

INVESTOR ATTENTION AND IPO UNDERPRICING

Perhatian Pelabur dan Terkurang Harga pada Tawaran Awam Awal (TAA)

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Abstract

This study examines the impact of investor attention proxied by Google Search Volume Index on the initial returns of Malaysian IPOs. Considering the nature of IPOs is new and has limited information, investors are struggling to search for desired information related to the firms, which leads them to search for other possible signals to evaluate the IPOs. This search behaviour reflects investors' interest in IPOs. Using 45 samples of IPO, the finding shows that search volume during two weeks before the listing date has a significant positive relationship with the initial return. This indicates IPOs received above-average attention experienced a large first-day return. Attention creates demand for IPOs thus causes a reaction to the first-day trading price. The study finds that the Malaysian IPOs on average underprice at a rate of 11.3%, lower than reported in the previous studies. The finding also shows that the IPO offer size and KLCI return have a significant relationship with the first-day return. Interestingly, the correlation between investor attention and offer size is positive and significant, suggesting investors give more attention to a firm with a large offer size. However, prestigious underwriters and auditors are not significant in determining the initial return. Consider this study is the first to address the role of internet search on Malaysian IPOs, the findings add to the current literature on underpricing puzzle.

Keywords: Investor Attention, IPO, Underpricing, Search Volume Index

Abstrak

Kajian ini menyelidik hubungan antara perhatian pelabur menggunakan jumlah Indeks Carian Google (ICG) sebagai proksi dan pulangan awal tawaran awam awal (TAA) di Malaysia. Mengambil kira informasi berkaitan TAA yang terhad, pelabur berusaha mendapatkan informasi berkaitan syarikat TAA yang membawa kepada carian untuk menilai TAA. Gelagat ini menunjukkan minat pelabur terhadap TAA. Dengan menggunakan 45 sampel TAA, kajian ini mengesahkan bahawa jumlah carian dalam tempoh dua minggu sebelum penyenaian mempunyai hubungan positif yang signifikan dengan pulangan awal TAA. Ini menunjukkan TAA yang mendapat perhatian tinggi mengalami pulangan hari pertama yang besar. Perhatian pelabur mencipta permintaan terhadap TAA seterusnya memberikan kesan ke atas harga dagangan pada hari pertama disenaraikan. Kajian mendapati TAA di Malaysia terkurang harga pada kadar purata 11.3%, lebih rendah dari dapatan kajian lepas. Dapatan menunjukkan bahawa saiz tawaran TAA dan pulangan KLCI mempunyai hubungan yang

signifikan dengan pulangan hari pertama. Kajian juga mendapati korelasi antara perhatian pelabur dan saiz tawaran adalah positif dan signifikan. Ini menunjukkan pelabur memberi perhatian kepada syarikat dengan saiz tawaran yang besar. Walau bagaimanapun, reputasi penaja jamin dan juru audit tidak memeberikan kesan ke atas pulangan awal. Kajian ini mendapati bahawa pelabur memberi perhatian kepada syarikat yang mempunyai TAA yang besar. Dapatan dari kajian ini menyumbang kepada leteratur sediada berkaitan peranan carian internet dalam fenomena terkurang harga TAA.

Kata kunci: Perhatian Pelabur, TAA, Terkurang Harga, Indeks Carian Google

1.0 INTRODUCTION

Information is important to the investor in making investment decisions. The development of digital technology allows potential investors to search for information on the internet. This makes information accessible vastly in the market. This medium provides cheaper and easy access to information, particularly for retail investors. The efficient market hypothesis assumes that information is instantaneously reflected in asset prices. However, this assumption has a drawback since, in the real market, the investors are incapable to give their attention to all available information. Investors need to limit their focus on several sets of stocks. Investor attention in the real market is a limited capability (Kahneman, 1973). As both time and effort are restricted, investors can access only a limited amount of information on the stock market (Barber and Odean, 2008). Investor is struggling in processing all available information and it is hard to keep track of the progress of all stocks simultaneously. Therefore, investors' attention plays a crucial role in the dynamics of asset pricing. Merton (1987) proposes a model of investor recognition, that is individual investors are prone to buy a stock that they recognise and implies that the concept of investor attention can be a fundamental key to stock pricing and liquidity. Consistent with this, Barber and Odean (2008) argue that investors only tend to purchase stocks that catch their attention. Thus, investors are only capable to trade when they have enough information on a stock that caught their attention. Such behaviour creates demand for stocks that received attention and induces price pressure.

