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Understanding the Positive Announcement Effects of Private Equity Placements: New Insights from Hong Kong Data ⋆

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Abstract. The literature has documented positive announcement effects for privately placed seasoned equity issues. This study shows positive announcement effects not only for private but also for public placements in Hong Kong. Our unique data offer new insights not obtainable from U.S. data as we examine the cross-sections of the announcement effects. Most importantly, we find that the announcement effect is more likely to be positive for smaller issuers, such as private placing firms and some public issuers where asymmetric information arises more from growth than from assets in place. This finding is consistent with the generalized Myers-Majluf model.

1. Introduction

The finance literature has shown that private equity placements on average produce positive announcement effects. This finding is based on evidence from several countries (e.g., Wruck, 1989 and Hertzel and Smith, 1993, for the U.S.; Kato and Schallheim, 1993 and Kang and Stulz, 1996, for Japan; Cronqvist and Nilsson, 2000, for Sweden; Eckbo and Norli, 2005a, for Norway). A great deal of theoretical and empirical analysis has been devoted to understanding this phenomenon. For example, in a widely cited article, Wruck (1989) argues that new equity sales through private placements enable a small number of participants in the new equity purchases to play an active role through monitoring as a result of changes in ownership structures that follow the prediction made by Morck et al. (1988).

Recent research, however, has challenged the hypothesis that the positive announcement effect of private placements reflects anticipation of a monitoring effect. Barclay et al. (2003) find that private investors in the U.S. are usually not

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active after a private placement. Also, Wu (2004) finds that private placements in the U.S. do not appear to improve monitoring. This is not surprising because entrenched managers may find a "white knight" that is willing to protect managerial perks in private placements. On the other hand, control-diluting placements may facilitate intruders to share in incumbents' private benefits of control so that entrenched managers/controlling shareholders may safeguard their large private benefits of control through rights issues instead (Wu and Wang, 2004a). In theory, blockholders' activism may not add value to firms. For example, Zwiebel (1995) and Gomes and Novaes (2001) suggest that large shareholders can engage in sharing the private benefits of control (meaning that a new blockholder may hardly bring in additional monitoring). Thus, the positive announcement effects of private placements are not as well explained as previously believed.

Using Hong Kong data, we show that not only private placements but also ordinary seasoned equity offerings (SEOs) in the form of public placements produce significantly positive announcement returns, on average. While a positive SEO announcement effect appears to be inconsistent with the separating equilibrium of Myers and Majluf (1984), papers that generalize the Myers-Majluf model such as Cooney and Kalay (1993), Wu and Wang (2005) and Eckbo and Norli (2005a) do imply a positive announcement effect in certain circumstances. For example, Wu and Wang (2005) suggest that a positive SEO announcement effect occurs when the adverse selection effect, primarily arising from asymmetric information about assets in place, is overwhelmed by the positive information effect from asymmetric information about corporate growth opportunities – a situation virtually ruled out in Myers and Majluf (1984). Since studies of SEOs by U.S. firms show positive announcement effects only for private placements, the use of international data can address important issues that cannot be fully spelled out using U.S. data.[1] Of course, our finding of a positive announcement effect also for public placements may reflect unique institutional and ownership characteristics in Hong Kong issue market.

In most cases, both private and public placements in Hong Kong are typically "firm commitment" offerings made through investment banks or brokerage firms to new investors who have no previous connection with the issuers, as required by the local listing rules. While a private placement involves only a small number of clearly identifiable investors, a public placement (as in the U.K) usually involves many investors, albeit often professional and institutional. Furthermore, incumbent insiders cannot participate in new equity purchases through either private or public placements in the data we use. In addition, the concentration of controlling ownership in Hong Kong is notably high, with an average controlling ownership of about 40 percent. In our sample, on average, new equity issued is more than 10 percent of existing shares outstanding. As a result, an equity issue to new shareholders

[1] Although rarely documented in the U.S., positive announcement effects for SEOs other than private placements have been found quite frequently in other countries such as Japan (Kang and Stulz, 1996) and the U.K. (Slovin et al., 2000).

substantially decreases the concentration of incumbent controlling ownership in public as well as private placements. This contrasts with the U.S., where substantial changes in ownership concentration mainly occur in private placements.

These unique characteristics of Hong Kong data provide a natural environment to test potential relationships between announcement effects of new equity issues and changes in ownership concentration, not only in private but also in public placements. The direct comparison between private and public placements helps sharpen the tests of the monitoring effect of Wruck (1989). Unlike private placements, which explicitly generate new substantial (block) shareholders, public placements are likely to involve many relatively passive portfolio investors. Yet we show that public placements on average can produce a positive announcement effect of a similar magnitude to that of a private placement. This suggests that the positive announcement effect may stem from factors other than the monitoring effect that acts via changes in ownership concentration.

Since both private and public placements involve firm commitment underwriting, even though an ex post monitoring is not anticipated, their positive announcement effects may also reflect a screening or underwriting effect (Eckbo and Norli, 2005a). To the extent that investment banks and brokerage firms can screen issuers, the underwriting services they provide may significantly mitigate asymmetric information. One way to test whether the announcement effect of new equity issues reflects a screening effect is to compare the announcement effects of placements with those of uninsured rights issues where there is no underwriting.[2] However, rights issues in Hong Kong are almost all insured or standby rights issues as required by the local listing rules.[3] In addition, as documented in Wu and Wang (2004b), rights issues in Hong Kong on average produce a significant 3-day announcement effect of -8.0 percent.[4] This implies that screening or underwriting

[2] For example, Eckbo and Norli (2005a) study private placements along with uninsured rights. They find both private placements and rights have a significantly positive announcement effect on the Oslo Stock Exchange. One important variable in their model is the current shareholders' take-up ratio in new issues (see also Eckbo and Masulis, 1992).

[3] In Hong Kong, while a full subscription to the entitled shares by controlling shareholders in rights issues is almost the norm, as reported by Wu and Wang (2004b), the average offer discount is more than 20 percent so that the rights which are tradable are deep in the money and the exercise of rights is almost assured. On the other hand, as in the case of placements shown later, there is no significant relationship between the announcement returns and the offer discounts (this is true even in the pooled sample of rights and placements). Using the offer discount to test a certification effect in SEOs is common in the literature (see Hertzel and Smith, 1993; Slovin et al., 2000).

[4] Slovin et al. (2000) also document a significantly negative announcement effect of rights issues in the UK, in contrast to a positive announcement effect of rights issues documented by Eckbo and Norli (2005a), among other previous studies. The separating equilibrium of Wu and Wang (2004a) – which considers asymmetric information about private benefits – predicts that announcement effects of rights issues are smaller than those of control-diluting placements, because the choice of rights offer reveals larger private benefits, while the choice of control-diluting placement signals smaller private benefits. When investment opportunities are also considered, the announcement effects of rights issues can be either positive or negative.

to certify an issuer's quality is very noisy in Hong Kong. Note that the valuation of SEO underwriting in the U.S. is also very noisy (Eckbo and Masulis, 1992). Thus, we limit our study to the comparison of private and public placements, where an important issue in the literature is whether changes in ownership concentration play a role in determining the positive announcement effects of private placements by improving ex post monitoring.

This study yields three main results. First, we find on average a significantly positive announcement effect for public as well as private placements in Hong Kong. Second, using an announcement return measure common in the event study literature, we find no evidence for Wruck's (1989) monitoring effect for private placements, reinforcing the challenge thrown down by recent studies conducted using U.S. data. It is worth mentioning that we do not use the non-standard return measure introduced by Wruck (1989). As we elaborate in Section 4.1, the adjusted announcement return often adopted in the event studies for private placements in the literature is mechanically related to changes in ownership structures.

Finally, our cross-sectional regression results show some common determinants of announcement effects for both private and public placements. The positive announcement effects are more related to the information gap about growth than to growth per se, consistent with the generalized Myers-Majluf model. In particular, we find a significant firm size effect: the smaller the issuer – by implication the more likely it is that the asymmetric information about the issuer's valuation arises from growth rather than from assets in place – the higher the announcement effect. Since private issuers are usually small, as is widely documented in the literature, we maintain that the information effect from the asymmetric information about growth as predicted by the generalized Myers-Majluf model can be a new, legitimate explanation for the positive announcement effects of private equity placements.

The remainder of this paper is organized as follows. Section 2 describes the data and provides sample statistics. Section 3 presents the empirical evidence on average announcement effects. Section 4 takes a close look at the monitoring effect of Wruck (1989). Section 5 examines cross-sections of the announcement effects of both private and public placements. Section 6 concludes the paper.

