CHAPTER V
FINDINGS AND CONCLUSION

5.1 INTRODUCTION

In India, Buyback of shares has been implemented to sustain economy and allow company to sustain in the stock market. As per SEBI (Buyback of Securities) Regulations 1999, the major governing laws were constituted for companies to announce buyback in capital market of India. Within a year of amendment in SEBI, companies had started repurchase of their own shares. Buyback of shares in companies has been increasing year by year. Since implementation of buyback of shares, more than 200 buyback announcements have been done by various companies in Bombay Stock Exchange in India by various methods. Most common method was Open Market Method which was followed for buyback of shares in Indian stock market as compared to tender offer method.

This study has initiated the factors influencing buyback of shares listed Bombay Stock Exchange in India. The researcher has also identified impact of buyback of shares for the past seventeen years. This research focused on the buyback of shares pre announcement and post announcement effective on the company. The primary aim of this study is to identify the factors influencing for buyback of shares in BSE listed companies in India. The secondary aim of this study is to establish whether there is impact of buyback of shares on pre-announcement and post-announcement. Sampling size of this study was 238 companies which repurchased their own shares from 1998 to 2015. Data were collected mainly in CMIE Prowess Database, SEBI, BSE and moneycontrol.com.

The findings obtained from the different statistical tests and tools, like Descriptive Statistics, Multiple Regression, ANOVA, GARCH Model and Auto Correlation.

5.2 Factors Influence for Buyback Decision Results for Multiple Regression

Analyzed the factors influenced the buyback of shares in Indian companies. Results were perceived the leverage and capital structure of company shares has the main influencing factor to take buyback decision. The second highest influencing factor has free cash flow to take buyback decision. Multiple Regression analysis was used to achieve the stated results with the sample. As per the results attained, leverage, capital structure and free cash flow hypothesis showed highest coefficient regression value to perceive the results. Second
important factor influenced the free cash flow or excess cash or surplus cash to take buyback decision.

5.2.1 Results of Before Buyback Announcement

Among the variable “Equity and Debt” scored the maximum absolute regression coefficient value of $t = 28.88$. Since “Equity and Debt” attained highest value, it had First rank to influence the buyback of shares among all variables. Rests of other variables have weights or coefficients values which were substantially lower than variable “Equity and Debt”. Next to variable “Equity and Debt”, “Cash” have the 4.73 regression coefficient value of $t = 6.67$. These two variables had placed to influence the event of buyback of shares.

5.2.2 Results of During Buyback Announcement

Among the variables “Equity and Debt” attained 8.32 the maximum absolute regression coefficient value of $t = 32.31$. Since variable “Equity and Debt” attained highest value, it was placed First rank to influence the buyback of shares among all variables. Rests of all other variables have weights or coefficients values which were substantially lower than variable “Equity and Debt”. Next to variable “Equity and Debt”, “Cash” had the 1.26 regression coefficient value $t = 2.63$. These two variables have been placed to influence the event of buyback of shares.

5.2.3 Results of After Buyback Announcement

Among the variables “Equity and Debt” 9.28 attained the maximum absolute regression coefficient value of $t = 46.69$. Since Equity and Debt attained highest value, it had placed First rank to influence the buyback of shares among all variables. Rests of all other variables have weights or coefficients values which were substantially lower than variable “Equity and Debt”. Next to “Equity and Debt”, variable “Cash” have the B value was 1.42 regression coefficient value of $t = 4.36$. These two variables are placed to influence the event of buyback of shares.

5.3 Findings and Results from Descriptive Statistics for Selected Variables

Descriptive statistics for all selected variables for the purpose of easy evaluation among all selected variables. In tables from 4.1 to 4.8 individually discussed the performance of results of every variable. The table 4.9 clearly states that mostly all the variables were given abnormal returns except cash and leverage.
Important to note that the difference between positive returns of those two variables were very low changes, that has for variable EPS the return has decreased from 19.77 to 17.77 and increased for variable Equity and Debt from 0.023 to 0.050. Among all positive return variables, current asset gives maximum return. Finally it describes that there were abnormal returns among the variables before and after the buyback of shares. Since the returns were abnormal, the standard deviations of before buyback periods shows reduced when compared to after buyback periods in most cases. Among them, “ROCE” and “EPS” have decreased. The values of Skewness and Kurtosis of all variables are acceptable limit of ± 1 as per the result shows that the selected variable is fit for the analysis.

5.3.1 Descriptive Statistics for DEBT and EQUITY

The basic statistics effect of Equity before and after the buyback of shares. The mean statistics before the buyback has 454.92 and it increased after the buyback value is 486.44 and standard deviation has increased from 1819.58 to 1855.52 and the basic statistics effect of Debt before and after the buyback of shares. The mean statistics before the buyback was 134.89 and it increased after the buyback value is 225.73 and standard deviation has grater from 211.00 to 921.26

5.3.2 Descriptive Statistics for Total Assets

The basic statistics effect of variable “Total Assets” before and after the buyback of shares announcement. Analyzed the mean statistics before the buyback is 112.26 and it is decreased to 98.96 after the buyback. The standard deviation has decreased from 896.42 to 792.22.

