



## IMPACT OF BUYBACK ANNOUNCEMENTS ON SHARE PRICES

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### ABSTRACT

Linkage of Corporate payout decisions with market reactions is already strongly established. The reaction translates into changing values of various market related financial and non-financial parameters. Namely the most identifiable ones include share prices. The announcement and implementation of buyback is expected to bring both short and long-term effects on such parameters. This helps in measuring the impact from eyes of overall capital market framework in our economy. The second problem thereby relates to measuring such impacts thereby providing more evidence for better preparedness of corporate decision makers.

**KEYWORDS :** *Stock market, AAR, SAAR.*

### INTRODUCTION

#### IMPACT ON SHARE PRICES

The fluctuations in prices expected to happen over short term period surrounding buyback announcements has been measured using previous trends in prices over an estimation window of 160 days i.e., from minus 180 days to minus 21 days for the sample companies. Using market model involving daily security prices, corresponding daily security returns, daily BSE SENSEX values and corresponding daily BSE SENSEX returns for the same period, basic parameter like combined variance of sample securities was estimated. This parameter has been used in order to check the significance level of average abnormal returns for sample securities on daily basis. Using T- test with basic assumptions of normal distribution of abnormal returns, daily returns over event window of minus 20 to plus 20 days of buyback announcements have been evaluated.

There are specifically to aspects of results obtained for measuring impact of buyback announcements on share prices in stock market. The effect has primarily been measured in respect of average abnormal Returns (AAR). Besides this, the effect has been measured for standardized average Abnormal Returns (SAAR) over specific event Windows. SAAR have been calculated for every security on daily basis (similar to AAR) by dividing daily average returns by standard deviation of individual security estimated for the estimation period. For calculating statistical significance of SAAR, it has been divided by under root of number of sample securities, i.e., N in this case in order to further analyse the results obtained, a ratio of number of securities having positive abnormal returns (AR) to the total number of securities has been calculated for every day of event period.

In the second part of analysis, the specific cumulative results have been obtained for different event Windows of even period. A total of 10 event windows were fabricated covering different time durations of the event period. The results were accumulated for both AAR and SAAR resulting into calculation of cumulative average abnormal returns (CAAR) and standardized cumulative average

abnormal returns (SCAAR). The significance level of CAAR and SCAAR was tested using prospective standard error of estimate (S E) calculated for each respective event Window for each respective measure.

### **IMPACT ON AAR AND SAAR**

Calculating and measuring the possible effect of buyback announcements on share prices over an event period of 41 days (20 days on either side of the announcement today plus the announcement day) some patchy effects of announcements have been observed. The results have come out to be statistically significant from zero values at 5% level of significance for AAR just for 3 days in pre announcement period. According to table 1 these three days are minus 20, minus 16 and minus 9 day before respective buyback announcement of sample securities. Similarly the results have been found to be statistically significant from zero values at 5% level of significance just for two days falling in post announcement period i.e., for announcement day plus 3 and plus 4.

However, the results obtained for all these five days have shown negative values for respective days. This clearly indicates the actual daily returns falling short of expected returns as calculated using regression analysis with daily BSE SENSEX returns as predictor. Thus, expectations of some significant abnormally positive returns due to buyback announcements of sample securities have been discarded. Instead, the results have shown negative daily security returns both preceding and succeeding the buyback announcement day. Analysing the daily abnormal returns, the values of AAR has turned out as positive only for 9 days out of total of 41 days of event period. This means that the values have shown abnormal returns vis-a-vis the expected returns for these days. To confirm these results, the values of SAAR have also been calculated for the same event period. In case of SAAR any possibility of effects of fluctuations in variance of individual securities has been ruled out by using variance of individual security returns as the common denominator for individual security return calculations. As visible from table 1 abnormal returns have been observed to be significantly different from zero at 1% level of confidence for minus 19, minus 15, minus 8 and minus 4 days preceding the buyback announcement day, While the results are found to be statistically significant at 5% level of confidence for minus 11 day. For days succeeding announcements, the days zero and plus 4 with plus 9 have reported abnormal returns which are statistically significant at 5% and 1% level of significance respectively. Similar to AAR, SAAR results have also shown positive abnormal returns for just 9 days out of total of 41 days event period. A silver lining in the cloud is that the positive effect of buyback in short term has been revealed for day zero and one plus day for SAAR results.

