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Do Permanent and Temporary Cash Flows Affect Corporate Buybacks?

V. Bhama
FORE School of Management, New Delhi, India

ABSTRACT

Equity buyback decisions are critical commitments, depending on the cash position of a firm. The **purpose** of this study was to examine the effects of cash flow volatility on the buyback decisions of Indian corporate firms. The sample comprised 132 Indian companies listed on the Bombay Stock Exchange from 2012–2019. The selected firms had non-significant abnormal returns (after buyback announcements) that aroused the inquisitiveness to explore the real motivation behind repurchases across firms with permanent and volatile cash flows. The results of ordinary least squares regression suggested that large cash holdings were unrelated to the buybacks with coefficient values –0.02 and 0.01 for firms with permanent and volatile operating cash flows, respectively. Firms with considerable cash flows exhibited a low tendency to buy back their shares. The repurchases served mostly as signaling tools meant to enhance the value of stocks that were potentially undervalued. Thus, the undervaluation of stocks (with a beta of –0.38) seemed to have significantly affected the repurchase decision in association with the constant or volatile cash flows of the firms. Further, small firms appeared to engage more frequently in buybacks given their lower market-to-book ratios.

Keywords: free cash flow; stock repurchases; India; undervaluation; market-to-book ratio; firm size; firm age; leverage

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ОРИГИНАЛЬНАЯ СТАТЬЯ

Влияют ли постоянные и временные денежные потоки на выкуп компанией своих акций?

В. Бхама
Школа менеджмента FORE, Нью-Дели, Индия

АННОТАЦИЯ

Решение о выкупе акций является важнейшим обязательством, зависящим от денежного положения компании. **Цель** данного исследования — изучить влияние волатильности денежного потока на решения о выкупе акций индийских корпоративных компаний. В выборку вошли 132 индийские компании, зарегистрированные на Бомбейской фондовой бирже в период с 2012 по 2019 г. Выбранные компании имели незначительную аномальную доходность (после объявлений о выкупе), что вызвало желание изучить реальную мотивацию обратного выкупа в компаниях с постоянными и волатильными денежными потоками. Результаты регрессии по методу наименьших квадратов показали, что крупные денежные активы не связаны с выкупом акций с коэффициентами –0,02 и 0,01 для компаний с постоянными и волатильными операционными денежными потоками, соответственно. Фирмы со значительными денежными потоками проявляли низкую склонность к выкупу своих акций. Выкуп акций в основном служил сигналом, призванным повысить стоимость акций, которые могли быть недооценены. Так, недооцененность акций (с бета-фактором –0,38), по-видимому, существенно повлияла на решение о выкупе в связи с постоянными или волатильными денежными потоками компаний. Кроме того, небольшие компании чаще участвовали в выкупе, учитывая их более низкий коэффициент соотношения рыночной и балансовой стоимости собственного капитала компании.

Ключевые слова: свободный денежный поток; выкуп акций; Индия; недооценка; соотношение между рыночной и балансовой стоимостью; размер компании; возраст компании; леверидж

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INTRODUCTION

A varied range of financial options are used by the firms to benefit shareholders, which has led to the dominance of using alternative mechanisms of cash disbursement [1]. Generally, large cash holdings are associated positively with the buybacks [2] and equity buybacks are considered a flexible way of distributing cash to the shareholders [3]. Firms may buy back their shares using either of the two routes: fixed price tender offer or open-market proposal.

The tender offer method is resorted to in a scenario of large buybacks, whereas, open-market method is used in the case of relatively small buybacks. Among several buyback hypotheses tested in the past, those on free cash flows and stock undervaluation have been extended the greatest attention. Free cash flow theory proposes that firms with considerable cash flows prefer to use funds for unproductive investments and shareholders gain benefits from buybacks instead of wasting their funds elsewhere [4]. Hence, buybacks are generally considered to increase shareholder wealth through the distribution of free cash flows.

