

## **Common Stock Repurchases: Case of Stock Exchange of Thailand**

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### **Abstract**

*In Thailand, common stock repurchase has been allowed since 2001. Eighty-six repurchase announcements from 69 companies listed on Stock Exchange of Thailand (SET) have been made during December 14, 2001- May 22, 2012 (two companies were delisted). This paper is to investigate whether repurchase announcement has any effect on the abnormal return of the listed firms or not. Event study methodology is employed. Sample covers 78 announcements excluding six illiquid stocks and two recent announcements. The announcement date is set as the same date of the board of director meeting because the company must disclose the resolution to SET within the date of resolution or within 9:00 a.m. of the next business day. The result shows the positive abnormal return of 2.23%, on average, at 1% significance level. Graph of cumulative abnormal return reports very clearly that the significant abnormal return starts 2 days before the announcement date. This is consistent with the arguments that repurchase is done when stock is underpriced and management knows about this information.*

**Key words:** Cumulative Abnormal Return (CAR), Share Repurchases, Event Study

### **1. Introduction**

When the company gets the net profit, it may choose to distribute the cash out to its common shareholders or keep it as retained earnings for the future investment. The payout policy may be set in the form of dividend distributed to all shareholders or the firm may use the money to repurchase the common stocks back. Common stocks can be repurchased by many methods. The most popular two methods are fixed-price tender offer and open-market repurchase. Study by Ikenberry, Lakonishok and Vermaelen (1995), and Grullon and Michaely (2002) reported that open-market repurchase has gained more popularity. In Thailand, out of 88 repurchase announcements from 2001 to 2012, only 5 repurchases were done by General Offer (GO), the remaining repurchases were on the Stock Exchange of Thailand (SET)'s Main Board. This paper is the preliminary study of the effects of share repurchases through the SET's Main Board on the behavior of the underlying share price.

Share repurchase in Thailand has been allowed only after the amendment of section 66/1 of the Public Limited Companies Act B.E. 2544 and the Ministerial regulations, regarding Rules and Procedures governing a Company Repurchasing Its Own Share, Disposing of the Repurchased Shares and Writing-off the Repurchased Shares, was made on November 30, 2001. If any listed company wants to repurchase its own shares, it must get approval from the shareholders first. However, if the amount of repurchase is not in excess of 10 percent of the paid-up capital, only approval from board of directors may be done and the listed company may request a written approval from the shareholders for the repurchase decision made by the board instead of convening a shareholders' meeting. The listed firm then has to disclose the board resolution or the shareholder's resolution approved to Stock Exchange of Thailand (SET) within the date of resolution or within 9:00 a.m. of the next business day. Also the company must disclose the treasury stock program to the investors through SET's information system at least 3 days before actual repurchase (prior to November 19, 2008, it was at least 14 days). The company, that can repurchase its shares, must have positive retained earnings and excess liquidity and the free float shares are not less than 15 percent of paid-up capital and number of retail shareholders must not be less than 150. The listed firm can repurchase its stock from the SET's Main Board if the total treasury shares do not exceed 10% of a firm's paid-up capital or can buy back through a general offer to the shareholders.

If the firm chooses to buy from the Main Board, the offer price must not exceed the 115% of the average closing price of those shares for the preceding 5 business days. Share repurchase is prohibited prior to the release of material information or the price-sensitive information, i.e. declaration of dividends or capital change.

This paper is organized as follows:- the next section will be the review of related literature, after that data and methodology used in this study will be discussed. The final section will report the results and the conclusion of the paper.

## **2. Literature Review**

When firms announce share repurchases, lots of evidences report the significant positive returns around the repurchase announcement date of those firms. For example, in U.S., the sample used by Masulis (1980), Dann(1981), and Vermaelen (1981) covered the firms listed on either the New York Stock Exchange or American Stock Exchange. Rees (1996) and Wang, Strong, Tung and Lin (2009) studied on the U.K. market. Canadian firms are investigated by Ikenberry et al. (2000), and Li and McNally (2007). Brown (2007) explores on the Australian market. Hong Kong market was studied by Zhang (2005), while Taiwanese market was investigated by Chen, Chen, and Cheng (2004), Liao, Ke, and Yu (2005), and Shyu (2007.) It is surprising to find that even though it is not the commitment for the firms to repurchase their shares after the announcement, and prices also go up after the announcement date, most of the firms still repurchase their shares. Isagawa (2002) explained that it may result from the inefficiency of the market.

