

# Buyback Announcements of Small Market Capitalized Firms and the Shareholders' Value Creation

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## Abstract

Share repurchase commonly known as buyback in India, represents reverse process than issue of shares. Share buyback are carried out with different motives. A buyback generally refers to a corporate restructuring tool where, company through different options offer existing shareholders usually better price than price prevailing in the market. Reactions of such announcements towards market equilibrium idea and share holders' value creation through abnormal return over market is studied with the help of event study methodology – market adjusted model. This study examines the announcements of buyback of shares by small capitalized companies during year 2010-2016. An analysis of security price performance over benchmark index surrounding 21 days i.e. 10 days pre and post days of the announcements suggest negligible return on the day of announcements and negative average abnormal return in said range.

**Keywords** — Buyback, Event study, Shareholders value

JEL classification: G14; G32, G34;

## 1. Introduction

The success of the event is noted with achievement of the target. Like the success of the business is noted ones the earnings are distributed among all the stakeholders in their respective weights. The ultimate and genuine source of money for the business comes from the owners say equity investors. The profit earned through business activities reaches back to investors in form of return of their investment in the

business may have different forms. From the time the world economies are opening up, innovative corporate strategies are evolved to achieve the success. This success is not only measured through the quantum of the profit of the business but its conversion to create value for the investors. Thus, value creation to the equity investors is considered as due obligation of the business. The return to the equity investors was done through regular payment of dividend. With the opening up the economies the alternative options of the return were explored world over. With the initiation in early 80s, the firms in US started choosing alternatives of dividend. The cash was disbursed in the form of share buyback commonly known as share repurchase. Till late 90s of the last century the process of capital restructuring through buyback was widely accepted and legalized in many countries. In India with amendments in the Companies Act 1956 the buyback was legalized.

Return to the equity shareholders other than dividend through the form of buyback was innovative tool for the companies. Many reasons are being justified for choosing buyback as the method of distribution of cash to the shareholders by management. Excess cash and undervaluation of the share market prices of the shares were observed as widely accepted causes for choosing the same. Share buyback in India can be performed through many legal ways say open market offer through book building process or stock exchange, tender offer of through employees.

In this paper, the tool buyback of shares evaluated not as shield for the management but as support to create or to add any value for the investors or not. Return on investment may not always create wealth for the investors as it may just help to meet the inflation prevailing in the economy. The modern approach of wealth maximization has this core

thought that whether return do generate value over and above the normal rate of return. The concept value creation originated from the idea of serving better to the investors so that wealth can be built from the return. Excess return to equity investors said to be generated if the return on specific security produce more return than the share market return. Thus, excess return above share market return is known as abnormal return. This study takes abnormal return generated or other wise as base for small capitalized firms through specific events like announcement of buyback by the company.

## 2. Literature Review

Though recent, buyback as tool of capital restructuring and alternative to compensate shareholders has plethora of literature in developed as well as developing economy like India.

Rappaport (1986), demonstrates that the ultimate test of corporate strategy is whether it creates economic value for the shareholder. According to him, the shareholder value is the only true standard for business performance. He outlines flaws of the accounting numbers such as earnings per share, the return of investment and return on equity. He presents a model whereby, he describes an increase in shareholder value for a listed company can be measured by the increase in market capitalization or more specifically by the total return to shareholders.

Asquith and Mullins (1986) opined that though dividend and share buyback have different signaling purpose the object is same of distribution.

Donaldson (1994) taking organizational angle, emphasizes on voluntary restructuring of the business than the conventional theory suggesting intervention from outside authorities are essential for the management to work for the goal of the stake holders.

According to the findings of Grullon and Michaely (2002) the firms have gradually substituted repurchases for dividends. Most of the time firms that initiate cash payments do so through share repurchases and many firms that have been paying dividends have also started to repurchase shares as well. It has also been suggested that differential taxes between dividends and capital gains matters a lot. The market's reaction to repurchases is more positive when the tax gains from repurchases are higher than dividends. Share repurchases as a percentage of total dividends increased from 13.1% in 1980 to 113.1% in 2000 in the U.S Market.

Li and McNally (2004) showed that firms choose tender offer when they have financial slack and large shareholders that monitor management and prefer open market repurchases in times of market turbulence or weak business conditions. There was a direct relationship between the choice of the

repurchase program and the offer terms and the announcement period price reaction.

