

Research article

# An Empirical Study of Initial Public Offerings Underpricing For *Shariah*-compliant Companies: The Case of Malaysian Market

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## ABSTRACT

Initial Public Offerings (IPO) underpricing is an important factor for investors to predict the profit from investment activities. Numerous empirical research reports the existence of IPO underpricing in various investment environments around the world. However, what were factors that influenced IPO underpricing vary between each country and still remain a largely unexplored. Examining 420 IPOs for *shariah*-compliant companies listed on the Malaysian Stock Exchange (MSE), this study investigates the average degree of IPO underpricing for *shariah*-compliant companies and the effect of determinant factors on the degree of IPO underpricing for *shariah*-compliant companies. The result shows that the degree of IPO underpricing for *shariah*-compliant companies is 28.82 percent. Using a multiple linear regression analysis, this study found that the time of oversubscription has a significant effect on the degree of IPO underpricing for *shariah*-compliant companies. **Copyright © IJEBF, all rights reserved.**

**Keywords:** IPO underpricing, *Shariah*-compliant companies, Malaysian Stock Exchange

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## INTRODUCTION

Recently, IPO for *shariah*-compliant companies are observed exponential growth. Since Malaysian Stock Exchange (MSE) introduced *shariah*-compliant securities in 1997, IPO are gathered high demand and observed as a chance for investors to participate in the growing up of the companies. In 2011 IPO for *shariah*-compliant companies listed on the MSE is 420 IPOs compare with non *shariah*-compliant companies (i.e. 56 IPOs). Numerous empirical research reports that IPO are underpriced during a trading on the stock exchange. This phenomenon generally accepted as a universal phenomenon (e.g. Loughran *et al.*, 1994; Boulton, *et al.*, 2010; Banerjee, *et al.*, 2010; Boulton, *et al.*, 2011; Boulton, *et al.*, 2012).

Almost in every country IPO are underpriced, for instance the degree of IPO underpricing in Bangladesh has been known to report overwhelmingly high IPO underpricing that is 480.72% during a period of study 1995-2005 (Islam, Ali and Ahmad, 2010). Asian markets are not exception with underpricing such as China documented the high degree of IPO underpricing that is 129.16% during a period of study 1996-2000 (Chi and Padgett, 2005). Malaysia also reported the high degree of IPO underpricing (Dawson, 1987; Jelic *et al.*, 2001; Yong and Isa, 2003; Murugesu and Santhapparaj, 2009). However, what were factors that influenced IPO underpricing vary between each country and still remain a largely unexplored. Thus, this study discussed two issues related with IPO underpricing with focused on the *shariah*-compliant companies. The first issue is whether the average degree of IPO underpricing in Malaysia are continuously high, since Securities Commission of Malaysia introduced *shariah*-compliant securities. The second issue is related with the growing up of *shariah*-compliant companies among Islamic countries like Malaysia. As reported by Securities Commission of Malaysia, 89% of IPO listed on the MSE is *shariah*-compliant companies (List of *Shariah*-Compliant Securities, 25 November 2011). Specifically, this study was different with the previous research, as it investigates whether *shariah*-compliant companies would change the average degree of IPO underpricing for companies listed on the MSE. This study also investigates the possible factors that have contributed to the average degree of IPO underpricing in Malaysia including offer price, offer size, underwriter reputation, company age, types of market, types of industry and times of oversubscription for *shariah*-compliant companies.

The important of understanding IPO for *shariah*-compliant companies separately from the common IPO market relates to the basic requirement of Islamic investment, which is the companies must free from any prohibited element of:

- Usury (*riba*) defines as an increase or excess in any exchange or sale of good or by virtue of loan without providing equivalent value to the other party.
- Uncertainty (*gharar*) refers to the activities that have elements of uncertainty in measure weight of goods, price of goods or deceiving the buyer on the price of goods.
- Gambling (*maysir*) is refers to the any activity that involves betting. The winner will take the entire bet and loser will lose his bet.
- Others prohibited elements, such as non-halal foods, drinks and immoral activities also must be absent.

