# Stock Returns Reaction to Dividend and Earnings Announcement: Which Event Provide More Predictive Information to Investor's 

Muhammad Awais<br>Department of Banking and Finance, Govt. College University Faisalabad.<br>Muhammad Sajid<br>Lecturer at Department of Banking and Finance, Govt. College University Faisalabad.<br>Ayesha Ateeq<br>Lecturer at Department of Banking and Finance, Govt. College University Faisalabad.

Asghar Ali<br>Principal at Madina Group of Colleges


#### Abstract

The objective of this study is to reduce the uncertainty involved in firm's future earnings performance by scrutinizing the impact of dividend and earnings announcement on stock returns by assembling data from the official website of Karachi Stock Exchange (KSE) over the period 2010-2014. The study employed event study methodology to examine the effect of dividend and earnings announcement on the stock returns around the 41days event window of both pre and post announcement. The research results revealed that after the dividend announcement, stock prices move upward which is statistically significant and support the dividend signalling theory but in case of earnings announcement the persistent downward drift of stock prices in the post announcement period is observed which is statistically insignificant and offer some support for behavioral finance theory. Overall, the result confirmed that dividend announcement provide more predicative information than the earnings announcement around the firm's future earnings performance. The study have implications for investors, policy makers and shareholders for their proper strategic decision making to uncovered the uncertainty about the firm's future earnings performance.


Keywords: Dividend Announcement; Earnings Announcement; Stock Returns; Signalling Effects; Event Study.
JEL Classification: G35; G17; G32;

## 1. Introduction

Increase in firms profit's exploited for making re-investment into stock which is known as retained earnings and distributed among shareholders as cash dividend \& stock dividend based upon dividend re-investment plan (DRIP) ${ }^{1}$ of the corporations. Most frequently dividends are rewarded to shareholders in the form of cash but in the existence of best investment alternatives or when suffering from liquidity crunch, then firms will not think it to be rational to rewarded shareholders with cash dividend and go for the bonus shares and scrip dividend ${ }^{2}$. The distribution of dividend with fixed rate known as preferred dividend or with variable rate which based upon firm's current profits is known as common dividends. The distribution of firm's profit as dividend, retained earnings and taxes and found variance of dividend lower than the earnings. Moreover, dividend distribution decision based on sustainability of firm future earnings performance in long-run [1]. The amount of profits distributed among shareholders as dividend, announced by board of directors on specific period by issuing a press release before the actually payment of dividend which is known as dividend announcement date or dividend declaration date. When firms profitability increases then equity analysts issued official statement of firm profitability to public by issuing a press release on specific period which is known as earning announcement date or earning declaration date. The dividend announcement and earnings announcement are the major financial events in the life of corporations which are not only entail the company's cash flow to shareholders but also provide signal to investors about present and future performance of the company. In underdeveloped countries where economic and political conditions are not stable and investors are failure to forecast the uncertainty about firms future performance by finding the impact of these events on stock prices which ultimately are effect on firm value. The increase in stock prices increased earning proportion distributed among shareholder as dividends which exhibit great association among retained earnings and price appreciation and reason-out that earnings retention is more important for firm's growth than the dividends [2]. If companies distributed all earnings which decrease future investment opportunities which

