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# Buyback of Shares and Shareholders' Value Creation: A Study of Indian Corporate Sector 

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#### Abstract

: Buyback of shares has been used widely as a means of financial restructuring to maximise shareholder's wealth. It reduces the number of outstanding shares and thus enhance earnings per share. As a result, price earnings ratio is also affected. The present paper examines a sample of 128 buyback announcement made by 102 companies listed on BSE during 1999-2012. Four different ratios viz. earnings per share, proprietary ratio, dividend payout ratio and price earnings ratio have been used to analyse the impact of buyback of shares on the financial performance of the companies. Paired t-test has been used to examine these ratios before and after the buyback. The paper finds that there is improvement in EPS, DP ratio and PE ratio while a decrease is found in PP ratio. However, the pre-buyback ratios are not statistically significantly different from the post buyback ratios at $5 \%$ level of significance. Thus it can be concluded that the shareholders value is not largely influenced by the buyback of shares.


Keywords: Share buybacks, Earnings per share, Proprietary ratio, Dividend payout ratio, Price earnings ratio

## 1. Introduction

Maximisation of wealth is considered as an important objective of the firms. It means maximising the value of owners' share capital which is indicated by the market price of the shares of the companies. The market price of a company's shares signifies the pronouncement of all market participants which represents the true value of the particular company. It shows how well the management of the company is performing for the shareholders. Thus creating value to the shareholders has become a matter of concern for the companies. There are many ways and investment options through which a company can maximise wealth of its shareholders e.g. merger and acquisition, stock split and buyback of shares. The choice depends upon the cash position and financial position of the company. When a company is overcapitalized and having surplus cash it needs to take a decision regarding paying out excess cash or retaining the funds as the earnings. There are many ways in which a company can return its excess cash i.e. either in the form of dividend or buying back its own shares. Buyback of shares, also known as repurchase of shares means the reverse of issue of shares by a company i.e. buying back its own shares from the existing shareholders in the market. Buyback generally results in the return of shareholder's money and thereby reduction of share capital along with creating value for the remaining shareholders. Thus repurchase of shares is considered as a significant tool of financial restructuring and has gained its popularity around the world during last few decades. It is a method through which surplus cash is disbursed to the shareholders through some flexible means without involving any regular commitment.

### 1.1. Buyback of Shares in India

The main legislation governing the buyback of shares in India was declared in 1999 by making necessary amendments in the Companies Act 1956. Sections 77A, 77AA and 77B were inserted to provide space for the introduction of buyback of shares. SEBI also put in force some fresh guidelines for the buyback of securities. However, after the introduction of New Companies Act 2013 the provisions of buyback of shares have been further revised and some necessary changes were made. Similarly, SEBI also issues some amendments in the regulation of buyback of securities from time to time. Thus at present there are two different regulations viz. Companies Act and SEBI provisions to provide the conditions under which an Indian company can purchase its own shares. Moreover, in the New Companies Act 2013 there is a mention of Rule 17 of Companies (Share capital and Debentures) 2014 to govern the buyback of securities by the private companies and unlisted public companies.
Immediately after the enactment of the share buyback few companies like Reliance Industries Ltd., Kesoram Industries Ltd., Compton Greaves and Tisco Ltd. took the legal authority to announce the buyback of their shares. Still the buyback activity remained very low in the initial two years. Only 13 buyback announcements were made in first two years 1998-2000 involving an amount of around rupees 300 crores (Table 2.1). This less number of buyback leads to the relaxation in the buyback rules and provisions in October 2001. As a result, there were 72 buyback announcements made in the next three years from 2001 to 2003 with an amount of around rupees 4500 crores. However, a decline in the buyback activity was again noticed from 2004 to 2007 where in only 47 buybacks was undertaken over the period of four years. The reason may be the subprime crisis in U.S stock market crisis of the year 2006 because
after that there was a tremendous increase in the buyback activity from 2008 till date as mentioned in Table 1. There were 196 buyback announcements with an amount of approximately rupees 39000 crores over a period of eight years i.e. from 2008 to 2015.

