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Corporate Restructuring through Share buybacks: An Indian Experience

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Abstract

The share buyback regulation was enacted by the Government of India (GOI) in 1998 with an objective to revive the fast declining Indian capital markets and protect the interest of the investors and companies from hostile takeover bids^[1]. Until 2004, the buyback process did not gain any momentum, but the year 2004 witnessed a series of share buyback announcements and this process has continued until the present day. There is much discussion in media and financial circles about this issue, but little effort was made to know the reasons behind such buyback decisions. The present study has analyzed the corporate actions such as the "free cash" policy, dividend distribution, change in capital structure and lower profitability while deciding interpreting the intent behind these 'tender offer buyback' and 'open market buyback' offers between January 2004 to December 2017. The study uses a sample of ninety open market repurchasing companies with a similar number of non-repurchasing companies and of fifty-four tender buyback companies with fifty-four non-repurchasing companies in the same industry having similar market capitalization and listed on Bombay stock exchange (BSE). To investigate the drivers of open market buyback and tender offer buyback in India, a Tobit regression analysis has been used. The study concludes that 'Tender offer buyback' is used more predominantly for capital structure corrections, while in the case of open market repurchase in India, dividend substitution and capital structure correction act as the key drivers. Whether 'size of the firms' make any significant difference or not, study revealed positive impact on the motive for buybacks.

A hostile takeover is a corporate phenomenon that entails the acquisition of a certain block of equity shares of a company giving the acquirer a larger stake in the company than its promoters. That enables the acquiring company to exercise control over the affairs of the company.

Keywords

Share buyback, Open market repurchase, Tender offer buyback, Capital Correction.



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Abstract

The share buyback regulation was enacted by the Government of India (GOI) in 1998 with an objective to revive the fast declining Indian capital markets and protect the interest of the investors and companies from hostile takeover bids⁴. Until 2004, the buyback process did not gain any momentum, but the year 2004 witnessed a series of share buyback announcements and this process has continued until the present day. There is much discussion in media and financial circles about this issue, but little effort was made to know the reasons behind such buyback decisions. The present study has analyzed the corporate actions such as the "free cash" policy, dividend distribution, change in capital structure and lower profitability while deciding interpreting the intent behind these 'tender offer buyback' and 'open market buyback' offers between January 2004 to December 2017. The study uses a sample of ninety open market repurchasing companies with a similar number of non-repurchasing companies and of fifty-four tender buyback companies with fifty-four non-repurchasing companies in the same industry having similar market capitalization and listed on Bombay stock exchange (BSE). To investigate the drivers of open market buyback and tender offer buyback in India, a Tobit regression analysis has been used. The study concludes that 'Tender offer buyback' is used more predominantly for capital structure corrections, while in the case of open market repurchase in India, dividend substitution and capital structure correction act as the key drivers. Whether 'size of the firms' make any significant difference or not, study revealed positive impact on the motive for buybacks.

JEL Classification: G35, G15.

Keywords: Share buyback, Open market repurchase, Tender offer buyback, Capital Correction.

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⁴ A hostile takeover is a corporate phenomenon that entails the acquisition of a certain block of equity shares of a company giving the acquirer a larger stake in the company than its promoters. That enables the acquiring company to exercise control over the affairs of the company.

1.0 INTRODUCTION

Buyback of listed shares is the repurchase of its outstanding shares by a company to restructure its capital structure, return excess cash to shareholders and improve overall shareholders' worth. Buyback results in reduction in outstanding number of equity shares, which may lead to improvement in earnings per share (EPS) and enhance return on net worth and create long-term value for continuing shareholders. In India, buyback of listed shares was permitted by the Companies (Amendment) Act, 1999 by the insertion of Sections 77A, 77AA and 77B in the Indian Companies Act, 1956.⁵ The act was introduced along with a set of conditions⁶ intended to prevent its misuse by companies and safeguard the interests of the investors. The act proposed that a company can either buy back its shares from existing shareholders on a proportionate basis⁷ or from the open market, through the book building process⁹ or the stock exchange. Indian companies started enacting buyback since 2001 by using both 'open market repurchase (OMR)' and 'tender offer buyback' mechanism. There were 193 buyback announcements from January 2001 to December 2017 by Indian listed companies for open market repurchase and 190 announcements for tender offer repurchase. The public announcement data on security exchange board of India (SEBI) has been considered to present and study the chronological distribution of the number of announcements. There is much discussion in media and financial circles but no effort was made to know the reasons for such decisions. Even today this is much talked but less understood issue in the Indian context

Corporate restructuring is a corporate action taken to considerably transform the structure or the operations of a company. This corporate action is normally taken when a company faces substantial problems and is in the state of financial jeopardy. Expecting positive intentions and enhance shareholders value, companies normally engage in stock repurchase decisions. There are many reasons for a stock buyback that effectively removes those shares from circulation.

