Winner's Curse and Bandwagon Effect in Malaysian IPOs: Evidence from 2001-2009

(Sumpahan Pemenang dan Kesan Ikut Serta dalam TAP Malaysia: Bukti dari 2001-2009)

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ABSTRACT

This paper examines the winner's curse hypothesis and the bandwagon effect in initial public offerings (IPOs), using Malaysian IPO data from January 2001 to December 2009. The average initial return (offer-to-close) for the 160 Malaysian private placement IPOs is 18.51 percent as opposed to the average initial return (offer-to-close) of 28.84 percent for the 210 non-private placement IPOs, which gives support to the winner's curse hypothesis, where uninformed investors (using non-private placement IPOs as the proxy) demand a higher initial return in the absence of informed investors (using private placement IPOs as the proxy). The study also finds that the presence of a large number of informed investors in an IPO exercise, as compared to uninformed investors, brings with it an increased interest, or the bandwagon effect, in that particular stock, which results in higher initial return.

ABSTRAK

Kajian ini meneliti hipotesis sumpahan pemenang dan kesan ikut serta pada tawaran awam permulaan (TAP), dengan menggunakan data TAP Malaysia dari Januari 2001 hingga Disember 2009. Purata pulangan awal (tawaran-hingga-penutup) bagi 160 TAP Malaysia jenis perletakan persendirian adalah 18.51 peratus, berbanding purata pulangan awal (tawaran-hingga-penutup) sebanyak 28.84 peratus bagi 210 TAP Malaysia jenis bukan perletakan persendirian, yang menyokong hipotesis sumpahan pemenang, iaitu pelabur kurang berpengetahuan (dengan TAP Malaysia jenis bukan perletakan persendirian sebagai proksinya) mahukan pulangan awal yang lebih tinggi bilamana tiadanya pelabur berpengetahuan (dengan TAP Malaysia jenis perletakan persendirian sebagai proksinya) dalam sesuatu TAP. Kajian ini juga mendapati bahawa kehadiran jumlah pelabur berpengetahuan yang besar dalam satu-satu TAP, berbanding dengan jumlah kehadiran pelabur kurang berpengetahuan, menyebabkan peningkatan minat pada saham yang berkenaan, atau berlakunya kesan ikut serta, yang menghasilkan pulangan awal yang lebih tinggi.

INTRODUCTION

The existence of under-pricing in initial public offerings (IPOs) is well documented both in the developed and under-developed markets. A comprehensive review can be found in Ritter (2003) and Yong (2007a). Ritter also reports the extent of under-pricing in 38 countries, including 11 Asian countries, and concludes that the average initial returns of Asian IPOs are significantly higher than the average initial return of U.S. IPOs. Yong reviews the IPO research in Asia, especially the unique features of these IPOs which have not been researched in the developed markets in the West.

In Malaysia, studies such as underwriters' reputation (Jelic *et al*. 2001), proportion of IPO shares allocated to Bumiputra investors (How *et al*. 2007), privatisation IPOs versus other IPOs (Paudyal, *et al*. 1998), firm size (Yong 1996), and over-subscription ratio (Yong & Isa 2003), have been carried out to determine the possible relationship between these variables and the initial returns of Malaysian IPOs. How *et al*. (2007) examine the change in regulation in 1996 towards a market-based pricing mechanism, and its effect on the under-pricing of Malaysian IPOs. Quite recently, Yong (2007b) examines the issues of over-subscription ratio (i.e. investor demand) and firm size (i.e. size effect) on the performance of Malaysian IPOs after the 1997 Asian financial crisis. Recently, Abdul Rahim and Yong (2010) study the performance of shariah-compliant Malaysian IPOs and find that initial returns of shariah-compliant IPOs are driven by size and type of offers whereas non-shariah IPOs are driven by risks.