| Year | Amount (Rs. Cr.) | No. of Buyback Announcement |
| :---: | :---: | :---: |
| $1998-99$ | 1 | 1 |
| $1999-00$ | 300 | 12 |
| $2000-01$ | 1,297 | 14 |
| $2001-02$ | 2,154 | 27 |
| $2002-03$ | 1,011 | 31 |
| $2003-04$ | 52 | 8 |
| $2004-05$ | 3,600 | 11 |
| $2005-06$ | 363 | 10 |
| $2006-07$ | 295 | 7 |
| $2007-08$ | 2,004 | 10 |
| $2008-09$ | 4,218 | 46 |
| $2009-10$ | 824 | 20 |
| $2010-11$ | 4,295 | 20 |
| $2011-12$ | 13,765 | 31 |
| $2012-13$ | 1,694 | 21 |
| $2013-14$ | 11,380 | 32 |
| $2014-15$ | 605 | 10 |
| $2015-16$ | 1834 | 16 |
| Total | 49692 | 327 |

Table 1: Buyback Announcements in Indian Capital Market
Thus it is cleared that buyback of shares in India has been gaining its space. Large numbers of companies are using buyback of shares as an effective mechanism for corporate and financial restructuring. The present paper is an attempt to discover whether the buyback of shares increases the value to the shareholders and maximises their wealth.

## 2. Review of Literature

Vermaelen (1995) in his study examined 131 buy-back tender offers and 243 open market repurchase. He found the average abnormal return of $3.67 \%$ and $13.9 \%$ for an open market repurchase and tender offer announcements respectively. He found that the earnings per share were found to be abnormally high for the years following a tender offer and used as a proxy for cash flow per share. He examined a period from 1962-1977 when most of the firms repurchasing shares were small firms, normally not followed by many researchers. These firms were mostly considered to be undervalued and thus required a greater need to follow tender offer. He endorsed that the management undertakes buy-back to satisfy the investors that the shares of the company are undervalued.
Nohel and Tarhan(1998) examined 242 tender offers during the period 1978-1991and argued that the effects of buyback announcement are not adequate to conclude that the signalling or the free cash flow hypothesis holds true. They observed some improvement in the performance of the companies buying back but there were sheer differences between high- growth and lowgrowth firms.
Weisbenner (1999) found that if the firms grant stock options, it will reduce earnings per share because the number of shares over which earnings are divided would be increased. EPS is an important determinant of the performance of a company. Once the share is bought back, the number of outstanding shares is reduced. However, the cash utilised repurchase the shares is not taken out of earnings. Weisbenner concluded that the companies carry out gradual share repurchase in order to offset the adverse earnings per share resulting out of stock option programmes.
The study of Ben, Nagar, Skinner and Wong (2003) also examined that corporate executives' stock repurchase decisions are affected by their incentives to manage diluted Earnings Per share. They found that dilutive effects of employee stock option plans on diluted EPS help explain executives' stock repurchase decisions.
Brav et al. (2005) findings further supported this argument and found that to counteract the adverse effect of employee share option is the third most significant cause of share buyback decision.
In order to examine the price reaction of the share buyback announcement Mishra (2005) studied 25 buybacks in India during the period between 1999 and 2001. He mentioned that the company's intention to reveal its high confidence in itself is the major reason behind the buyback of shares. He tried to find out whether the management took best care of the interest of the non tendering shareholders when it decided to go for buyback of shares. In order to describe the trends of various performance measures like share prices, a trend analysis was carried out for pre and post buyback period. The study established that the repurchase returns were generally momentary and the markets came back to the previous level after only three months. Thus share buyback was used to increase promoter's shareholdings.
Brav et al. (2005) found after interviewing 384 CFO's that increase in earnings per share is the second main important factor which affects a company's decision of share buyback. The reason supporting this argument is that if share is repurchased, the number of
shares outstanding is reduced and as a result EPS will grow assuming net income remains unchanged. However, there are various reasons which that may contradict the apparent association between EPS and share buyback. First, a share buyback will not necessarily boost earnings if positive NPV investments opportunities exist that is the funds used for the buyback would not succeed to earn the desired cost of capital. In this case it is better to invest in the company's own stock than other available investments otherwise executing a share buyback may actually bring down the shareholder value.
Li and McNally (2007) in their paper found that the average number of shares outstanding actually grows by 4.7 percent for the companies buying back shares, in comparison with a sample of non-repurchasing where number of share outstanding increased firms by 10.0 percent for the same time period. This further means that all share buyback programs do not reduce the number of shares outstanding.
In their conceptual study Nadarajan, Ahmad and Chandren (2009) attempted to examine the share buyback announcement effects on earnings within the jurisdiction of Malaysian Stock Market. The study concluded with a conceptual model, which provides with an insight of valuable connection between share buyback targets and earnings per share, Dividend Payout ratio and cash flows of firms making share repurchase announcements in Malaysian markets. Secondly, it may be quite possible that repurchase of shares does not always result into a decrease number of shares outstanding at the end of the buyback program as on one hand a firm is repurchasing its shares, and on the other it may also be issuing shares to execute employee stock options. There are studies which proved that the number of shares outstanding actually increases as a result of share buyback.
B Ramesh and P Rane (2013) examined the sample of 27 Indian companies and 5 Multinational companies belonging to 21 different industries listed on BSE tomeasure the performance of share repurchase during the period 2005 to 2010 . The study analysed the effect of share repurchase on the shareholder value creation. It was considered that the Earnings per share increased because the number of shares reduced after the buyback of shares. The study revealed that there was increase in EPS for $78 \%$ of the buyback programmes included in the sample. For the remaining a reduction in EPS was registered. Thus it was concluded that the buyback of shares created value to the shareholders through share buyback programmes.
Abdul Wahid (2014) discovered that the operating performance of the companies was improved just because of the reduction in the number of outstanding shares. It was also found that the important factors for improving the operating efficiency were earnings per share, return on assets, returns on equity and market to book value of equity. The sample included 101 companies listed on Main and Second Board of Malaysia and that had undergone through the share repurchase during 1999 to 2005. Share buyback was considered as a method of returning excess cash to its shareholders.
Lately Dhanda and Kaur (2014) had published their research paper to discuss the benefits of share repurchase to the shareholders and the companies. The prime intention of the study was to test the impact of the share repurchase on the performance of the companies. They analysed the companies listed on the BSE and undergone the share buyback programme between 2009 to 2011. To measure the pre and post-performance of the companies' ratio analysis technique was used. Liquidity ratios are calculated to test the financial stability of the companies after the buyback of shares and to find the association between the liquidity ratio and the performance of the companies. They believed that if the firm is not able to provide the returns equivalent to what is required it should return funds to the investors so that they can invest such funds elsewhere to get their desired returns.

