International Journal of Business and Technopreneurship
Volume 13, No 3, October 2023 [301-312]

Bumiputera Equity Requirements and Initial Public Offering Underpricing

Ahmad Hakimi Tajuddin[1*], Waqas Mehmood[1] and Rasidah Mohd-Rashid[2]

[1]School of Accounting and Finance, Taylor's University, 47500, Subang Jaya, Selangor, Malaysia
[2] School of Economics, Finance and Banking, Universiti Utara Malaysia, 06010, Kedah, Malaysia

Received 10th February 2023, Revised 28th February 2023, Accepted 4th December 2023

ABSTRACT

The purpose of this paper is to investigate how the share allocation to the Bumiputera policy and a change in the Bumiputera equity policy in 2009 impacted the underpricing of Initial Public Offering (IPO) in Malaysia. A unique aspect of the Malaysian IPO market is the share fraction designated for Bumiputera investors. It is hypothesized that the Bumiputera equity policy introduced in 1976 could potentially explain IPO underpricing. The study utilized signaling theory to formulate its hypotheses. Data on 462 IPOs over a 19-year period were collected from the websites of Bursa Malaysia. Multivariate regression analyses were employed to evaluate the association between IPO underpricing and the independent variables in this study. The study revealed a significant positive relationship between Bumiputera equity ownership and underpricing, suggesting that heightened competition among Bumiputera investors provides an advantage, leading to increased underpricing during listing. Conversely, the change in the Bumiputera equity policy in 2009 had an insignificant positive effect on IPO underpricing, likely due to competitive offer prices set by issuers and underwriters, resulting in a negligible impact on IPO underpricing. The results of this study may be useful to practitioners in the Malaysian IPO market, including investors, issuers, policymakers, regulators, and underwriters. The study supports signaling theory and underscores that firms seeking listing on the main market must allocate shares to Bumiputera investors under this mandatory regulation.

Keywords: Bumiputera, Institutional Investors, Initial Public Offering (IPO), Market Condition, Underpricing

1. INTRODUCTION

In order to be listed on an exchange, a private company must sell shares to potential inventors in what is known as an initial public offering (IPO) (Mehmood et al., 2020). The first-day trading return of an IPO, which is often underpriced, is the difference between the offer price and the selling price on the market (Wei et al., 2021). Investors consider IPOs one of the best investment opportunities to produce excessive instant returns (Mohd-Rashid et al., 2019). Vast amounts of empirical support are available for such excessive returns. Ibbotson et al. (1994) reported an average increase from 21.1% in 1960 to 55.5% in 1992 for the United States (US). Ritter and Welch (2002) found similar findings for the US between 1980 and 2001, peaking at 65% between 1999 and 2000. Despite discrepancies in ranges, most US market studies have reported positive excess returns (Bradley & Jordan, 2002; Ligon & Liu, 2011; Zheng et al., 2005). Elsewhere, Boulton et al. (2010) analysed IPOs from 49 countries and Loughran et al. (1994) looked at 25 countries; both studies reported positive excess returns varying between 4% to 80%.

*Corresponding Author: ahmadhakimi.tajuddin@taylors.edu.my

Loughran et al. (1994) considered Malaysian IPOs as offering a deep discount among a handful list of emerging markets. There is a consensus that the Malaysian IPO underpricing is in the range of 63% to 167% (Yong & Isa, 2003; Tajuddin et al., 2015; Taufil-Mohd, 2007; Mohd-Rashid et al., 2022). While several theories and factors have been discussed in exploring the reasons behind such high underpricing among emerging market IPOs. Taufil-Mohd (2007) stated that each country might have some unique characteristics that could affect how well an IPO does. The varying degrees of underpricing observed in different countries may indicate that it is potentially caused by the distinct characteristics of each market. Meanwhile, institutional disparities in pricing and allocation of shares are shown by Loughran, Ritter and Rydqvist (1994) to be a major factor in explaining cross-sectional differences in underpricing across the 25 nations reviewed. Furthermore, they note that the increased level of regulation in Malaysia could have an impact on the cost of issuing new securities. There are certain unique aspects of IPO market in Malaysia as compared to other countries. Stock grants to Bumiputera investors are one such perk. Given this institutional difference in Malaysia, they may influence the IPO underpricing. As a result of this scenario, it is necessary for the current paper to examine the effect of Bumiputera regulation and revised in 2009 on underpricing of IPO.

