Bonus Announcement and its impact on Shareholders Wealth: A study on Bombay Stock Exchange

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Abstract

The bonus shares are issued to existing shareholders at free of cost. It creates some value in the form of future dividend and indication of the company's growth to shareholders. In fact it may affect their wealth or share price after announcement. So the study attempts to find out the impact of bonus issue on shareholders wealth. To know this impact, bonus announcements are analysed in industry wise as well as overall by using companies of BSE 500 index. The samples are selected based on prescribed criteria made by the researcher which is exclusively related to number of times bonus shares issued by companies under a particular industry. The study analyses the impact by taking the share price of samples companies for 30 days before and 30 days after announcement. The market adjusted model is used to calculate the abnormal returns. The statistical tools such as student t test, paired sample t test and analysis of variance are used for analysis. The analysis result shows that share price changes significantly after announcement. The study concludes that bonus issue has long term impact on shareholders wealth. The FMCG, Capital goods, Transport Equipments and Miscellaneous industries produce the huge amount of extra returns in the long run. The study also concludes that abnormal returns earns by the investors are not different according to nature of the industries.

INTRODUCTION

Bonus announcement is another type of corporate action which takes place when the company decides to capitalize its free reserves into equity shares. Issue of such shares to shareholders in proportion to their existing shareholdings at free of cost is known as bonus issue or capitalization issue. The main purpose of an issue of bonus shares is to reduce a company's retained earnings (free reserve) into its share capital. Generally, the company pays some portion of net earnings as dividend and remaining amounts is kept as free reserve for future contingencies. When a company keeps doing this for a long period and at the same time and if a company's financial position is fair, then free reserves are distributed to shareholders. Due to other reasons, company also issues the bonus shares. For an example a company's market share is very high, the general investors could not buy the shares at high price. In this situation, the company may issue the bonus shares to bring down the market price of per share within a popular range (Lakonishok and Lev, 1987; Mc. Nichols and Dravid, 1990). Consequently, common investors are able to buy that company's shares and trading activity would be increased in the market. The Infosys Technology Ltd. has been issuing the bonus shares with the same idea to attract more investors by keeping his share price in a desired trading range in the market.

Keywords:

Bonus announcement; Shareholders wealth; Share price; Market reaction

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The advantage of the issue of bonus shares to shareholders is availing tax benefit. When the shareholders receive the cash dividend from the company, it is considered as ordinary income and taxed at ordinary income rate. If shareholders receive the bonus share, it is not a taxable income. Moreover, shareholders may sell the new shares received in the form of bonus to satisfy their desires for income and pay the capital gain tax which is very less than income tax. It shall be noted that, as per the existing provisions of income tax, the dividend is not a taxable income in the hand of the investors in India but in the foreign countries it is a taxable income. Hence Indian law makes the bonus issue less attractive than dividends because investors need to pay the tax on capital gain if they sell after received. Another advantage of issue of bonus shares is future dividend may increase. For example, recently (24/04/2015), Infosys issued the bonus shares 1:1 to their shareholders and on the same date Infosys further announced final dividend of Rs. 14.75 per share. As an effect of this bonus issue, shareholdings of shareholders will be double and every one will get double of final dividend i.e. Rs. 29.50 per share of original shareholdings. Hence, the issue of bonus share increases the future dividend.

Issue of bonus shares indicates high future profits and growth prospect of the company. It enhances the positive perception amongst shareholders about company and also builds the shareholders confidence over the company as a result of which increases the goodwill of the company. As investors receive the shares at free of cost and also create the value for future dividend, it may have a favourable psychological impact on shareholders. Moreover, receipt of bonus shares gives the chance to shareholder to sell the shares for making the capital gains without impairing their principal investment. If they like to do so, they may feel happy due to of earnings capital gains without losing anything. In this case, bonus shares may create a psychological influence on shareholders.

