IPO Pricing in Malaysia: An Analysis of REITs and Non-REITs

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ABSTRACT

This paper provides evidence of initial returns for a comprehensive data set of Malaysian Real Estate Investment Trusts (REIT) and non-REIT initial public offerings (IPOs). Factors that influence the IPO initial returns were also investigated. The sample consists of ten REITs and 134 non-REITs that went public during the period 2005-2007. We found that the average value of initial returns for REITs is significantly lower than non-REITs. Consistent with prior studies, the gross proceeds that are raised from IPOs and the offer price that are used as proxies for *ex ante* uncertainty, have a significant negative impact on the pricing of Malaysian REIT and non-REIT IPOs. Company size and market of listing have a significant positive relationship with IPO initial returns, but in an unexpected direction. Our results suggest that investors who purchase REIT IPO shares at the offering date and sell them immediately on the first day of trading, gain lower returns than those who purchase non-REIT IPOs.

Keywords: IPO, Malaysia, underpricing, Real Estate Investment Trust

INTRODUCTION

A Real Estate Investment Trust (REIT) is a collective investment scheme in which funds raised from investors (i.e., unit holders) are pooled and invested towards a specified goal as stated as the investment objective of the fund. It invests primarily in a portfolio of real estate assets or real estate-related assets, and uses the income from the properties and/or companies (e.g., rent collected from tenants, capital gains from property sales) to provide returns to its unit holders at regular intervals.

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A portion of the REIT funds can also be invested in other asset classes, such as cash or deposits.

In purchasing a unit in a REIT, unit holders share the benefits and risks of possessing the real estate assets held by the REIT. REITs are an attractive asset class for investors seeking strong dividend yields because REITs tend to distribute most of their income (net of expenses) to unit holders in the form of dividends. The main objective of a REIT is to give unit holders with stable distributions per unit with the potential for sustainable long-term growth of such distributions. Investing in REITs is generally less risky than direct investments in real estate, or investment in shares of financial derivatives, but generally more risky than investments in bonds or fixed deposits.

REIT represents a new investment opportunity in Malaysia since its establishment in the late 2005. A REIT may be listed or unlisted. The first REIT is Axis-REIT, which was launched and listed in August 2005 after the introduction of the revised Securities Commission (SC) Guidelines on REITs. As of December 2008, there are eleven REITs listed on the Bursa Malaysia. More than RM2.3 billion of public equity was raised from these eleven equity REITs IPOs.

The main objective of this paper is to examine the IPO pricing in Malaysia, specifically for REITs. The majority of prior studies examining IPO pricing in Malaysia exclude REITs in their sample. Our study contributes to the IPO literature by providing the first Malaysian evidence on the initial performance of REITs. Given the relatively small number and novelty of REITs in Malaysia, a full analysis of REIT performance is not possible. Therefore, this study also makes comparison between REIT and non-REIT performance. We used a comprehensive data set of 144 IPOs, comprising 10 REITs and 134 non-REITs that were subsequently listed on Bursa Malaysia during the period 2005-2007.

We find that the average value of initial returns for REITs is significantly lower than non-REITs. Our results suggest that investors who purchase REIT IPO shares at the offering date and sell them immediately on the first day of trading, gain lower returns than those who purchase non-REIT IPOs. Our multivariate analysis suggests that the gross proceeds that are raised from IPOs and the offer price, both being used as proxies for ex ante uncertainty, have a significant negative impact on the pricing of Malaysian REIT and non-REIT IPOs. In contrast to prior studies, we find that company size and market of listing have a significant positive relationship with IPO initial returns.