The need for current paper arises from the fact that previous studies didn't take into account the updated recommendations on the Bumiputera equity requirement. On June 30, 2009, the requirement that enterprises seeking listing have 30% Bumiputera stock was eliminated. Since then, only 12.5% of listed companies' shares must be made available to Bumiputera investors, signifying a reduction in the distribution of wealth to the Bumiputera. This move has reduced Malay Bumiputera opportunity to have IPO equity and may result in reduced underpricing. This could threaten the goal of the NEP for Bumiputera investors to own 30% of the shares in the equity market. Accordingly, there is a need for an empirical investigation into how the revised Bumiputera shareholding requirement affects IPO underpricing.

In light of its singularity to the Malaysian market, where it has been employed as one of the New Economic Policy (NEP) measures to enhance Malay investor in the stock market since 1976, the present article argues that it deserves specific considerations particularly for Malay Bumiputera. This change could also affect the NEP's objective of having Bumiputera investors own 30% of shares in the equity market. As a result, it is necessary to conduct empirical research on the consequence of the revised requirement on underpricing of IPO. The present paper is of the opinion that this factor requires special considerations given its uniqueness in Malaysian IPO market and has been utilised as a tool for the NEP to improve Malay Bumiputera involvement in the stock market since 1976.

2. LITERATURE REVIEW

Several models have been proposed to explain underpricing, including the information asymmetry, prospects theory, lawsuit avoidance, winner's curse and signalling theory. However, there are two primary models of information asymmetry, although signalling has garnered the majority of the focus. Rock (1986) was the one who first introduced the information asymmetry model. Rock (1986) stated that uninformed investors who have less information than informed investors regarding the quality of IPOs. However, if a new issue is priced too high, it will only attract investors who are not well informed since well knowledgeable investors would not participate in issues that are priced too high.

Another explanation for underpricing is the signalling model. The premise underlying the signalling models developed by Welch (1989), is that companies have a better understanding of their own values than investors and underwriters do. According to these approaches, the companies underprice their products to make their qualities more apparent. A company of higher quality is in a better position to underprice its offering because it knows it can make up the difference in future equity offerings or by enabling its current shareholders to offer their stock at

premium price at some point in the future. However, low-quality companies cannot afford to underprice their issues because investors will learn about the quality of these companies in the not-too-distant future; this information will be made available to investors. As a consequence of this, it is possible that these companies or their owners will not have positive market reactions in the future if they attempt to sell shares of the company.

According to Mohd-Rashid et al. (2022a), lockup clauses imply commitment and therefore increase the demand for initial returns. Likewise, due to the modification in the Bumiputera equity requirement, issuers no longer need to lower offer prices to attract investors. Firms with a lower lockup ratio and a shorter time period imply uncertainty about their future prosperity, as argued by Mohd-Rashid et al. (2022b). Hence, issuers tend to underprice their IPO shares to boost investors' willingness to subscribe. As long as investors are aware of relevant facts concerning IPO firms, they should continue to participate in the IPO market rather than reacting irrationally. Mehmood, Mohd-Rashid et al. (2021b) argued that Shariah-compliant status has a negative association with IPO underpricing, whereas Shariah regulation has a positive relationship. Therefore, it is argued that Shariah-compliant enterprises have lower asset uncertainty and volatility than non-Shariah-compliant firms, resulting in decreased underpricing. Mehmood et al. (2021a) argued that investors are rewarded with high initial returns in exchange for the weak country-level institutional quality. They also highlighted that strengthening country-level institutional quality improves financial market efficiency, lowering IPO initial returns. Finally, Mohd-Rashid et al. (2019) asserted that the lock-up period dummy is positively significant and confirms that the substantial reduction in early performance of Malaysian IPOs is a result of the shorter lock-up duration policy, which provides less opportunity for IPO speculation.

Some studies have examined share allocation to Bumiputera investors, including How et al. (2007), Abdullah and Taufil-Mohd (2004), Paudyal et al. (1998), Jelic et al. (2001), Prasad et al. (2006), and Taufil-Mohd (2007). Abdullah and Taufil-Mohd (2004) found a significant negative link between Bumiputera ownership and IPO underpricing. In their investigation of the elements that contribute to the underpricing of IPO. They concluded that government regulatory action in the form of a Bumiputera equity mandate is one of the contributing causes. Using data from 70 IPO listed between 1991 and 1998 and concluded that greater share allocation to Malay Bumiputera reduce underpricing. However, Taufil-Mohd (2007) opined that the competition among Bumiputera investors prevents underpricing from being affected since it enables issuers to set offer prices that are competitive in the market. As a result, the effect of allocating shares to Bumiputera investors has a negligible impact on pricing. According to Taufil-Mohd (2007), IPO issuers may deal more easily with government authorities, particularly if they intend to sell more shares in the future through rights offerings; this makes dealing with government agencies easier.