These basic requirements are obligatory in Islamic law but no financial institutions and instruments can be totally devoid from the elements of *riba*, *gharar* and *maysir*. Therefore, *Shariah* Advisory Council (SAC) in Securities Commission of Malaysia regulated the benchmark for IPO companies to list shares on the *shariah* board. The benchmark stated that the revenue for non *shariah* activities should be less that the *shariah* activities. Table 1 shows the percentage of non-*shariah* activities that accepted to list on the *shariah* board. The revenue is calculated before tax.

**Table 1:** Percentage of non-*shariah* activities that accepted to list on the *shariah* board.

Benchmark	Application
5%	Mixed contributions from clearly prohibited activities such as conventional banking ( <i>riba</i> ), gambling, liquor, pork and non-halal food production.
10%	<i>Umum balwa</i> (prohibited element affecting most people and difficult to avoid) such as interest income from fixed deposits in conventional bank or tobacco-related activities.
20%	Used to assess the level of mixed contribution from rental income derived from activities that are not <i>shariah</i> compliant such as rental income received from premises selling liquor.
25%	<i>Maslahah</i> (public interest) to the public such as hotel resort operations, stockbroking.

Sources: Islamic Financial System: Principles & Operations, ISRA, 2012

Besides that, SAC also evaluated the extent of interest-based financing and interest-based income. Table 2 shows the ratios of financial screening according to the Dow Jones Islamic Indices. For companies to consider as *shariah*-compliant companies is the below three ratios must not exceed 33%. Market capitalization is the total dollar market value of company's outstanding shares. Market capitalization is calculated by multiplying company outstanding shares by the current market price of one share. *Shariah*-compliant companies also must be more ethical because they are less aggressive in speculating the price run-up on the first day.

**Table 2:** Ratio of Financial Screening

Ratio 1	$\frac{\text{Total interest – based debt}}{\text{Trailing 24 – month average market capitalisation}}$
Ratio 2	$\frac{\text{Sum of cash and interest bearing securities}}{\text{Trailing 24 – month average market capitalization}}$
Ratio 3	$\frac{\text{Interest bearing accounts receivable}}{\text{Trailing 24 – month average market capitalization}}$

Sources: Islamic Financial System: Principles & Operations, ISRA, 2012

The remainder of this study is organized as follow. Section 2 presents a previous study of IPO underpricing. Section 3 presents the data and methodology employed in this study. Section 4 reports and discusses the results, and finally section 5 concludes and discusses the implications.

## PREVIOUS STUDY

### 1. IPO studies in Malaysia

Empirical researches found that IPO are underpriced during initial trading on the Malaysian Stock Exchange. The initial study regarding IPO underpricing performance in Malaysia is Dowson (1987). IPO data collected from 1978-1984 show that IPO in Malaysia are underpriced at 166.7% compare with Hong Kong 13.8% and Singapore 39.4%. Jelic *et al.* (2001) found that the degree of IPO underpricing is 99%, during the period 1980-1995. The study from Yong and Isa, (2003) found that the average initial return is 94.91% over the entire January 1990 – December 1998 period. Murugesu and Santhapparaj (2009) found that the IPO are underpriced 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 new shares must 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 Malaysian IPO market found 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 better in short-term and long-term.

Uddin (2008) found that 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.

Ahmad-Zaluki and Abidin (2011) investigate initial return for Malaysian Real Estate Investment Trust (REIT) and non REIT IPO from 2005 till 2007. They found that average value of initial return for REIT is significantly lower (i.e. 2.72%) than non REIT (i.e. 27.99%).

Yong (2011) examines the winner's curve hypothesis and the bandwagon effect in Malaysia's IPO using a data from January 2001 to December 2009. The average initial return for the 160 Malaysian private placements IPO is 18.51% as opposed to the average initial return of 28.84% for the 210 non private placements IPO.