The current study focuses on the type of initial public offering called private placement, which has become quite popular since 2001. Private placement, as suggested by its name, usually refers to the sale of IPOs directly to institutional investors. The opposite of institutional investor is individual investor, or retail investor as commonly referred to in Malaysia. Information on private placement IPOs enables us to analyze the performance of IPOs based on the presence of knowledgeable or informed investors, as represented by the institutional investors, in an IPO exercise, and thus enables us to the test the winner's curse hypothesis. None of the earlier studies on Malaysian IPOs deals with private placement IPOs. They usually focus on two major types of IPOs, namely public offer and offer for sale (Dawson 1995; Yong & Isa 2003). The current study fills this void in the past studies.

As suggested by Rock (1986), with fixed-price IPOs, the uninformed investors always face a winner's curse, that is, they get all of the shares which they ask for because the informed investors (or institutional investors) do not want them. Thus, faced with this adverse selection problem, the uninformed investors will only buy if IPOs are under-priced to compensate them for the bias in the IPO allocation. In line with this line of argument, we hypothesize that IPOs without the participation of institutional investors (i.e. informed investors) will result in higher initial returns, or higher levels of under pricing.

Information on the proportion of IPOs subscribed by the institutional investors, in IPOs with private placement, enables us to test another hypothesis called the bandwagon effect. According to Welch (1992), bandwagon effects may develop if potential investors pay attention not only to their own information about an IPO, but also to whether other investors are purchasing. In this case other investors are the informed investors or the institutional investors. If an investor sees that no one else wants to buy, he may not buy even when he possesses favorable information. In order to prevent this situation from happening, an issuer may have to under-price 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. Along with this line of argument, we hypothesize that an IPO with a large proportion of informed investors (i.e. the institutional investors) will result in a higher level of price movement (as measured by the higher level of standard deviation) and a higher level of under pricing (or higher initial return) due to increased interest and trading activity in that particular issue.

DATA AND METHODOLOGY

Auctions, book building and fixed-priced offers are the three common mechanisms by which IPOs are sold around the world. In the case of auctions, the market-clearing price is determined after bids are submitted, and with book building, the underwriter usually solicits or goes through potential buyers and then set an offer price. In a fixed-priced offer, a very common practice in Malaysian IPOs, the offer price is set prior to the allocation, and if there is excess demand, shares are rationed on a pro rata or lottery basis. Book building is common in the U.S. and most other countries in the world, but quite rare in the Malaysian IPO scenario, and as such they are excluded from this study.

Prior to 2004, Bursa Malaysia (or previously known as the Kuala Lumpur Stock Exchange) usually classified Malaysian IPOs as either *offer for sale* or *public issue, or combination of both*. Basically, *offer for sale* refers to shares that have already been issued to the original stockholders, who in turn offer their shares for sale to the public. As such, there is no change in the company's paid-up capital; the money received from the sale of the stock does not go to the company. Its purpose is to restructure the company's ownership distribution in line with the government's rules and regulations. *Public issue* refers to new shares of stock offered to the public for the first time; as such, it results in an increase in the paid-up capital of the company concerned. Current study does not specifically focus on these two types of IPOs since most past studies, such as Yong and Isa (2003), have dealt with this issue. The current study focuses on private placement IPOs, which refer to the sale of IPOs *directly* to institutional investors, the opposite of individual investor, or retail investor as commonly referred to in Malaysia. Private placement has become increasingly popular since 2001, and since 2004 it has been included in its own separate section called "private placement," apart from the regular "offer for sale" and "public offer" sections of information on IPO listing provided by Bursa Malaysia on its website (www.bursamalaysia.com/website/listing/ipo).

The period of the study is from January 2001 to December 2009, and the sample comprises of all fixed-price IPOs (370 IPOs in total, with 160 private placement IPOs) listed on Bursa Malaysia. January 2001 is chosen as the beginning period of the current study since most effect of the 1997 financial crisis has dissipated since then, plus the fact that private placement IPOs has become increasingly popular since then. The information used in this study is compiled from various old issues of *Investors Digest* (a monthly publication of Bursa Malaysia that ceased publication in July 2004)*, the website of Bursa Malaysia (www.bursamalaysia.com), the Star Online website (biz.thestar.com.my/marketwatch/ipo), the website of the Malaysian Issuing House (www.mih.com.my), and various reports from local newspapers.