2. The Data

The SEO data on announcement date, issue price, and issue amount are collected from *The Securities Journal* published monthly by the Stock Exchange of Hong Kong (SEHK) from 1989 to 1997. Only local non-financial and non-utility firms listed on the SEHK are considered. The SEOs included in our sample are private and public placements, and are purely new equity sales to outside or independent investors who have no connections with corporate insiders (as required by the local listing rules). The new issues are "firm commitment" underwritten through investment banks and brokerage firms. In private placements, new equity is sold to a small number of identifiable outside investors (also labeled in the data source as

Table I. Number of SEOs and dollar amount issued in Hong Kong from 1989 to 1997

The table reports the annual number of SEOs (Panel A) and the annual SEO dollar amount (Panel B) for non-financial and non-utility firms listed on the Stock Exchange of Hong Kong (SEHK) in the period from 1989 to 1997. Data on SEOs with announcement dates, offer price and number of shares issues are from The Securities Journal published monthly by the SEHK. Each year only the first SEO is included in the sample if a firm issues more than once during that year. The SEO dollar amount, in millions of Hong Kong dollars, is the offer price multiplied by the number of shares issued. The SEOs are split into private and public placements.

	1989	1990	1991	1992	1993	1994	1995	1996	1997	Total
Panel A: Number of SEOs										
SEOs	21	46	30	56	73	31	13	61	74	405
Private placement	6	20	12	20	17	10	3	6	5	99
Public placement	15	26	18	36	56	21	10	55	69	306
Panel B: Dollar Amount Placed (HK$Mil)										
SEOs	1,769	2,917	2,422	12,731	11,255	9,120	2,690	59,384	12,026	114,314
Private placement	305	1,357	650	3,463	1,088	1,199	277	3,492	260	12,091
Public placement	1,464	1,560	1,772	9,268	10,168	7,921	2,413	55,892	11,766	102,224

"private placing") while in public placements (often simply called "placements") both the number and identity of investors are unknown to the public at the announcement. These SEOs are the main form of seasoned equity issues in Hong Kong. New issues to corporate insiders or parent firms, rights issues, and issues of warrants and convertibles are excluded from the sample.

The controlling ownership data are collected from various volumes of Hong Kong company handbooks and guides.[5] Controlling ownership includes the equity holdings of the largest shareholder and, where applicable, includes the holdings of that shareholder's family members. Finally, stock returns and financial statement data (where available) are retrieved from the Pacific-Basin Capital Markets (PACAP) databases.

Table I reports a total of 405 SEOs of listed Hong Kong firms during the period from 1989 to 1997. As shown in Panel A, there are 99 private placements and 306 public placements in the sample and the latter dominate the former every year. During this nine-year period, the number of SEOs in Hong Kong fell to its lowest level of 13 issues in 1995, but peaked twice, with 73 issues in 1993 and 74 issues in 1997. This phenomenon of waves of SEOs is consistent with the evidence from

[5] The sources are *Companies Handbook*, 1988, published by *The Stock Exchange of Hong Kong Ltd; Corporate International's Company Handbook: Hong Kong*, 1992, 1993, 1994, Published by *Corporate International; Thornton Guide to Hong Kong Companies*, 1995, 1996, published by *Edinburgh Financial Pub. (Asia)*.

the U.S. observed by Choe, Masulis and Nanda (1993). Panel B of Table I shows the dollar amount issued. The SEOs in our sample raised HK$114,314 million (US$14,656 million): private placements accounted for HK$12,091 million while public placements for HK$102,224 million.

Table II reports the issue and firm characteristics of the SEOs. As shown in Panel A, the average issuing amount (Offersize) is HK$122 million for private placements while it is HK$334 million for public placements. The private placements, on average, raised less money than the public placements did. In terms of shares issued as a percentage of shares outstanding at the end of the previous month of the issuance announcement (Dilution), the private placements created, on average, slightly more new shares than the public placements did (18.69 versus 15.20 percent). Private issuers have a significantly lower average close price than public issuers (1.83 versus 3.21 HK$). SEOs are often made at a discount, which we measure as the percentage difference between the close and the offer price (Discount), where the offer price is measured two event days before the issue is announced. The discounts are on average 5.75 and 4.20 percent for private and public placements respectively. But the difference is not significant (p-value = 0.38). The median discount rates are actually similar (5.56 versus 5.78 percent) and, using the Wilcoxon Signed Ranks test, their difference is not significant either (p-value = 0.67). Thus, we do not observe, on average, a deep discount in offer prices of private placements in Hong Kong. A bigger discount in private placements would be an important way of compensating private investors for information signaling or certification, as hypothesized by Herzel and Smith (1993).

Panel B of Table II reports firm characteristics of the SEOs. The average firm size by market value (market equity plus book debt at the end of the previous fiscal year), MV, is much smaller for private issuers (HK$1,571 million) than for public issuers (HK$4,069 million). But their median firm sizes are similar (638 versus 674 HK$ million), as also confirmed by the Wilcoxon Signed Ranks test. The fact that the median firm sizes are smaller than the average ones indicates that smaller issuers dominate the Hong Kong market. Another important observation is that the firm size variation is much smaller among private issuers than among public issuers (HK$6,634 million versus HK$16,411 million in terms of standard deviation). This means that private issuers cluster more in small firm size classes (as found also by Wruck, 1989, Hertzel and Smith, 1993, and Wu, 2004, using U.S. data).

As shown in Panel B of Table II, the average ownership concentration of controlling shareholders (Conown) is significantly lower for privately placing firms than for public issuers (39.0 versus 45.0 percent). A similar difference is found also between the median values of these two groups (40.0 versus 45.5 percent).[6] Given the high ownership concentration in Hong Kong, both private and public placements can cause substantial changes in ownership concentration.

[6] Taking 466 non-utility and non-financial Hong Kong listed firms as the whole population in 1996, a typical ownership concentration of controlling shareholders (the mean and median values are 49.3 and 50.6 percent respectively) is higher than that of the issuers.

Table II. Issue and firm characteristics of the Hong Kong SEOs

The table presents the mean, median and standard deviation of issue (Panel A), and firm characteristics (Panel B) for the sample of SEOs for the period of 1989 to 1997. Data are from *The Securities Journal* and *PACAP*. The controlling ownership data are from various Hong Kong company handbooks and guides. The mean and median are calculated across SEOs. Offersize is the offer amount in millions of Hong Kong dollars. Dilution is the number of shares issued, ΔN, over the number of shares outstanding (SHROUT), N, at the end of the month prior to the month when the issue is announced. Discount is defined as 1 − (offer price/close price), where the close price is the price (CLSDAY) on event day −2. Conown is the controlling ownership, also in percentage terms, reported for the year prior to the year when the new issue takes place. All the financial statement data refer to the previous year, if not specifically mentioned. MV is the sum of end-of-year market value of equity (data item MKTVAL) and end-of-year book value of liability (BAL17), in millions of Hong Kong dollars. BV is the sum of end-of-year book value of equity (BAL21) and end-of-year book value of liability (BAL17). ROE is the net income (INC9) over the book equity (BAL21). Leverage is the interest bearing debt: the sum of short-term loan (BAL11), long-term loan (BAL14) and debentures (BAL15) over the sum of the debt and book equity (BAL21). Turnover is the past six-month monthly average turnover ratio prior to the event month, where the monthly turnover ratio is monthly trading volume (TRDVOL) divided by the shares outstanding at the end of month (SHROUT). DivYd is cash dividend (MKT1) over stock price (MKT3). The Wilcoxon Signed Ranks test is used under the null of equality in medians.

	Private placement			Public placement			Difference		
	Mean	Median	Std	Mean	Median	Std	in Mean	in Mean p-Value	in Median p-Value
Panel A: Issue Characterisitcs (HK$Mil for Offersize, HK$ for Close Price)									
Offersize	122.10	47.60	360.00	334.10	66.00	2,081.80	−211.90	0.09	0.02
Dilution (%)	18.69	15.00	16.61	15.20	10.22	19.87	3.49	0.09	0.01
Close Price	1.83	0.93	3.12	3.21	1.47	7.65	−1.38	0.01	0.01
Discount (%)	5.75	5.56	18.78	4.20	5.78	16.19	1.55	0.38	0.67
Panel B: Firm Characteristics									
MV (HK$Mil)	1,571.20	638.30	6,634.20	4,068.60	673.90	16,411.10	−2,497.50	0.03	0.15
Conown (%)	38.95	39.98	16.45	44.99	45.52	16.98	−6.04	0.00	0.00
MV/BV	1.16	1.06	0.57	1.32	1.16	0.70	−0.16	0.01	0.01
ROE (%)	4.80	6.94	27.11	9.13	11.61	22.53	−4.33	0.16	0.07
Leverage (%)	45.21	47.30	20.21	43.52	43.65	18.12	1.69	0.46	0.32
Turnover (%)	10.79	7.31	11.54	14.05	8.63	18.64	−3.26	0.04	0.10
DivYd (%)	3.65	2.25	4.30	3.30	1.90	4.05	0.35	0.49	0.67

Panel B of Table II further shows that private issuers tend to have lower growth prospects in terms of market value over book value (MV/BV), lower returns on equity (ROE) and lower monthly average turnover ratio (Turnover, where monthly turnover ratio is defined as monthly trading volume over shares outstanding at the end of month), compared with public issuers. But there is not much difference between other variables such as leverage and dividend yield (DivYd) for the two types of issuers.

