

RETENTION RATIO, LOCK-UP PERIOD AND PRESTIGE SIGNALS AND THEIR RELATIONSHIP WITH INITIAL PUBLIC OFFERING (IPO) INITIAL RETURN: MALAYSIAN EVIDENCE

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ABSTRACT

High-quality issuing firms with encouraging inside information regarding their prospect will use signalling to differentiate their issues from low-quality issuing firms and convince prospective investors regarding the value of their firm. Hence, the present study investigates the dominant signals in explaining the initial return in the Malaysian IPO market. The study investigates the following signalling variables: Lock-up period, shareholder retention ratio, underwriter reputation, auditor reputation and board reputation. Moreover, the current study also uses the stepwise regression analysis to know the order of contribution of the signalling variables to the overall model. The results of the regression analysis show that three signals out of five have a significant relationship with the initial return. Furthermore, the stepwise regression shows their order of contribution, where shareholder retention ratio is ranked first, followed by auditor reputation and board reputation. The outcomes of the present study offer new evidence regarding the kind of information that investors should be concerned with when evaluating IPOs and making decisions concerning investment in the Malaysian IPO market.

Keywords: prestige signals, lock-up period, shareholder retention ratio, initial return, Malaysian IPO market

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INTRODUCTION

The signalling hypothesis is built on the essence that higher-valued firms use signalling as a strategy to reflect their quality to prospective investors and discourage lower-valued firms from competing against them in the Initial Public Offering (IPO) market. Welch (1989) was among the first to propose a signalling model in which issuers use under-pricing as a method to signal the quality and the value of their firm to prospective investors. Also, this signal helps listing firms to acquire either a higher offer price or a better price when the firm offers subsequent seasoned offering (Allen & Faulhaber, 1989). However, under-pricing is not the only signal that can be used by IPO firms. Bhabra and Pettway (2003) argued that public companies before listing are considered privately owned (unlisted companies), and the information regarding them is not easily accessible by investors before listing, so the investors' decision regarding investing in IPOs must rely mainly on signals provided by the prospectus. For example, the firm size, offer size, venture capital (VC) backing and underwriter prestige. In other words, investors can make use of the available information in the prospectus to look for signals that able to reduce their hesitation about the prospect of the listing firm they are aiming to invest in (Spence, 1973).

The focal objective of this study is to investigate the order of contribution of the five signals that investors could obtain from the prospectus to explain the initial return within the Malaysian IPO market. The main five signals of the study are the lock-up period, shareholder retention ratio, underwriter reputation, auditor reputation, and board reputation. The current study, in particular, had selected each of the signalling variables because each one of them is able to contribute to the Malaysian literature. Shareholder retention has received a very little attention, even in developed markets (Bradley & Jordan, 2002; Wong, Ong, & Ooi, 2013; Zheng, Ogden, & Jen, 2005). Due to this lack of research in this field, the validity of the relationship in a developing market, such as Malaysia, remains relatively unexplored in the existing body of literature. On the other hand, the lock-up period in the Malaysian IPO market is heavily regulated, where the new issuing firms do not have the pleasure of choosing the period of the lock-up period—one year period before 2009 and six months period after 2009—or even the choice of implementing the lock-up period or not. For that reason, the current study wants to investigate if the lock-up period still holds any relationship with the initial return due to the mandatory regulations put forth by the Securities Commission (SC) in the Malaysian market.

The present study extends the work of Jelic, Saadouni and Briston (2001), through extending the period they covered in their study from 1980 to 1995. Furthermore, the present study investigates the relationship between auditor reputation and initial return to fulfil the request made by Yong (2007a), who suggested that the relationship between the reputation of auditing firms and IPO initial return lacks in the Asian region. Finally, the current study extends Yatim's (2011) work through narrowing the definition of board reputation by indicating that independent non-executive directors (INEDs) can convey the quality of the issuing firms, which leads to a reduction in IPO under-pricing because prospective investors believe that prestigious INEDs are well informed about the future of the issuing firm.

The other objective from examining the five signals in the same model is to find out if the current results of the present study using the Malaysian IPO market can provide consistent results with the literature that investigated the individual relationship of the study signalling variables with the initial return. For example, shareholder retention (Clarkson, Dontoh, Richardson, & Sefcik, 1991; Habib & Ljungqvist, 2001; Leland & Pyle, 1977), underwriter reputation (Dimovski, Philavanh, & Brooks, 2011; Kenourgios, Papathanasiou, & Melas, 2007), lock-up period (Michaely & Shaw, 1994; Mohd Rashid, Abdul-Rahim, & Yong, 2014), auditor reputation (Michaely & Shaw, 1995) and board reputation (Certo, Daily, & Dalton, 2001; Yatim, 2011). The majority of the studies considered examining the individual relationship of each signalling variable with the initial return, ignoring their overall coherence in the IPO market. Seemingly, the approach of only considering the relationship of the individual signal has the potential to not take into consideration the multidimensionality of the signalling environment, which causes the results to suffer from absent variable bias (Keasey & Short, 1997).