Ahmad-Zaluki and Kect (2012) examine the short-run and long-run investment performance of Malaysian IPO companies that are listed on the MESDAQ market from 2002 till 2005. The results show that the mean for short-run performance is 37.18%. While for long-run tend to be underperform; the Cumulative Average Abnormal Return (CAR) for 36 months post-IPO is -41.74%.

Paudyal *et al.* (1998) show that IPO underwritten by reputed underwriter are better long term investments as compared to the IPO underwritten by less reputed underwrites.

Ariff *et al.* (2007) investigate IPO underpricing in the United Kingdom, Singapore and Malaysia found that IPO underpricing are strongly related with government-linked companies (GLC).

## 2. IPO studies 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. They found that IPO are 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.

## 3. IPO studies in other countries

Study from Neupane and Thapa (2013) regarding underwriter reputation and the underwriter-investor relationship in IPO markets in India found that the high reputation and low reputation underwriters have strong relationships with different sets of investors. While large institutional investors participate early in IPO managed by high reputation underwriters, high net worth investors appear to do the same in IPO managed by low reputation underwriters. The varying nature of relationships with investors also has important consequences for IPO pricing. The analysis of setting the offer price shows that reputation matters greatly for high reputation underwriters. Low reputation underwriters, on the other hand, appear to price aggressively and set high offer prices even when institutional participation is negligible.

Darmadi and Gunawan (2012) examine the relationship between board structure and ownership on IPO underpricing in Indonesia for the period 2003 till 2011. The data comprises 101 companies. This study found that the board independence is significantly related on the degree of underpricing. This study also provides evidence that the degree of underpricing is negatively associated with board size and institutional ownership. This factor indicates that governance plays 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 found that the positive correlated between country-level institution quality with the underpricing of IPO.

Agathee *et al.* (2012) examine the evidence on the short-run underpricing of IPO listed on the Stock Exchange of Mauritius since 1989 till 2010. The average initial return is 13.14%. Using a regression approach found that aftermarket risk level and auditor's reputations has a significant positive impact on the initial return of IPO.

Boulton *et al.* (2011) examine 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 risk and uncertainty have a significant impact on IPO underpricing. This study used a sample of 171 IPO issued in India during the period 2002 till 2007.

Mahmood *et al.* (2011) examine 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 Lanka stock market found that average IPO underpricing was 34% from 1987-2008.

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

Boulton *et al.* (2010) examine how differences in country-level governance affect the underpricing of initial public offering (IPO). Examining 4,462 IPO across 29 countries from 2000 till 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 found that the average IPO underpricing is 60.21%.

Zhang and King (2008) found that the underpricing ratio is 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.

Pettway *et al.* (2008) study a Japanese IPOs and found that book-built IPOs exhibit greater underpricing and higher aftermarket volatility compared to price –discriminatory auctions.

Kenourgios *et al.* (2007) show that the underwriters' reputation and the times of oversubscription are significantly affects the degree of IPO underpricing.

Borges (2006) examines the IPO underpricing phenomenon in Portugal using a data from 1988 till 2004. This study found that IPO was underpriced at 11.1%.

A study from Nguema and Sentis (2006) on 33 countries around the world found that country risk is one of the determining factors of IPO underpricing.

Kirkulak and Davis (2005) regarding underwriter reputation and IPO underpricing from Japanese IPO market indicated the relationship between underwriter reputation and IPO underpricing depends on where IPO is priced, reflecting the level of demand for the issue. When there is high (low) demand there is a positive (negative) and significant relationship between underwriter reputation and degree of IPO underpricing.

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 unformed 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.

Kaneko and Pettway (2003) examine the book building method in pricing IPO in Japan. They found that initial return of book building IPOs are significantly higher than those of auctions, especially during hot markets.

A study from Jelic *et al.* (2001) show that 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.

Study from Carter *et al.* (1998) found 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.

Pettway and Kaneko (1996) investigate whether changed IPO pricing regimes can reduce the level of initial returns in Japan. They found that removed price limits and introduced public auctions reduced the level of initial return significantly.