The remainder of the paper is organized as follows: Section 2 starts with a literature review and hypothesis development. Section 3 describes the methods. Section 4 explains the data collection process. Section 5 reports the results of our analysis, and Section 6 contains some concluding remarks.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Prior studies on non-REIT (industrial companies) IPOs have consistently found that the IPO offer price is lower than the price on the first trading day. The positive initial return of IPOs has been documented in many countries, both in developed markets and emerging ones. While the positive initial return seems to be a common phenomenon in every stock market, its amount varies from country to country. The degree of positive initial return, measured as the difference between the subscription price and the closing market price on the first trading day, varies from 4.5% in Israel (Kandel, Sarig and Wohl,1999) to 289.2% in China (Mok and Hui 1998). Loughran, Ritter and Rydqvist (1994) summarize international evidence on initial returns from 25 countries and suggest that variations in the initial performance across different countries may be due to differences in regulations, contractual mechanisms, and the characteristics of IPO companies. Ritter (2003) updates and expands the analogous table in Loughran et al. (1994) and lists the average initial returns for 38 countries around the world.

Unlike the general evidence of non-REITs, several studies on REITs in the US market (e.g., Wang, Chan and Gau, 1992; Buttimer, Hyland and Sanders, 2005) find that REITs provide negative initial returns (overpricing). Wang et al. (1992) find a statistically significant negative average initial return of −2.82% on the first trading day for a sample of 87 initial public offerings of REITs during the period from 1971 to 1988. Their overpricing result is invariant to offer price, issue size, distribution method, offer period, and underwriter reputation.

There is also contradicting evidence that shows US REITs produce positive initial returns (e.g., Ling and Ryngaert 1997; Ghosh, Nag and Sirmans, 2000). Ling and Ryngaert (1997) suggest that a positive initial return (underpricing) of REITs is due to greater valuation uncertainty (measured by the amount of leverage used by the trust) and greater institutional involvement in the REIT IPO market, which supports the 'winner's curse' explanation. Further studies on REITs in other countries prove the existence of lower underpricing with initial returns ranging from 1.20% in Australia (e.g., Dimovski and Brooks, 2006) to 1.71% in Canada (e.g., Londerville, 2002) and up to 16.21% in Hong Kong (e.g., Chan, Stohs and Wang, 2001). Dimovski and Brooks (2006) find that initial returns can in part be explained by forecast profit distributions (or dividends) and the market sentiment towards REITs from the prospectus date to the listing date. Similar to Ling and Ryngaert (1997), their study also finds that larger investor or institutional involvement (arguably better-informed investors) has some explanatory power in explaining the level of IPO underpricing, supporting the 'winners curse' hypothesis of Rock (1986).

A comparison between IPO initial returns of REITs and non-REITs reveals that there are significant lower initial returns for REIT IPOs. As suggested by Buttimer *et al*.(2005), investors and underwriters are more apt at pricing the underlying REIT rather than non-REIT assets, which reduces uncertainty and consequently lessens underpricing. Hartzell, Kallberg and Liu (2005) and Frybote, Rottke and Schiereck (2008) advocate that transparency of the real estate markets and strict regulatory frameworks of REITs are the primary factors that lower the level of uncertainty. Based on the literature reviewed, we arrive at the following research hypothesis:

Hypothesis 1   :   REITs produce lower initial returns than non-REITs

Control Variables: Other Factors Influencing IPO Initial Returns

Prior studies that relate underwriter prestige and auditor reputation to underpricing reports show a negative relationship (e.g., Beatty and Ritter 1986; Titman and Trueman 1986). This is because prestigious underwriters will reduce agency costs experienced by companies around the IPO. In addition, more prestigious underwriters tend to underwrite less risky IPOs to protect their reputation (Beatty and Ritter 1986; Titman and Trueman 1986; Carter and Manaster 1990). Therefore, a negative relationship is expected between underwriter prestige or auditor reputation and underpricing.

Beattie and Ritter (1986) suggest that IPO with higher *ex ante* uncertainty are more underpriced. We use six proxies: gross proceeds, company size, offer price, company age, market of listing and listing delay to proxy for *ex ante* uncertainty. The size of offerings measured by the gross proceeds indicates the uncertainty about the IPO for the companies. Larger offerings are usually offered by well-established companies. This contributes to a lower perception of risk by potential investors (Carter, Dark and Singh,1998). Therefore, the gross proceeds raised from the IPO are expected to be negatively related to the level of initial returns.

