

IMPACT OF CONCURRENT ANNUAL DIVIDEND AND INTERIM/SPECIAL DIVIDEND ANNOUNCEMENTS ON STOCK PRICES: A STUDY OF INDIAN STOCK MARKET*

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Abstract

Corporate announcements are those activities taken by the management of the corporate entity to increase the shareholder value. This paper attempts to find out how market reacts to annual dividend and concurrent annual dividend and interim/special dividend announcements of the stocks listed in S&P CNX 500 index of National Stock Exchange for the period 2014-2019 using Event study Methodology. The results of the study show positive significant returns around annual dividend and interim/special dividend announcements. However, the magnitude of return is found to be high for concurrent annual dividends and interim/special dividends than pure annual dividend announcements.

Keywords: Concurrent Annual and Interim dividend announcements, Event Study.

Introduction

Dividend policy is one of the key financial decisions to convey information about the companies with market participants. The proportion of earnings to be distributed to the shareholders and the portion to be retained by the firm is determined by the Dividend policy of the firm. Dividend irrelevance theory of Miller and Modigliani (M&M) states that the value of the stock is not affected by the dividends issued by the firm. It also states that the earnings of the firm and type of assets owned by the firm determine the value of the firm and not the dividends issued by the firm.

However, some companies declare interim /special dividends apart from annual dividends. It is the discretion of the company to distribute interim /special dividends. Annual dividends paid at the end of the financial year, whereas interim /special dividends are paid during the current financial year. The mismanagement of cash or investments in projects with negative net present value can be reduced by issuing special dividends(Jensen, 1986). Therefore, stock price increases with the announcement of a special dividend since good news is conveyed about the company.

Review of Literature

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Aharony and Swary (1980) examined firms that announced quarterly dividend and earnings listed on the New York Stock Exchange. The findings showed that the companies that announced increase in dividends realized positive abnormal returns and the companies decreased their dividends had negative abnormal return. A positive significant abnormal return was found for those companies that announced both earnings and dividend increases in the same quarter.

Positive and statistically significant returns were found for simultaneous cash and stock dividend announcements in Karachi Stock Exchange **Akbar and Baig (2010)**. In the study of **Arab et al (2004) and Archana(2019)** an increase in share prices were found with the dividend announcements by the company.

The findings of the study by **Chander et al (2007)** show a quick swift in stock prices to dividend announcements so that investors could not devise profitable trading strategies.

Crutchley et al (2003) studied a stock price performance and earnings performance for sample of firms listed on NYSE, NASDAQ and AMEX that announced special dividends. The results of the study show that the firms issuing special dividend earned significant positive excess return and earnings in the preceding year.

The results of the study by **Dasilas et al (2008)** on the Athens Stock Exchange show positive reaction to joint interim dividend and earnings by the firms. **Dehghani and Chun (2011)** found immediate positive stock returns to special dividends announcements in the Malaysian stock market.

The findings of the study by **Hoque and Mamun (2013)** show that there was fall in share prices in the event window with dividend declaration in Bangladesh. In the study of **Joshi and Mayur (2017)** the wealth of the shareholders increased with the announcement of dividends, thus supporting signaling hypothesis.

Kaleem and Salahuddin (2006) studied a sample of 24 companies with high turnover which announced dividend for the period 2002 and 2003 at Lahore Stock Exchange. The results showed that there is no significant gain from dividend announcements.

The study by **Mahmood et al (2011)** show positive returns to dividend announcements in Karachi Stock Exchange rejecting the dividend irrelevance hypothesis. The results of the study by **Pathirawasam (2009)** to dividend announcements show an excess return over 10 percentage.

Mohammed Arif Pasha et al. (2017) found that dividend announcements did not have any significant influence on large, medium and small caps companies.

Petit (1972) examined how stock prices react to dividend changes for 625 stocks listed in American market. The findings show that there is an increase stock price with increase in dividends and fall in prices with decrease in dividend payments.

The economic factors are found to have a positive influence on share prices rather than dividends in the study of **Pradhan (2014)**.

Sharma (2011) investigated of stocks belonging to 20 major industries in India for the period 1997 to December 2007 to dividend announcements. The results of the study show that information content is reflected immediately and investors could not earn any excessive returns.

Sharmila et al (2014) studied the dividend announcement on manufacturing and service sectors of CNX Nifty stocks. The results show that investors could gain more stock returns from manufacturing sector.

Sharmila et al (2015) studied the volatility of stock prices around bonus share announcements for the period 2013 to 2014 using event study methodology. The findings of the study shows the stock market is efficient enough to absorb the information content of bonus share announcement and adjust the share prices supporting the trading range hypothesis.