Attention is hard to measure therefore the existing studies focus on using indirect measures to represent investor attention. For instance, advertising (Chemmanur and Yan, 2019), trading volume, news, and extreme return (Barber and Odean, 2008), price limit (Seasholes and Wu, 2007), and media coverage (Fang and Peress., 2009; Liu et al., 2014). In recent years, studies propose a few attention proxies associated with internet features including Google Search Volume Index (Da et al., 2011; Aouadi et al, 2013; Vakrman and Kristoufek, 2015; Dimpfl and Jank, 2016), Baidu search index (Zhang et al., 2013) and Wikipedia editing frequency (Rubin and Rubin, 2010). Studies argue that individuals' attention is more likely to be captured because they are attention-grabbing net buyers (Barber and Odean, 2008) and are more prone to use search queries than institutional investors because institutional investors have information databases that can easily be accessible and accurate (Zhang et al., 2013). Da et al. (2011) provide strong evidence using retail order execution (DASH 5) report, an increase in individuals trading in the market such as Madoff is consistent with the increase in the Search Volume Index (SVI). The findings suggest attention influences retail investor's decisions hence market activities.

Empirical studies show investor attention affects stock market activities. Aouadi et al. (2013) examine the impact of investor attention on France stock market. They find that attention is a crucial factor in stock market volatility, and it drives up the liquidity even after controlling

for the financial crisis effect. Similarly, Ding and Hou (2015) investigate the impact of attention on S&P 500 stock and show that retail investor attention increase shareholder base and improved stock liquidity. Dimpfl and Jank (2016) find that search query volume has a strong co-movement with Dow Jones volatility. They argue that investor attention rise during strong market movements. Bank et al. (2011) study the German stocks and find that increase in the internet search volume improves trading activities, liquidity and leads to a higher return temporarily. Tantaopas et al. (2016) and Vozlyublennaia (2014) conclude that GSVI is efficient in capturing the investor attention on any particular information therefore a suitable proxy for retail investor attention.

The initial public offering (IPO) is a procedure in which a private firm opens up new shares to the public. Considering the nature of IPOs is new and has limited information, investors are struggling to search for desired information related to the firms, which leads them to search for other possible signals to evaluate the stocks. This search behaviour reflects investors' interest in IPOs. The only available information is the details written in the prospectus. This presents a unique setting in financial literature to analyse the role of attention on initial returns (Da et al., 2011; Liu et al., 2014; Bajo and Raimondo, 2017). The international literature suggests the underpricing puzzle of IPOs and proposes various explanations from the perspective of investors' behaviour. For example, studies suggest that investor attention induced demand towards IPO stocks, which lead to large first-day returns (Da et al., 2011; Vakrman and Kristoufek, 2015; Zhao et al, 2018). Thus, a deeper understanding and further research on investor attention and IPO's initial return would be useful to investigate the relationship between them. Da et al. (2011) show there is an increasing trend in Google Search Volume Index (GSVI) 2 weeks before the IPO and peaks in the IPO week but drops after the IPO week. They conclude GSVI has predictive power on initial return and long-run performance of IPO firms. Da et al. (2011) claim that attention is needed to create the sentiment. In the context of IPOs, investor sentiment is created after they invest their attention in the IPOs they are interested in. Therefore, the demand for IPOs increase as the public attention increase on the IPOs. This is aligned with Barber and Odean (2008)'s attention-induced price pressure theory . Zhao et al. (2018) find investor attention proxied by Baidu search index has an effect on IPOs in China's Growth Enterprises Market. The findings show a significant correlation between the abnormal search index and IPO's initial return. Chang and Kwon (2020) examine investor attention on IT firms that go public. They find that IT firms that receive large attention are underpriced severely than non-IT firms.

