Initial Public Offering (IPO) Underpricing, Underwriter Reputation and Oversubscription: Evidence from Shariah-Compliant Companies listed on the Malaysian Stock Exchange (MSE)

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ABSTRACT

This paper aims to provide initial evidence on the initial public offering (IPO) for shariah-compliant companies by examining the underpricing performance and two determinants of 420 IPO for shariah-compliant companies listed on the Malaysian Stock Exchange (MSE) over the period 2000-2011. In the first stage, the IPO underpricing is measured by calculated the degree of IPO underpricing for shariah-compliant companies. In the second stage, a proxy is used to rank the high underwriter reputation and low underwriter reputation along with oversubscription, which are introduced as explanatory variable in the model. The results of the analysis indicate that the degree of IPO underpricing for shariah-compliant companies on the MSE was 38.16%. The results found that the average of IPO underpricing for shariah-compliant companies with high underwriter reputation were 37.31% compare with low underwriter reputation was 35.90%. The results also indicated that the time of oversubscription was 29.87 times on the MSE. Furthermore, the regression analysis on the determinants of the IPO underpricing shows that both the underwriter reputation and the times of oversubscription were insignificant effect on the degree of IPO underpricing.

Keyword: IPO Underpricing, Shariah-Compliant Companies, Underwriter Reputation, Oversubscription
INTRODUCTION

Background

Initial Public Offering (IPO) underpricing is an interesting research area that has major attention by academic scholars or researchers. The IPO underpricing appears to be a universal phenomenon (Loughran et al., 1994). Studies examining IPO have documented the existence of underpricing on the Malaysian Stock Exchange (MSE). Various researchers have studies IPO underpricing performance on the MSE (e.g. Dowson, 1987; Yong and Isa, 2003; Prasad et al. 2006; Uddin, 2008; Murugesu and Sandapparaj, 2009; Abu Bakar and Uzaki, 2012). Most researchers have investigated entirely of IPO securities issues on the MSE even though there are different IPO regulatory guidelines for shariah-compliant companies and non shariah-compliant companies. Shariah-compliant companies is a companies listed on the MSE followed by Islamic law which is the activities must be free from any prohibited elements such as riba (usury), gharar (uncertainty) and maisir (gambling). Currently, shariah-compliant companies have become important within the global capital market. This phenomenon was due to the awareness and demand from Muslim people to participate in capital market. IPO for shariah-compliant companies also have gathered a significant impact in attracting non-Muslim companies and investors. At the end of year 2011, 89% of companies listed on the MSE were shariah-compliant companies (List of Shariah-Compliant Securities, 25 November 2011).

Numerous international studies have been tested using the data of various stock markets. Boulton, et al. (2010) was examined 10783 IPO from 37 country and found that IPO underpricing is depend on the corporate government in each countries. Boulton, et al. (2011) IPO underpricing was depending into quality earnings information in each country. Boulton, et al. (2012) in the current research found that the country-level institutional quality is positively correlated with the underpricing of IPO. Benerjee, et al. (2010) was examines the impact of country-level information asymmetry, investors’ home country bias, effectiveness of contract enforcement mechanisms and accessibility of legal recourse on IPO underpricing in 36 countries founded that all the variable have significance impact into IPO underpricing. Study from Nguema and Sentis (2006) into 33 countries around the world found that country risk is one of the determent factor of IPO underpricing. Ariff, et al. (2007) investigates IPO underpricing in United Kingdom, Singapore and Malaysia found that the IPO underpricing are strongly related with government-linked companies (GLC). Although, thousands of empirical studies have been carried out to enhance knowledge regarding IPO underpricing issues, it is difficult for people to clearly understand the various issues related with IPO underpricing especially with different market, regulatory and others. Thus, this study contributes to the existing literature by providing additional evidence on the Malaysian IPO by investigated the effect of underwriter reputation and oversubscription on IPO underpricing for shariah-compliant companies listed on the MSE.

