



Wealth maximization: An empirical analysis of Bonus Shares and Right Issue

KEYWORDS

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ABSTRACT *In financial management, wealth is defined as value of the shareholders equity. It is generally agreed in theory that financial goal of the firm should be maximization of shareholders' wealth as reflected in the market value of the firm's shares. The financial manger must know financial engineering and strategies to be adopted in influencing the market price of shares; otherwise he would find himself unable to maximize the market price of the company's shares. The paper is a study on the bonus and right issue which are some of the important factors for maximizing shareholder's wealth. So the basic objectives of the study are to know the relationships of bonus issue and right issue made by the company with EPS and MPS of their stocks. The results depicts that bonus issues does not make significant difference on EPS and MPS of stocks. Further, moderate degree of correlation was found between the variables. Also negative correlation was established between MPS and bonus issue on the contrary, EPS illustrated a positive value of correlation with bonus issues. Right issue shares do not influence earning per share but not market price per share. There is a high degree of positive correlation of EPS and MPS with pre and post right issue of shares respectively.*

INTRODUCTION:

Relationship between bonus and right issues (also known as stock issues and scrip issues) and share prices has been the subject of many empirical discussions within the finance literature. Empirical research has shown that market generally reacts positively to the announcement of bonus issue/right issues/stock dividend (see for example, US- foster and Vickery (1997), Woolridge(1983), Grinblatt et al (1984), and McNichols and Dravid(1990); Canada – Masse et al (1997); Sweden – Liljeblom(1989). The hypothesis that has received strongest support in explaining the positive market reaction to bonus issue announcements is signaling hypothesis, which suggests that 'the announcement of a bonus issue conveys new information to the market in instance where managers have asymmetric information.

The firm's investment and financing decision are unavoidable and continuous. In order to make them rationally, the firm must have a goal. It is generally agreed in theory that financial goal of the firm should be shareholders wealth maximization as reflected in the market value of the firm's shares. The financial manger must know financial engineering and strategies to be adopted in influencing the market price of shares; otherwise he would find himself unable to maximize the market price of the company's shares.

A company issue shares in lieu for cash or sometimes against transfer of physical or intellectual property to the company's hands. However, bonus shares are issued to the existing shareholders by converting free reserves or share premium account to equity capital without taking any consideration from investors, bonus shares do not directly affect a company's performance.

Since 1978 Australian companies have offered their shareholders alternatives to receiving a cash dividend. Initially these were bonus share plans (BSPs) which allowed shareholders to take bonus shares in lieu of the dividend. Dividend reinvestment plans (DRPs), similar to those offered in the United-States, were introduced to Australia in 1981. The DRP allowed shareholders to have cash dividends reinvested in the company and instead receive an issue of new shares, Skully (1982). Early adopter of these plans merely offered one type of plan but as more companies followed, some began to offer both types.

Bonus and right issues have following major effects:

1. Share capital gets increased according to the bonus issue ratio.
2. Liquidity in the stock increases
3. Effective earning per share, book value and other per share values stand reduced
4. Markets take the action usually as a favorable act.
5. Market price gets adjusted on issue of bonus shares.
6. Accumulated profits get reduced.

The majority of existing DRP participation research was undertaken in the United States, which has no equivalent in the BSP. This paper's main contribution is to study the impact of bonus issue on earning per share and market price of shares. It studies the impact before and after declaration of bonus issue by the companies.

REVIEW OF LITERATURE:

Past academic researches show significant increase in the stock prices towards the announcements of bonus issues. As George, V., Rampheal investigated impact on prices of bonus issues around announcement dates using daily return in India with the help of market adjusted excess return model. It also investigates the impact of bonus ratio on price behavior so as to find whether large size bonus issues have more information content than small size issues. This is an area not yet explored in India. Their study is limited to Indian companies, which offered bonus shares from January 2004 to March 2005. Employing market adjusted return model, it found support for signaling theory, that the declaration of bonus issues convey favorable information about the future earnings to the investors. We found a cumulative abnormal return of 5.9 percent (mean Maler1, 97 percent) around three days of bonus announcement. Price analysis based on industry and supported by ANOVA shows that industry does not influence short term price behavior. But analysis of influence of ratio of back on shares price behavior found that either the ratio of bonus issue does not convey any signal about future performance of firms to investors or investors do not consider it as a factor to be considered.

Mishra (2005) documents the market behavior around the bonus issue announcement date for the forty-six stocks listed in the national stock exchange of India over the period from 1994 to 2004 using standard market model event study methodology covering a period of twenty days before and

after the event. One of the interesting finding was that on an average, the stock starts showing positive abnormal returns eight to nine days before the announcement date. This could be due to the leakage of the informational content. This paper lends support to the hypothesis that Indian stock market is semi-strong efficient.

