Private placement, share prices, volume and financial crisis: An emerging market study

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A R T I C L E   I N F O

A B S T R A C T

Firms are increasingly resorting to private placements in recent years, yet there is no published study of emerging markets. There is a unique opportunity to study this behavior during a severe financial crisis, when firms resorted to private placements to recover financially distressed firms. Our analysis using data over fifteen years shows (a) a significant 2–3% positive share price reaction, affirming asymmetric information effect, (b) a significant volume activity, and (c) the price impact is different across a period of a major financial crisis. If the proceeds from placement are earmarked for investment, share price is negatively (positively) correlated during the crisis (non-crisis) periods. Our finding on regulation is inconsistent with prior reports in developed markets: this is explained by the stricter restrictions on trading of private issues in emerging market. These results provide modest new contributions to the literature on private placements.

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1. Introduction

Research on *private placement* disclosure effect on share returns has established a *positive* relationship in several developed markets. It is suggested that private placements – as opposed to rights issues – reduce agency costs-cum-information asymmetry thus leading to a positive share price reaction to such events: (Wruck, 1989). Hertzel and Smith (1993) assert that private placement signals issuing firm's undervaluation, which help to mitigate information asymmetry. Hence the observed positive price effect

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has become entrenched in studies using data from developed markets. Should share price behavior to private placements in emerging markets be identical to that in developed markets? Prior studies show that in most emerging markets, a positive price effect to rights issues has been observed, which is contrary to the well-known *negative* effect explained as due to an overvaluation of shares associated with rights issues.[1]

Next, should unique regulation in emerging markets on share trading by private equity providers distort share return behavior? Should share returns behave the same way during a severe financial crisis period, when private equity providers acted more as white knights to troubled firms, hence helping to reduce the cost of financial distress of firms?

Emerging markets selected for this study already had high share ownership concentration, so should Wruck's hypothesis be tested in such a concentrated share market? Individual Malaysian investors, who provided private placement funds, also increased an already high ownership concentration. These are issues that could be addressed by examining private placements in the emerging market of Malaysia. In short, should private placement effect be the same as in the developed markets; are there new research issues pertinent to emerging markets?

There is a specific rule in Malaysia that requires that parties buying private placements cannot trade their shares for up to three years from the date of purchase. This unique rule is likely to increase the behavior predicted by Wruck (1989) on information asymmetry given ownership concentration increases. During the Asian Financial Crisis of 1997/8, private placements were used as a means to rescue firms with financial distress: should share price effect be opposite to the effect in normal market condition?

The rest of the paper is organized as follows: Section 2 reviews selected relevant literature. The data set, test models, and hypotheses are explained in Section 3 while in Section 4 the reader is presented the findings. Section 5 concludes the paper. The findings reported in this paper extend our understanding of the price behavior of emerging markets by providing new results on some unanswered questions.

2. Private placement literature and institutional differences

2.1. Brief overview

Research on stock price reactions to private placement announcements has shifted in recent years to long-run behavior: see Billet, Flannery, and Garfinkel (2011); Anderson, Rose, and Cahan (2006); see also Anderson et al. (2006) for a test of private issue effect on share price. These studies also used data from developed capital markets. The original question of how stock prices in emerging markets behave is seldom researched despite some interesting research questions, we have shown, that could be addressed. A quick review of results from few selected private placement studies is summarized in Table 1. These studies suggest a significant positive cumulative abnormal return (CAR) to private placements.

The largest gain of about 3–8% during different test windows is found in Australia, where private placement as a dominant form of fund-raising accounts for 66% of equity funds raised during a recent ten-year period. The UK and the US also recorded significant but smaller CARs while New Zealand reported very small gain as is also reported for Hong Kong. Barclay, Holderness, and Sheehan (2009) find that private investors in the US are usually not active after private placement is made (perhaps due to some rules). Wu and Wang (2005) also find that private placements in Hong Kong do not appear to improve monitoring.

Judged against these facts and the fact that there are some 75 emerging markets, should the stock price reactions be the same as in developed market studies? Private placement as a source of funding has taken prominence during and since the Asian Financial Crisis of 1997: Ariff and Khalid (2005). Private placement raised 58% of funds in 2008 compared to just 1% in 1994 in Malaysia. Another aspect worthy of investigation is the traded volume behavior around private placements as to whether it supports an increased trading

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[1] For just a selection of most cited papers on the positive price effect to rights issues, see Miller and Rock (1985), Myers and Majluf (1984), Smith (1977), Asquith and Mullins (1986). Against this there is also evidence that the share prices react positively in emerging markets and some developed markets as reported in Arsiraphongphisit and Ariff (2008) for Australia; Wu and Wang (2005) for Hong Kong; Anderson et al. (2006) for New Zealand; and, for the US, Hertzel and Smith (1993), Wruck (1989), Lee and Kocher (2001). Therefore, should share price reaction to private placements be the same as in developed markets it requires a further exploration.

Table 1
Results on wealth effect of private placement announcement, International Evidence.

Event window	Aus (%)	Event window	HK (%)	Event window	NZ (%)	Event window	SG (%)	Event window	US (%)
−15,+10	9.89 (3.85)			−30, −1	−1.00 (−0.35)	−5, −2	0.13 (0.41)	−29, −10	4.99 (3.22)
−15, −1	7.64 (5.51)			−5, −1	3.94 (2.72)	−1, 0	−0.89 (−2.11)	−9, 0	3.28 (2.48)
−1, 0	2.06 (4.43)	−1, 0	1.97 (5.01)	0, 1	0.15 (0.13)	+1, +5	−0.44 (−0.20)	−3, 0	1.72 (2.30)
−1, +1	3.42 (6.62)	−1,+1	3.51 (7.28)	+2, +20	−5.05 (−2.16)	+1, +10	−0.98 (−0.63)	+1, +10	0.51 (0.86)
+2, +10	−0.371 (−0.36)			+2, +30	−8.55 (−2.53)	+1, +20	−0.12 (−0.85)	−29, +10	8.78 (3.95)

Note: These statistics are reported in the following studies: Chen, Ho, Lee, and Yeo (2002), Anderson et al. (2006), Wruck (1989) and Barnes and Walker (2006), Ball, Brown, and Finn (1977), Tan, Chng, and Tong (2002).

Table 2
Characteristics of private placements in selected countries.

Placement characteristics	Malaysia	Singapore	New Zealand	United States	United Kingdom
Issue size	Not exceed 10% of the nominal value of the issued and paid-up capital of firm	Maximum 10% in a 12-month period without shareholder approval.	Maximum 10% in a 12-month period without shareholder approval	No restriction	Before 1990 – max £3 m. 1990–95: maxi £15 m After 1996 – no restrictions
Pricing	Shares must not be priced at more than 10% discount to the weighted average market price of the shares for the five market days prior to the price-fixing date	A maximum 10% discount to current market price	No regulatory restriction	No regulatory restriction	A maximum 10% discount to middle market price of those shares at the time of the placing
Resale restriction	On-market trades are prohibited	No regulatory restriction	No regulatory restriction	On-market trades are prohibited, unregistered financial claims may be traded among high net value investors	No restriction
Purchasers	Cannot be sold to directors, substantial shareholders or chief executive officer of the issuer or the holding company of the issuer or associated persons	Cannot be sold to directors or substantial shareholder	Cannot be sold to directors or associated persons	Fewer than 35 sophisticated investors, including existing substantial shareholders.	Purchases may be by entirely new investors or existing investors invited to subscribe for a portions of the private issue

Note: The information sources for these studies are as follows: Malaysia, SC Policies and Guidelines on Issue/Offer of Securities. For Singapore, Chen et al. (2002). For New Zealand, Anderson et al. (2006); for US, Wruck (1989); for U.K., Barnes and Walker (2006).

activity: volume behavior has been reported in some studies on rights issues to support increased trading hypothesis. So investigating the volume behavior in private issues is likely to add new evidence to private placements.[2] Private placements in this market are unique in some ways (see Table 2 in the next section).