- (i) Change in capital structure: A share buyback has the tendency to decrease the outstanding equity and hence increases the debt-equity ratio which is a popular measure of the capital structure of the firm. Medury, (1992) has explained the stock repurchasing behavior on the basis of leverage adjustment hypothesis. Aaquith, (1986) reinforces the point that share buybacks have been used for the alteration of the capital structure of the firm.

⁵ A hostile takeover is a corporate phenomenon that entails the acquisition of a certain block of equity shares of a company giving the acquirer a larger stake in the company than its promoters. That enables the acquiring company to exercise control over the affairs of the company.

⁶ This has reference to SEBI's Buy Back of Securities Regulation, 1998, Chapter II, Conditions of Buyback.

⁷The buyback can only be based on the proportion of shares held by an investor in case the buyback is oversubscribed.

⁸A tender offer is when an investor gives an open invitation to all the shareholders of a listed company for a certain price at a certain time. The investor usually offers a higher price per share than the company's market price, providing shareholders a reason to sell their shares.

⁹. This is a systematic process of finding the optimum price for a company's share. The issuing company decides the price of the security by asking investors how many shares and at what price they would be interested in paying.

- (ii) **Undervaluation:** Share buybacks can be seen as a how confident the management is about the firm's prospects. They believe that their shares are underpriced, and the premium they are willing to pay, over the current market price (CMP) of the share further will add to their conviction. The study by Grullon &. (2004) suggested that boosting earnings per share (EPS) and signaling a firm's optimism about their future prospects are the two common reasons for buyback of shares. The signaling perspective has two versions, the first being the management's expectation that future earnings are going to increase and the second being the management's disagreement with how the shares are presently priced. Oswald, (2004) has also found that firms buying back have a surplus cash effect.
- (iii) **Dividend Substitution:** Buybacks and dividends are payout mechanisms to return the excess cash to the shareholders. The choice between dividends and buybacks depend on the ownership structure, the current payout levels, the size of the distribution and degree of under-valuation (Caudill, Marshall, & Roumantzi, 2006).
- (iv) **Excess cash:** Share repurchases contribute to limiting the agency conflict by judiciously returning back the cash to shareholder rather than investing the same in negative NPV Projects (Weston, 2007). Studies in the past find a strong association between cash holding and share buybacks (Dittmar, 2000).
- (v) **Lack of profitable investments:** Firms undertake buybacks when they have limited investment opportunities and they prefer to return back the excess cash to the shareholder through buybacks. Oswald, (2004) has found that firms buying back with surplus cash are more in cases where there is low investment return.
- (vi) **Other popular reasons :** Take over deterrence can be achieved if a buyback is announced prior to the takeover, since buyback has been witnessed to increase the earnings per share (EPS), CEO compensation driven buyback programs have been frequently talked about since the CEO compensation is linked to the share price which can see a boost post the buyback announcement.

Caudill, Marshall, and Roumantzi, (2006) compare the choice by companies amongst fixed price tender offer, Dutch auction, open market repurchases and special dividends and find that the choices amongst the payout techniques depend on factors like the size of the firm, institutional ownership, leverage, dividend yield, undervaluation and takeover threats. Hence there is a need to segregate a different set of drivers for open market repurchase and tender offer repurchase in the Indian scenario as well.

In the Indian context, studies conducted by Mishra, (2005) suggest that signaling is the most prevalent use of buybacks but its misuse can lead to a huge penalty. While buyback brings a lot of movement in the capital market it also costs a lot. Companies need to think about the appropriate need for returning the shareholders money through buyback against reinvesting it in the business. Mishra, (2005) also finds that share buybacks have not been very successful in yielding a return to its shareholders and they have been tools to increase the promoter's stake. Also, there are very few in the Indian context which measures the financial gains of share repurchase for shareholder and promoter. Banarjee, (2014) Suggests that promoters often use share buybacks to consolidate their holdings. A study by Varma and Munjal, (2016) has looked into the drivers of tender offer buyback and how they differ from the non-repurchasing companies but have not empirically developed a cause and effect relationship.