Finally, the present study focuses on the Malaysian IPO market because it suffers from a high level of information asymmetry due to weak institutional development (Hemmer & Bardhan, 2000),¹ and weak investor protections (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000).² Furthermore, another reason for the high information asymmetry in the Malaysian IPO market is caused by the fixed-priced offer mechanism of pricing the IPOs, where the fixed-priced offer mechanism set the offer price before the allocation of IPOs in the market (Yong, 2011).³ According to Mohd Rashid et al. (2014), this high level of information asymmetry makes Malaysia as one of the best candidates to examine the relationship between the study signals and initial return.

LITERATURE REVIEW AND HYPOTHESES

The main implication behind information asymmetry is that the issuing firms' insiders know the real value of their business, but they are unable to credibly communicate their value to the market, especially to future investors. According to Bessembinder, Hao and Zheng (2015), a market failure occurs in particular to firms like these or at times when the mixture of confidence regarding asset value is low, and the possibility of information asymmetry is high. However, the signalling theory has provided a solution to the information asymmetry dilemma, by communicating the superior quality of new issuing firms to potential investors. For example, a prestigious underwriter could signal the magnitude of risk of the issuing firm to prospective investors (Logue, 1973; Rumokoy, Neupane, Chung, & Vithanage, 2017). Besides that, the lock-up period is an appropriate signal to represent the issuing firm's quality (Mohd Rashid et al., 2014). Shareholder retention ratio is also considered by investors to be a good signal to reflect the quality of issuing firm because the insiders of the issuing firm have a much clearer knowledge of their firm's future cash flows than the outside investors (Leland & Pyle, 1977; Kang, Kang, Kim, & Kim, 2015). Issues with reputable auditing firms (the Big 5) are presented as a moderate risk because prestigious auditors normally screen issuing firms and undertake the ones with less risk to protect their reputation (Michaely & Shaw, 1995; Boulton, Smart, & Zutter, 2017). Board prestige is used to signal the issuing firm's quality to investors, which may increase IPO performance (Certo, 2003; Handa & Singh, 2017).

Another important characteristic that any signal must have is the ability to be naturally available in advance (i.e. available before stock offering) to prospective investors. The availability of such information will allow the market participants to utilise the signal effectively. The signalling variables of the current study (i.e. lock-up period, shareholder retention ratio, underwriter reputation, auditor reputation, and board reputation) are available to investors through the prospectus and can be investigated freely before the IPO offer date. According to Butler, Connor and Kieschnick (2014), prior IPO information is necessary and does influence IPO initial return. They reported that many of the variations in IPO initial return could be clarified via the publicly available information known before the IPO offer date.

The third characteristic—according to the signalling theory—that is as equally important as the other characteristics, is that a signal must be costly. This will make it difficult for low-quality firms to imitate such a signal. According to Michaely and Shaw (1994), issuing firms use signalling as a tool to reduce agency costs by conveying the message that they are too costly for low-quality firms to

imitate. In the case of shareholder retention ratio, the higher the percentage of shares retained by pre-IPO shareholders, the higher the cost they would have to bear regarding the additional non-diversifiable risk that they must shoulder (Leland & Pyle, 1977). Neuberger and Chapelle (1983) divided underwriters into two groups depending on their level of prestige in the market. They concluded that prestigious underwriters reduce information asymmetry in the IPO market and charge larger fees. The lock-up period imposes an enormous cost on insiders. This is because insiders hold undiversified portfolios that consist mainly of their firm's issue, and the longer the period is, the higher the price will become (Courteau, 1995). Furthermore, Sundarasan, Khan and Rajangam (2017) indicated that high-quality issuing firms in Malaysian select costly reputable underwriters as a platform to market their credibility. "Good" reputable auditors charge higher auditing fees for higher-quality reporting (Michaely & Shaw, 1995; Khurana, Ni, & Shi, 2017). Finally, board reputation is considered to be costly and very problematic for low-quality firms to imitate (Certo et al., 2001; Yatim, 2011; Xu, Wang, & Long, 2017).