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[2] The frequency of private placement is increasing faster than seasoned equity offers over a recent 15-year period: it accounts for 40% of total equity funds raised compared to less than 5% in 1995. The rights offers still account for 60% of equity funds raised in Malaysia in 2010. *Bursa* Malaysia has about 1,000 companies listed, and it is a liquid but volatile market. The equity and bond securities traded therein provide up to about 32% of the total capital needs of the economy in most years. This market is also included by major investment advocacies as an investable market because of its efficiency, current capital openness and sound regulatory oversights. It has been shown to be a Fama-efficient market: Annuar and Shamsher (1993).

A wealth transfer hypothesis has been suggested: an unexpected issue of new equity reduces the risk of the firm's outstanding debt.[3] Consequently this result in a wealth transfer from shareholders to bondholders, which has a positive effect on share prices when seasoned equity issues are offered: see Galai and Masulis (1976) and Masulis (1983). Hence, wealth transfer effect is also evident from private placements as well.

Wruck (1989) and Hertzel and Smith (1993) reported private placement events in the US are known to lead to positive market reaction. Private placement exercises increase in ownership concentration and control of firm significantly. They suggest that a positive stock price reaction is a reflection of a favorable inside information to the market. Similarly, Kato and Schallheim (1993) showed that the share price reaction to private placement in Japan is significantly positive.

2.2. Institutional differences on private placements

It is probable that the significant differences in the characteristics of private placements in developed and emerging markets may have different price-relevant effects. The Malaysia market underwent a severe financial crisis. It is during this crisis period that the frequency of private placement peaked to 58% of funds raised. Also some firms had two to three times more private placements than rights issues.

For example, private placements predominantly involved a small number of identifiable wealthy investors in this market, not institutions such as mutual funds as are the cases in developed markets. Further, private equity placements account in 2010 for about 10% of outstanding shares largely due to its overuse during financial crisis periods. This resulted in improved monitoring to hitherto less monitored firms.

In terms of pricing of private placements, unlike in the US and UK, where there are little or no regulatory constraints, privately-offered shares in this market must not be priced at more than 10% discount to the weighted average market price of the shares over five market days immediately prior to the price-fixing date. Very importantly, unlike in other markets, there is a binding resale embargo on owners of private placements from trading out of this tranche. They are prohibited for a period of three years for the privately placed portion (let us call it 'private tranche') of the firm's shares.

In the US, on-market trades are prohibited for a shorter time but these may be traded as unregistered financial claims among high net value investors without restrictions, which provide a way around the unbreakable moratorium in Malaysia. Thus, the non-trading restriction placed on Malaysia's private tranche retards full market price discovery thus creating a *soft segmentation* of the market for the firm's shares.[4]

3. Data and methodology

3.1. Data

The firms included are from a sample of shares selected for analysis from the *Bursa* Malaysia Main Board: we excluded the firms in Second Board. The data relate to the prices of shares of companies with announcements of private placements for the period 1994 to 2008, wherein this period included economic crises and recovery as well as normal economic conditions. The data included all private placements (250) and this sample is reduced after applying the following criteria: Only listed companies that announced private placements of common stocks with complete information in the data sources were included; events with other regular announcements during the test period of −30 to +30 days were deleted; announcements by PN4, PN17 (financially distressed firms), MESDAQ and de-listed or suspended companies were excluded.[5] The initial sample consisted of 250 announcements of private placements.

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[3] Wruck (1989) argues that the value of the firm increases when a change in ownership concentration help align management with shareholder interests. Lee and Kocher (2001) showed US evidence of positive price effect from private placements.

[4] Studies of market segmentation have provided differential value for segments. For example foreign tranche vs local tranche traded separately as dual-listings lead to significant price differences in the same market: see Ariff and Khan (2004). However, with a bar on trading of a tranche, a market's valuation difference is not revealed.

[5] In Malaysia, normal earnings reports are released twice a year, so using a 61-day window did not severely reduce the sample. The shares of PN4 and other firms were suspended from trading, so these could not be included even if data were available prior to their suspensions. The database does not have data on delisted firms; of course, suspended firms do not have data over the period of suspensions.

After screening, a clean sample of eighty-nine private placement announcements were available for the test window of t_{-30} to t_{+30} trading days around the announcement day, t_0.

The capitalization and dividend adjusted daily share prices of companies announcing private placements and the concurrent daily values of the Composite Index (KLCI as the value-weighted market index I_t) were sourced from the DataStream database at the University Putra Malaysia. The list of the firms and the announcement dates of private placements were sourced from the *Investor Digest*, shareholder circulars and *Bursa* Malaysia's website. Table 3 provides a summary on financing patterns of listed firms in Malaysia.

The frequency of private issues increased by an average of 10% per annum leading to the total funds provided by this method almost equaling the amount by rights-and-new issues. Private placement started in 1992 raising just 1% of the total equity funds. It rose to account for 58% just before the Global Financial Crisis. During the height of the Asian Financial Crisis, just 5 years after its debut, private placement jumped to about 25% of all the funds during the crisis period. Hence the frequency of private placement increased during the two financial crisis periods. A belief in the market was that firms negotiated large funding needs directly with rich individuals to save the firms under severe financial distress during those critical years.

3.2. Are private placement firms different from others?

Crucial to the research question on private placement study is the following question: Are firms engaging in private placement issues different from those not engaged in private placement? If they are, do long-run performances say over 3-years the same as over the announcement period?: Billet et al. (2011). We felt this question has to be answered first before proceeding with the research. The results are in Table 4.

Therefore, we selected for each private placement issuing firm, a firm that did not issue a private placement in the year of issue. We tested the gross returns of these two samples to verify if the gross returns are different.

The results show a buy and hold return over an average one year, two year and three year periods following the private placement announcements. The results show negative return of the sampled firms over one-year, two-year and three-year periods after the announcement while the matched firm results show positive gross return differences specially in the three-year period following the private placement

Table 3
Funds raised through seasoned equity offerings and private placements in Malaysian capital market: 1992–2007 (RM Million)*.

Year	Net fund raised by public sector	Types of fund raised by private sector in RM million				Private placement over total SEO equity (%)	Private placement over total new equity (%)
		IPO	Private placement	Total seasoned equity**	Debt securities		
1991	3157	1711	–	2649	1873	No issue	–
1992	1531	5416	28	3766	3324	1%	0.29%
1993	1181	913	659	2520	3640	26%	19%
1994	1778	2973	799	5485	9033	15%	9%
1995	−35	4175	1147	7263	8339	16%	10%
1996	1331	4099	*4554*	11825	14534	39%	29%
1997	−1407	4781	*3234*	13577	16784	24%	18%
1998	9804	685	320	1103	6175	29%	18%
1999	6297	1009	519	5074	15026	10%	9%
2000	13659	992	912	4937	19936	18%	15%
2001	15214	1678	**1681**	3605	17577	47%	32%
2002	8568	6835	**2402**	5765	2058	42%	19%
2003	23851	3952	707	3682	18731	19%	9%
2004	26671	4017	838	2400	9526	35%	13%
2005	15825	5305	*1460*	2968	19579	49%	4%
2006	20919	1519	*1911*	3367	7368	57%	7%
2007	25178	2486	*2022*	4526	13174	45%	5%

Source: www.bnm.gov.my.
Bold numbers are referred to fund raised during financial crisis period.
*Excludes funds raised by the exercise of Employee Share Options Scheme, Transferable Subscription Rights, and Irredeemable Convertible Unsecured Loan Stocks. **Seasoned Equity Offering = Right issue + private placement + special issue.