To summarize, private issuers have significantly lower concentration of controlling ownership, lower growth prospects, and lower turnover than public issuers. Another important point is that private issuers cluster more in small firm size classes. In Section 5, we test whether these firm characteristics can explain the cross-sections of SEOs' announcement returns. But first we document the average announcement effects, which are one of the important concerns discussed in the literature.

3. Announcement Effects of Private and Public Placements in Hong Kong

We essentially follow the event study method as in Asquith and Mullins (1986) and Kang and Stulz (1996). Daily stock returns with dividend reinvested are used. Each year, we form ten equally weighted portfolios among all listed Hong Kong stocks in the PACAP database, ranked according to the Scholes-Williams beta estimates of individual stocks computed against the PACAP equally weighted market portfolio for Hong Kong. The decile portfolio to which an issuing firm's stock belongs is thus its control portfolio. On a particular day, the abnormal return of the issuing firm is defined as the return of the firm in excess of its expected return estimate or the return of the control portfolio. At any event-time cross-section, t, an average abnormal return, AAR_t, is computed across the issuing firms. To gauge the significance of the average abnormal return on each event day, we calculate, from the estimation event time period, -89 to -11, the standard deviation of the event-time-series of the average abnormal returns, taking into account the Newey-West auto-correlation adjustment up to the fourth lag. For a multi-day announcement window, [event day t_1 to t_2], a cumulative average abnormal return, $\mathrm{CAR}[t_1, t_2]$, is defined as the sum of the time-series of AAR_t within the event window. Its standard deviation is the standard deviation for the one-day AAR_t multiplied by the square root of the number of event days in the event window.

Table III shows the daily average abnormal returns, AAR, cumulative average abnormal returns, CAR, and their t-values for private and public issuers for individual event days from -15 up to $+15$ in the period from 1989 to 1997. We highlight the CARs of two-day $[-1, 0]$ and three-day $[-1, 0, +1]$ event windows at the bottom of Table III. The announcement effects of both private and public placements in Hong Kong turn out to be, on average, significantly *positive*. The two-day and three-day average CARs are 1.97 (t-value = 5.01) and 3.51 (t-value = 7.28) for private placements and 1.93 (t-value = 7.91) and 3.14 percent (t-value = 10.47) for public placements. Interestingly, there is no statistical difference between the positive announcement effects for private and public placements in Hong Kong (p-values >0.20 in all cases).

To ensure that our results are robust, we also use an alternative abnormal return measure. In the spirit of Eckbo and Norli (2005b), we compute the announcement returns using the following multifactor model:

Table III. Announcement returns for SEOs in Hong Kong from 1989 to 1997

The table presents daily average abnormal stock returns (AAR), t-values, and cumulative average abnormal returns, CAR, for event days from −15 up to 15 for a sample period from 1989 to 1997, where the SEO announcements take place on event day 0. We also highlight CARs for the two-day and three-day announcement windows, and their t-values at the bottom of the table. The Wilcoxon Signed Ranks test is used under the null of equality in medians. Return data are from PACAP. The number of cross-sectional observations (SEOs) at the two- and three-day announcement windows is 99 for private placements, and 306 for public placements respectively.

	Private placement			Public placement		
Event Day (t)	AAR_t	t-value	CAR[−15, t]	AAR_t	t-value	CAR[−15, t]
−15	−0.09	−0.33	−0.09	0.03	0.19	0.03
−14	0.56	2.03	0.47	0.66	3.83	0.69
−13	0.41	1.46	0.88	0.16	0.94	0.86
−12	−0.12	−0.41	0.76	0.35	2.00	1.20
−11	−0.21	−0.77	0.55	0.33	1.91	1.53
−10	−0.02	−0.07	0.53	0.01	0.08	1.55
−9	0.30	1.07	0.83	0.38	2.17	1.92
−8	0.34	1.21	1.17	0.67	3.88	2.59
−7	0.90	3.22	2.06	0.07	0.42	2.67
−6	−0.47	−1.69	1.59	0.07	0.39	2.73
−5	0.68	2.45	2.27	0.51	2.92	3.24
−4	0.62	2.24	2.89	0.30	1.72	3.54
−3	1.41	5.06	4.30	0.52	3.01	4.06
−2	0.83	2.98	5.13	0.55	3.15	4.60
−1	0.84	3.03	5.97	0.91	5.27	5.52
0	1.13	4.05	7.10	1.02	5.91	6.54
1	1.54	5.54	8.64	1.20	6.96	7.74
2	0.16	0.57	8.80	0.30	1.73	8.04
3	−0.34	−1.22	8.46	−0.01	−0.06	8.03
4	0.15	0.55	8.61	−0.23	−1.31	7.80
5	−0.82	−2.94	7.79	0.04	0.22	7.84
6	−0.54	−1.93	7.25	−0.06	−0.34	7.78
7	0.06	0.21	7.31	0.06	0.36	7.85
8	0.43	1.56	7.75	−0.06	−0.33	7.79
9	0.10	0.37	7.85	−0.11	−0.64	7.68
10	0.20	0.73	8.05	−0.16	−0.94	7.52
11	0.12	0.43	8.17	0.02	0.14	7.54
12	0.29	1.05	8.46	0.02	0.10	7.56
13	0.10	0.35	8.56	0.05	0.29	7.61
14	0.16	0.58	8.72	−0.42	−2.45	7.18
15	−0.36	−1.31	8.35	−0.18	−1.02	7.01

	Private		Public		Difference		
	CAR	t-value	CAR	t-value	in Mean	in Mean p-value	in Median p-value
2-day [−1.0]	1.97	5.01	1.93	7.91	0.04	0.97	0.58
3-day [−1, 1]	3.51	7.28	3.14	10.47	0.27	0.76	0.23

$$R_{it} = a_i + d_{0i} RD_t + d_{1i} WD_t + b_i Rm_t + s_i SMB_t + h_i HML_t + g_i TO_t + e_{it}. \quad (1)$$

This is a Fama-French three-factor model augmented with a liquidity factor, TO_t. R_{mt} is daily value-weighted market return. SMB_t and HML_t are the daily Fama-French two factors.[7] TO_t is a turnover-based daily zero-investment portfolio return, namely, a daily difference in the high and low turnover portfolio returns from three equally sorted, value-weighted portfolios that we rebalance at the end of every month according to the past six-month monthly average turnover ratio (Turnover).

In regression (1), R_{it} is the daily return of the issuing firm i, RD_t is a dummy variable that takes a value of one on trading days -130 through -2, and WD_t is a dummy variable that takes a value of one in either a two-day $[-1, 0]$ or a three-day $[-1, 1]$ announcement window (note that we use two versions of the event window). The estimation period is a total of 501 trading days $[-300, 200]$. For issuer i, the time series OLS estimates for d_{0i} and d_{1i} measure its daily six-month run-up and announcement returns, respectively. The percentage abnormal return for a w-day event window is $w \times d_i \times 100$. Under the null hypothesis of zero abnormal return, the test statistic

$$z = \frac{1}{\sqrt{N}} \sum_{i=1}^{N} \frac{d_i}{\sigma_i}$$

follows a standard normal distribution where d_i is the OLS estimate of d_{0i} or d_{1i}, σ_i is the standard error of this estimate, and N is the number of events (see Eckbo and Norli, 2005a, b).

Table IV reports the average announcement returns controlling for the multi-factors as well as the six-month run-up returns. The two-day announcement returns for private and public placements in Hong Kong are 2.57 and 2.07 percent (the numbers are 4.92 and 3.45 percent for a three-day window). These average announcement returns are all positively significant and of a similar magnitude, similar to the results in Table III. Also as in Table III, there is no significant difference between the positive announcement returns for private and public placements in Hong Kong. Among tests for differences in means or medians, only the difference in means for the three-day announcement returns is marginally significant in favor of private placements (p-value = 0.06).

While the findings of positive announcement effects for private placements are consistent with the empirical literature (e.g., Wruck, 1989; Eckbo and Norli, 2005a), the findings for public placements are in sharp contrast to findings from the U.S. market.[8]

[7] Portfolio formation (sorting) is done at the end of June of every year according to the market value of equity (PACAP data items, CLSPRC times SHROUT) and book-to-market equity ratio (BAL21 divided by MKTVAL) of Hong Kong listed firms.