[^0]caused decline in future dividend and also reduced stock prices. However, dividend policy followed more frequently to control the stock prices variations. The positive correlation among dividend and stock prices which provide predictive information to market regarding abnormal return on stock prices and shown positive impact on shareholders wealth which increase firm value [3,4,5,6]. Increases in corporation's profitability are announced by issuing official statement of profitability to public in press release. The information conveyed via these earnings reports same as which is pre-consolidate in stock prices and investors forecast the future earnings based on that information [7]. Another study argued that dividend did not disclosed any information to market regarding abnormal return and stock prices because future earnings are modified by observing dividend pay-out rate and rate at which actual dividends are adjusted to expected dividends which reduce information effects [8]. Only dividend announcement impart information to market because he has not found any difference between actual and expected dividend but he has found difference between actual and expected earnings [9,10]. Earnings announcement strongly influenced on stock prices around the period of announcement and increase return on stock which accurately disclosed information about earnings process of firms [11]. Change in earnings strongly influenced on investor's investment decision and to determine the return on dividend and earnings $[12,13,14,15,16]$. Both events have corresponding effect on each other because change in earning (dividend) expectation changed dividend (earning) yield [17] and provide valuable information to investors about the future performance of firms which is necessary for investment point of view to design portfolio. Change in dividend frequently changed firms' future earnings by testing Signalling and smoothing variables [18,19,20]. Dividend pay-out have substantial impact on investor's deportment and constant dividend leave stock price unchanged [21]. Increase in earnings based upon the firm's performance which provide chance to investor's to increase their return above average [22]. Increase in earnings caused more stock return because return on earnings depend upon other macro-economic factors. The positive stock price reaction to dividend and earnings announcement are determined which are supportive for investors in decision making [23]. The size of firm has significant effect to ascertain the correlation among dividend pay-out and earnings growth [24]. Usually smaller firms paid more cash dividend which reduced agency cost but increased stock prices which offer enthusiastic view of the firms and decrease in stock dividend established positive relation among dividend yield and firm's future expected earnings. On the other hand, earnings announcement has no impact on stock prices due to increasing the volume of trade during the period of announcement and lower abnormal return during the period of announcement [25,26]. Frequently traded firms revealed positive relation among stock price and dividend announcement across the firms traded less actively which exhibit negative abnormal returns [27]. The encroachment of dividend announcement on stock return are inspected Suwanna (2012) and found if dividend increases then stock return will also increases which exhibit positive relation between them and Dividend Signalling Theory have substantial impact on stock returns [ $3,10,20,28,29]$. The purpose of the study is to determine the effect of dividend and earnings announcement on stock returns in Pakistan under structural changes in dividend and income distribution methods which provide guidance for investor's by signalling effect and confirm that which event provide more predictive information to investor's about the firm's future earnings performance in Pakistan. Our study is typically paying attention on investor's deportment to uncovered uncertainty involved in the Pakistani firms about future earnings performance which will assist firms to make informed decision concerning investment. The stock price reaction to dividend and earnings announcement changed the investor's deportment regarding investment decision in Pakistan. The paper organized as follows. The section two contain material and methods. In section three discuss about the empirical results and discussion. Section five, conclusion will be draw from the findings, followed by limitations and future directions.

## 2. Material and Methods

In this study for practical implementation we selected 92 companies having more capitalization and listed on Karachi Stock Exchange of Pakistan (KSE) in KSE-100 Index across the period from 2010 to 2014. The reason of selecting these companies is that only those firms regularly announced dividend and earnings having more capitalization and increasing their earnings and dividend yield which are necessary to analyze the impact of dividend announcement and earnings announcement on stock prices. The companies included in sample met following criteria:

- Only, final dividend and earnings announcement are used during the event window, no interim, special dividends and extra ordinary dividend were included.
- Financial year of the companies must ended on June 30.
- During the event period, the companies should not change their accounting period.
- During the period the companies should be listed on Karachi Stock Exchange (KSE).
- To avoid confounding effects, other contemporaneously announced corporate events such as share issues, bonus share, stock splits, and share repurchases were excluded from the final sample in the event window of 41 -days (20-days before and 20-days after) the dividend and earnings announcement date.

The first step is downloading of corporate announcements from KSE official website and then filtering dividends and earnings announcements of those companies listed in KSE. The financial information such as stock prices are extracted from the official website of Karachi Stock Exchange (KSE) and from other commercial website such as business recorder over the period of 03 May, 2010 to 28 July, 2014. The stock returns (SR) are taken as dependent variable which are derived from stock prices (SP) and it is the closing price of stock (at the end of the day) which are extracted directly from the official website of Business Recorder. The dividend \& earnings announcement are taken as independent variables where date of both announcements are used as an event window to check their impact on stock prices.

### 2.1 Hypothesis of the Study

## Hypothesis 1

$\mathbf{H}_{0}$ : Dividend announcement has no impact on stock returns and not provide predictive information.
$\mathbf{H}_{1}$ : Dividend announcement has an impact on stock returns and provide predictive information.
Hypothesis 2
$\mathbf{H}_{\mathbf{0}}$ : Earnings announcement has no impact on stock returns and not provide predictive information.
$\mathbf{H}_{1}$ : Earnings announcement has an impact on stock returns and provide predictive information.