Sharmila et al (2016) examined how stock prices react to change in dividends of S&P CNX 500 stocks for the period 2007 to 2012. It was found that magnitude of returns was high for decrease in dividends (8.25%) followed by constant dividends and increase in dividends.

Thanwarat Suwanna (2012) studied how stock prices reacted to dividend announcements of 60 listed Thai companies. The results also show statistically significant returns using market model.

1. Rationale of the study

The empirical studies carried out in the past show varied evidences, using the data from United States, Srilanka, Malaysia, Greece, Japan and Indian markets. Empirical studies of Arab et al (2004), Pathirawasam (2009), Akbar and Baig (2010), Mahmood et al (2011), Thanwarat Suwanna (2012), Hoque and Mamun (2013), Sharmila et al (2016) and Joshi and Mayur (2017), shows significant positive relationship on stock prices with the dividend payment while the studies by Kaleem and Salahuddin (2006), Sharma (2011), Mohammed Arif Pasha et al. (2017), Archana (2019) found that there is no significant wealth creation for the shareholders around dividend announcements. Crutchley et al (2003), Dasilas et al (2008), Dehghani and Chun (2011) found positive impact on interim/special dividend announcements. During the period 2014 to 2019 more than 2500 annual dividend announcements, 1000 interim/special dividends and 40 concurrent annual and interim/special dividends are announced.

The previous studies show a blend of contradictory evidences on the impact of dividend announcements. A very few studies are done to study the effect of concurrent announcements annual and interim/special dividends on stock prices. In India combined effect of two concurrently occurring events of annual dividends and interim dividends has not been examined before. This has motivated the researcher to explore the market reactions towards annual dividends and concurrent annual dividends and interim/special dividend announcements.

2. Objectives of the Study and Hypothesis

4.1 Objectives

1. To study the stock price reaction around annual dividend announcements of S&P CNX 500 companies.
2. To study the price reactions of concurrent announcements of annual dividends and interim dividends in the event window.

4.2 Hypothesis

H_1 : There are significant average abnormal returns (AARs) around the annual dividend announcements in the pre event and post event window.

H_2 : There are significant cumulative average abnormal returns (CAARs) around the annual dividend announcements in the pre event and post event window.

H_3 : There exist statistically significant AARs around concurrent annual dividend and interim/special dividend announcements on stock price.

H_4 : There exist statistically significant CAARs around concurrent annual dividend and interim/special dividend announcements on stock price.

3. Sample and Data

5.1 Sample

Two sets of sample are considered for the study. First, the stocks that declared annual dividend from the stocks listed in CNX 500 of NSE during the year 2014-2019 have been taken for the study. Total number of records was 2588 annual dividend announcements. After eliminating stocks which have any price sensitive, lack of data or confounding events during the event window (-30 days to +30 days), a final sample of 1477 annual dividend announcements are included for the study. Secondly, 52 stocks that announced concurrent annual dividends and interim/special dividends are taken for the study. Confounding events or concurrent events are financially relevant corporate announcement occurring in the event window of another corporate event.

5.2 Data

- Annual dividends and interim/ special dividend announcements that are announced by the sample stock collected from Capitaline database includes the first set of data. This includes the dates of above corporate events announced by the companies.
- Closing prices of the selected stocks from NSE are the second set of data included for the study.
- The third set of data consists of S&P CNX 500 index prices compiled and published by NSE on daily basis which have been collected from NSE website (<http://www.nseindia.com/>)

4. Methodology

The Market model employed by Brown and Warner (1980), is used to compute the abnormal returns from the following equation.

$$R_{it} = \alpha_i + \beta_i R_{m,t} + e_{it}$$

Where;

R_{it} = the actual return on security i at day t

$R_{m,t}$ = the market return on NSE index at day t

α_i, β_i is the excess return and slope coefficient estimators respectively

e_{it} = the error term for security i at day t

The NSE market index (CNX 500) is taken as the benchmark for computing the market return.

The actual returns of security, i , on a particular day, t , is defined as:

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}}$$

Where P_{it} : closing price of security i on day t and P_{it-1} : closing price of security i on $t-1$.

The actual returns of market index m , on a particular day, t , is defined as:

$$R_{mt} = \frac{P_{mt} - P_{mt-1}}{P_{mt-1}}$$

where P_{mt} : closing price of index m on day t and P_{mt-1} : closing price of index m on $t-1$.