In the Indian business context, a significant increase in the number of buybacks has occurred in the past few years, yet the initial reaction to buyback announcements has been biased and inadequate [5]. Moreover, a number of studies that focused on buyback announcements indicated weak signalling effects[1] on the prices of stocks [6–11]. These developments highlighted an important question: if buyback announcements reflect non-significant abnormal returns, then what factors influence firms to make buyback decisions? The recent study of V. Bhama [12] indicated less encouraging results of repurchase announcements in terms of return creation in the Indian context. S. Jena et al. [13] noticed that Indian firms with large cash pile up and low investment opportunities have more buybacks.

The observations described above called attention to a vital aspect of the relevance of cash flow volatility to the repurchase decision of Indian firms. This issue stimulated an examination of the nature of cash holdings, which shapes buyback decisions. Many times, companies have continuous or permanent free cash funds, whereas in other instances, they might be in situations of volatile or temporary cash flows. The purpose stresses the need to distinguish firms with permanent positive operating cash flows and firms with volatile operating cash flows having repurchases, while previous studies tend to put all firms together in a single set to determine the factors affecting equity buybacks [14–16].

Correspondingly, the main objective of this study was to determine the motivational factors for repurchases across Indian firms with permanent and temporary free cash flows. This matter is particularly important given that the majority of empirical research concentrated on controlling factors for an entire set of firms [14, 15, 17–19]. The present study deviated from this orientation by fundamentally focusing on the cash flow division and accordingly classifying firms into those with permanent and volatile cash flows to derive deep insights related to the motivations behind the behaviors of Indian enterprises.

Previous evidence indicated weak signalling impact of buyback announcements on the prices of the stock [20]. Furthermore, these returns sustained for a very short time, i.e., generally for 1–2 days in the majority of the evidences. A large number of studies reported that the positive returns have been realized in the pre-offer period [21, 22]. Post-buyback announcement, the results of various studies indicated no significant improvement in the operational performance of firms [2].

Using the above rationale, the study tries to understand the nature of cash holdings that shapes buyback decisions by bifurcating firms into two sets, i.e., permanent and volatile cash flow firms. For the purpose, predictors like market-to-book ratio, profitability, dividend payments, leverage, cash, asset size, and firm age have been used for both sets of groups. These key variables help to identify significant contributory factors that frame motivation for repurchases in each group.

The present study makes a significant contribution to the repurchases and excess cash flow literature, especially, in the Indian context. First, the major focus of Indian studies has been on the repurchase announcements capturing the signaling effect[1] [6–11]. The present work particularly emphasizes the role and nature of cash flows in shaping buyback decisions. The findings would help academicians and practitioners in understanding how cash flow presence builds up the motivation for repurchases. Second, S. Jena et al. [14] tested different theories related to buybacks using a whole set of firms in the Indian context. However, the study deviates with a core focus on the cash flow

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division of firms, which provides deep insights related to the motivational behavior of Indian firms.

The remaining part of the study has been covered in the following sections. Section 2 discusses the relevant literature in the given context. Section 3 covers the data and methodology. Descriptive and empirical evidence have been indicated in Section 4. Section 5 covers the conclusion and implications of the study.

LITERATURE REVIEW

Generally, large cash holdings are associated positively with the buybacks [2], thus indicating the presence of excess cash within firms having share repurchases. More frequent repurchases are preferred by companies with large cash piles but low investment opportunities [13]. There are two rationales behind excess cash distribution: first, firms release surplus cash to reduce agency problems and second, firms allocate impermanent cash funds through buybacks [23]. Firms having a higher amount of permanent operating cash flows prefer paying dividends, while, the substantial amount of temporary non-operating cash flows is utilized for share repurchases. Moreover, a higher volatility in cash flows can be observed in firms that opt for buybacks [16].

Ample evidence was accumulated in the past with respect to equity buybacks and the free cash flow hypothesis. The literature has reported various financial options used by firms to benefit shareholders, thereby leading to the dominance of alternative mechanisms of cash disbursement [1, 24–26]. A. Drousia et al. [27] found that diverse companies have different reasons for repurchasing equity. Equity buybacks are considered a flexible approach given the significance of cash disbursement to shareholders [3]. Substantial cash reserves and significant cash flows, along with the availability of fewer investment opportunities, may also persuade firms to engage in equity buybacks [13]. Examples are companies with volatile cash flows and strong growth opportunities that possess high cash reserves [28]. The findings of J. Evans et al. [29] likewise support the idea that free cash flow is a key driver of equity repurchase. Because large cash holdings are associated positively with the buybacks [2], firms with high cash flows tend to buy back shares.