Reasons to explain why the significant positive abnormal returns are detected around the repurchase announcement periods have been discussed from many hypotheses. Six hypotheses will be discussed in this paper. The first one is the information asymmetry and signaling hypothesis. To operate the business effectively and transparently, shareholders will elect board of directors to be their representatives, and board of directors will appoint the manager to run the business under its control. Jensen and Meckling (1976) introduce this situation as the separation of ownership and control. Manager or insider is supposed to know the real situation of the company better than anyone else; therefore, investors try to interpret the decisions made by the management as the signal intentionally sent out to them. Share repurchase decision can be interpreted as the good signal that manager tries to convey new and positive information about the future prospects of the firm and the firm value to the investors. Investors may interpret that management is better informed that the stock price is currently undervalued or lower than the fundamental value, so the firm can repurchase its own shares at the low price (Masulis, 1980; Dann, 1981; Vermaelen, 1981; Asquith & Mullins, 1986; Ofer & Thakor, 1987; Grullon & Ikenberry, 2000; Isagawa, 2002.) Investors may interpret the information that managers know more about the true state of the firm's current earnings (Miller & Rock, 1985.) However, study by Grullon and Michaely (2004) and Jagannathan and Stephen (2003) did not report the higher operating performance after the announcement of open-market share repurchases.

The second hypothesis is the agency cost and free cash flow hypothesis. Because of separation of ownership and control (Jensen & Meckling, 1976), managers sometimes spent the firm's free cash flow to maximize his own benefits instead of maximizing shareholders' wealth resulting in the agency problem. Jensen (1986) states that firms with excess free cash flow and less positive investment opportunity will face the agency cost; therefore, share repurchase is one method to help reduce the agency cost. This hypothesis is supported by the study done by Jagannathan and Stephens (2003), Grullon and Michaely (2004), Li and McNally (2007) and Wang, Strong, Tung and Lin (2009). However, Howe, He, and Kao (1992) found no evidence to support the free cash flow hypothesis. Also Chan, Ikenberry, and Lee (2004) found limited evidence to support this hypothesis.

The third hypothesis is the personal taxation. In Thailand, dividend received from the companies listed on Stock Exchange of Thailand has to be deducted by 10% withholding tax, but tax will be exempted for the capital gain. One of the arguments that firm distributes cash to the investors in the form of share repurchases is to help investor avoid double taxation from dividends. This is consistent with the study by Bagwell and Shoven (1989), Masulis (1980), and Grullon and Michaely (2000). The fourth hypothesis is concerning with the leverage and the corporate taxation. If repurchases are financed with debt, firm will get benefit from interest tax shield (Masulis, 1980.) Grullon and Michaely (2000) also state that firms choose to repurchase their stocks in order to adjust the leverage ratio. The fifth hypothesis is the bondholder expropriation. Dann (1981) and Maxwell and Stephens (2003) found that firms repurchases their shares in order to transfer wealth from bondholders to shareholders.

Masulis (1980) also explained that share repurchase may make the wealth transfer between tendering and non-tendering shareholders. Takeover defense is the sixth hypothesis. Bagwell and Shoven (1989) and Denis (1990) pointed out that share repurchase may make it harder for the repurchasing firm to be acquired.

