

## **EXPLORING FIRMS' SIZE AND AGE EFFECT THROUGH TRIANGULATION: AN EMPIRICAL EVIDENCE OF INDIAN FIRMS ANNOUNCING DIVIDENDS AND SHARES REPURCHASES**

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### **ABSTRACT**

*Cash dividend and shares repurchase announcements are said to have informational content concerning the value of the firm. The paper attempts to present the results of the study on the impact of cash dividends and shares repurchases decisions on returns, liquidity and risk profile of the firms. It examines whether the age and size of the firm affect the cash dividend and shares repurchase decisions of the firms. In operational terms, it aims to assess the management perception of cash dividend and shares repurchase announcements and the underlying motives for issuing them in Indian context. For the purpose, the study has employed the event study methodology and the pre-test and post-test research design to evaluate the changes. The uniqueness of this study emanates from the fact that it is perhaps the first attempt (to the best of the authors' knowledge) of its kind based on both the primary and the secondary data evidences at providing the views, motivations and impact behind the cash dividend and shares repurchase decisions and their announcements. It is perhaps the first attempt of its kind comprising of a large sample of BSE 500 index companies. With a substantially larger data set, the present study is expected to provide credible results.*

**Keywords:** Dividends, Shares Repurchases, Dis-aggregative Analysis, India

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## **INTRODUCTION**

The analysis of the impact of the corporate announcements/actions in terms of returns, liquidity and risk is important for both the investors and the management. These actions are indicative of the financial health of the company and are looked upon as the barometer/fundamental parameters for the growth of the stock markets. This study provides a comprehensive view of the two corporate actions: cash dividend and shares repurchase announcements. The empirical literature has mixed evidences with respect to the impact of these announcements at aggregate level in terms of returns, liquidity and risk (increase or decrease). However, there has been a scant evidence of Indian studies conducted on dis-aggregative level. The aim of the paper is to explore the relationship through 'triangulation' amongst the return, liquidity and risk amongst the firms of different size and age groups. This would enrich the understanding of both the management and the shareholders with respect to the enhanced understanding of the corporate announcements as well as enable them to take right decisions based on the firms' total assets and age, thereby enabling them to take better and informed investment decision.

## **SAMPLE AND METHODOLOGY**

The results presented in the paper are confined to the BSE 500 index firms that announced cash dividends and shares repurchases from April 1, 2003 to March 31, 2013. These firms represent nearly 93 per cent of the total market capitalization on BSE and cover 20 dominant sectors of the economy (as on 7 November 2012, the date of sample selection). Hence, with a substantially larger data set, the paper is expected to provide credible results enabling investors as well as the shareholders to make sound investment decisions.

The present study has used questionnaire-based survey research method to get an insight into the managerial views and motives related to cash dividends and shares repurchases. A national survey for Indian companies (for both the cash dividends and shares repurchases) has been conducted on Directors/Chief Finance

Officers/Company Accountants/Vice Presidents/Managers (Finance) of the companies that announced cash dividends and shares repurchases during the specified time period.

The sample firms have been segregated on the basis of the size (total assets) and age (year of incorporation) for cash dividend and shares repurchase announcements. This would facilitate in assessing the factors/reasons for the trend in returns, liquidity and risk amongst the firms.

The impact of cash dividend and shares repurchase announcements on stock returns has been studied using event study methodology (Brown and Warner, 1985; Bowman, 1983; Peterson, 1989; Mackinlay, 1997; McWilliams and Siegel, 1997; Kothari and Warner, 2007). Event study methodology is one of the most popular statistical research methods in finance. It measures the event's economics by observing security prices around such events. The stock returns behaviour around these announcements is likely to enable researcher to know the informational content and the applicability of the signalling hypothesis in India.

To ascertain the magnitude of change in the liquidity and risk consequent to the announcements of cash dividend and share repurchase, one-group pre-test post-test research design has been used. One-group pre-test post-test (also called before and after research design) is an experimental research design where participant groups are compared to measure the degree of change occurring as a result of treatments or interventions. The treatment/intervention, for the study, is the cash dividend and the shares repurchase announcements.