Another reason for choosing these signals is due to their significant relationship with the initial return. There have been mixed findings in the literature regarding some of the study signalling variables. For instance, shareholder retention ratio is reported to have a positive (Clarkson et al., 1991; Leland & Pyle, 1977; Kang et al., 2015) and negative (Espenlaub & Tonks, 1998) relationship with the initial return. Underwriter reputation is reported to have a positive (Dimovski & Brooks, 2008; Kenourgios et al., 2007; Ammer & Ahmad-Zaluki, 2016) and negative (Jelic et al., 2001; Neuberger & Chapelle, 1983; Tong & Ahmad, 2015; Sundarasan et al., 2017) relationship with the initial return. Furthermore, studies on the lock-up period have reported a positive relationship with the initial return (Mohan & Chen, 2002; Mohd Rashid et al., 2014), while studies on auditor reputation have reported a negative relationship with the initial return (Michaely & Shaw, 1995; Khurana et al., 2017) and positive relationship with initial return (Sundarasan et al., 2017). Finally, Certo et al. (2001) documented that board reputation has a negative relationship with the initial return. However, Yatim (2011) reported that board reputation has a positive relationship with the initial return in the Malaysian market.

Building on the previous discussion, the IPO market consists of various signals that can be used by the issuing firm. However, the majority of the studies considered examining the individual relationship of each signalling variable with the initial return, ignoring their overall coherence in the IPO market. Seemingly, considering such an approach has the potential to cause the results to suffer from omitted variable bias (Keasey & Short, 1997). Furthermore, drawing on the mixed

findings of the past studies it can be inferred that each signalling variable may not fully explain the information conveyed by the issuing firms. Furthermore, the information conveyed by each signal could be incomplete. Thus, it is conjectured that the various signals play complementary roles in reducing information asymmetry around their issues through reflecting the quality of the new issuing firms and all of the selected signals can co-exist with one another. Thus, the present study hypothesises the following:

- H1: Shareholder retention ratio has a positive relationship with the initial return.
- H2: Lock-up period has a positive relationship with the initial return.
- H3: Underwriter reputation has a negative relationship with the initial return.
- H4: Auditor reputation has a negative relationship with the initial return.
- H5: Board reputation has a negative relationship with the initial return.

The Malaysian IPO literature consists of various studies that have managed to pinpoint significant factors that influence the initial return. Paudyal, Saadouni and Briston (1998) documented that certain variables (volatility of the market, oversubscription, risk, underwriter reputation, and sector dummy) have a significant relationship with the initial return. Meanwhile, Yong and Isa (2003) showed that only the variable oversubscription ratio (OSR) has a significant relationship with IPO initial return. Wan-Hussin (2005), on the other hand, found that owner participation ratio is negatively associated with under-pricing and the fractions of directors' shares that were locked-up were positively related with under-pricing. Furthermore, Wan-Hussin (2005) reported that demand (oversubscription ratio), offer size, and the lock-up period is significantly related to under-pricing. Meanwhile, Jelic et al. (2001) found that over-subscription, the market condition of three months before issue, demand, and book-to-market value ratio to have a significant relationship with the market adjusted initial return.

How, Jelic, Saadouni and Verhoeven (2007) found that users, multiple, technology and regulation were the significant factors in explaining IPO initial return. Abdul-Rahim and Yong (2010) used a sample of regular IPOs and Shari'a-compliant IPOs from the Malaysian market to study under-pricing. They found that the oversubscription ratio and size of the offer were significant in explaining the initial return. Yong (2011) found that larger percentage of private placement

could lead to a higher initial return, which points out the bandwagon effect due to the involvement of the bigger group of informed (institutional) investors in the issue. Mohd Rashid et al. (2014) extracted two variables from the information provided by the prospectors regarding the lock-up, which are lock-up period and lock-up ratio. They concluded that the relationship with the initial return was more pronounced in the case of the lock-up period rather than a lock-up ratio, and the lock-up period was more appropriate for signalling the quality of the firm.

Control Variables

The Malaysian literature has managed to identify some variables that are unique to the Malaysian IPO market, which has helped in explaining initial return. Thus, to measure the full effect of the study signalling variables, there is a need to control the influencing effect of such variables. The current study, therefore, selected the following four control variables due to their ability to explain the initial return in the Malaysian IPO market, according to the literature. These control variables are the institutional investor involvement, the demand for IPOs, the supply of IPOs, and market condition.

The Malaysian literature has reported a negative relationship between the supply of IPOs and initial return. This negative correlation is fueled by the smaller supply of shares, which has led to greater pressure on initial return (Abdul-Rahim & Yong, 2010; Yong 2007b). Meanwhile, the demand side of IPOs is determined by the over-subscription ratio, which has a positive relationship with the initial return (Abdul-Rahim & Yong 2010). The demand side is considered unique to the Malaysian IPO market due to the use of the fixed-price mechanism in setting the offer price of the issues (Yong 2007b).