Initial return is calculated as the percentage change in price from the offer price to the opening price of the first day of trading, and we refer this as initial return (offer-to-open). Initial return is also calculated as the percentage change in price from the offer price to the closing price of the first day of trading, as mostly used in past studies in Malaysia and in the developed markets in the West, and we refer this as initial return (offer-to-close). Even though initial return (offer-to-close) is commonly employed in past studies, we feel that initial return (offer-to open) is the "true" performance measure for "initial" return, due to the fact that initial return (offer-to-close) contains some "after-market" elements in it. In most cases, we report both.

FINDINGS

Table 1 reports the descriptive statistics of initial return (offer-to-open) for 370 fixed-price IPOs listed on Bursa Malaysia from January 2001 to December 2009, by year. Panel A reports the descriptive statistics of initial returns (offer-to-open) for 160 private placement IPOs, Panel B presents the summary statistics of the initial returns for 210 non-private placement IPOs, and Panel C reports the summary statistics for the overall 370 IPOs.

For private placement IPOs, the highest initial return (offer-to-open) of 194.12 percent is registered in 2005, and the lowest initial return of -66.67 is also registered in 2005. The overall mean initial return for the 160 private placement IPOs is 21.44 percent and this figure is significantly different from zero at the 1 percent level. For non-private placement IPOs, the highest initial return (offer-to-open) of 207.69 percent is registered in 2004, and the lowest initial return of -26.67 is registered in 2001. The overall mean initial return for the 210 non-private placement IPOs is 30.07 percent and this figure is significantly different from zero at the 1 percent level. The largest number of private placement IPOs is registered in 2005 with a total of 62 IPOs, and the lowest number of 4 is registered in 2002. The highest number of non-private placement IPOs of 58 is registered in 2004, and the lowest number of 1 is registered in 2008.

TABLE 1. Descriptive statistics of initial return (offer-to-open) for private placement IPOs versus non-private placement IPOs, by year

Year	n	Mean	Std. Dev.	Min.	Max.
Panel A: Initial return (offer-to-open) of private placement IPOs, in percent					
2001	5	16.22	55.25	-24.24	112.12
2002	4	61.29@	60.89	6.25	145.00
2003	6	30.34*	22.59	0.00	57.41
2004	13	33.79*	42.89	0.00	145.16
2005	62	20.51**	47.81	-66.67	194.12
2006	30	19.46**	27.82	-35.77	90.48
2007	15	39.66**	48.23	-15.00	135.71
2008	18	-4.24	12.12	-34.88	15.86
2009	9	11.19*	14.10	-2.82	37.74
2001-2009	160	21.44**	41.39	-66.67	194.12
Panel B: Initial return (offer-to-open) of non-private placement IPOs, in percent					
2001	15	17.29	47.60	-26.67	133.33
2002	46	21.90**	32.99	-11.54	161.90
2003	52	46.16**	35.60	0.00	140.00
2004	58	36.58**	43.07	-12.04	207.69
2005	17	18.93*	27.08	-12.44	104.65
2006	5	6.80	17.31	-9.09	36.36
2007	12	11.54*	16.20	-10.48	56.08
2008	1	14.29	n.a.	n.a.	n.a.
2009	4	4.15	15.72	-12.86	25.00
2001-2009	210	30.07**	37.94	-26.67	207.69
Panel C: Initial return (offer-to-open) of all IPOs combined, in percent					
2001	20	17.02	48.09	-26.67	133.33
2002	50	25.05**	36.65	-11.54	161.90
2003	58	44.52**	34.67	0.00	140.00
2004	71	36.07**	42.74	-12.04	207.69
2005	79	20.17**	44.11	-66.67	194.12
2006	35	17.65**	26.75	-35.77	90.48
2007	27	27.16**	39.58	-15.00	135.71
2008	17	-3.15	12.57	-34.88	15.86
2009	13	9.02*	14.34	-12.86	37.74
2001-2009	370	26.34**	39.65	-66.67	207.69