Contrary to the above-mentioned results, K. Chan et al. [3] found that the major reason for repurchase is the mispricing of stock value. Buybacks serve as a signaling tool that enhances the efficient valuation of stocks [30]. Generally, repurchase decisions are undertaken when stock returns are small, regardless of robust operating performance [31]. Numerous repurchases are considered favorable by the market, but it views occasional buybacks much more strongly [19, 32]. The aforementioned findings stimulated our interest in exploring which factor (free cash flow or stock undervaluation) dominates in the Indian context.

Apart from the factors identified above, certain other motivational determinants affect buyback decisions. For example, repurchase decisions are influenced by the intention to manage earnings per share [33], and such decisions are made to signal the market about future expectations regarding stock and its undervaluation [34, 35]. Similarly, liquidity in the stock market plays an important role in buyback initiation and, managers consider these decisions in situations of appropriate market liquidity [36]. The repurchase price paid by firms is low in comparison to the price paid by investors, thereby reducing liquidity in the market [37]. R. Dixon et al. [38] noted that capital adjustments through share repurchase act as another value-enhancing driver of undervalued and low-leverage firms, thus prompting companies to engage more frequently in buybacks [39]. S. Aramonte [40] observed that companies extensively engage in buybacks to meet debt targets; therefore, to achieve an optimal capital structure, repurchasing firms mostly maintain low debt ratios [31].

A few other researchers observed additional factors, such as firm size, firm age and dividends, that affect equity buyback decisions. For instance, D. Andriosopoulos & H. Hoque [17] reported that firm size, cash dividends and ownership structure substantially affect buyback announcements. U. Varma et al. [18] uncovered a positive association between firm size and the repurchase motives of firms. Large companies that repurchase stock issue substantial dividend payments owing to the low volatility of their operating incomes. Small firms engage infrequently in buybacks because they experience more variations in their operating incomes, they have lower market-to-book ratios and they grapple with higher information asymmetry [19, 41]. Yet another driver of repurchase among small firms is undervaluation, but this also applies to companies with high book-to-market ratios [27]. In a similar vein, low stock valuation motivates buybacks in growing enterprises [42]. Conversely, mature firms make the decision to repurchase as a means of distributing surplus cash funds.

Despite the insights derived from previous research, the literature has been silent and has presented inconclusive results on the significance of buybacks, especially among Indian firms with constant and volatile cash flows. This deficiency is addressed in the current work through an analysis of various predictors, namely, stock undervaluation, earnings, dividend,

Table 1

Permanent vs Temporary Operating Cash Flows

	Permanent operating cash		Temporary operating cash	
Indicator	**Operating Cash**	**Non-operating cash**	**Operating Cash**	**Non-operating cash**
Mean	0.12	–0.11	0.02	–0.01
Median	0.11	–0.10	0.01	–0.01
Min	0.00	–0.47	–0.28	–0.45
Max	0.47	0.12	0.47	0.41
SD	0.08	0.09	0.15	0.15

Source: Compiled by the author.

Note: The values indicate an average of last three years.

leverage, firm size and age across both types of firms. The study explores the major forces determining repurchase decisions among corporate firms with fixed or volatile cash flows.

MATERIALS AND METHODS

Data and Statistics

The sample comprised repurchase announcements from 132 Indian companies, specifically those related to non-significant abnormal returns post-buyback; these negligible returns motivated the current examination of the extent to which cash flows affect repurchase decisions. The data were extracted from the Prowess database of the Centre for Monitoring Indian Economy. Initially, the study considered 180 repurchases made from 2012 to 2019 by the firms listed on the Bombay Stock Exchange (BSE). Prior to this period, the number of successful buybacks in India was negligible and the data was also incoherent. Using the filtering criterion related to announcements, 136 firms were selected, but four companies were excluded because of missing values in relation to a few key variables. This left a final group of 132 firms, representing 73% of the buybacks occurring during the examination period.