[8] Significantly negative stock price responses to the announcement of SEOs have been observed, particularly in the U.S. market (e.g., Asquith and Mullins, 1986; Masulis and Korwar, 1986, among

Table IV. Announcement returns for SEOs using a multifactor model

The table presents six-month run-up and announcement returns in percentage for SEOs in Hong Kong using a multifactor model similar to that in Eckbo and Norli (2005b):

$$R_{it} = a_i + d_{0i} RD_t + d_{1i} WD_t + b_i R_{mt} + s_i SMB_t + h_i HML_t + g_i TO_t + e_{it},$$

where R_{it} is daily return on issuing firm i, R_{mt} is daily value-weighted market return, SMB_t and HML_t are the Fama-French two factors, TO_t is a turnover-based daily zero-investment portfolio return, RD_t is a dummy variable that takes a value of one on trading days -30 through -2, and WD_t is a dummy variable that takes a value of one in either a two-day $[-1, 0]$ or a three-day $[-1, 1]$ announcement window. For issuer i, the time series OLS estimates for d_{0i} and d_{1i} measure its daily six-month run-up and announcement returns respectively. The percentage abnormal return for a w-day event window is $w \times d_i \times 100$. Under the null hypothesis of zero abnormal return, the test statistic

$$z = \frac{1}{\sqrt{N}} \sum_{i=1}^{N} \frac{d_i}{\sigma_i}$$

follows a standard normal distribution where d_i is the OLS estimate of d_{0i} or d_{1i}, σ_i is the standard error of this estimate, and N is the number of events. Results are reported for private and public placements. The Wilcoxon Signed Ranks test is used under the null of equality in medians. The p-values in parentheses are for two-sided tests.

	Private placement	Public placement	Difference in mean	Difference in median
6-months Runup	6.18	21.39	−15.21	−16.97
	(0.51)	(0.00)	(0.00)	(0.02)
2-day [−1.0] Announcement return	2.57	2.07	0.50	−0.41
	(0.00)	(0.00)	(0.89)	(0.97)
3-day [−1, 1] Announcement return	4.92	3.45	1.47	−0.16
	(0.00)	(0.00)	(0.06)	(0.70)
Number of Obs.	$n_1 = 99$	$n_2 = 306$	($n_1 = 99$; $n_2 = 306$)	($n_1 = 99$; $n_2 = 306$)

Does our evidence on public placements simply represent a special case for Hong Kong? Or does it provide new insights that are relevant for the existing literature? There is a sound theoretical basis for positive announcement effects of SEOs in general (Cooney and Kalay, 1993; Wu and Wang, 2005; Eckbo and Norli, 2005a). For example, Wu and Wang (2005) predict that positive announcement effects are more likely to occur if the asymmetric information arises more from investment opportunities than from assets in place (see also Ambarish, John and Williams, 1987, in a non-Myers-Majluf context). These effects are particularly likely in a market like Hong Kong, which in the period from 1970 to 1997 had the highest volatility – as well as the highest average return – among the top ten equity markets by capitalization (Wu and Bae, 1999). This combination of high corporate growth and uncertainty may have underpinned the positive announcement effects found here.[9] Hong Kong, however, is not an isolated case. For example, Kang and Stulz (1996) find that announcement returns of SEOs other than private placements are on average significantly positive in Japan.

Public placements do not significantly differ from private placements in terms of their announcement returns. But the positive announcement returns for public placements are unlikely to come from the monitoring effect of Wruck (1989) because dispersed public equity purchasers are unlikely to play an effective monitoring role. Instead, the positive announcement effects of public placements can be consistent with the information effect from uncertainty over growth prospects as described by the generalized Myers-Maljuf model. But if this is the case, can this model also explain the announcement effect for private placements? This is addressed in Section 5.

4. A Close Look at the Monitoring Effect of Wruck (1989)

Before we examine a host of alternative determinants of positive announcement returns for both private and public placements in Section 5, we reexamine the

others). Both Smith (1986) and Eckbo and Masulis (1995) document an average abnormal return of about −3.0 percent for U.S. industrial firms. This stylized evidence is consistent with the prediction by Myers and Majluf (1984). Alternatively, based on the theory of Stulz (1990), Jung et al. (1996) attribute the negative announcement effects to the asymmetric information about Jensen's (1986) free cash flows.

[9] We split the sample into two periods: 1989–1993 and 1994–1997. The first period starts with the June 4th Tiananmen incident which initially triggered economic sanctions by the U.S. and Western countries and scared investors in Hong Kong for a few years; the second period ends with Hong Kong's handover to mainland China which happened to coincide with a Hong Kong stock market boom. Despite Hong Kong's recent checkered history, we still observe positive announcement effects in the first as well as the second period (not reported). For example, the two-day average CARs for private and public placements together are 1.62 percent (t-value = 5.02) for 1989–1993, and 2.36 percent (t-value = 7.31) for 1994–1997, with the difference in means being −0.74 percent (t-value = −0.96). Thus, the evidence for positive announcement effects of new equity issues seems unlikely to be purely driven by the fact that the handover fueled hopes for the opening up of more business opportunities in China.

monitoring effect of Wruck (1989). In this section, we first explain why this paper uses the standard announcement returns instead of the adjusted return measure proposed by Wruck (1989) in a cross-sectional regression (Section 4.1). Then, we test whether Hong Kong data support the monitoring effect through changes in ownership structures (Section 4.2).

4.1. DISSECTION OF WRUCK'S (1989) ADJUSTED ANNOUNCEMENT RETURN

In the literature on private placements, the adjusted announcement return introduced by Wruck (1989) has been widely used in cross-sectional regressions. The adjusted announcement return measure departs from the standard measure commonly used for SEOs and other event studies.

Let P_0 and P_1 be the pre- and post-announcement stock price, P_x the placement price, N the shares outstanding before the placement (old shares), and ΔN the new shares placed. The equilibrium price after the announcement is:

$$P_1 = (P_0 N + P_x \Delta N + NPV)/(N + \Delta N), \tag{2}$$

where NPV is the market assessment on the change in firm value due to the valuation effect of the placement. Clearly, NPV is shared by both the old and new shareholders. From (2), we simply have:

$$\begin{aligned} NPV &= P_1(N + \Delta N) - (P_0 N + P_x \Delta N) \\ &= (P_1 - P_0)N + (P_1 - P_x)\Delta N, \end{aligned} \tag{3}$$

where the first term in the second equation of (3) is the gain to old shareholders, and the second term is the benefit to new shareholders (who participate in new shares purchases).

Following Bradley and Wakeman (1983), Wruck (1989) defines AR_{NPV}, or NPV divided by $P_0 N$, as the measure of return to old shareholders due to the new information about the placement. Let $AR = (P_1 - P_0)/P_0$, be the standard measure of the return to old shareholders, and Discount $= (P_0 - P_x)/P_0$, the discount that accrues only to new shareholders in the placement. According to (3), the adjusted announcement return is simply:

$$\begin{aligned} AR_{NPV} &= \frac{(P_1 - P_0)N + (P_1 - P_0 + P_0 - P_x)\Delta N}{P_0 N} \\ &= AR + (AR + \text{Discount})\frac{\Delta N}{N}. \end{aligned} \tag{4}$$

While the NPV in (3) shows perfectly how the wealth gain is divided by the old and new shareholders, however, there is a catch in applying AR_{NPV} to new equity issues, unlike in the study of targeted share repurchases by Bradley and Wakeman

(1984). (Incidentally, Bradley and Wakeman (1983) never used AR_{NPV} in their cross-sectional regressions – a fact that is not mentioned in the private placement literature that borrows this adjusted return measure.)

While NPV measures the value added to the firm, AR_{NPV} scales NPV by the pre-event firm value only – that is, new investment/issue influences only the numerator in the first equation of (4). The consequence is obvious: since cross-sectionally the size of NPV (but not necessarily the investment return) tends to increase with the size of new investment, as the new equity issue (i.e., new investment) becomes larger, AR_{NPV} becomes higher. As we show below, this generates a mechanical correlation between AR_{NPV} and changes in ownership structures.

As shown in (4), AR_{NPV} contains an additional term compared with the standard measure, AR. This additional term embeds shares dilution (Dilution), $\Delta N/N$, a near-perfectly correlated variant of fraction placed (FractionPlaced), $\Delta N/(N + \Delta N)$, and placement discount (Discount). Let InsiderShares be the incumbent controlling shareholders' number of shares outstanding and Conown be the incumbents' pre-placement ownership in percentage, namely InsiderShares/N. Assuming that insiders and existing shareholders do not participate in private placements but that the new shareholders join the insiders in their monitoring role after the placement, the change in the ownership concentration of monitoring shareholders, ΔOwnership, in Wruck (1989) is simply

$$\begin{aligned}
\Delta\text{Ownership} &= \frac{\text{InsiderShares} + \Delta N}{N + \Delta N} - \frac{\text{InsiderShares}}{N} \\
&= \frac{\Delta N}{N + \Delta N} - \frac{\Delta N}{N + \Delta N} \times \frac{\text{InsiderShares}}{N} \\
&= \text{FractionPlaced} \times (1 - \text{Conown}). \qquad (5)
\end{aligned}$$

Wruck (1989) finds a significant relationship between AR_{NPV} and ΔOwnership, support for the monitoring hypothesis which relies on changes in ownership concentration. Hertzel and Smith (1993) document a significant relationship between AR_{NPV} and FractionPlaced, which they interpret as support for the hypothesis that the placement mitigates asymmetric information problems. We show below that their analyses bias the test results in favor of their hypotheses. The key reason is that there is a built-in relationship between AR_{NPV} and ΔOwnership or FractionPlaced.