The lower the offer price offered encourages small investors to purchase the IPO shares. Investors demand higher returns to compensate the risks inherent in investing in the IPO companies with a small offer price, which are usually subject to speculative trading (Ibbotson, Sindelar and Ritter, 1994). Thus, we expect that offer price has a negative relationship with IPO initial returns.

IPO companies in Malaysia can choose to list on either the MAIN Market or the ACE Market. Information asymmetry is likely to be lower for companies listed on the MAIN Market as they require more paid-up capital and a longer trading history than those listed on the ACE Market. Therefore, we expect that the level of initial returns is lower for companies listed on the MAIN Market than the ACE Market. The same argument goes for company size and age, which we expect to have a negative relationship with initial returns. Finally, the longer the time to listing from the closing date of the IPO offer can be associated with more uncertainty on the offer. Therefore, the level of initial returns is expected to be higher.

METHODS

Measure of Initial Return

We measure both the raw and market-adjusted initial returns. Raw initial return is calculated as $R_{it} = (P_{it} - S_{io})/S_{io}$, where R_{it} is the initial return of company i's share, P_{it} is the closing price on the first day of listing and S_{io} is the subscription price on the offering date. The abnormal initial return is the market-adjusted initial return (MAIR), calculated as $MAIR = R_{it} - R_{mt}$, where R_{mt} is the return on the market portfolio proxied by the KL Composite Index, the main market index in Malaysia, calculated as $R_{mt} = (I_t - I_0)/I_0$, where I_t and I_o are the corresponding day index levels.

Factors Influencing Levels of Initial Returns

To examine the factors that influence the IPO initial returns, we examine various explanations proposed in the previous literature as explained in Section 2. After describing the overall pattern of underpricing, *univariate* analysis is conducted on the influence of REITs and non-REITs on initial returns. Further *multivariate* analysis is undertaken to investigate Hypothesis 1, while controlling for additional factors that may influence IPO underpricing. The level of IPO initial returns is regressed on experimental variables relating to type (REITs or non-REITs) with several additional control variables: gross proceeds of the issue, company size, offer price, underwriter prestige, auditor reputation, company age, market of listing, and also listing delay. The ordinary least squares (OLS) multiple regression model is estimated as follows:

$$MAIR_i = \alpha_0 + \beta_1 REITD + \beta_2 PROCEED + \beta_3 CSIZE + \beta_4 OFFERP + \beta_5 UNDWR + \beta_6 AUDITOR + \beta_7 AGE + \beta_8 MARKET + \beta_9 DELAY + \varepsilon_i$$

where:

MAIR = market-adjusted initial returns (%) measured by comparing the share price (p_t) at the end of the first day of trading with the offer price (p_0): (p_t-p_0)/p_0 adjusted for price movement on the stock market;

REITD = dummy variable = 1 for REITs and zero otherwise;

PROCEED = gross proceeds, measured by the natural log of the product of offer price and the number of units offered;

CSIZE = company size, measured by the natural log of the market value at the time of the IPO computed as the number of shares outstanding x the closing price on the first trading day;

OFFERP = natural log of the offer price;

UNDWR	=	dummy variable = 1 for prestigious underwriter and zero otherwise;
AUDITOR	=	dummy variable = 1 if auditor is Big 4 and zero otherwise;
AGE	=	natural log of company age in years;
MARKET	=	dummy variable = 1 for companies listed on the MAIN Market and zero for companies listed on the ACE Market;
DELAY	=	listing delay, measured by natural log of the number of days between listing date and offer closing date;
ε_i	=	error term

SAMPLE SELECTION AND DATA

We examined the initial returns of REITs and non-REITs that were subsequently listed on the Bursa Malaysia during the period 2005-2007. This period is used because, as of December 2008, when the data were collected, there were no REIT IPOs prior to 2005 and after 2007. In total, 147 companies (11 REITs and 136 non-REITs) went public during the period 2005-2007. Our final sample consists of ten REITs and 134 non-REITs after excluding three companies that have missing share price data. The characteristics of existing REITs and non-REITs prior to going public were obtained from the offering prospectuses. The prospectuses were collected from the website of Bursa Malaysia Securities Berhad at http://www.bursamalaysia.com. Data that were collected include: date of issue, date of incorporation, offer price, number of shares issued, the names of the reporting accountant (auditor), underwriter and market of listing.