Table 4

Long run performance difference between private placement issuing firms and matched sample of non-issuing firms.

Panel A	Raw return for private placement %			Size and industry matched %			Differences between private placement and size/ind matched		
	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)
Mean	−0.11	−0.12	−0.15	0.06	−0.02	0.08	−0.17	−0.10	−0.20
Median	−0.12	−0.21	−0.18	−0.09	−0.07	−0.10	−0.02	−0.09	−0.03
t-Value							−0.81	−0.28	−1.73
Panel B	Raw return for private placement %			Size and B/M matched %			Differences between private placement and size/BM matched		
	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)
Mean	−0.11	−0.12	−0.15	−0.02	−0.05	0.06	−0.09	−0.07	−0.06
Median	−0.12	−0.21	−0.18	−0.09	−0.08	−0.14	−0.04	−0.12	−0.05
t-Value							−0.415	−0.823	−1.832
Panel C	Raw return for private placement %			Size matched %			Differences between private placement and size match samples		
	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)	1 Yr (BHR)	2 Yr (BHR)	3 Yr (BHR)
Mean	−0.11	−0.12	−0.15	−0.05	−0.07	0.07	−0.06	−0.05	−0.05
Median	−0.12	−0.21	−0.18	−0.10	−0.05	−0.11	−0.01	−0.09	−0.03
t-Value							−1.03	−1.78	−1.81

announcement. As shown in panel A, the difference in mean values for a buy and hold return as the differences between placement sample and matched firm are −20% for three years, −10% for two years and −17% for one year respectively.

Similarly, as shown in panel B, the mean buy and hold abnormal return or size and book-to-market value matched samples are −6% for three years, −7% for two years and −9% for one year respectively. The t-statistics indicate that only a three-year buy and hold returns are statistically significant at the 0.10 level. Therefore the results confirm different performance of private placement announcements, regardless of how we did the matching. The plausible explanation of these results is that this source of financing has taken increasing dominance over other form of financing since the Asian Financial crisis as will be documented later in this paper. Financial rescue and survival appear to be the main reasons for resorting to private placements as could be seen by the larger funds raised by these firms during the crisis years. This could be a unique result for this period when the market index came crashing to 370 points from around 1400 prior to the crisis.

3.3. Measuring the price effect

The event study methodology (Ball & Brown, 1968; Fama, 1969) is applied to ascertain price effects on the announcement for 60 days surrounding the announcement and the beta was estimated from the estimation period (day −31 to day −230). The abnormal returns on each of the pre- and post-event days are calculated by subtracting the actual returns at time t from the expected returns using the following equation. The expected returns (ER_{it}) were estimated based on the risk-adjusted market model expressed as follows:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \qquad (1)$$

where:

$\alpha_i + \beta_i R_{mt}$　the expected return suggested by theory,
R_{it}　　　return on stock i at period the estimation period, $Ln(P_t/P_{t-1})$
R_{mt}　　　return on market portfolio (KLCI) at time t,: $Ln(I_t/I_{t-1})$
α_i　　　intercept of stock i
β_i　　　slope coefficient of stock i and

α_i, β_i, and $\sigma^2 \varepsilon_i$ the parameters of the market model.

The OLS beta was adjusted for thin-trading bias using Scholes and Williams (1977) model with two lags and two leads following Annuar and Shamsher (1993).

The abnormal returns on the days surrounding the announcement are estimated for each firm on each day of the event period. The abnormal returns for all firms on each event day are then aggregated and averaged, to get the average abnormal returns. The abnormal returns aggregated across firms are used to draw overall inferences on the price effect of the announcements. The cross-sectional average abnormal returns for the event are aggregated over the firms making the placements. Then the cumulative average abnormal return (CAR) is computed as follows:

For any interval in the event window:

$$CAR_i\left(t_j, t_k\right) = \sum_{tj}^{tk} AR_{it} \tag{2}$$

where CAR_i (t_j, t_k): are CAR of AR from the starting period of measurement t_j to the end of the measurement window t_k.

To test the null hypothesis that the CAR are zero in a specific window, the following test statistic is utilized[6]:

$$t-statistic = \frac{\overline{CAR_t}}{[\,\mathrm{var}(CAR_t)]^{1/2}} * \sqrt{N} \sim t-\mathrm{distribution}. \tag{3}$$

In practice, because the variance of (CAR) is unknown, an estimator must be used to calculate the variance of the abnormal returns. To allow for changing variance as part of the null hypothesis, it is necessary to eliminate the reliance on the past returns to estimate the variance of the aggregated cumulative abnormal returns estimated as follows:

$$\mathrm{Var}\left(CAR_{(t1,t2)}\right) = \frac{1}{N^2} \sum_{j=1}^{N} \left[\left(CAR_{t1,t2}\right) - \left(\overline{CAR_{t1,t2}}\right)\right]^2. \tag{4}$$

3.4. Measuring the volume effect

Changes in trading volume surrounding private placements provide further insight into the trading intensity for additional information on such announcements. If private placements announcements signal valuable new information, then it is expected that trading volume will increase in the post-announcement period as investors rebalance their shareholdings. The Kryzanowski, Lazrak, and Rakita (2010) and Etebari and Duncan's (1997) approaches provide us a procedure to follow in this regard. A measure of abnormal trading volume for each announcement is calculated using their procedures. The abnormal volume (AV) for each announcement on day t is calculated as:

$$AV_{it} = \frac{V_{it}}{EV_i} - 1 \tag{5}$$

where, EV is expected volume based on the daily trading volume (V) for the same firm calculated during the estimation period as shown below and consistent with the Brown–Warner mean-adjusted computation.

$$EV = \frac{\left[\sum_{-230}^{-31} V_{it}\right]}{200}. \tag{6}$$

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[6] Although the sample is small, it has the desirable character that there is no confounding effect, so that our parameters are estimated robustly. Since the number of observations is greater than 72, we use the student t-table to conduct the tests in preference to also reporting non-parametric test results sometimes found in some studies with smaller samples.

The average abnormal volume (AAV) on a given trading day t is calculated by summing the abnormal volume for each announcement in the sample and dividing by the number of sample announcements. The cumulative abnormal trading volume is also constructed in the normal manner for specified event windows.

$$AAV_t = \frac{1}{N}\sum_{t=1}^{N}AV_{it}. \tag{7}$$

The t-statistic is calculated as follows:

$$t-statistic = \frac{AAV}{\sqrt{\dfrac{\sum_{i=1}^{N}\sigma^2_{i,pre}}{N}}} \tag{8}$$

where, $\sigma^2_{i,pre}$ is the standard deviation of security specific volume of each announcement estimated during the pre-event measurement period as follows:

$$\sigma^2_{i,pre} = \sqrt{\frac{\sum_{-230}^{-31}AV^2_{it}}{200-1}}. \tag{9}$$

4. Empirical findings

4.1. Price, volume and ownership effects of private placement announcements

This section provides the main evidence on private placement announcement effect on share prices by focusing on the event effect over −10 days before +5 days after the announcement. We use this short window to narrow down to the days closer to the issues. A review of emerging market studies show that the event impact is studied over about 10–15 days while in developed markets with more active information-trading activity, this is measured over a shorter period. The average abnormal returns and cumulative average abnormal returns (CAR) for the test window surrounding the private placement announcements are presented in Table 5.

The CAR for the period prior to the announcement date, CARs$_{(-10,0)}$ is positive 2.03%, and is statistically significant with a t-value of 2.2. A positive effect is consistent with evidence from previous studies in developed markets: example in the US, it was 3.28% over the 2-day window; in Australia 7.61% over −15 to −1; and in New Zealand it is 3.94% over −5 to −1.