## RESEARCH METHODOLOGY

Malaysian Stock Exchange commonly issued IPO in form of public issue, offer for sale and combination of these two methods. Public issue refers to the new shares of IPO offered to the public for the first time. Offer for sale refers to the shares that already sold to the original stockholders, and then they would like to offer their shares for sale to the public. Other method for offered IPO is like private placement, restricted offer for sale or public special issues and restricted offer for sale to *bumiputera* investors (Abdul Rahim and Yong, 2010). The data required in this study are offer price, first trading day opening and closing, units offered, types of market, types of industry, times of oversubscription and underwriter reputation. These criteria provided 420 IPOs for *shariah*-compliant companies issued from 2000 till 2011. The data from this study are compiled from Malaysian Stock Exchange, Prospectus, ISI Emerging Market website and listed company website.

To analyse the degree of IPO underpricing in first day trading on the MSE, this study are 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

**Table 3:** Explanations of Determinants of IPO Underpricing for *Shariah*-Compliant Companies

Determinants of IPO underpricing	Explanations
Underwriter reputation (dummy variable)	1 if high underwriter reputation, 0 otherwise
Types of market (dummy variable)	1 if ACE market, 0 main market
Types of industry (dummy variable):	
1. Property	1 if property industry, 0 otherwise
2. Technology	1 if technology industry, 0 otherwise
3. Plantation	1 if plantation, 0 otherwise
4. Trading/Service	1 if trading/service, 0 otherwise
5. Consumer Product	1 if consumer product, 0 otherwise
6. Industrial Product	1 if industrial product, 0 otherwise

7. Infrastructure Project Cos.	1 if infrastructure project cos., 0 otherwise
8. Construction	1 if construction, 0 otherwise
9. Real Estate Investment Trusts (REITs)	1 if real estate investment trusts, 0 otherwise
10. Finance	1 if finance, 0 otherwise
Times of oversubscription	demand for IPO shares exceeded than total number of IPO shares issues
Offer price	Offer price per share (retail) in Malaysia Dollar (RM)
Offer size	The number of shares issued under the offer for sales multiplied by par value (RM) per share
Company age	Company age computed from the date (year) of incorporated to the date (year) of IPOs listed at Malaysian Stock Exchange

Table 3 above are explained the explanatory variable used in this study. The following hypotheses are proposed:

$H_0$ = Underwriter reputation, types of market, types of industry, times of oversubscription, offer price, offer size and company age individually have no significant effect on the degree of IPO underpricing for *shariah*-compliant companies.

$H_1$ = Underwriter reputation has a significant effect on the degree of IPO underpricing for *shariah*-compliant companies.

$H_2$ = Types of market have a significant effect on the degree of IPO underpricing for *shariah*-compliant companies.

$H_3$ = Types of industry have a significant effect on the degree of IPO underpricing for *shariah*-compliant companies.

$H_4$ = A time of oversubscription has a significant effect on the degree of IPO underpricing for *shariah*-compliant companies.

$H_5$ = Offer price has a significant effect on the degree of IPO underpricing for *shariah*-compliant companies.

$H_6$ = Offer size has a significant effect on the degree of IPO underpricing for *shariah*-compliant companies.

$H_7$ = Company age has a significant effect on the degree of IPO underpricing for *shariah*-compliant companies.

To quantify the role of the seven predictor variables on the degree of IPO underpricing, this study performs a multiple linear regression, which generally estimated by the following equation:

$$UP = \alpha + \beta_1(UR) + \beta_2(TM) + \beta_3(TI) + \beta_4(TOS) + \beta_5(OP) + \beta_6(OS) + \beta_7(CA) + \varepsilon$$