In the case of Malaysia, Yong (2011) hypothesised that the level of underpricing would become higher for issues subscribed by a larger proportion of institutional investors (informed investors). Finally, the current study controls market condition using the EMAS Index since it provides a wider coverage of the market than the commonly used FTSE KLCI index. Ritter (1984) concluded that during the bullish market, initial return tends to increase due to higher market return and market volume.

DATA AND METHODOLOGY

The lock-up period was made mandatory on 3 May 1999, for specific issues in the Malaysian IPO market. For any new regulation, time is needed to take action as well as for investors to realise the regulatory change. This study accounts for

all issues that went for listing on Bursa Malaysia from January 2000 to December 2015, leaving a 6-month lapse according to Mohd Rashid et al. (2014). The data concerning the IPOs is gathered from the websites of Bursa Malaysia, annual reports of Bursa Malaysia, Star online, and DataStream database.

During the present study period, a total of 544 IPOs were reviewed. The sample of the study consists of the IPOs that fall under any of the following forms: public issue, private placement, and offer-for-sale, or a hybrid of any of these forms. This selection of IPOs is based on Abdul-Rahim and Yong (2010), Yong (2007b), and Mohd Rashid et al. (2014). The Malaysian IPOs consist of unique types of issues.⁴ The final sample excludes those unique types of issues because they are not available for subscription by the general public. Furthermore, according to Abdul-Rahim and Yong (2010) and Yong (2007b), these unique types of offers can be excluded from the sample to avoid less meaningful outcomes.

The present study also omits the Real Estate Investment Trust (REIT) category, because according to Mohd Rashid et al. (2014), this type consists of a different presentation format of financial statements. Finally, the current study also dismisses offers including institutional offering, because these types of offers are rare and cause massive spikes in the total units provided and the amount of market capitalisation for each year. These huge spikes could have an influence in selecting the top 5 and top 10 reputable underwriters and auditors. The final sample of the current study, therefore, consists of 420 IPOs.

Table 1 summarises the distribution of both the IPOs collected for this study (population) as well as the IPOs used in the final sample. The distribution of the population and the final sample are established based on the year of listing.

A cross-sectional regression model is applied to assess the impact of the five signalling variables on initial return, in the following form:

$$\begin{aligned} IR = & \alpha + \beta_1 SHRTN_i + \beta_2 LP_i + \beta_3 UR_i + \beta_4 AR_i + \beta_5 BR_i \\ & + \beta_6 OFFSZ_i + \beta_7 OSR_i + \beta_8 PRIV_i + \beta_9 MKTCON_i + \varepsilon_i \end{aligned} \quad (1)$$

where IR is the primary initial return, which is calculated by finding the percentage change in the issue price from the offer price to the opening price of the first day, SHRTN is the shareholder retention ratio which represents the percentage of shares that the insiders of the firm remain to hold after the firm went public, LP is the lock-up period that is calculated by taking the natural log of lockup length for every IPO firm (in days), UR is the dummy variable for underwriter reputation takes a value of 1 if Big 5 or Big 10 and 0 otherwise, is the dummy variable of

auditor reputation which takes a value of 1 if Big 5 or Big 10 and 0 otherwise.⁵ The Malaysian market consists of a limited number of underwriters and auditing firms,⁶ which makes it difficult to discern precisely the difference in prestige among them. For that reason, the present study used two proxies for underwriter reputation and auditor reputation, which are the top 10 and top 5 to measure the reputation of the prestigious underwriters and auditors in the Malaysian market.

Table 1
Distribution of the study sample based on the year of listing (from 2000 to 2015)

Listing year	Population	Final sample
2000	38	30
2001	20	15
2002	51	41
2003	58	53
2004	79	66
2005	79	67
2006	40	30
2007	30	18
2008	23	12
2009	14	12
2010	29	21
2011	21	9
2012	17	9
2013	17	10
2014	15	10
2015	13	7
Total	544	420

BR is the board reputation which measured as the overall number of directorships held by INEDs (Independent non-executive director).⁷ The present study focuses on INED members because they can convey the quality of the issuing firms, which leads to a reduction in IPO under-pricing because prospective investors believe that prestigious INEDs are well informed about the future of the issuing firm. Furthermore, Fama (1980) argued that INEDs have an important role to play in monitoring management actions and providing valuable business networking and expert knowledge for management. The study argues that the higher number of INED members on the board the more reputable the board becomes.