The AAR on the announcement date, AAR$_{(t=0)}$, is positive 0.56%: on day −1, it is 0.53% and significant using 2-tail test. Plausible explanation for the significant positive announcement period effect in this market is that the market perceives a positive signal from a private equity in anticipation of improving the fortunes of the firm by using private funds from placements as reducing the information asymmetry as well as increased ownership concentration leading to increased monitoring. These findings are consistent with prior studies: Wruck (1989) and Kato and Schallheim (1993). Thus, private placements in emerging market appear to have similar positive effect as in developed markets probably due to the same information asymmetry dynamics.

Turning now to CAR, on average, there is an increase in shareholder wealth over the 10-day period prior to the private placement announcement, thus the event is a wealth-increasing good news event. The CAR for the window −10 to 0 is positive with a 2.03% significant: result is consistent with Wruck's (1989) findings for the US and findings reported in other studies for other developed markets. The positive and significant CARs before the announcement is probably due to speculative trading based on information leakage. Fig. 1 provides a plot of the price reaction to private placement announcements over −30 to +15 days surrounding the announcement date.

The trend in the plot shows a gentle increase in abnormal returns starting from about −30 days peaking at the time of announcement at day 0 and persisting over day +1 to about +10 days. The gains are corrected

Table 5
Daily abnormal returns (AAR) and cumulative abnormal return (CAR) surrounding private placement announcement, 1994–2008.

Total sample (n = 89)			
Event day (t)	AAR (%)	t-Stat	Sig. (2-tailed)
−10	0.35	1.19	0.239
−9	0.41	1.38	0.170
−8	−0.11	−0.31	0.754
−7	0.24	0.71	0.478
−6	−0.07	−0.28	0.777
−5	−0.05	−0.17	0.868
−4	0.38	1.36	0.178
−3	−0.25	−0.76	0.448
−2	0.04	0.17	0.863
−1	0.53	1.67***	0.092
0	0.56	1.37	0.175
1	−0.29	−1.15	0.253
2	0.11	0.30	0.762
3	−0.15	−0.50	0.621
4	0.04	0.13	0.897
5	0.41	1.40	0.166
	CAAR (%)	t-Statistics	Sig. (2-tailed)
[−10, 0]	2.03	2.22**	0.029
[−5, 0]	1.21	1.55	0.124
[−1, 0]	1.11	2.11**	0.038
[0, +1]	0.28	0.63	0.527
[0, +5]	0.69	0.95	0.345

The symbols ** and *** denote statistical significance at the 0.05 and 0.10 levels, respectively, using a two-tailed test.

in the period from day +11 onwards, with the final cumulative gain of about 4% around day +20. Thus, the chart suggests a permanent price gain of about 4% for the event.

4.2. Ownership concentration

One reason suggested for a positive price effect by Wruck is the ownership concentration: see also Anderson et al. (2006). None of the studies to-date have actually tested this proposition. Therefore, we
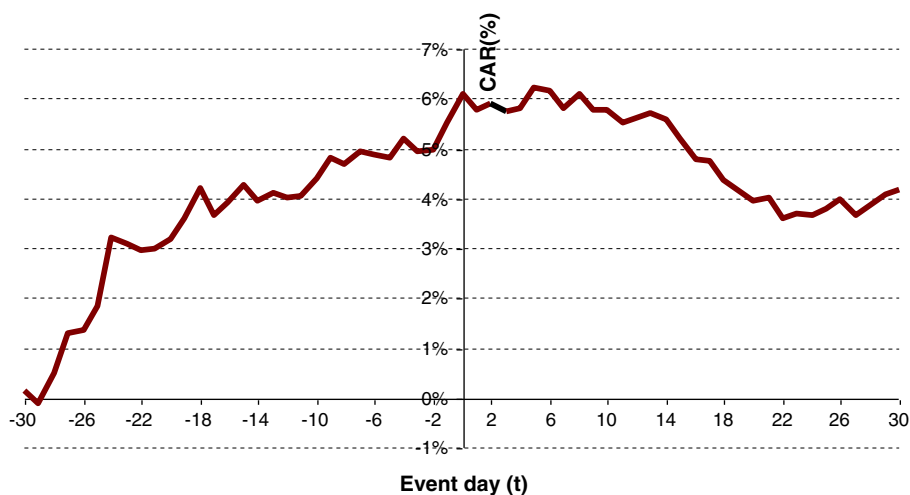

Fig. 1. Cumulative average abnormal returns for 30 days surrounding the private placement announcements.

Table 6
Ownership analysis after and before private placement.

	Large management shareholder		t-Statistic	Large non management shareholder		t-Statistic
	Before	After		Before	After	
Total	87.00	87.00		78.00	80.00	
Mean	12.19	10.89	**1.55** (**.124**)	36.83	40.74	2.76* (0.008)
Median	2.50	1.84		33.34	38.52	

Note: * indicates significant at 0.01 level.

measured the increase in ownership concentration by measuring it prior to and after private placements in this emerging market using the ownership details given on page 1 of the annual reports of companies. Our results are presented in Table 6.

There is a substantial increase in concentration due to private placements. From a median value of 2.5% (management ownership) and 33% of non-management ownership, the first number decreased to 1.84% for management while the number for non-management increased to 39%. The tests on the mean values show a significant increase in the case of a non-management ownership concentration. Thus, there is a significant increase in ownership concentration due to private placements. The positive price effect could have arisen from this important factor. We have tested the change suggested by Wruck (1989) as reported in this table.

Table 7
Results of average abnormal (AAV) and cumulative abnormal volume (CAAV) for the total samples, sample based on different economic conditions, intended use of proceeds and discount or premium.

	Panel A Different economic conditions						Panel B Discount or premium in offer prices				Panel C Intended use of proceeds			
	Before crisis (94–96) (n = 9)		During crisis (97–99) (n = 17)		After crisis (00–07) (n = 63)		Discount (n = 70)		Premium (n = 19)		Investment (n = 23)		WC/Debt Repayment (n = 66)	
Event day (t)	AAR (%)	t-Stat	AAR (%)	t-Stat	AAR (%)	t-Stat	AAV	t-Stat	AAV	t-Stat	AAV	t-Stat	AAV	t-Stat
−10	−0.26	−0.89	1.22	1.88*	1.01	2.41**	1.17	3.01**	0.30***	0.48	0.69	1.32	1.08	2.64**
−9	−0.29	−1.24	1.91	2.26**	1.00	1.96*	1.06	2.77**	1.14	0.91	0.53	1.02	1.28	2.46**
−8	−0.38	−1.86	1.79	1.72	0.78	1.97*	1.07	2.50**	0.35	0.52	0.37	0.55	1.11	2.55**
−7	−0.34	−1.69	2.21	1.69	1.64	1.58	1.95	1.99*	0.31	0.82	0.18	0.41	2.09	2.03**
−6	−0.45	−3.10**	2.36	1.16	0.38	1.43	0.92	1.53	0.09	0.32	−0.17	−0.66	1.07	1.68
−5	−0.14	−0.51	2.26	1.56	0.36	1.21	0.97	2.02**	−0.19	−0.88	0.30	0.71	0.88	1.76
−4	−0.36	−1.25	2.40	1.77*	0.93	1.87*	1.36	2.38**	0.33	0.70	0.78	0.86	1.23	2.33**
−3	−0.09	−0.28	6.26	1.94*	1.73	1.41	3.03	2.18**	0.58	0.98	0.97	1.44	3.06	2.07**
−2	−0.35	−2.15*	1.94	1.32	1.39	1.47	1.71	1.88*	0.02	0.07	−0.06	−0.19	1.88	1.92*
−1	−0.43	−3.45**	3.01	2.02*	1.91	2.35**	2.33	2.87**	0.50	0.87	0.18	0.40	2.56	2.98**
0	−0.15	−0.67	1.89	1.75*	2.64	2.47**	2.71	2.72**	0.53	1.21	1.29	1.51	2.57	2.50**
1	−0.13	−0.42	1.97	1.44	1.87	2.14**	2.19	2.59**	−0.06	−0.26	0.30	0.93	2.24	2.46**
2	−0.36	−1.84	3.85	1.33	1.62	2.42**	2.21	2.23**	1.10	1.25	0.54	0.87	2.46	2.35**
3	−0.33	−2.37**	4.44	1.53	1.35	2.75**	2.28	2.38**	0.65	1.44	0.18	0.68	2.56	2.51**
4	0.13	0.20	3.50	1.49	2.61	2.60**	3.09	2.85**	0.81	1.50	0.39	0.97	3.43	2.95**
5	−0.08	−0.23	3.11	1.82*	2.73	2.31**	3.27	2.82**	0.17	0.44	0.44	1.04	3.28	2.75**
CAAR(%)														
[−10, 0]	−2.93	−1.99*	25.41	2.30**	12.99	2.40**	17.19	3.06**	3.84	0.88	4.74	0.98	17.69	3.02**
[−5, 0]	−1.33	−1.57	16.21	2.39**	8.43	2.18*	11.34	2.91**	1.71	0.91	3.25	1.14	11.39	2.81**
[−1, 0]	−0.57	−1.97*	4.74	1.94*	4.38	2.78**	4.87	3.17**	1.00	1.05	1.46	1.28	4.94	3.07**
[0, +1]	−0.27	−0.62	3.76	1.62	4.28	2.35**	4.69	2.70**	0.47	0.80	1.58	1.40	4.56	2.51**
[0, +5]	−0.87	−0.69	18.14	1.63	11.95	3.10**	14.76	3.26**	3.02	1.40	3.00	1.36	15.48	3.25**