Mishra (2005) empirically examined the price reaction on announcement and whether management is acting in the best interest of non-tendering shareholders when the company wants to go ahead with targeted share buyback. In many cases it was observed that the company that offered buyback price far above premium had over subscription and the prices fell after the buyback. Share buyback could not ensure a sustained rise in the price of the scrip. The study pointed that the buyback norms should be made more stringent if the companies were to have a long term view.

In the Indian market, Thirumalvalavan and Sunitha (2006) emphasised on the fact that market reacts more favourably to share buybacks announcements than dividends announcements which in turn suggests strong signalling power of share repurchase announcements. The market reaction to share repurchase announcement recorded a high Cumulative Abnormal Return (CAR) two days of the event whereas dividend announcement recorded a high CAR within one day of the event. In the share price movement markets showed an immediate upward swing but this positive signalling existed for a very short period.

Quintana (2006) covered French companies in the research and shown the facts that a positive correlation between the relative amount spent on buyback programs and the long run share price performance suggesting a positive impact of buybacks on shareholder's value. However the immediate effect of buyback announcements was much smaller than in other countries (US and Germany) with an average abnormal return of 0.32% only. This study pointed out that when buyback announcements are not aimed at shareholder's value creation then there is an adverse reaction.

Availability of information plays the vital role to trade of the return. Asymmetry of information between management as insider and investors as outsiders can be match up with proper and timely announcements. Announcement for the buyback is opined by Adams et al.(2007) as such remedy which provides option though not obligation. As most of the announcements make the difference and not the execution of it.

Hyderabad (2009) studied the market reaction to share repurchases in India documented and for this purpose 68 buybacks were selected for the period 1998 to 2007. Year wise analysis of AAR and CAR for buyback returns indicates vast divergence in the returns over several years. However research could

not establish the strong relation, contrary the positive reaction on the announcement day was only temporary. According to this study the fixed price tender offers yielded higher announcements returns than open market repurchases in the Indian context.

Ishwar (2010) showed negative and insignificant abnormal returns for majority of the days in the event period. Contradictory findings from the past Indian market studies and opined that there was absence of any change in the movement of stock price reaction to buyback which further led to the inference that market anticipates the information provided by these announcements and incorporates this before the announcements.

Varma and Rao (2010) investigated the motives for repurchase varied over years. It was also observed that high profitability firms usually go in for repurchase and the companies having low profitability over the years use repurchases for false signalling.

Horan (2011) reported that the buybacks are more frequent and more intense compared to past, having an increased accretive effect on EPS.

Doan et al. (2012) examined Australian firms, suggesting that firm's share buyback activities will increase if it perceives a high takeover risk from the market.

Stout (2012) in his article rightly drawn attention towards considering stakeholders' interest not over but along the shareholders' wealth.

Rajlaxmi (2013) the announcement effect was tested for which CAR with 5 day pre CAR and 5 day post CAR was calculated. The sample for this study comprises of 6 buyback announcements and the results indicated that the investors must view repurchase announcements as a short term gain only.

### 3. Methodology

As stated earlier shareholders' wealth created if they able to make abnormal return by minimising the time gap between availability and non-availability of information. Thus, evaluation of the announcement of share buyback by the company was taken with event study methodology for the research. Event studies have long history to its side since James Dolly (1993). Over the decades from the early 1930s until the late 1960s the depth of event studies increased. John H. Myers and Archie Bakay (1948), C. Austin Barker (1956, 1957, 1958), and John Ashley (1962), have significantly contributed to event studies during this time period. In the late

1960s seminal studies by Ray Ball and Philip Brown (1968), and Eugene Fama et al. (1969) introduced the methodology that is essentially the same as that which is in use today.

The initial task of conducting an event study is to set the event of interest and identify the duration over which the security prices of the firms involved in this event will be examined this is called the event window. In this research, the event that is under study is the announcement of buyback by a company. As is customary to define the event window to be larger than the specific period of interest the paper takes 10 days prior and post announcement of buyback—event under study. This permits examination of periods surrounding the event. After identifying the event, it is necessary to determine the selection criteria for the inclusion of a given firm in the study. The criteria may involve restrictions imposed by data availability such as listing on the Bombay Stock Exchange or National Stock Exchange in India.

To research the announcement of buyback of the listed company which has declared corporate action under section 68,69 and 70 of the Companies Act 2013 notified with effect from 1<sup>st</sup> April 2014 has been taken from database Capital Line and ACE Equity. Then the data has been filtered and cleaned by re-checking from the NSE websites Share prices and the benchmark index values have been taken from ACE Equity. For this study, the price taken for shares are the adjusted closing prices of the shares.