The present study has four control variables, which are OFFSZ is the natural log of offer-size which indicates the supply of IPOs, OSR can be used as a measure of investors' demand on IPOs because it can indicate the amount of times the IPO is oversubscribed, PRIV is the institutional investor involvement that takes a value of 1 to represent firms with private placement and zero otherwise, and MKTCON is the market condition that takes EMAS Index as a proxy for listed firms on the Main Market and ACE as well since it provides a wider coverage of the Malaysian market.⁸

The present study is also interested in knowing the dominant signals in explaining the initial return. For that reason, the stepwise regression is implemented by the current study because of its ability to identify the contribution order of the independent variables to the overall model. Furthermore, the stepwise regression method can develop a regression model with the least number of statistically significant independent variables that also have the highest predictive accuracy (Yong, 2015).

RESULTS

The descriptive statistics in Table 2 are based on the final sample of 393 IPOs.⁹ The average initial return is about 33.7% this value is slightly higher than the 26.34% average offer-to-open initial return covering the period from 2001 to 2009 in Yong (2011) and 29% average initial return for the period of 2000 to 2012 in Mohd Rashid et al. (2014); but very close to 30% average initial return covering the period from 2003 to 2008 in Abdul-Rahim, Sapian, Yong and Auzairy (2013) and 30.83% average initial return for the period from 2000 to 2007 in Low and Yong (2011).

Table 3 presents the correlation between the initial return and the five signalling variables. The correlation table can provide a prediction of what to be expected from the regression analysis. Starting with the independent variable shareholder retention ratio is expected to have a significant positive relationship with the initial return. Furthermore, the Big 5 reputable auditors, Big 10 reputable auditors and board reputation are expected to have a significant negative relationship with the initial return. However, the lock-up period is not expected to have a significant relationship with the initial return. Finally, the Big 5 reputable underwriters and Big 10 reputable underwriters are not expected to have a significant relationship with the initial return.

Table 2
Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Offer price	393	0.971	0.658	0.12	4.8
Opening price	393	1.277	0.970	0.17	7
Initial return	393	33.755	41.143	-21.481	288.889
Lock-up days	393	271.832	149.652	0	1080
Retention ratio	393	67.517	9.895	0.15	94.55
Board reputation	393	2.501	0.805	0	6
Supply of IPOs	393	36,000,000	52,900,000	2,000,000	732,000,000
OSR	393	33.627	50.291	-0.890	377.960
Market condition	393	0.667	4.625	-20.001	12.986

Notes: Obs = observation; Std. Dev. = Standard Deviation; OSR = oversubscription ratio.

Table 3
Pearson correlations between initial return and the five signalling variables (N = 393)

	LP	SHRTN	UR_10	UR_5	AR_10	AR_5	BR
IR	0.04	.184**	-0.018	0.047	-.179**	-.131**	-.149**

Notes: **Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Table 4 presents the results of the cross-sectional regression for the entire sample of 393 IPOs. Panel A takes Big 5 reputable underwriters and Big 5 reputable auditors in consideration, Panel B takes Big 10 reputable underwriters and Big 10 reputable auditors into consideration.

According to the accounting literature, auditing companies help firms that seek listing to enhance their liquidity through a reduction in the Bid/Ask spread (Soltani, 2002), increase their post-IPO equity prices (Hanley & Hoberg, 2010) and improve their cost of capital and cost of equity (Armstrong, Guay, & Weber, 2010), this means auditing firms could demonstrate the quality of the issuing firms and decrease their inventory risk (Hearn, 2013). Furthermore, this is shown by the significant negative relationship between Big 5 and Big 10 reputable auditors with the initial return (H4). These results are in alignment with the literature. Beatty and Ritter (1986) found that IPO clients that characterised as big firms with less risk tended to hire Big 8 auditing firms. Both Titman and Trueman (1986) and Moizer (1997) argued that investors are also able to logically conclude that issuing firms with prestigious auditor must have favourable private information because this option is not considered by issuers with less favourable information because it is not profitable for them.

According to Fama and Jensen (1983), Certo et al. (2001), and Cohen and Dean (2005) new issuing firms use multiple board memberships to signal their firm's quality, which is likely to have a negative relationship with the IPO initial return. Board reputation (H5) has a negative relationship with the primary initial return. Specifically, the INED members in the board can convey the quality of the firm and able to reduce the IPO under-pricing around their issues because investors believe prestigious INEDs are better informed of the issuing firm's future. The previous result is in alignment with the literature. Certo (2003) have reported that board reputation has a negative relationship with the initial return.