Ramachandran (1985) examined the impact of bonus announcement on stock prices and mixed evidences of the semi-strong form of the efficiency in Indian market. Obaidhullah(1992) document positive stock market reaction to the equity bonus announcements. He found evidence to support the semi-strong form of the EMH. Rao and Geetha(1996) analyzed bonus issue announcement and found that one could not make excess money in the stock market by studying the patterns of abnormal returns of the announcement made earlier. Srinivasan (1993) found extremely large positive abnormal returns on ex-bonus and ex-right dates for the equity stocks. Rao (1994) estimated the cumulative abnormal returns of 6.31% around three days of the announcement date. He reported that the Indian stock market responds in an expected direction to corporate announcement and it supported the semi-strong form of the EMH for the Indian stock market.

A study by Budhraja et al. (2004) on BSE suggests that abnormal returns in stock prices around the bonus issue announcement date over three day trading period starting one day before the announcement is significant at 95% confidence level. It also says that much of the information in the bonus announcement gets impounded into stock by the time of the announcement of the bonus issue. Most researchers have lent support to the fact that Indian markets are semi-strong efficient.

OBJECTIVES OF THE STUDY:

The study has been undertaken with the following objectives:

1. To examine the impact of bonus issue of Biocon on its earnings per share and market price of share
2. To examine the impact of Right issue of Piramal Enterprises on its earnings per share and market price of share

RESEARCH METHODOLOGY:

The study is analytical in nature and used secondary data analysis to attain its objectives.

The study incorporated Biocon Limited which has issued bonus shares on 22-04-2008 and is listed in national stock exchange. The data used for the study of pre-issue of bonus share covers five years which are from 2003-04 to 2007-08 and post-issue are five years from 2008-09 to 2012-13. Piramal Enterprises has issued right shares on 12-03-2005. Similarly, right issue of Piramal Enterprises are also studied considering data of six years for pre-issue from 1999-2000 to 2004-05 and post-issue of six years from 2005-06 to 2010-11. Closing market price of shares and basic earnings per share before extra-ordinary income has been taken for analysis. Market price before issue of bonus shares and after issue of bonus shares has been taken for analysis. Percentage methods, Karl-Pearson co-efficient of correlation, difference t-test and Wilcoxon Signed Ranks tests have been used for measuring the change in EPS and MPS with bonus and right issue.

Following hypotheses are formed for analysis:

1. Bonus Shares:

H_0 = there is no significant difference between earning price per share before and after issue of bonus shares.

H_1 = there is no significant difference between market price per share before and after issue of bonus shares.

2. Right Shares:

H_0 = there is no significant difference between earning price per share before and after issue of right shares.

H_1 = there is no significant difference between market price per share before and after issue of right shares.

RESULTS AND DISCUSSIONS:

Biocon Limited:

1. Biocon allotted bonus shares in proportion of 1:1 i.e., 100%, shares have been raised but EPS of it has been fallen only by 34% during the study period.
2. The mean of it reduces from 20.51 to 13.50 over the study period,
3. The variation of it has been reduced by 47% (i.e., standard deviation has been dropped from 12.99 to 6.20) for the study period.
4. In spite of issue of bonus share in proportion of 1:1 i.e., 100% , there is an improvement in MPS by 46.21% (i.e., mean has been increased from 218.81 to 319.963) in study period.
5. The fluctuation of it has been reduced from standard deviation of 67.91 to standard deviation of 62.89.
6. There is a moderate degree of positive correlation of 0.028 between pre- bonus issue and post- bonus issue EPS
7. There is a moderate degree of negative correlation of -0.104 between pre- bonus issue and post- bonus issue MPS

Piramal Enterprises:

8. Piramal Enterprises allotted right issues in proportion of 1:10 i.e., 1000%, shares have been raised but EPS of it has been decreased by 53.32% during the study period.
9. The mean of it has been declined from 23.20 to 12.37 over the study period.
10. The variation of it has been slumped by 33.91% (i.e., standard deviation has been increased from 14.89 to 5.05) in the study period.
11. In spite of issue of right shares in proportion of 1:10, there is a climb in MPS by more than double (i.e., mean has been increased from 153.77 to 347.22)
12. The fluctuation of it has been slumped by 70.34% (i.e., from standard deviation of 119.59 to standard deviation of 84.12.
13. There is a greater degree of positive correlation of 0.815 and 0.818 between pre- right issue and post- right issue of EPS and pre- right issue and post- right issue of MPS respectively.

t and Wilcoxon Signed Ranks tests of bonus issue of Biocon Limited shares have been examined to find out the significant difference between the EPS (pre-issue and post-issue of bonus shares) and MPS (pre-issue and post-issue of bonus shares). The p value of EPS and MPS of t test are 0.333 and 0.081 which are both more than the critical value of 0.05 at 5% level of significance respectively. Likewise, the p value of EPS and MPS of Wilcoxon Signed Ranks test are 0.345 and 0.080 which are both more than the critical value of 0.05 at 5% level of significance respectively. Hence, the null hypotheses (H_0) are accepted which concludes that bonus shares does not influence earning per share and market price per share respectively.