EFFECT OF BONUS ANNOUNCEMENT

Bonus issues are simply distributions of additional shares to the existing shareholders in their proportion of current investment. A company can issue the bonus shares by using the retained earnings or accumulated reserves. If a company decides to issue the bonus issues out of retained earnings, it makes a book entry to allocate retained earnings into paid up capital in the shareholders' equity section of the company's balance sheet. Alternatively, if a company decides to make a

bonus issue out of accumulated capital reserves, it adjusts the accumulated capital reserves into paid-up capital. In both the cases the company does not receive any cash from the shareholders. As result of issue of bonus shares, number of shareholdings of investors will be increased, while EPS and market price per share will be decreased proportionally to bonus issue. But, there will be no effect on shareholders wealth, capital structure and financial position of the company. Miller and Modigliani (1961) demonstrated theoretically that bonus issues along with other types of dividends do not affect the shareholders wealth. The modification triggered by the bonus issue is that the number of outstanding shares is adjusted by the bonus issue ratio, therefore the price of the share declines according to the same bonus issue ratio. The total market value of the shares or the values of the shares that are held by each investor should remain unchanged. Sloan (1987) provided Australian evidence that bonus issues do not affect shareholders wealth.

However in practice, there may be an increase or decrease in share price after bonus announcement. Such price changes may depend upon the investors' expectation. Sometimes a sharp decline in the share price may be observed if the bonus issue falls short of the investors' expectation. For example, Reliance Industries which had announced the bonus share 1:1 ratio in 07/10/2009 after successful completion of two world class mega projects. This bonus had been issued to shareholders after 12 years (last bonus ratio 1:1 in the year13/09/1997). It is an amazing reward to shareholders and created value for shareholders, commented many analysts. Before announcement, the scrip has been under-performing for the past few days, but opened strongly immediate after announcement. Therefore, the effect of bonus issue, scrip had been on a down slide since September and has plunged over four per cent to Rs 2,201 on October 30 immediately after announcement. The bonus issue could have helped to regain flagging investor's confidence in the scrip. Another example, Infosys has been issuing bonus 1:1 ratio for last two years 2014 and 2015 along with paid dividend in higher payout ratio. Hence, paying both higher dividend payout and bonus are a good news for investors because it increases overall returns (capital appreciation as well as dividend income) of the investors and it is also a positive signal for future growth. This indicates that the company is confident that it will be able generate cash in future to meet its payout requirement, says many analysts. However some analysts say that higher dividend payout ratio indicate that the Infosys does not have profitability opportunity to deploy its cash.

As on 31st of 2015 Infosys had a cash balance of Rs. 30,367 crores.

Many empirical studies on the impact of bonus issues on the stock prices give evidence that the market reacts favourably to the bonus issue announcement. Empirical studies conducted by Fama, Fischer, Jensen, and Roll (1969), Peterson(1971), Foster and Vickrey (1978), Woolridge (1983), Eades, Hess and Kim (1984), Charest (1978), Grinblatt, Masulis, and Titman (1984), Asquith, Healy and palepu (1988), Ball, Brow and Finn (1977), Mc Nichols and Dravid (1990), Masse et al (1997), Lijleblom (1989), Anderson et al (2001) have shown the positive market price reaction to bonus announcement. These findings raise the question that what causes market respond positively to bonus announcement. Several hypotheses have been developed to answer this question. The hypotheses that have received strongest support in explaining the positive reaction to bonus announcement is signaling hypothesis. This hypothesis suggests that the declaration of bonus announcement provides a convenient and effective mechanism for conveying new information to the market in stances of asymmetric information between investors and management of company. In particular, this announcement conveys favourable private information about the future earnings of the company to the investors. Managers have superior information about future earnings because there may be asymmetric information between the managers and investors. A number of studies relate the positive market reaction to the signaling hypothesis which states that, in the presence of asymmetric information, companies issue bonus shares to signal good news to investors (e.g. Grinblatt et al., 1984; Mc Nichols and Dravid, 1990; Nichols, 1981; Rankine and Stice, 1997; Woolridge, 1983, Peterson 1971). Papaioannou et al. (2002) has found the market reaction is negative to stocks distribution.

In India, Ramachandran (1985) examined the impact of announcement of bonus issues on equity stock prices and found mixed evidence for semi strong formefficiency of Indian stock market. A. K Mishra (2005) said the Indian capital market is semi strong form. Rao and Geetha (1996) concluded that one could not make excess money in the stock market by studying that patterns of abnormal returns of announcements made earlier. Rao (1994) documented the positive stock market reaction to equity bonus announcement. A. K. Mishra (2003), Obaidullah (1992), Budhraja et al.(2004) also supported positive reaction to bonus issue announcement. Malhotra et al (2007) found that bonus announcement has signal effect

but this effect is negatively related to price changes.