Motivated by the growing interest in the role of investor attention on IPO, we aim to examine the relationship between retail investor attention and the initial return of Malaysian IPOs using the GSVI. Malaysian IPOs are one of the Southeast Asia region that experience a high level of underpricing. For example, Yong and Isa (2003) examine IPOs from 1990 until 1998 show that the average underpricing was 94.91%. Recent studies however show IPOs underpricing is lower than previously reported (Ammer and Ahmad-Zaluki, 2016; Wong et al., 2017; Mahussin et al., 2018). Malaysian IPOs underpricing received overwhelming attention in the literature, however, the study on the connection between investor attention and IPO is still limited. Therefore, the present study aims to fill this gap.

This paper is organised as follows. The following section explains the data and methodology used in this study. Section 3 discusses the empirical findings and the last section concludes.

2.0 RESEARCH METHODOLOGY

The study covers the period from 2015 until 2020. Table 1 presents the number of IPOs listed on Bursa Malaysia during the study period. 63 companies went listing on the Bursa Malaysia Main Market and ACE Market during the period. We exclude companies listed in the Leading Entrepreneur Accelerator Platform (LEAP) market and real estate investment trust (REITs). However, due to the availability of Google Search Volume Index data, the final sample only consists of 45 IPOs. We include other factors suggested by existing literature to influence IPOs initial returns as control variables. These variables include underwriter reputation (Mahussin et al., 2018; Ammer and Ahmad-Zaluki, 2016, Sundarassen et al., 2018), reputable auditor (Mahussin et al., 2018; Ammer and Ahmad-Zaluki, 2016; Lee et al., 2011), size of the firm (Ammer and Ahmad-Zaluki, 2016; Lee et al., 2011; Da et al., 2011), offer size (Da et al., 2011) and the market return (Ma and Faff, 2007). The variables use and explanation is provided in Appendix 1.

Table 1: Number Of IPO Companies Listed From 2015 Until 2020.

| Year | Main Market | ACE Market | LEAP Market | Total |
|------|-------------|------------|-------------|-------|
| 2020 | 1 | 8 | 6 | 15 |
| 2019 | 4 | 11 | 15 | 30 |
| 2018 | 2 | 9 | 11 | 22 |
| 2017 | 6 | 6 | 2 | 14 |
| Year | Main Market | ACE Market | Total | |
| 2016 | 7 | 5 | 12 | |
| 2015 | 9 | 4 | 13 | |

Source: Bursa Malaysia

Google is the most widely used search engine by Malaysians. According to Statista websites, Google is the leading search engine with a percentage of market share accounts of 98.13% in 2020. Google SVI is collected from <http://www.google.com/trends>. The data is filtered to focus on Malaysia since the study aims at investigating investor attention in Malaysia. According to Bank et al. (2011), this process allows minimizing the noises in the data, in case there is an object with the same name in other countries or languages. The data provided in Google Trend begin in 2004 and the information is stored anonymously, categorized, and aggregate. The search index shows specific keywords that have been normalized and index into an interval [0,100]. A lower value in SVI does not necessarily mean that the company has a few numbers of absolute searches but it implies the popularity of the keyword reduces over time (Aouadi et al. 2013). We obtain IPO search data using the company name with an abbreviation such as 'group', 'Berhad', 'resources', and others. The reason why company name is used is that ticker information is unavailable before the IPO (Da et al., 2011) and it presents a broader demand from retail investor attention (Bank et al, 2011; Aouadi et al., 2013). However, using the company name come with several drawbacks. First, the keyword use maybe has other meanings such as the product of the firm itself or any general meaning. Second, there are various ways to express the firm's name. We use abbreviations and select keywords based on Google's suggestion. We also cross-check with the prospectus if there were any changes in the company name in the recent period before the IPOs. Weekly SVI data of IPOs are collected from 2015 until 2020. We gathered SVI data from 8 weeks before the IPO until the IPO week. We calculate Abnormal SVI following Da et al. (2011) definition. Da et al. (2011) define ASVI as the log of Search Volume Index during IPO week minus the median of log Search Volume Index during the past 8 weeks. According to Da et al. (2011) the advantage of using ASVI is time trends and other low-frequency seasonality are removed.

We extend the measure using SVI data 4 and 2 weeks before the IPO with the consideration that prospectus in Malaysia usually is launched during 4 weeks before the IPO date.