The actual returns of the security and the market index are derived from the market model over 250 days prior to the event window and for the event window considered in the study ($t = -30$ to $+30$ days).

The expected returns for security i on day t is given below

$$ER_{it} = \alpha_i + \beta_i R_{mt}$$

Where α_i and β_i are the excess return and slope of the regression line respectively

Following are the models used for calculations:

The returns generated by a given stock or portfolio over a period of time which is different from the expected rate of return are known as **Abnormal Returns (AR)**.

The daily abnormal return is calculated as

$$AR_{it} = e_{it} = R_{it} - ER_{it}$$

Where

AR_{it} = the abnormal return of security i in day t

R_{it} = actual return of security i in day t .

ER_{it} = the expected return of security i on day t

Average Abnormal Returns (AAR) is the average deviation of actual returns of a stock from the expected returns.

For each event date t , the cross-sectional average abnormal returns for all stocks are defined as

$$AAR_{it} = 1/n \sum_{i=1}^n e_{it}$$

$t = -30$ to $+30$ days

n = number of securities

Cumulative Average Abnormal Returns (CAAR) provides information about the average price behavior of stocks during the event window. CAAR is calculated by cumulating average abnormal returns.

The cumulative average abnormal returns (CAAR) for t days ($t = -30$ to $+30$) are calculated by:

$$CAAR_t = \sum_{t=-30}^{+30} AAR_{it}$$

Where $t = -30, \dots, 0, \dots, +30$.

The Brown & Warner (1985) model is followed to test the significance of Average Abnormal returns

$$t \text{ AAR} = \frac{\text{AAR}t}{\sigma(\text{AAR})/\sqrt{n}}$$

To find out the longer-term effect of an event the CAAR in (-30, +30), (-20, +20), (30, 0), (-20, 0) event windows are used. The CAAR calculations of the broader event windows and its narrower pre and post-event combinations are calculated for determining whether the news provides signal to the market. To test whether the news provide signal to the market (i.e., the CAARs differ significantly from zero) narrower event windows (-10, +10), (-5, +5), (-2, +2) (-1, +1), (-10, 0), (-5, 0), (-2, 0), (0, +2), (0, +5), (0, +10) as their pre and post event combinations are used. In order to capture the significant difference in pre announcement period the Cumulative average abnormal Returns (CAAR) of (-30, 0), (-20, 0), (-10, 0), (-5, 0), (-2, 0) event windows are used. The CAARs in (0, +2), (0, +5), (0, +10), (0, +20), (0, +30) event windows helps to test the significant difference in the post event window. This helps to identify of there are any significant returns in the holding period.

7.0 Data Analysis and Interpretation

7.1 Impact of Annual Dividend Announcements

Table 1 shows the results of the behavior of share prices of 1477 annual dividend announcements. The abnormal returns are measured by Market model and the corresponding t-value is found for the event period (from day -30 to day +30) to find out the significance of returns. Before the announcement period (-30 day to -1 day) the AAR is positive for 26 days and negative for 4 days. AAR is 0.15 % on the event day which shows positive return and is significant at 10% level. This shows that distribution of dividend conveys good news about the stock to the market that brought significant positive price reaction. AAR is found to be positive and significant on -30, -27, -19, -2 days (at 1% level); -28,-26,-17,-13, -9, -1 days (at 5% level); -22, -4 days (at 10% level). The significant AAR on -30, -28,-27,-26,-22,-19,-17,-13,-9,-4,-2, and -1 days shows that there is leakage of dividend announcement before the event day.

Positive and significant AARs is found on +11, +12 days (at 1% level); +13, +24, +26, +27, +28 days (at 5% level); +15,+16, +30 days (at 10% level) in the post announcement period. The positive significant returns reveal that annual dividend announcements have conveyed favourable information to the market. *Therefore the hypothesis H_1 can be accepted and inferred that the AAR are significant around the annual dividend announcement in the event window.*

Table 1 shows a consistent increase in CAAR around the announcements in the event window. The CAAR 0.249% on -30 day and 3.076% on the dividend announcement day which has increased to 4.89% on +30 day shows a good holding period return around the dividend announcements which is clear from Fig 1.