The results show that shareholder retention ratio has a significant positive association with the primary initial return. Downes and Heinkel (1982) reported an increase in the market valuation as a result of an increase in the proportion of ownership retained by the insiders. Furthermore, Ritter (1984) documented retained ownership has a positive relationship with the shareholder retention ratio, but he suggested that this increase could also be due to wealth or agency effect rather than a signalling effect. Another explanation for the positive sign is provided by Ofek and Richardson (2003). They reported that regarding the economic assumption of a downward sloping demand for shares, that the increase in the share retention percentage by the pre-IPO owners has led to a decrease in the number of available shares for trading, which causes investors to treat the available shares as a scarce commodity, which could lead to an increase in share prices. In the Malaysian IPO market, Ahmad-Zaluki, Campbell and Goodacre (2007) reported an average retention ratio of 76.6% in the whole IPO market, 75.9% in the Main Board, and 77.0% in the Second Board. According to the previous arguments, the current study supports three hypotheses, which are H1, H4 and H5.

Both the lock-up period (H2) and underwriter reputation (H3) did not show any significant relationship with IPO initial return when measured with other signals. The current study suggests that the reason behind the ineffective relationship of the lock-up period (H2) with the initial return is because of the regulatory requirement put forth by the Malaysian IPO market regulators in which no issuing firms would lock their issues for a period longer than what is required by the market regulator. From the study sample, 63.0% of the firms lock their shares for one year, while the rest 36.0% lock their shares for six months. The lock-up period is uniform across firms, i.e. one year before the 2009 revision and six months after that. In short, all of the firms abide by the required lock-up period, and there is no voluntary element of the additional lock-up period. From the investors' point of view, lock-up period does not provide any information regarding the riskiness of the new issuing firm because the lock-up period is

enforced on all of the new issuing firms by the market regulators, and the new issuing firm is not at liberty to manipulate the lock-up period to suit its conditions or expectations.

Table 4
Cross-sectional regression results

Dependent variable: Primary initial return		
Variable	Coefficient	
	Panel A	Panel B
Lockup period	-0.037 (-1.08)	-0.037 (-1.07)
Retention ratio	0.013 (1.95) *	0.014 (2.25) **
Big 5 underwriters	0.156 (1.03)	
Big 5 auditors	-0.276 (-1.93) *	
Big 10 underwriters		-0.0815 (-0.36)
Big 10 auditors		-0.438 (-3.11) ***
Board reputation	-0.265 (-2.63) ***	-0.271 (-2.71) ***
Supply of IPOs	-0.386 (-3.62) ***	-0.363 (-3.38) ***
OSR	0.012 (6.72) ***	0.012 (6.64) ***
Market conditions	0.329 (6.16) ***	0.323 (6.05) ***
Private placement	-0.280 (-1.52)	-0.288 (-1.57)
Constant	8.278 (4.22) ***	8.106 (4.14) ***
Number of obs.	393	393
F-value	14.15**	14.15**
Adj. R-squared	0.317	0.323

Notes: ***, **, * denote significance at the 1%, 5% and 10% levels respectively.

Regarding the ineffective relationship between the underwriter reputation and initial return (H3), the current study suggests that the cause is stemmed from the low number of underwriters in the Malaysian IPO market. During the year 2015, there were only 21 fully-fledged investment banks in Malaysia. The banks are locally owned and operate as brokerages and investment banks. The top 10 Malaysian investment banks out of 21 have played a leading role in underwriting around 91.0% of the firms seeking listing during the study sample. Building on this information, the current study believes that any new issuing firm in the Malaysian IPO market has a limited list of investment banks to choose from. This limitation has caused investors to discard the effect of underwriter reputation because they feel that any of the top 10 investment banks would be assigned to any of the new

issues. Furthermore, the lack of international investment banks in the Malaysian market has led to an absence of competition between the investment banks, since all of the investments banks in the Malaysian IPO market are locally owned. Moreover, Jelic et al. (2001) suggested that the absence of statistical significance may also point toward a lack of competitive pressure between underwriters in the Malaysian market.

The current study uses the stepwise regression to know the order of contribution of the signalling variables to the initial return. Table 5 shows the results of the stepwise regression, where Panel A shows the results of taking Big 5 reputable underwriters and Big 5 reputable auditors in consideration and Panel B takes Big 10 reputable underwriters and Big10 reputable auditors into consideration. The present study employs the stepwise regression due to its ability to develop a regression model that includes only the statistically significant independent variables. Furthermore, the stepwise regression is able to introduce the independent variables in the model in the order of their statistical significance, from the highest predictability accuracy to the lowest, which will be helpful in achieving the objective of the current study of determining the order of contribution of the study signalling variables.

