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Impact of Buyback of Shares on Firm Value: An Empirical Evidence from India

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Abstract

The present study examines the impact of capital employed in buyback of shares on firm value for 180 firms listed in the Bombay Stock Exchange of India. The issue of buyback of shares in the period from 2006 to 2016 was examined. The firm value is measured by a proxy, enterprise value, as a substitute of share price. The results suggest that the firm value differs from pre and post buyback of shares. The findings of this study further imply that the proportion of paid-up equity capital employed by companies for buyback of shares does not have any significant effect on firm value.

Keywords

Buyback of shares, enterprise value, firm value, capital employed

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Introduction

Amidst the immense rise of fragility in the current business scenario, companies have been facing numerous unpredictable economic and business level jolts. Under globalization, rapidly changing technologies, dwindling resources and fierce global competition collectively disrupt the entire business cycle. Small and medium level companies become vulnerable that makes their survival a challenging task. The global investors consistently have a keen vigil on the performance of companies in the emerging markets. To build the confidence of investors in their policies, companies try to maximize the shareholders' wealth through either distributing the dividends to the investors or buy backing their shares at premium price than prevailing market price. Share buyback (repurchase) has become a prominent corporate practice in developing and developed economies. During the last decade, phenomenal growth has been seen in buyback of shares at premium price by companies to project strong future growth prospects to the investors. Mishra (2015) described buyback of share as a zero-sum game as both investors and companies remain on the receiving end. On one side, investors get premium price than prevailing market price for their shares, and on the other hand, companies win the faith of the investors towards their brand.

India is considered as an emerging economic force at global map. Dittmar (2000) and Grullon and Michaely (2004) observed companies buyback their shares with numerous motives including to nullify the threat of takeover by competitors, promoting voting power of shareholders and returning surplus cash to shareholders, for injecting buoyancy into undervalue shares (Liao, Ke, & Yu, 2005), increasing earnings per share and many more. Fama and French (2001) documented the rise in popularity of repurchase of shares for providing benefits to shareholders by observing that in 1998, smaller portion (only 20.7 percent) of publicly traded companies offered cash dividends to their shareholders as compared to 1978 where majority of companies (66.7%) offered cash dividends in USA. Generally during buyback of shares, two routes are adopted: Through tender offer and open market purchase. Stephens and Weisbach (1998) stated that the main motive behind adopting open market purchase of shares is to repurchase small volume of shares and to distribute the surplus cash to shareholders as an alternative of paying dividend. Tender offer route is adopted when the company has intention to buyback a small stock of shares from shareholders.

Under the Securities and Exchange Board of India regulations, every company is restricted to utilize upto 25% of its capital to buyback shares. Every company uses different proportion of capital for exercising buyback of shares. The present study makes an attempt to examine the effect of buyback of shares on firm value and also the impact of proportion of capital employed in buyback of shares on firm value. Many previous studies have ignored this aspect of buyback of shares. Few studies have been performed by considering enterprise value as a proxy for firm value. Majority of the researchers used share price of company as the proxy for firm value. Our study attempts to put weightage of using enterprise value as firm value instead of share price as firm value. The present study contributes to the existing literature by examining the effects of buyback of shares and proportion of capital employed by companies in buyback of shares on the enterprise value of companies listed in the Bombay Stock Exchange of India.

In the next section, we provide a theoretical framework by discussing previous research studies conducted by various scholars on the same stream of research. We then develop hypotheses about the impact of buyback of shares on firm value and effect of percentage of capital employed in the buyback of shares on firm value. Further, we depict the data analysis method and interpretation of results. We conclude the present study by discussing the findings and implications of our results in future research.

Review of Literature

A critical analytic review has been performed on the existing research studies that help in embarking new dimensions. The following section describes the various studies that have been conducted in the past in this area. Rajlaxmi (2013) observed share buyback as a short term gain for the investors. Wahid and Dol (2013) measured the effect of buyback of shares on the operating performance of Malaysian companies from 1999 to 2005. The results found that operating performance of companies (involved in share buyback) increases due to the increase in earnings per share, return on equity and return on assets. Doan et al. (2012) suggested in his findings that a high rise in buyback of shares has been noticed with the rise in risk of takeover among companies. The buyback of shares affects the corporate practice of paying cash dividends to shareholders in developed economies like USA and UK. Grullon and Ikenberry (2000) examined that the estimated dollar amount distributed to shareholders through buyback of shares was higher than the dollar amount distributed to shareholders through cash dividends. Chatterjee and Rakshit (2012) examined empirically that positive effect of buyback of shares on stock price of firm is not true for all the companies offered buyback. A significant portion of companies experience negative effect on stock price of firms, contrary to the theoretical hypothesis, the positive influence of repurchase on share price is not prevalent in all the buyback cases in India.