**3. Data and Methodology**

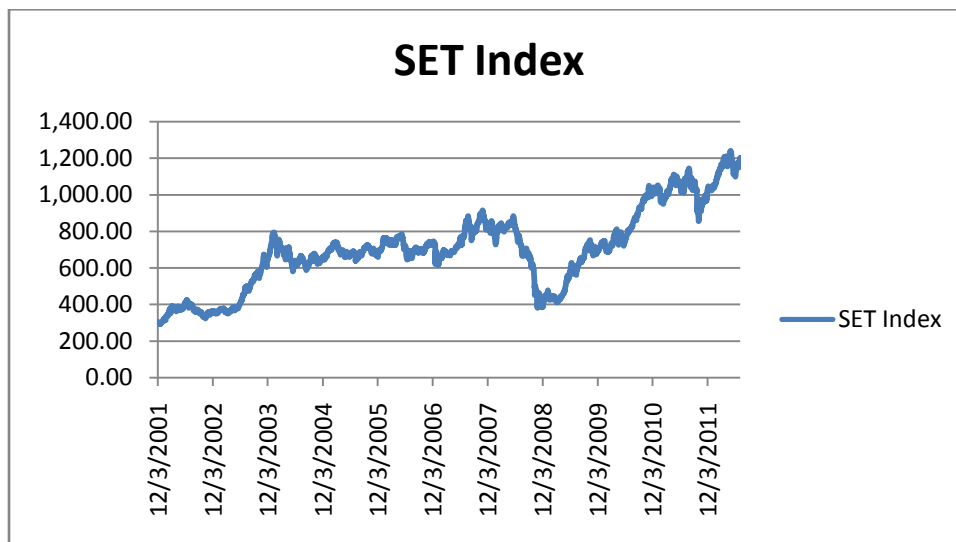
One of the restrictions on share repurchase from Stock Exchange of Thailand (SET) is that repurchases must not be done prior to the release of material or price-sensitive information; therefore, all repurchase decisions made by the listed companies that have been disclosed to SET since 2001 are investigated. Eighty-eight announcements on share repurchase from seventy-one companies listed on SET have been made. Table 1 reports number of share repurchases announcements during 2001-2012. Starting from year 2001 when the companies listed on SET are allowed to repurchase their own shares, number of share repurchases announcements were not high. From year 2002-2005, number of share repurchases announcements were only 5-7, and dropped to only 3 announcements in year 2006 and 2007. In year 2008, number of share repurchases announcements increased dramatically to 31, dropped to 5 in year 2009, increased to 14 in year 2010 and dropped again to 4 in year 2011. Figure 2 shows the SET index from year 2001-2012. It is very clear that year 2008 was the bearish year, stock prices dropped sharply around 50% from year 2007.

**Table 1: Number of share repurchases announcements during 2001-2012**

Year	Number of share repurchase announcements
2001	2
2002	5
2003	5
2004	6
2005	7
2006	3
2007	3
2008	31
2009	5
2010	14
2011	4
May 2012	3
TOTAL	88

Source: Stock Exchange of Thailand

**Figure 1: Stock Exchange of Thailand Index during year 2001-2012**



Source: Stock Exchange of Thailand

Sample covered in this study will be only seventy-eight announcements because two companies were delisted, stocks of six companies were illiquid, and two announcements were recently made.

After the firms repurchase their stocks, they can resell the treasury stocks either on SET's main board or via public offering with the approval from Securities and Exchange Commission Thailand (SEC). Firms can resell their treasury shares six months after the earlier of the day that they completely repurchase the shares (completion date) or after the implementation date. If the shares cannot be sold out, the companies must report the capital reduction and reduction of unsold shares, and register the changed registered capital with Ministry of Commerce and disclose the capital reduction registration to SET. Table 2 reports the status of the share repurchase announcements. Out of 78 announcements made, 19 (24.4%) announcements are still open meaning that the firms do not completely repurchase their shares yet, and 59 repurchases are completed. Out of 59 repurchases, 28 repurchases (35.9%) are for the purpose of capital reduction, and 31 repurchases (39.7%) ends up with reselling the treasury shares back to the public.

**Table 2: Status of share repurchase from year 2001-2012**

Status of Share Repurchase	Number of Repurchase Announcements
- Open	19 (24.4%)
- Capital Reduction	28 (35.9%)
- Repurchase then Resell	<u>31 (39.7%)</u>
TOTAL	78 (100%)

Source: Stock Exchange of Thailand

To explore the effect of share repurchase announcements on the behavior of underlying share price, event study is employed. Because of the requirement set by SET that firms must disclose the resolution of the shareholders or the board of director concerning share repurchase to SET within the date of resolution or within 9:00 a.m. of the next business day. The date of the Board of Directors' meeting is, therefore, set as the announcement date. Though Ministerial regulations state that firms have to make public announcement of the share repurchase at least 14 days prior to the implementation of the project (or 3 days as stipulated in SET's regulations), it is believed that once information is disclosed to SET, investors are informed about the news already, and most of the firms start implementing the repurchases 14 days after the resolution is made.