Meanwhile, Paudyal et al. (1998) conducted an analysis of the effectiveness of private placement of IPO in Malaysia beginning in January 1984 and ending in September 1995. According to the findings of their analysis, Malaysia's PIPOs offer initial returns that are much higher than those of other IPOs. According to their findings, the regulation that the country has placed on Bumiputera stock participation results in a greater underpricing of Malaysian public initial public offerings (PIPOs) than in other markets. The study by Jelic et al. (2001) reported a similar finding, where the average share allocation to Bumiputera investors was 44.45%. Their research investigated how underwriters and management's profits forecast influenced the IPO valuation. Using data from 182 IPO listed between 1980 and 1995, they found support for signalling theory where initial returns were found to be significantly linked to market sentiment, book-to-market value and demand multiple.

This finding is backed up by Prasad et al. (2006), who investigated policy and regulation on IPO underpricing. They contended that this policy had a role in affecting IPO underpricing in the Malaysian market. They made 75 observations of IPO that listed between 1976 and 1992 and concluded that the Bumiputera equity ownership policy significantly influenced IPO underpricing

in a positive way. This finding suggests that government intervention in the form of the 30% share allocation to Malay Bumiputera significantly affect the underpricing of IPO. This is demonstrated by the fact that the average amount of underpricing on the first day of trading increased by 61% during the time period that followed the regulation's introduction. Their finding showed that the underpricing level increased from 57% before the implementation of the Bumiputera equity policy to 118% post-implementation.

Similar findings were reported by other studies. How et al. (2007) examined the IPO performance among Malaysian Second Board companies. Their observation at 322 IPOs listing between 1989 to 2000 showed that about 40% of the shares were allocated to retail Bumiputera investors. According to this result, there is a correlation between a higher allocation of initial public offerings (IPOs) to Bumiputera investors and underpricing. In addition, by analysing the fraction of shareholding held by Bumiputera investors (which includes both retail and institutional investors), the researchers discovered a strong correlation between the shareholding held by Bumiputera investors and initial returns. According to the signaling theory, a significant number of Bumiputera shareholders may encourage potential investors to take part in an initial public offering (IPO) activity. The issuers may think that they should give bigger discounts to Bumiputera investors in order to get them to buy into their IPOs. This argument says that the share allocation to Malay Bumiputera has a positive effect on underpricing of IPO. With this in mind, the subsequent hypothesis was tested:

H_1: Share Allocation to Bumiputera Investors has a positive relationship with the IPOs underpricing.

Under the NEP, the 30% Bumiputera equity requirement has led to more Bumiputera investors getting involved in the stock exchange. The NEP has reduced poverty level and an improve in the representation of Bumiputera individuals in professional, technical, management, and administrative roles. Consequently, since 30 June 2009, the proportion to be distributed to Bumiputera investors has been decreased to 12.5% of the total issued shares. This move shows that the government is trying to open up and make the stock market desirable (The Edge Markets, 2009). Earlier research that looked at how the Bumiputera equity requirement affected underpricing used a Bumiputera shareholding ratio of 30%. As far as the researcher knows, no research has been done on how the change in the share allocation to Bumiputera investors from 30% to 12.5% on June 30, 2009 will affect things.

According to research by Prasad et al. (2006), IPO underpricing increased when the government instituted the 30% shares allocation to Bumiputera in 1976. They went on to say that issuers have to cut the offering price to attract Malay Bumiputera to buy in. Consequently, investors showed more interest in the underpriced IPOs and frequently generated greater returns during listing. Similarly, Jelic et al. (2001) and Paudyal et al. (1998) noticed that 30% Bumiputera policy had made the underpricing go up. Since the Malaysian government, through the security commission, lowered share allocation to Bumiputera to 12.5%, it looks like that the reverse will happen. If the government loosens up on this policy, it's possible that underpricing will go down. However, Taufil-Mohd (2007) stated that giving shares to Bumiputera investors does not affect underpricing because the rivalry between Malay Bumiputera applications helps the IPO firm decide competitive prices. This means that underpricing is not affected much by share allocations to Bumiputera investors.