Loughran and Ritter (2000), were of the opinion that categorization of the event was important from the point of view of an investor who wants to predict the abnormal returns associated with a random event.

Fama (1998), also argues that category wise returns should be studied, as they are more accurate in capturing the total wealth effects of events. The implications for market efficiency can be completely different than this categorization. This was illustrated by Brav, Geczy, & Gompers (2000), where they present a scenario in which a sample companies which have a \$1 million market capitalization are called the "small firms" and one firm that market capitalization greater than \$1 million are called the "large firm".

This research, taking clue from Brav et al. (2000), to segregate announcements of buyback companies. Companies are categorized as large cap, mid cap and small cap, based on their relative market capitalizations. Market capitalization is simply the market value of the company, calculated by multiplying the share price of a company with the company's total number of shares outstanding.

Bombay Stock Exchange (BSE) categorizes companies into market cap segments based on the 80 – 15 – 5 rule. In the 80 – 15 – 5 rule, companies listed on BSE are arranged in descending order of market cap (highest to lowest) and starting from the top (company with highest market cap), the largest market companies which cover 80% of the total market cap of all the companies listed on the BSE are categorized as large cap companies. The next set of companies which cover 80 to 95% of the total market cap of all BSE listed companies are categorized as mid cap companies. The last set of companies, covering 95 to 100% of total market cap of all BSE listed companies, are small cap companies. But the anomaly is with dynamic market prices, it is difficult to categorize the companies in specific mode for permanent basis. With the guideline of US market cap we have taken companies with less than 1000 crores during referred time as small capitalized companies. To have concentrated study here, companies having market capitalisation of less than 1000 crores were chosen with a tag of 'small capitalised companies' for the period of 2010 to 2016.

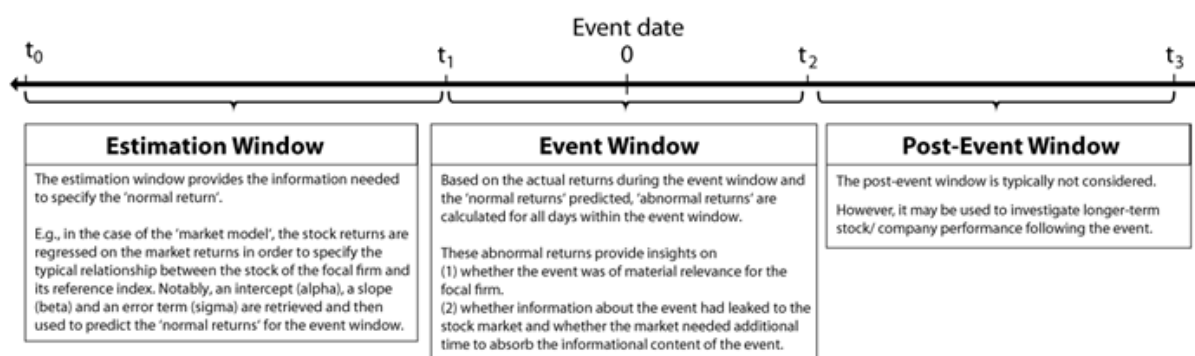
**Table -1: Total Announcements of buyback of shares**

Year of Announcements	No. of Companies
2010	7
2011	1
2012	1
2013	1
2014	1
2015	1
2016	0
<b>Total</b>	<b>12</b>

As discussed shareholders' wealth in numeric term is abnormal return generated over market return. The abnormal return is the actual ex-post return of the security over the event window minus the normal return of the firm over the event window. The normal return is defined as the expected return without conditioning on the event taking place.

**H0** = There is no significance relation between shareholder value and buyback announcements

**H1** = There is significance relation between shareholder value and buyback announcements



(Adapted from Benninga (2008: 372))

The event study can be done with different models. Here, 'market return model' is used. It builds on the actual returns of a reference market and the correlation of the firm's stock with the reference market.

Equation (1) describes the model formally, the abnormal return on a distinct day within the event window represents the difference between the actual stock return  $R_{i,t}$  on that day and the normal return, which is predicted based on two inputs; the typical relationship between the firm's stock and its reference index (expressed by the  $\alpha$  and  $\beta$  parameters), and the actual reference market's return ( $R_{m,t}$ ).

$$AR_{i,t} = R_{i,t} - \beta_i R_{m,t}$$

In the above equation,  $\beta_i$  is the Beta is the measure of a stock's sensitivity of returns to changes in the market.  $R_{m,t}$  is the return on the market i.e. Nifty Index return over the period time  $t$ .

$$\beta = \frac{\text{covariance of stock to the market}}{\text{variance of the market}}$$

$$\beta = \frac{\text{cov}(R_i, R_m)}{\sigma^2}$$

As per the market return model given by Mac Kinlay (1997), event study methodology  $\beta$  is taken as 1, because of the following reasons (1) fundamental

issue in calculating beta, (2) beta in this period is quite distorted (3) there is no data to estimate future beta of the subsidiary (4) Pre-transaction beta does not reflect the post-transaction risk-return profile.