Where,

*UP*: IPO underpricing

*UR*: Underwriter reputation

*TM*: Types of market

*TI*: Types of industry

*TOS*: Times of oversubscription

*OP*: Offer price

*OS*: Offer size

*CA*: Company age

$\varepsilon$  : Others factor

## RESULTS

Table 4 presents the descriptive statistic of the average degree of IPO underpricing over the study period. The average degree of IPO underpricing for *shariah*-compliant companies is 28.82% tend to be high than non *shariah*-compliant companies that is 26.63%. This results shows that the average degree of IPO underpricing in Malaysia is lower than the percentage reported by previous study (e.g. Dawson (1987) is 166.7%; Jelic *et al.* (2001) is 99%; Yong and Isa (2003) is 94.91%; Murugesu and Santhanpparaj (2009) is 81%). The lower IPO underpricing reported in this study show that IPO issues in Malaysia become more efficiently due to the new method liberalized by Securities Commission (SC) on 1996 that is market-based pricing mechanism. Market-based pricing mechanism gave total responsibilities to issuers and advisers for setting or make decision regarding IPOs price. While, the final approval from SC is still required in order to ensure appropriateness (How *et al.*, 2007; Abdul Rahim and Yong, 2010). The results also indicated that the average degree of IPO underpricing for *shariah*-compliant companies are higher than non *shariah*-compliant companies. The possible reason is because *shariah*-compliant companies have limited investment which is the investment must free from any prohibited element in Islamic investment.

**Table 4:** Degree of IPO under pricing

Company	No. of Companies	Underpricing	Minimum	Maximum	Standard Deviation
<i>Shariah</i> -compliant companies	420	28.82%	-0.45	2.64	0.4551
Non <i>Shariah</i> -compliant companies	56	26.63%	-0.25	2.62	0.5546

Table 5 show the degree of IPO underpricing based on the types of market. Since 2009, MSE are provided two boards that are ACE market and main market. ACE market is provided for the excellent growth companies and main market is provided for companies with a sizeable business. The result shows that the degree of IPO underpricing for ACE market (i.e. 38.68%) tend to be higher than main market (24.09%). The possible reason



for the high differential between ACE market and main market is because companies listed on the ACE market are risky than companies listed on main market.

**Table 5:** The average degree of IPO underpricing for *shariah*-compliant companies by types of market

Types of market	No. of Companies	Underpricing	Minimum	Maximum	Standard Deviation
ACE market	136	38.68%	-0.45	2.64	0.56120
Main market	284	24.09%	-0.39	1.94	0.38656

Table 6 shows the degree of IPO underpricing for *shariah*-compliant companies by types of industry. The results show that IPO are overpriced for infrastructure project cos. (i.e. -4.12%) and finance (i.e. -9.60%). Technology industry tends to be high degree of IPO underpricing (i.e.37.71%). This results show that technology industry is a risk industry for investment due to high degree of IPO underpricing.

**Table 6:** The average degree of IPO underpricing for *shariah*-compliant companies by types of industry

Types of Industry	<i>Shariah</i> -compliant companies	
	No. of companies	IPO underpricing
Industry product	127	27.26%
Trading/service	90	30.87%
Technology	90	37.71%
Consumer product	70	26.16%
Property	17	12.11%
Construction	10	28.63%
Plantation	8	15.08%
Infrastructure project cos.	4	-4.12%
Real estate investment trust (REITs)	3	17.07%
Finance	1	-9.60%

Table 7 shows the average offer price for *shariah*-compliant companies (i.e. RM1.10) and non *shariah*-compliant companies (i.e. RM0.98). Offer price is important for investors to predict the initial return of IPO shares. These results parallel with the objective of Securities Commission of Malaysia that is to improve the transparency and efficiency of Malaysian stock market.

The average offer size of IPO issues for *shariah*-compliant companies (i.e. RM34, 030,507.20) tend to be higher than non *shariah*-compliant companies (i.e. RM11, 150,468.00). The high different of offer size between *shariah*-compliant companies and non *shariah*-compliant companies is because the companies listed on the

*shariah* board is the large companies and issues large volumes of IPO. In addition, the total IPO issues for *shariah*-compliant companies (i.e. 420 IPOs) are more than non *shariah*-compliant companies (i.e.56 IPOs).

While, the average company age listed on the MSE for *shariah*-compliant companies is 11.98 years and non *shariah*-compliant companies is 8.64 years. Large and high technology companies can issue IPO although their company age less than 5 years. This condition gives opportunities for companies to issues IPO even though there are young companies.

