms of financial and management strength compared to conventional principles.

In providing more recent evidence, Table 6 represents the performance of REITs share price since IPO and is extended to the year 2014. Based on the table, all listed REITs are traded above their IPO price. As for the iREITs, Axis REITs shows the highest changes (57.34 %), followed by Al-Hadarah (52.17%), and Al-Aqar (28.57%). On the other hand, results for the cREITs indicating Sunway REITs depict the highest changes with 40.79% while the lowest is AmFirst with no changes at all. Thus, it is corroborated with a prior study by Alhenawi and Hassan (2011) which reveals that compliant REITs have out-performed non-compliant REITs. Accordingly, results also support the growth of iREITs in Malaysia with a distinctive potential of being a strong pillar towards the growth of Islamic fund management hub in Malaysia. Consecutively, it demonstrated that industry players have seen Islamic Funds as a sustainable investment and not just an auxiliary to conventional funds.

Conclusions

The primary focus of this study is to ascertain the relative performance of iREITs and cREITs by conducting a comparative performance analysis using four different variables which are DY, DPU, NAV, and EPU. The non-parametric Kruskal-Wallis test is used to test four hypotheses in identifying significant differences of REITs performances across two different structures in the Malaysian capital market. The results indicate a significant difference exist for DPU, NAV, and EPU, and supporting the alternate hypothesis one, three, and four. On the contrary, the result for DY indicates an insignificant difference, thus, accepting the null hypothesis two. The descriptive statistics analysis discloses a better performance of iREITs compared to cREITs indicating the competitiveness of iREITs in Malaysia REITs industry. In addition, the changes in share price as at 2014 since IPO also revealed a positive outlook to iREITs as showed by result of Axis REITs signifying a change of 57.34% since IPO which is the highest amongst others REITs. The recent study thus proved the study by Newell and Osmadi (2010), Alhenawi and Hassan (2011), and Osmadi and Razali (2014), even though by using

different variables from this particular study.

The study provides additional evidence towards the viable of Islamic funds as a significant initiative to broaden and deepen the product base of Islamic capital market in Malaysia. Consequently, signal the capability of Islamic principle in nurturing competitive advantage of Islamic funds management particularly in REITs industry. In flourishing the expansion of Malaysia's REITs, future research should be conduct to examine the development, performance, and impact of REITs towards Malaysia capital market segment. In addition, further study should look at the performance of NAV in a monthly basis and others statistical method of time series test such as cointegration test to scrutinize the long term performance of these two financial assets.

References

Abdullah, N. A. H., & Wan Zahari, W. M. (2008). *Performance of property listed companies in Malaysia: 1996-2007* (Unpublished Master Thesis). University Utara Malaysia, Malaysia.

Aharony, J., & Swary, J. (1980). Quarterly dividend and earnings announcements and stockholders' returns: An empirical analysis. *Journal of Finance,* 35(1), 1-12.

Alhenawi, Y., & Hassan, M. K. (2011). The relative performance of debt-restricted real estate investment trusts (reits): Does faith matter? (Unpublised Manuscript). University of New Orleans New Orleans, LA.

Alias, A., & Soi Tho, C.Y. (2011). Performance analysis of reits: Comparison between M-reits and UK-reits. *Journal of Surveying, Construction and Property, 2,* Special Issue. e-ISSN:1985-7527: 38-61

Chan, S. H., Erickson, J., & Wang K. (2003). *Real estate investment trusts: Structure, performance, and investment opportunities.* New York: Oxford University Press.

Clayton, J., Eighholtz, P., Geltner, D. M., & Miller, N. G. (2007). *Commercial real estate analysis and investments* (International Student Edition, 2nd Ed.). South-Western Publishers.

Clayton J., & MacKinnon, G. (2001). The time-varying nature of link between REIT real estate and financial asset returns. *Journal of Real Estate Portfolio Management*, 7, 43–54.

Dusuki, A. W. (2007). *Practice and prospect of islamic real estate investment trusts (s-reits) in Malaysian Islamic capital market*. Paper presented at The International Conference on Islamic Capital Markets, Jakarta.