In order to examine the initial performance of the existing REITs and non-REITs, the share price data for each REIT and non-REIT were collected from the DataStream database. Data on market performance were also collected from the DataStream database. We used the Kuala Lumpur Composite Index as a market benchmark.

RESULTS

Initial Returns of REITs and non-REITs

In order to see whether the pattern of REITs is the same as or different from the non-REITs, we compare the first trading day performance of both REITs and non-REITs. The results are reported in Table 1. Panel A reports the results of all 144 companies including REITs and non-REITs. Panel B reports the results of ten REITs while panel C reports the results of 134 non-REITs. The mean of raw and market-adjusted initial returns for all companies listed during the period 2005 to 2007 are 26.24% and 25.24%, respectively. Both of them are statistically significant at the 1% level. The median value for both raw and market-adjusted initial returns

however is significantly lower at 3.25% and 3.18%, respectively. The difference in results between the mean and the median values suggests that the mean value has been distorted by outliers. [1] Further investigation on the data reveals that there are 10 outlying observations in the initial returns. All of the outlying observations are from the sample of non-REIT. When these are excluded, not reported in the table, the mean of raw and market-adjusted initial returns are 5.58% and 4.53%, respectively. Meanwhile, the median raw and market-adjusted initial returns are 1.14% and 2.11%, respectively. With the 10 outliers deleted, both the raw and market-adjusted initial returns are no longer statistically significant, with the exception of the mean raw initial returns (weakly significant at the 10% level).

Table 1 Initial returns of REITs and non-REITs

	Mean (%)	*p-value*	Median (%)	*p-value*
Panel A: All Companies (n=144)				
Raw initial return	26.24***	*0.002*	3.25***	*0.004*
Market-adjusted initial return	25.24***	*0.002*	3.18***	*0.009*
Panel B: REITs (n=10)				
Raw initial return	2.72	*0.296*	1.31	*0.234*
Market-adjusted initial return	0.68	*0.758*	-0.32	*1.000*
Panel C: Non-REITs (n=134)				
Raw initial return	27.99***	*0.002*	4.00	*8.985*
Market-adjusted initial return	27.07***	*0.002*	3.97	*8.270*

Test of difference (REITs vs. Non-REITs)		
	Raw initial return	Market-adjusted initial return
t-stat for diff *(p-value)*	-2.77***	-2.92***
	(0.006)	*(0.004)*
z-stat for diff *(p-value)*	-0.66	-0.96
	(0.506)	*(0.338)*

This table reports the mean and median initial returns of REITs and non-REITs that are listed on the Bursa Malaysia during the period 2005-2007.

*** denotes significantly different from zero at the 0.01 level, using two-tailed tests. The one-sample t-test is used for the means and the Wilcoxon sign-ranked test is used for the medians. The difference in mean and median initial returns between REITs and non-REITs is based on the Independent-Samples t-test and Mann-Whitney U-test, respectively.