Table 1 AAR and CAAR around the Annual Dividend Announcements

(Returns in Percentage)

| Days | AAR | CAAR | t (AAR) | Sig. (2-tailed) | Days | AAR | CAAR | t (AAR) | Sig. (2-tailed) |
|------|----------|---------|------------|-----------------|------|----------|---------|----------|-----------------|
| -30 | 0.24973 | 0.24973 | 3.11457*** | 0.002 | 0 | 0.15434 | 3.07649 | 1.73021* | 0.084 |
| -29 | 0.07418 | 0.32392 | 1.03268 | 0.302 | 1 | -0.13777 | 2.93872 | -1.37844 | 0.168 |
| -28 | 0.15638 | 0.4803 | 2.20226** | 0.028 | 2 | -0.03419 | 2.90453 | -0.44993 | 0.653 |
| -27 | 0.2097 | 0.69001 | 2.93592*** | 0.003 | 3 | 0.06993 | 2.97445 | 1.00047 | 0.317 |
| -26 | 0.17137 | 0.86138 | 2.33896** | 0.019 | 4 | -0.07649 | 2.89796 | -1.00667 | 0.314 |
| -25 | 0.09541 | 0.95679 | 1.41098 | 0.158 | 5 | -0.08195 | 2.816 | -1.18095 | 0.238 |
| -24 | -0.05064 | 0.90615 | -0.58706 | 0.557 | 6 | 0.02226 | 2.83826 | 0.34852 | 0.728 |

| Days | AAR | CAAR | t (AAR) | Sig. (2-tailed) | Days | AAR | CAAR | t (AAR) | Sig. (2-tailed) |
|------|----------|---------|------------|-----------------|------|----------|---------|------------|-----------------|
| -23 | 0.00025 | 0.9064 | 0.004 | 0.997 | 7 | -0.08028 | 2.75798 | -1.20002 | 0.23 |
| -22 | 0.14441 | 1.05081 | 2.15958* | 0.031 | 8 | -0.03632 | 2.72166 | -0.58017 | 0.562 |
| -21 | 0.09664 | 1.14745 | 1.48737 | 0.137 | 9 | 0.0658 | 2.78746 | 0.9332 | 0.351 |
| -20 | 0.10131 | 1.24876 | 1.50986 | 0.131 | 10 | 0.01646 | 2.80391 | 0.26094 | 0.794 |
| -19 | 0.31831 | 1.56707 | 4.67981*** | 0 | 11 | 0.18266 | 2.98657 | 2.75583*** | 0.006 |
| -18 | 0.09928 | 1.66635 | 1.51398 | 0.13 | 12 | 0.18694 | 3.17351 | 2.84211*** | 0.005 |
| -17 | 0.13859 | 1.80493 | 2.19513** | 0.028 | 13 | 0.16639 | 3.3399 | 2.40912** | 0.016 |
| -16 | -0.08201 | 1.72293 | -1.28859 | 0.198 | 14 | 0.06058 | 3.40048 | 0.92149 | 0.357 |
| -15 | 0.05511 | 1.77803 | 0.82162 | 0.411 | 15 | 0.12884 | 3.52932 | 1.94520* | 0.052 |
| -14 | -0.05425 | 1.72378 | -0.8106 | 0.418 | 16 | 0.1195 | 3.64881 | 1.77056* | 0.077 |
| -13 | 0.17022 | 1.894 | 2.47454** | 0.013 | 17 | -0.01204 | 3.63678 | -0.17581 | 0.86 |
| -12 | 0.0927 | 1.9867 | 1.37041 | 0.171 | 18 | -0.01887 | 3.61791 | -0.27348 | 0.785 |
| -11 | -0.0244 | 1.9623 | -0.37412 | 0.708 | 19 | 0.10116 | 3.71907 | 1.55333 | 0.121 |
| -10 | 0.06606 | 2.02836 | 1.03552 | 0.301 | 20 | 0.05665 | 3.77571 | 0.86549 | 0.387 |
| -9 | 0.14208 | 2.17044 | 2.08382** | 0.037 | 21 | 0.07086 | 3.84657 | 1.05929 | 0.29 |
| -8 | 0.01926 | 2.1897 | 0.30515 | 0.76 | 22 | 0.0581 | 3.90467 | 0.92571 | 0.355 |
| -7 | 0.03105 | 2.22075 | 0.46975 | 0.639 | 23 | 0.10119 | 4.00586 | 1.53463 | 0.125 |
| -6 | 0.04728 | 2.26803 | 0.69295 | 0.488 | 24 | 0.13963 | 4.14549 | 2.24375** | 0.025 |
| -5 | 0.01812 | 2.28615 | 0.25951 | 0.795 | 25 | 0.10035 | 4.24585 | 1.5856 | 0.113 |
| -4 | 0.13524 | 2.4214 | 1.93898* | 0.053 | 26 | 0.14279 | 4.38863 | 2.16883** | 0.03 |
| -3 | 0.00294 | 2.42434 | 0.04369 | 0.965 | 27 | 0.15351 | 4.54215 | 2.47938** | 0.013 |
| -2 | 0.34893 | 2.77327 | 4.24493*** | 0 | 28 | 0.1594 | 4.70155 | 2.48471** | 0.013 |
| -1 | 0.14888 | 2.92215 | 2.07254** | 0.038 | 29 | 0.09018 | 4.79173 | 1.46653 | 0.143 |
| 0 | 0.15434 | 3.07649 | 1.73021* | 0.084 | 30 | 0.10283 | 4.89456 | 1.69881* | 0.09 |