Taufil-Mohd (2007), who examined restrictions and underpricing, also stated that IPO issuers might deal with government agencies in the future, particularly if the business plan to sell additional stock through rights offerings. The present paper argues that the revised Bumiputera equity requirement may send signal to investors negatively regarding IPO underpricing, since they may perceive less allocations to Bumiputera investors. Following the implementation of the

amended regulation, an issuer is no longer required to reduce the price of an IPO to attract Bumiputera investors.

Consequently, the hypothesis of this study is that the less severe Bumiputera equity requirement indicates that IPO prices would be higher, leading to investors' reluctance to purchase the stock and reducing underpricing. In addition, allocating more equity to non-Malay investors would decrease rivalry among them during IPO subscriptions, potentially leading to a decrease in underpricing. The claims suggest that the new Bumiputera regulation has a negative impact on underpricing of IPO. In accordance with this, the following hypothesis was tested:

H_2: The revised regulation on the share allocation to Malay Bumiputera investors in June 2009 has a negative relationship with the IPOs underpricing.

3. RESEARCH METHODOLOGY

IPO prospectus is the key source for data collection which is download from the website of Bursa Malaysia. This study focused on IPOs that were listed between January 2001 to December 2019. The present study included listed IPOs from year 2001 onward because of Asian Financial Crisis 1998 that gripped the financial market of Malaysia. There are 462 IPO sample after excluding outliers and finance companies. In order to verify the validity of the hypotheses, a cross-sectional multiple regression analysis was carried out. The purpose of this study is to analyse how the new Bumiputera equity requirement and the ownership of Bumiputera equity effect the underpricing of IPO. This study's regression model has two independent variables (IV) and five control variables (CV) to attain the research objectives. The equation is set out as follows:

$$UP_i = \beta_0 + \beta_1 BO_i + \beta_2 DBUMI\Delta_i + \beta_3 OVER_i + \beta_4 INSTS_i + \beta_5 RISK_i + \beta_6 SIZE_i + \beta_7 3MR_i + \varepsilon_i \quad (1)$$

where the dependent variable in this study is underpricing of IPOs (*UP*) determined by the change in the price of the issue on the day of listing against its offer price, expressed in percentage. Bumiputera ownership (BO) is the total shares allocated to Malay Bumiputera investors. The changed Bumiputera regulation is proxied by DBUMIΔ. DBUMIΔ is a dummy variable that takes the value of "1" for the new Bumiputera decision after 30 June 2009 and "0" otherwise. This paper also considers five control variables, namely oversubscription ratio (OVER), institutional investor (INSTS), reciprocal of offer price (RISK), offer size (SIZE) and market condition (3MC).

4. RESEARCH FINDINGS

Table 1 present descriptive statistics for 462 IPOs that were listed between January 2001 and December 2019. On average, the underpricing for the whole sample is 28.27% (offer-to-close). Meanwhile, the lowest underpricing is -71% whereas the highest underpricing is 404. The vast disparity among the lowest and greatest underpricing demonstrates that the initial return for each IPO issued in Malaysia varies, providing an opportunity for this study to explore several factors that may affect underpricing in greater detail. On average, the ownership of Bumiputera equity for the whole sample is 23.99%. The full sample has been segregated between prior the changes Bumiputera regulation sample and after the changes Bumiputera regulation sample. The prior the changes Bumiputera regulation IPOs report an average of 25.47%. Meanwhile, the Bumiputera equity ownership after the changes Bumiputera regulation show and average 19.18. The reduces the Bumiputera equity ownership is expected as the new requirement only need 12.5% Bumiputera equity ownership.

Table 1 Descriptive Statistics

Variables	Mean			Median	Minimum	Maximum	Standard deviation
	Before Changes (n=353)	*After Changes* (n=109)	Whole Sample (n=462)				
Underpricing (%)	30.81	20.04	28.27	15.95	-70.70	404.17	50.45
BUMI Ownership (%)	25.47	19.18	23.99	30.02	0.00	87.50	21.39
DBUMI Changes	-	-	0.00	0.00	0.00	1.00	0.42
Oversubscription ratio (times)	31.30	23.61	29.49	16.24	-0.89	173.77	37.61
No. of Shares Issued (million)	43.47	217.00	84.31	32.00	2.00	2,480.00	220.00
Offer price (RM)	1.06	0.98	1.04	0.80	0.12	5.05	0.76
Risk	1.55	1.83	1.61	1.25	0.20	6.67	1.24
Institutional (%)	43.62	71.39	50.17	59.86	0.00	100.00	31.48
Market Return (%)	0.600	0.900	0.600	1.00	-8.00	9.40	3.00