We apply multiple regression to analyse the effect of investor attention on the IPO's initial return. We run three regressions using investor attention proxies for 2, 4, and 8 weeks based on the following model:

$$IR_i = \beta_0 + \beta_1 ASVI_i + CONTROL + \varepsilon_i$$

{ASVI = ASVI8W, ASVI4W, ASVI2W}

(1)

Where, IR_i is the first-day return for firm i share, $ASVI_i$ is the Abnormal Search Volume Index of firm i for 2, 4, and 8 weeks, and CONTROL includes underwriter market share for firm i lead underwriter during the sample period ($UND SHARE_i$), auditor reputation with the value of '1' if auditor is big 4 firms ($AUDITOR_i$), log of the firm total asset prior to IPO for firm size ($FIRM SIZE_i$), log of IPO offer size ($OFFER SIZE_i$), and KLCI return (KLCI) to represent market performance.

IPOs underwrite by credible underwriters are argued to be associated with lower information asymmetry (Carter and Manaster, 1990) therefore lower initial return (Sundaresan, 2018). On the other hand, there are times when underwriter on purpose underpriced their issue to induced subscription and increase the price in the market (Ammer and Ahmad-Zaluki, 2016). Several studies discovered that underwriter's reputation has a positive relationship with IPO's return (Chemmanur & Fulghieri, 1994; Beatty & Welch, 1996; Liu & Ritter, 2011). They argue that issuing firms and underwriters purposely lowering their IPO's price than the market value as prevention from legal action from investors, reduce risk of bankruptcy due to IPO failure and protect the uninformed investor from overpricing IPO. Moreover, reputable underwriter significantly helps the issuing firm in promoting their stock since the reputation captures the attention from the media and analyst coverage. These help increase the firm publicity in the market and led to a positive relationship with initial return (Beatty and Welch, 1996; Loughran and Ritter, 2002; Liu and Ritter, 2011).

Studies posit that a prestigious auditor reduces the information asymmetry between issuer and investor in terms of financial information during the range-bound market. Thus, increasing the investor's intention to purchase the IPOs and causing demands for the share, consequently increase the initial return (Sundarasan et al., 2018). Contrary to the former argument, auditors are argued to play a vital role for issuing firms because they provide extra credibility to the firm financial position and reduce the risk of the issuance. This reduces underpricing level. It is argued that firm size is negatively associated with uncertainty. A large company usually backed up by more capital, well managed and has diversified investment is more likely to gain interest from an informed investor because it reduces the risk around the IPOs and information asymmetry (Ibbotson et al., 1994). The offering size indicates the risk associated with the firm (Miller and Reilly, 1987). Largest offering offered by established issuing firm, which potential investors assume the IPO to have a lower risk (Carter, Dark and Singh, 1998). Ma and Faff (2007) argue that initial return mostly influences by the condition of the market before listing. Ibbotson et al. (1994) argue that issuers are only able to sell their IPOs during the hot market and have difficulty during the cold market. This suggests that market risk has a role in determining the initial return for IPOs (Ritter, 1998).

3.0 EMPIRICAL FINDINGS

3.1 Descriptive Statistics

Table 2 shows descriptive statistics based on 45 observations. Based on the table, the average investor searches for IPOs on Google for the last 8 weeks, 4 weeks and 2 weeks before the listing date is 0.470, 0.173, and 0.156, respectively. Moreover, all ASVI versions have a positive median, 0.460 for the past 8 weeks, and 0.182 for the past 4 weeks and 0.211 for the past 2 weeks. This study shows that on average, the investor googles about the companies before listed in Bursa Malaysia. We find the mean value of the initial return is 11.3%, which is lower than reported in the recent studies (for eg: Ammer and Ahmad-Zaluki, 2016; Wong et al., 2017; Mahussin et al., 2018) suggesting underpricing. The maximum value of initial returns is 156.3% and the minimum is -52.2%.