To see this, assume that FractionPlaced is neither correlated with the standard measure, AR, nor with Discount, and substitute the near-perfect correlated share dilution, $\Delta N/N$, with FractionPlaced, so the covariance between AR_{NPV} and FractionPlaced according to (4) is:

$$\begin{aligned}
&\text{Cov}\{AR_{NRV}, \text{FractionPlaced}\} \\
&\quad = \text{Cov}\{AR + \text{FractionPlaced} \times (AR + \text{Discount}), \text{FractionPlaced}\} \\
&\quad = \text{Cov}\{\text{FractionPlaced} \times (AR + \text{Discount}), \text{FractionPlaced}\} \\
&\quad = \text{Cov}\{\text{FractionPlaced} \times (m + e), \text{FractionPlaced}\} \\
&\quad = m \times \text{Var}\{\text{FractionPlaced}\}, \qquad (6)
\end{aligned}$$

where m is the mean of AR + Discount, and e is the residual that is not correlated with any moments of FractionPlaced, as assumed in the beginning.

In a private placement, both AR and Discount are usually positive on average. Thus, the slope estimate in a regression of AR_{NPV} on FractionPlaced equals a positive number, m, even though there is no relationship between the standard measure of announcement returns, AR, and FractionPlaced. A similar bias can be shown when one estimates a regression of AR_{NPV} on ΔOwnership, because ΔOwnership in (5) is also closely related to FractionPlaced by definition. This built-in relationship is a likely explanation for the unusually high R^2 in the estimates by Wruck (1989) and by Hertzel and Smith (1993).

Empirically, the mechanical relationship between AR_{NPV} and changes in ownership concentration can even change sign, depending on how researchers measure the latter. For example, in the context where new investors do not play an active monitoring role after the private placement, if we denote ΔConown to be ΔOwnership minus FractionPlaced, this alternative measure for changes in ownership concentration, ΔConown (unlike ΔOwnership) is a decreasing function of new equity issues, due to dilution of incumbent controlling shareholders.

A further analysis of our sample of Hong Kong private placements illustrates these points: the relationship between AR_{NPV} and FractionPlaced or ΔOwnership arises mainly from components of AR_{NPV} that are mechanically related to FractionPlaced or ΔOwnership. As shown in Table V, each of the measures that are relevant to the changes in ownership structures (FractionPlaced, ΔOwnership, and ΔConown) even though clearly not correlated with AR, is significantly correlated with AR_{NPV}. As already pointed out, such a significant correlation actually stems from the significant correlation with the additional term in AR_{NPV}, namely, Dilution(AR + Discount). Note that the correlation coefficient between ΔConown and Dilution is negative, -0.89, because ΔConown is always negatively related to new issues placed with outside new investors.

4.2. TESTS FOR THE MONITORING EFFECT OF PRIVATE PLACEMENTS

In the literature, private placements have been often treated differently from public issues, mainly because many believe that private equity sales involve active investors who enhance firm value. Most notably, Wruck (1989) argues that the

Table V. AR_{NPV} and changes in ownership structures: A built-in relationship

The table reports the correlation coefficients for each of the measures that are related to ownership structure changes-FractionPlaced, Δownership and Δconown-with AR_{NPV} (and its components) using a sample of 99 private placements on the Stock Exchange of Hong Kong during the period from 1989 to 1997. FractionPlaced is the new shares placed, ΔN, divided by shares outstanding after placement, $N + \Delta N$ – a measure that is closely related to Dilution, $\Delta N/N$. Δownership is the ownership concentration change that includes FractionPlaced, as defined in Equation (5). Δconown is the change (actually decrease) in controlling ownership concentration, where FractionPlaced is not included in the ownership concentration. AR_{NPV} is Wruck's (1989) measure of the announcement return, which is the sum of AR and Dilution(AR + Discount), as defined in Equation (4). AR is the standard announcement return, (post-announcement price/pre-announcement price) − 1. Discount is defined as 1 − (placement price/pre-announcement price), and is positive if the placement price is below the close price just before placement. In the calculation, we use the cumulative average abnormal returns (CAR) for event days from −1 to +1, CAR[−1, 1], to replace AR (as detailed in Table III). p-values are in parentheses right below the corresponding estimates.

	Correlation coefficient				
	AR_{NPV}	AR	Dilution	Discount	Dilution(AR + Discount)
Fraction Placed	0.39	−0.05	0.98	0.39	0.64
	(0.00)	(0.60)	(0.00)	(0.00)	(0.00)
Δownership	0.26	−0.04	0.80	0.30	0.41
	(0.02)	(0.73)	(0.00)	(0.01)	(0.00)
Δconown	−0.51	0.01	−0.89	−0.53	−0.76
	(0.00)	(0.91)	(0.00)	(0.00)	(0.00)

allocation of control is significantly changed after highly concentrated private sales of new equity – especially because private investors as new blockholders cause a shift in the distribution of voting power among investors. Wruck finds a significant relationship between the adjusted announcement returns and changes in ownership structures, consistent with the nonlinear relationship between firm value and ownership structures of Morck et al. (1988). Wruck concludes that the monitoring effect explains the positive announcement effect of private equity placements. In this section, we basically follow the tests of Wruck (1989), but we use instead the correct, standard announcement return measure.

Table VI shows the regression results. The dependent variable is the three-day cumulative average abnormal returns, CAR [−1, 1]. The explanatory variables are ownership variables employed by Wruck (1989) or Hertzel and Smith (1993). We also use the three piecewise components of ownership structure changes, Δownership, split at 20 and 50 percent of the incumbents' pre-placement percentage ownership (Conown). It turns out that in various specifications the slope estimates for Δownership and its three piecewise components are not significant at all. While Δownership counts newly issued shares within insider ownership,

Table VI. Test results for the monitoring effect of private placement

This table reports coefficient estimates and their t-values of cross-sectional regressions of the announcement returns on ownership variables for Hong Kong private placements during the period from 1989 to 1997. The dependent variable is the three-day announcement window cumulative abnormal return, CAR[−1, 1]. FractionPlaced is the new shares placed, ΔN, divided by shares outstanding after placement, $N + \Delta N$. Conown is the concentrated controlling ownership before placement. Δownership is the ownership concentration change that includes Fraction(Placed), as defined in Equation (5). Δconown is the controlling ownership concentration change (decrease) where FractionPlaced is not included in the ownership concentration. $\Delta\text{ownership}_1$, $\Delta\text{ownership}_2$ and $\Delta\text{ownership}_3$ are three segments of Δownership with the two split points of 20 and 50 percent of the controlling ownership before placement (Conown). Likewise, Δconown_1, Δconown_2, and Δconown_3 are three segments of Δconown with the same splits. The t-values using White heteroskedasticity-consistent standard errors are shown in parentheses below the corresponding regression coefficient estimates.

Regression	1	2	3	4	5	6	7	8	9	10
Intercept	4.46	2.40	3.90	3.93	3.46	3.78	1.63	1.63	3.58	2.91
	(2.77)	(0.71)	(2.17)	(2.14)	(2.34)	(2.39)	(0.32)	(0.32)	(1.94)	(1.30)
Fraction	−0.06						−0.12	0.04	0.21	0.26
	(−0.63)						(−0.39)	(0.14)	(0.48)	(0.38)
Conown		0.02					0.05	0.05		
		(0.28)					(0.45)	(0.45)		
Δownership			−0.07				0.16			
			(−0.33)				(0.27)			
$\Delta\text{ownership}_1$				−0.09					−0.31	
				(−0.24)					(−0.51)	
$\Delta\text{ownership}_2$				−0.01					−0.27	
				(−0.04)					(−0.44)	
$\Delta\text{ownership}_3$				−0.13					−0.59	
				(−0.63)					(−0.61)	
Δconown					0.02			0.16		
					(0.15)			(0.27)		
Δconown_1						0.52				1.41
						(1.04)				(0.58)
Δconown_2						−0.14				0.32
						(−0.51)				(0.26)
Δconown_3						0.21				0.48
						(0.71)				(0.57)
Adj-R^2	−0.01	−0.01	−0.01	−0.04	−0.01	−0.02	−0.03	−0.03	−0.05	−0.03
Obs.	98	83	82	82	82	82	82	82	82	82

Δconown as another version of changes in insider ownership treats new shares purely as outside equity. For this alternative measure of changes in controlling ownership concentration, as shown in Table VI, the results remain insignificant. It seems that there is no reliable relationship between the announcement returns for private placements and the changes in ownership concentration in our sample. Thus, our results seem to be inconsistent with Wruck's monitoring hypothesis.