**Table 7:** Average of offer price, offer size and company age for *shariah*-compliant companies.

Companies	Offer price (means)	Offer size (means)	Company age (means)
<i>Shariah</i> -compliant companies	RM1.10	RM34, 030,507.20	11.98 years
Non <i>shariah</i> -compliant companies	RM0.98	RM11, 150,468.00	8.64 years

We finally perform multiple linear regression analysis to quantify the degree of IPO underpricing for *shariah*-compliant companies. The results in table 8 indicate that oversubscription plays a dominant role in explaining variations in IPO underpricing. This finding is consistent with several study such as Kenourgios, *et al.* (2007) founded that the underwriter reputation and oversubscription was significant effect on the degree of IPO underpricing. In general, the multiple linear regression models explain at best 12.3% of the variations in underpricing of Malaysian IPOs, indicating a great need for additional predictors.

**Table 8:** Results of regression analysis (determinants of IPO underpricing for *shariah*-compliant companies

Variables	Coefficient	t-statistics
Intercept	0.148	2.101
Underwriter reputation	0.007	0.150
Types of market	0.050	0.681
Industry – property	-0.077	-0.679
Industry – technology	0.050	0.666
Industry – plantation	-0.072	-0.450
Industry – trading and service	0.058	0.948
Industry – consumer product	0.026	0.387
Industry – industry project cos.	-0.223	-1.002
Industry – construction	0.062	0.432
Industry – REITs	-0.028	-0.111
Industry – Finance	-0.309	-0.700
Oversubscription	0.003	6.144*
Offer price	0.026	0.770

Offer size	-1.452E-010	-1.179
Company age	-0.001	-0.555
R square = 12.3%		
F value = 3.754		
Durbin Watson = 1.660		

\* Indicate statistical significance at the 1% level

## CONCLUSION

This paper examines the profiles of the IPO underpricing in Malaysian market with a focus on the *shariah*-compliant companies. This is done by investigating the IPO underpricing for *shariah*-compliant companies from 2000 till 2011. Overall this study uses 420 IPOs issued during the period study. The preliminary results show that there is a substantial decrease in the IPO underpricing of Malaysian IPO. Compared to the average IPO underpricing of 81% reported from 1999 till 2004 (Murugesu and Santhapparaj, 2009), the initial return (28.82% for *shariah*-compliant companies and 26.63% for non *shariah*-compliant companies) reported from twelve years period of this study are more similar to mature markets around the world. This result shows the Malaysian capital market become more efficient. The lower IPO underpricing reported in this study are associated with the price deregulate by Securities Commission of Malaysia. This finding is parallel with IPO underpricing reported in Japan (Pettway and Kaneko, 1996) after removal price limits.

This study also suggested that a *shariah*-compliant company does not transform the degree of IPO underpricing in Malaysia significantly. This is because the degree of IPO underpricing for *shariah* compliant companies (i.e. 28.82%) and non *shariah*-compliant companies (i.e. 26.62%) are quite similar.

The results of the multiple linear regression analyses indicate that IPO for *shariah*-compliant companies is driven by times of oversubscription. The result shows that the exceed demand in IPO are affected the degree of IPO underpricing. These situations give opportunities to investors to predict the IPO price. Therefore, this situation was created a bandwagon effect. Yong (2007) explains the 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.

Further research could examine the greater details of the compliance to Islamic investment rules and including more predictive variables should be undertaken to verify the IPO underpricing phenomenon in Malaysian market.

## References

- [1] Ariff, M., Prasad, D., & Vozikis, G. S. (2007). Are Government-Linked IPOs Underpriced? A Three Country Privatization Effort Comparison. *International Entrepreneurship and Management Journal*, 3(3), 293–307.
- [2] Abdul Rahim, R and Yong, O. (2010). Initial Returns of Malaysian IPOs and Shari'a-Compliant Status. *Journal of Islamic Accounting and Business Research*, 1(1), 60–74.
- [3] Ahmad-Zaluki, N.A. and Abidin, S. (2011) IPO Pricing in Malaysia: An Analysis of REITs and Non-REITs. *International Journal of Economics and Management* 5(1), pp. 319-332
- [4] Agathee, U. S., Sannasee, R. V., & Brooks, C. (2012). The Underpricing of IPOs on the Stock Exchange of Mauritius. *Research in International Business and Finance*, 26(2), 281–303.