Infact, day zero results show abnormal returns as high as 17.21% which is statistically significant at 5% level of significance. Similarly, for day plus one, SAAR has shown 15.71% abnormal returns which is, however, statistically not different from zero. Corresponding to that, absolute daily returns represented by AAR has reported just 0.5% and 0.27 % abnormal returns, which is not significant. Infact, a negative average value of 0.32% and 6.5 % for AAR and SAAR respectively over the event period of 41 days has also clearly proven a declining trend in values of daily abnormal returns for companies announcing buyback of shares.

**TABLE 1**  
**AVERAGE ABNORMAL RETURNS (AAR) AND STANDARDISED ABNORMAL**  
**RETURNS (SAAR) FOR EVENT PERIOD.**

Day	AAR	t-STATISTICS	SAAR	t-STATISTICS
-20	-0.0089*	-2.27182	-0.0389	-0.4632
-19	-0.0055	-1.40062	-0.3214**	-3.8299
-18	-0.0009	-0.24141	0.0944	1.1252
-17	-0.0056	-1.42371	-0.1150	-1.3709
-16	-0.0080*	-2.03233	-0.1136	-1.3536
-15	-0.0072	-1.83566	-0.3581**	-4.2669
-14	-0.0062	-1.57106	-0.1991	-2.3731
-13	0.0026	0.67144	0.1222	1.4559
-12	0.0013	0.33976	-0.0823	-0.9804
-11	0.0059	1.51309	0.1970*	2.3472
-10	-0.0010	-0.2428	-0.0889	-1.0596
-9	-0.0087*	-2.21543	-0.1583	-1.8863
-8	-0.0061	-1.54453	-0.2542**	-3.0289
-7	0.0002	0.06176	-0.0578	-0.6885
-6	-0.0010	-0.24806	-0.0791	-0.9420
-5	0.0001	0.02808	-0.0293	-0.3494
-4	-0.0055	-1.40839	-0.2415**	-2.8783
-3	-0.0010	0.26635	0.0226	0.2691
-2	-0.0065	-1.65472	-0.0103	-0.1224
-1	-0.0042	-1.07601	-0.0850	-1.0124
0	0.0051	1.30117	0.1721*	2.0506
1	0.0027	0.68863	0.1571	1.8722
2	-0.0022	-0.5529	-0.0625	-0.7452
3	-0.0079*	-2.01007	-0.1624	-1.9353
4	-0.0083*	-2.10336	-0.2655**	-3.1636
5	-0.0069	-1.75260	-0.0991	-1.1807
6	-0.0031	-0.78728	-0.0469	-0.5587
7	-0.0071	-1.81619	-0.1456	-1.7348
8	-0.0059	-1.50879	-0.1559	-1.8575
9	-0.0065	-1.66464	-0.2811**	-3.3491
10	-0.0036	-0.91435	-0.0435	-0.51804
11	-0.0067	-1.71471	0.0748	0.89149
12	0.0017	0.439105	0.0705	0.840649
13	-0.0059	-1.50727	0.0343	0.408745
14	-0.0040	-1.01691	-0.0850	-1.01299
15	0.0000	-0.00768	0.0300	0.357219
16	-0.0023	-0.57333	-0.0596	-0.71044
17	-0.0043	-1.09395	-0.0498	-0.59309
18	-0.0044	-1.10989	0.0367	0.437394
19	-0.0029	-0.74676	-0.0569	-0.67768
20	0.0022	0.57034	0.0688	0.820031
Average	-0.0032	-----	-0.0650	-----