*Significant at 10% level, ** Significant at 5% level,

***Significant at 1% level

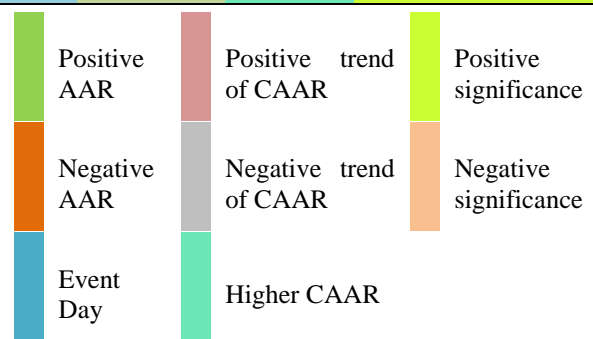


Table 2 shows CAAR around annual dividend announcement for different event windows. In the pre event window CAAR is positive and significant for (-30, 0), (-20, 0), (-10, 0) event windows (at 1% level); (-5, 0) trading days (at 5% level); (-2, 0) event window (10% level) which shows the information is absorbed in the market before the dividend announcement. After the dividend announcements the CAAR is negative for (0, +2), (0, +5), (0, +10) trading days but insignificant. The CAAR is positive and significant for (0, +20), (0, +30) trading days at 1% level of significance. The highest return of 4.89% is found for the event period (-30, +30) days during the study period. This shows that the investors could be benefited by the announcements of annual dividends for the holding periods of the event window which has resulted in significant positive returns. **Therefore the hypothesis H_2 can be accepted and inferred that the CAAR around the annual dividend announcements are significant across event windows.** The empirical results of the study are similar with studies of Adelegan (2003), Arab et al (2004), Capstaff *et al.* (2004),

Pathirawasam (2009), Akbar and Baig (2010), Chughtai (2010), Mehndiratta and Gupta (2010), Mahmood et al (2011), Taneem and Yuce (2011), Thanwarat Suwana (2012), Hoque and Mamun (2013), Sharmila et al (2016) and Joshi and Mayur (2017) which shows significant positive relationship on stock prices with the dividend payment while it is contradictory to the studies by Fama (1974), Uddin and Chowdhury (2005), Kaleem and Salahuddin (2006), Chander et al (2007), Sharma (2011), Mohammed Arif Pasha et al. (2017), Archana (2019) who found that there is no significant wealth creation for the shareholders around dividend announcements.

Table 2 CAAR around Annual Dividend Announcements for different Event Windows

(Returns in Percentage)

| Event Window (in days) | CAAR | t (CAAR) | Sig. (2-tailed) | Event Window (in days) | CAAR | t(CAAR) | Sig. (2-tailed) |
|------------------------|----------|----------|-----------------|------------------------|---------|----------|-----------------|
| (-30 , 0) | 3.07649 | 5.451*** | 0.000 | (0 , +20) | 0.85356 | 1.941* | 0.066 |
| (-20, 0) | 1.92904 | 3.936*** | 0.001 | (0, +30) | 1.97241 | 4.050*** | 0.000 |
| (-10, 0) | 1.11419 | 3.332*** | 0.008 | (-30, +30) | 4.89456 | 6.533*** | 0.000 |
| (-5, 0) | 0.80846 | 2.652** | 0.045 | (-20, +20) | 2.62827 | 3.948*** | 0.000 |
| (-2 , 0) | 0.65215 | 3.304* | 0.081 | (-10, +10) | 0.84162 | 1.708 | 0.103 |
| (0 , +2) | -0.01762 | -0.069 | 0.951 | (-5, +5) | 0.42057 | 1.210 | 0.254 |
| (0 , +5) | -0.10614 | -0.397 | 0.708 | (-2, +2) | 0.41553 | 1.865 | 0.136 |
| (0, +10) | -0.11824 | -0.417 | 0.685 | (-1, +1) | 0.16545 | 0.572 | 0.625 |