## **TRIANGULATION**

Triangulation is considered as a multiple method research technique to investigate a problem. It facilitates in validation and consistency of findings by interpreting results from more than one perspective. The present paper has made an attempt to provide a more comprehensive, complete and holistic view of cash dividend and shares

repurchase announcements in Indian context by exploring the size and age effect on the returns, liquidity and risk of the sample firms. Figures 1 and 2 provide pictorial view of results arrived at using the primary data (collected through questionnaire) as well as the secondary data research techniques. It would be equally beneficial to explore the relationship between the two segregates (firm size and age) and the resultant returns, liquidity and risk from the investment perspective.

### ***Cash Dividend- Firm Size and Age Effect***

It has been observed in Figure 1 that according to the firm 'size', the highest returns have been reported by the small firms. It is useful to note that the small firms have high risk as compared to their larger counterparts. Hence, the relationship of high risk and high returns seems to exist for the small firms. In operational terms, it implies that the investors consider cash dividend announcements by the small firms as a signalling device regarding the future earnings prospects. Perhaps, the cash dividend announcements by the medium, large and very large firms may have been perceived by investors as utilizing the excess cash flows available inside the firm. Hence, these firms might not have emerged out to be better performers from the returns perspective for the investors. Therefore, less risk has been evinced for these firms. The relationship of less return and less risk exists for the medium, large and very large firms. In the case of liquidity, very large firms have better liquidity. This may be due to larger assets base and strong brand image for these firms. However, it is informative to note that the liquidity has been reported less for the small, medium and large firms. Further, the medium and large firms have also reported less risk. Hence, the relationship of less returns, less risk and less liquidity exist for the medium and large firms.

According to the firm 'age', middle-age firms have reported the maximum returns. Moreover, liquidity of the middle-age and the 'old and established' firms has better liquidity position. Thus, the relationship of higher returns and higher liquidity exists for the middle-age firms. Perhaps, the middle-age firms have better investment opportunities and are at the growth stage of their life cycle. Hence, investors feel

positive for these firms. On the other hand, old and established firms are generally at the mature stage with less growth prospects. However, these firms enjoy investors' confidence and trading history. Therefore, the old and established firms have been reported with better liquidity. In terms of risk, it is evinced that the risk of the old and established and middle-age firms is less *vis-a-vis* young firms. The relationship, higher liquidity and less risk exist for the old and middle-age firms. The young firms are generally at the initial stage of their life cycle with limited access to financial resources and are less popular amongst the investors. Hence, the young firms have reported the highest risk.

The survey evidence has also supported finance managers' opinions with the cash dividends creating a psychological impact on investors. The managers have opined that cash dividends provide a positive impact on the firm's future prospects and increase the total market value of the firms. The results of the survey suggest that the vast majority of the finance managers have expressed strong opinion for signalling hypothesis.

The following results have emerged from all the segregates:

- Abnormal Returns

On the basis of the size, 'small' firms are better in providing higher returns (AARs and CAARs) to the shareholders. The 'large' and the 'very large firms' have reported negative returns on the announcement of cash dividends. According to the age, 'middle-age' firms have reported the highest AARs and CAARs as compared to the young and old and established firms. These firms are better equipped with financial resources to explore untapped areas where they can generate more returns. Hence, the middle-aged firms might be suitable for investors willing for portfolio diversification by taking relatively more risk to capitalize their gains.

- Liquidity

According to the size, 'very large' firms have better liquidity position as their trading

volumes and the turnover have increased after the announcement as compared to the 'small', 'medium' and the 'large' firms. Hence, these firms appear to satisfy the immediate short-term liquidity needs of the investors of the sample companies. Whereas, according to the age, 'old and established' firms and the 'middle-age' firms have better liquidity positions than the 'young' firms; the reason is that these firms (being more established) earn the benefits of investors' confidence. Liquidity as a concept of *trading activity* has been observed to be 1 in all the cases. This signifies that trading volume was never zero for the sample firms. It further implies that all the companies comprising the BSE 500 index are actively traded, being the top 500 companies in the country.

- Risk

On the basis of the size, 'small' firms are more risky. The 'middle-age', 'large' and the 'very large' firms are in a comfortable position as far as the fluctuations in their stock prices (as measured by variance) are concerned. The investors would prefer to invest in the 'medium', 'large' and the 'very large' firms. These firms with lower returns but known risk (stable variance) rather than fluctuating variance are better suited for the risk-averse investors. 'Small' firms with higher returns but unknown risk (unstable variance) would be preferred by those investors who are prepared to assume risk. According to the age, the 'young' firms are more risky in terms of fluctuations in variance. They are the newly incorporated firms with less exposure to the market and popularity amongst the traders. The 'middle-age' and the 'old' firms are safer investment outlets for the conservative investors who prefer lower returns but known risk (stable variance) rather than fluctuating variance. 'Young' firms would be more suited for investment by the high risk-return investors.

