Stock Repurchases in Japan

Kenji Wada
Graduate School of Business Administration, Keio University

April, 2005

1. Motivation and Some Results

2. Literature

3. Detailed Results

4. Conclusion and Further Research

1. Motivation

- Stock Repurchases as an alternative to dividends

>The volume of stock repurchase is increasing.

- How stock price will react to the announcement of repurchases?

>It will react positively.

- Is the reaction different according to the motive of the repurchase?

>The reaction is different.

- Have firms been able to time to market?

>Yes, to some extent.

- Have firms increased payout, or have they replaced dividends with repurchase?

>Firms that repurchased stocks increased the payout.

2. Literature

- Hirota (1996) investigated 9 firms that repurchased shares for the retirement purpose and derived cumulative abnormal return (CAR) for 7 days after the announcement. He considered the different CAR based on 1)total value of the repurchase, 2)the change in financial ratios, and 3)the source of fund for repurchase

One day CAR is 0.22% if we exclude one firm
2) and 3) do not matter

- Kan (1999) investigated 138 cases that repurchased shares for the retirement purpose and derived average abnormal return (AR) and average CAR for 20 days after the announcement. He found that average AR was significant one day and two day after the announcement. He also considered the impact of repurchase on 1)EPS, 2)ROE, 3)equity capital 4)change in the total number of shares, 5)combination of EPS and equity capital change.

- Makita (2002) showed the difference between open market repurchase and tender offer does not affect the short-term stock returns after the repurchase for 165 firms.

3. Detailed Results

● Table 1: Summary of Major Stock Exchanges

Tokyo Stock Exchange (TSE) > Osaka Stock Exchange (OSE)
> Nagoya Stock Exchange (NSE) > OTC: in terms of total market cap

Tokyo Stock Exchange (TSE) > Osaka Stock Exchange (OSE)
> OTC > Nagoya Stock Exchange (NSE): in terms of total trading value

- Table 2: Repurchase Programs (year, purpose, location)

1631 announcements by 736 distinct firms between 1995 and 2001
1281 (TSE), 202 (OSE), 71 (NSE), 54 (OTC), 23 (the rest)

- Table 3: Frequency of Repurchase Announcements

379 firms with multiple announcements, 70 firms with 5 or more announcements, one firm with 16 announcements and one firm with 15 announcements

- Table 4: Completion of Repurchase Announcements

17% of announcements with no actual repurchase
Actual value/announced value = 67%

- Table 5: Fraction of Shares in Announcement Actually Repurchased

74% in total: 75% (TSE), 70% (OSE), 65% (NSE), 69% (OTC)
Conditional on repurchase, 89% in total, 89% (TSE), 90% (OSE), 91% (NSE), 97% (OTC)

- Table 6: Distribution of the Length of Time to Complete Repurchase Program

Mean 103 days, median 77 days, 40% within 60 days, 66% within 120days

- Table 7: Reasons for Share Repurchase

Retirement: 1260 announcements, 2.91 billion yen per announcement
Option: 371 announcements, 0.88 billion yen per announcement

- Table 8 & Figure 1: Dividends vs. Share Repurchases

Dividends by all the firms and all the firms with announcements did not decrease. Repurchase by firms increased
> Total payouts by Japanese firms increased between 1995 and 2001!

- Table 9: Frequency of Payouts

Over 80% of firms making announcements paid dividends between 1995 and 2001
On average, 2.1% of outstanding shares were repurchased

- Table 10: Short-term and Long-term Mean Excess Returns around Repurchase Announcements

<Before the Announcements>

Firms announced shares following long-term price declines except for OTC

Excess return between t-250 and t-1, -11.4% (total), -11.3% (TSE), -14.9% (OSE), -16.2% (NSE), but 0.4% (OTC)

Excess return between t-125 and t-1, -3.5% (total), -3.5% (TSE), -6.4% (OSE), -0.8% (NSE), but 3.2% (OTC)

Short-term excess return: negative but not significant

<After the Announcements>

Market reacted to announcements in a positive way, especially at OTC

Excess return between t and t+250, 16.5% (total), 15.5% (TSE), 3.0% (OSE), 11.5% (NSE), and 83.4% (OTC)

Excess return between t and t+125, 9.3% (total), 9.3% (TSE), 1.3% (OSE), 2.7% (NSE), and 43.7% (OTC)

Short-term excess returns: positive and significant

Firms time the market when announcing repurchase programs and the market react positively to the announcements.

● Table 11: Breakdown of Table 10

<After the Announcements>
Excess return between t and t+20, t+125 and t+250.
stock option > retirement at total, TSE, OSE and OTC but not at NSE

Excess return between t and t+20, t+125 .
First announcement > the rest at total, TSE, OSE, but not at OTC or NSE

Excess return between t and t+20, t+125 and t+250.
Actual repurchase > No repurhcase at total, TSE, OSE and OTC but not at NSE

Most of the differences were not significant.

<Before and Annoucements>

Excess return between t-250 and t-1

Retirement < 0 at total, TSE, OSE, NSE, OTC

Excess return between t-250 and t-1

Option > 0 at total, TSE, OTC, but not at OSE or NSE

Excess return between t-20 and t-1

Option > 0 at total, TSE, OSE, NSE, OTC

Excess return between t-250 and t-1

First < Subsequent at total, TSE, OSE, NSE, OTC (not significant)

- Table 12: Regression Analyses after Announcement

Excess returns between t and t+20 or t and t+125 are higher when 1) purpose was stock option. 2) first announcement and 3) there was an actual repurchase
(not significant)

- Table 13: Regression Analysis before Announcement

Excess returns between t-250 and t-1, t-125 and t-1 and t-20 and t-1
Stock option > Retirement, First < Subsequent (not significant),
Actual Repurchase > No Repurchase (not significant)

- Table 14: Regression Analysis after Repurchase Announcement Upon Fraction of Shares Announced to be Repurchased

The greater the fraction of shares announced for repurchase, the higher the excess return is for short period
1% increase in the fraction > 0.21% increase in excess returns between t and t+2

- Table 15: Regression of the Time to Complete a Repurchase Program Upon Stock Returns After the Announcement

Short-term (t and t+5): takes more time when the excess return is higher

Midterm (t+6 and t+20):takes less time when the excess return is higher

4. Conclusion and Further Research

- The volume of stock repurchase is increasing.
- The stock price will react to the announcement of repurchases positively.
- The reaction is different according to the motive of the repurchase.
- Firms have been able to time to market to some extent.
- Firms that repurchased stocks increased the payout.
- The more detailed data on the industry or size may convey additional information about the effect of repurchase on stock prices.