Notes:
1. @ Even though this figure is quite big, it is not significantly different from zero even at the 5percent level, due to its small number of observation (n = 4).
2. n.a. not applicable.
3. * Significant at the 5 percent level, under the null hypothesis that the mean initial return (offer-to-open) is zero.
4. ** Significant at the 1 percent level, under the null hypothesis that the mean initial return (offer-to-open) is zero.

Table 2 presents the detailed analysis of the initial returns (for both methods of calculating initial returns) for the period 2001-2009 based on the two types of offer. In the case of initial returns (offer-to-open) as shown in Panel A, there are 160 private placement IPOs, with an average initial return (offer-to-open) of 21.44 percent. Non-private placement IPOs represents 210 of the total 370 IPOs for the period, with an average initial return (offer-to-open) of 30.07 percent. The independent t-test indicates that there is a significant difference (at the 5 percent level) between

the average initial return (offer-to-open) of 21.44 percent for the private placement IPOs and the average of 30.07 percent for the non-private placement IPOs. The negative sign of the t-statistic indicates the average initial return (offer-to-open) of the private placement IPOs is significantly lower than average initial return (offer-to-open) of the non-private placement IPOs. This result seems to indicate that the uninformed investors (retail investors or the general public) demand a higher premium (as indicated by the higher average initial return) when the informed investors (as indicated by the presence of private placement offers) are not present; this finding seems to support the winner's curse argument. As indicated by the Levene's F-test, the variations (as shown by the standard deviations of initial returns) in initial returns, for both types of IPOs, are not significantly different.

TABLE 2. Results of the independent t-test on the equality of means and the Levene's F-test on the equality of variances of the initial returns, between the two types of Malaysian IPOs, for the period 2001-2009

Type of Offer	n	mean (%)	standard deviation (%)
Panel A: Initial return (offer-to-open)			
Private Placement	160	21.44	41.39
Non-Private Placement	210	30.07	37.94
Result of the test conducted		t-stat. = -2.082*	F-stat. = 0.020
		($p = 0.047$)	($p = 0.888$)
Panel B: Initial return (offer-to-close)			
Private Placement	160	18.51	48.61
Non-Private Placement	210	28.84	42.72
Result of the test conducted		t-stat. = -2.170*	F-stat. = 0.080
		($p = 0.031$)	($p = 0.778$)

Note: * Significant at the 5 percent level.

We further analyse whether this phenomenon is still valid if the initial return is calculated using the closing price rather than the opening price as initially done, and the results are shown in Panel B. The independent t-test indicates that there is a significant difference (at the 5 percent level) between the average initial return (offer-to-close) of 18.51 percent for the private placement IPOs and the average of 28.84 percent for the non-private placement IPOs. In fact, in this case the significance level improves from a *p*-value of 0.047 to a *p*-value of 0.031. This result is in line with our earlier finding when initial return is calculated using the opening price; the only difference is the value of the initial return which seems to decrease for both types of IPOs. The Levene's F-test also indicates no difference in the variation of initial returns in both types of IPOs.