Table 1
Chronological distribution of the number of buyback announcements in India during
January 2004 to December 2017

<i>Year</i>	<i>Tender</i>	<i>OMR</i>	<i>Total BB PA</i>	<i>Tender (%)</i>	<i>OMR (%)</i>
2004	19	0	19	100.00	0.00
2005	13	3	16	81.25	18.75
2006	8	0	8	100.00	0.00
2007	11	2	13	84.62	15.38
2008	15	30	45	33.33	66.67
2009	5	36	41	12.20	87.80
2010	6	13	19	31.58	68.42
2011	6	30	36	16.67	83.33
2012	1	19	20	5.00	95.00
2013	9	26	35	25.71	74.29
2014	6	16	22	27.27	72.73
2015	11	4	15	73.33	26.67
2016	31	9	40	77.50	22.50
2017	49	5	54	90.74	9.26
TOTAL	190	193	383	49.61	50.39

Note: BB stands for Buy Back and OMR stands for Open Market Repurchase

Source: Computed using SPSS and financial data from CMIE Prowess on Tender and Open market repurchase firms in India during January 2004 to December 2017.

1.1 RESEARCH GAP

Why do companies buy back their own shares are much talked about but are a less understood issue in the area of corporate restructuring¹⁰ There has been very limited research in the area of stock buyback, particularly in the Indian context. There is a growing concern that whenever companies find that their returns are going down, they tend towards payouts. A related proposition is that when firms retain cash flows rather than paying them out they can expect to reach a stage when cash flows should be used to pay dividends or share repurchases. The firms in their initial stage of industry life cycle normally do not pay dividends considering their future expansion plans. Established firms with even moderate growth do not require much external financing but they do require funds for new growth opportunities and hence they repurchase with less frequency. While on the other hand, firms in maturity or decline stage of their life cycle hardly require any capital for their expansion plans and meeting working capital requirements. Consequently, such firms' payout is higher of their profits and therefore share repurchase initiatives exceed cash dividend payout. These insights in the literature provide a motivation for the current study to find out what drives open market and tender offer buyback in India.

¹⁰. Corporate restructuring is a corporate action taken to considerably transform the structure or the operations of a company. This corporate action is normally taken when a company faces substantial problems and is in the state of financial jeopardy.

Based on the gaps identified this study looks into identifying the set of drivers for open market repurchase and tender offer repurchase in India. The remaining part of the paper is discussed in subsequent sections. In section 2 the research methodology is discussed where the objective, hypothesis, sample, data source, and variable selection is presented. Section 3 talks about the profile of buyback companies in the sample. Section 4 is about the testing methodology and findings. Sections 5,6,7 and 8 are on the conclusion, recommendations, research implications and limitations and further scope respectively.

2.0 RESEARCH METHODOLOGY

2.1 RESEARCH OBJECTIVE

To investigate the different set of drivers which result in the adoption of different modes of repurchase with specific reference to open market repurchase or tender offer as a method of share repurchase

2.2 HYPOTHESIS

H₀₁: There is no relative importance of drivers like free cash flow, dividend substitution, undervaluation, capital structure correction for share repurchase in India either in isolation or jointly.

H_{a1}: There is a significant relative importance of drivers like free cash flow, dividend substitution, undervaluation, capital structure correction for share repurchase in India either in isolation or jointly.

H₀₂: There is no significant difference between the set of drivers for open market repurchase and fixed price tender offer.

H_{a3}: There is a significant difference between the set of drivers for open market repurchase and fixed price tender offer.

2.3 SAMPLE

The companies under study were selected from securities exchange board of India (SEBI) website that portrays the public announcement of all such companies as and when announced which is available under the category of fixed-price tender offer and open market buyback separately. Since the public announcements were mainly available from the year 2004 onwards hence the companies have been selected from January 2004 to December 2017 but due to the paucity of associated data and very fewer announcements in 2014 and 2015 and change in the pattern of announcements of 2016 and 2017 a separate study is required in the said period, hence the study period was ultimately confined to January 2004 to September 2013. During the said period a total of 144 buyback announcements have been made in India. Out of these 90 announcements were of open market repurchase and 54 announcements were of a tender offer. The maximum number of 29 buyback announcements have been witnessed in the year 2009 followed by 28 announcements in 2008. In the year 2006, the least number of buyback announcements were observed. In the year 2013 till September out of the 13 buyback announcements, 76.92% were open market repurchase announcements while 23.08% announcements were tender offer repurchase announcements. In the years 2006 and 2004, there were no open market repurchase announcements. In the year 2011 out of the 15

buyback announcements 93.33% were open market repurchase announcement while only 1 announcement was a tender offer repurchase announcement.