## 3. Methodology

Mostly, event study methodology is used in finance research as it is designed to investigate the relevance and magnitude of certain event such as financial and natural events on specified dependent variables. According to Kalay and Loewenstein (1985) event study is a best technique used to measure the valuation effects of corporate financial events, such as earnings and dividend announcement [ $10,20,30,31,32$ ]. The main purpose of using this methodology is to evaluate difference between the security returns and expected return which given by the model. The study related to finance under the event study mostly include stock prices as dependent variables. For an every event study it is necessary to pre-defined the event periods which is expressed as $(t=0)$ because after occurring the event the next day is very first trading day and then determining the returns according to that periods by designing an event window of 41 -days, before and after the event ( -20 days, +20 days). Once event period is define then returns generating model is employed respectively for simple and compound returns. The daily closing prices help to measure the pre and post stock prices returns in a 41-days event window. To estimate stock prices response first calculate log-returns which give a compound returns because it is theoretically better when combined the subperiod return to form returns over larger period by using this formula:

$$
\begin{equation*}
\mathrm{R}_{\mathrm{i}, \mathrm{t}}=\ln \left(\frac{\mathrm{P}_{\mathrm{i}, \mathrm{t}}}{\mathrm{P}_{\mathrm{i}, \mathrm{t}-1}}\right) \times 100 \tag{1}
\end{equation*}
$$

Where:
$\mathrm{R}_{\mathrm{i}, \mathrm{t}}=$ Actual return or security return for share i at day t .
$\mathrm{P}_{\mathrm{i}, \mathrm{t}}=$ Daily closing price of share i at day t .
$P_{i, t-1}=$ Daily closing price of share i at day $t-1$.
Another formula is also used to calculate simple return as:
This is more suitable for short time period.

$$
\begin{equation*}
R_{i, t}=\left(\frac{P_{i, t}-P_{i, t-1}}{P_{i, t-1}}\right) \times 100 \tag{2}
\end{equation*}
$$

Where:
$\mathrm{R}_{\mathrm{i}, \mathrm{t}}=$ Actual return or security return for share i at day t .
$\mathrm{P}_{\mathrm{i}, \mathrm{t}}=$ Daily closing price of share i at day t .
$P_{i, t-1}=$ Daily closing price of share i at day $t-1$.
The abnormal or residual returns AR are known as the actual return which are calculated by using arithmetic percentages less the predicted returns of all the firms listed in KSE-100 index. The overall stock prices of KSE100 index is known as market prices which are extract from Karachi Stock Exchange (KSE). Various empirical models are used by the researchers over the number of years to estimate abnormal performance of any given event. The most commonly used model is market adjusted return model.

### 3.1 Market-Adjusted Return Model

In numerous study market model are used which have an explicit account of risk elements associated with means of actual and market returns [27,31,33]. In this study the Market Adjusted Return Model are employed to determine the abnormal returns. Another reason of using this model is that it is error-proof and avoids all extra computations involve in forecasting of security beta which is also use as assumption of Capital Asset Pricing Model (CAPM) and considered expected return of securities equal to the market return which shown constant return but it is not constant over the period, i.e. the value $\alpha$ and $\beta$ are set equal to 0 and 1 respectively. Under all above mention circumstances we employed market adjusted return model to forecast the actual and expected returns on stock
prices for comparison by using the estimation window.
This is mathematically expressed as:

$$
\begin{equation*}
\mathrm{R}_{\mathrm{i}, \mathrm{t}}=\mathrm{R}_{\mathrm{m}, \mathrm{t}} \tag{3}
\end{equation*}
$$

Where:
$\mathrm{R}_{\mathrm{it}}=$ The expected return
$\mathrm{R}_{\mathrm{mt}}=$ The return of the market portfolio
The Market Adjusted Return Model are employed to calculate the expected returns by using following formula as:

$$
\begin{equation*}
E\left(R_{i, t}\right)=\left(\alpha_{i}+\beta_{i} R_{m, t}+e_{i, t}\right) \tag{4}
\end{equation*}
$$

Where:
$\mathrm{E}\left(\mathrm{R}_{\mathrm{i}, \mathrm{t}}\right)=$ Expected return on share i at day t .
$\alpha_{\mathrm{i}}, \beta_{\mathrm{i}}=$ Market model parameters.
$\mathrm{e}_{\mathrm{i}, \mathrm{t}}=$ Random error term.
After determing stock returns then calculate abnormal returns for each share by following equation as:

$$
\begin{equation*}
A R_{i, t}=R_{i, t}-E\left(R_{i, t}\right) \tag{5}
\end{equation*}
$$

Where:
$A R_{i, t}=$ Abnormal or excess return of share $i$ at day $t$.
$R_{i, t}=$ Actual return or security return for share $i$ at day $t$.
$E\left(R_{i, t}\right)=$ Expected return on share $i$ at day $t$.
After calculating abnormal return of all the sample firms which have more capitalization then overall KSE-100 index returns considered to be market returns. The average abnormal returns (AAR) for each day is calculate as:

$$
\begin{equation*}
\mathrm{AAR}_{\mathrm{i}}=\frac{1}{\mathrm{~N}} \sum_{\mathrm{i}=1}^{\mathrm{N}} \mathrm{AR}_{\mathrm{i}, \mathrm{t}} \tag{6}
\end{equation*}
$$