When we split our full sample into REITs and non-REITs, we find that the mean raw and market-adjusted initial return of REITs are 2.72% and 0.68%, respectively,

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[1] A standard method was adopted in identifying the outliers (i.e., outliers are any values outside a range of ± 1.5 times the inter-quartile range beyond the upper and lower quartiles).

while non-REITs produce 27.99% and 27.07%, respectively.[2] Both mean values for REITs are significantly lower at the 1% level than those for non-REITs. These results suggest that investors who purchase REIT IPO shares at the offering date and sell them immediately on the first day of trading gain lower returns than those investors who purchase non-REIT IPO shares. Interestingly, the degree of underpricing of non-REITs is small relative to the average underpricing observed in prior Malaysian studies of non-REITs (e.g., Ahmad-Zaluki et al., 2007: 96%; How et al., 2007: 102%). The difference in results might be due to the different sample periods used in prior studies, where most of the studies used a sample period prior to the year 2000. The lower IPO returns in recent years suggests that Malaysian market has become more matured and efficient, which contributes to lower levels of underpricing.

Similar to the results observed for all companies, the median value for both raw and market-adjusted initial returns for REITs and non-REITs is lower than the mean value. As can be seen from Panels B and C of Table 1, the median value for REITs is lower (raw = 1.31%, market-adjusted = -0.32%) than non-REITs (raw = 4.00%, market-adjusted = 3.97%) but the difference in value is not statistically significant. Also not reported in the table, with 10 outliers excluded, the median values for raw and market-adjusted initial returns for a sample of 124 non-REITs are 1.14% and 2.24%, respectively.

Multivariate Analysis: Explaining Initial Returns

We perform regression analysis to consider factors that explain the variation in the IPO initial returns. These factors are explained in Section 3. Table 2 shows the initial bivariate correlation analysis between variables. It reports expected moderate correlations between market of listing (*MARKET*) and gross proceeds (*PROCEED*) of 0.59, and between offer price (*OFFERP*) and gross proceeds (*PROCEED*), with a correlation of 0.63. As expected, the correlation between company size (*CSIZE*) and gross proceeds (*PROCEED*) are slightly higher (0.79), due to the fact that both proxies are almost identical, which makes them have similar values. According to Anderson et al. (1996), as a rule of thumb, inter-correlation among the independents above 0.70 signals a possible problem. High multicollinearity potentially leads to large variances and co-variances, large confidence intervals, and insignificant coefficients; it can also contribute to directional inconsistencies. However, none of the other independent variables are particularly highly correlated. The results suggest that multicollinearity is unlikely to be an issue in the regression model. This result is reinforced by the observation that all of the variance inflation factors (VIF) are below 4.10.[3]

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[2] With an outlier excluded, the mean raw and market-adjusted initial returns for non-REITs are 5.81% and 4.84%, respectively.

[3] Neter *et al*. (1985) suggest that a multi-collinearity problem can be indicated by having the VIF$\geq$10.0.

Table 2 Correlation matrix for variables in the determinants of IPO initial returns regressions

	ADJIR	REITD	PROCEED	CSIZE	OFFERP	UNDWR	AUDITOR	AGE	MARKET	DELAY
MAIR	1.00									
REITD	-0.07	1.00								
PROCEED	-0.23	0.42	1.00							
CSIZE	0.16	0.29	0.79	1.00						
OFFERP	-0.29	0.08	0.63	0.48	1.00					
UNDWR	-0.07	0.10	0.29	0.29	0.33	1.00				
AUDITOR	0.017	0.17	0.23	0.26	0.05	0.15	1.00			
AGE	0.06	-0.03	0.10	0.09	0.11	-0.01	0.07	1.00		
MARKET	-0.02	0.27	0.59	0.50	0.58	0.30	0.11	0.08	1.00	
DELAY	0.16	0.05	0.03	0.01	-0.04	-0.07	0.02	0.07	-0.10	1.00

This table shows the bivariate Pearson correlation between dependent and independent variables. *MAIR* is the level of IPO market-adjusted initial returns. *REITD* is a dummy variable equal to 1 for REIT IPO companies and zero otherwise; *PROCEED* is proceeds of the issue, calculated as the natural log of the product of the offer price and the number of shares offered to the public; *CSIZE* is company size, measured as the natural log of market value at listing; *OFFERP* is the natural log of the offer price; *UNDWR* is a dummy variable for 'prestigious' underwriters and zero otherwise; *AUDITOR* is a dummy variable for 'reputable' auditors and zero otherwise; *AGE* is the natural log of company age in years from the date of incorporation to the date of listing; *MARKET* is a dummy variable equal to 1 for companies listed on the MAIN Market and zero otherwise; and *DELAY* is the natural log of number of calendar days from the offer closing date to listing date.

