AN EMPIRICAL STUDY ON EFFECT OF BONUS ANNOUNCEMENT ON SHARE PRICE VOLATILITY AND LIQUIDITY AND ITS IMPACT ON MARKET WEALTH CREATION OF INFORMED INVESTORS IN BANGALORE WITH SPECIAL REFERENCE TO CNX NIFTY STOCKS OF NSE

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Abstract

This paper investigates the market reaction to bonus issue announcement news, using a event study methodology for Nifty stocks from 1995 to 2011. There are several theories that have been advanced to explain why companies go for stock dividends. In previous studies, it is evident that stock returns are significantly affected negatively or positively around bonus issue announcement dates. Informed investors market wealth is affected to a greater extent around this event. The purpose of this study is to test whether the investor can gain or lose an above normal return by relying on public information impounded in a bonus issue announcement. Using risk adjusted event study methodology, this study tests where there is excessive abnormal return exists during event window of announcement. Bonus announcement sample observations S&P Nifty INDEX were analyzed using standard risk adjusted event study methodology. The event study methodology was employed in the determination of the effects of the bonus. Abnormal returns were calculated by use of the market model and t-tests are conducted to test the significance. We find the existence of significant positive abnormal returns on AD 0, but under a short run of AD+3 abnormal returns do not persist and dilutes to its normal return. The study found out that the Indian market reacts positively to bonus issues. Also shown a increase in volumes of shares traded around the bonus issues date. There is also an increase in trading activity after the bonus announcement as compared to that before the announcement.

Keywords: Abnormal returns, market reaction, event study

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1. Introduction and Literature review

When a publicly-traded company issues corporate action information through any channel of communication, it is initiating a process that will bring actual change to its stock. By understanding these different types of processes and their effects, an investor can have a clearer picture of what a corporate action indicates about a company's financial affairs and how that action will influence the company's share price and performance. This knowledge, in turn, will aid the investor in determining whether to buy, sell or hold the stock in question. Corporate actions are typically agreed upon by a company's board of directors and authorized by the shareholders and informed to the shareholders from time to time.

Informed shareholders generally understand the market as efficient and the daily stock prices reflect the market adjusted price for all available information of the corporate events. Such premises are hypothetical to believe that the market is efficient and are influenced by the corporate actions disclosure given from time to time. Under efficient markets corporate events should not show any abnormal return on or surrounding either announcement date or effective date of information, as it is absorbed by the market in the real time, and the current prices reflect the benefits associated with such corporate events, and discounts its future earning benefits.

Evidence available from U. S market reflects the absence of abnormal positive return on and around announcements as well as effective day and increase in variance following ex-day. Though these evidences are less consistent and more confusing, several hypotheses have been presented to explain effect surrounding bonus issue announcement. Some of them are, the signaling hypothesis (Asquith, Healy, and Palepu (1989), Rankine and Stice (1997)) and the liquidity hypothesis (Baker and Powell (1993), Muscarella and Vetsuypens (1996)) are quite popular, Apart from these several studies find that the neglected firm hypothesis provides some explanation power as well (Grinblatt, Masulis, and Titman (1984), Arbel and Swanson (1993), and Rankine and Stice (1997).

In this paper, Bonus announcement was taken to examine the effect of corporate actions on price and liquidity. Empirical research on the effects of a bonus issue on the stock prices gives evidence that the market reacts favorably to a bonus issue. Fama, Fischer, Jensen, and Roll (1969), Charest (1978), Grinblatt, Masulis, and Titman (1984), for example, have documented evidence of a

favorable reaction of the stock market to a bonus issue in the US. Ramachandran (1988) and Obaidullah (1992) have found out similar evidences in India.

Empirical research has shown that the market generally react positively to the announcement of bonus issue (Foster and Vickrey (1978), Woolridge (1983), Grinblatt *et al* (1984), McNichols and Dravid (1990), Masse *et al* (1997), Lijleblom (1989), Bar-Yosef and Brown (1977)). Numerous studies in India have dealt with the information content of various types of announcements (Ramachandran (1985), Obaidullah (1992), Rao (1994), Rao and Geetha (1996), Srinivasan (2002), Budhraja I, Parekh P and Singh T (2004), and Mishra (2005)).

