# Announcement Effects of Seasoned Equity Offerings in China

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# Abstract

By taking a longer period (1998-2008) this study examines the stock price reaction to the announcement of different equity issues in China. Initially, the study documents the announcement effects of Right issues and Public Offerings (SEOs). Secondly, it adds to the previous literature by keeping in view three successive announcement dates for SEOs as event dates i.e. Board of directors meeting date (BOD), shareholders' meeting date and announcement date to public. Findings suggest that market react positively to the announcement of right offerings while SEOs convey negative signals to market. Consistent with earlier studies on Right issues announcement effects around different event dates, SEOs price effects are also more significantly negative around BOD date. For shareholders' meeting date less significant response is observed, while around announcement date again more negative significant returns are observed, more than shareholders' meeting date but less than BOD meeting date.

Keywords: Seasoned Equity Offerings, BOD, Shareholders' meeting date, announcement Effects

# 1. Introduction

This study observes the market reaction to different seasoned equity offering announcements in China. Normally, when a firm plans to raise funds through seasoned equity, it can go for either right issues, public offerings (SEOs) or private placements. This research focuses on right issues and public offerings (SEOs). In right issues, new shares are offered to current stockholder at a specified subscription price that is normally less than what the offering price to the public will be. It enables existing stockholders to maintain their proportionate ownership in the company when the new issues are made, called preemptive right. In public offerings new shares are offered to public while in private placements, new shares are sold to institutions or high net worth individuals.

Empirical evidence indicates that stock price declines with the announcement of seasoned equity offerings, due to negative information about the prospect of the issuing firm. To formalize this information effect, Myers and Majluf (1984) developed the overvaluation hypothesis, which proposed that in an asymmetric information world where managers possess superior information about the value of their firm, they have an incentive to issue new equity when their firm is overvalued. Consequently, market interprets the equity announcement as unfavorable information about the issuing firm and thus revises the value of the issuing firm downward upon the announcement.

The majority of research on the effects of seasoned equity issue in the United States based on public offerings. These studies documented consistent negative abnormal returns on equity value when public offerings are announced (Smith, 1977; Myers and Majluf, 1984; Masulis and Korwar, 1986; Asquith and Mullins, 1986; Mikkelson & Partch, 1986 and Jung et al., 1996)

However, some studies also reported the evidence on stock price behavior of right issues. A stock price decline has been observed by Hansen (1989) and Eckbo and Masulis (1992) in US. In United Kingdom 2-day excess return of -1.3% (Levis, 1995) and -1.88% (Slovin et al., 2000) has been observed. A negative excess stock returns has also been observed in France (Gajewski and Ginglinger, 1998), New Zealand (Marsden, 2000), Netherlands (Kabir and Roosenboom, 2003) and Hong Kong (Ching et al., 2001).

In contrast to these findings, a positive abnormal return for right issue announcements has been observed in Japan (Kang and Stulz, 1996), Greece (Tsangarakis, 1996) and Singapore (Tan et al., 2002). Numerous studies on emerging markets also reveal significant positive abnormal returns on announcement of right issues i.e. in Korea (Kang, 1990 and Dhatt et al., 1996), Malaysia (Salamudin et al., 1999) and in China (Shen and Xiao 2001). While V.B. Marisetty et al. (2008) reported insignificant positive abnormal returns in Indian firms. Cahit Adaoglu (2006) investigates the market reaction to both "unsweetened" (plain) and "sweetened" (with simultaneous distribution of bonus issues) rights offerings in the Istanbul Stock Exchange, and found significant negative announcement day abnormal returns for "unsweetened" rights offerings and significantly positive abnormal returns for "sweetened" rights offerings. C. Chen, X. Chen (2007) examined 205 right issues in China and found market reacts negatively around such announcement, but positively during the post-announcement period (in +10 to +20 days expiration period).

#### 1.1. Regulatory Issues in China

In China, when a firm meets the requirements of the China Securities Regulatory Commission (CSRC) and plans to raise Right issues, it has to submit a proposal to the board of directors. Upon the approval from the board, the firm informs the stock exchange within two days and holds a shareholder meeting within one week. After approval by shareholders, the firm submits the application materials to the CSRC. However, firms still has to wait for final issue after getting authorization from CSRC (Cao et al. 2007). How long they wait in queue, depends on the market situation. When the market is bullish, it is easier to issue new shares, but the delay can be large in a bear market. The CSRC has a great concern about the new issue's impact on the market. On average, the rights issue procedure takes six months from the signing of the prospectus until receipt of the proceeds. The procedure for public offerings is almost the same as for rights issues except that the firm has to get a pre-approval from the CSRC and then hold the shareholders meeting to determine the specific details in the prospectus. This prior submission and approval by the CSRC may add a delay.