Table 2: Descriptive Statistic For Sample Period Jun 2015 To May 2020

| | Mean | Median | Maximum | Minimum | Std. Dev. | Skewness | Kurtosis |
|------------|-------|--------|---------|---------|-----------|----------|----------|
| ASVI8W | 0.47 | 0.46 | 1.26 | -0.113 | 0.289 | 0.382 | 2.908 |
| ASVI4W | 0.173 | 0.182 | 0.629 | -0.477 | 0.241 | -0.19 | 2.827 |
| ASVI2W | 0.156 | 0.211 | 0.691 | -0.477 | 0.262 | -0.262 | 2.62 |
| IR | 0.113 | 0.067 | 1.563 | -0.522 | 0.447 | 1.485 | 5.639 |
| UND SHARE | 0.117 | 0.153 | 0.292 | 0.003 | 0.088 | 0.486 | 2.373 |
| OFFER SIZE | 7.817 | 7.68 | 9.682 | 6.636 | 0.623 | 1.135 | 4.224 |
| KLCI | 0.569 | 0.574 | 0.726 | 0.162 | 0.088 | -2.093 | 11.649 |
| FIRM SIZE | 8.044 | 7.998 | 9.97 | 6.088 | 0.707 | -0.074 | 4.828 |
| AUDITOR | 0.222 | 0 | 1 | 0 | 0.42 | 1.336 | 2.786 |

3.2 Level of investor attention across IPOs company

The level of attention received by the IPO company is measured based on GSVI. The GSVI is based on an interval from 0 to 100. Table 3, table 4 and table 5 indicate 5 companies that received the highest level of attention and 5 companies that received the lowest level of attention. Based on the tables, the most searched firm during this period is the HSS Engineer Group with the average search for the past 8 weeks and 4 weeks is 60 and 79, respectively. The second most search firm is the SDS Group with an average GSVI value of 56 in 8 weeks, and BCM Alliance Berhad with an average value of 77 in 4 weeks. Bison Consolidated received the least attention during the 8 weeks before the listing day at an average of 21 searches, while Serba Dinamik Holdings Berhad received the lowest attention for the past 4 weeks, with an average of 28 searches. During 2 weeks before listing, HSS Engineers received the most attention, and Serba Dinamik received the least attention

Table 3: The Highest and The Lowest Average of GSVI For The Past 8 Weeks Until The Listing Date

| Top 5 High GSVI | | Top 5 Low GSVI | |
|---------------------|----|------------------------|----|
| HSS Engineers Bhd | 60 | Securemetric Berhad | 27 |
| SDS Group Berhad | 56 | Tashin Holdings Berhad | 25 |
| DPI Holdings Berhad | 55 | UWC Berhad | 24 |
| Dancomech Hldgs Bhd | 52 | Serba Dinamik Hldg Bhd | 22 |
| BCM Alliance Berhad | 50 | Bison Consolidated Bhd | 21 |

Table 4: The Highest and Lowest Average of GSVI For The Past 4 Weeks Until The Listing Date

| Top 5 High GSVI | | Top 5 Low GSVI | |
|----------------------------------|----|-------------------------------|----|
| HSS Engineers Berhad | 79 | UWC Berhad | 41 |
| BCM Alliance Berhad | 77 | Lotte Chemical Titan Hldg Bhd | 40 |
| Dancomech Holdings Berhad | 76 | Bison Consolidated Berhad | 38 |
| Kim Teck Cheong Consolidated Bhd | 75 | Ranhill Holdings Berhad | 31 |
| Innature Berhad | 69 | Serba Dinamik Holdings Berhad | 28 |

Table 5: The Highest and Lowest Average of GSVI For The Last 2 Weeks Until The Listing Date

| Top 5 High GSVI | | Top 5 Low GSVI | |
|-------------------------------|----|-------------------------------|----|
| HSS Engineers Berhad | 89 | Gagasan Nadi Cergas Berhad | 38 |
| Chin Hin Group Berhad | 81 | Bison Consolidated Berhad | 36 |
| Kim Hin Joo (Malaysia) Berhad | 77 | Cabnet Holdings Berhad | 36 |
| Foundpac Group Berhad | 77 | Tashin Holdings Berhad | 34 |
| Innature Berhad | 77 | Serba Dinamik Holdings Berhad | 30 |

Figure 1: The Cross-Sectional Mean and Median of The Search Volume Index Around The IPO Week (Week 0).