2. Motivation

Thou earlier researchers have made attempts to study the effect of corporate actions on shareholders wealth, but there is no specific research conducted on nifty since its inception period Also few attempts were made earlier to study the wealth effect around announcement dates, but not on liquidity changes around announcement dates. Hence, to bridge this gap of knowledge motivated to research in this area under this study. Also, generally investors are unaware about the corporate actions and its effects on their share prices. It is observed in the previous research investigations that, there is a change in the risk and return pattern of shares around the corporate actions dates. By understanding these different types of actions and their effects, an investor can have a clearer picture of what a corporate action indicates about a company's financial affairs and how that action will influence the company's share price and performance. This knowledge, in turn, will aid the investor in determining whether to buy or sell the stock in question. And understand how material news released by a company might affect the value of its securities or influence investors' decisions. Several studies have been conducted to study on Price and liquidity effects of stock dividend in US market and with special reference to Indian market the study conducted by Mr. Mayank Joshipura (Nseindia.com) and Madhuri Malhotra1, Dr. M. Thenmozhi & Dr. G. Arun Kumar holds as the basis for this study. In this research paper, an attempt has been made, to investigate Bonus issue for a data period of 15 years from 1995 taking CNX Nifty Stocks as bench mark.

3. Objectives of the study:

a) Primary Objective

The following major objectives are set for the study.

1. To verify Presence of any abnormal returns on or surrounding bonus issue announcement.
2. To find the Presence of any abnormal volume variance on or surrounding bonus announcement. (Trading volume is taken as stand-in to liquidity).

b) Secondary Objective

The following Secondary objectives are set for the study

1. To investigate efficiency of the market in absorbing the material information in bonus issue.
2. To support informed investors in understanding the price pressure and liquidity prevailing around the announcement date.

3. Scope of the study

This study covers the wider range of shares from sectors comprised in Nifty index and investigates the corporate announcement effects with bonus issue actions of Nifty companies and the abnormal change in the price movements and liquidity around the announcement and effective date of action. It also attempts to find the announcement effect on market wealth creation of informed investors in Bangalore. It gives scope for further studies in Indian market on corporate actions like dividend announcements, mergers news, consolidation etc in indexes or other sectors stock.

5. Description of the research work

Data and Methodology:

5.1 Data source

a). As the Corporate announcement data is not published directly in any of the leading business dailies, to find out effective announcement date of the event, data available on nseindia.com, Capital line and CMIE's Prowess database has been used.

5.1.2 Data sample

To test the above objectives the companies that went for bonus issue in last 15 years (Announcement Date Between April 1995 to December 2011) has been taken from a sample frame of current constituents of CNX Nifty.

5.2 Methodology:

Hypothesis tests of bonus issue:

There are several hypothesis put forwarded by previous researchers to explain price and liquidity changes associated with corporate events. To test each hypothesis a window is designed and effect of event is measured.

H_1: There are no abnormal returns present in pre event window.
H_2: There is no abnormal return present on announcement date.
H_3; There is no abnormal return in post event window.
H_4: There are no abnormal volumes present in pre announcement window.
H_5: There are no abnormal volumes present on announcement date.

H_6; There is no abnormal volumes in post event window.