5.3.2 Descriptive Statistics for Current Assets

The basic statistics effect of variable “Current Assets” before and after the buyback of shares announcement. The mean statistics before the buyback is 1052.48 and it is increased to 1575.34 after the buyback. The standard deviation is increased from 3631.27 to 5005.23.

5.3.3 Descriptive Statistics for Cash
The basic statistics effect of variable “Cash” before and after the buyback of shares announcement. Analyzed the mean statistics before the buyback is 377.11 and it is increased to 455.34 after the buyback. The standard deviation is increased from 989.73 to 1100.00.

5.3.4 Descriptive Statistics for ROCE

The basic statistics effect of variable “ROCE” before and after the buyback of shares announcement. Evaluated the mean statistics before the buyback is 72.04 and it is increased to 82.72 after the buyback. The standard deviation is decreased from 444.22 to 408.17.

5.3.5 Descriptive Statistics for Book Value to Market Value

The basic statistics result of variable “Book Value to Market Value” before and after the buyback of shares announcement. Studied the mean statistics before the buyback is 132.38 and it is increased to 224.61 after the buyback. The standard deviation is increased from 209.21 to 919.09.

5.3.6 Descriptive Statistics for EPS

The basic statistics result of Earning per Share(EPS) before and after the buyback of shares announcement. Examined the mean statistics before the buyback is 19.77 and it is decreased after the buyback is 17.77. Also standard deviation is decreased from 38.84 to 21.13

5.4 Results for Model Summary and ANOVA

- The R had the correlation, its value was 1.00 and R square the degree of determination, its value was 0.99. The degree of determination showed the extent to which the variable “Book Value to Market Value”, “EPS”, “ROCE”, “Cash”, “Current Assets”, “Total Assets”, “Equity and Debt and Debt” had influenced the before buyback of shares decision in company.

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decision in company.

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- ANOVA revealed that the variance significant value was less than 0.05, which means dependent variable that was outstanding buyback shares that significantly predicted by independent variables namely “Book Value to Market Value”, “EPS”, “ROCE”, “Cash”, “Current Assets”, “Total Assets”, “Equity and Debt” at 95% level of significance.

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5.5 DESCRIPTIVE STATISTICS OF SHARE PRICES BETWEEN PRE AND POST EVENT

The basic statistics result of market returns of all buyback companies before and after the buyback of shares. The mean statistics before the buyback is -0.001 and it has increased after the buyback to 0.003. It denotes that there is a positive movement of share price after the event. But the standard deviation is increased from 0.009 to 0.017, it indicates that the
difference among the market prices are highly deviated by comparing the Pre-event period. Approximately the difference is increased by 50%. The overall average returns are increased at the same time the deviations are also increased. There is possibility for negative return, hence it is very important to watch the market very keenly and investment should be done during buyback announcement.

Basic statistics result of share prices of event day which was five days before the event and 5 days after the event. The impact of event was highly validate for five trading day of before and after the event date. Hence 5 trading days before and after the event was taken to find out the impact. The mean value of the shares before the buyback that was decreased in the 1\textsuperscript{st} day, 4\textsuperscript{th} day and 5\textsuperscript{th} day and rest of the days 2\textsuperscript{nd} and 3\textsuperscript{rd} was increased. After the buyback the average returns were increased all the five days and the immediate impact was positive then it came to normal position. The deviation also increased by second day when compared to the first day. The forth day achieved the highest return of 0.159 and at the same time the deviation to the highest point of 0.500.

5.6 GARCH OF PRE BUYBACK OF SHARES

5.6.1 Results from GARCH model

- Result of GARCH of Pre Buyback of shares. It has clearly states that the sum of alpha (0.049616) and beta (0.000265) is 0.04963.
- Result of GARCH of Pre Buyback of shares. It has clearly states that the sum of alpha (0.048591) and beta (0.000298) is 0.04889
- Result of GARCH of Pre Buyback of shares. It has clearly states that the sum of alpha (0.162249) and beta (0.350652) is 0.51290.
- Result of GARCH of Pre Buyback of shares. It has clearly states that the sum of alpha (0.049799) and beta (0.0000219) is 0.049820
- Result of GARCH of Pre Buyback of shares. It has clearly states that the sum of alpha (0.05141) and beta (0.0000404) is 0.051450.
• Result of GARCH of Pre Buyback of shares. It has clearly states that the sum of alpha (0.050142) and beta (0.00000523) is 0.05014.

• Result of GARCH of Pre Buyback of shares. It has clearly states that the sum of alpha (0.04506) and beta (0.001006) is 0.04606.