Table VI shows, in various specifications, the slope estimates for Fraction (Placed) are also not significant. Hertzel and Smith (1993) largely rely on this explanatory variable to differentiate their test from the test by Wruck (1989) which is based directly on ownership structure changes, and to support their asymmetric information mitigation (or certification) hypothesis. More precisely, they point out that the monitoring hypothesis of Wruck (1989) is primarily based on Morck et al. (1988) where the inference is drawn from large firms only. Hertzel and Smith (1993) emphasize that private investors are not organizational-active (as in Wruck, 1989) but instead are informational-active because private issuers are usually small firms. They suggest that private equity placements are a solution to the Myers-Majluf adverse selection problem because managers can better communicate with a small number of private investors so that private equity sales tend to reduce asymmetric information. They further argue that the larger the new investment (equity issue), the more difficult it is for the private investors to value the uncertain investment. As a result, they suggest placement discounts reflect compensation for information costs borne by private investors.

Using the non-standard announcement return defined by Wruck (1989), Hertzel and Smith (1993) find a significant relationship between announcement returns and new block sizes (or FractionPlaced). Their finding seems to be consistent with an asymmetric information mitigation or certification effect. But FractionPlaced is a major factor of ownership structure changes in Wruck (1989), as shown in the previous section. In this sense, the main tests in Hertzel and Smith (1993) are not fundamentally different from the tests in Wruck (1989).

Taken together, the adjusted R^2 in Table VI are all below zero, indicating no relationship between announcement returns and changes in ownership concentrations for private placements. Our results are inconsistent with the monitoring hypothesis, reinforcing the challenge raised by recent studies conducted using U.S. data. In the next section, we explore alternative explanations.

5. Determinants of Announcement Effects of Private and Public Placements

To explore the determinants of SEO announcement effects, we use cross-sectional regressions of the announcement-window cumulative abnormal returns, not only on ownership structure variables but also on a list of firm characteristics and market conditions used in previous studies or suggested by existing theories. The dependent variable is the three-day cumulative average abnormal returns, CAR $[-1, 1]$, used in the previous section.

Our list of explanatory variables includes ownership variables similar to those employed by Wruck (1989). In addition, we replace FractionPlaced with Discount. One of the main points in Hertzel and Smith (1993) is that offer discounts compensate for information costs that private investors incur for certifying firm valuation. Hertzel and Smith (1993) suggest that a deeper discount should be related to a higher announcement return. Since underwriting services provided by investment banks or brokerage firms can work in the same way, the certification effect through discounts can also occur for non-private underwritten offers (see Slovin et al., 2000, but with the opposite prediction). Nevertheless, the offer discount is an important variable to test the certification effect.

Second, we use the natural logarithm of the firm's market value, Ln(MV). Firm size is a reasonable proxy for information asymmetries about new investment relative to those about assets in place. As argued by Wu and Wang (2005), the smaller a firm, the more asymmetric information concerns future growth opportunities rather than assets in place, suggesting that the coefficient of firm size should be negative. By the way, there is no correlation between Ln(MV) and Discount (p-values: 0.92, 0.35 and 0.61 for the pooled and the two separate – private and public placements – samples, respectively).

Third, we use three variables as direct proxies for growth opportunities: (i) the firm's market-to-book ratio, MV/BV (Barclay and Liztenberger, 1988); (ii) the return on equity, ROE, which may capture growth opportunities if these are correlated with assets in place (as argued by Denis, 1994); and (iii) the ratio of interest-bearing debt to the sum of debt and equity (Leverage), since leverage itself may be correlated with subsequent growth (as found by Smith and Watts, 1992).

Fourth, we use the (past six-month) monthly average turnover ratio prior to the event month to proxy for a standard liquidity effect (see Brennan and Subrahmanyam 1996; Datar et al., 1998; Eckbo et al., 2000). Fifth, we use the dividend yield (DivYd), since dividend payments reveal firm quality and have a positive effect on the subsequent new equity issues (see Ambarish, John and Williams, 1987). Finally, we consider pre-announcement $(-60, -2)$ CAR, Pre60s, and pre-announcement cumulative market return (Pre60m) as proxies for the firm-specific and general market conditions (see Choe et al., 1993). We estimate the regression model with various specifications. For pooled data, Private is the dummy variable that takes on the value of one for private placements and zero for public placements.

We discuss the regression results along two lines: the information effect from ownership structure variables (Section 5.1); the information effects from growth uncertainty and liquidity (Section 5.2).

5.1. A NEW INTERPRETATION OF THE INFORMATION EFFECTS FROM CHANGES IN OWNERSHIP CONCENTRATION

Table VII reports the regression results. The first ten regressions make use of the pooled sample of private and public placements. For comparison, the 11th and 12th

Table VII. Cross-sectional tests on SEO announcement effects in Hong Kong

This table reports coefficient estimates and their t-values of cross-sectional regressions of the announcement returns on ownership variables, issuing firm characteristics and market conditions for the Hong Kong SEOs during the period from 1989 to 1997. The dependent variable is the three-day announcement window cumulative abnormal return, CAR[−1, 1]. Private takes the value of one for private placements and zero for public placements. Pre60s is the cumulative average abnormal return for the issuing firm from event day from −60 to −2, that is, the pre-announcement price run-up for the firm's stock. Pre60m is the cumulative equal-weighted market return for the same event period before the SEO announcement, that is, the pre-announcement market run-up. See definitions of the other explanatory variables in Tables II and VI. There are various regression specifications. The first 10 are for the pooled sample, and the 11th and 12th are specified in the same way as the 9th and 10th, respectively, but for the public placement sample only. The t-values using White heteroskedasticity-consistent standard errors are shown in parentheses below the corresponding coefficient estimates.

	Pooled sample of private and public placements										Public placement	
	1	2	3	4	5	6	7	8	9	10	11	12
Intercept	3.09	−0.03	2.12	2.25	−0.04	18.68	15.23	17.51	15.46	18.93	17.13	20.47
	(4.39)	(−0.02)	(2.21)	(2.08)	(−0.02)	(3.48)	(2.96)	(3.12)	(2.99)	(3.05)	(2.72)	(2.59)
Private	0.35	0.53	0.12	0.43	0.49	−1.16	−0.49	−1.29	−0.62	−0.78		
	(0.28)	(0.43)	(0.09)	(0.33)	(0.39)	(−0.84)	(0.37)	(−0.88)	(0.46)	(−0.54)		
Discount	1.22				1.50	2.03			2.80		3.58	
	(0.45)				(0.53)	(0.83)			(1.12)		(1.35)	
Conown		0.07			0.07		0.13		0.13		0.14	
		(1.75)			(1.70)		(2.73)		(2.71)		(2.56)	
Δconown			−0.19					−0.26				
			(−1.18)					(−1.68)				
Δconown_1				−0.18						−0.18		0.08
				(−0.19)						(−0.18)		(0.07)
Δconown_2				−0.05						0.01		−0.01
				(−0.22)						(0.02)		(−0.01)
Δconown_3				−0.31						−0.45		−0.52
				(−1.48)						(−2.30)		(−2.21)

Table VII. (Continued)