Firth and Yeung (2005) analyzed the positive relationship between stock price and buyback of shares and observed an increase in stock price of company after the announcement of buyback of shares. Various research studies in the past also analyzed the relationship between buyback of shares and firm size. The effect of buyback of shares varies according to the size of firm. Hatakeda and Isagawa (2004) reported in their research that smaller firms receive greater market reaction as compared to the large firms. Brav et al. (2005) took interview of 384 CFOs and noticed a positive impact of buyback decision of shares upon the earnings per share. Hong et al. (2008) found that companies announce buyback of shares to bring short term stability in their stock price. De Cesari et al. (2011) also supported the motive of companies to bring short term stability in stock price through the results of their study. Lim and Bachha (2002) analyzed the reaction of investors to share buyback announcement of companies and found that stock market gives abnormal return after the announcement of buyback of stocks. Isa et al. (2011) provided their support to the above finding with their study focused on the effect of buyback announcement on market reactions during the period from year 2001 to year 2005. Li and McNally (2007) stated an opposite opinion by showing that all buyback practices do not mean to reduce number of shares of company in the market. Their result was supported by their empirical analysis in which they found that after buyback of shares, the average number of shares grows by 4.7 percent.

Thirumalvalavan and Sunitha (2006) claimed that the strong positive market reactions to share buyback announcement as compared to dividend announcement send further a strong signal to share market. Ramesh and Rane (2013) analyzed Indian companies from different sectors from 2005 to 2010 and found a positive effect of buyback of shares on shareholders' value. The results pen down an increase in earnings per share for more than 78 percent of their sample size of study. Comment and Jarrel (1991) noticed a positive long term trend of rise on stock price after the announcement of open market repurchase of stocks by the companies. Many research studies focused on stock markets of different countries like Hong Kong (Zhang, 2005), Canada (McNally et al., 2006), China (Huang & Zhou, 2007) and France (Ginglinger & Hamon, 2007), and observed an abnormal return (about 2.5 percent to 3.5 percent) from stocks of companies during the buyback time duration. Bartov (1991) finds a positive correlation between post buyback return and change in earnings before buyback of shares. Extending this line of enquiry can enrich our understanding of the influence of buyback of shares on firm value.

Objectives and Hypotheses Development

Research objectives

Many of previous research studies have focused primarily on measuring the effect of buyback of shares on stock price of firms but there is serious paucity of systematic research based on percentage of capital used in buyback. Under the current uncertain business environment, stock prices does not remain as an effective measurement of firm value. It is also pertinent to measure the impact of percentage of capital used in buyback of shares on the performance of companies from different dimensions. Each and every company utilizes different proportion of capital during buyback of shares, so it has become a matter of concern whether the effect of buyback of shares is uniform for all the companies or it varies in proportion of capital used. The companies must be aware about what percentage of capital should be optimum for them to get better return. The following objectives have been framed:

To study the effect of buyback of shares on enterprise value

To study the effect of proportion of capital employed in buyback of shares on enterprise value

Hypotheses

The following hypotheses have been formulated to achieve the desired objectives of the present study:

H1 : Buyback of shares have significant effect on enterprise value

H2 : Proportion of capital employed in buyback of shares has a significant effect on enterprise value.

Research Methodology

Data collection

To generate the data for this study, we identified the companies that issued buyback offers since 2007. The companies were identified after exploring CMIE's (Centre for Monitoring Indian Economy Pvt. Ltd.) Prowess database. The records of 141 companies which announced buyback of stocks from 2007 to 2016 were collected from CMIE's Prowess database. To achieve the second objective of study, the companies were categorized on the basis of percentage of paid up capital employed for buyback of stocks. The companies were categorized into following three categories.

a) Proportion of capital used ≤ 10 %

b) Proportion of capital used 10% < X ≤ 20%

c) Proportion of capital used 20% < X ≤ 25%

The enterprise value of the identified companies, one year prior to and post of buyback year of issuing buyback of shares and post one year of issuing buyback of shares has been collected from Prowess database.