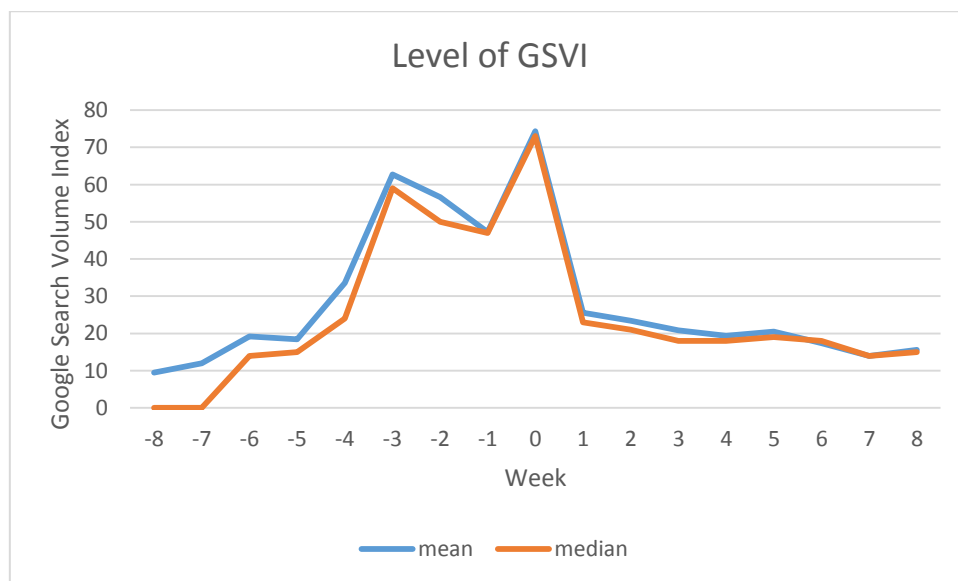
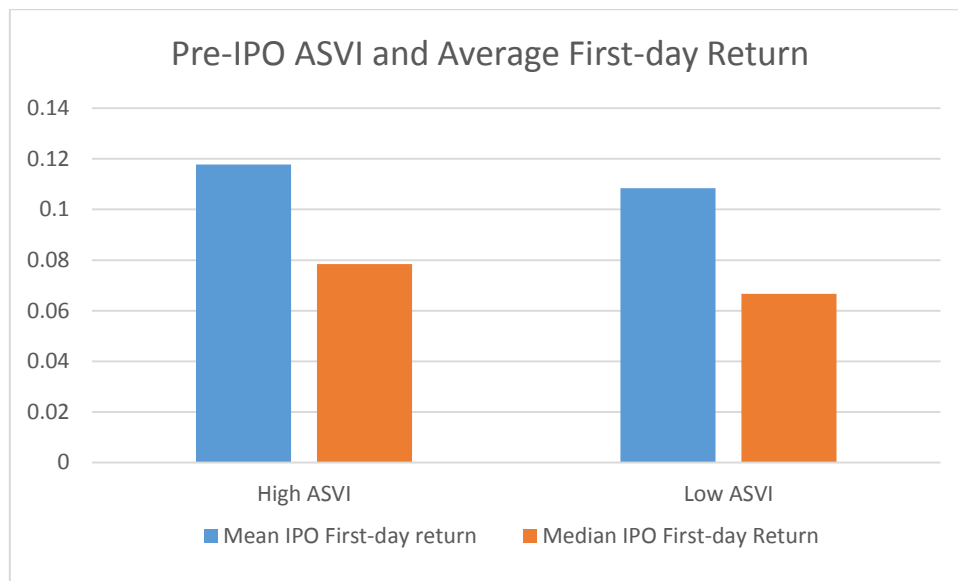


Figure 1 illustrates the average of GSVI level in 8 weeks before and after the IPO week. This figure shows that there is a surge in search volume before the IPOs. Similar to Da et al., (2011), the trend starts to increase in 3 to 4 weeks before IPO-trading day and is followed by a significant jump during the IPO week. The GSVI on an IPO stock jumps by 55% (using the mean) during the IPO week. This trend reflects an increase in retail attention toward the stock and shows that ASVI has predictive power for initial return (Da et al., 2011). Both the mean and median of GSVI show the same pattern. This means that investors started searching for information after the prospectus is launched. This is the only information available for the public. The GSVI trend drastically reverts to its pre-IPO level after the IPO week. Thus, it is

confirmed that there is a significant increase in Google Search Volume Index before the IPO trade in Bursa Malaysia.