• Result of GARCH of during the announcement Buyback of shares. It has clearly states that the sum of alpha (0.046194) and beta (0.001279) is 0.04747.

• Result of GARCH of Post Buyback of shares. It has clearly states that the sum of alpha (0.032384) and beta (0.042705) is 0.07508.

• Result of GARCH of Post Buyback of shares. It has clearly states that the sum of alpha (0.049269) and beta (0.020474) is 0.069743.

• Result of GARCH of Post Buyback of shares. It has clearly states that the sum of alpha (0.219372) and beta (0.027009) is 0.24638.

• Result of GARCH of Post Buyback of shares. It has clearly states that the sum of alpha (0.05246) and beta (0.000341) is 0.05280.

• Result of GARCH of Post Buyback of shares. It has clearly states that the sum of alpha (0.047741) and beta (0.000488) is 0.04822.

5.7 Results from Augumented Dicky Fuller Test and Stationarity Test

Result of Augmented Dickey – Fuller Test for event periods of 11 days which includes event date and pre and post 5 days. The table 4.3.3 expressed that, the calculated values of all dates are less than critical value at the level of 1%, 5% and 10% significance. It is clear that the post return is stationary in 1% level of significant. Hence all data are stationary.

5.7.1 Augmented Dickey – Fuller Test
In the results noted that the calculated values of pre event is lesser than critical value at the level of 1% value -3.458, 5% value -2.873 and 10% value -2.573 significance. It is clear that post return is stationary in 1% level of significance.

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The result of Augmented Dickey–Fuller Test for event periods of 11 days which includes event date and pre and post 5 days. The Augmented Dickey–Fuller Test is \(-5 -4.682, -4 -5.908, -3 -5.278, -2 -5.121, -1 -17.564, 0 -6.855, 1 -6.707, 2 -7.166, 3 -5.533, 4 -7.257\) and \(5 -4.681\).

**5.8 Discussion**

During the research work of buyback of shares companies are selected based on the BSE listed companies in India. However we want to discuss the following points:

**5.8.1 Factors Influenced:**

- Many research works have been carried out on buyback of shares in other countries such as United States of America, Canada, Malaysia and Australia. The result of this study shows that the capital structure has been influencing the companies to participate in the buyback of shares. The outcome of this study coincides with the result of Subba Reddy Yarram (2013) who has researched in Austrian firms.

- The study shows that leverage and capital structure has influenced buyback of shares decision in Indian BSE listed companies to maintain optimum capital structure of the company. Guffey and Schneider (2004) mentioned that buyback of shares was one of the methods to adjust companies leverage. The leverage hypotheses sat by them that management provided information allow the firm to move closer to its optimal capital structure through a buyback of its shares. Share buyback has the effect of reducing the equity of a company and thereby changing
its capital structure mix. The results of Guffrey and Schneider (2004) coincide with the results of this study.

- The study reveals that undervaluation is not the main factor for buyback of shares decision in Indian Companies. Subba Reddy (2013) has stated in his study undervaluation is not main motive for buyback of shares in Australian firms which coincide with the following author Abdul and Wahid (2013).

5.8.2 Impact of Share Price

- The research shows that the impact of share price on buyback of shares announcement is highly validate for five trading days of before and after the buyback announcement date. Therefore before and after the event 5 trading days is taken for find out the impact. The mean value of the shares before the buyback that is day -1 and -5 are decreased and rest of the day 2 and day 3 was increased. After the buyback the average returns are increased all the five days and the immediate impact is positive, then it has come to normal position. Ashish Arora (2012) found that the markets in India are semi strong efficient, the share prices excess returns will start declining post the event date. Since, most of the studies consider undervaluation hypothesis and buyback as a positive event, so share prices are expected to raise post announcement and generate higher returns. However, there is a severe under reaction from shareholders to buyback announcements.

- The studies are conducted on the basis of impact of share price on buyback of shares decision. Dielman, Nantell & Wright (1980), Masulis (1980), Vermaelen (1981), Dann (1981), Davidson & Garrison (1989), Comment & Jarrell (1991) and many others who have found some significant abnormal returns for shareholders in a comparison of before and after buyback of share prices.

5.9 Summary:
The study reveals that buyback of shares decisions in companies of India. The above mentioned variables or factors have influenced the buyback of shares have influenced decision making Indian to companies because buyback of shares. The objective of the study is to identify the factor influences on buyback of shares. The study reveals that Leverage and Capital Structure was the main factor to obtain buyback of shares decision. Most of the companies participated in buyback of shares in order to maintain optimal capital structure. Free cash flow has the second factor to obtain buyback of shares decision in company. Some of the factors negatively influenced the buyback of share announcement such variables company not concentrated like current assets and total assets etc.

Impact on share price for buyback decision, before buyback announcement there are slight changes in the share price but after the buyback announcement in company there is big change in the company share price.