Therefore, there is mixed evidence so as to stock market price to bonus issue announcement. So, in this research study, the researcher further attempts to find out the actual relationship between the share price and bonus announcement. The researcher also attempts to find out whether industries produce equal quantum of returns due to announcement effect.

RESEARCH METHODOLOGY

This study is a descriptive in nature. This study analyses the share price data to know its reaction to bonus announcement. Share prices data of 30 days before and 30 days after announcement were collected from sampled companies which are listed under S & P BSE 500 index. Initial, date of announcement companies of BSE 500 index were considered from1st April 2000 to 31st march 20015. But, due to non availability of share price data study period is restricted to five years from 1st April 2008 to 31st March 2015. The criteria for drawing the samples and size of samples are explained below.

Criteria for Selection of Sample Unit

- 1. Company must be listed under S&P BSE 500 index
- 2. Every industry should have minimum three companies and five announcements over last seven years from 1st April 2008 to 31st March 2015
- 3. Maximum five companies in each industry and maximum five announcements in each company are taken as total samples for an industry, which equals to maximum 25 announcements (one industry* five companies* five announcements) per industry.

Sample Size

The total number of bonus issues during 2008 to 2015 is 380 out of which 133 bonus issue offered by 107 companies, which are belonged to S & P BSE 500 index. Industry wise in details are given in the table 1. Samples were drawn from during this period.

Table 3: Industry Wise Samples from 2008 to 2015

	Company	Announcement
Agriculture	6	7
Capital Goods	9	13
Chemical &		
Petrochemical	3	3
Consumer Durables	1	1

Diversified	2	2
Finance	10	14
FMCG	6	7
Healthcare	8	9
Housing Related	7	7
Information Tech-		
nology	9	10
Media & Publishing	3	2
Metal ,Metal Prod-		
ucts & Mining	7	8
Miscellaneous	7	12
Oil & Gas	7	11
Power	2	3
Telecom	3	3
Textile	7	11
Tourism	2	3
Transport Equip-		
ments	2	2
Transport Services	3	3
Other	3	3
Total Companies	107	133

According to the selection criteria for drawing the sample unit, Samples are drawn from five different companies for each industry. Total number of samples is 60 out of which six samples from textile, five from oil and gas, six from Miscellaneous, five from Metal ,Metal Products & Mining, six from Information Technology, five from Housing Related, five from Healthcare, five from FMCG, seven from finance industry, five from capital goods and five from agriculture industry are taken for the analysis. The simple random sampling methods is also used for selection of companies and its announcements in a particular industry if there is more samples than maximum intake as per selection criteria.

Event Study Methodology

This study used the event study methodology. Event study methodology examines the effect of bonus issues on share price. In the events study, it is necessary to calculate the abnormal returns to know abnormal performances of the stock around the announcement of a particular event. The abnormal returns can be calculated by using the different models. In this study, market adjusted abnormal returns model is used. The formula of the market adjusted abnormal returns model is given below.

$$AR_{it} = R_{it} - R_{mt}$$

Where

AR_{it} Abnormal return of a company j at time t,

 $R_{jt}^{}$ = Daily company share price return a company j at time t,

R_{mt} =Daily market index returns at time t

Statistical Tools for Analysis

The statistical tools such as student sample t test, paired sample t test and ANOVA are used in the analysis. Student sample t-test is used to assess the significant of AR for a particular period. Paired sample t-test is used to see price reaction to bonus issue. ANOVA is also used to know whether the abnormal returns are different from industry to industry or not.

IMPACT OF BONUS ANNOUNCEMENT ON SHARE PRICE

Here, the study attempts to find out the price reaction to bonus issues. To know this effect paired sample t test is used. This analysis is done in industry wise, for which finance industry, agriculture industry, healthcare industry, housing related industry, FMCG industry, capital goods industry, IT industry, metal, metal products & mining industry, transport equipments industry, oil and gas industry and miscellaneous industry are taken for analysis.