Table 5 shows that the stepwise regression is able to produce the same results obtained by the cross-sectional regression in Table 4, plus the stepwise regression is also able to drop the independent variables that do not have a statistical significance with the dependent variable, which are underwriter reputation, lock-up period. The results in Table 5 shows that both reputable auditors and board reputation still have a negative relationship with the initial return, while shareholder retention ratio still has a positive relationship with the initial return. The extra information that the stepwise regression is able to introduce is the order of contribution of the study signalling variables, where shareholder retention ratio has the highest statistical significance in its relationship with the initial return. This means that prospective investors should keep a vigilant eye on the percentage retained by the original owners of the listing firm because higher percentage can be construed as: (1) the original owners have faith in the future of the company and its quality; and (2) the listed company will have high the initial return during the first-day of listing. Moreover, the results in Table 5 shows that the second place goes to the reputation of the auditing firm followed by the reputation of the board which is represented by the number of INEDs in the board.

Table 5
Stepwise regression results

Dependent variable: Primary initial return		
Variable	Coefficient	
	Panel A	Panel B
Retention ratio	0.016 (2.56)**	0.015 (2.42)**
Big 10 auditors		-0.4328 (-3.09)**
Board reputation	-0.298 (-3.0)**	-0.320 (-3.18)**
Constant	7.396 (4.01)**	7.0326 (3.86)**
Number of obs.	393	393
F-value	22.89	19.48
Adj. R-squared	0.310	0.321

Note: ** denotes significance at the 5%.

The present study is able to contribute to the literature by showing the order of contribution of the signalling variables in the Malaysian IPO market. Furthermore, the study results are able to show that, in addition to information on shareholder retention ratio, investors should also use the information on the reputation of the auditing firm and the number of INEDs in order to evaluate prospective IPOs.

CONCLUSION

The focal objective of this study is to indicate the dominant signals in explaining the initial return in the Malaysian IPO market. The study investigates five main signals (i.e. lock-up period, shareholder retention ratio, underwriter reputation, auditor reputation, and board reputation) within the Malaysian IPO market. The study sample covers 393 listed IPOs from January 2001 to December 2015. The present study used a cross-sectional multiple regression model and a stepwise regression to identify the dominant signals in their relationship with the initial return, where the five signalling variables (i.e. shareholder retention ratio, lock-up period, underwriter reputation, auditor reputation, and board reputation) used as independent variables, while the primary initial return (offer-to-open) used as the dependent variable. Finally, in examining the relationship between the five

signals and initial return, the present study took into account four control variables (i.e. private placement, offer size, demand [OSR], and market conditions) due to their significant relationship with initial return as empirically documented by the Malaysian literature (Abdul-Rahim, Che Embi, & Yong, 2012; Abdul-Rahim & Yong, 2010; Agarwal, Liu, & Rhee, 2008).

The statistical analysis shows that the average initial return is about 33.7% for primary initial return. The result is in alignment with the average initial return calculated by recent scholars such as Abdul-Rahim et al. (2013) and Low and Yong (2011). On the other hand, the regression analysis shows that three out of five signals reported a statistically significant relationship with the initial return; the signals are shareholder retention ratio, auditor reputation, and board reputation. This significant association indicates that these signals contain certain information to investors and have an important impact on the initial return. Moreover, the current study is also interested in knowing the ranking of those signals in explaining the initial return. For that reason, the stepwise regression is implemented by the current study because of its ability to identify the order of contribution of the signalling variables to the initial return. The results of the stepwise regression show that shareholder retention ratio is ranked first followed by auditor reputation and board reputation.

Issuing firms are obligated to release their information through the prospectus, which is used by prospective investors to evaluate IPOs and help them in their decision-making process. However, the investor's judgment can be easily clouded by the amount of information available to them through the prospectus. Therefore, the investor needs to be selective in choosing the information that relevant in explaining the initial return. The present study is based upon the argument that some of the information disclosed by prospectuses is important in helping prospective investors in evaluating IPOs. Therefore, such information should be given a higher prioritisation by prospective investors who are seeking an investment in the IPO market.

The results of the present study show that shareholder retention ratio, auditor reputation, and board reputation are significant in explaining the initial return. The findings imply that such information is important in determining the initial return in the Malaysian IPO market. Therefore, it is reasonable to suggest that information regarding these signals must be clearly disclosed to the investors because current disclosure practice in Malaysia only embeds information concerning these variables in bits and pieces of other seemingly standard information.

The results of the present study show that the lock-up period has no relationship with the initial return. The study suggests that the reason behind this is due to the mandatory regulations enforced on the new issuing firms regarding the lock-up period, where the new issuing firms are mandated to have a lock-up period of one year or six months after the amendments of 2009. According to Brav and Gompers (2003) and Mohan and Chen (2002), the lock-up period is used by the issuing firm to signal its risk to the market, because investors interpreted the lock-up period as a commitment by major shareholders who believes in the future of the listing firm; and subsequently, such listing firm is expected to have higher initial return for a firm with a longer lock-up period. The present study suggests that for the lock-up period to be able to implement such functionality in the market, the regulatory body in the Malaysian market should relax the regulations around the lock-up period, by providing the new issuing firm with the opportunity to express themselves to future investors through implementing the lock-up period that reflects their quality. The current study suggests that relaxing the regulations regarding the lock-up period could help investors to make better investment decisions regarding the new issuing firms they want to invest in.