As the entire study was oriented towards a cash-based firm setup, the cash flow statements of the companies were evaluated. Operational cash flow was derived from the net cash flow from operating activities. Non-operational cash was defined as the sum of net cash flows from investment and financing activities. Further, the values of operating and non-operating cash flows were taken as a fraction of total assets. Each year, these fractional values for the last three years of operating and non-operating cash flows were used to divide firms into two groups: those with permanent operating cash flows and others with volatile/temporary operating cash flows. Each year, companies with continuous positive operating cash flows in the last three years were assigned to group 1, and those with volatile operating cash flows in the last three years were classified under group 2. Among the selected companies, 91 reported positive operating cash flows in the last three years and 41 indicated having volatile operating cash flows.

Operating and non-operating cash flows are scaled using total assets. *Table 1* provides the descriptive statistics of the operating and non-operating cash flows. The mean values indicated that the average permanent operating cash flow in the previous three years was 0.12, which is more substantial than the temporary operating cash flows, which had a negligible mean value of 0.02. Interestingly, the non-operating cash flows were substantial (with a mean value of –0.11) in firms with permanent operating cash flows. This finding corroborated the assertion that the net cash availability in both groups of firms left a negligible amount of net cash, with a mean value of 0.01. Therefore, it would be interesting to explore the options taken by the two groups of companies in increasing buybacks under volatile cash flows.

Methodology

Following the methodology of A. Dittmar [15], the present study tested buyback proposition using an ordinary least squares (OLS) regression model for the given repurchase year. The OLS model is expressed as follows:

$$REP_{it} = \alpha_{it} + \beta_1 MKBK_{i(t-1)} + \beta_2 EARNINGS_{i(t-1)} + \\ + \beta_3 DPR_{i(t-1)} + \beta_4 LEVERAGE_{i(t-1)} + \beta_5 CASH_{i(t-1)} + \\ + \beta_6 LOG\ AGE_{i(t-1)} + \beta_7 LOG\ ASSETS_{i(t-1)} + e_{it}, \quad (1)$$

where *i* represents the year at which a firm engages in buybacks, *t* denotes the time measured on the basis of the firm's financial year-end. *REP*, the dependent variable, is the Rupee volume of repurchases divided by the market value of equity in the previous year. To obtain robust results, repurchase values were set to zero for firms under a repurchase value of less than 1% of the market value of equity.[2]

The various predictors given in Equation (1) were used to test the repurchase proposition. These variables were controlled due to various repurchase hypotheses (undervaluation hypothesis, excess capital hypothesis, optimal leverage ratio hypothesis and management incentive hypothesis) tested in the literature. In order to validate the results in this paper, these variables were necessary to study. For instance, to test the premise regarding valuation as a driver of repurchases, $MKBK_{i(t-1)}$, the market-to-book ratio of a firm *i* at the end of the year prior to repurchase, was included in the examination of stock valuation. $EARNINGS_{i(t-1)}$ refers to the profits to assets of a firm *i* and $CASH_{i(t-1)}$ stands for the cash and cash equivalent to assets of the firm at the end of the year prior to repurchases; earnings and cash were expected to be positively associated with repurchase for firms intending to distribute excess capital. Up to 2018, the Indian government charged fewer taxes on repurchases than on dividends. If companies intend to reduce their tax burdens, they substitute repurchases for dividends. For this purpose, $DPR_{i(t-1)}$ (dividend payout ratio), the ratio of dividend payments to net profits in the year before repurchase, was included in the analysis. Companies with high repurchases were expected to pay few dividends.

The leverage hypothesis maintains that firms tend to buy back equity when leverage ratios are low. To look into this issue, $LEVERAGE_{i(t-1)}$, the total debt-to-asset ratio in the year prior to repurchase, was incorporated into the analysis. The other predictors considered were $LOG\ AGE_{i(t-1)}$ which was measured by the natural log of the number of years elapsed from the date of a firm's incorporation, and $LOG\ ASSETS_{i(t-1)}$, which was measured by the natural log of total assets at the end of the year prior to buyback. Owing to information asymmetry issues, small and growing firms were expected to have undervalued stock and thus prefer to repurchase such an asset.