5.2.1Effect on price and volume

The approach used to achieve above mentioned objective is known as "event study" which is a standard approach in the area of financial economics ever since it has been published by Fama (1969). An event study is designed to examine market reaction of any event under observation using abnormal return criteria. For this study, data is divided into various windows. It has been always a debatable issue when it comes to choosing window length and different lengths are used by different researchers for the study. But here I propose to use following different windows to test some of the above mentioned hypothesis.

a). Pre event window (AD-21 to AD): This window is selected to test Neglected firm hypothesis and any information content associated with corporate actions announcement or leakage of corporate actions information before the formal announcement been made. In case any information content is associated with corporate actions announcement as suggested by neglected firm hypothesis, an abnormal return should be present on announcement day but should not be present on effective day. If any significant abnormal return is found in this window prior to announcement date there is a case of insider information or leakage of sensitive information in the market place before the announcement.

b). Announcement date effect (AD-1 to AD+1): If market did not anticipate change (exp. bonus issue) then abnormal return should not be present in the pre announcement window but it may appear in run up window, specially if any positive wealth effect is associated with stock bonus, as it has been explained by market maker hypothesis and the same is anticipated by the market.. As number of days between AD and ED is different in each of the stocks bonus issue s, the length of this window may very from stock to stock.

c). Post announcement window (AD to AD+21): As per tradable range hypothesis, small investors can only participate after bonus, issue becomes officially announced, hence, a significant improvement in liquidity along with abnormal positive return due to substantial demand from number of small investors from AD to about AD+21 days as the stock becomes more affordable but later on abnormal return starts reversing from thereon. But in case if that

abnormal return sustains through the window it indicates positive wealth effect associated with liquidity premium and market maker hypothesis.

5.2.2 Measuring Wealth effect:

Price or wealth effect has been analyzed, with the equilibrium model for the normal stock return that is the expected return if the event did not happen. Estimation window of AD-21 to AD-201 days which is the standard practice in most such studies has been developed. The forecast errors over the event window +21 to -21 measures the abnormal performance of returns associated with the event. The normal model most widely used in the event-studies is the market model which can be expressed as

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

Daily return of a security (firm) at a particular date, R_{it} is computed by using formula

$$R_{it} = In \frac{P_{it} - P_{io}}{P_{io}}$$

Where,

P_{it} = Price of the stock I on day t.
P_{i0} = Price of the stock I on day 0.

The NIFTY is used as market portfolio ($R_{m,t}$). The coefficients alpha and beta are estimated by using period of AD-21 days to aAD-201 as mentioned above. Regression was runed to obtain the coefficients for the estimation window. The expected returns for security j at day t are defined as,

$$ER_{jt} = \alpha_i + \beta_i R_{mt}$$

Where α_i, β_j are OLS estimators of (α_i, β_j)

The daily abnormal return is measured as

$$AR_{jt} = R_{jt} - ER_{jt}.$$

For each event date t, the cross sectional average abnormal returns for all firms are defined as:

$$AAR_t = \frac{1}{n}\sum_{i=1}^{n} \varepsilon_{it}$$

To analyze the price effects, the Cumulative Average Abnormal Returns (CAAR) for the 42 days centered in the announcement dates has been calculated. The use of CAAR is a common methodology. CAAR for event days t_1 to t_2 were obtained as follows:

$$CAAR = \sum_{t=1}^{t_2} AAR_t$$

5.2.3 Test of significance:

To compute the t-statistic, first, all abnormal returns are standardized as:

$$\mathrm{SAR_{it}} = \frac{\mathrm{AR_{it}}}{S_i(AR)}$$

Where, S_i (AR) is the standard deviation of the abnormal returns of stock '*i*' in the estimation period. The *t*-statistic for the sample of *N* observations for each day't' in the event window is calculated as:

$$\mathrm{t(SAR)} = (\sum \mathrm{i} = 1 \text{ to N } \mathrm{SAR_{it}})\ 1/\sqrt{\mathrm{n}} \quad \text{.....(1)}$$

$$Students \quad 't' \ test = \frac{\sum AAR_t/SD_t}{\sqrt{n}} \quad \text{.....(2)}$$