All other studies on Seasoned Equity offerings present the market reaction around a specific announcement date. However, in China, due to its different regulatory nature, several announcement dates are available .i.e. board of directors meeting date, shareholders meeting date, CSRC approval date, and announcement to the public. Research on right offerings in China documents, first date i.e. board of directors meeting date (BOD) as most important event date (Cheung et al., 2006; Fung et al. 2008). This may for the reason that first time the news of new equity is transferred to market. To get the more comprehensive representation of results this study try to focus on a large period of 11 years (1998-2008) to measure the seasoned equity issue announcement effects. In the first step, SEOs and right issues are compared to evaluate the market reactions on different seasoned equity offering methods. In order to assess the most significant date in SEOs, this research analyses the market reaction on three different event dates, i.e. BOD date, shareholder's meeting date and announcement date of offering.

The rest of the paper is organized as follows. Section 2 describes the sample selection and methodology. Section 3 presents the results and discussion, robust testing is given in Section 4, while section 5 provides concluding remarks.

# 2. Sample Selection and Methodology

This study contains a sample of 565 observations of rights offerings and 152 observations of seasoned public offerings for a period of 1998-2008. In considering sample inclusion, we consider the offerings that have identifiable board of directors (BOD) meeting dates, shareholder's meeting date and announcement date along with the data require for the calculation of abnormal returns around these three event dates. We collect all the data about the stock issues and date from Wind database. While all the prices are collected from CCER, Chinese Center for Economic Research. If a company issues stock two or more times it is treated as a separate stock and the prices are obtained separately for it and if on the issue date stock is not trading then the first trading day is considered as day zero.

After filtering all the data, we find 717 equity issues out of which 565 were Right offerings, 302 issued in Shanghai and 263 in Shenzhen stock exchange and 152 were SEO, 87 issued in shanghai and 65 in Shenzhen stock exchange,

Two different models are used to generate the expected returns of securities. First, one is the Market Adjusted Return Model and the other is Mean Adjusted Return Model. According to market adjusted return model the expected return of security on a specific date is same for all the securities but it is different for other dates. However, in mean adjusted return model the expected return of a security 'i' is equals to a constant (average return in estimation window), which can differ across security. Normally the return of market index is taken as expected return of securities in market adjusted return model (Aens and Andoval 2005, C.Chen, C.Chen 2007). In this study mean adjusted return model is used for robust testing purpose. Although it is the simplest method but it often yields results similar to those of more sophisticated models (Brown and Warner 1980,1985)

We calculate daily abnormal returns for event in the research window by subtracting its expected return from the actual (observed) return.

$$AR_{it} = R_{it} - \hat{R}_{it} \tag{1}$$

Where  $AR_{it}$  is the abnormal return,  $R_{it}$  is the observed return and  $\hat{R}_{it}$  is expected return of security 'i' on day't'. In market model for a security,  $\hat{R}_{it}$  is the overall market return of its respective stock exchange (Shanghai or Shenzhen). While for mean adjusted return model for each security,  $\hat{R}_{it}$  is the average of its returns in estimation period. We calculate the average daily abnormal return for all the events within the research window as follows

$$\overline{AR}_{t} = 1/N \sum_{i=1}^{N} AR_{it}$$
<sup>(2)</sup>

Where  $\overline{AR}_t$  is the average daily abnormal return, N is the total number of securities. Cumulative abnormal return (CARs) for a certain period is computed by adding daily abnormal returns.

$$CARs(t_1 - t_2) = \sum_{t=t_1}^{t_2} AR_t$$
 (3)

This study use an estimation window of 190 days (-200 to -11) and an event window of 21 days (-10, +10) for each security, where day 0 defines the event day. The significance of abnormal returns is tested by using t-test.

#### 3. Results and Discussion

Table 1 presents the results of right issue announcements. In the preannouncement period, we obtain significantly positive average abnormal returns (AARs) around 0.2%. The significant positive response in preannouncement period shows that the news of right issues has been leaked out prior to board meeting. On event date negative but insignificant AARs of 0.18% are observed. On and after BOD date, no abnormal performance is detected, except on day 2. The -0.18% AARs (significant at 5%) is may be the adjustment for earlier overreaction of prices.