## 3. Research Methodology

### 3.1. Objectives

The study has the following objectives:

- To investigate whether the buyback of shares helps in enhancing the financial performance of the companies.
- To examine whether the buyback of shares plays any role in creating value to the shareholders.


### 3.2. Hypothesis

Following hypotheses are tested to study such impact of buyback of shares on equity shareholders' stake and interest.

- $\mathrm{H}_{0}$ : There is no difference in shareholders' value after the buyback of shares
- $\mathrm{H}_{1:}$ There is difference in shareholders' value after the buyback of shares


### 3.3. Methodology

The study is based on the secondary data. The companies listed on Bombay Stock Exchange which have declared and conducted the share buyback programme from 2000 to 2012 through open market purchase are selected. 128 companies have been selected on the basis of availability of data. Out of this 20 companies have conducted buyback for more than once but since they have done buyback with different offer amount and the offer price therefore each buyback offer is treated as a separate sample.
The data for six years pre and post buyback period is collected for all the companies into consideration. The pre buyback period consists of three years prior to the financial year in which the announcement of buyback is made while the post buyback period comprises of three years after the financial year in which the buyback is announced. The data has been collected on annual basis with the help of PROWESS. In order to measure the impact of buyback of shares on the value or wealth of the shareholders following ratios have been considered:

### 3.3.1. Proprietary Ratio

Proprietary ratio is a variant of the debt equity ratio which explains the relationship between the shareholders' fund and total assets of a company. The proprietary ratio is also known as the equity ratio. As it measures the proportion of shareholders' equity to total assets, it presents a rough approximate of the amount of capitalization used to support a business at present. A higher ratio signifies that the better long term solvency position of the company in the sense that the company has enough amount of equity to support the business and there is no need to raise the additional debts. On the other hand, if a company has low proprietary ratio, it means the company may be using too much of debt rather than equity to support its business. Thus a high ratio is considered good for a company as it ensures that business is mainly run through owners' funds rather than the outside funds which indicates less pressure and less interference from outside. To determine the proprietary ratio, the total shareholders' equity is divided by the total assets excluding intangibles assets.