This paper follows the Market model by Brown and Warner (1980) to calculate abnormal returns around the repurchase announcement period (p.252-3.) By defining day 0 as the announcement date, one hundred daily return observations (-89 to +10) on each announcement are used. The period covers 89 days before and 10 days after the announcement date. For each share repurchase announcement from day -89 to day -11, daily returns of the firms announcing the share repurchase are regressed with the returns on the market portfolio where SET index is used as the proxy for the market price. The residuals for each firm from day -10 to day +10 will then be estimated based on the coefficients ( $\hat{\alpha}_i, \hat{\beta}_i$ ) obtained from the regression. These market model residuals are used as the measurement of abnormal return ( $A_{i,t}$ ). Average abnormal returns for all 78 announcements for each day t ( $AR_t$ ) from day -10 to day +10 are then calculated. In order to see whether the abnormal returns starting from the day of accumulation to day t are systematically different from zero or not, cumulative abnormal returns ( $CAR_t$ ) for day t are then computed (p.228.)

$$R_{i,t} = \ln \left( \frac{P_t}{P_{t-1}} \right)$$

$$A_{i,t} = R_{i,t} - \hat{\alpha}_i - \hat{\beta}_i R_{m,t}$$

$$AR_t = \frac{1}{N} \sum_{i=1}^N A_i$$

$$CAR_t = CAR_{t-1} + AR_t$$

where  $R_{m,t}$  = the market return at time t

$R_{i,t}$  = the return of each stock at time t

$P_t$  = price of each stock or SET index on day t

$P_{t-1}$  = price of each stock or index on day t-1

$A_{i,t}$  = residual or abnormal return of stock i at time t

$AR_t$  = average abnormal return for firm i = 1 to 78 at time t

$CAR_t$  = cumulative abnormal return at time t

The significance of the abnormal return on the announcement date or day 0 ( $AR_0$ ) is tested by the t-test under the assumption that residuals are uncorrelated across securities, and standard deviation of the average abnormal return will be estimated on the basis of the standard deviation of the average abnormal return of each announcement in the (-89, -11) period. The test statistic which is distributed Student-t with 78 degrees of freedom for the assumed normal and independent  $A_{i,t}$  is then calculated from:-

$$\frac{\frac{1}{N} \sum_{i=1}^{78} AR_{i,0}}{\frac{1}{N} \left( \sum_{i=1}^{78} \left[ \frac{1}{77} \sum_{t=-89}^{-11} \left( A_{i,t} - \left( \sum_{t=-89}^{-11} \frac{A_{i,t}}{77} \right) \right)^2 \right] \right)^{\frac{1}{2}}}$$