RESULTS & DISCUSSION

The descriptive statistics of the two company groups are shown in *Table 2*. The mean repurchase amount, market-to-book ratio, profitability, and leverage were statistically significant in the companies with constant and volatile cash flow firms. Note that the firms with volatile cash flows had almost double the amount of repurchases made by the companies with continuous positive cash flows, thereby confirming the argument that the former intended to engage in buybacks upon experiencing volatility in their cash flows. Thus, instead of making continuous dividend payments, the firms distributed cash through a repurchase mechanism. The companies were driven to increase buyback activities also because of the undervaluation of their stocks; the mean volatile cash flows of the firms were 1.12 and 2.32 under positive cash flows.

Table 3 reflects statistical differences across the subsets. The values corresponded to statistically significant variances between companies with permanent operational cash flow and those with temporary cash flow firms. Service firms had higher consistent cash funds than manufacturing firms. The findings with respect to growing firms were more similar than those involving mature enterprises.

This similarity signifies that small, growing service-oriented firms had more cash funds, which motivated the companies to make repurchase decisions. Volatile cash flows were non-significant across all sets.

Figures 1 and *2* illustrate cash patterns with respect to repurchases among firms. As seen in *Fig. 1*, under constant cash flows, the level of repurchase increased with the enhancement in cash funds. However, the level of buybacks was moderately volatile and, on average, did not exceed 3% of the market value of equity. In contrast, *Fig. 2* shows greater volatility in repurchase amounts vis-à-vis cash flows. Higher volatility in cash flows was observed in firms that opted for buybacks [16]. Thus, they seemed to have allocated impermanent cash funds through repurchases [23]. The buybacks, on average, amounted to nearly 4 percent. These findings substantiated the assertion that inconsistent cash funds more strongly led to repurchase decisions than the payment of dividends.

Tables 4 and *5* show the correlation among the variables. The values indicated no multicollinearity issue, as the correlation value did not exceed 50% in any of the cases. Furthermore, the correlation values were significant at the 1% level for the market-to-book ratio with repurchases under permanent operational cash flows. The results are similar for firms with volatile operational cash flows. An equally interesting finding is that cash had no significant relationship with repurchases in either group of firms, reflecting that undervaluation was the dominating factor for repurchases among the examined companies.

[2] L. Bagwell, J. Shoven [1] used 0.5%, and A. Dittmar [15] used 1% of equity market value.

Table 2

Descriptive Statistics

Indicator	Mean	Median	Minimum	Maximum	SD	T- stat
Repurchases						
Firms with permanent cash	0.07	0.04	0.00	0.54	0.08	−3.24 (0.00)***
Firms with volatile cash	0.13	0.08	0.00	0.46	0.14	
MKBR						
Firms with permanent cash	2.32	1.51	0.20	12.28	2.22	3.27 (0.00)***
Firms with volatile cash	1.12	0.67	0.13	5.43	1.19	
Profitability						
Firms with permanent cash	0.11	0.10	0.01	0.57	0.08	5.58 (0.00)***
Firms with volatile cash	0.03	0.02	−0.20	0.20	0.08	
Dividend						
Firms with permanent cash	0.35	0.32	0.00	1.95	0.33	0.916 (0.36)
Firms with volatile cash	0.29	0.13	0.00	1.65	0.41	
Leverage						
Firms with permanent cash	0.11	0.09	0.00	0.46	0.11	1.78 (0.08)*
Firms with volatile cash	0.08	0.06	0.00	0.38	0.09	
Cash						
Firms with permanent cash	0.01	0.00	−0.09	0.23	0.05	−0.88 (0.382)
Firms with volatile cash	0.02	0.00	−0.11	0.39	0.09	

Source: Compiled by the author.

Note: *** and * indicate statistical significance at 1 and 10 percent.