- [5] Ahmad-Zaluki, N.A. and Kect, L.B. (2012) The Investment Performance of MESDAQ market initial public offerings (IPOs). *Asian Academy of Management Journal of Accounting and Finance* Vol. 8 No. 1, pp.1-23
- [6] Borges, M. R. (2006). Underpricing of Initial Public Offerings: The Case of Portugal. *International Advances in Economic Research*, 13(1), 65–80.
- [7] Boulton, T. J., Smart, S. B., & Zutter, C. J. (2010). IPO Underpricing and International Corporate Governance. *Journal of International Business Studies*, 41(2), 206–222.
- [8] Banerjee, S., Dai, L., & Shrestha, K. (2010). Cross-country IPOs: What Explains Differences in Underpricing? *SSRN Electronic Journal*, (June).
- [9] Boulton, T. J., Smart, S. B., & Zutter, C. J. (2011). Earnings Quality and International IPO Underpricing. *The Accounting Review*, 86(2), 483–505.
- [10] Boulton, T. J., Smart, S. B., & Zutter, C. J. (2012). The Impact of Institutional Quality on Initial Public Offerings. *SSRN Electronic Journal*, (2010).
- [11] Carter, R.B., Dark F. H., and Singh, A.K. (1998) Underwriter Reputation, Initial Return and Long-Run Performance of IPO stocks. *The Journal of Finance*, Vol. LIII, No.1
- [12] Chan, K., Wang, J., & Wei, K. C. J. (2004). Underpricing and Long-Term Performance of IPOs in China. *Journal of Corporate Finance*, 10(3), pp. 409–430
- [13] Chi, J., & Padgett, C. (2005). Short-Run Underpricing and its Characteristics in Chinese Initial Public Offering (IPO) Markets. *Research in International Business and Finance*, 19(1), 71–93.
- [14] Dawson, S.M. (1987) Secondary Stock Market Performance of Initial Public Offers, Hong Kong, Singapore and Malaysia: 1978-1984, *Journal of Business, Finance & Accounting*, 14(1), pp. 65-76
- [15] Darmadi, S., & Gunawan, R. (2012). Underpricing, Board Structure, and Ownership: An Empirical Examination of Indonesian IPO Firms. *SSRN Electronic Journal*, 1–36.
- [16] How, J., Jelic, R., Saadouni, B. and Verhoeven, P. (2007) Share Allocation and Performance of KLSE Second Board IPOs. *Pacific-Basin Financial Journal*, No.15, pp. 292-314.
- [17] Islam, A., Ali, R., & Ahmad, Z. (2010). An Empirical Investigation of the Underpricing of Initial Public Offerings in the Chittagong Stock Exchange. *International Journal of Economics and Finance*, 2(4), 36–46.
- [18] Jelic, R., Saadouni, B. and Briston, R. (2001) Performance of Malaysian IPOs: Underwriters Reputation and Management Earnings Forecasts. *Pacific-Basin Finance Journal*, No. 9, pp. 457-486
- [19] Jones, T. L. and Swaleheen, M.U. (2010) Endogenous Examination of Underwriter Reputation and IPO Return. *Managerial Finance*, Vol. 36, No. 4 pp. 284-293
- [20] Kirkulak, B and Davis, C (2005). Underwriter Reputation and Underpricing: Evidence from the Japanese IPO Market. *Pacific-Basin Finance Journal*, Vol. 13, pp. 451-470
- [21] Kenourgios, D.F., Papathanasiou, S. and Melas, E.R. (2007) Initial Performance of Greek IPOs, Underwriter's Reputation and Oversubscription, *Managerial Finance*, Vol. 33, No. 5, pp. 332-343
- [22] Kaneko, T. and Pettway, R.H. (2003) Auctions versus book building of Japanese IPOs. *Pacific-Basin Finance Journal*, 11, pp. 439-462
- [23] Loughran, T, Ritter, J.R, Rydqvist, K, (1994), Initial Public Offerings: International Insights. *Pacific-Basin Financial Journal*, 2, 165-199
- [24] Murugesu, J., & Santhapparaj, A. S. (2009). Valuation Errors and the Initial Price Efficiency of the Malaysian IPO Market. *The IUP Journal of Applied Finance*, 15(10).
- [25] Mahmood, F., Xia, X., Ali, M., Usman, M., & Shahid, H. (2011). How Asian and Global Economic crises Prevail in Chinese IPO and Stock Market Efficiency. *International Business Research*, 4(2), pp. 226–238