*Significant at 10% level, ** Significant at 5%

***Significant at 1% level

Positive Significance

Highest CAAR with Positive Significance

level,

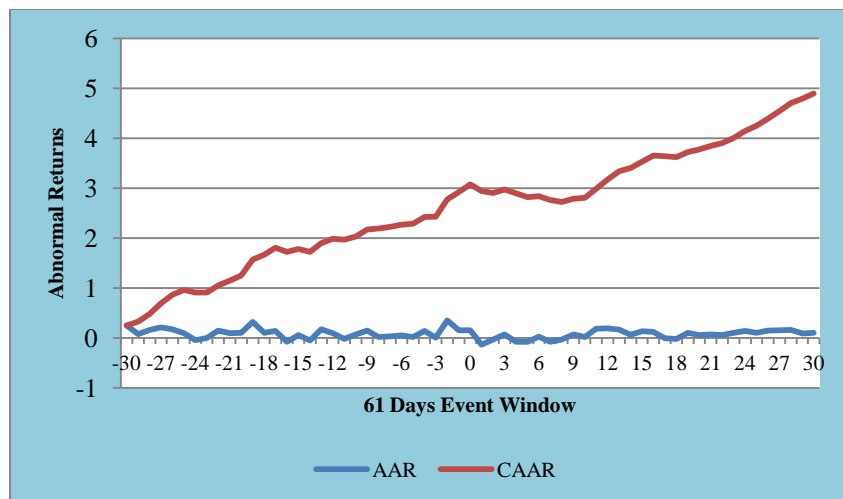


Fig 1. AAR and CAAR around the Annual Dividend Announcements

7.2 Impact of Concurrent Annual Dividends and Interim Dividends Announcements

Table 3 shows the AAR and CAAR around concurrent annual and interim/special dividend announcements. AAR is found to be positive for 22 days and negative for 8 days in before the announcement period. After the concurrent announcement of dividends AAR is positive for 23 days and negative for 7 days.

Table 3 AAR and CAAR around the Concurrent Announcements of Annual Dividends and Interim Dividends

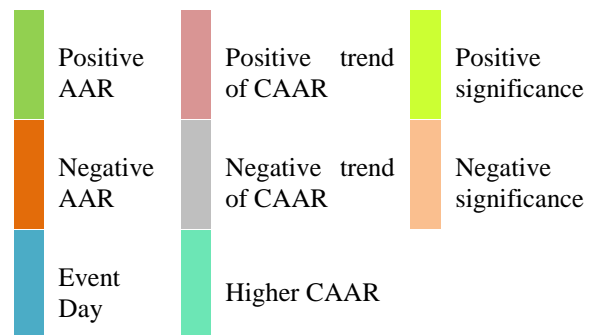
(Returns in Percentage)

| Days | AAR | CAAR | t (AAR) | Sig. (2-tailed) | Days | AAR | CAAR | t (AAR) | Sig. (2-tailed) |
|------|----------|---------|---------|-----------------|------|----------|---------|---------|-----------------|
| -30 | 0.22888 | 0.22888 | 0.717 | 0.478 | 0 | 0.41977 | 4.59266 | 0.974 | 0.336 |
| -29 | 0.10287 | 0.33174 | 0.372 | 0.712 | 1 | 0.77402 | 5.36668 | 1.245 | 0.220 |
| -28 | 0.36882 | 0.70056 | 1.143 | 0.260 | 2 | 0.58872 | 5.95541 | 1.380 | 0.175 |
| -27 | 0.17303 | 0.87359 | 0.547 | 0.587 | 3 | 0.42120 | 6.37660 | 0.873 | 0.388 |
| -26 | -0.50341 | 0.37017 | -1.655 | 0.106 | 4 | 0.54353 | 6.92014 | 1.018 | 0.315 |
| -25 | 0.05541 | 0.42559 | 0.234 | 0.816 | 5 | 0.69932 | 7.61945 | 1.575 | 0.123 |
| -24 | 0.63348 | 1.05907 | 2.104** | 0.042 | 6 | -0.00700 | 7.61246 | -0.019 | 0.985 |
| -23 | -0.03769 | 1.02137 | -0.110 | 0.913 | 7 | 0.15980 | 7.45265 | -0.686 | 0.497 |
| -22 | 0.19014 | 1.21152 | 0.507 | 0.615 | 8 | 0.02687 | 7.42578 | -0.083 | 0.935 |
| -21 | 0.18269 | 1.39421 | 0.726 | 0.472 | 9 | 0.10535 | 7.32043 | -0.413 | 0.682 |
| -20 | 0.21863 | 1.61284 | 0.548 | 0.587 | 10 | 0.15885 | 7.47928 | 0.510 | 0.613 |
| -19 | -0.07687 | 1.53597 | -0.213 | 0.832 | 11 | 0.05899 | 7.53826 | 0.186 | 0.853 |
| -18 | 0.25958 | 1.79555 | 0.843 | 0.404 | 12 | 0.47649 | 8.01476 | 1.882* | 0.067 |
| -17 | 0.57517 | 2.37072 | 1.746* | 0.088 | 13 | 0.12700 | 8.14175 | 0.373 | 0.711 |
| -16 | 0.15098 | 2.52170 | 0.593 | 0.557 | 14 | 0.16849 | 8.31024 | 0.402 | 0.690 |