The regression results are presented in *Table 6*. The coefficient values conveyed the statistical influence of market-to-book ratio on firm repurchases; the value was −0.38 for both groups. Stock undervaluation was the key determinant of repurchase decisions, irrespective of whether the firms had constant or volatile cash flows. The results contradict those derived by G. Grullon and R. Michaely [2], who found a positive association between large cash holdings and buybacks. In the current study, cash seemed to have had no statistical significance in the repurchase decisions. Thus, the real motivation behind the buybacks among firms with permanent and temporary cash flows was the undervaluation of stocks. Moreover, firm age appeared to have had no negative relationship with firms that had permanent operational cash flow firms, as evidenced by the value of −0.28. Smaller firms with consistent cash funds more strongly tended towards repurchase. Correspondingly, such companies engaged in buybacks because of their low market-to-book ratios and high information asymmetry [19].

DISCUSSION

The study showed that buyback decisions of Indian firms varied significantly. According to the excess cash hypothesis, when firms have positive cash flows, or, in other words, when a firm's capital exceeds its investment opportunities, firms may distribute it to the shareholders. Repurchase is one of the methods of using excess cash. However, the present study noted that large cash holdings were inversely associated with buybacks, supporting the argument that companies with high cash flows exhibit a low tendency to buy back shares. These results contradict the findings presented by L. Bagwell & J. Shoven [1], N. Vafeas & O. Joy [24], D. Ikenberry et al. [25]; N. Vafeas [26]. Thus, free cash flow theory was not supportive in the Indian case. Equally interesting is

Table 3

T-stat of Permanent and Temporary Cash Flow Firms Across Different Sets

Indicator	Variables	Manufac-turing	Service	T-stat	Open Market	Tender offer	T-stat	Small firms	Large firms	T-stat	Growing firms	Mature	T-stat
Permanent operating cash	Operating Cash	0.11	0.14	0.832 (−3.657)***	0.11	0.13	4.74 (−1.352)	0.13	0.11	0.334 (2.076)**	0.13	0.11	0.422 (3.712)***
	Non-operating cash	−0.09	−0.13	0.043 (3.751)***	−0.10	−0.12	0.200 (2.153)**	−0.12	−0.10	0.493 (−1.322)	−0.12	−0.10	0.001 (−2.872)***
Temporary operating cash	Operating Cash	0.02	0.02	6.530 (0.177)	0.00	0.04	0.038 (−1.453)	0.01	0.03	0.561 (0.455)	0.03	0.02	5.653 (0.330)
	Non-operating cash	−0.02	−0.01	2.351 (−0.332)	0.00	−0.04	0.940 (0.732)	0.00	−0.03	0.000 (0.997)	−0.02	−0.01	0.494 (−0.754)

Source: Compiled by the author.
Note: *** and * indicate statistical significance at 1 and 10 percent.

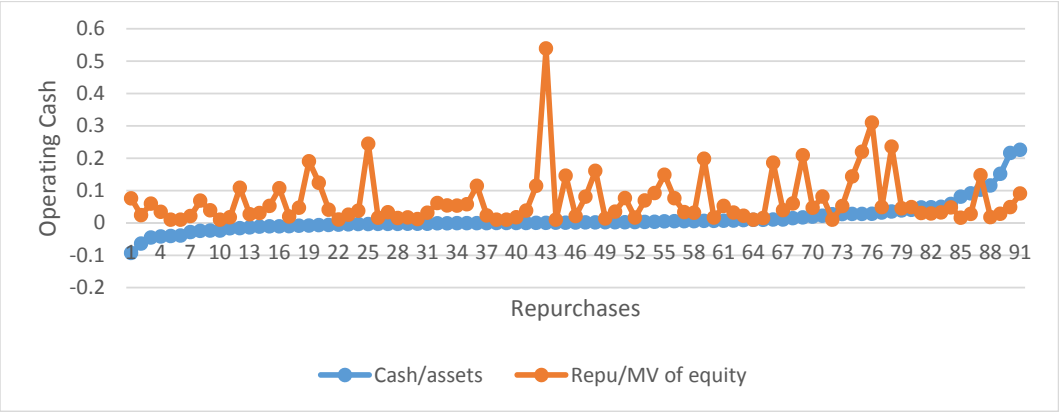

Fig. 1. **Cash to Asset and Repurchases to Equity of Permanent Operational Cash Flow Firms**
Source: Compiled by the author.