The symbols *, ** and *** denote statistical significance at the 0.10, 0.05 and 0.01 levels, respectively, using a two-tailed tests.

4.3. Volume behavior

This sub-section documents evidence on volume activity as this aspect has yet been analyzed in any markets. In rights studies research, there are reports on volume activity. The average abnormal volume and cumulative average abnormal volume (CAV) surrounding private placement announcements are shown in Table 7. On the entire sample (Panel A in the table) we find that abnormal announcement day volume (AV) is 0.9 times the expected volume (that is, about 10% less than average), which is significant at the 0.10 level. However, during the three-day prior to announcement day, AAV ($t = -3$) is 2.50 times the expected volume. The results in panels B, C and D are summarized for trading volumes based on different economic conditions, use of proceeds and the discount/premium in the private placements offer price respectively. During the pre-crisis period (Fig. 2), trading volume decreased prior to the announcement date with a CAV$_{(-10,0)}$ of -2.93 times the expected volume, which is also significant at 0.05 level. That is, the volume decreased 193 times.

During the crisis period, the volume increased significantly by 21.4 times, which is significant at 0.01 level; during post-crisis, it was 12.99% and significant at 0.01 level.

For discounted private placements, there was a significant increase in trading volume as volume increased 17.19 times the expected volume in the pre announcement period CAV$_{(-10,-1)}$; 14.7 times during the period after the crisis $t = 0$ to $+5$ window. This increase in trading volume for private placements with discounted offer prices can be explained by the close monitoring hypothesis that suggests that the high net-worth individuals and institution provide such close monitoring in this market. In this market, these investors are not permitted to trade their tranche of shares for 2–3 years. Existing investors take this event as a cue that in the future close monitoring by the new investors as insiders will lead to better share price performance, so non-private placement shareholders increase their trading activities that account for substantial increases in volume activities.

For private placements with premium offer prices, there were positive increase in trading volume in the pre and post announcement period but were not statistically significant. This could be due to investors already discounting the premium offer price and they expect not much positive changes in the future. Therefore no significant increases in trading volume are observed.

The trading volume increases (Fig. 3) in the case of intended use of proceeds for debt payment and working capital purposes: CAR over -10 and -1 is 8.94 times higher than the expected trading volume. But the volume increases at the announcement day and at the post-announcement period are positive though not significant. The use of proceeds for debt payment reduces financial risk but does not provide a positive outlook for the future. On the contrary, the increases in trading volume for investment purposes are positive in both the pre- and post-announcement periods. This could be due to a release of new information about the future prospects after the announcement.
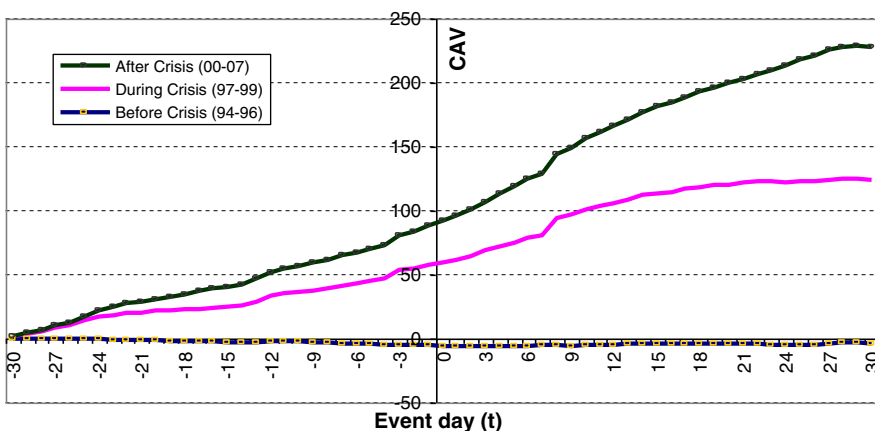

Fig. 2. Cumulative average abnormal volume (CAAV) plot of private placement announcements based on different economic conditions.
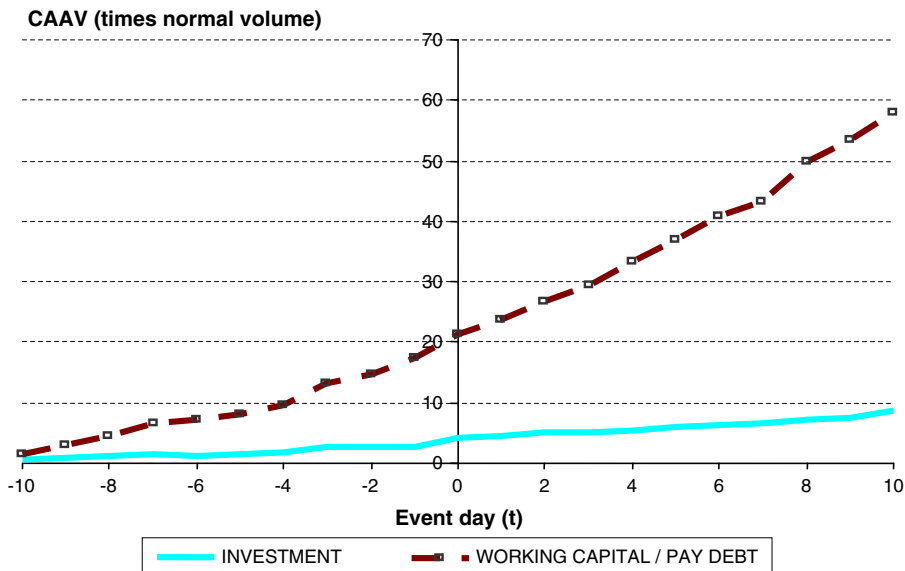
CAAV (times normal volume)

Fig. 3. Cumulative average abnormal volume (CAAV) plot of private placement announcements based on the intended use of proceeds.

4.4. Private placements and economic conditions

To ascertain if price reactions to announcements of private placements differ during different economic conditions (before crisis, during crisis and after crisis), further tests were done. The results are summarized in Fig. 4 and Table 7. The statistics suggest that during the period before the financial crisis, both the AAR and CAR are positive implying that there is a positive price reaction to private placement announcements. This is evident in the plots of the numbers in Fig. 4.