	Pooled sample of private and public placements										Public placement	
	1	2	3	4	5	6	7	8	9	10	11	12
Ln(MV)						−1.60	−1.82	−1.52	−1.81	−1.64	−2.04	−1.80
						(−3.93)	(−3.40)	(−3.66)	(−3.96)	(−3.54)	(−3.89)	(−3.35)
MV/BV						−2.31	−2.12	−2.46	−2.21	−2.66	−1.81	−2.31
						(−2.31)	(−1.96)	(−2.24)	(−2.02)	(−2.32)	(−1.49)	(−1.78)
ROE						−4.79	−6.40	−4.50	−6.41	−4.44	−9.09	−7.93
						(−1.34)	(−1.71)	(−1.24)	(−1.70)	(−1.20)	(−1.91)	(−1.68)
Leverage						−0.97	−3.50	−2.47	−3.59	−2.67	−3.90	−2.95
						(−0.23)	(−0.75)	(−0.55)	(−0.77)	(−0.57)	(−0.65)	(−0.50)
Turnover						−0.12	−0.12	−0.12	−0.12	−0.11	−0.12	−0.11
						(−2.89)	(−2.87)	(−2.84)	(−2.95)	(−2.76)	(−2.79)	(−2.55)
DivYd						−0.58	7.49	3.10	6.02	3.65	−3.71	−2.84
						(0.04)	(0.50)	(0.21)	(0.41)	(0.25)	(−0.22)	(−0.17)
Pre60s						0.84	−1.98	−1.08	−2.23	−1.50	−0.01	1.35
						(0.33)	(−0.74)	(−0.43)	(−0.84)	(−0.59)	(−0.01)	(0.50)
Pre60m						4.13	4.42	4.86	3.77	4.41	−1.33	0.38
						(0.87)	(0.87)	(0.97)	(0.74)	(0.89)	(−0.21)	(0.06)
Adj-R^2	0.00	0.00	0.00	0.00	0.01	0.06	0.09	0.07	0.09	0.07	0.11	0.09
Obs.	405	372	371	371	372	375	347	346	347	346	271	271

regressions use the sample of public placements alone to repeat the 9th and 10th regressions respectively. First, the dummy variable, Private, is not significant in all specifications with the pooled sample. Thus, there is no significant difference in average announcement returns for private and public placements: this is consistent with the results in Table III. Second, none of the slope estimates for Discount is significant. Thus, our results do not support the certification effect of Hertzel and Smith (1993) and that of Slovin et al. (2000). Third, the slope estimates for the incumbent controlling shareholdings, Conown, tend to be significantly positive. For example, in regression 9, the slope estimate is 0.13 (t-value = 2.71). A similar result is also found in the sample of public placements (regression 11). Thus, the higher the issuers' ownership concentration, the higher the announcement return of equity issues becomes.

Can this positive information effect related to the level of controlling ownership reflect the monitoring effect of Wruck (1989)? As shown in Table VII, none of the slope estimates for changes in ownership concentration, Δconown, seems to be significant in the pooled sample, much like the results with the sample of private placements in Table VI. However, when we split the incumbent controlling ownership concentration into three regions, the slope estimate for the ownership concentration changes, Δconown_3, that occur when the ownership concentration is high (above 50 percent), is significantly negative, -0.45 with t-value of -2.30 (from regression 10). For the public placement sample alone, the slope estimate is also significant, -0.52 with a t-value of -2.21 (from regression 12).

Since new equity issues to outside investors always cause dilution of incumbent controlling shareholdings, Conown, the negative sign indicates that such new issues at a high level of controlling ownership enhance firm value. Dilution of insider ownership can enhance firm value when managerial entrenchment poses a problem in the sense of Morck et al. (1988). But such managerial entrenchment is hardly an issue in concentrated ownership structures, as in many non-Anglo-American countries. Since this result is observed not only in the pooled sample but also for public placements alone, it is unlikely to be driven by the monitoring effect of Wruck (1989). We suggest that this result is likely to reflect the fact that close incentive alignment at a high level of controlling ownership facilitates a positive information effect from new investments.

It is commonly acceptable that, when the ownership concentration of the controlling shareholders is high, the control rights are more likely to fully coincide with the cash flow rights of the controlling shareholders – indicating close incentive alignment in concentrated ownership structures.[10] As a result, new investments in

[10] See the survey on international corporate governance by Denis and McConnell (2003). They conclude that, while the relationship between firm value and ownership structures in the U.S. such as that documented in Morck et al. (1988) remains debatable, the incentive alignment effect in concentrated ownership structures is well received in the literature. The generalized Myers-Majluf model of Wu and Wang (2005) offers an explanation why the incentive alignment effect is pronounced in concentrated ownership structures.

this situation are less likely to be driven by the controlling shareholders' pursuit of private benefits of control. The fact that a larger investment size (reflected by dilution of controlling shareholders' interest) produces a higher announcement return here suggests a positive information effect from genuine new investments in the sense of McConnell and Muscarella (1985). We also repeat regression 10 without the dummy variable, Private, in Table VIII with various splits on Δconown. In general, for a controlling ownership concentration above 40 percent, we still find significantly negative slope estimates for Δconown_3 (meaning a more likely positive announcement effect for larger new investments).

5.2. THE INFORMATION EFFECTS FROM GROWTH UNCERTAINTY AND LIQUIDITY

Table VII shows some other significant firm characteristics. Interestingly, the slope estimates for Ln(MV), in all regression specifications, are significantly *negative*. This is consistent with the line of research that links SEO positive announcement returns to more asymmetric information about growth prospects, or to smaller firm size as a proxy. This important relationship is unconditionally plotted in Figure 1 for the pooled sample.[11] Since private placing firms are usually small, this firm size effect suggests that the large information gap about growth opportunities produces the positive announcement effects of private placements widely documented in the literature.

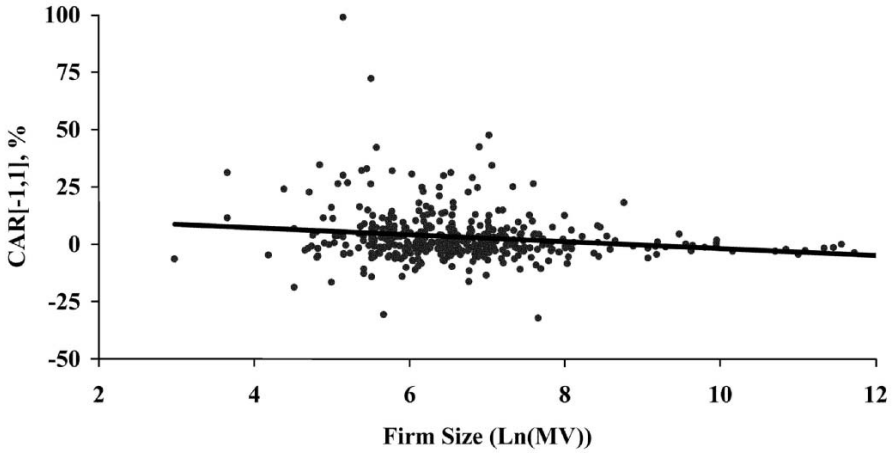

Figure 1. SEO announcement effects (private and public placements) and firm size in Hong Kong for the period from 1989 to 1997.

[11] The plot is similar to that of the sample of public placements. But we cannot find a significant slope estimate for firm size in the sample of private placements alone. The most likely reason is that private issuers cluster in small-firm size classes. This causes insufficient variations in firm size (see Table II).

Table VIII. Results from robustness tests on ownership concentration changes with various splits

This table reports coefficient estimates and their t-values of cross-sectional regressions of the announcement returns on ownership concentration changes, issuing firm characteristics and the market conditions for the Hong Kong SEOs (pooled sample of private and public placements) during the period from 1989 to 1997. All regressions are similar to regression 10 in Table VII except that the dummy variable, Private, is dropped and the two split points take various values.

	Δconown split at (first, second) points of ownership level, Conown (%)					
	(10, 30)	(10, 40)	(20, 40)	(10, 50)	(25, 50)	(30, 50)
Intercept	17.73	18.74	17.93	18.88	19.02	19.26
	(3.26)	(3.40)	(3.04)	(3.21)	(3.10)	(3.21)
Δconown_1	1.24	1.44	−0.20	1.19	0.13	0.23
	(0.50)	(0.61)	(−0.20)	(0.49)	(0.15)	(0.38)
Δconown_2	0.04	0.05	0.06	0.01	0.01	−0.01
	(0.36)	(1.14)	(0.19)	(0.02)	(0.04)	(−0.06)
Δconown_3	−0.27	−0.31	−0.31	−0.45	−0.45	−0.43
	(−1.93)	(−2.13)	(−1.95)	(−2.24)	(−2.20)	(−2.12)
Ln(MV)	−1.56	−1.63	−1.57	−1.65	−1.66	−1.68
	(−3.83)	(−3.90)	(−3.54)	(−3.73)	(−3.58)	(−3.70)
MV/BV	−2.27	−2.41	−2.47	−2.43	−2.53	−2.52
	(−2.13)	(−2.23)	(−2.30)	(−2.19)	(−2.27)	(−2.27)
ROE	−5.20	−4.70	−4.27	−5.22	−4.68	−4.81
	(−1.36)	(−1.24)	(−1.16)	(−1.38)	(−1.29)	(−1.33)
Leverage	−2.96	−3.33	−2.63	−3.16	−3.16	−3.17
	(−0.65)	(−0.72)	(−0.55)	(−0.69)	(−0.67)	(−0.69)
Turnover	−0.12	−0.11	−0.11	−0.11	−0.11	−0.11
	(−2.85)	(−2.76)	(−2.80)	(−2.83)	(−2.82)	(−2.85)
DivYd	3.63	4.67	1.89	4.83	4.75	4.71
	(0.24)	(0.32)	(0.13)	(0.33)	(0.32)	(0.32)
Pre60s	−1.01	−1.46	−1.31	−1.28	−1.36	−1.36
	(−0.39)	(−0.56)	(−0.52)	(−0.50)	(−0.53)	(−0.53)
Pre60m	5.29	5.34	5.14	4.78	4.60	4.52
	(1.01)	(1.03)	(1.06)	(0.94)	(0.93)	(0.90)
Adj-R^2	0.07	0.07	0.07	0.07	0.07	0.07
Obs.	346	346	346	346	346	346

Kang and Stulz (1996) come across this very relationship between announcement return and firm size when they report a small but significantly positive average announcement return (0.5 percent) within a sample of 185 Japanese SEOs excluding private placements. They find it puzzling. Traditionally, the literature has viewed small firms as particularly fraught with asymmetric information-so that the announcement of new issues should cause a larger drop in small issuers' stock prices. Likewise, Fama and French (2002) are puzzled when they find that less-leveraged, small-growth firms favor new equity issues. According to Myers' (1984) pecking order model, new equity should be the last resort in financing.