Table 1: Impact of Bonus Announcement on Share Price

	Share	Price		Sig.	
Industry	Before	After	T Value		
Finance	27.264	33.124	-19.894	.000	
Agriculture	162.445	152.9	3.460	.002	
Healthcare	220.212	298.764	-5.345	.000	
Housing	174.1775	140.6	3.861	.001	
FMCG	37.1775	66.1625	-6.277	.000	
Capital Goods	195.782	273.436	-10.605	.000	
IT	224.872	265.638	-8.180	.000	
Metal, Metal Products & Mining	113.954	131.886	-3.114	.004	
Transport Equipments	96.96167	132.9567	-24.565	.000	
Oil and Gas	130.55	136.796	-7.518	.000	
Miscellaneous	389.872	476.202	-2.563	.016	

Table 1 shows the mean share price of before announcement and after announcement and t value and its significant value. The significant value is less than 0.05 for all industries which means that there is a significant difference between the mean shares price of before announcement and mean share price of after announcement. This indicates that share price changes significantly after the announcement. Therefore, it can be concluded that bonus influences the share price significantly.

IMPACT OF BONUS ANNOUNCEMENT ON SHAREHOLDERS WEALTH

In this section, the study attempts to find out impact of bonus issue on shareholders wealth in industry wise as well as overall. Abnormal returns and cumulative abnormal returns over the window period are calculated using market adjusted model for both industry wise and overall. The study also analyses effect of bonus issue by doing event window analysis and inter industry comparison.

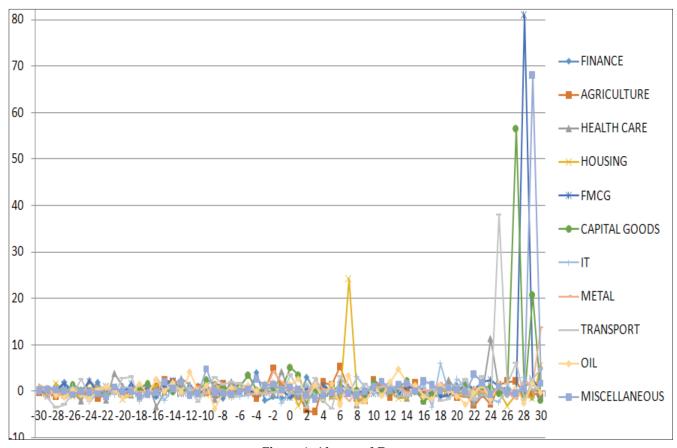


Figure 1: Abnormal Return

Figure 1 reveals the abnormal returns of different industries. Beforethe announcement, AR is very close to zero for all industries. After the announcement, AR is also much close to zero for all industries in short run except housing related industry. In case of housing related industry, AR is very high on the 7th day, thereafter it is close to zero. So this indicates that this industry produce surplus returns due to some other market reasons but not due to the impact of bonus announcement. Further, some industries like FMCG industry, capital goods industry, miscellaneous industry and transport equipments industry have produce more abnormal returns from the 24th dayto the end of the window period. Therefore, it can be concluded that bonus announcement has long run impact on shareholders wealth.

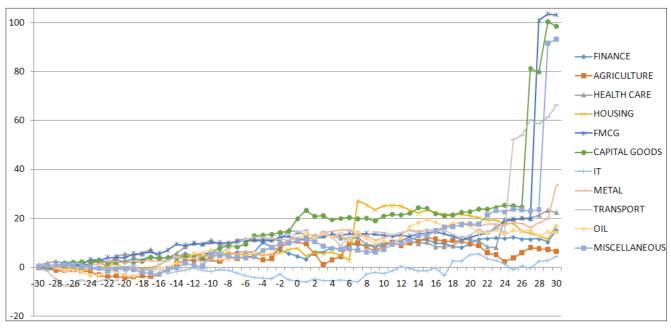


Figure 2: Cumulative Abnormal Return

From Figure 2 it may be inferred that cumulative abnormal returns is closeto zero during the entire window period for all industries except FMCG industry, capital goods industry, miscellaneous industry and transport equipments industry. Cumulative abnormal returns of transport equipments industry, capital goods industry, FMCG industry and miscellaneous industry increase spontaneously on the 24th, 26th, 27th and 28th daysrespectively. Therefore, it can be concluded that bonus issues have impact on shareholders wealth in long run.