The economy was growing at 8.4% during the pre-crisis period, but it declined to below 3% during and after the crisis years. During the period before the crisis, the price reaction to private placements is very much muted and small. The size of the price effect is about one-third to that of the effect during normal periods. This may be explained by the fact, that during this period, the amount of funds raised by this
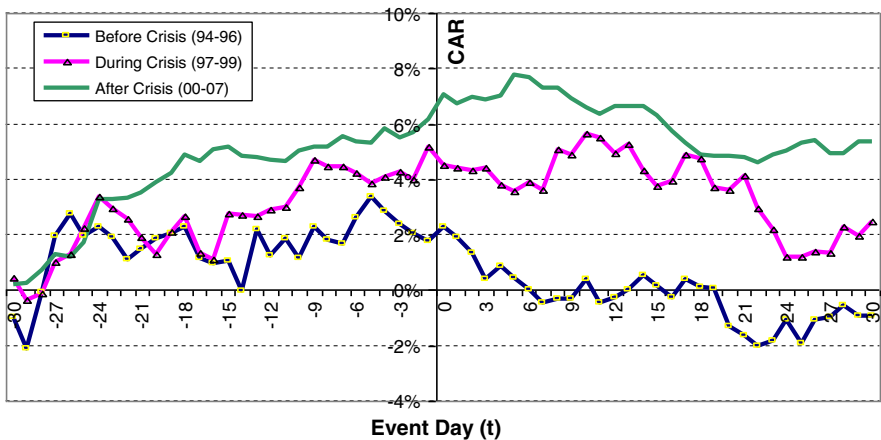

Fig. 4. Cumulative abnormal return (CAR) over different economic conditions: pre-crisis (94–96); during crisis (97–99) and after crisis (00–07).

method was about less than half in the crisis period since there were plenty of funds available in the market place at low costs. Hence, investors did not appear to price the private placement as a significant event. However, during the crisis period, when the stock prices had declined by a whopping 65%, firms resorted to private placement aggressively.

As seen in the graph, the price reaction during the crisis was much more pronounced. As is seen in the graph for the period after the crisis, investors appear to regard private placement as a significant event, and the plot dominates the other two periods. The rate of growth in the amount of funds via private placement was much higher (1.3% per year) compared to growth of seasoned equity (1% per year).

4.5. Placements effect by intended use of proceeds

Panel C of Table 7[7] summarizes the abnormal returns by separating the event effect according to the intended use of proceeds from the private placement exercise. Intended use is revealed by the firms in their prospectuses. We collected this information from prospectuses and coded them as: private placement proceeds earmarked for working capital requirements so to continue business; and for debt repayment. Obviously, the latter intended use is a severe indictment on the management of the firm.

Fig. 5 plots the CARs based on the intended use of proceeds from placements. The plot shows a significant run-down in abnormal returns subsequent to private placements announcement for both debt repayment and implementing new projects. However, the CAR plot for announcements, when proceeds are identified for debt repayment and/or working capital requirements, dominates the plot for announcements of proceeds to be used for investment. These findings imply that the market expects positive long-term abnormal returns when the proceeds from private placement exercise are intended for working capital requirements and for debt repayment. This could also be due to a reduction in financial risk when debts are settled and available working capital funds are sufficient to sustain the business.

A significant positive price reaction of 2.44% is observed prior to the announcement, $CAR_{(-10,0)}$: Table 8. This is consistent with findings that decrease in financial leverage contributes to a positive price effect as such action is attributed as reducing financial distress.

However, when the proceeds are earmarked for investment purpose, the pre-event $CAR_{(-10,0)}$ is positive and the post-event $CAR_{(0,+5)}$ is negative but not significant. The event-day $CAR_{(0,+1)}$ is positive but not significant. The negative returns in the post announcement period could be due to high cost of private equity financing and the difficulty of the firm to resort to other cheaper form of financing considering the weak and desperate financial position of the firm. This also reflects the fact that if the proceeds are utilized for investments, there is a need to identify profitable investments to compensate the high costs of financing, and therefore contributing to higher business and financial risk.

4.6. Private placement effect from offer price discount

In this sub-section, we report the price reaction to the discounts offered. The issue price for the private placement is determined at a date nearer to the date of placement. The price is based on the weighted average market price of the firm's shares over the previous five days to the placement date, subject to a discount of not more than 10%, if deemed appropriate as may be approved by the Securities Commission (SC). The price fixing date is determined after receiving the approvals from relevant authorities and after taking into consideration prevailing market demand conditions. In the event that the weighted average market share price for the five days is below par value, the issue price for the private placement is set at RM1.00 per share and it is considered sold at premium. The discount and premium in offer price of privately-placed shares are calculated based on the difference in actual offer price and expected offer price. Expected offer price[8] is calculated based on the weighted average market price of the firm's shares over five days prior to the

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[7] The statistics on abnormal returns used to calculate the CAR are available with the submitting author. These were left out in order to conform to the paper size requirements of the Journal.
[8] The investors already expect the offer price on the day of private placement announcement although the offer price is determined later on a price fixing date.
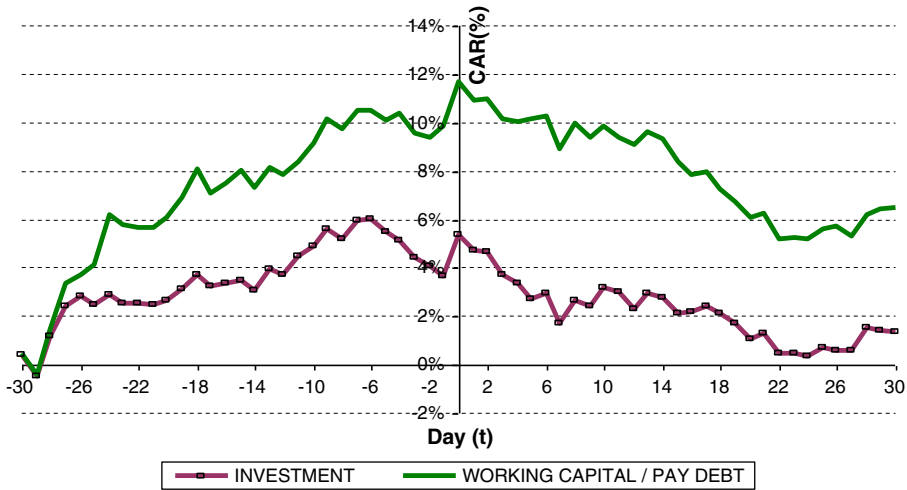
Fig. 5. Plots of cumulative abnormal return (CARs) of private placement announcements based on intended use of private placement proceeds.

placement announcement. An analysis of the expected offer price shows that 70 private placements were sold at a discount and 19 private placements were sold at premium. Premium or discount is calculated as follows:

$$\frac{P_{real} - P_{exp}}{P_{exp}}$$

where: Discount: negative value, Premium: positive value, and P_{real} = real offer price; P_{exp} = expected offer price.

Panels B of Table 9 and Fig. 6 show the share price reaction of private placements at premium or discount for selected windows. The findings reveal an asymmetric price reaction between the discounted and premium placements. The discount sub-sample showed positive price reaction before the announcement day of 2.46% $CAR_{(-10,0)}$ which is significant. On the event day $t = 0$, the value is 1.33% and is significant; the post-event $CAR_{(0, +5)}$ is positive but not significant. The discount is considered an incentive by the management of the issuing firm since such an incentive is a signal of future prospect of higher earnings. It could well be that with the offer of discount the entry of private-placement investors is considered more likely as good news and that the existing shares are valued higher.