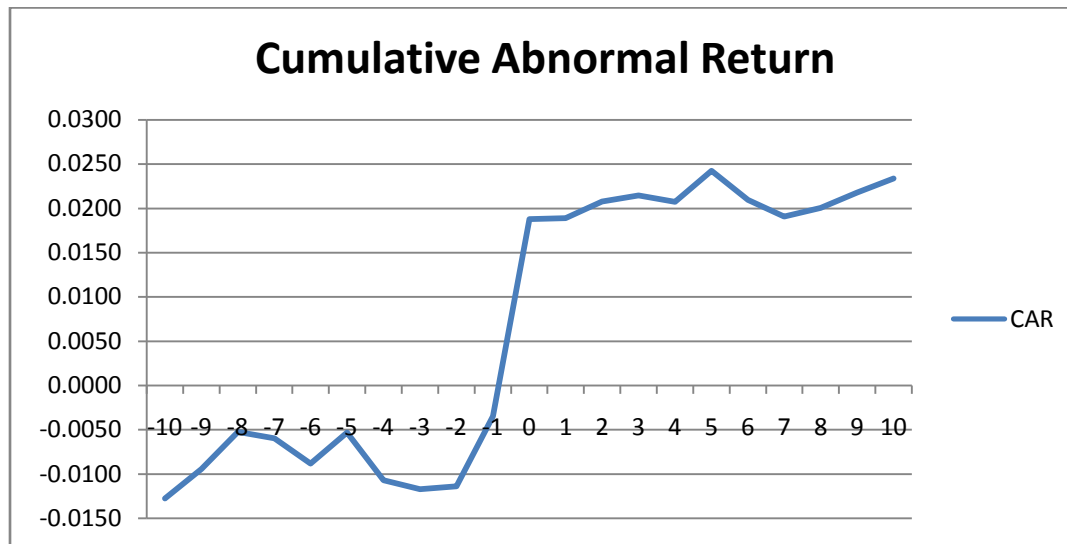
#### 4. Results of the Study

Many researchers have found the significant positive abnormal return around the share repurchase announcement date and explained the findings with the concept of Asymmetric Information and Signalling hypothesis (Masulis, 1980; Dann, 1981; Vermaelen, 1981; Asquith & Mullins, 1986; Ofer & Thakor, 1987; Grullon & Ikenberry, 2000; Isagawa, 2002.) In this study, the results from 78 share repurchase announcements made during 2001-2012 by the firms listed on Stock Exchange of Thailand also shows the consistent findings with the previous studies. Out of 78 announcements, positive abnormal returns on the announcement day (day 0) are found positive for 57 announcements. From Table 2, the average abnormal return on the announcement date (day 0) reports the mean value of 2.23%. The t-statistics of 2.81 with 78 degrees of freedom shows that the positive average abnormal return is significant at 1% level. From three days to ten days before the announcement date, the average abnormal returns are both positive on some days and negative on the other days. Positive average abnormal returns are detected for 5 days from two days before until three days after the announcement date. After three days of the announcement, the average abnormal returns are mixed between positive and negative values again.

In order to see whether the abnormal returns starting from the day of accumulation on day -10 to day +10 are systematically different from zero or not, cumulative average abnormal returns (CAR) are calculated and shown in Figure 2. It is very clear that the positive average abnormal returns are detected two days before the announcement date. Average abnormal returns increase at an accelerating pace during these two days and cumulative average abnormal return stay around 2% after those days. This implies that investors in Thailand interpret the share repurchase announcements as the good signal sent from the management, and so they react positively to those announcements very fast.

**Table 3: Average abnormal return and cumulative abnormal return around the announcement**

DAY	Average Abnormal Return	Cumulative Average Abnormal Return
-10	-0.0128	-0.0128
-9	0.0034	-0.0094
-8	0.0040	-0.0052
-7	-0.0006	-0.0060
-6	-0.0029	-0.0088
-5	0.0032	-0.0053
-4	-0.0053	-0.0107
-3	-0.0008	-0.0117
-2	0.0003	-0.0114
-1	0.0079	-0.0035
0	0.0223	0.0188
1	0.0001	0.0189
2	0.0019	0.0208
3	0.0007	0.0215
4	-0.0012	0.0207
5	0.0037	0.0242
6	-0.0034	0.0209
7	-0.0026	0.0191
8	0.0009	0.0201
9	0.0014	0.0218
10	0.0015	0.0234

**Figure 2: Cumulative average abnormal return for 78 announcements from day -10 to +10**

## 5. Conclusion

This paper is the preliminary study to investigate the effects of share repurchase announcements on the behavior of underlying stock prices of the firms listed on Stock Exchange of Thailand during 2001-2012. During the year 2008, SET index dropped sharply around 50% from the previous year. Management may consider that the prices of their stocks were lower than the fundamental values and the firms may not have many positive NPV projects to be invested, so they decided to announce the share repurchases project. Number of repurchases announcements in year 2008; therefore, was very high; however, after that year, share repurchases were not as popular as before.

When the firms announces the share repurchase project, investors interpret that management is sending the good signal that the stock is underpriced, and they react to that signal positively and very fast. The results found in Stock Exchange of Thailand is consistent with the study done by Masulis (1980), Dann (1981), Vermaelen (1981), Asquith and Mullins (1986), Ofer and Thakor (1987), Grullon and Ikenberry (2000), and Isagawa (2002) that the significant positive abnormal returns are found around the announcement period. The reason for the price increases may be explained by the asymmetric information and signaling hypothesis.

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