We also analyse the performance of these two types of offer based on the period they are listed, either during hot or cold period. We are interested to see whether the period an IPO is offered has anything to do with its initial performance. The number of IPOs offered each year is used as the basis for determining the period of cold market or hot market. From Panel C of Table 1, we can see that the year with the lowest number of IPOs issued is 2009, and the year with the highest number of IPOs issued is 2005, whereas 2006 is the year with the median number of IPOs issued, with 35 IPOs. The years with IPOs greater than the median, i.e. 35, are classified as the hot period, whereas the years with IPOs less than 35 are classified as the cold period. Year 2006 is also included in the cold period since it has only 35 IPOs, whereas the next higher number of IPOs is 50. The results of the independent t-test and the Levene's F test are shown in Table 3. Results of the independent t-test indicate that none of the mean initial returns of the private placement IPOs is significantly different from the mean initial returns of the non-private placement IPOs, even at the 5 percent level, especially during the cold period. However, we can see that the mean initial returns (for both calculations of initial return), during the hot period, of the non-private placement IPOs is markedly higher (even though not statistically significant) than the mean initial returns of the private placement IPOs. The Levene's F-test also indicates no difference in variations in initial returns, especially during cold period, in both calculations of initial returns. However, variation seems to be higher (for both calculations of initial returns) for the private placement IPOs compared to non-private placement IPOs, during hot period. The significance value, as shown by the *p*-value, also improves when initial return is calculated from the offer price to the closing price. This greater variation in initial returns indicates some kind of increased activity in the IPOs with private placement, which can be an early indication of the "bandwagon effect" in this type of IPOs.

Based on the earlier indication of the "bandwagon effect" in IPOs with private placement, as shown by the results of the F-test in Table 3, we further analyze the existence of "bandwagon effect," using the 160 companies that issue both private placement IPOs and non-private placement IPOs. These companies are divided into two general groups, i.e., the group with small percentage of private placement IPOs, and the group with large

percentage of private placement IPOs. Specifically, these groups are: (1) the companies with percentage private placement IPO compared to overall IPO issued of less than 50 percent; and (2) the companies with percentage private placement IPO compared to overall IPO issued of 50 percent or more. The second group, i.e., the group with the percentage of private placement IPOs of more than 50 percent, registers the higher average initial return in both calculations of initial return. In the case of initial return (offer-to-open), as shown in Panel A of Table 4, the mean

initial return of the second group of 26.42 percent is significantly higher the mean for the first group of 11.66 percent, at the 1 percent level. In the case of initial return (offer-to-close), as shown in Panel B, the mean initial return of the second group is substantially lower, but it is still significantly higher than the initial return of the first group, at the 5 percent level. This finding seems to suggest that the presence of a large number of informed investors in an IPO exercise, as compared to uninformed investors (and this information is known to the public before the first

TABLE 3. Results of the independent t-test on the equality of means and the Levene's F-test on the equality of variances of the initial returns, between the two types of Malaysian IPOs, during periods of hot and cold market

Type of Offer	n	mean (%)	standard deviation (%)
Panel A: Initial return (offer-to-open) during cold period			
Private Placement	75	17.23	34.17
Non-Private Placement	37	12.51	32.21
Result of the test conducted		t-stat. = 0.702	F-stat. = 0.678
		($p = 0.484$)	($p = 0.412$)
Panel B: Initial return (offer-to-close) during cold period			
Private Placement	75	14.34	32.99
Non-Private Placement	37	15.60	41.16
Result of the test conducted		t-stat. = -0.175	F-stat. = 0.678
		($p = 0.862$)	($p = 0.412$)
Panel C: Initial return (offer-to-open) during hot period			
Private Placement	85	25.15	46.74
Non-Private Placement	173	33.82	38.10
Result of the test conducted		t-stat. = -1.591	F-stat. = 1.131
		($p = 0.113$)	($p = 0.289$)
Panel D: Initial return (offer-to-close) during hot period			
Private Placement	85	22.20	59.04
Non-Private Placement	173	31.67	42.62
Result of the test conducted		t-stat. = -1.472	F-stat. = 2.866
		($p = 0.142$)	($p = 0.092$)

TABLE 4. Results of the independent t-test on the equality of means and the Levene's F-test on the equality of variances of the initial returns, for the 160 issuing companies that offer private placement IPO, based on the percentage of private placement IPO compared to the overall IPO issued by a company