Figure 2 depicts the relationship between averages of ASVI (consisting of ASVI for 8, 4, and 2 weeks) with IPO initial return. Based on the figure, the set of high ASVI has an average initial return of 11.7%, while a set of low ASVI has a lower average initial return of 10.8%. This result followed the attention-induced price pressure hypothesis as argued by Da et al., (2011) and is consistent with Merton (1987)'s view, which is investors are prone to buy stocks that they recognise. Therefore, these pieces of evidence show that ASVI is suitable to measure the attention level received by the IPOs.

Figure 2: Illustrates The Level of ASVI and IPOs Initial Return



3.3 Regression Results

Table 6 presents the correlation matrix between variables based on Model ASVI2W. All correlations between variables are below 0.6. However, the correlation between ASVI2W and IR is not significant. Interestingly, the table shows the correlation between ASVI2W and Offer size is positive and significant at 10%. This suggests investor pay more attention to IPO firms with large OFFER SIZE. Table 7 shows the regression results for the relationship between investor attention and initial return by using ASVI as a proxy. Based on the results, GSVI shows a positive relationship with the initial return of the IPO. The finding is in line with the findings of previous studies (Da et al., 2011; Vakrman and Kristoufek, 2015; Zhao et al., 2018; Chang and Kwon, 2020). These studies argue that the positive relationship shows a piece of strong evidence that IPOs experienced a surge in investors' attention before the first-day listing followed by a higher initial return. However, the relationship between investor attention and IPOs' initial return is only significant in Model 3. This relation indicates that investors are searching for information about the companies during the 2 weeks before the IPO is listed in Bursa Malaysia. We believe that the reason for the surge in attention is that the prospectuses of the companies are available only 2 weeks before being traded in the stock market and it is the only information available for the public. After controlling for all variables, an increase in the standard deviation of ASVI increases the initial return by the magnitude of 59.4% of the standard deviation.

OFFER SIZE shows the strongest relationship with the IPOs initial returns. All coefficients of OFFER SIZE in all models are significant at 10% and 1%. Contrary to Zhao et al. (2018), we find that OFFER SIZE has a negative relationship with the initial return. The results suggest that firms with lower offer sizes received higher initial returns on their first-day trading. A larger offer size usually associates with a larger firm. Based on the investor point of view, a large firm means low risk and this will result in low return (Carter, Dark and Singh, 1998). We find a significant positive relationship between KLCI and the initial return at 10%. This result supports Ma and Faff (2007) that market conditions affect IPOs initial returns. Other variables including FIRM SIZE, AUDITOR, and UND SHARE are not significant in all models.

Table 6: Correlation Analysis on Regression Model Using ASVI 2 Weeks

| Correlation | INITIAL RETURN | ASVI 2W | UNDER WRITER | OFFER SIZE | KLCI | FIRM SIZE | AUDITOR |
|-------------|----------------|---------|--------------|------------|--------|-----------|---------|
| IR | 1 | | | | | | |
| ASVI2W | 0.159 | 1 | | | | | |
| UND_SHARE | -0.099 | 0.060 | 1 | | | | |
| OFFER SIZE | -0.271* | 0.253* | 0.439** | 1 | | | |
| KLCI | 0.161 | -0.166 | -0.074 | 0.064 | 1 | | |
| FIRM SIZE | -0.040 | 0.217 | 0.092 | 0.290* | -0.015 | 1 | |
| AUDITOR | -0.010 | 0.032 | 0.254* | 0.484*** | -0.056 | 0.549*** | 1 |

Note: *, ** and *** represent the statistically significant at 10%, 5% and 1%.