| | | | | | | | | | | | |
|-----|---------|---------|---------|---------|-------|---------|----------|---------|---------|--------|-------|
| -15 | - | 0.14700 | 2.37470 | -0.499 | 0.620 | 15 | 0.11875 | 8.42899 | 0.348 | 0.729 | |
| -14 | 0.26782 | 2.64252 | 1.048 | 0.301 | 16 | - | 0.27500 | 8.15399 | -1.073 | 0.289 | |
| -13 | - | 0.16333 | 2.47918 | -0.575 | 0.568 | 17 | 0.43909 | 8.59307 | 1.247 | 0.220 | |
| -12 | 0.34795 | 2.82713 | 1.176 | 0.246 | 18 | - | 0.22833 | 8.36475 | -1.069 | 0.291 | |
| -11 | - | 0.16112 | 2.66601 | -0.582 | 0.564 | 19 | 0.11193 | 8.47667 | 0.313 | 0.756 | |
| -10 | 0.14894 | 2.81495 | 0.396 | 0.694 | 20 | 0.16060 | 8.63728 | 0.624 | 0.536 | | |
| -9 | 0.21908 | 3.03403 | 0.635 | 0.529 | 21 | 0.54371 | 9.18099 | 1.042 | 0.303 | | |
| -8 | - | 0.45934 | 2.57469 | -2.010* | 0.051 | 22 | 0.05201 | 9.23300 | 0.201 | 0.842 | |
| -7 | 0.34026 | 2.91495 | 1.437 | 0.158 | 23 | 0.49077 | 9.72377 | 1.527 | 0.134 | | |
| -6 | 0.19933 | 3.11428 | 0.499 | 0.621 | 24 | 0.05904 | 9.78280 | 0.238 | 0.813 | | |
| -5 | - | 0.17464 | 2.93964 | -0.586 | 0.561 | 25 | - | 0.12563 | 9.65717 | -0.433 | 0.667 |
| -4 | 0.02908 | 2.96872 | 0.096 | 0.924 | 26 | 0.06096 | 9.71813 | 0.190 | 0.850 | | |
| -3 | 0.37303 | 3.34175 | 1.133 | 0.264 | 27 | 0.21835 | 9.93648 | 0.855 | 0.397 | | |
| -2 | 0.00934 | 3.35109 | 0.027 | 0.979 | 28 | 0.55031 | 10.48679 | 2.228** | 0.031 | | |
| -1 | 0.82181 | 4.17289 | 1.436 | 0.158 | 29 | 0.50937 | 10.99616 | 1.815 | 0.077 | | |
| 0 | 0.41977 | 4.59266 | 0.974 | 0.336 | 30 | 0.36865 | 11.36481 | 1.303 | 0.200 | | |

*Significant at 10% level, ** Significant at 5% level,

***Significant at 1% level



Positive and significant excess returns are found on -24, and +28 days at 5% level and significant on -17, +28 days at 10% level. Larger number of positive returns reveals that concurrent annual dividend and interim announcements have conveyed favourable information to the market. **Therefore the hypothesis H_3 can be accepted and inferred that the AAR are significant around the concurrent annual and interim/special dividend announcements.** Table 3 shows a consistent increase in CAAR around the announcements in the event window. The CAAR 0.22% on -30 day has increased to 11.36% on +30 day shows a good holding period return around the concurrent dividend announcements which is clear from Fig 2.