Variables and statistical tests

Enterprise value has been taken as a proxy for firm value (dependent variable). Bhullar et al. (2014) proposed Enterprise Value (EV) as a proxy for firm's value. Enterprise value has been calculated as:

Enterprise value = market value of common stock + market value of preferred equity + market value of debt + minority interest – cash and equivalents

The stock price has more volatility as compared to EV. Two or more companies may have similar or nearly similar stock price even though their leverages are different. The following statistical tests have been applied to analyze the above stated objectives in the research study.

Paired sample t-test has been performed to compare EV of the firms in pre and post buyback period to test the impact of buyback of shares on firms' EV. The findings show no significant difference between the impact of pre and post buyback of shares on enterprise value of firm.

One way ANOVA has been applied to measure the effect of percentage of paid up equity capital used in buyback of shares on the enterprise value (firm value). The sample of selected companies is categorized into three categories on the basis of paid up capital employed in buyback of share. One way Anova is considered as one of the most suitable statistical techniques to compare the means of more than two samples of given population.

Data Analysis and Interpretation

The statistical results of the analysis have been presented and interpreted in the following section.

Paired sample t-test

Table 1 .Paired Sample T-Test

Pair 1	Mean	t	Df	Sig. (2- tailed)
EV pre BB – EV post BB	15511.66	2.081	141	0.039

Source: SPSS output

Table 1 depicts the statistics of paired sample t-test. The results show that significant value in paired sample t-test is lower than the significance level ($p<0.05$). It signifies significant difference between pre buyback enterprise value and post buyback enterprise value. This confirms that the enterprise value of a company changes after issuing buyback of shares.

Table 2 .Paired Sample Statistics

Pair 1	Mean
EV pre BB	79282.8432
EV post BB	63771.1751

Source: SPSS output

The statistics indicated in Table 2 shows the change in mean of enterprise value of companies. The results show that the mean of enterprise value before issuing the buyback of share is higher than the mean of enterprise value after issuing the buyback of shares (79282.8432 > 63771.1751). It signifies that the firm value of companies decreases after issuing the buyback of shares.

Table3. ANOVA Statistics

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	108036846642.605	2	54018423321.302	0.908	0.406
Within Groups	8273704321597.683	141	59523052673.365		
Total	8381741168240.287				

Source: SPSS Output

The statistics in Table 3 demonstrated the statistical output of ANOVA. The results shows that the significance value is higher than level of significance (0.406 >0.05). That confirms the acceptance of null hypothesis. Thus, the difference in the EV of companies which used different paid up capitals in buyback of shares, is not statistically significant. It means that there is not a significant effect of percentage of paid up capital used in buyback of shares by different companies on the enterprise value.

Findings

This study has extended the existing understanding of effect of buyback of shares on firm value. The consideration of Enterprise value as a substitute of stock price for a proxy of firm value brings new dimensions in this streak of research. The results of the statistical analysis indicate that the firm value of companies change after issuing the buyback of shares. The results are consistent with the previous research studies (Mishra, 2005; Ramesh and Rane, 2013). The analysis further extends its results by showing the negative impact of buyback of shares on firm value. This results contradicts the previous studies as many of the previous studies indicate the rise in firm value in terms of stock price after buyback of shares (Mishra, 2005; Ramesh and Rane, 2013). The results extend their confirmation about the decrease in firm value after issuing of share buyback. It may be due to use of cash in repurchasing the stocks at premium price than the current stock price in the market. The results also suggest that firm value is independent from the percentage of capital employed in buyback of shares.

Conclusion

The dependent variable (enterprise value used as the proxy of firm value) signifies the main difference between the present study and previous research studies. The results confirm that the firm value is completely independent from the percentage of capital used in buyback of shares. Companies need not to worry about the optimum level of paid up capital utilized in buyback of shares. The present study opens up new dimensions of research in buyback of shares that must be explored to the next level by the scholars in future. The present study contributes to the gradual emerging body of literature on how the firm value is affected by buyback of shares as there is a statistically significant difference in pre buyback and post buyback values of firm. However, there may be other factors that can have an effect on the firm value, which must also be studied. In the current study, an attempt has been made to see if the buyback of shares has any effect on the firm value and the results of the study are positive. The researchers can further attempt to identify other factors which may have effect on firm value (buyback of shares being one of them), and make a model to study their combined as well as individual effect on the firm value. This kind of study continues to be important for domestic and foreign companies among emerging heterogeneous economies around the world.

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