Table 7: Regression Analysis Result

| Dependent variable: IPOs' First Day Return (IR) | | | |
|---|-------------------------------------|------------------------------------|---------------------------------------|
| Variable | Model 1 | Model 2 | Model 3 |
| ASVI 8W | 0.0667 (0.2681) | | |
| ASVI 4W | | 0.3856 (1.3255) | |
| ASVI 2W | | | 0.5944** (2.2382) |
| AUDITOR | 0.2294 (1.0371) | 0.2687 -1.27 | 0.3178 -1.5521 |
| FIRM SIZE | -0.0302 (-0.2582) | -0.0383 (-0.340) | -0.0844 (-0.7583) |
| UNDER_SHARE | 0.2261 (0.2606) | 0.3152 (0.3723) | 0.3068 (0.3782) |
| KLCI | 1.0208 -1.3068 | 1.2024 -1.5474 | 1.3803* (1.8342) |
| OFFER SIZE | -0.2862* (-2.0601) | -0.3301* (-2.391) | -0.3657*** (-2.7482) |
| Constant | 1.9041 (1.3875) | 2.1543 (1.6121) | 2.6657* (2.024) |
| Obs | 45 | 45 | 45 |
| R-squared | 0.1342 | 0.1709 | 0.2336 |

Note: *, ** and *** represent the statistically significant at 10%, 5% and 1%. The values in the bracket is the t-statistic of the coefficient.

4.0 CONCLUSION

We examine the relationship between investor attention proxied by Google Search Volume Index (GSVI) and IPOs' first-day return during 2015-2020. We find that Malaysian IPOs on average underpriced at 11.3%, lower than reported in the previous studies. Our findings show that GSVI within 2 weeks before the listing date has a significant positive effect on IPOs initial returns. IPOs with a high level of attention experienced higher initial returns compared to IPOs with a low level of attention. Retail attention creates demand for IPOs and induces first-day price pressure, resulting in greater underpricing. We also find offer size and market return have a significant relationship with the initial return. Another interesting finding is the positive correlation between investor attention and offer size. The correlation suggests that retail investors give more attention to IPOs with larger offer size. Retail investors have become more significant in Malaysian stock market in recent years. In 2020, the participation of retail investors in Bursa Malaysia was approximately 32.4% in terms of value traded (Surendran, 2021). As retail investors are labelled as "uninformed" and "irrational" (DeLong et al. 1990; Shleifer and Summers, 1990), thus our findings contribute to the existing literature on the role of retail investor attention on IPOs underpricing in an emerging market. Our conclusion is based on a small sample due to data limitations. It would be interesting to provide evidence on the role of retail investor attention on the short and long-run performance of IPOs. In addition, the role of the underwriter in promoting IPOs to attract attention could be explored in future research.

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APPENDIX

Appendix 1: Variables Explanation and Data Source

| Variables | Proxy | Source of Data |
|-----------------|--|----------------|
| IR_i | $IR_i = \frac{P_i^{close}}{P_i^{offer}} - 1$ <p>IR_i is stock return on first day trading of company i. P_i^{close} is the close price of first day trading and P_i^{offer} is the offer IPO price.</p> | DataStream |
| $ASVI_t$ | $ASVI_t = \log(SVI_t) - \log \text{MED}(SVI_{t-1} + \dots + SVI_{t-8})$ <p>SVI_t is Google search volume index during week t. $\text{MED}(SVI_{t-1} \dots SVI_{t-8})$ is the median value of SVI in the previous 8,4 or 2weeks.</p> | Google Trend |
| UND_SHARE_i | $UND_SHARE_i = \frac{\text{no of share underwrite by lead underwriter } i}{\text{total no of share underwrite by all lead underwriter}}$ <p>The percentage of lead underwriter share divide by all underwriter share during the sample period in ringgit Malaysia.</p> | Prospectus |
| $OFFER_SIZE_i$ | $OFFER_SIZE_i = \text{offer price} \times \text{no of share}$ | Prospectus |
| $KLCI_i$ | $KLCI_i = \frac{P_t - P_0}{P_0}$ | DataStream |
| $FIRM_SIZE_i$ | Log firm's total asset pre-IPO. | Prospectus |
| $AUDITOR_i$ | A dummy variable equal to 1 if the auditor is Big 4 (KPMG, Ernst and Young, PricewaterhouseCoopers and Deloitte Touche Tohmatsu), 0 otherwise. | Prospectus |