Table 2: Abnormal Returns and Cumulative Abnormal Returns

	Pre Announcement					Post Announcement			
Day	AR	CAR	T Value	Sig.	Day	AR	CAR	TValue	Sig.
-30	0.410	0.410	1.800	.078	0	0.689	9.228	1.667	.102
-29	-0.147	0.264	494	.623	1	-0.025	9.203	039	.969
-28	-0.040	0.224	152	.880	2	-0.380	8.824	716	.477
-27	-0.141	0.083	475	.637	3	-0.074	8.750	162	.872
-26	0.116	0.199	.345	.731	4	0.027	8.777	.072	.943
-25	-0.229	-0.030	808	.423	5	-0.183	8.594	579	.565
-24	0.103	0.073	.329	.743	6	0.456	9.050	1.000	.322
-23	0.245	0.318	1.010	.317	7	1.910	10.960	.976	.334
-22	-0.128	0.190	369	.713	8	-0.416	10.545	-1.019	.313
-21	0.598	0.789	1.603	.115	9	-0.737	9.808	-1.847	.070
-20	-0.026	0.763	078	.938	10	0.849	10.656	2.108	.040
-19	0.393	1.156	1.221	.228	11	0.625	11.282	1.454	.152
-18	-0.137	1.019	583	.563	12	0.472	11.754	1.518	.135
-17	0.426	1.445	1.425	.160	13	0.546	12.300	1.677	.100
-16	-0.100	1.345	213	.832	14	0.086	12.386	.233	.816
-15	0.736	2.081	1.816	.075	15	0.518	12.904	1.585	.119
-14	1.002	3.082	3.146	.003	16	-0.374	12.530	-1.028	.309

-13	0.698	3.781	1.625	.110	17	-0.464	12.066	-1.109	.273
-12	0.445	4.226	1.190	.240	18	0.640	12.706	1.350	.183
-11	-0.139	4.087	565	.575	19	0.270	12.976	.771	.444
-10	0.904	4.991	1.857	.069	20	0.251	13.227	.840	.405
-9	0.251	5.242	.664	.510	21	0.201	13.428	.586	.561
-8	0.058	5.300	.194	.847	22	-0.357	13.071	624	.535
-7	0.193	5.493	.568	.573	23	0.563	13.634	1.558	.125
-6	0.394	5.887	1.491	.142	24	0.529	14.163	.510	.613
-5	0.370	6.256	.659	.513	25	2.456	16.618	1.120	.268
-4	0.417	6.674	.882	.382	26	0.043	16.661	.136	.892
-3	0.073	6.746	.240	.811	27	5.622	22.283	1.024	.311
-2	1.317	8.064	2.807	.007	28	6.390	28.673	1.339	.187
-1	0.476	8.539	.929	.357	29	9.134	37.807	1.658	.104
0	0.689	9.228	1.667	.102	30	2.503	40.310	1.526	.133

Table 2 shows AR, CAR, t value and its significant value. After the -11thday, AR is positive and CAR continuously increases. Two days before announcement, AR is highest and significant, which conveysa positive signal to investor about upcoming events like bonus issue. On the announcement date, AR is positive with 0.689 percent and CAR is 9.228 percent. Immediately after the announcement, AR is negative on the 1st, 2nd and 3rd days. In long run there is a continuous increasing of CAR from 22nd days and industry produces more abnormal returns on the days 27th, 28th and 29th and 30th as compared to other days. Therefore, it can be concluded that bonus announcement has long run impact on shareholders wealth.

Event Window Analysis

Event window analysis is done to measure the effect of bonus announcement on the shareholders wealth for a specific period. For this purpose, announcement effect is categorized into the immediate effect (-1 to +1 days), short term effect (-5 to +5 days), medium term effect (-15 to +15 days) and long term effect (-30 to +30 days) according to the event window period. Cumulative abnormal returns accruing duringthese time periods have been assessed for each industry. CAR of different industries forbonus announcement has been displayed in the Table 3.