This study has three objectives. First, it investigates the degree of IPO underpricing for shariah-compliant companies listed on the MSE. Second, this study was investigated the effect of underwriter reputation on degree of IPO underpricing for shariah-compliant companies listed on the MSE. Underwriter is important statutory body in determine IPO shares such as price, volume and others. Third, this study was examined times of oversubscription which is the demand for IPO securities were exceeded than total number of shares issues.
PREVIOUS STUDY

IPO underpricing in Malaysia

Empirical studies show that IPO are underpriced during initial trading in Malaysia market. The significant study that attempts to measure IPO underpricing performance in Malaysia based on initial return is Dowson (1987). IPO data collected from 1978-1984 show that IPO in Malaysia was underpriced (offering price compared with closing price on the first day trading) at 166.7% compare with Hong Kong 13.8% and Singapore 39.4%. Jelic, et al. (2001) reported that the level of IPO underpricing is 99%, during the period 1980-1995. Study from Yong and Isa, (2003) found the average initial return (offer price to open price) is 94.91% over the entire January 1990 – December 1998 period. Murugesu and Santhapparaj (2009) found that IPO was underpriced (closing price and offering price was deflated by Net Asset Value) at 81% from 1999-2004.

The study from Prasad, et al. (2006) regarding the short-run and long-run performance of Malaysian IPO found that Malaysian IPO are highly underpriced compared to IPO in developing countries. The data consist of the IPO of various firms that went public for first time during the period 1968-1992. This study was investigating the impact of IPO policy that was being implemented since 1976 in Malaysia. The policy stated that at least 30% of a new shares on an IPO be sold to the indigenous Bumiputera population or to mutual funds owned by them. The result show that the average IPO underpricing is 61% during the period after the regulatory economic policy was instituted.

How, et al. (2007) analyzes share allocations in the Malaysian IPO market founded that Bumiputera investors and the Malaysian public receive almost an equal allocation and make a similar profit per issues. IPO with a higher share allocation to retail Bumiputera investors perform best in both short and long term.

Uddin (2008) found that the average listing time lag for Malaysian IPO is 115 day and average intended underpricing in Malaysia is 68.81%. This study used data from January 1990 until December 2000.

Abu Bakar and Uzaki (2012) founded that the degree of IPO underpricing on the MSE was 35.87%. This study was use 476 IPO data collected from 2000 until 2011.

IPO underpricing for shariah-compliant companies listed on the MSE

The first study regarding IPO for shariah-compliant securities in Malaysia is Abdul Rahim and Yong (2010) regarding the effect of shariah-compliant status on the patterns of initial return of IPO and found that IPO was underpriced at 22.49% (main board), 31.83% (second board) and 41.0% (MESDAQ). The result also shows that initial return of shariah-compliant IPO is driven by the size and types of offer.

Abu Bakar and Uzaki (2013) examines the IPO underpricing for shariah-compliant companies listed on the Malaysian Stock Exchange founded that the offer price and offer size was significant effect on the degree of IPO underpricing. This study also founded that the companies’ age was insignificant into degree of IPO underpricing.

Abu Bakar and Uzaki (2013) examines the IPO underpricing for shariah-compliant companies and non shariah-compliant companies listed on the MSE. They found that IPO for shariah-compliant companies (i.e. 36.55%) are more underpriced compare with non shariah-compliant companies (i.e. 18.85%).
IPO underpricing in other countries

Darmadi and Gunawan (2012) examine the relationship between board structure, ownership and IPO underpricing in Indonesia for the period 2003 till 2011. The data comprises 101 companies. This study found that board independence is significantly related into the level of underpricing. This study also provides evidence that the level of underpricing is negatively associated with board size and institutional ownership. This factor indicates that governance play an important role in mitigating information asymmetry between issuer and potential investors.

Boulton, et al. (2012) investigate the impact of country-level institutional quality from 1998-2008 founded the positive correlated between country-level institution quality with the underpricing of IPO.

Agathee, et al. (2012) examines the evidence on the short-run underpricing of the IPO on the Stock Exchange of Mauritius since 1989-2010. The average initial return was 13.14%. Using a regression approach found that the aftermarket risk level and auditor’s reputation have a significant positive impact on the initial return of IPO.

Boulton, et al. (2011) examines the impact of country-level earnings quality on IPO underpricing for 10,783 IPO from 37 countries. They found that IPO are underpriced less in countries where public firms produce higher quality earnings information.

Sahoo and Rajib (2011) found that the risk and uncertainty surrounding IPO have a significant impact on underpricing by using a sample of 171 IPO issued in India during the period 2002 till 2007.

Mahmood, et al. (2011) was examined the IPO underpricing and aftermarket performance for two time window of crises (Asian financial crisis and global financial crisis) in Chinese stock market. Firstly, during the time period of Asian financial crisis (1997-1999) and the second is prevailing global economic crisis (2007-2009). Sample of 626 companies and a market adjusted return model are used. Results indicate that in the recent global economic crisis IPO activity is on shrinking trend and there is 10% increase in average underpricing as compare to last Asian financial crisis. There is a fluctuating trend in aftermarket performance of IPO returns. A minimum return of 62% in 2009 is observed.