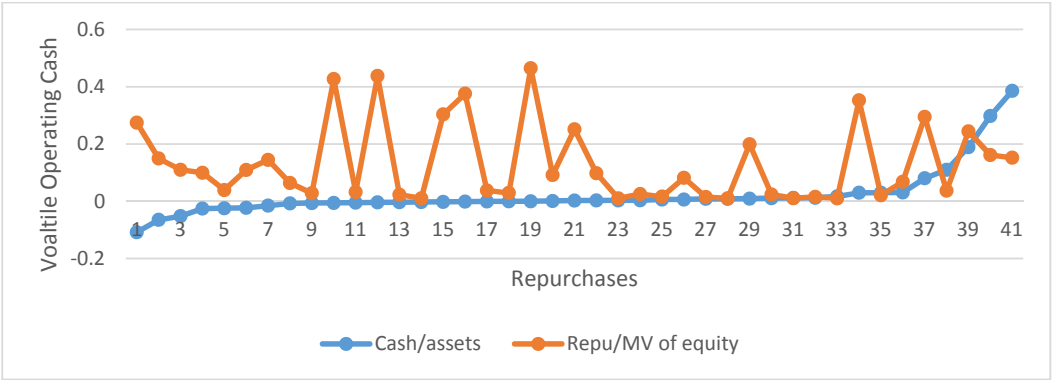

Fig. 2. **Cash to Asset and Repurchases to Equity of Volatile Operational Cash Flow Firms**
Source: Compiled by the author.

Table 4

Correlation Matrix of Permanent Operating Cash Flow Firms

Variables	Repurchase	MTB	Earnings	Dividend	Leverage	Cash	Age
MTB	−0.370 (0.000)***						
Earnings	−0.171 (0.106)	0.606 (0.000)***					
Dividend	0.015 (0.890)	0.009 (0.930)	0.036 (0.735)				
Leverage	0.038 (0.718)	−0.232 (0.027)**	−0.394 (0.000)***	0.111 (0.294)			
Cash	0.035 (0.743)	−0.057 (0.594)	−0.004 (0.968)	−0.128 (0.228)	−0.063 (0.554)		
Age	0.129 (0.224)	−0.253 (0.025)**	−0.225 (0.032)	0.055 (0.603)	0.213 (0.043)**	−0.067 (0.529)	
Assets	−0.268** (0.010)	0.055 (0.606)	0.025 (0.816)	0.226 (0.032)	0.178* (0.091)	−0.177 (0.093)	0.174 (0.099)

Source: Complied by the author.

Note: *** indicates significance level at 1 percent.

Table 5

Correlation Matrix of Volatile Operating Cash Flow Firms

Variables	Repurchase	MTB	Earnings	Dividend	Leverage	Cash	Age
MTB	−0.389 (0.012)***						
Earnings	−0.149 (0.354)	0.014 (0.931)					
Dividend	−0.252 (0.117)	−0.071 (0.664)	0.165 (0.307)				
Leverage	−0.148 (0.355)	−0.008 (0.961)	−0.272 (0.086)	0.168 (0.299)			
Cash	0.044 (0.785)	0.049 (0.762)	−0.088 (0.585)	−0.056 (0.732)	0.072 (0.655)		
Age	0.104 (0.516)	−0.041 (0.799)	0.034 (0.832)	−0.183 (0.257)	0.244 (0.124)	0.053 (0.740)	
Assets	−0.336 (0.032)**	0.298* (0.058)	0.098 (0.542)	0.319** (0.045)	0.485 (0.001)***	−0.264 (0.096)*	0.080 (0.617)

Source: Complied by the author.

Note: *** indicates significance level at 1 percent.

Table 6

Regression Results

Variables	Permanent Operating cash Flow	Volatile Operating cash flow
Intercept	0.117 (0.106)	0.168 (0.408)
MKBK	−0.388*** (0.002)	−0.380** (0.030)
Profitability	0.094 (0.470)	−0.158 (0.352)
Dividend	0.071 (0.484)	−0.186 (0.281)
Leverage	0.006 (0.956)	−0.160 (0.434)
Cash	−0.021 (0.830)	0.016 (0.924)
Log assets	0.102 (0.323)	0.085 (0.603)
Log age	−0.288 (0.007)***	−0.074 (0.734)
R square	0.22	0.28
No of observations	91	41

Source: Complied by the author.