Table 3: Event Window Analysis

Industry	-1 to 1	-5 to5	-15 to 15	-30 to30
Finance	-3.81	1.05	8.18	15.19
Agriculture	1.04	-0.12	15.20	6.48
Health	2.43	0.42	6.26	22.40

Housing Related	-1.34	-0.25	22.44	17.08
FMCG	-0.80	2.37	8.56	103.17
Capital Goods	9.04	10.58	20.29	98.49
IT	-3.36	-1.97	-0.84	4.51
Metal, Metal Products & Mining	2.45	8.81	12.54	33.58
Transport Equipments	3.61	-2.51	14.14	66.26
Oil and Gas	3.84	9.20	19.66	14.22
Miscellaneous	1.60	3.48	15.72	93.33

Table 3 shows that most of the industries have positive cumulative abnormal returns except IT industry and housing relate industries in both immediate as well as in short run. In addition to this, thefinance and FMCG industries have negative CAR in immediate effect and agriculture and transport equipments have negative CAR in short run. However capital goods industry has highest cumulative abnormal returns in both immediate and short run. This indicates the capital goods industry produce more abnormal returns in both immediate and short term effects of bonus issue.

In medium and long term effect of bonus announcements, all industries except IT industry have positive CAR. However, Housing related industry has highest CAR in medium term while FMCG industry has highest in long run. Therefore, it can be concluded that investors who have invested in capital goods industry would have earned more surplus returns in immediate effect as well as short term effect of bonus announcement. The investors who have invested in housing related industry and

FMCG industry would have benefited more in medium term effect and long term effect of bonus announcements respectively because bonus issue creates more value for shareholders of above said industries.

Inter Industries Comparison

Different industries may have different impact of bonus announcement on shareholders wealth. So, an attempt is made by using ANOVA to measure the inter industries comparison whether the industries produce equal quantum of abnormal returns or not.

Table 4: ANOVA of Bonus Announcement- Inter industries Comparison

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	286.761	10	28.676	1.047	.402
Within Groups	18325.880	669	27.393		
Total	18612.641	679			

Table 4 shows the analysis of variance among the industries. The significant value is greater than 0.05 which indicates that there is no significant difference among the industries with respect to abnormal return earned by

the shareholders. Therefore, it can be concluded that the shareholders earns equal abnormal returns from different industries.

CONCLUSION

The study evidences that the price reaction to bonus issue is significant which indicating that the share price changes significant after announcement. The study concludes that bonus issue has long term impact on shareholders wealth. The FMCG, capital goods, Transport Equipments and Miscellaneous industries produce the huge amount of extra returns in the long run in particular. If the investors make the investment decision based on the bonus announcement for long period, they may prefer to FMCG, capital goods, Transport Equipments and Miscellaneous industries so that they can earn maximum returns from these industries. If the investors invest for short period they should prefer to investment in capital goods industry. This study suggests the investors that they should not prefer to invest in IT industry even either going for long term or short term investment because it does not create any extra value for the investors. The study also concludes that abnormal returns earns by the investors are not different according to nature of the industries.

REFERENCE

- Adaoglu, C. Ameziane, L. M. (2006): Market Valuation of Bonus Issues in a Closely Held Market, Presented at the Emerging Markets: Finance and Economics (EMFE) International Conference, Istanbul, Turkey, September, p. 6-8.
- Adouglu, C. (2005): Liquidity Changes around Bonus and Rights Issue Announcement: Evidence from Manufacturing and Service Sectors in India, Retrieved from http://mpra.ub.uni muenchen.de/41216/MPRA Paper No. 41216, posted 11.
 September 2012 / 09:10.
- Amuthan, R. & Ayyappan, S. (2011): Analysis on Bonus Share Issuing Event Impact on Share Prices with Special Reference to Indian Banking Sector and Information Technology Sector Stocks in India, European Journal of Economics, FISSN 1450-2275 Issue 38.
- Anderson, H., Cahan, S. & Rose, L.C. (2001): Stock dividend in an imputation tax environment, Journal of Business Finance & Accounting, Vol. 28(5), p. 653-669.
- Asquith P, Healy, P. & Palepu, K. (2001): Earnings and stock splits", The Accounting Review, 14 (3), p. 24-43.
- Asquith, P. & Mullins, D.W. (1983): The Impact of Initiating Dividend Payments on Shareholder Wealth, Journal of Business, Vol. 56 (1), p. 77-96.
- Asquith, P., Healy P., Palepu K., (1989): Earning and Stock Splits, The accounting review, Vol. 64(2), p.387-403
- Balachandran, B. & Faff, R. (2004): Special Dividends, Bonus Issues and on-Market Buy-Backs: Signalling in an Imputation Environment, Finance Letters, Vol. 2, p. 23–26.
- Ball, R, Brown P and Finn, F.J. (1977): Share Capitalization Changes, Information and the Australian Equity Market, Australian Journal of Management, Vol. 2, p. 105-126.
- Barnes, M. L., & Ma, S. (2001): Market Efficiency or Not? The Behaviour of China's Stock Prices in Response to the Announcement of Bonus Issues, From http://ro. uow.edu.au/commpapers/475.