Private placements with offer prices at premium experience positive but insignificant price effect: $CAR_{(-10, 0)}$ of 0.42%. Based on the firm quality argument, private placements at premium will send a positive signal to the market with respect to how management and institutional or high wealth investors perceive the firm's future prospects and value. Please see Fig. 6 for a plot of the price reactions to discount.

4.7. Searching the determinants of CAR

A number of publications explore how independent variables are associated with observed abnormal returns. Table 9 presents the descriptive statistics (Panel A) and correlation coefficients matrix (Panel B) for the independent variables. PROMV is the natural logarithm of the ratio of private placement proceeds to market value of firm on day t_{-30}. INV and FIN are dummy variables where simultaneous announcements for new investment opportunities or repayment of debt (respectively) are announced at the time of the private placement. VAR is variance of daily stock returns from t_{-230} to t_{-31} while NON is the ratio of number of non-trade days during estimation period divided by 200 estimation period days. PEQ is the ratio of the offer price to the closing stock price on day t_{-30}. BM is the equity book value to market value on day t_{-30}. SIZE is natural logarithm of market value of the firm at $t = {}_{-30}$.

Table 8
Results of average abnormal return (AAR) and cumulative abnormal return (CAR) based on different economic conditions, intended use of proceeds and discount or premium in offer prices.

	Panel A Different economic conditions						Panel B Discount or premium in offer prices				Panel C Intended use of proceeds			
	Before crisis (94–96) (n = 9)		During crisis (97–99) (n = 17)		After crisis (00–07) (n = 63)		Discount (n = 70)		Premium (n = 19)		Investment (n = 23)		WC/debt Repayment (n = 66)	
Event day (t)	AAR (%)	t-Stat	AAR (%)	t-Stat	AAR (%)	t-Stat	AAR (%)	t-Stat	AAR (%)	t-Stat	AAR (%)	t-Stat	AAR (%)	t-Stat
−10	−0.72	−2.37**	0.74	1.03	0.39	1.09	0.29	0.92	0.53	0.77	0.41	0.82	0.32	0.91
−9	1.16	2.48**	0.99	1.11	0.14	0.43	0.56	1.64*	−0.17	−0.31	0.70	1.33*	0.31	0.86
−8	−0.50	−0.96	−0.23	−0.37	−0.02	−0.04	0.04	0.09	−0.65	−1.55*	−0.44	−0.89	0.01	0.02
−7	−0.13	−0.34	−0.01	−0.01	0.36	0.82	−0.03	−0.07	1.22	1.33*	0.76	1.77**	0.06	0.14
−6	0.95	1.20	−0.26	−0.44	−0.16	−0.57	−0.11	−0.37	0.06	0.13	0.11	0.19	−0.13	−0.50
−5	0.73	1.59	−0.36	−0.65	−0.07	−0.21	0.01	0.04	−0.25	−0.29	−0.58	−1.29	0.14	0.42
−4	−0.50	−0.95	0.23	0.37	0.55	1.55	0.52	1.49*	−0.12	−0.38	−0.34	−0.81	0.63	1.82**
−3	−0.48	−0.65	0.19	0.15	−0.34	−1.08	−0.14	−0.36	−0.68	−0.96	−0.73	−1.34*	−0.09	−0.22
−2	−0.35	−0.82	−0.27	−0.54	0.17	0.68	−0.03	−0.11	0.26	0.73	−0.34	−0.91	0.16	0.67
−1	−0.28	−0.30	1.15	1.21	0.48	1.31	0.72	1.85**	−0.17	−0.34	−0.40	−0.81	0.85	2.13***
0	0.52	0.80	−0.67	−1.08	0.90	1.65*	0.61	1.20	0.38	0.88	1.68	1.24	0.17	0.60
1	−0.35	−0.49	−0.09	−0.19	−0.34	−1.05	−0.37	−1.20	−0.02	−0.05	−0.61	−1.30	−0.18	−0.60
2	−0.59	−0.68	−0.06	−0.13	0.26	0.53	0.03	0.07	0.42	0.64	−0.09	−0.16	0.19	0.40
3	−0.92	−2.04*	0.06	0.07	−0.10	−0.26	0.01	0.01	−0.73	−1.37*	−0.95	−2.6***	0.12	0.32
4	0.48	0.82	−0.58	−1.56	0.15	0.32	0.03	0.07	0.10	0.23	−0.34	−0.91	0.18	0.41
5	−0.43	−0.64	−0.27	−0.45	0.72	1.93*	0.38	1.07	0.53	1.15	−0.64	−1.70	0.78	2.12***
CAAR(%)														
[−10, 0]	0.40	0.19	1.51	0.55	2.40	2.33**	2.46	2.21***	0.42	0.37	0.84	0.54	2.44	2.20***
[−5, 0]	−0.36	−0.21	0.27	0.12	1.69	1.91*	1.70	1.77*	−0.58	−0.66	−0.70	−0.45	1.88	2.10***
[−1, 0]	0.24	0.21	0.48	0.40	1.38	2.15*	1.33	2.09***	0.20	0.35	1.28	0.89	1.03	2.07***
[0, +1]	0.17	0.28	−0.75	−1.13	0.57	0.98	0.25	0.47	0.36	0.66	1.07	0.87	0.00	0.00
[0, +5]	−1.30	−0.97	−1.60	−1.30	1.60	1.70*	0.70	0.78	0.67	0.74	−0.95	−0.73	1.26	1.46*

The symbols *, ** and *** denote statistical significance at the 20%, 10% and 5% levels, respectively, using a two-tailed test.

Table 9
Descriptive statistics, Pearson correlation and multicollinearity test.

Panel a — Independent variable descriptive statistics					
	Minimum	Maximum	Mean	Std. deviation	Collinearity statistics
					Variance Inflation Factor (VIF)
PROMV	15.10	18.39	16.58	0.89	1.90
INV	0.00	1.00	0.25	0.50	1.90
FIN	0.00	1.00	0.75	0.49	2.08
VAR	0.00	9.32	0.56	1.72	1.46
NON	0.03	0.21	0.07	0.03	1.78
PEQ	0.79	1.63	1.03	0.17	1.33
BM	0.12	2.70	0.88	0.61	2.09
SIZE	3.69	9.19	6.28	1.40	3.98

Panel b — Pearson correlation matrix						
	PROMV	INV	FIN	VAR	NON	BM	SIZE
PROMV	1.00						
INV	0.23	1.00					
FIN	−0.17	−0.61	1.00				
VAR	−0.25	0.12	−0.05	1.00			
NON	−0.41	−0.27	−0.03	−0.12	1.00		
BM	0.05	−0.30	0.20	−0.25	0.31	1.00	
SIZE	0.56	0.46	−0.35	0.25	−0.53	−0.54	1.00

$_1$ [30] AdjCAAR$_j$ is the discount-adjusted[9] abnormal returns for −30 day to day t = +1 which is the dependent variable.

[9] Discount-adjusted abnormal returns are used in this study in order to isolate abnormal market reactions driven by the information content of the private placement announcement from those driven by the pricing effect (Wruck, 1989).