The cross-sectional t-test using cross-sectional variance as proposed by *Brown/Warner* (1985) to take cross sectional correlation into account is calculated as follows: is calculated as

$$t_i = \frac{AAR_i}{S^2/\sqrt{N}} \qquad \text{----------(3)}$$

Under the assumption that the abnormal returns are cross sectional independent and identically normally Distributed, Mayank Joshipura (2008) where S^2 is equal to

$$\boldsymbol{S^2} = \frac{1}{N}\sum_{i=1}^{N} \frac{(AR_{it} - AAR_t)^2}{N-1}$$

5.2.4 Normality of Data:

Many statistical tests require that your data follow a normal distribution. Sometimes this is not the case. In some instances it is possible to transform the data to make them follow a normal distribution; in others this is not possible or the sample size might be so small that it is difficult to ascertain whether or not the data a normally distributed. In such cases it is necessary to use a statistical test that does not require the data to follow a particular distribution. Earlier studies documents that (Brown and Warner (1985)) that mean excess returns in a cross-section of securities converge to normality as the sample size increases. And in this study the sample size is 87 so there won't be a problem of non normality of returns.

But still to support the parametric test results of this research finding a Non parametric sign test is also calculated. A nonparametric sign test based on sign of abnormal return is also employed. The hypothesis is abnormal returns are independent across securities and that the expected proportion of positive abnormal returns under the null hypothesis is 0.5. The test statistic is computed as

$$\theta = \left\{\frac{N_+}{N} - .05\right\}\frac{\sqrt{N}}{.05} \sim N\ (0.1)$$

where N is the sample size and N_+ is the number of cases where the abnormal return is positive.

5.2.5 Liquidity Measure:

Stock's trading volume represents liquidity and any change in its volume around event window above its normal trading range indicates the volume variance. ceteris paribus, Amihud and Mendelson, (1986). Any change in volume variance is change in liquidity. To verify whether there is any abnormal trade volume around event window a mean and market adjusted volume measure similar to those of Harris and Gurel (1986), Liu (2000) and Elliott and Warr (2003), Mayank Joshipura (2008) and as adopted by to examine abnormal volumes around the event days. The change in raw trading volume (VOL) for security i is computed as:

$$VOl_{i,t} = In(VOL_i)_{after} - In(VOL_i)_{before} \qquad \text{----------(1)}$$

The abnormal volume variance ratio is computed as follows for N obersations for S_{it}

$$AVVR_{i.t} = \frac{V_{it}/_{V_i}}{V_{mt}/_{V_m}}$$

6. Empirical Results and Conclusions:

Bonus issue has resulted in positive mean return during event window for 27 companies and for 32 companies on announcement date. It is also obvious in the research findings that the bonus issue announcement has a positive average abnormal return of 0.620% on Announcement date and it is significant at 5% level with t value of 2.545. Also observed that in pre window period of AD 0 to -21 14 days have significant change in the abnormal returns. This confirms the information leakage for large group of traders in the market. Small investors will have positive wealth change on announcement date as generally they have less access to the corporate insider's information. When tested with non parametric sign test it is found that out of total 48 companies

offering bonus issues, 32 companies have positive abnormal returns and it is statistically significant at 5% level with 1.980 p-value.

The trading volume has also increased significantly surrounding bonus issue announcement as well as on announcement day. Bonus issue has volume ratios of 1.725 on announcement day and also that volume ratio remains at considerably higher than one in the entire event window (AD-21, AD+21) with strong statistical significance indicating increase in the liquidity for the stock. When verified with the non parametric sign test the result confirms the existence of positive abnormal change in volume for bonus issue thereby higher liquidity for the stock during the window. This may lead us to conclude that the bonus issue announcement creates positive wealth effect with higher liquidity. Increase in liquidity finding is consistent with findings of Muscarella and Vetsuypens (1996), Amihud and Mendelson (1986), and Christian Wulff (2002). This confirms the liquidity is associated with positive wealth effect. Informed Investors awareness and perception about the effect of such corporate events on their portfolio holdings is insignificant and the alternative hypothesis has been accepted that the informed investors does not have any knowledge of the wealth effect of corporate events and reacts only as per the market trend and on the calculated risk analysis of the stock for the stock.