### ***Shares Repurchases- Firm Size and Age Effect***

Figure 2 (based on size) exhibits that the highest returns have been reported by the 'small and medium' and the large firms. It has also been observed that the 'small and medium' firms have better liquidity position and have high risk. Thus, the

relationship of high returns and high risk exists for the 'small and medium' firms. Perhaps, the shares repurchase announcements of the small and medium firms are perceived as reduction in information asymmetry regarding the bright future prospects of the firm by the management to the investors. On the other hand, the large firms have been evinced with less liquidity and less risk. The relationship of less liquidity and less risk exists for the large firms. Perhaps, the shares repurchase announcements by the large firms might have been perceived as disposal of excess free cash flows by the firms with less investment opportunities.

On the basis of the firm 'age', the 'young and middle-age' firms have better returns and liquidity as compared to the 'old and established' firms. Thus, the relationship of high returns and high liquidity exists for the young and middle-age firms. It has been observed that the 'old and established' firms have less returns, less risk and less liquidity; hence, the relationship of less returns, less risk and less liquidity exist for the old and established firms. The young and middle-age firms have been reported more risky. Therefore, the relationship of high returns and high risk exists for the young and middle-age firms. Perhaps, the shares repurchase by the young and middle-age firms are perceived as signals of positive future growth by the investors and that the current shares prices are undervalued.

The survey evidence has also suggested that the Indian managers unanimously believe that shares repurchase is undertaken by the firms when they perceive that the share prices are undervalued. The finance managers' have also opined that shares repurchase signal the management's confidence in the future and facilitate investors to express confidence in the firm. Also by returning excess cash to the shareholders, the management creates a positive impact on the share prices and eventually on the value of the firm.

The following results have emerged from all the segregates:

- Abnormal Returns

In terms of the returns according to the size, 'large' firms are better in terms of

providing higher AARs and 'small and medium' firms have performed fairly well in terms of providing higher CAARs to the shareholders. Hence, the conservative investors with low risk-return appetite might be attracted towards large firms for investment perspective; whereas investors with preference towards high risk-return for their portfolio diversification may choose to invest in small and medium firms. On the basis of the age, the 'young and middle-age' firms have better returns in terms of providing higher AARs and CAARs. Hence, these firms might be suitable for investors willing to assume more risk with an expectation of more returns.

- Liquidity

According to the size, 'small and medium' firms have better liquidity positions as compared to their larger counterparts around the shares repurchase announcements. Liquidity according to the age of the firms is better for the 'young and middle-age' firms as compared to the firms of other age groups. Hence, these firms can satisfy the liquidity needs of the active/conservative investors. This can lead to enhancement in the value of the firm. Liquidity as a concept of trading activity has come out to be 1 in all the cases implying that trading volume was never zero for the sample firms, implying that all the companies comprising the BSE 500 indices are actively traded.

- Risk

The risk (variance) according to the size is more for the 'small and medium' firms. Hence, the conservative investors would prefer investing in 'large' firms due to fear of loss in their investments. On the other hand, 'small and medium' firms would be a preference for the high risk-return investors. On the basis of the age, the 'young and middle-age' firms are more risky and have more fluctuations in the share prices vis-à-vis their larger counterparts. Hence, the investors with low risk-return appetite would prefer investing in 'old and established' firms. In contrast, the 'young and middle-age' firms would be a preference for the high risk-return investors.



## CONCLUSION

The detailed analysis of the sample firms announcing cash dividends and shares repurchases on the basis of the size and age helps enrich the understanding of both the management and the shareholders. The results are likely to be useful in understanding how the investors react in different situations subsequent to the declaration of cash dividends. Further, the results would facilitate in enhancing the wealth of the shareholders to a great extent. The results presented have provided support to the signalling, undervaluation and maturity hypothesis of cash dividend and shares repurchase respectively. They facilitate investors to take right decisions based on the firms' total assets and age, thereby enabling them to take better and informed investment decision. With increasing number of shares repurchase events in India, it becomes useful to understand the behaviour of the firms in different time periods. These results would provide insights to the management and the shareholders in understanding the important issues/factors for the success of this emerging phenomenon in the Indian stock market. Thus, the above findings provide a clear bird's eye view of the returns, liquidity and risk in all segregates. These findings might help understand investors to analyze each company both fundamentally and technically (for diversification) in construction of optimum portfolios.