Table 3 reports our regression results and explains the variation in the initial returns. The results of Regression I includes all variables in the model. As can be observed from Table 3, our *REITD* variable is found to be insignificant and with a positive direction. It suggests that *REITD* is not a major determinant of IPO initial returns in our full model. We find that *PROCEED* and *OFFERP* have a significant negative relationship with IPO initial returns. These results suggest that the higher the gross proceeds raised from the IPO and the higher the offer price, the lower the level of initial returns. The negative relationships between *PROCEED* and *OFFERP* on IPO initial returns indicate a lower uncertainty about IPO companies. Larger offerings are usually offered by well-known companies. Potential investors perceive that the risk of these IPO companies is lesser; therefore lower initial returns are expected.

We also find that *CSIZE* and *MARKET* are the major determinants of IPO initial returns. Both variables have a significant positive relationship with initial returns, indicating that larger size companies are significantly more underpriced than smaller companies. Our results do not support the *exante* uncertainty's argument of Beattie and Ritter (1986). As expected, *DELAY* shows a positive sign, which suggests that the longer the time taken for a listing, the more uncertain the offer, and a higher level of initial returns is required. However, we find that this positive relationship is not significant in our regression model. Other variables (*UNDWR*, *AUDITOR* and *AGE*) do not seem to affect the level of IPO initial returns but they are in the expected sign.

To confirm whether the correlation between *CSIZE* and *PROCEED* does not cause any serious problems, the model that contains both variables was re-estimated by excluding one of the variables at a time. Regression 2 excludes the *PROCEED* variable in the model, while Regression 3 excludes the *CSIZE* variable in the model. Focusing first on Regression 2, the results from the modified model indicate that there is no substantial change in the *p*-value of the model and the determinant variables, except for *REITD*. All significant variables in the original model remain significant and there is also no change of sign. *REITD* is found to be a significant determinant of IPO initial returns with an expected negative sign. This result suggests that REITs provide lower underpricing, which is consistent with prior univariate analysis. In conclusion, our results using the model of Regression 2 confirm the hypothesis that REITs produce lower initial returns than non-REITs. However, when we exclude the *CSIZE* variable, the results reported for Regression 3 indicate that REIT is no longer a major determinant of IPO initial returns, but has an expected sign. *PROCEED* is also found to have an insignificant negative relationship with initial returns. All other significant variables in the original model (i.e., *OFFERP* and *MARKET*) remain significant and there is also no change of sign.

Due to slightly different results observed from Regressions 2 and 3, we omit both variables (*PROCEED* and *CSIZE*) to see whether *OFFERP* and *MARKET* remain significant in Regression 4. Interestingly, we discover that both variables

Table 3 Determinants of IPO initial returns

	Expected sign	Regression 1 (All variables)		Regression 2 (PROCEEDS excluded)		Regression 3 (CSIZE excluded)		Regression 4 (PROCEEDS and CSIZE excluded)	
		Coefficient	t-stat	Coefficient	t-stat	Coefficient	t-stat	Coefficient	t-stat
REITD	-	3.907	0.18	-69.457***	-3.04	-20.049	-1.05	-43.986**	-2.56
PROCEED	-	-70.917***	-3.16			-16.508	-1.38		
CSIZE	-	78.139***	3.81	36.229***	3.58				
OFFERP	-	-41.396***	-3.39	-85.923***	-4.23	-52.092***	-3.20	-67.434***	-3.66
UNDWR	-	-8.134	-0.71	-5.564	-0.43	3.463	0.24	2.019	0.15
AUDITOR	-	-4.319	-0.31	-9.892	-0.58	8.6885	0.58	3.724	0.23
AGE	-	6.264	1.13	5.426	0.92	7.390	1.05	6.820	1.01
MARKET	-	47.723***	3.55	32.427**	2.01	59.963***	3.07	51.316***	2.80
DELAY	+	34.508	0.93	28.997	0.69	33.824	0.73	31.789	0.70
Constant		738.539***	3.40	-267.105*	-1.83	153.419	1.28	-120.218	-0.98
N		144		144		144		144	
F-value		4.86***		3.45***		2.26**		2.49**	
R-Square		44.67%		25.21%		16.84%		15.05%	
Adj R-Square		40.96%		20.78%		11.91%		10.67%	