In open market repurchase, the leading companies are Jindal Power and Steel, Kirloskar Oil Engines limited, JK Lakshmi Cement Ltd, Reliance Infrastructure, Hindustan Unilever Ltd, Godrej Industries Ltd etc. In case of fixed-price tender offer companies such as Monnet Ispat & Energy Ltd., Reliance energy limited, Godrej consumer products, and Reliance industries ltd were included.

To conduct the study each repurchasing company was one to one matched to a non-repurchasing company. The non-repurchasing companies were in the same industry as a sample of buyback companies as per CMIE¹¹ prowess database industry classification. The economic activity codes of buyback and non-buyback (non- repurchasing) companies are kept the same. The mapping for non-buyback companies with the corresponding buyback companies had been done on the basis of listing category, NIC economic activity code¹², and year of incorporation and industry category. The financial performance of the buyback company and its corresponding non-buyback company was obtained for a year immediately preceding the buyback year (or the year preceding the year in which buyback announcement was made) from the balance sheets and income statements available in CMIE database

2.4 DATA SOURCE

The lists of buyback companies were first compiled. The public announcement for both fixed price tender offer and open market buybacks were available on SEBI's website. All the public announcements were studied to obtain information on the size of the buyback, the buyback premium, the contact of the company, the associated merchant banker, the reasons for buyback and the change in the promoter's stake post buyback. The financial performance of the buyback company and its corresponding control company was obtained for a year immediately preceding the buyback year from the balance sheet and income statement as available in CMIE database. The performance indicators were computed using this data. The details of the financial performance of open market repurchase companies on 31st March before the year of buyback

2.5 SELECTION OF VARIABLES: DRIVERS OF BUYBACK

2.5.1 DEPENDENT VARIABLE

Share repurchase: Value of share repurchases during the year to the Market value of equity in the previous year. In our case, the dependent variable is a categorical variable, observable only for the buyback companies and for the rest of the companies it is zero i.e. the dependent variable is directly zero. The variable is limited for some reason. Since some observations for

¹¹Centre for Monitoring Indian Economy (CMIE) is one of the leading business information company in India which offers a wide range of information about various aspects of Indian economy to academia, government bodies, financial markets, business enterprises, professionals and the media. CMIE not only collects data about economic and business developments but develops specialised analytical tools to deliver these to its customers for decision making and for research. It also critically analyses the data to decode the latest trends in the economy.

¹²The National Industrial Classification (NIC) is an essential Statistical Standard for developing and maintaining comparable database according to economic activities. Such classifications are frequently used in classifying the economically active population, statistics of industrial production and distribution, the different fields of labour statistics and other economic data such as national income.

the dependent variables are zero running OLS would result in inappropriate estimates. Hence censored regression would be used.

2.5.2 INDEPENDENT VARIABLES

(a)Undervaluation: The higher the level of undervaluation in the firm the more is the tendency of the firm to buyback. Buyback acts as a signal on the firms' belief that the company has better prospects which have not been reflected in its trading price. It has been measured as the ratio of the market value of the firm to its intrinsic value by DeMarzo, (2008).

(b) Excess Cash: Firms with idle cash tend to use share buyback as a payout mechanism to counter agency conflict. This again has a positive effect on the quantum of the buyback. In order to measure excess cash, a variant of current ratio has been used. It is measured as the ratio of cash in hand, at the bank and marketable securities in the previous year to the current liabilities and provisions of the previous year.

(c) Capital Structure correction: Firms use buyback to improve their leverage since every debt remaining constant buyback reduces equity and improves the debt to equity ratio. Hence lower the leverage higher are the capital structure correction through buybacks. In the present study for capital structure the obligation of the firm in terms of debt, hence here we use debt to equity ratio. It helps to assess the extent to which borrowings is present as suggested by Horne, (2008).

(d)Dividend Payout: Share buybacks and dividends are both payout measures. In the present study, they both are considered as substitutes. The lower the dividend payout, the higher would be the quantum of the buyback. The dividend policy is popularly measured in two forms dividend yield or dividend payout. In this study, since the concern with the quantum of dividend, we use the latter definition. It is measured as the ratio of dividend paid out to the profit after tax in the previous year.

(e)Lack of profitable investment: Firms not having profitable investments in the future would be interested in returning the cash to the shareholders. A buyback is a payout method which is used by these firms. Low profitability leads to increased buyback activity. Profitability ratio can be measured either in terms of capital employed or in terms of sales (Damodaran, 2008).In the present study and in studies in a similar line, the concern is to measure the returns on the capital employed. In their study, Medbury et al (1992) have measured the profitability of the firm as return on total assets. In the present study, profitability is measured by the return the firm is generating on the capital employed by it. This provides an insight into the firm's performance and its future prospects.