Samarakoon (2010) investigates underpricing of IPO in Sri Langka stock market founded that the average IPO underpricing was 34% from 1987-2008.

Boulton, et al. (2010) studies how differences in country-level governance affect the underpricing of initial public offering (IPO). Examining 4462 IPO across 29 countries from 2000 to 2004, this study found the surprising result that underpricing is higher in countries with corporate governance that strengthens the position of investors’ relative insiders.

Uzaki (2009) investigates underpricing of IPO in Japan founded that the average IPO underpricing was 60.21%.

Zhang and King (2008) found the underpricing ratio to be 0.873 for stock listed on the Chinese stock exchange and 0.613 for stock cross-listed on NASDAQ. Underpricing is less pronounced for firms cross-listed on Singapore exchange which is 0.165. For Hong Kong and New York Stock Exchange (NYSE) the underpricing ratio is -0.053 and -0.138 that indicate overpriced.
Borges (2006) examines the IPO underpricing phenomenon in Portugal. In the period 1988-2004, founded that IPO was underpriced averaged at 11.1%.

A study from Chi and Padgett (2005) on 668 new issues in Shanghai and Shenzhen Stock Exchanges from 1 January 1996 to 31 December 2000 found that the average market-adjusted initial return on the 1st, 5th, 10th and 20th trading days are 129.16%, 126.93%, 126.93% and 124.95%. Using a cross-sectional analysis to explain the extraordinarily severe underpricing of Chinese IPO, found that IPO underpricing is primarily explained by the high demand caused by the quota system and the high proportion of uniformed individual investors. Estimation results show that the information asymmetry hypothesis explains the underpricing in the Chinese IPO market well, while the signaling hypothesis does not.

Chan, et al. (2004) investigate the underpricing and long-term performance of 570 A-share IPO issued in China between January 1993 and December 1998 and 39 B-share IPO issued between January 1995 and December 1998. This study found that there is a huge underpricing of A-share IPO, as the average return of the A-share IPO on the first trading day is 178%. In contrast, the underpricing for B-share IPO is much smaller, with an average return of only 11.6% on the first trading day.

Study from Carter, et al. (1998) founded that the underperformance of IPO stocks relative to the market over a three-year holding period is less for IPO handled by more prestigious underwriters.

Jones and Swaleheen (2010) underwriter reputation is statistically significantly negative related to initial return from 1980 to 1991 and statistically positively related to initial returns from 1992 till 2003, when reputation is taken as an exogenous variable.

Study from Jelic, et al. (2001) show the results do not give evidence that offers underwritten by more prestigious underwriters are better long-term investments as compared to those underwritten by less prestigious underwriters in Malaysian market.

Kenourgios, et al. (2007) show that the underwriters’ reputation and the times of oversubscription were significantly affect the level of IPO underpricing.

RESEARCH METHODOLOGY

Sample

The data used in this study comprises of 420 IPO of shariah-compliant companies listed on the MSE from 2000-2011.

Data Analysis

1. IPO underpricing

To analyze the degree of IPO underpricing in first day trading on the MSE, this study calculated initial return (underpricing) using this formula:

\[ UP_i = \frac{CP_i - OF_i}{OF_i} \]
Where,

\( UP_i \): underpricing in firm \( i \)
\( CP_i \): closing price in firm \( i \)
\( OF_i \): offering price in firm \( i \)

The following hypotheses are proposed:

Dependent variable: IPO underpricing for \textit{shariah}-compliant companies

Independent variable: Underwriter reputation and times of oversubscription.

\( H_0 \): Underwriter reputation and times of oversubscription individually have no significant effect on the degree of IPO underpricing for \textit{shariah}-compliant companies.

\( H_1 \): Underwriter reputation has a significant effect on the degree of IPO underpricing for \textit{shariah}-compliant companies.

\( H_2 \): A time of oversubscription has a significant effect on the degree of IPO underpricing for \textit{shariah}-compliant companies.

2. \textit{Multiple Linear Regression Analysis}

A multiple regression model with the following specification was therefore employed:

\[
UP = \alpha + \beta_1(UR) + \beta_2(OS) + \epsilon
\]

Where,

\( UP \): IPO underpricing
\( UR \): Underwriter reputation
\( OS \): Times of oversubscription

\textbf{RESULTS}

\textbf{Degree of IPO underpricing}

Table 1 shows the degree of IPO underpricing for \textit{shariah}-compliant companies from 2000 till 2011. The total degree of IPO underpricing for \textit{shariah}-compliant companies was 38.16% with a standard deviation of 1.12436. Table 2 shows the frequency of IPO underpricing for \textit{shariah}-compliant companies.