The test for the multicollinearity between the independent variables was tested using variance inflation factors (VIF). The findings in Table 9 (Panel A) shows that the size of the VIF range from 1.33 (PEQ) to 3.98 (SIZE), suggesting that multicollinearity is not a serious problem in this analysis.
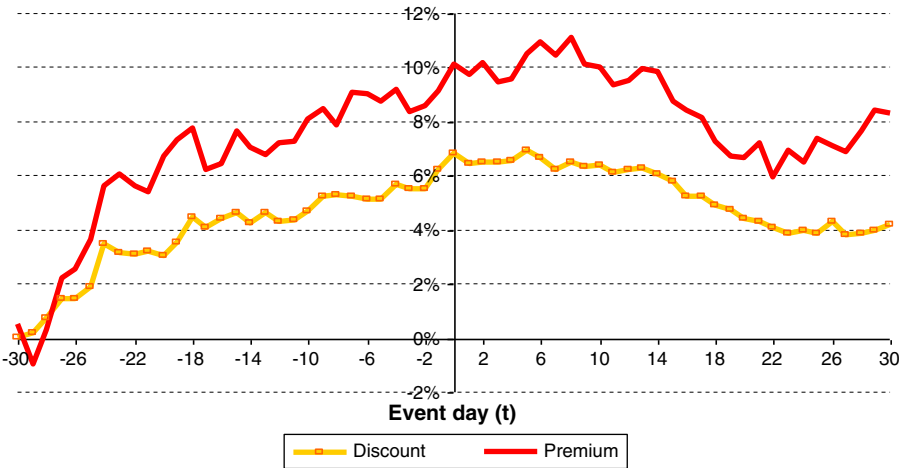

Fig. 6. Plots of cumulative abnormal return (CARs) to private placement announcements based on premium or discount in the offer price.

Table 10
Multivariate regression results, determinants of abnormal return (AR).

	Expected sign	Coefficient	t-Test	p-Value
PROMV	+/−	0.089	1.308	0.198
INV	+/−	0.142	1.540	0.142
FIN	−	0.241	2.54**	0.018
VAR	−	0.011	0.527	0.972
NON	−	−0.004	−0.003	0.998
PEQ	+	0.771	3.53*	0.001
B/M	−	−0.271	−3.43**	0.002
SIZE	−	−0.038	−0.789	0.435
ΔOWN		−0.611	−2.22**	0.020**
Regression	$R^2 =$	0.437		
Statistics	Adjusted $R^2 =$	0.313		
	F-Stat =	3.492		
	p-Value =	0.005**		

$AdjCAAR_j = \partial_0 + \partial_1 PROMV + \partial_2 INV + \partial_3 FIN_i + \partial_4 NON_i + \partial_5 VAR_i + \partial_6 PEQ_i + \partial_7 BM_i + \partial_8 SIZE_i + \varepsilon_i.$
The symbols * and ** denote statistical significance at the 0.05 and 0.01 levels, using a two-tailed test.

The regression results for the total sample of private placements are presented in Table 10. The independent variables only explain about 43% of changes in the abnormal returns in Table 10. The coefficients of variables FIN, PEQ and BM are statistically significant and all variables had the predicted sign except for variables FIN and VAR.

A previous research found that increased ownership concentration increased firm value because private placement serves as a good monitoring mechanism for the issuing firms with greater monitoring ability (Ferreira & Brooks, 1999; Hertzel & Smith, 1993; Wruck, 1989). According to Claessens, Djankov, & Lang (2000) Malaysia is one of the highly ownership concentrated country in Asia with family ownership of 67.2% and government ownership of up to 13.4%. Therefore, private placement may affect the ownership concentration.

According to the Securities Commission guideline, not more than two percent of shares can be placed to one person and most of the private placement in Malaysia goes to rich individuals.

Empirical result reported in the table on ownership change has a negative relationship on share returns, indicating a decrease in ownership concentration and increases in share prices. However, too much ownership concentration may gain enough power and control and the new owners may be prone to pursue their own objectives (Morck, Shleifer, & Vishny, 1988) which is perhaps the reason why the result is negative in our study.

The variables PROMV and INV have positive coefficients though not statistically significant. These findings are not in support of the Miller and Rock's (1985) information-signaling hypothesis where larger issues of seasoned finance are expected to produce more negative abnormal returns. This suggests that a positive reaction is not solely related to issue size and simultaneous new project announcements.

Table 11
Findings on an emerging market on private placements, 1992–2008.

Research questions	Expected results	Findings
1 Private placers different?	Yes, white knights choose to secure profits	Positive, Reduced signaling and monitoring costs
2 Private placement effect? Stock prices and volume?	Yes, based on prior studies	Positive on share prices Positive on volume traded
3 Concentration increased?	Yes, (no studies yet)	Positive, concentration increasedsignificantly
4 Do crises magnify effect?	Yes, crisis increase risk (no studies yet)	Positive, price effect 3× larger against normal
5 Does intended use matter?	Yes, loan repayments but not for increasing funds	Confirmed as predicted
6 Are discounts favored?	Yes, to assure confidence in fund providers	Positive discount effect
7 Correlation of CARs with firm-specific variables	Yes, (seldom studied data needs are intensive)	Some confirmed variables having effect, others no.

4.8. Wealth transfer hypothesis

The coefficient for FIN variable is positive and significant, which is inconsistent with the wealth transfer hypothesis that predicts a negative share price reaction when equity proceeds are applied to debt repayments. However, private placement becomes an important fund raising instrument during the financial crisis and the debt payment is the main reason for private equity offering during the crisis. One plausible explanation for this observed behavior is that during the crisis the private placement exercises were for paying off debts to ensure the survival of the business by the positive share price reaction at the announcements.

4.9. Price pressure hypothesis

Unlike the VAR, the coefficient for a NON variable had the predicted sign, though both coefficients are not significant, which is inconsistent with the predictions of price pressure effects. This implies that firms are able to issue a reasonable amount of new shares without any significant adverse effects on their share prices. This study finds that thin trading does not magnify the price reaction for the private placements, which is inconsistent with Anderson et al. (2006) findings on private placements in New Zealand.

Firm quality hypothesis: The coefficient of variable PEQ was positive and significant. This implies that private placements support firm quality hypothesis (Heinkel & Schwartz, 1986): the deeper the discount of the offer price, the more negative is the signal perceived by management and the market regarding the value and quality of the firm. Equity placed at a premium sends a positive signal to the market regarding firm quality. Therefore, the offer price in private placements is an important determinant in firm quality.

Information asymmetry hypothesis: The coefficient for the book-to-market equity ratio is negative and significant. This suggests that undervalued firms could avoid the negative signals as proposed in Myers and Majluf (1984) by choosing private placements. This finding is in support of Hertzel and Smith's (1993) information asymmetry hypothesis that the positive abnormal returns will be magnified when the potential undervaluation is higher. The coefficient of SIZE is not significant, implying that firm size is not an important determinant of abnormal returns in the private placement exercise.

5. Conclusions

We believe that this paper reports a modest number of new findings on emerging market behavior to private placement disclosures and how the CARs to the event are correlated with a number of firm-specific variables. The important contribution of this attempt is the answer to multi-faceted research questions beyond simply answering the stock price reaction. Given some unique set of research questions on regulatory differences, effect of crisis and intended use of funds data, this research is able to provide a fresh outlook on some unresearched issues. The methodology we applied is standard, and we show how a matched sample could address the key question of whether non-private-placement firms are different from the ones announcing private placement. It is found that, given the higher financial distress of such firms in this market, the yields of the private placement firms are a lot lower than the ones not using private placement. There is a signaling impact in this market for non-users of private placements. Table 11 provides a quick summary of the contributions of this paper to the emerging market literature.

Beyond establishing a positive price reaction to private placements as a risk-reducing fund-raising through this method, there are some unique findings from this study need to be highlighted. Significant findings on the regulatory impact show that emerging market behavior could well be different for the reasons that are due to unique characteristics of emerging market private placement. A confirmation of a three-fold increase in price effect during financial crisis suggests this is a worthy research question to be addressed in all markets following the Global Financial Crisis of 2007/8. Our findings on how the intended use of funds affect the CAR values as well as how discounts offered increase CAR values are new to this topic. Finally, we showed two fresh perspectives on this topic. First, we showed that there is a significant difference between the private-placement firms and those that did not resort to private placements. It appears that the non-users are better quality firms. Second, this paper identified a number of firm-specific factors correlated with the abnormal returns.

Extensive testing of more emerging markets using our research design may in future add further new findings to the equity raising behavior of firms listed and traded in some 75 emerging markets around the world.

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