Shareholdess' Fund
Proprietary Ratio $=$ Total Assets ExcludingIntangibleAssets

### 3.3.2. Dividend Payout Ratio (\%)

The dividend payout ratio means that part of the portion of the net income of the company which is paid as a dividend to its shareholders. The remainder is available for investing for future growth and expansion. Thus the ratio is calculated as under:
Equity Dividened

Dividend Payout Ratio $=\overline{\text { Profit After Tax }}$
A higher dividend payout ratio shows that the company is paying more of its income as dividend and keeping less for reinvestments. the investors who want more capital growth may prefer lower dividend payout ratio. On the other hand, the investors normally prefer the companies with high dividend payout ratio if they seek more current income and less capital growth.

### 3.3.3. Earnings Per Share (EPS)

Earnings per share is defined as an amount which a company freely pay to its shareholders as dividend or can plough back into the company or a combination of both without any obligation. It is regarded as an indicator of the profitability of a company. because it is considered as that portion of a company's profit which is allocated to each equity share outstanding. EPS is calculated by dividing the profits after tax by the total number of equity shares outstanding. Thus

$$
\frac{\text { Net Profit Available to Equity Shareholders }}{\text { Number of Equity Shares Outstanding }}
$$

Earnings Per Share $=$
This ratio shows the amount of earnings per equity share. However, EPS does not represent how much is distributed as dividend and how much is ploughed back into the company. Still a higher the ratio is considered as good because it shows better earnings to the shareholders.

### 3.3.4. Price Earnings Ratio

The price earnings ratio is considered as an important tool to value the performance of a firm as expected by the shareholders. It is regarded as a valuation ratio of the share price of a company to its earnings per share. Thus it is calculated as under Price Earnings Ratio $=\frac{\text { Market Value Per Share }}{\text { Earnings Per Share }}$
Thus is provides an estimation of what the market is ready to pay for the earnings of the company. It also presents whether a stock is correctly valued in the market or not.A very high PE ratio generally advocates that market participants required that the company should post higher earnings growth. However, it can also be taken as the stock is overpriced in the market. On the other hand, a low PE ratio is regarded as an undervaluation of the stock. This interpretation however may be different for different industries. For example, the sectors that are cyclical like fertilizers may have a low PE ratio while the sectors like FMCG and It may command a higher PE ratio.

### 3.4. Statistical Tools Used for Analysis

The analysis is done for all the companies without any differentiation. For the analysis, year wise performance of sample companies for different parameters (variables) has been considered. Pre-buyback data includes pre-buyback three years' average and postbuyback data includes post-buyback three years' average. The paired sample t-test has been used to measure the statistical implication of pre-buyback and post-buyback financial performance. Further non parametric test e.g. Wilcoxon and Sign test are also used to prove the robustness of the results. Statistical software package SPSS 19 has been used for the statistical analysis.
The difference observed mean, $t$-value and p-value are considered for the purpose of analysis at $95 \%$ level of significance. The acceptance of the null hypothesis $\left(\mathrm{H}_{0}\right)$ indicates that there is no change observed in the performance of the companies after the buyback. If null-hypothesis is rejected, it signifies that there is a change in the performance, either increase or decrease. The hypotheses are tested at the 0.05 significance level.

## 4. Analysis and Interpretation of Data

Sometimes a company may go for buyback of shares as a substitute of paying dividends. In may be because of many reasons e.g. potential tax benefits, managerial flexibility, signalling and improved financial leverage. In such cases the buyback of shares is considered as a better substitute of dividend payment and therefore the dividend payout ratio becomes less irrelevant. Thus an effort is made to analyse the dividend payment pattern of the companies after the buyback of shares by examining their dividend payout ratios before and after the buyback of shares.
Buyback of shares may also have an impact on the earnings per share. This may be because of the reasons that the number of outstanding shares is reduced as a result of share repurchase and therefore the earnings per share is assumed to be increased provided the profits after tax does not change. Since the buyback of shares reduces the number of outstanding shares, its great effect can be noticed in per share measure of profitability i.e. EPS before and after the buyback of shares. The reduction in EPS as a result of buyback of shares may reduce the PE ratio of the company if the market value remains the same. On the other hand, if there is a corresponding increase in the market price of the share and such increase is more than increase in EPS, the P/E will increase at a rate more than increase in the EPS.
It has been observed that the share repurchase is undertaken for increasing the price in the market, if it is true it may affect the PE of the companies also. Therefore, an analysis is made to study the impact of the buyback of shares on the PE ratio of the sample companies. The results are presented in Table 2 and Table 3.