\textbf{Table 1: Degree of IPO underpricing for \textit{shariah}-compliant companies}

<table>
<thead>
<tr>
<th>Companies</th>
<th>No. of Companies</th>
<th>Underpricing</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{Shariah}-compliant companies</td>
<td>420</td>
<td>38.16%</td>
<td>-0.79</td>
<td>6.55</td>
<td>1.12436</td>
</tr>
</tbody>
</table>
Table 2: Frequency of IPO Underpricing for Shariah-Compliant Companies

Table 3 shows the result from multiple regression analysis. The result shows that underwriter reputation and oversubscription was insignificant into degree of IPO underpricing. The results were contradicted with several empirical studies. Study from Kenourgios, et al. (2007) founded that the underwriter reputation and oversubscription was significant effect on IPO underpricing. Table 4 shows the R-square result (i.e. 0.6%). This percentage is very low indicated that there are others factor that was closely influence IPO underpricing in MSE.

Table 3: Multiple regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.456</td>
<td>.089</td>
<td></td>
<td>5.119</td>
<td>.000</td>
</tr>
<tr>
<td>prestige</td>
<td>-.033</td>
<td>.110</td>
<td>-.015</td>
<td>-.301</td>
<td>.763</td>
</tr>
<tr>
<td>oversubscription</td>
<td>-.002</td>
<td>.001</td>
<td>-.080</td>
<td>-1.627</td>
<td>.105</td>
</tr>
</tbody>
</table>

a. Dependent Variable: underpricing
**Table 4: Model summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.080⁴</td>
<td>.006</td>
<td>.002</td>
<td>1.12346</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.006</td>
<td>1.336</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>.417</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.264</td>
<td>1.108</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), oversubscription, prestige
b. Dependent Variable: underpricing

**Determine factors of IPO Underpricing**

1. **Underwriter reputation**

At the end of 2008, there are 15 fully fledged Investment Bank in Malaysia. The bank is locally owned and they operate as brokerages and Investment Bank:

1. Affin Investment Bank Berhad
2. Alliance Investment Bank Berhad
3. AmInvestment Bank Berhad
4. CIMB Investment Bank Berhad
5. ECM Libra Investment Bank Berhad
6. Hong Leong Investment Bank Berhad
7. Hwang-DBS Investment Bank Berhad
8. KAF Investment Bank Berhad
9. Kenanga Investment Bank Berhad
10. Maybank Investment Bank Berhad
11. MIDF Investment Bank Berhad
12. MIMB Investment Bank Berhad
13. OSK Investment Bank Berhad
14. Public Investment Bank Berhad
15. RHB Investment Bank Berhad

Several proxies for measure high prestige underwriter have been developed in IPO literature (see Carter et al., 1998). Yip, et al. (2009) was measure high prestige underwriter based on their market shares of IPO offerings in US for each year from 1996 to 2000. While, Jelic, et al., (2001) was indicating high prestige of underwrite by using the number of issues an investment bank has underwritten as lead manage since 1980 until 1995 in Malaysia.

In this study, underwriters (Investment Bank) were considered as a high underwriter reputation is the bank with the high IPO companies under their lead. Investment bank which is can lead more than 5 shariah-compliant companies in one year is considering as high reputation underwriter. A dummy variable is included to capture the high and low underwriter reputation. Therefore, we assign high underwriter reputation = 1 and otherwise = 0.
<table>
<thead>
<tr>
<th>Underwriter reputation</th>
<th>No of Companies</th>
<th>Mean (Underpricing)</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shariah-compliant Companies:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. High underwriter reputation</td>
<td>221</td>
<td>37.31%</td>
<td>-0.79</td>
<td>6.50</td>
<td>1.01975</td>
</tr>
<tr>
<td>2. Low underwriter reputation</td>
<td>195</td>
<td>35.17%</td>
<td>-0.79</td>
<td>6.55</td>
<td>1.19640</td>
</tr>
<tr>
<td>3. More than one (1) underwriter</td>
<td>4</td>
<td>230.75%</td>
<td>0.45</td>
<td>4.15</td>
<td>1.65393</td>
</tr>
</tbody>
</table>

Results reported in Table 5, suggest that underwriter with the high reputation for *shariah*-compliant companies tend to be high underpricing that is 37.31%. This contradiction result is different with other studies on underwriters’ role in other countries. *Carter, et al.,* (1998) found that IPO managed by more reputable underwriter are associated with less short-run underpricing. *Paudyal, et al.* (1998) show that the IPO underwritten by reputed underwriter are better long term investments as compared to the IPO underwritten by less reputed underwrites.