Table 2
Median Values of Drivers for Open market repurchase and Tender repurchase firms

	<i>OMR</i>	<i>OMR Control</i>	<i>Tender</i>	<i>Tender Control</i>
<i>Undervaluation</i>	22.32	5.45	9.67	6.14
<i>Excess cash</i>	2.52	2	0.87	0.31
<i>Capital Structure</i>	0.11	0.55	0.01	0.18
<i>Dividend Payout</i>	0.2	0	0.16	0.11
<i>Profitability</i>	0.08	0.03	0.14	0.14

Source: Computed using SPSS and financial data from CMIE Prowess on Tender and Open market repurchase firms in India

A study by Dittmar (2000) suggests that firm size has an impact on buyback characteristics. Hence, the companies are further classified into quartiles as per their size. The natural logarithm of the total assets is considered for determining the size of the assets. Hence a classification is made in the firms as per their size as large size firms (q4), medium size firms(q3), small size firms(q2) and smallest firms(q1). As per table 3, tender offer buyback the natural logarithm of asset size value of 0 to 4.43 is smallest firms(q1), 4.44 to 7.10 is small size firms q2, 7.11 to 8.77 is medium size firms and 8.78 to 14.10 is large size firms. There are 18 companies in the category of smallest firms, 10 companies in smaller firms, 14 companies in the category of medium size firms and 13 companies in the category of large size firms. In case open market repurchase buyback the natural logarithm of asset size value of 0 to 7.46 is smallest firms(q1), 7.47 to 8.50 is small size firms q2, 8.51 to 9.78 is medium size firms and 9.79 to 14.86 is large size firms. As per table 3 there are 19 companies in the smallest firms, 19 companies in smaller firms, 20 companies in medium-size firms and 18 companies in large size firms.

Table 3
Classification of Open Market Repurchase and Tender Offer Repurchase Firms on basis of Size

<i>Category</i>	<i>LN(total asset) for OMR</i>	<i>No. of Companies</i>	<i>LN(total asset) for a Tender offer</i>	<i>No. of Companies</i>
Smallest	0-7.46	19	0- 4.43	18
Smaller	7.47-8.50	19	4.44-7.10	10
Medium	8.51-9.78	20	7.11-8.77	14
Larger	9.79-14.86	18	8.78-14.10	13

Source: Computed using SPSS and financial data from CMIE Prowess on Tender and Open market repurchase firms in India

3.0 PROFILE OF BUYBACK COMPANIES

All the public announcements were studied in depth to obtain information on the size of the buyback, the buyback premium, the contact of the company, the associated merchant banker, the reasons for buyback and the change in the promoter's stake post buyback. From January 2004 to September 2013 in India a value of shares that have been bought back, amount to ₹1,10,414.87million. Out of the total value of buybacks, 11.92% is contributed by open market repurchase while the balance 88.98% is contributed by tender offer repurchase. The ownership pattern of the tender offer repurchase companies during the study period suggests that almost ninety percent of the companies surveyed are owned by the India private sector, while ten percent of the companies had a foreign holding. The median value of the shares bought back as a percentage of the fully paid-up equity for tender offer buyback was 7.695% and the median buyback premium offered was 21.75%. The sample of tender offer companies was from different industry groups. The maximum participation of fourteen percent was from the computer software industry, followed by 10% from drugs and pharmaceuticals industry. The mean value of percentage increase in promoter's stake post-tender offer buyback is 4.02% and the median value for the sample is 2.37%. The range of values lies between the minimum values of 1% to a maximum value of 15%. The median value of the buyback

premium offered is 21.75%. The tender offer repurchases companies buyback at a minimum discount of 9.09% and a maximum premium of 134.63%.

The ownership pattern for the sample of open market repurchase suggests that while 92% of the firms were owned by the Indian private sector, eight percent of the sample firms had foreign promoters. In case of open market repurchase, the median value of shares bought back as a percentage of fully paid up equity was found to be 7%. The median value of the buyback premium offered by open market repurchase companies between the said period was 18.00%. In case of open market repurchase, 6 companies (8.5% of the sample) are from drugs and pharmaceuticals industry. Besides this, there were 5 companies from the computer software industry.