- Eades, K., P. H. and Kim, E. (1984): On interpreting Security Returns during the Ex-Dividend Period, Journal of financial economics, Vol. 13, p. 3-34
- Fama, E. F., Fisher, L., Jensen, M. & Roll, R. (1969): The Adjustment of Stock Prices to New Information, International Economic Review, Vol. 10, p. 1-21.
- Foster T.W, Vickerrey D (1978): The Information Content of Stock Dividend Announcements, The Accounting Review, Vol. 53 (2), p. 360-370.
- Grinblatt, M.S., Masulis, R.W., & Titman, S. (1984): The Valuation Effects of Stock Splits and Stock Dividends, Journal of Financial Economics, Vol. 13 (4), p. 461-490.
- Ikenberry, D., Rankine, G. & Stice, E. (1996): What Do Stock Splits Really Signal?, Journal of Financial and Quantitative Analysis, vol. 31, p. 357–375.
- Lijleblom, E. (1989): The information impact of announcement of stock dividends and stock splits, Journal of business finance and accounting. Vol. 16, (5), p. 681-698.
- Malhotra, M., Thenmozhi, M. & Gopalaswamy, A.K.: Liquidity Changes around Bonus and Rights Issue Announcement: Evidence from Manufacturing and Service Sectors in India. from http://mpra.ub.uni-muenchen.de/41216/.
- Masse, I., Hanrahan, J. & Kusher, J. (1997): The Effect of Canadian Stock Splits, Stock Dividends and Reverse Splits on the Value of the Firm, Quarterly Journal of Business and Economics, Vol. 36 (4), p. 51-62.
- Mc Nichols, M. & Dravid, A. (1990): Stock Dividend, Stock Splits and Signalling, Journal of finance, Vol. 34 (4), p. 411-433.
- Miller, M. & Modigliani, F. (1961): Dividend Policy, Growth and the Valuation of Shares, Journal of Business, Vol. 34(4), p. 411-433.
- Miller, M.H. & Rock, K. (1985): Dividend Policy under Asymmetric Information, Journal of Finance, Vol. 40, (10), p. 31-52.
- Mishra, A.K. (2005): An Empirical Analysis of Market Reaction around the Bonus Issue in India, The ICFAI Journal of Applied Finance, p. 21-37.
- Obaidullah, M. (1992): How Do Stock Prices React to Bonus Issues?, Journal of Financial Economic. P.17-22
- Peterson, P. P. (1989): Event studies: A Review of Issues and Methodology", Quarterly Journal of Business and Economics, p. 36-66.
- Peterson, R. (1971): Bonus Issues, Share Issues, Share Splits and Rights Issues", The Chartered Secretary, July/August issue, p. 198-207.
- Woolridge, R. (1983): Stock Dividends as Signals, Journal of Financial Research, Vol. 6 (1), p. 1 12.
- Rao, S. N. (1994): The Adjustment of Stock Prices to Corporate Financial Policy Announcements, Finance India, Vol. 8(4), p. 941-953.
- Sloan, R. G. (1987): Bonus Issues, Share Splits and Ex-day Share Price Behaviour: Australian Evidence, Australian Journal of Management. Vol. 12, p. 277-291.
- Suresh, B. and Naidu, G. (2012): 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, IJMT, Vol. 2 (9), p. 2249-1058.
- Vandana Gupta (2003): Announcement Effects of Bonus Issues on Equity Prices: The Indian Experience, Indian Journal of Finance and Research, Vol. 13 (1&2), p. 11-23.
- Wen-Chung Guo, Shin-Rong Shiah-Hou & Yu-Wen Yang (2006): Stock bonus compensation and firm performance in Taiwan, Managerial finance, Vol. 32(11), p. 862-885.
- Wood, J.M., Tataryn, D.J. & Gorsuch, R.L. (1996): The Effects of under- and Over extraction on Principal Axis Factor Analysis
 with Varimax Rotation, Psychological Methods, Vol. 1, p. 354-365.