The report indicates that the average oversubscription ratio for IPOs before changes is 31.30 times, which is almost similar to the whole sample's average of 29.49 times. This is expected as 76% of the IPOs were issued before the changes made in 2009. Moreover, the number of shares issued before the changes (43.47 million) was lower than the number issued after the changes (217 million), with a mean of 84.31 million shares and a range of 2 million to 2,480 million shares, indicating a significant difference in the size of IPOs in the Malaysian market. The average offer price for IPOs before the changes was RM1.06, which is higher than the average of RM0.98 after the changes. Meanwhile, the IPO risk is 1.61 on average, which ranges from 0.20 to 6.67, showing a large gap between the lowest and highest risk issues. Institutional investors participated on average by 50.17%, with a maximum of 100%, implying that they are the primary subscribers to IPOs. Finally, the market condition had an average of 0.6% and a range of -8% to 9.4%. Pearson's bivariate correlation coefficient analysis between independent variables was used to ensure that there was no multicollinearity issue. Pearson's correlation matrix between variables is presented in Table 2. The result showed that all the independent variables recorded correlations of less than 0.50. A further test using variance inflation factors (VIF) generated VIF values ranging from 1.03 to 1.78, as shown in Table 2. Therefore, there was no multicollinearity issue as the result was far below the 10.00 cut-off point (Gujarati & Porter, 2010; Kleinbaum et al., 2013).

Table 2 Pearson's Correlation Matrix between Variables

VARIABLES	UP	BO	DBUMIΔ	OVER	INSTS	SIZE	RISK	3MC
UP	1	-0.03	-0.09*	0.36***	0.01	-0.21***	0.22***	0.22***
B0		1	-0.14***	-0.21***	-0.38***	0.26***	-0.47***	-0.02
DBUMIΔ			1	-0.08*	0.38***	0.38***	0.10**	0.01
OVER				1	0.20***	-0.27***	0.33***	0.15***
INSTS					1	0.12***	0.43***	0.07
SIZE						1	-0.39***	-0.04
RISK							1	0.02
3MC								1

Notes: ***, **, and * indicate the statistical significance at the 1%, 5%, and 10% levels, respectively. UP refers to underpricing, BO represents the total shares allocated to Malay Bumiputera investors, and DBUMIΔ is a dummy variable that takes a value of 1 for the new Bumiputera ruling after June 30th, 2009, and 0 otherwise. OVER refers to the oversubscription ratio, INSTS is the percentage of institutional investors, SIZE represents the natural logarithm of the offer size, RISK refers to the reciprocal of the offer price, and 3MC represents the weighted average return of the EMAS Index.

Before conducting the cross-sectional regression analysis, the standard error was adjusted using the Newey-West covariance estimator. The effects of Bumiputera ownership, the updated Bumiputera equity requirement in June 2009, and other five control variables on the IPOs underpricing were analysed by applying the model depicted in equation 1 through ordinary least squares regression. The outcomes of this analysis are presented in Table 3.

Table 3 Regression Results

Variables	Dependent variable is initial return		
	Ordinary Least Square		
	Before Revised	**After Revised**	**Whole Sample**
BO	0.2522	0.2101	0.2288
	1.6983***	0.9598	2.0901**
DBUMIΔ	-	-	1.6629
	-	-	0.2618
OVER	0.4098	0.3132	0.4033
	4.6188***	2.1995**	5.0040***
3MC	308.9667	148.4385	297.466
	3.1217***	0.7402	4.4010***
RISK	5.8221	12.1645	7.4740
	1.7882*	1.5962	2.4543**
SIZE	4.9445**	2.0155	2.1548
	2.2143	0.6049	1.3811
INSTS	0.1370	0.1764	0.1576
	1.3757	0.5725	1.8013*
CONSTANT	90.3432	38.4413	42.2050
	2.2353**	0.6779	1.5896
OBSERVATION	353	109	462
R-squared	0.1910	0.1275	0.1851
F-Statistics	14.8466***	3.6299***	15.9688***
Probability	0.0000	0.0026	0.0000
Durbin-Watson	1.6841	1.8392	1.9557
VIF range	1.038 – 1.865	1.056 – 1.997	1.031 – 1.779