Similarly, t and Wilcoxon Signed Ranks tests of right issue of Piramal Enterprises shares have also been examined to find out the significant difference between the EPS (pre-issue and post-issue of right shares) and MPS (pre-issue and post-issue of right shares). The p value of EPS and MPS of t tests are 0.064 and 0.001 which are more and less than the critical value of 0.05 at 5% level of significance respectively. Similarly, the p value of EPS and MPS of Wilcoxon Signed Ranks test are 0.075 and 0.028 which are more and less than the critical value of 0.05 at 5% level of significance respectively. Null hypothesis (H_0) of no significant difference between earning price per share before and after issue of right shares is accepted whereas Alternative hypothesis (H_0) of significant difference between market price per share before and after issue of right shares is accepted. It concludes that right

shares do not influence earning per share but not market price per share.

CONCLUSION:

Shareholders wealth maximization means maximizing the net present value of a course of action to shareholders. It implies that the market price per share, which may not be true in many instances. If the market value is not a function of EPS then maximization of the latter will not necessarily result in the highest possible price for the company's shares. Maximization of EPS further implies that the firm should make no dividend payments as long as funds can be invested internally at any positive rate of return, however small such a dividend policy may not always be to the shareholders advantage. Hence, considering EPS and MPS as two different factors for maximization of shareholders wealth is justified. The results depicts that bonus issues does not make significant difference on EPS and MPS of Stocks. Further moderate degree of correlation was found between the variables. Also negative correlation was established between MPS and bonus issue on the contrary EPS illustrated a positive value of correlation with bonus issues.

Biocon Limited

Bonus Summary:

The last bonus that Biocon had announced was in 2008 in the ratio of 1:1. The share has been quoting ex-bonus from September 11, 2008. Bonus History (Biocon)

Appendix-1

Descriptive Statistics	Pre-bonus EPS	Post bonus EPS	Pre-bonus MPS	Post bonus MPS
Mean	20.518	13.506	218.816	319.93
Standard Error	5.8104	2.773289743	30.3732466	28.12718703
Median	15.84	12.78	247.58	286.8
Mode	#N/A	#N/A	#N/A	#N/A
Standard Deviation	12.993	6.201264387	67.916644	62.89430221
Sample Variance	168.81	38.45568	4612.67053	3955.69325
Kurtosis	4.5409	2.072747958	0.015909	1.058427049
Skewness	2.1091	0.606804938	-0.9218737	1.373401488
Range	31.02	17.37	172.05	147
Minimum	12.47	5.59	116.55	273.85
Maximum	43.49	22.96	288.6	420.85
Sum	102.59	67.53	1094.08	1599.65
Count	5	5	5	5
Largest(1)	43.49	22.96	288.6	420.85
Smallest(1)	12.47	5.59	116.55	273.85
Confidence Level (95.0%)	16.132	7.699886733	84.3296517	78.09359074

Piramal Enterprises

Rights Summary:

The last right shares that Piramal Enterprises had issued were

in 2005 in the ratio of 1:10 at a premium of Rs 173 per share. The share has been quoting ex-rights from June 24, 2005.

Appendix-2

Descriptive Statistics	Pre-bonus EPS	Post bonus EPS	Pre-bonus MPS	Post bonus MPS
Mean	23.20667	138.9533333	153.775	347.225
Standard Error	6.081042	125.8360102	48.82508	34.343
Median	18.75	13.765	117.555	365.75
Mode	#N/A	#N/A	#N/A	#N/A
Standard Deviation	14.89545	308.2340161	119.5965	84.12284
Sample Variance	221.8745	95008.20871	14303.33	7076.652
Kurtosis	1.166132	5.995090048	-1.90989	-0.45724
Skewness	1.238419	2.448207564	0.58032	0.026891
Range	40.47	760.04	274.4	231.85
Minimum	8.78	8.02	45	238.1
Maximum	49.25	768.06	319.4	469.95
Sum	139.24	833.72	922.65	2083.35
Count	6	6	6	6
Largest(1)	49.25	768.06	319.4	469.95
Smallest(1)	8.78	8.02	45	238.1
Confidence Level (95.0%)	15.63182	323.4717618	125.5089	88.2815

Statistics of tests:

Appendix-3

S.No.	Variables	p value of Two-tailed t-Test: Paired Two Sample for Means	p value of Two-tailed Wilcoxon Signed Ranks Test	Results
1	Bonus issue and EPS	0.333	0.345	Null Hypothesis accepted
2	Bonus issue and MPS	0.081	0.080	Null Hypothesis accepted
3	Right issue and EPS	0.064	0.075	Null Hypothesis accepted
4	Right issue and MPS	0.001	0.028	Null Hypothesis rejected

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