Where:
$\mathrm{N}=$ Number of observation.
$\mathrm{AR}_{\mathrm{i}, \mathrm{t}}=$ Abnormal or excess return of share i at day t .
$A A R_{i}=$ Average abnormal return of share i.
Finally cumulative average abnormal return (CAAR) is determine by the sum of average abnormal return over each day in the event window as:

$$
\begin{equation*}
\mathrm{CAAR}_{\mathrm{T}}=\sum_{\mathrm{i}=1}^{\mathrm{T}} \mathrm{AAR}_{\mathrm{i}} \tag{7}
\end{equation*}
$$

Where:
CAAR $_{t}=$ Cumulative average abnormal return of each day $t$.
$A A R_{i}=$ Average abnormal return
The study used two possible ways to investigate the impact of both events on stock prices, first is graphical representation and other is $t$-statistics test which are used to check the significance of daily abnormal returns.
The study used following equation to check the significance level:

$$
\begin{equation*}
\mathrm{t} \text {-Statistics }=\mathrm{AAR}_{\mathrm{t}} * \mathrm{~N}^{0.5} / \mathrm{S}^{2} \mathrm{D}_{\mathrm{t}} \tag{8}
\end{equation*}
$$

Where:
$\mathrm{N}=$ Degree of Freedom.
$\mathrm{AAR}_{\mathrm{t}}=$ Average abnormal return at time t.
The significance level of CAARs is also determined by t-statistics equation as:

$$
\begin{equation*}
\mathrm{t} \text {-Statistics }=\mathrm{CAAR}_{\mathrm{t}} * \mathrm{~N}^{0.5} / \mathrm{S} . \mathrm{D}(\text { ARs }) \tag{9}
\end{equation*}
$$

Where:
$\mathrm{N}=$ Degree of freedom
$\mathrm{CAAR}_{\mathrm{t}}=$ Cumulative average abnormal return at time t .
S. $D_{t}=$ Standard deviation of abnormal return at time $t$.

## 4. Results and Discussion

A careful observation of the findings presented in Table I which show that CAARs is increased after dividend announcement event i.e. the CAARs after dividend announcement is 0.733 on event day (day 0 ) which is increased up to 1.051 on day +1 and CAARs after earnings announcement is 2.253 on event day (day 0 ) which is decrease up to 2.242 on day +1 as illustrated in Figure 1. The overall result show that change in CAARs in post announcement days after the dividend announcement and has more explanatory power in the market which are clearly observed by their fluctuation.


Fig. 1: CAARs of Market Returns after Announcement
Figure 1 presented that after event day (day 0 ) on day +1 the CAARs after dividend announcement is increased which is visually inspected by fluctuation of curve upward, and CAARs after earnings announcement is decreased after event day (day 0 ) on day +1 with minor value which is observed by curve that is downward.