Notes: ***, **, and * indicate the statistical significance at the 1%, 5%, and 10% levels, respectively. UP refers to underpricing, BO represents the total shares allocated to Malay Bumiputera investors, and DBUMIΔ is a dummy variable that takes a value of 1 for the new Bumiputera ruling after June 30th, 2009, and 0 otherwise. OVER refers to the oversubscription ratio, INSTS is the percentage of institutional investors, SIZE represents the natural logarithm of the offer size, RISK refers to the reciprocal of the offer price, and 3MC represents the weighted average return of the EMAS Index.

We present the findings for before and after the revision of the Bumiputera share policy and the whole sample. In the whole sample, Bumiputera ownership is statistically significant. As there are a number of Bumiputera investors who are likely to participate in the IPOs, the high competition among the Bumiputera investors would increase the underpricing on the first day of listing. Next, the changes in Bumiputera policy (DBUMIΔ) in 2009 is not statistically significant. With this result, one might expect the high competition among the Bumiputera investors would allow firms to set competitive offer prices, resulting in an insignificant impact of this variable on IPO underpricing. According to Prasad et al. (2006), the implementation of the 30% Bumiputera equity requirement in 1976 by the government resulted in an upward trend of IPO underpricing. However, when the government dropped the requirement from 30% to 12.5%, it seemed like the

opposite happened. Due to the less strict requirement, issuers and underwriters no longer had to underprice their IPOs to draw in Bumiputera investors. Consequently, companies could raise more funds with better IPO prices.

Regarding the control variables, the oversubscription ratio (OVER) was found to be significant in explaining the underpricing of IPOs. This leads to the conclusion that the demand of investors is driving the initial returns of Malaysian IPOs, which is consistent with previous research conducted by Mohd-Rashid et al. (2017), Abdul-Rahim and Yong (2010), Mehmood et al. (2021b), and Tajuddin et al. (2019). Market condition, as indicated by the three-month weighted average market return prior to listing (3MC), was found to be significantly and positively related to underpricing. This is an anticipated outcome since investors tend to invest more during a bullish market, which is consistent with Gounopoulos (2006) and Goergen et al. (2006). The reciprocal of the offer price (RISK) demonstrated a significant positive impact on IPO underpricing, with a coefficient of 7.47, indicating that a one-unit increase in RISK leads to a 7.47% increase in underpricing. This means that firms with higher risks (lower offer price) tend to have higher underpricing. Hence, investors would receive higher initial returns for investing in higher-risk IPOs. This finding is consistent with studies conducted by Beatty and Welch (1996) and Bradley and Jordan (2002) which suggested that a lower offer price is likely to generate higher returns. The relationship between size of IPO (SIZE) and IPO underpricing showed insignificant positive. The argument that a larger issue size of a firm could offer more discounts due to its superior future prospects, which led to a positive relationship between the SIZE coefficient of 2.15 and underpricing, was refuted by this study's findings. Instead, the research found a significant positive relationship between institutional investors (INTS) and underpricing, with a 0.16 coefficient, indicating that a one-unit increase in INSTI leads to a 16% increase in underpricing. The winner's curse concept proposed by Rock (1986) thus cannot be disregarded. According to Rock (1986), informed investors are more inclined to buy into an initial public offering that are underpriced. This is supported by the results, as the winner's curse concept posits that these investors are aware of the IPO's high quality. Underpricing is more likely to occur when a large number of institutional investors subscribe to a particular stock's IPO. Therefore, this research lends credence to Rock's notion of the winner's curse.

The findings indicate that Bumiputera ownership, oversubscription, market condition, risk, and institutional investors all play a significant role in elucidating underpricing in the complete dataset. The adjusted R-square denotes that the variables in the model could account for 19% of the changes in IPO underpricing in general.

5. CONCLUSION

The share fraction allocated to Bumiputera investors is among distinct characteristics of Malaysian stock market. Meanwhile, there is huge different between the lowest and highest IPO underpricing as showed in the descriptive statistic. Thus, allowing this study to investigate whether the requirement to allocate shares to Bumiputera investors affects underpricing. The regression results show that the allocation of shares to Bumiputera equity ownership affected underpricing. This result showed that a number of Bumiputera investors who are likely to participate in the IPOs, the high competition among the Bumiputera investors would increase the underpricing on the first day of listing.