Automobile ancillary and trading companies represent 5.71% of the sample each. Diversified, media, print and other fund based financial services represent 4.29% of the sample each. Cement, cosmetics, industrial machinery, media broadcasting, metal products, plastic furniture and steel companies form 2.86% of the sample each. Business consultancy, copper and copper products, crude oil and natural gas, engines, gems and jewellery, generators, glass and glassware, housing construction, ITES, Organic chemicals, other agricultural products, other assets financing services, other chemicals, other electronics other misc. services, other textiles, paints and varnishes, plastic films and packaging, polymers, production and distribution of films, refinery, refractory, shipping transport services, storage and distribution, sugar, telecommunication services, tyres and tubes and wires and cables each are represented in the sample by one company each. The mean value of percentage increase in promoter's stake post-tender offer buyback is 6.91% and the median value for the sample is 3.95%. Out of 81 out of 90 open market repurchase public announcement between January 2004 to September 2013, 72 announcements offer a buyback premium in the range of 0% to 50%. There are 8 announcements which offer buyback premium in the range of 50% to 100% and there is only one announcement which offers a buyback premium of greater than 100%.

Table 4

**The Result for Censored Regression or Tobit Regression for Tender Offer Repurchase
and Open Market Repurchase**

	TENDER OFFER					OPEN MARKET REPURCHASE					
	Model I	Model II Small Size Firms	Model III Smaller Size Firms	Model IV Medium Size Firms	Model V Large Size Firms	Model I	Model II Small Size Firms	Model III Smaller Size Firms	Model IV Medium Size Firms	Model V Large Size Firms	
No of Observations	108	32	20	28	26	145	38	38	40	35	
Liquidity	Coeff Prob	4.99 (0.80)	-0.01 (0.99)	0.00 (0.45)	-0.01 (0.62)	0.00 (0.90)	0.02 (0.92)	0.04 (0.08)	0.00 (0.31)	0.01 (0.66)	0.01 (0.27)
Dividend Substitution	Coeff Prob	0.02 (0.71)	0.02 (0.71)	-0.16 (0.40)	-0.11 (0.49)	0.06 (0.25)	-0.01* 0.00	-0.07 (0.13)	-0.13 (0.63)	-0.03 (0.29)	-0.03 (0.30)
Capital Structure	Coeff Prob	-0.17* (0.01)	-1.28 (0.99)	0.11 (0.63)	-0.48* (0.02)	0.15 (0.08)	-0.11* 0.00	-0.43* 0.00	-0.73* (0.04)	-0.48* (0.02)	-0.34 (0.34)
Undervaluation	Coeff Prob	0.00 (0.94)	-3.77 (0.99)	0.00 (0.41)	0.00 (0.91)	0.00 (0.62)	0.00 (0.54)	0.01* 0.00	0.00 (0.08)	0.00 (0.78)	0.00 (0.62)
Profitability	Coeff Prob	-0.03 (0.61)	-1.24 (0.31)	0.08 (0.57)	0.23 (0.22)	0.46* 0.00	0.00 (0.90)	-0.09* 0.00	-0.08 (0.09)	0.00 (0.86)	0.01 (0.55)
Intercept	Coeff Prob	0.41* 0.00	0.09* 0.00	0.13* 0.00	0.11* 0.00	0.09* 0.00	0.10* 0.00	0.1* 0.00	0.22* 0.00	0.12* 0.00	0.14* 0.00
LL		-6.67	2.85	-0.65	3.07	5.35	-17.84	9.81	-1.49	6.68	6.12
AIC		0.27	0.32	0.80	0.31	0.14	0.45	-0.2	0.49	0.01	0.05

Source: Computed using Eviews and financial data from CMIE Prowess on Tender and Open market repurchase firms in India

4.0 TESTING METHODOLOGY AND FINDINGS

Table 4 presents the result of censored regression or Tobit regression for fifty-four tender offer public announcements and ninety 'open market repurchase' announcements during the said period represented in table 4. Here the dependent variable was limited for some reason. Since some observations for the dependent variables were zero running OLS would result in inappropriate estimates. (Brooks, 2008). The regression was run separately for the tender offer and open market repurchase. To analyze the impact of the size of the regression was run for the four quartiles of the tender offer and open market repurchase.

Forty-nine companies represented these fifty-four public announcements for tender offer buyback. In the case of tender offer buyback capital structure had a significant impact on share repurchase (p-value 0.01)¹³. The sign of the coefficient for the capital structure was found negative. The drivers of liquidity, dividend substitution, undervaluation, and

¹³In statistical hypothesis testing, the p-value is the level of marginal significance which represents the probability of the occurrence of a given event. The p-value is normally considered as an alternative to rejection points to provide the smallest level of significance at which the null hypothesis would be rejected.

profitability didn't find any significant impact on the dependent variable share buyback. The sign of the relationship between the dependent variable, share repurchase and liquidity was found positive. The relationship between dividend substitution and share repurchase seemed positive. The relationship between undervaluation and share repurchase found to be positive but the relationship between profitability and share repurchase was negatively correlated. Eighteen medium-sized firms and ten small size firms went for tender offer buyback didn't report liquidity, dividend substitution, capital structure, undervaluation, and profitability as the key drivers and had not any significant impact on the dependent variable, the amount of shares repurchased as a percentage of the paid up capital.