\*\*Significant at 1% level \*Significant at 5% level

**IMPACT ON CAAR AND SCAAR**

Another pertinent question is to measure the possibility of difference in abnormal returns over specific event Windows distributed across entire event period. From table 2 and figure 1, the impact of buyback announcements on cumulative returns i.e., CAAR has been calculated for 10 different event windows. This is primarily done to understand the immediate and short run impact of buyback announcements on share prices over different event periods. Out of 10 event windows, 4 have shown CAAR values statistically significant at 1% level, while CAAR values are different from zero at 5% level of significance for another two windows. However, largely conforming to the results obtained from table 1, the cumulative abnormal returns have been found to be negative over the complete period of 41 days measured via event window 1(minus 20 to plus 20). figure 1 shows that the line graph measuring the CAAR is declining steeply from day minus 20 to minus 11 with some recovery from minus16 to minus 11 days. This is proven by the reduction in values of CAAR from -3.21 % reported for event windows spanning from minus 20 to minus 11 Days to minus 1.99% as reported for event window of minus 15 to minus 6 days. Another recovery is falling CAAR has been observed at evening window -minus 2 to plus 2 whereby the identification in graph is clearly visible and significant. Infact, for the shorter windows surrounding the buyback announcement day, the value of CAAR have been found to be lesser towards the negative side. So, some positive effect created over one day before and one day after event is visible though not so significant. Besides, another steep fall in value of CAAR has been observed over event window number is 8 (plus1 to plus10) which shows lack in momentum of positive abnormal results observed earlier for some time period.

Somewhat little resurrection in prices has been noticed over a few days post announcements as indicated by event window number 10 (plus 11 to plus 20). This is mainly due to the fact that investors start taking notice of the positive differential arising due to price difference of share prices and buyback price announcement leading to positive sentiment towards Such announcements. Besides after a series of under performing for couple of weeks from recovery due to support provided by buyback announcements creates positive CAAR over periods following such announcements. Overall a negative CAAR of 13.62% over the complete event period (minus 20 to plus 20) has provided the required summarisation of complete results of buyback failing to provide the required support to falling daily returns. The results reported by another measure i.e., SCAAR taken by accumulating the individual day SAAR values over the same 10 event windows as for CAAR has validated the results obtained for CAAR. Figure 1 has shown quite and overlapping of time series plots of CAAR and SCAAR with minor aberration at three different stages, i.e., at minus16, minus 2 and plus 11 days. However, these being very small deviations, cannot be termed as recovery.

**TABLE 2. CUMULATIVE AVERAGE ABNORMAL RETURNS (CAAR) AND STANDARDISED CUMULATIVE AVERAGE ABNORMAL RETURNS (SCAAR) FOR THE EVENT PERIOD.**

SI.NO.	EVENT WINDOWS	CAAR		SCAAR	
		VALUES	T-STATISTICS	VALUES	T-STATISTICS
1	-20 to +20	-0.13627**	-5.424	-2.6659**	-3.15229
2	-20 to -11	-0.03241	2.007	-0.8148	-1.40702
3	-15 to -6	-0.01992	-1.308	-0.9585	-1.84235
4	-10 to -1	-0.03363**	-3.309	-0.9817**	-3.33884
5	-5 to +5	-0.03453*	-2.337	-0.6038	-1.29137
6	-2 to +2	-0.00508	-0.471	0.1714	0.6277
7	-1 to +1	0.00359	0.427	0.2442	0.977313
8	+1 to +10	-0.04878**	-4.557	-1.1053**	-2.78578
9	+6 to +15	-0.04122**	-4.36	-0.5482	-1.51164
10	+11 to +20	-0.02655*	2.733	0.0638	0.32483

\*\*Significant at 1% level \*Significant at 5% level.

**CONCLUSION**

All the four measures of average abnormal returns,i.e.AAR, SAAR, CAAR and SCAAR have not shown values significantly different from zero during the event period of 41 days around buyback announcements. Rather, the results are abnormally high, but negative for both CAAR and SCAAR variables over the event window of plus one to plus ten days post announcement of buyback.

#### **REFERENCES**

- Datta, Sudip and Upinder S.Dhillon,(1993), “Bond and stock market response to unexpected earning announcement”, The Journal of financial and quantitative Analysis.
- Bieman, Harold,(2008), “Dividends versus share repurchase : The stock price effect”, Journal of portfolio Management.
- Nobuyuki,Isagawa,(2002), “Öpen market repurchase Announcements and stock price behaviour in inefficient markets”, Financial management.