We also believed that Bumiputera equity ownership has an indirect influence on IPO underpricing because it is compulsory for each issuer who wish to go for listing in Main Market to make their shares available to Bumiputera investors. This investigation provides an important understanding on IPO underpricing, explicitly regarding the Malaysian IPO market. On the other hand, lowering the percentage of share allocation to Bumiputera has no effect on the underpricing of IPOs. This could be due to the competitive offer prices set by issuers and underwriters, resulting in an insignificant impact on IPO underpricing. The Bumiputera equity requirement is

among distinct characteristics of Malaysian stock market, is perceived to be a significant determinant of IPO underpricing, thereby supporting the need to carry out this study. In light of this, the results of this study may be useful to practitioners in the Malaysian IPO market, including investors, issuers, policymakers, regulators and underwriters.

In conclusion, the regression analysis again indicated substantial interception and adjusted R-squared values in the region of 19%. Therefore, the present work suggests that further development of current literature is possible based on the available of data. Further, this study suggests that the estimated model does not adequately represent all of the changes in underpricing that occur in the Malaysian IPO market. Therefore, there are other elements that future researchers should consider when analysing the phenomenon of underpricing, such as auditor reputation, venture capital, and other macroeconomic variables.

ACKNOWLEDGEMENTS

This paper was created within the project CIRI Seed Fund provided by the Taylor's University. Project registration number CIRI-SEED/1/2022/SOAF/001.

REFERENCES

Abdul-Rahim, R., & Yong, O. (2010). Initial returns of Malaysian IPOs and Shari'a-compliant status. *Journal of Islamic Accounting and Business Resear*ch, *1*(1), 60-74.

Abdullah, N. A. H., & Taufil-Mohd, K. N. (2004). Factors Influencing the Underpricing of Initial Public Offerings in an Emerging Market: Malaysian Evidence. *International Journal of Economics, Management and Accounting, 12*(2), 1-21.

Allen, F., & Faulhaber, G. R. (1989). Signalling by Underpricing in the IPO Market. *Journal of Financial Economics, 23*(2), 303-323.

Beatty, R. P., & Welch, I. (1996). Issuer Expenses and Legal Liability in Initial Public Offerings. *The Journal of Law and Economics, 39*(2), 545-602.

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.

Bradley, D. J., & Jordan, B. D. (2002). Partial Adjustment to Public Information and IPO Underpricing. *Journal of Financial and Quantitative Analysis*, *37*(4), 595-616.

Grinblatt, M., & Hwang, C. Y. (1989). Signalling and the Pricing of New Issues. *The Journal of Finance, 44*(2), 393-420.

Goergen, M., Renneboog, L. & Khurshed, A. (2006). Explaining the Diversity in Shareholder Lockup Agreements. *Journal of Financial Intermediation, 15*(2), 254-280.

Gounopoulos, D. (2006). Flipping Activity in Fixed Offer Price Mechanism Allocated IPOs, Initial Public Offering: International Perspective of IPOs. Imprint of Elsevier Butterworth-Heinemann, Burlington, pp.159-175.

Gujarati, D., & Porter, D. (2010). Essentials of Econometrics: McGraw-Hill International: New York.

How, J., Jelic, R., Saadouni, B., & Verhoeven, P. (2007). Share Allocations and Performance of KLSE Second Board IPOs. *Pacific-Basin Finance Journal, 15*(3), 292-314.

Ibbotson, R. G., Sindelar, J. L., & Ritter, J. R. (1994). The Market's Problems with the Pricing of Initial Public Offerings. *Journal of Applied Corporate Finance*, *7*(1), 66-74.

Jelic, R., Saadouni, B., & Briston, R. (2001). Performance of Malaysian IPOs: Underwriters Reputation and Management Earnings Forecasts. *Pacific-Basin Finance Journal, 9*(5), 457-486.

Kleinbaum, D. G., Kupper, L. L., Nizam, A. & Rosenberg, E. S. (2013). Applied Regression Analysis and other Multivariable Methods. Nelson Education.

Ligon, J. A., & Liu, H. C. (2011). The Effect of the Trading System on the Underpricing of Initial Public Offerings. *Journal of Financial Research*, *34*(1), 103-130.

Loughran, T., Ritter, J. R., & Rydqvist, K. (1994). Initial Public Offerings: International Insights. *Pacific-Basin Finance Journal, 2*(2–3), 165-199.