This puzzle is resolved in the analysis of Wu and Wang (2005). First, small firms with little collateral value and limited reputation are unlikely to have access to (outside) debt. Second, if asymmetric information stems more from (positive) investment opportunities than from assets in place, as is likely for *some* small firms, the information gap may not necessarily deter new equity issues.[12] In this case, the adverse selection effect from asymmetric information about assets in place tends to be overwhelmed by good news about new investment. This situation, however, is absent from the original framework of Myers and Majluf (1984).

The slope estimates of growth proxies other than market-to-book, MV/BV, are not significant. While many studies have tried to link a higher MV/BV to a higher announcement effect in equity offerings (see Pilotte, 1992; Denis, 1994; Jung et al., 1996), the model of Wu and Wang (2005) shows that there is a non-monotone relationship between the announcement effect and the expected NPV of new investment.[13] In particular, if the market expects high growth, information about the issue-to-invest decision becomes largely anticipated and the new issue announcement will have little information content. In effect, the generalized Myers and Majluf model emphasizes that the key variable that underpins the positive announcement effect for new equity issues is not high growth per se but greater uncertainty about investment opportunities than about assets-in-place. Thus, one

[12] This does not mean that new equity issues by small firms would become rampant. First, if issuers are expected to launch bad projects, announcement effects are likely to be negative (see the simulation results in Wu and Wang, 2005). Second, similar to the repeated-game argument of Ambarish, John and Williams (1987) to prevent cheating, even if the market does not know that the new investment is purely driven by private benefits, a new issue can eventually cause an adverse effect on managers/controlling shareholders' equity ownership large enough to offset their private benefits from the new investment. Third, the advantage of a small-growth firm in subsequent new equity issues will endogenously diminish as the small firm gets bigger after the current new issue.

[13] Previous extensions of the Myers-Majluf model predict that new issues cause smaller drops in stock prices when there are smaller information asymmetries. Korajczyk et al. (1991) and Dierkens (1991) find that smaller information asymmetries reduce negative announcement effects. Since debt issues involve less adverse-selection than equity issues do, the findings that debt issues have virtually no impact on stock prices are interpreted as being consistent with the Myers-Majluf model (e.g., Dann and Mikkelson, 1984; Eckbo, 1986; Mikkelson and Parch, 1986). This also gives rise to Myers' (1984) pecking order model of financing because of the difference in information costs of various forms of capital.

may not necessarily observe a positive relationship between the announcement returns and the growth proxy MV/BV.

In Table VII, at the first glance, the finding (only in the pooled sample) that the slope estimates for MV/BV tend to be significantly *negative* looks a bit odd. In general, a lower MV/BV means that either the firm had more bad projects (due to either bad ex ante decisions or simply business setbacks) in the past, or it is expected to have lower growth prospects, or both. Denote A to be the market value of assets in place and B to be the expected NPV of future investments. The market-to-book ratio, MV/BV, will be (A + B)/BV. It follows that a low (A + B)/BV may not necessarily mean poor growth prospects. It possibly means that A is much lower than the book value of assets in place, BV, due to bad past investments. In this situation, if uncertainty over growth is big enough, an issuer is likely to have a surprising turnaround.

It is worth mentioning that firm size, Ln(MV), is significantly *positively* correlated with the market-to-book ratio, MV/BV, in the pooled sample (the Pearson correlation coefficient is 0.10 with p-value of 0.05). Just as in our sample a smaller firm size tends to reflect more asymmetric information about growth than about assets in place, a lower MV/BV should mean greater uncertainty over investment opportunities. In the generalized Myers-Maljluf framework, Wu and Wang (2005) show that if the (market) value of assets in place remains low and there is sufficient uncertainty over growth (a likely situation for a lower MV/BV as a proxy for a turnaround), the announcement effect is likely to be positive. But this is not saying that low MV/BV firms in general can enjoy cost-effective equity financing. For one thing, according to Wu and Wang (2005), if the newly raised funds are largely expected to be squandered on private benefits – which is likely to produce a low MV/BV – the announcement effect is bound to be negative.

The slope estimates for the remaining variables in Table VII (except for Turnover) are not significant. The results for Turnover are resoundingly significant in all cases. For example, in regression 10, the slope estimate is -0.11 (t-value = -2.76). This evidence is consistent with a standard liquidity effect in the literature – that is, the lower is the turnover of the stocks under consideration, the more the liquidity improvement associated with the new equity issues (and the concomitant increase in public float) will matter for the valuation effect of new issues.

To check the robustness of our cross-sectional results, we also use the announcement returns calculated based on the multifactor model as shown in regression (1). The concern arises because some firm characteristics such as firm size, market-to-book equity ratio and liquidity can directly influence a firm's expected return. But CARs in the regressions for Table VII do not account for this, so that the firm characteristics may simply pick up the expected cross-sectional patterns rather than the announcement effects. To address this concern directly, we replicate the results of Table VII using the announcement returns based on the multifactor model as described in Section 3. The results (not reported but available on request) are qualitatively unchanged.

To summarize, we find that a higher announcement return of the new equity issue occurs when the issuing company has a high controlling ownership concentration (above 40 percent). We interpret this as suggesting that sufficiently close incentive alignment facilitates a positive information effect from new investment. There is also a significant firm size effect, that is, a significantly *negative* cross sectional relationship between announcement effect and firm size. Unlike previous studies (Pilotte, 1992 and Denis, 1994), we emphasize that a positive announcement return is linked more to uncertainty over growth than to high growth per se. We also find that an issuer with a lower market-to-book ratio tends to have a higher announcement return. Finally, there is a significant liquidity effect.

6. Conclusion

This research studies the positive announcement effects of new equity issues, with a focus on private placements. For a two-day announcement window, we document a significantly *positive* average CAR of 2.0 percent for a sample of 99 private placements, and of 1.9 percent for a sample of 306 public placements, for the period from 1989 to 1997 on the Hong Kong Stock Exchange (the three-day average CARs are 3.5 and 3.1 percent respectively). These findings help address important issues that cannot be fully investigated using U.S. data. In particular, any determinant of positive announcement effects for public issues, a phenomenon not observed in the U.S., may help us better understand the case of private placements.

In cross-sectional regressions, we find that positive announcement returns in private placements do not seem to arise from ex post monitoring. In both private and public placements (especially in the latter case where new investors are deemed to be relatively passive) there is a significantly positive relationship between announcement returns and the levels of controlling ownership concentration. Further scrutiny reveals that a positive announcement return tends to be associated with larger new issues only when ownership concentration exceeds 40 percent. Since dilution to controlling shareholders only hurts incentive alignment and hence can hardly improve monitoring in an already concentrated ownership structure, we suggest a new explanation: the close incentive alignment at a high level of ownership concentration facilitates a positive information effect from new investments.

While screening by underwriters certainly sets a bar for issuing firms, as in the U.S., valuations of screening or certification are very noisy in Hong Kong. Understandably the announcement effect of new issues largely depends on how asymmetric information works. We find that the positive announcement effect of new equity issues is significantly related to growth uncertainty: this is consistent with the generalized Myers-Majluf model which predicts that more asymmetric information about growth (relative to that about assets in place) is likely to determine the positive announcement effect for new equity issues. Interestingly, we find that an issuer poised for a turnaround (measured by a relatively low market-

to-book ratio but with highly uncertain growth) is more likely to have a positive announcement effect.

Most important, we find a significant firm size effect: the smaller the issuer, the higher the announcement effect of a new issue. We interpret this as reflecting the fact that for smaller issuers, asymmetric information is more likely to concern new investment opportunities than assets in place. As issuers of private equity are usually small firms (as widely documented in the literature) the information effect from uncertainty over growth prospects seems to be a new, legitimate explanation for positive announcement effects of private placements identified by the literature and confirmed by this study. In the case of Hong Kong, uncertainty of corporate growth prospects – being more pervasive than elsewhere – and the unique institutional setting help explain why the same positive announcement effect is found for public placements as well.

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