The study results also show that underwriter reputation is not significant in explaining the initial return. The lack of statistical significance is caused by the lack of competitive pressure between underwriters in the Malaysian market (Jelic et al. 2001). The study results have shown that the Big 10 reputable underwriters have underwritten more than 90.0% of the study sample. Furthermore, the Malaysian market consists of only 21 investment banks and all of them are locally owned. The current study suggests that the regulatory body in the Malaysian market should open the door for new underwriters to enter the Malaysian IPO market, especially foreign underwriters. Such changes can increase the competitive pressure in the Malaysian underwriting market and turn back underwriter reputation for being a useful signal for investors to determine potential investment decisions.

Overall, the results of the present study provide a new insight for investors regarding the importance of the information in the prospectus when making informed investment decisions about IPOs. Although the initial return is getting lower in the recent years, shying away from the IPO market may present a great opportunity cost to the investors, as documented in the present study. The Malaysian IPOs are still providing a much higher return than secondary stocks in general. In short, as long as investors know which information about the firms and the market is important, they should continue to participate in the IPO market and not behave irrationally.

NOTES

1. Hemmer and Bardhan (2000) argued that the low levels of institutional development in the Asian countries are caused by the following: (1) the traditional institutions of exchange in developing countries often did not evolve into more complex (impersonal, open, legal rational) rules or institutions of enforcement as in early modern Europe; (2) the institutional arrangements of a society are often the outcome of strategic distributive conflicts among different social groups, and inequality in the distribution of power and resources can sometimes block the rearrangement of these institutions in ways that are conducive to over-all development.
2. La Porta et al. (2000) referred to investor protections: as the ability of the legal system, meaning both laws and their enforcement, to protect outside investors – whether shareholders or creditors from insiders. Moreover, they showed the effect of investor protections on expanding the financial markets, on facilitating external financing of new firms, on moving away from concentrated ownership, and on improving the efficiency of investment allocation.
3. Rock (1986) argued that the uninformed investors are always faced with the winner's curse, which allows uninformed investors to always get the shares they ask for because these shares are ignored (not wanted) by the informed investors (institutional investors). Thus, uninformed investors are faced with adverse selection problem due to the bias in the allocation of IPOs (Yong, 2011), which could help in increasing the levels of information asymmetry in the Malaysian IPOs market.
4. Such as restricted offer-for-sale, restricted public issue, restricted offer-for-sale to eligible employees, restricted offer-for-sale to Bumiputra (Malays and indigenous people) investors, special and restricted issues to Bumiputra investors, tender offers, and special issues.
5. The study measures underwriter and auditor reputation through the proportion of the number of issues an investment bank (auditing firm) have underwritten (audited) as lead manager (lead auditor), and this method has been used by Jelic et al. (2001), Dimovski et al. (2011) to measure underwriter reputation, by Megginson and Weiss (1991) to measure auditor reputation.
6. Big 10 underwriter covered 91% of IPOs, Big 5 underwriters covered 90% of IPOs, Big 10 auditors 72% of IPOs, and Big 5 auditors covered 62% of IPOs.
7. The board of a public-listed company (PLC) consists of different types of directors. The non-executive directors (NED) have the role of critical oversight and can also be considered as the last line of defence against decisions that go against the best interest of the company. The NED consists of two groups, which are independent NED (INED) and the non-independent NED (NINED) groups. The main focus of the study is INED because the Bursa Malaysia Securities Berhad has a set of criteria that define INED, which outlined in its listing requirements. The purpose of such criteria is to guard against relationships and transactions that may impair the director's independence.
8. The EMAS Index is a capitalisation weighted index. The index comprises the large and mid cap constituents of the FTSE Bursa Malaysia 100 Index and the FTSE Bursa Malaysia Small Cap Index. The index was developed with a base value of 6,000 as of 31 March, 2006.

9. The present study removes extreme outliers using studentised residuals (Ruppert, 2004), DFITS and Cooks (Rahman, Sathik, & Kannan, 2012). As suggested by Ryan (2008), DFITS and Cooks allow for the simultaneous detection of both extreme outliers and influential observations. The rule of thumb is to remove outliers only if the outliers are also influential because the outliers will be able to influence the regression model only in such cases. The current study deletes 27 IPO extreme outliers, reducing the sample from 420 to 393 new issues.

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