Mehmood, W., Mohd-Rashid, R., & Ahmad, A. H. (2020). Pricing Mechanism and IPO Initial Return: Evidence from Pakistan Stock Exchange. *International Journal of Business & Society, 21*(3), 1239-1257.

Mehmood, W., Mohd-Rashid, R., & Tajuddin, A. H. (2021a). IPO Initial Return in Pakistan: Influence of Country-Level Institutional Quality. *South Asian Journal of Business Studies*.

Mehmood, W., Mohd-Rashid, R., Tajuddin, A. H., & Saleem, H. M. N. (2021b). Shariah-compliance and IPO Underpricing: Evidence from Pakistan Stock Exchange. *International Journal of Islamic and Middle Eastern Finance and Management, 14*(5), 1081-1098

Mohd-Rashid, R., Abdul-Rahim, R., Che-Yahya, N., & Tajuddin, A. H. (2017). Voluntary Lock-Up Provisions and Performance of IPOs: Effects of Information Asymmetry. *Journal of Economic Cooperation and Development*, *38*(4), 1-24.

Mohd-Rashid, R., Abdul-Rahim, R., Che-Yahya, N., & Tajuddin, A. H. (2019). Impact of a Regulatory Change on Initial Performance of IPOs. *Afro-Asian Journal of Finance and Accounting, 9*(3), 332-348.

Mohd-Rashid, R., Tajuddin, A. H., Khaw, K. L. H., & Ong, C. Z. (2022a). The Impact of Changes in Regulations on Malaysian IPOs. *Accounting Research Journal, 35*(3), 317-335.

Mohd-Rashid, R., Tajuddin, A. H., Khaw, K. L.-H., & Ong, C. Z. (2022b). The Impact of Changes in Regulations on Malaysian IPOs. *Accounting Research Journal, 35*(3), 317-335.

Mohd-Rashid, R., Khaw, K. L.-H., Mehmood, W., & Tajuddin, A. H. (2022). New Evidence of Lockup Provisions: Effects on IPO Demands. *Journal of Contemporary Eastern Asia, 21*(1), 43-52.

Paudyal, K., Saadouni, B., & Briston, R. J. (1998). Privatisation Initial Public Offerings in Malaysia: Initial Premium and Long-term Performance. *Pacific-Basin Finance Journal, 6*(5), 427-451.

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.

Ritter, J. R., & Welch, I. (2002). A Review of IPO Activity, Pricing, and Allocations. *The Journal of Finance, 57*(4), 1795-1828.

Rock, K. (1986). Why New Issues are Underpriced? *Journal of financial economics, 15*(1-2), 187-212.

Tajuddin, A. H., Mohd-Rashid, R., Abdullah, N. A. H., & Abdul-Rahim, R. (2015). An Empirical Examination of Over-Subscription in the Malaysian IPO Market. *International Journal of Economics and Management, 9*(S), 81-102.

Tajuddin, A. H., Abdullah, N. A. H., & Taufil Mohd, K. N. (2018). Shariah-compliant Status and IPO Oversubscriptions. *Journal of Islamic Accounting and Business Research, 9*(4), 531-548.

Taufil-Mohd, K. N. (2007). Regulations and Underpricing of IPOs. *Capital Markets Review, 15*(1), 1-27.

The Edge Markets. (2009, June 30). Najib's Speech at Invest Malaysia 2009 [Newspaper article]. The Edge Markets. Retrieved from https://www.theedgemarkets.com/article/najibs-speech-invest-malaysia-2009

Wei, H., Mohd-Rashid, R., Mehmood, W., & Tajuddin, A. H. (2021). Institutional Quality and Initial Public Offering Underpricing: *Evidence from Hong Kong. Journal of Public Affairs, e2676.*

Welch, I. (1989). Seasoned Offerings, Imitation Costs, and the Underpricing of Initial Public Offerings. *The Journal of Finance, 44*(2), 421-449.

Yong, O., & Isa, Z. (2003). Initial Performance of New Issues of Shares in Malaysia. *Applied Economics, 35*(8), 919-930.

Zheng, S. X., Ogden, J. P., & Jen, F. C. (2005). Pursuing Value through Liquidity in IPOs: Underpricing, Share Retention, Lockup, and Trading Volume Relationships. *Review of Quantitative Finance and Accounting*, *25*(3), 293-312.