Table 4 CAAR around the Concurrent Announcements of Annual Dividends and Interim Dividends

(Returns in Percentage)

| Event Window (in days) | CAAR | t (CAAR) | Sig. (2-tailed) | Event Window (in days) | CAAR | t(CAAR) | Sig. (2-tailed) |
|------------------------|---------|----------|-----------------|------------------------|---------|----------|-----------------|
| (-30 , 0) | 4.59266 | 2.870*** | 0.01 | (0 , +20) | 4.46438 | 3.207*** | 0.00 |

| | | | | | | | |
|----------|---------|----------|------|------------|----------|----------|------|
| (-20, 0) | 3.19845 | 2.385** | 0.03 | (0, +30) | 7.19191 | 4.535*** | 0.00 |
| (-10, 0) | 1.92666 | 1.735 | 0.11 | (-30, +30) | 11.36481 | 5.057*** | 0.00 |
| (-5, 0) | 1.47838 | 1.664 | 0.16 | (-20, +20) | 7.24307 | 3.803*** | 0.00 |
| (-2, 0) | 1.25091 | 1.778 | 0.22 | (-10, +10) | 4.81327 | 3.080*** | 0.01 |
| (0, +2) | 1.78251 | 5.808** | 0.03 | (-5, +5) | 4.50517 | 4.125*** | 0.00 |
| (0, +5) | 3.44656 | 9.756*** | 0.00 | (-2, +2) | 2.61366 | 3.560** | 0.02 |
| (0, +10) | 3.30638 | 2.936** | 0.01 | (-1, +1) | 2.0156 | 5.299** | 0.03 |

*Significant at 10% level, ** Significant at 5%

***Significant at 1% level

Positive Significance

level,

Highest CAAR with Positive Significance

CAAR around concurrent annual and interim dividend announcement for different time windows is presented in Table 4. In the pre event window of (-30, 0) days and (-20, 0) CAAR has given positive returns at 1% and 5% level of significance respectively. In the post event trading days and in the combination of different event windows positive and significant returns are found. This shows that concurrent annual dividend and interim/special dividends has created significant wealth for the investors in the event window -30 to +30 days. The highest return of 11.36% is found in event window (-30, +30) days whereas the pure annual dividend announcements have given a maximum return of 4.89% in 61 days. **Therefore the hypothesis H_4 can be accepted and inferred that the CAAR around the concurrent annual and interim/special dividend announcements are significant during the pre and post event windows.**

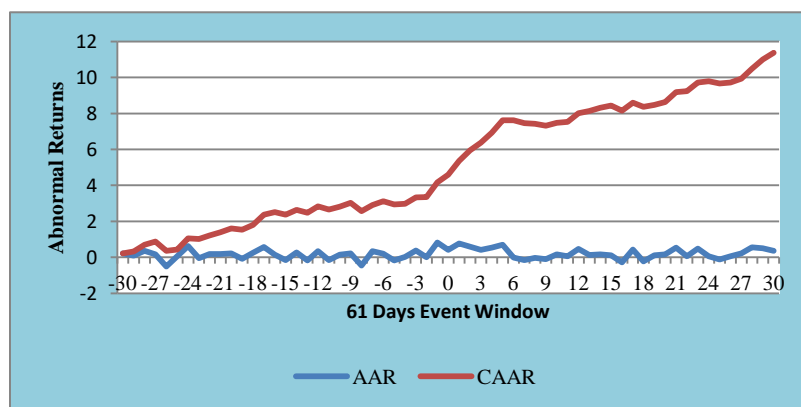


Fig 2 AAR and CAAR around the Concurrent Announcements of Interim Dividends with Annual Dividends

5. Findings and Conclusion

A large number of positive AAR around the event day (45 days) is found for annual dividends with interim/special dividend announcements. However, the AAR is found to be significant for only 4 days in the entire window. The CAAR for the annual dividends with interim/special dividend announcements is found to show positive significant returns in almost all event windows. The highest return of 11.36% is found in event window (-30, +30) resulting in annualized return of 67.97%. Whereas the pure annual dividend announcements have given a maximum return of 4.89% in 61 days, an annualized returns of 29.25%. Thus the findings shows the investors preference towards cash dividends which further strengthens the bird-in-hand theory.

The important attribute for increase in share price with dividend announcement is because dividend payment is noted as a sign of a company's financial strength and expect positive earnings in future, making the stock more attractive. Thus demand created the company's stock in a substantial manner increases its price. Therefore the concurrent announcement of annual dividends and interim dividends could increase the market capitalization of the firms and investors wealth to a larger extent because of capital appreciation. Thus the finding of the study strengthens bird-in-the-hand argument put forward by Gordon (1959) and Lintner (1962) and contradict the dividend irrelevance theory by Miller and Modigliani (1961).

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