Such an analysis performed for multiple events of the same event type (i.e., a sample study) may yield typical stock market response patterns, which have been at the center of prior academic research. Typical abnormal returns associated with a distinct point of time before or after the event day are defined as follows.

$$AAR = \frac{1}{N} \sum_{t=1}^N AR_{i,t}$$

To calculate the total impact of an event over a particular period of time (termed the 'event window'), one can add up individual abnormal returns to create a 'Cumulative Average Abnormal Return'. Equation (2) formally shows this practice.

$$CAAR(t_1, t_2) = \sum_{t=t_1}^{t_2} AAR_{i,t}$$

To check the statistical significance of the abnormal return, t-test has been used.

$$t = \frac{AAR}{\sigma_{ar}}$$

Where,  $\sigma_{ar}$  is an estimate of the standard deviation of the average security's return. It is calculated from the -10 to 10 day's pre and post announcement of the demerger. A t-statistic with a p-value (i.e. the observed significance level) less than or equal to 0.05 is considered to be significant.

### Data Analysis

After the discussion of methodology, AAR i.e. average abnormal return and CAAR cumulative average abnormal return is summarized in following tables.

**Table 2**  
**Cumulative Average Abnormal Return**  
(with 21 days event window)

Days	AAR	CAAR
-10	-1.49%	-----
-9	0.20%	-1.28%
-8	0.97%	-0.31%
-7	0.43%	0.12%
-6	0.78%	0.90%
-5	-1.86%	-0.96%
-4	-1.67%	-2.63%
-3	-0.47%	-3.10%

-2	-0.32%	-3.42%
-1	-2.12%	-5.54%
0	3.83%	-1.71%
1	1.78%	0.07%
2	0.48%	0.55%
3	-0.60%	-0.04%
4	-0.62%	-0.66%
5	1.80%	1.14%
6	-0.36%	0.77%
7	0.92%	1.69%
8	-0.86%	0.82%
9	0.75%	1.58%
10	-0.68%	0.89%

As discussed earlier the abnormal return is individual return of the share over index return. As shown in Table 2 AAR average abnormal return of all the twelve companies for 21 days are narrated here along with CAAR cumulative average abnormal return. As seen above AAR is positive as well as negative cascading the effects in CAAR which is highly fluctuating. The return generated on day 0 i.e. on the day of announcements is significantly high 3.83% but CAAR on the same day is negative at -1.71% as it is quite unrealistic to occupy shares just one day prior to announcement and earn return.

**Table 3 Data Analysis of all small capitalized firms**

Surroundings Days	Event window	CAAR	Std. Dev.	P-value
0 and+1	2 days	-0.82%	1.26%	0.172113
-1 to +1	3 days	-2.39%	2.87%	0.1209059
-2 to +2	5 days	-2.01%	2.52%	0.0870117
-3 to +3	7 days	-1.88%	2.25%	0.0472201
-5 to +5	11 days	-1.48%	2.02%	0.0297876
-7 to +7	15 days	-0.86%	2.04%	0.1067659
-10 to +10	21 days	-0.60%	1.86%	0.1323684

As discussed above the small capitalised firms show high volatility in return. The extension of the study is narrated above in Table 3, where analysis is shown taking range of days for different event windows from very short span of 2 days around announcements to 21 days from 10 days pre and post announcement for short term effects of the announcements of the buyback. At 5% level of significance, p value suggesting non-significant result narrating acceptance of null hypothesis. Negative CAAR supporting null hypothesis by establishing no relation between average abnormal return of small capitalised firms and announcements of the buyback.



#### 4. Conclusion

As the data suggest small capitalised firms facing high volatility and less scrutiny by the investors are not generating above average return to the equity holders through the announcements of buyback of shares. High volatility, leakage of the information and investors valuation aspirations are working against market equilibrium theory. Thus we can say that shareholders' value is not created in small cap firms. This study can further be extended for mid or large cap firms with different time duration.

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