- [26] Nguema, J.F. and Sentis, P. (2006). IPO Underpricing Across the World : Does the Country Risk Matter ?, 1–23.
- [27] Neupane, S. and Thapa, C. (2013) Underwriter Reputation and the Underwriter-Investor Relationship in IPO Markets. *International Finance Market, Institutional and Money*, 24, pp. 105-126
- [28] Pettway, R.H. and Kaneko, T. (1996), The effect of removing price limits and introducing auctions upon short-term IPO returns: the case of Japanese IPOs, *Pacific Basic Finance Journal*, Vol. 4, pp. 241-258
- [29] Pettway, R.H., Thosar, S. and Kaneko, T. (2008), Auctions Versus Book-built IPOs in Japan: A Comparison of Aftermarket Volatility, *Pacific Basic Finance Journal*, Vol. 16 pp. 224-235
- [30] Paudyal, K., Saadouni, B. & Briston, R.J. (1998) Privatisation Initial Public Offering in Malaysia: Initial Premium and Long-Term Performance, *Pacific-Basin Finance Journal*, 6, pp. 427-451.
- [31] Prasad, D., Vozikis, G. S., & Ariff, M. (2006). Government Public Policy, Regulatory Intervention, and Their Impact on IPO Underpricing: The Case of Malaysian IPOs. *Journal of Small Business Management*, 44(1), 81–98.
- [32] Samarakoon, L. P. (2010). The Short-Run Underpricing of Initial Public Offerings in the Sri Lankan Stock Market. *SSRN Electronic Journal*, (20), 1–38.
- [33] Sahoo, S., & Rajib, P. (2011). Risk Proxies and IPO Underpricing : An Empirical Investigation. *The IUP Journal of Applied Finance*, 17(4), pp. 38–57
- [34] Uddin, M. H. (2008). An Empirical Examination of Intended and Unintended IPO Underpricing in Singapore and Malaysia. *International Research Journal of Finance and Economics*, 20(20), 55–74.
- [35] Uzaki, K. (2009). The Effect of Innovation on Corporate Value in IPOs. *Japan Finance Association, Working Paper, No.1*
- [36] Yong, O., and Isa, Z. (2003) Initial Performance of New Issues of Shares in Malaysia, *Applied Economics*, 35, pp. 919-930
- [37] Yong, O. (2007) A Review of IPO Research in Asia: What's Next? *Pacific-Basin Finance Journal*, N0. 15, pp. 253-275
- [38] Yong, O. (2011) Winner's Curve and Bandwagon Effect in Malaysian IPOs: Evidence from 2001-2009, *Jurnal Pengurusan*, No 32, pp. 21-26
- [39] Zhang, C. (Xinde), & King, T.-H. D. (2008). The Decision to Cross-List: The Case of Chinese IPOs and ADRs. *SSRN Electronic Journal*
- [40] *Islamic Financial System: Principles & Operations* (2012). Published: International Shari'ah Research Academy for Islamic Finance (ISRA)
- [41] List of *Shariah-Compliant Securities*, 25 November 2011 *Shariah Advisory Council of the Securities Commission Malaysia*, available at: <http://www.sc.com.my/>