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Figure 1: Appropriate Investment Avenues for Returns, Liquidity and Risk for Cash Dividend Announcements

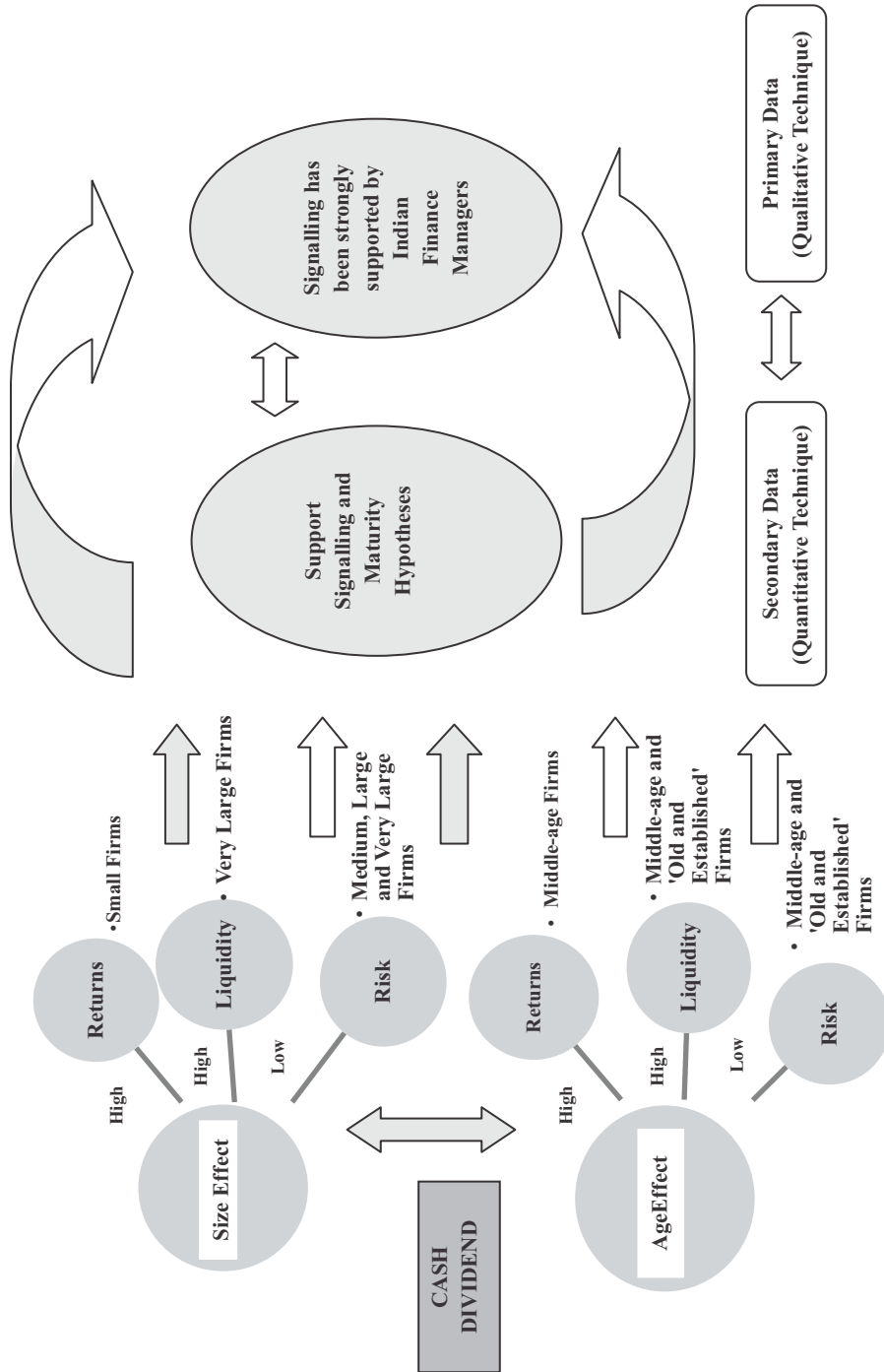


Figure 2: Appropriate Investment Avenues for Returns, Liquidity and Risk for Shares Repurchase Announcements