Percentage of Private Placement IPO Compared to Overall IPO Issued	n	mean (%)	standard deviation (%)
Panel A: Initial return (offer-to-open)			
Less than 50 percent	54	11.66	24.65
50 percent to 100 percent	106	26.42	47.04
Result of the test conducted		t-stat.= -2.604**	F-stat.=12.084**
		($p = 0.010$)	($p = 0.001$)
Panel B: Initial return (offer-to-close)			
Less than 50 percent	54	9.78	27.98
50 percent to 100 percent	106	22.96	55.90
Result of the test conducted		t-stat.= -1.987*	F-stat.=7.822**
		($p = 0.049$)	($p = 0.006$)

Notes:
1. * Significant at the 5 percent level.
2. ** Significant at the 1 percent level.

day's trading of the said IPO) brings with it an "increased interest" or a "bandwagon effect" in that particular IPO, and thus results in the increase in its initial return. In both calculations of initial return, standard deviation of initial return is always higher in the second group compared to the first group. The Levene's F-test shows that the standard deviation (for each calculations of initial return) of the second group is significantly higher than the first group, at the 1 percent level. This finding indicates that the existence of a big percentage of informed investors in a given IPO brings with it a "bandwagon effect" and a more diverse trading activity among the investors, which results in a higher dispersion of initial returns. This result, in a way, also suggests that the existence of a large group of informed investors can create a bandwagon effect when the market over-reacts to the pricing of an IPO.

CONCLUSION

The paper examines the *winner's curse* hypothesis and the "bandwagon effect" in the Malaysian IPOs, by employing the private placement IPOs. The period of the study is from January 2001 to December 2009, and the sample comprises of 370 fixed-price IPOs listed on Bursa Malaysia. The average initial return (offer-to-close) for the 160 Malaysian private placement IPOs is 18.51 percent, as opposed to the average initial return of 28.87 percent for the 210 non-private placement IPOs. The significantly higher average initial return of the non-private placement IPOs compared to the average initial return of the private placement IPOs suggests that "winner's curse" hypothesis is somewhat valid in the case of Malaysian IPOs, where investors in general demand a higher initial return in the absence of informed investors.

We find that that the presence of a large number of informed investors in an IPO exercise, as compared to uninformed investors brings with it an "increased interest" in that particular IPO, and thus results in the increase in its initial return. The existence of a big percentage of informed investors in a given IPO also results in a more diverse trading activity among the investors, as indicated by a higher dispersion of initial returns. This finding suggests that the existence of a large group of informed investors can create a bandwagon effect when the market over-reacts to the pricing of an IPO.

REFERENCES

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

Dawson, S.M. 1995. Measuring the costs of IPO under-pricing: The original shareholders' view. *Capital Markets Review* 3(1): 33-48.

How, J., Jelic, R., Saadouni, B. & Verhoeven, P. 2007. Share allocation and performance of the KLSE second board IPOs. *Pacific-basin Finance Journal* 15: 292-314.

Jelic, R., Saadouni, B. & Briston, R. J. 2001. Performance of Malaysian IPOs: Underwriters' reputation and management earnings forecast. *Pacific-Basin Finance Journal* 9: 457-486.

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.

Ritter, J. R. 2003. Investment banking and securities issuance. In *Handbook of the economics of finance*, edited by G. Constantinides, M.Harris & R. Stulz, 255-304. Amsterdam: Elsevier B. V.

Rock, K. 1986. Why IPOs are under-priced. *Journal of Financial Economics* 15: 1051-1069.

Welch, I. 1992 (June). Sequential sales, learning and cascades. *Journal of Finance*, 695-732.

Yong, O. 1996. Size of the firm, over-subscription ratio and performance of IPOs. *Malaysian Management Review* 3(2): 28-39.

Yong, O. 2007a. A review of IPO research in Asia: What's next? *Pacific-Basin Finance Journal* 15: 253-275.

Yong, O. 2007b. Investor demand, size effect and performance of Malaysian initial public offerings: Evidence from post-1997 financial crisis. *Jurnal Pengurusan* 26: 25-47.

Yong, O. & Isa, Z. 2003. Initial performance of new issues of shares in Malaysia. *Applied Economics* 35: 919-930.

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