For fourteen medium-size firms, the driver of the capital structure had a significant impact on share repurchase (p-value 0.02). The sign of the coefficient for the capital structure was negative. For thirteen large size firms, the driver of profitability had a significant impact on share repurchase (p-value 0.00). The sign of their coefficient for the capital structure was also found positive.

Table 4 reveals the result of censored regression/Tobit regression for ninety open market repurchase public announcements. Seventy-six companies represented these ninety public announcements. The driver of dividend substitution had a significant impact on the dependent variable (p-value 0.00). The sign of the coefficient for dividend substitution was found negative. Also, the driver of the capital structure had a significant impact on share repurchase, the dependent variable. The coefficient of capital structure exhibited a negative relationship with share repurchase. The drivers of liquidity, undervaluation, and profitability did not find any significant impact on share repurchase in case of eighteen very small sized firms went for open market buyback during the said period. The driver of liquidity significantly impacted the dependent variable share repurchase (p-value 0.08). The coefficient of liquidity was found negative. The driver of capital structure was having a significant impact on share repurchase (p-value 0.00). The coefficient of capital structure was negative. The driver of undervaluation also had a significant impact on share repurchase (p-value 0.00) and the coefficient had a positive sign for undervaluation. The driver of profitability also has a significant impact on share repurchase (p-value 0.00) and the sign of coefficient was negative for profitability. In the case of ninety small size firms, the driver of the capital structure had a significant (p-value 0.04). The coefficient for capital structure was found to be negative. The driver of undervaluation also had a significant impact on share repurchase (p-value 0.08). The coefficient of undervaluation was positive. It was also observed that profitability had an impact on share repurchase (p-value 0.09) and the coefficient of profitability had a negative value.

Table 5
Sign relationship for different firm sizes

	Expected Sign	Smallest Firms		Small Firms		Medium Size Firms		Large Size Firms	
		Observed (Tender)	Observed (OMR)	Observed (Tender)	Observed (OMR)	Observed (Tender)	Observed (OMR)	Observed (Tender)	Observed (OMR)
Liquidity	Positive	Negative	Positive	Positive	Negative	Negative	Positive	Negative	Positive
Dividend substitution	Negative	Positive	Negative	Negative	Negative	Negative	Negative	Positive	Negative
Capital structure	Negative	Negative	Negative*	Positive	Negative*	Negative*	Negative*	Positive	Negative
Undervaluation	Negative	Negative	Positive*	Positive	Positive	Positive	Negative	Negative	Negative
Profitability	Positive	Negative	Negative*	Positive	Negative	Positive	Negative	Positive*	Positive
No. of Observation		32	38	20	38	28	40	26	35

Source: Compiled by Authors

In the present study, none of the cases showed excess cash acting as a significant driver. Similarly, the dividend substitution hypothesis does not hold true. Capital structure correction or low leverage is characterized in smallest, small and medium-sized open market repurchase firms. The low leverage hypothesis held for medium-sized tender offer repurchase firms. Undervaluation was not observable for the entire sample however the small size open market repurchase firms were overvalued. Only the large size tender offer firms were having excess profitability as a driver. Findings summarized in table 5 are evident of the fact that the drivers are not consistent across the size of the firm and hence the variable of firm size has an effect on the decision of buyback.

5.0 CONCLUSION

The study investigated the drivers of tender offer repurchase in India using a sample of fifty-four tender buyback public announcements. It was found that the companies going for tender offer buyback were lower on leverage than non-buyback companies. Buybacks have a positive impact on leverage and thus resulted in improved capital structure of the firm. The median values in table 2 suggest that Indian firms going for stock buyback through tender offer repurchase during the sample period were low on leverage. Further, the study conducted on the drivers using the Tobit analysis evidenced that companies used tender offer repurchase to improve their leverage. Hence Tender offer share repurchase has been beneficial for companies that perceived their current leverage is below optimal target. Clearly, these firms with low leverage benefit more from share repurchase for capital restructuring for the company. Open market repurchases had been conducted to pay out as a substitute for dividends as also found by Grullon (2000). The study suggests that excess liquidity of the firms does motivate them to perform tender offer buyback. Lack of profitable opportunities results in buyback since the firm prefers to return the cash back to the shareholder as suggested by Grullon (2000) but in the case of tender offer buyback in India, the buyback firms did exhibit a lower profitability as a significant driver only in case of large-sized firms. The most relevant driver in case of Tender offer buyback in India is improving the leverage of the firm. As we look on the size as a driver it was observed that in case tender offer in case

of medium size firms' capital structure correction holds true while for large firms are buying back despite having high profits since there are no future prospects for them.