Mean cumulative abnormal returns (CARs) across firms around different event window periods of BOD date as event date, are presented in table 2. Results show positive but insignificant CARs for different event window periods around BOD meeting date. For event window of - 8 to 1 days cumulative abnormal returns are 1.03%, significant at 1%. This shows slow spreading of information in market before announcement. These results are consistent with the results of Fung et al. (2008).

Table 3 shows that for firms who use public offerings (SEOs), Average abnormal returns (AARs) in preannouncement period are positive and significantly different from zero but on the announcement date they are negative and highly significant (-1.25% significant at 1%). Positive price behavior before announcement is similar to those found in earlier studies (N.Salamudin et al. 1999) that upward movement of share prices occurred before announcement of new issue. These results are also consistent with Myers and Majluf (1984) overvaluation hypothesis due to which market gets negative information about the issuing firm, which leads to a price drop on announcement of SEO.

Figure 1 shows the comparative trend of right issues and SEOs. Right issues and SEOs both face the price increase in the preannouncement period but magnitude is found to be higher for SEOs issuing firms. On the

announcement date a little price drop is observed for right issues however, negative response for SEOs is very high and continue in post announcement period.

For observing the response of SEO announcement on other two event dates (shareholders' meeting date and announcement date), table 4 provides the Cumulative Abnormal Returns around BOD, shareholders and announcement date respectively. Also different event window periods are observed for robustness purpose.

Findings show that the CARs attached with BOD date are negative and more significant as compared to shareholders meeting date and announcement date. While on shareholders meeting date they are less significant as compared to both other event dates. CARs around announcement date are -0.94% significant at 5%. To capture the behavior of SEO in post announcement period, another event widow period of -1 day to 10 days is also presented in Table 4. CARs for this period are around -3% significant at 1% for BOD and announcement date and -2% for shareholders meeting date significant at 5%. Overall results show that BOD meeting date is most important date because it shows the real response of market. Shareholders meeting date convey less information to market that is the reason it shows less response of market. Again, on announcement date the negative response observed, is more than shareholders meeting date because all the information is passed on to public. Figure 2 presents the clear picture of announcement effects of SEOs around different event dates.

# 4. Robust Testing

For robustness of our results, we use the mean adjusted return model to compute the abnormal return. On BOD meeting date for an event window period of 3 days (-1, +1) CAR of -1.36% (significant at 1%) is obtained which is -1.07% (significant at 5%) on announcement date. While for shareholders meeting date these are insignificantly negative -0.8%. These results are robust to our earlier findings that BOD date is most important date in China to receive the market reactions on SEO announcements.

We also observe the CARs around different event window periods, i.e. from day -3 to day 3, from day -8 to 1 and from day -1 to 10 (presented in table 2 and table 4). Again, our results are robust to different event window periods.

# 5. Conclusion

All other studies on Seasoned Equity offerings document the market reaction around a specific announcement date. However, in china, due to its different regulatory nature, several announcement dates are available .i.e. board of directors meeting date, shareholders meeting date, CSRC approval date, and announcement date to the public. Different studies on right offerings in China document that first date i.e. board of directors meeting date (BOD) is most important event date as first time the information of new equity is going to be transferred to market. To get the more clear picture of results this study focused on a large period of 11 years (1998-2008). Firstly, this study documents the announcement effects of Right issues and Public Offerings (SEOs). Secondly, it adds to the previous literature by keeping in view three successive announcement dates for SEOs as event dates i.e. Board of directors meeting date, shareholders' meeting date and announcement date to public.

Results indicate that Right issues are associated with positive market reaction while SEO's announcements conveys negative signals to market. For SEOs, high positive abnormal returns before the board of directors meeting announcement were observed, which is consistent with earlier studies that upward movement of share prices occurred before SEOs announcements (overvaluation indication). On the BOD meeting date high negative abnormal returns are observed. Indicating that SEOs convey negative signal to market. On subsequent share holder's meeting date the negative price effects was observed but it is less significant than that at the time of the board meeting, suggesting that partial information has been disseminated in the market. At the announcement date of offerings, again negative price announcement effects were found, which were smaller than those at the board-meeting announcement but larger than those at the general shareholders' meeting.