Note: *** and ** indicate statistical significance at 1 and 5 percent.

the similarity in findings pertaining to permanent as well as temporary cash flows. This gave rise to the point that there are other dominating factors that motivate firms to pursue buyback decisions.

The examination of other contributory variables indicated that the major driver of repurchase by enterprises with permanent and volatile cash flows was the low valuation of stocks. The descriptive findings convey that the key characteristics of buyback firms vary considerably depending upon free cash flow availability, which suggests that firms with positive operating cash flow and volatile operating cash flow might be in different situations when they decide equity buybacks. Buybacks merely served as a signalling tool designed to enhance the value of stocks that are potentially undervalued. Small firms engaged in buybacks because they had low market-to-book ratios and higher information asymmetry. Capital structure adjustments did not persuade the companies to make these decisions.

The discussion above brings an interesting element to light-that stock undervaluation is the prominent driver of buyback across firms but that there is a weak signalling effect in the case of repurchase, as evidenced in the literature. The undervaluation hypothesis states that information asymmetry between insiders and shareholders may cause a firm to be misvalued [15]. The positive stock price reaction on the announcement corrects the valuation. However, Ikenberry et al. [25] noted that the price increase may not be sufficient to correct the price since the firms get abnormal returns late post buyback announcement. Likewise, Indian firms are also motivated by the desire to improve the valuation of stock through repurchases, but reactions in the market are not encouraging. Cash enrichment in firms is again not the motivational factor for repurchase. In this regard, further studies can focus on the sectoral effects of excessive or low cash reserves on buybacks among Indian firms.

CONCLUSION

The present study examines the relevance of cash flow volatility to the repurchase decisions of Indian firms. The issue stimulated an examination of the nature of cash holdings, which shapes buyback

decisions. Therefore, the study tries to understand the nature of cash holdings that shapes buyback decisions by bifurcating firms into two sets, i.e., permanent and volatile cash flow firms. This research probed into the real motivation and major forces behind buybacks among Indian firms with permanent and temporary cash flows.

The findings indicated that firms with continuous and volatile operating cash flows intended to buy back shares, but they might have been experiencing different situations when they decided to opt for equity repurchase. Large cash holdings were not positively associated with the buybacks. Hence, firms with high cash flows had a low tendency to buy back shares. In the Indian setting, the results do not support the free cash flow-based argument that considerable cash reserves and volatile cash flows persuade firms to increase their repurchases. Among the varying factors affecting the buyback decisions of firms, stock undervaluation seemed to have had a stronger effect on repurchase rationale, regardless of whether the firms had constant or volatile cash flows. Thus, the real motivation behind buybacks among firms with permanent and temporary cash flows was the undervaluation of stocks. Small firms with consistent cash funds have a higher tendency to opt for repurchases.

The findings would help academicians and practitioners understand how cash flow presence builds up the motivation for repurchases. The study is important to the investors while making their decisions for buying back shares. It is equally important to the corporations in their managerial decisions on the repurchases.

Limitations of the Study

The study is limited to a number of firms in the Indian context. The study has considered a limited number of factors to find the impact of buyback whereas considering more number of factors could have different findings.

Scope of Further Research

Future work may extend this study to cross-country comparison in the context of emerging and developed countries. This will also increase the number of firms which provides validation of results. Research can also be enhanced by bifurcating firms into age and size since the present study has important findings in the context of small firms.

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ABOUT THE AUTHOR / ИНФОРМАЦИЯ ОБ АВТОРЕ

Vandana Bhama — PhD in Finance, Assoc. Prof., Finance & Accounting, FORE School of Management, New Delhi, India
Вандана Бхама — PhD в сфере финансов, доцент кафедры финансов и бухгалтерского учета, Школа менеджмента ФОРЕ, Нью-Дели, Индия
https://orcid.org/0000-0002-3575-8378
vandana.bhama@gmail.com

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