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Exhibits:

Table:1

Showing the Average abnormal return for corporate actions around 42 days event window

	Bonus issue	
window	AAR%	t(AAR)%
-21	-0.629	**-4.326**
-20	-0.247	**-1.678**
-19	0.257	1.472
-18	0.975	**5.777**
-17	0.295	1.412
-16	-0.183	-1.08
-15	-0.716	**-4.62**
-14	0.443	**2.773**
-13	0.499	**3.135**
-12	0.144	0.653
-11	-0.208	-0.801
-10	0.579	**4.082**
-9	-0.149	-0.676
-8	0.367	**1.79**
-7	-0.277	-1.242
-6	0.855	**3.379**
-5	0.226	1.038
-4	0.318	**1.762**
-3	0.751	**4.223**
-2	0.644	**2.611**
-1	0.644	**3.55**
0	0.62	**2.545**
1	-0.197	-0.802
2	-0.457	**-2.613**
3	0.049	0.286
4	-0.29	**-1.752**
5	-1.979	**-3.014**
6	-1.319	**-1.878**
7	-0.195	-1.2
8	-4.711	**-3.14**
9	-0.563	**-2.743**
10	0.158	0.79
11	-0.782	-1.054
12	-0.972	**-5.224**
13	-0.192	-1.225

14	0.382	**1.675**
15	-0.32	**-1.765**
16	-0.315	**-2.127**
17	-0.61	**-2.782**
18	0.842	**2.854**
19	-0.178	-0.976
20	-2.374	**-2.071**
21	-0.738	**-2.608**

Table: 2
Showing the Companywise Cumulative abnormal return (CAR) for corporate actions around 42 days event window

Bonus issue		
COMPANY	CAR	t test
ACC	0.082	0.599
AMUJA	0.008	0.034
AMUJA	-0.021	-0.216
BAJAJ	0.021	0.223
BHEL	0.008	0.088
BPCL	0.027	0.138
CIPLA	-1.025	-0.955
CIPLA	0.146	0.932
DR.REDDY	-0.807	-0.77
GAIL	0.086	0.579
HCL	0.014	0.158
HERO HONDA	-0.376	-0.541
HINDALCO	0.062	0.72
HDFC	0.159	**2.688**
ITC	0.053	0.64
ITC	0.076	0.81
INFOSYS	-0.069	-0.465
INFOSYS	0.036	0.266
INFOSYS	0.261	1.181
INFOSYS	-0.279	-0.365
JP ASS	-0.322	-1.429
JINDAL	0.167	0.788
KOTAK	0.25	**1.805**
KOTAK	-0.285	-1.33
LT	-0.312	-1.182
LT	-0.297	**-1.672**
MM	-0.135	-1.02
MM	0.216	**2.39**
ONGC	-0.144	**-1.749**
ONGC	0.085	0.654
RANBAXY	-0.68	-1.004
RANBAXY	-0.046	-0.534
RELIANCE	-0.024	-0.163
RELIANCE	-0.011	-0.071
RPOWER	0	0

SESA GOA	0.102	0.521
SESA GOA	0.096	0.293
SIEMENS	0.033	0.179
STERLITE	0.039	0.205
STERLITE	-0.327	**-2.13**
SUN	-1.172	-0.987
SUN	0.022	0.12
TCS	0.055	0.399
TCS	0.519	**1.676**
TATA MOTORS	-0.563	-1.273
TATA STEEL	-0.286	-1.033
WIPRO	0.255	1.296
WIPRO	-0.333	-1.15
WIPRO	0.173	**2.225**
WIPRO	-0.311	**-3.377**