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Tabl	e 1. A	bnormal	Returns a	around 1	the p	eriod	of	a Rig	tht ]	lssue A	Announcement	

Days	AAR	t-value	CAR
-10	0.0007	0.709	0.0007
-9	0.0019	1.351	0.0026
-8	0.0008	0.807	0.0035
-7	0.0001	0.089	0.0035
-6	0.0018*	1.809	0.0054
-5	0.0001	0.063	0.0054
-4	0.0015	1.398	0.0069
-3	0.0025***	2.573	0.0094
-2	0.0024**	2.264	0.0119
-1	0.0034***	3.004	0.0152
0	-0.0018	-1.218	0.0134
1	-0.0005	-0.428	0.0129
2	-0.0018**	-1.765	0.0112
3	0.0002	0.162	0.0113
4	0.0001	0.085	0.0114
5	0.0004	0.409	0.0118
6	0.0014	1.243	0.0131
7	-0.0001	-0.132	0.0130
8	-0.0008	-0.853	0.0122
9	-0.0001	-0.141	0.0121
10	0.0003	0.291	0.0123

Describes the results of Right offerings for a period of 1998-2008. Column 2 and 4 represents the results of Average Abnormal returns (AAR) from day -10 to 10 and cumulative abnormal returns (CAR), respectively. These AARs and CARs are based on Market Adjusted return model out of 3 RGM (return generating models). column 3 presents the t value. \*, \*\*, \*\*\* shows that the results are significant at 10%, 5% and 1% significant respectively.

Table 2. Cumulative Abnormal Returns (CARs) around the period of a Right Issue Announcement

Event window periods	CAR (-3,3)	CAR (-1,1)	CAR (-2,1)	CAR (-8,1)	CAR (-1,10)
CARs	0.0044	0.0011	0.0035	0.0103***	0.0005
T value	(1.477)	(0.487)	(1.423)	(2.948)	(0.133)

Describes the results of Right offerings for a period of 1998-2008. Column 2 to5 represents the Cumulative Abnormal returns (CAR) from day -3 to 3, day -1 to 1, day -2 to 1 and day -8 to 1 respectively. t-values are presented in parenthesis. \*, \*\*, \*\*\* shows that the results are significant at 10%, 5% and 1% significant respectively.

Table 3 Abnormal Returns around th	e period of a SEO	announcement ()	Public Offerings
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Days	AAR	t-value	CAR
-10	-0.0009	-0.472	-0.0009
-9	0.0017	0.895	0.0008
-8	0.0019	0.896	0.0026
-7	0.0019	0.590	0.0045
-6	-0.0007	-0.375	0.0038
-5	0.0063***	2.933	0.0102
-4	0.0034	1.565	0.0135
-3	-0.0008	-0.422	0.0127
-2	0.0046**	1.985	0.0173
-1	0.0008	0.269	0.0181
0	-0.0125***	-4.524	0.0057
1	-0.0047**	-2.166	0.0010
2	-0.0013	-0.657	-0.0003
3	-0.0006	-0.188	-0.0009
4	-0.0012	-0.622	-0.0021
5	-0.0041	-1.305	-0.0062
6	0.0030**	1.708	-0.0032
7	0.0027	1.219	-0.0005
8	0.0004	0.215	-0.0001
9	-0.0011	-0.598	-0.0011
10	-0.0048**	-2 408	-0.0059

Describes the results of SEOs for a period of 1998-2008. Column 2 and 4 represents the results of Average Abnormal returns (AAR) from day -10 to 10 and cumulative abnormal returns (CAR), respectively. These AARs and CARs are based on Market Adjusted return model out

of 3 RGM (return generating models). column 3 presents the t value. \*, \*\*, \*\*\* shows that the results are significant at 10%, 5% and 1% significant respectively.

Event window periods	BOD	Shareholders	Announcement date
CARs (-1,1)	-0.0163***	-0.0078*	-0.0094**
	(-3.460)	(-1.831)	(-2.022)
CARs (-3,3)	-0.0144**	-0.0048	-0.0079
	(-2.257)	(-0.714)	(-1.314)
CARs (-2,1)	-0.0117**	-0.0058	-0.0016
	(-2.255)	(-1.180)	(-0.317)
CARs (-8,1)	0.0002	-0.0080	0.0054
	(0.026)	(-1.380)	(0.827)
CAR (-1,10)	-0.0232***	-0.0201**	-0.0310***
	(-3.391)	(-2.171)	(-4.261)

Table 4. Cumulative abnormal returns of SEO around different event dates

Describes the results of SEOs for a period of 1998-2008. Column 2 to 4 represents the Cumulative Abnormal returns (CAR) around board of directors, shareholders' and announcement date respectively. t-values are presented in parenthesis. \*, \*\*, \*\*\* shows that the results are significant at 10%, 5% and 1% significant respectively.



Figure 1. Cumulative abnormal returns (CARs) over the event window period (-10, +10) for all the right issues and SEOs in sample period



Figure 2. Comparative trend of cumulative abnormal returns (CARs) over the event window period (-10, +10) for all SEOs in sample period, on three event dates respectively.