| Ratio | Pre Buyback |  | Post Buyback |  | Paired Difference |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Mean | S. D | Mean | S. D | Mean | S. D |
| PR | 56.2677 | 19.65662 | 56.0637 | 19.66268 | 0.20398 | 15.00408 |
| DP Ratio | 17.3062 | 62.50026 | 27.6304 | 33.32833 | -10.324 | 70.19961 |
| EPS | 17.6598 | 40.61879 | 19.1144 | 30.7161 | -1.45461 | 40.90536 |
| PE Ratio | 13.0835 | 60.75178 | 14.9554 | 43.23701 | -1.87189 | 74.29911 |

Table 2: Value and Wealth Indicators: Comparison of Pre and post Buyback
It is evident from Table 2 that the proprietary ratio has been reduced slightly after the buyback of shares while all other three indicators recorded an increase in the post buyback period. Standard deviation of proprietary ratio is more after the buyback while that of other three ratios is less after the buyback of shares indicating less dispersion in these variables in post- buyback period.

| Ratio | T test |  | Wilcoxon |  | Sign test |  | Correlation |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | t Statistics | p Value | z Statistics | p Value | z Statistics | p Value | Correlation | p Value |
| PR | 0.154 | 0.878 | -.291 | 0.771 | -0.442 | 0.659 | 0.709 | $\mathbf{0}^{*}$ |
| DP Ratio | -1.664 | 0.099 | -.703 | 0.482 | 0 | 1 | 0.021 | 0.811 |
| EPS | -0.402 | 0.688 | -2.945 | $\mathbf{0 . 0 0 3} *$ | -2.917 | $\mathbf{0 . 0 0 4 *}^{*}$ | 0.369 | $\mathbf{0}^{*}$ |
| PE Ratio | -0.284 | 0.777 | -.555 | 0.579 | -0.887 | 0.375 | 0.008 | 0.933 |

Table 3: Value and Wealth Indicators: Results of test statistics
The test results in Table 3 indicates a very high and statistically significant positive correlation in pre and post buyback proprietary ratio. However, the correlation in pre and post buyback dividend payout ratio and price earnings ratio is very less and statistically insignificant. This means that as such there is no relationship between pre-and post-buyback dividend payout ratio and price earnings ratio. The p value for t test is more than 0.05 in case of all ratios which leads to the acceptance of null hypothesis. The p value for Wilcoxon and Sign tests are also more than 0.05 except in case of EPS. Hence, it may be concluded that there is no significant difference in the performance of these ratios after the buyback of shares.
From the above analysis of shareholders' value after considering the proprietary ratio, dividend payout ratio, earnings per share and price earnings, it is clear that that dividend payout ratio, earnings per share and price earnings ratio have been increased after the buyback of shares. The value of proprietary ratio has shown a slight decrease in the post- buyback period. However, the t-test analysis gives such value of p for all of these four ratios which is more than 0.05 significance levels. While Wilcoxon and Sign test provide lower value of $p$ in case of earnings per share. Hence, no sufficient evidences are drawn to reject null hypothesis.

## 5. Conclusions

Share buyback is considered as an effective mechanism of financial restructuring specially for creating value to the shareholders. The study observed that there is improvement in the financial performance of the companies after the buyback of shares. Three out of four measures i.e. earnings per share, dividend payout ratio and price earnings ratio have been increased in the post buyback period. However proprietary ratio recorded a slight decrease after the share buyback. Thus it can be concluded that the buyback of shares enhances the value to the equity shareholders. However, such increase is found to be statistically insignificant which leads to the acceptance of null hypothesis. thus it can be concluded that there is no change in the shareholder's value after the buyback of shares.

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