Table:3
Showing the average volume variance ratio for corporate events

	Bonus issue	
window	AVVR	t(AVR%)
-21	1.260	**1.732**
-20	1.325	**1.797**
-19	1.896	**2.172**
-18	1.325	1.570
-17	1.643	1.572
-16	1.720	**2.024**
-15	1.796	**2.317**
-14	1.873	**2.346**
-13	1.949	**2.451**
-12	2.026	**1.839**
-11	2.103	1.618
-10	1.260	**1.777**
-9	1.325	1.199
-8	1.896	**1.848**
-7	1.325	1.187
-6	1.643	1.298
-5	1.620	1.489
-4	1.680	**1.860**
-3	1.873	**2.107**
-2	1.949	1.581
-1	2.026	**2.233**
0	2.103	**1.725**
1	1.260	1.025
2	1.920	**2.197**
3	1.896	**2.191**
4	1.650	**1.992**
5	1.643	0.501
6	1.720	0.490
7	1.796	**2.216**
8	1.873	0.250
9	1.949	**1.898**
10	2.026	**2.030**
11	2.103	0.567
12	1.260	1.354
13	1.325	**1.690**
14	1.896	**1.663**
15	1.325	1.464

16	1.643	**2.221**
17	1.720	1.567
18	1.796	1.217
19	1.873	**2.050**
20	1.949	0.340
21	2.026	1.432

Table: 4 Data used for the study for bonus issue

Total companies announce bonus issue during study period	52
Data not found fully or partially	01
Announcement Date and other details not available.	01
Sample used for the study	50

Table: 5 Impact of bonus issue on share price performance

COMPANY	Event Date	Beta	Alpha	Average Returns	R2	Cumulative Abnormal Returns	t test
ACC	02/04/1996	0.123	0.000	0.002	0.006	0.082	0.599
AMUJA	19/04/2005	0.150	0.004	0.000	0.008	0.008	0.034
AMUJA	08/10/1999	0.289	0.001	-0.001	0.028	-0.021	-0.216
BAJAJ	22/07/2010	0.652	0.003	0.001	0.160	0.021	0.223
BHEL	25/01/2007	1.036	-0.001	0.000	0.564	0.008	0.088
BPCL	28/09/2000	0.099	-0.001	0.001	0.005	0.027	0.138
CIPLA	11/02/2006	0.790	0.001	-0.024	0.244	-1.025	-0.955
CIPLA	07/10/1999	0.685	0.004	0.003	0.168	0.146	0.932
DR.REDDY	31/05/2006	0.669	0.001	-0.019	0.133	-0.807	-0.770
GAIL	23/06/2008	0.970	0.000	0.002	0.446	0.086	0.579
HCL	14/12/2006	0.922	-0.001	0.000	0.428	0.014	0.158
HERO HONDA	04/08/1998	1.096	0.002	-0.009	0.361	-0.376	-0.541
HINDALCO	10/05/1996	0.176	0.001	0.001	0.019	0.062	0.720
HDFC	17/10/2002	-0.093	-0.001	0.004	0.005	0.159	**2.688**
ITC	18/06/2010	0.275	0.001	0.001	0.032	0.053	0.640
ITC	17/06/2005	0.282	0.000	0.002	0.042	0.076	0.810
INFOSYS	14/04/2006	0.102	0.003	-0.002	0.004	-0.069	-0.465
INFOSYS	13/04/2004	0.042	0.001	0.001	0.001	0.036	0.266
INFOSYS	25/01/1999	-0.059	0.003	0.006	0.001	0.261	1.181
INFOSYS	18/06/1997	0.081	0.004	-0.007	0.004	-0.279	-0.365
JP ASS	21/10/2009	0.070	0.007	-0.008	0.001	-0.322	-1.429
JINDAL	29/07/2009	0.015	0.001	0.004	0.000	0.167	0.788
KOTAK	07/06/2005	0.030	-0.001	0.006	0.000	0.250	**1.805**
KOTAK	25/05/2004	0.370	0.003	-0.007	0.033	-0.285	-1.330
LT	29/05/2008	0.096	0.003	-0.007	0.003	-0.312	-1.182
LT	07/06/2006	0.043	0.001	-0.007	0.001	-0.297	**-1.672**
MM	14/06/2005	0.119	0.000	-0.003	0.006	-0.135	-1.020
MM	07/11/1995	0.119	0.000	0.005	0.006	0.216	**2.390**
ONGC	16/12/2010	0.161	0.001	-0.003	0.011	-0.144	**-1.749**
ONGC	26/07/2006	0.227	0.000	0.002	0.031	0.085	0.654
RANBAXY	18/07/2002	-0.023	-0.001	-0.016	0.001	-0.680	-1.004
RANBAXY	11/11/1998	0.166	0.001	-0.001	0.010	-0.046	-0.534
RELIANCE	07/10/2009	0.096	0.001	-0.001	0.004	-0.024	-0.163
RELIANCE	13/09/1997	0.161	0.002	0.000	0.011	-0.011	-0.071
RPOWER	24/02/2008	1.197	-0.004	0.000	0.465	0.000	0.000
SESA GOA	28/04/2008	0.213	0.002	0.002	0.009	0.102	0.521