The study also revealed that in the case of open market repurchase dividend substitution and capital structure correction act as the significant drivers (Table 4). Share buyback and dividends are both means of returning excess cash to the shareholder. Hence companies in the study were using open market repurchase to substitute for dividends. In the case of 'smallest size firms', capital structure correction drove the buyback activity. These companies were overvalued and had low profitability as found in their median values in table 2. The 'smaller size firms' bought back in the open market category for capital structure correction as the companies were overvalued and had low profitability. In case of the 'medium size' capital structure correction drove open market repurchase in India while for the 'large size firms' there were no significant drivers for open market repurchase. Previous studies by (Cudd, 1996) have found that undervaluation and lack of investment opportunities do not act as drivers for buyback. The present study thus has found out that motivators of buyback vary according to the type of buyback as suggested by (Mitchell, 1999).

6.0 RECOMMENDATIONS

The findings suggest that Indian firms have repurchased their shares through a tender offer in order to improve the leverage of the firm. Hence Indian companies have perceived tender offer buyback majorly as a means to improve their leverage. However, findings of the literature suggests many other benefits of share buybacks apart from capital structure correction like using excess cash in case of non-profitable investments available, signal undervaluation, substitute for dividends and countering agency conflict. The findings recommend corporate to analyze and use share buybacks for benefiting from other drivers as well. Idle cash is never good for any organization. If the firm does not have any profitable venture in future or is not in a position to meet the opportunity cost of the investor the study recommends that the firm should buy back its shares from the shareholders who are willing to tender it. This will help the tendering shareholders to exit the company at a premium price. The non-tendering shareholders will benefit with the capital appreciation of the firm and will get rewarded for their loyalty.

The firms whose share price are trading lower than its book value or are basically undervalued can also adopt the buyback route to give a signal to the market on the positive prospects of their companies. They can reinforce their belief in the well-being of their companies by buying their own shares at a premium. One of the effects of a buyback is a reduction in the equity of the firm and this directly leads to improvement in the earnings per share of the firm. The study also reveals that open market repurchase is basically used to substitute for the dividend payout. Although share buyback and paying a dividend are both mechanisms to return excess cash to the shareholder however dividends pay the tendering shareholder while buybacks pay a premium to the non-tendering shareholders. The study also found that Indian firms under study have mainly used buybacks to substitute for dividends. Therefore, it is recommended to those firms that they should also think about the benefit of the non-tendering shareholders who have been loyal to the company. Hence using buyback just as a payout alternative to dividends should not be the only objective of the buying back firm.

7.0 RESEARCH IMPLICATIONS

The present study tests the drivers of buyback identified from the previous international studies in the Indian context. The tender offer buyback and open market repurchase are driven by a different set of drivers as has been witnessed in buyback studies in other countries. The previous studies from India have not empirically tested for the drivers of a buyback. This approach of studying buyback as a categorical variable and finding its drivers results in identifying capital structure correction and dividend substitution as a motive for a tender offer and open market repurchase buybacks in India respectively.

8.0 LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

In spite of the very comprehensive approach used in the study, there are few limitations which open the door for further research. Ownership structure affects buybacks in emerging markets where families control the business (Joh, (2007, October)). The magnitude of repurchase can be compared with the nature of control of a firm. The study of the 'nature of control' and the 'type of corporate action' in between dividend payout or share buyback has not been undertaken in the present article. Globally, buyback is a well-accepted process and the volume of buybacks globally is higher than in India. The lower volume of buyback in India limits the study horizon. The spread of industries is very large in case of the sample hence an industry-wise study of the motivators or drivers for tender offer buyback or open market buyback is not possible.

In future Inclusion of additional motivators like ESOPs, Mergers and acquisition announcement year wise may also a detail into the motivation of buyback. Firms announce a buyback when a number of employee stock options are outstanding (Kahle, 2002)As a result of the share repurchase the employees end up maximizing their own wealth. Hence the relationship between stock options and share repurchase needs to be analyzed.

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