This table reports the results of OLS regressions for the full sample taking into accounts all variables in the model (Regression 1), excluding *PROCEEDS* variable (Regression 2), excluding *CSIZE* variable (Regression 3) and excluding both *PROCEEDS* and *CSIZE* variables (Regression 4). The dependent variable is the level of IPO underpricing (in %) measured as market-adjusted initial returns. The *t*-statistics reported in the table were adjusted for heteroskedasticity (White's correction). *REITD* is a dummy variable equal to 1 for REIT IPO companies and zero otherwise; *PROCEED* is proceeds of the issue, calculated as the natural log of the product of the offer price and the number of shares offered to the public; *CSIZE* is company size, measured as natural log of market value at listing; *OFFERP* is the natural log of the offer price; *UNDWR* is a dummy variable for 'prestigious' underwriters and zero otherwise; *AUDITOR* is a dummy variable for 'reputable' auditors and zero otherwise; *AGE* is the natural log of company age in years from the date of incorporation to the date of listing; *MARKET* is a dummy variable equal to 1 for companies listed on the MAIN Market and zero otherwise; and *DELAY* is the natural log of number of calendar days from the offer closing date to listing date.

***, **, and * denote significantly different from zero at the 0.01, 0.05 and 0.10 levels, respectively, using two-tailed tests.

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remain significant in our Regression 4 and with no change of sign. The significant negative relationships between *OFFERP* with initial returns support the *exante* uncertainty hypothesis of Beattie and Ritter (1986). Our result suggests that companies with a small offer price can be attractive to investors to purchase the IPO shares. They then demand higher returns to compensate the risk in investing in these companies that are usually subject to speculative trading. However, the significant positive relationship between *MARKET* with initial returns indicates that the information asymmetry is higher for companies listed on the MAIN Market than those listed on the ACE Market of Bursa Malaysia. It is also found that *REITD* has a significant negative relationship with IPO initial returns. Again, our results of Regression 4 confirm our hypothesis that REITs provide lower return than non-REITs. All other variables remain insignificant in our model for Regression 4.

CONCLUSIONS

This paper has examined the initial returns of REIT and non-REIT IPOs. Overall, the results of our study show some evidence of positive initial returns of REIT IPOs in Malaysia. These results are preliminary given the immaturity and the relatively little volume of the market for REITs in Malaysia. However the level of positive initial returns is very low and insignificant as compared to the results observed for non-REITs. Our results are consistent with the notion that REIT IPOs produce lower initial returns than non-REIT IPOs. The lower initial returns of our REIT IPOs suggest that REITs are easier to value than non-REITs. None of the reputation variables (*UNDWR* and *AUDITOR*) appears to be important determinants of IPO initial returns in all our regression models. Interestingly, offer price (*OFFERP*) and market of listing (*MARKET*) are consistently found to be major determinants of IPO initial returns in all our regression models.

Due to the sample size of only 10 IPOs for Malaysian REITs, it is suggested that future research should consider waiting for larger sample sizes. Another consideration is to carry out in-depth comparative analysis, either within the same country, but across different sectors of the stock exchange, or compare with regional or international counterparts. This study provides only initial return analysis of IPOs in Malaysia over a 3-year period. Future studies should extend this line of research by examining the long-run performance of REITs and non-REITs.

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