Ezzati, J. (2013). The effectiveness and efficiency of reits performance in Malaysia. Retrieved from http://ssrn.com/abstract=2273937 or http://dx.doi.org/10.2139/ssrn.2273937

Ghosh, C., & Sirmans, C. F. (2006). Do managerial motives impact dividend decisions in Reits. *The Journal of Real Estate Finance and Economics, 32,* 327–355.

Ibrahim, M. F., & Ong, S. E. (2008). Syariah compliance in real estate investment. *Journal of Real Estate Portfolio Management, 14*(4), 401–414.

Kallberg, J. G., Liu, C. H., & Srinivasan, A. (2003). Dividend pricing and REITs. *Real Estate Economics, 31*(3), 435-450.

Kamali, M. H. (1989). Sources, nature and objectives of Shariah. *The Islamic Quarterly*, 33, 215-235.

Kok, K. K., & Khoo, K. L. (1995). Performance of property trusts in the Kuala Lumpur stock exchange. *Capital Markets Review*, *3*, 1-19.

Maxwell, S. E., & Delaney, H. D. (2004). *Designing experiments and analyzing data: A model comparison perspective* (2nd Ed.). New York, NY: Psychology Press.

MIFC (2013). *Islamic real estate and investment trusts (Islamic reits) a promising asset class for wealth management*. Retrieved from http://www.mifc.com/?ch=28&pg=72&ac=60&bb=uploadpdf.

Newell, G., & Osmadi, A. (2010). The development and preliminary performance analysis of Islamic REITs in Malaysia. *Journal of Property Research. 26*(4), 329-347.

Newell, G., Ting, H. K. & Acheampong, P.

https://scholarhub.ui.ac.id/icmr/vol8/iss1/1
DOI: 10.21002/icmr.v8i1.4844

(2002). Listed property trusts in Malaysia. *Journal of Real Estate Literature, 10*, 109-118.

Ngadimon, M. N. (2012). *Islamic real estate investment trusts (iREITs)*. Retrieved from http://www.iifm.net/sites/default/files/session-files/islamic%20reits%20-%20dr.%20nurdin.pdf.

Ong, T. S., Teh, B. H., & Chong, M. P. (2011). A study on the performance of Malaysian real estate investment trusts from 2005-2010 by using net asset value approach. *International Journal of Economics and Research, 2*(1), 1-15.

Ong, T. S., Teh, B. H., Soh, C. H., & Yan, Y. L. (2012). Malaysian real estate investment trusts: A performance and comparative analysis. *International Journal of Economics and Finance, 4*, 73-84.

Osmadi, A. (2006). A guide to Islamic finance and Islamic REITs. *Australian Property Journal, 39*(3), 212-218.

Osmadi. A. B. (2007). *REITs: A new property dimension to islamic finance*. Paper presented at the 13th Pacific-Rim Real Estate Society Conference, Fremantle, Western Australia.

Osmadi, A., & Razali, M. N. (2014). Assessing the financial and management strength of Islamic real estate investment trusts (I-Reits) during the global financial crisis (GFC). *PERINTIS E-Journal*, 4(1), 48-69.

Olanrele, O. O., Said, R. B., & Bin Daud, M. N. (2014). Dividend based return forecast as benchmark for REIT performance. *OIDA International Journal of Sustainable Development*, 7(10), 93-110. Available at SSRN: http://ssrn.com/abstract=2566027

Securities Commission Malaysia (2005). *Guidelines on Islamic real estate investment trusts*.

Shahrom M, A. (2011). Islamic REIT. Retrieved from http://www.jurunilai.com/#!Islamic-REIT/c1d85/556671e10cf298b2d3ea444d

Shariff, M. I. (2007). *Islamic reits – legal & legislative issues in i-reits*. Paper presented at Islamic Financial Markets Conference & Specialised Workshops, Karachi, Pakistan.

Zainal Azam, A. R. (undated). Institute of Islamic Understanding Malaysia. *Islamic REITS one way to invest in assets*. Available at http://www.ikim.gov.my/index.php/ms/the-star/7291-islamic-reits-one-way-to-invest-in-assets.