2. **Oversubscription**

The high significance level of oversubscription may also explain that the underpricing is under the assumption that there is an information leakage during the public offering. (Chowdhry and Sherman, 1996: Kenourgios, *et al.*, 2007). Table 6 reports the means, maximum and minimum values of the times of oversubscription of IPO securities issues on the MSE. The mean oversubscription on the MSE was 29.87 times indicate that the investors were able to predict the IPO price was low and therefore they can create a bandwagon effect. Yong (2007) Bandwagon effect or information cascades was occur if the investors sees that no one else wants to buy and he may also not buy IPO shares even when he possesses favorable information. In order to prevent this situation from happened, the issuers may have to underprice the IPO to induce the first few potential buyers, and later induce a cascade in which all subsequent investors want to buy irrespective of their own information. This situation was attracted high demand in IPO securities.

**Table 6:** Times of Oversubscription

<table>
<thead>
<tr>
<th>Variable</th>
<th>IPO companies for <em>shariah</em>-compliant companies</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oversubscription</td>
<td>420</td>
<td>-0.60</td>
<td>377.96</td>
<td>29.87</td>
</tr>
</tbody>
</table>
CONCLUSION

This paper examines the relationship between underwriter reputation and times of oversubscription into IPO underpricing from 2000-2011 on the MSE. The first analysis was examined the degree of IPO underpricing for shariah-compliant companies. The results show that IPO underpricing for shariah-compliant companies was 38.16%. This percentage was lower than other countries such as Bangladesh (i.e. 480.72%) (Islam, Ali and Ahmad, (2010) and China (i.e. 129.16%) (Chi and Padgett, 2005). It shows that, IPO underpricing phenomenon in Malaysian market still under control by many statutory body such as Securities Commission of Malaysia, Ministry of International Trade and Industry and the Foreign Investment Committee.

The second analysis was examined the degree of IPO underpricing for high underwriter reputation and low underwriter reputation for shariah-compliant companies. The results show that underwriter with high reputation for shariah-compliant companies tend to be high underpricing (i.e. 37.31%) compare with low underwriter reputation (i.e. 35.17%). This results show that IPO lead by high or low underwriter reputation is not determinant in valuation high or low underpricing of IPO. This contradiction result is different with other studies on underwriters’ role in other countries such as Carter, et al., (1998) found that IPO managed by more reputable underwriter are associated with less short-run underpricing.

The third analysis was calculated the average times of oversubscription. The result indicated that the time of oversubscription was 29.87 times. The exceed demand of IPO securities was lower than other countries such as Kenourgios, et al. (2007) investigated the Greek IPO oversubscription found that the average times of oversubscription was 89.96 times during the period of 1997-2002.

The fourth analysis on multiple regression shows that underwriter reputation and times of oversubscription were insignificant effect on the degree of IPO underpricing. Overall, our finding on the IPO underpricing for shariah-compliant companies contradict the consensus of IPO literature that document the significant impact on IPO underpricing in other countries. Due to the difference regulatory guidelines for shariah-compliant companies and non shariah-compliant companies is the main factor for this contradiction. Shariah-compliant companies must represent an assertion of Islamic law where the market should be free from the prohibited element such as usury (riba), gambling (maisir) and uncertainties (gharar). Besides that, the new structure that is price mechanism, implementing by Securities Commission of Malaysia in 1996 give the impact in IPO underpricing. Under the new structure, issuers and advisers are given total responsibility for setting the price, while final approval from the SC is still required to ensure appropriates. IPO issuance also needs to undertake a general process that involves seeking listing approval from government of Malaysian that is Ministry of International Trade and Industry and the Foreign Investment Committee. The implementing of new structure was providing the good performance for IPO companies for shariah-compliant companies. Whereas, the R-square was 0.6%, shows that there are other factors that were closely influence the IPO underpricing in MSE. The next research could seek to enlarge the potential determining factors that could influence the degree of IPO underpricing.

Future research could also make a comparison between shariah-compliant companies and non shariah-compliant companies listed on the MSE. In addition, the role of regulatory agency in the Malaysian capital market could be more closely examined, especially in relation to the short-term and long-term performance of IPO securities.
References


Malaysian Stock Exchange (MSE) website: http://www.bursamalaysia.com-market/