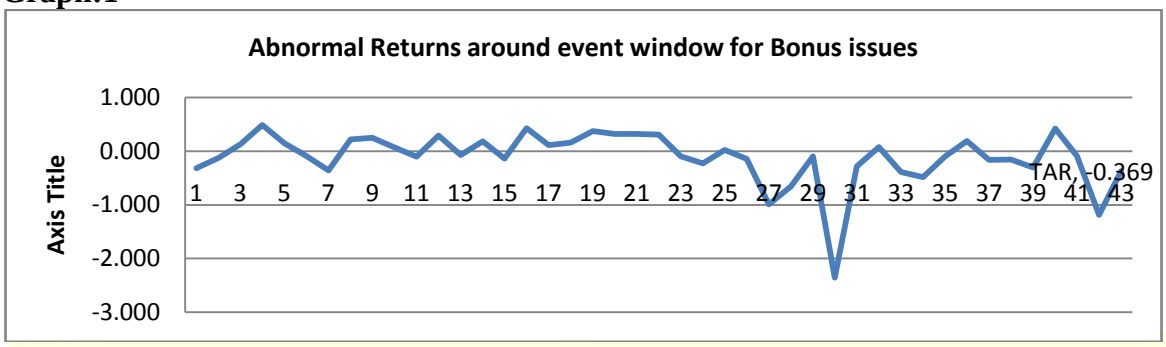
SESA GOA	17/12/2004	0.258	0.003	0.002	0.022	0.096	0.293
SIEMENS	22/11/2007	0.295	0.001	0.001	0.035	0.033	0.179
STERLITE	26/04/2010	0.037	0.002	0.001	0.000	0.039	0.205
STERLITE	10/02/2006	0.149	0.001	-0.008	0.005	-0.327	**-2.130**
SUN	21/04/2004	0.102	0.006	-0.028	0.002	-1.172	-0.987
SUN	09/02/2000	-0.071	0.004	0.001	0.002	0.022	0.120
TCS	20/04/2009	0.006	0.001	0.001	0.000	0.055	0.399
TCS	17/04/2006	-0.206	-0.004	0.012	0.026	0.519	**1.676**
TATA MOTORS	28/09/1995	-0.222	0.004	-0.013	0.014	-0.563	-1.273
TATA STEEL	07/06/2004	0.041	0.003	-0.007	0.001	-0.286	-1.033
WIPRO	23/04/2010	0.226	-0.001	0.006	0.003	0.255	1.296
WIPRO	22/04/2005	1.297	-0.001	-0.008	0.505	-0.333	-1.150
WIPRO	16/04/2004	0.600	-0.005	0.004	0.006	0.173	**2.225**
WIPRO	13/09/1997	0.735	0.003	-0.007	0.312	-0.311	**-3.377**

Note: t values in bold shows the significance at 5% level.

Table 6: Impact of Event Bonus Issues Announcement on Share Price Performance

Bonus Issue	No. of companies	%
Companies having positive mean return during event window	27	54
Companies having negative mean return during event window	23	46
Companies having positive return on announcement date	32	64
Companies having negative return on announcement date	18	63
Total	50	

Graph:1



Graph:2