| Dividend Announcement |  |  | Earnings Announcement |  |
| :---: | :---: | :---: | :---: | :---: |
| Days | CAARs | t-test | CAARs | t-test |
| -20 | 0.0356 | 0.3905 | -0.0290 | -0.3514 |
| -19 | 0.0934 | 0.6506 | 0.2245 | 1.7786 |
| -18 | 0.1642 | 1.0044 | 0.3059 | 1.9387 |
| -17 | 0.1564 | 0.7744 | 0.3520 | 1.9702 |
| -16 | 0.1090 | 0.4483 | 0.5019 | 2.2809 |
| -15 | 0.1043 | 0.4071 | 0.5617 | 2.4664 |
| -14 | 0.0493 | 0.1633 | 0.6607 | 2.4394 |
| -13 | 0.2052 | 0.6467 | 0.8533 | 2.9263 |
| -12 | 0.3685 | 1.0621 | 1.0140 | 3.0699 |
| -11 | 0.2850 | 0.7385 | 1.1908 | 3.5263 |
| -10 | 0.2901 | 0.6751 | 1.2350 | 3.3944 |
| -9 | 0.4412 | 0.9698 | 1.3510 | 3.6051 |
| -8 | 0.6032 | 1.3127 | 1.5609 | 3.9162 |
| -7 | 0.6525 | 1.3791 | 1.6683 | 4.1173 |
| -6 | 0.7767 | 1.5961 | 1.7085 | 3.9100 |
| -5 | 0.7980 | 1.6371 | 1.8268 | 4.2504 |
| -4 | 0.7550 | 1.4782 | 1.8103 | 4.0861 |
| -3 | 0.7401 | 1.4056 | 1.8547 | 4.1095 |
| -2 | 0.7134 | 1.2895 | 1.9190 | 3.9500 |
| -1 | 0.7503 | 1.2940 | 2.0725 | 4.1907 |
| 0 | 0.7335 | 1.2232 | 2.2535 | 4.5514 |
| 1 | 1.0518 | 1.7475 | 2.2426 | 4.4112 |
| 2 | 1.2784 | 2.0601 | 2.2072 | 4.1411 |
| 3 | 1.2945 | 2.0452 | 2.2550 | 4.1284 |
| 4 | 1.3983 | 2.1337 | 2.3911 | 4.2719 |
| 5 | 1.4104 | 2.1127 | 2.4051 | 4.1519 |
| 6 | 1.4005 | 2.0418 | 2.3251 | 3.8943 |
| 7 | 1.3170 | 1.9041 | 2.2727 | 3.7804 |
| 8 | 1.5214 | 2.1978 | 2.1962 | 3.5980 |
| 9 | 1.5599 | 2.1537 | 2.3326 | 3.7916 |
| 10 | 1.7351 | 2.4149 | 2.3755 | 3.7774 |
| 11 | 1.9337 | 2.6763 | 2.4968 | 4.0106 |
| 12 | 2.0569 | 2.8134 | 2.6317 | 4.2743 |
| 13 | 2.1540 | 2.9248 | 2.6295 | 4.2576 |
| 14 | 2.3423 | 3.1633 | 2.7099 | 4.3191 |
| 15 | 2.4636 | 3.2646 | 2.8492 | 4.4828 |
| 16 | 2.5284 | 3.3011 | 2.9671 | 4.5775 |
| 17 | 2.7069 | 3.4908 | 3.1080 | 4.8065 |
| 18 | 2.9493 | 3.8311 | 3.2758 | 5.0037 |
| 19 | 2.9932 | 3.8457 | 3.3980 | 5.1302 |
| 20 | 3.1135 | 4.0322 | 3.5772 | 5.3392 |

Notes: This table displays the cumulative average abnormal returns (CAARs) after dividend and earnings announcement ( $\mathrm{p}<.01$ ). In case of earnings announcement show CAARs is statistically insignificant.

Table I: Market CAARs after Dividend and Earnings Announcement

On the whole the earnings announcement curve is upward in direction because the returns of stocks prices after the both events fluctuate not with same ratios. The $t$-statistics result also shown that $t$-value after dividend announcement is 1.223 on event day (day 0 ) which is increased after the announcement on day $+1(t=1.747)$ and $t$-value of CAARs on event day (day 0 ) is 4.551 which is decreased 4.411 on day +1 as illustrated in Figure 2.


Fig. 2: t-Statistics of CAARs of Market Returns after Announcement
The CAARs of all the sample firms after dividend and earnings announcement are illustrated in Figure 3 and Table II. The CAARs after dividend announcement is increased but after earning announcement the CAARs is decreased. i.e. the CAARs of sample firms on event day (day 0 ) is 0.289 and after the dividend announcement on day +1 the CAARs is 0.666 which have an increasing tendency. The behaviour of CAARs for our sample firms after the earnings announcement are illustrated in Figure 3 and Table II. i.e. the CAARs of sample firms on event day (day 0 ) is 0.333 after the earnings announcements on day +1 the CAARs is 0.316 which is statistically insignificant.


Fig. 3: CAARs of KSE-100 Index firms after Announcement
The $t$-statistics result also shown that the $t$-value of CAARs on event day (day 0 ) is 0.622 and after dividend announcement on day +1 the $t$-value of CAARs is 0.716 which statistically significant.

The $t$-statistics result also shown that the $t$-value of CAARs on event day (day 0 ) is 0.622 and after dividend announcement on day +1 the $t$-value of CAARs is 0.716 which statistically significant. But in case of earnings announcement the $t$-value of CAARs on event day (day 0 ) is 0.898 and after the event day on day +1 the CAARs is 0.860 which is statistically insignificant as illustrated in Figure 4 and Table II.

Table II: CAARs of KSE-100 Index firms after Dividend \& Earnings Announcement

|  | Dividend Announcement |  | EarningsAnnouncement <br> Days |  |
| :--- | :--- | :--- | :--- | :--- |
| CAARs | t-test | CAARs | t-test |  |
| -20 | 0.0204 | 0.2557 | 0.1411 | 1.9315 |
| -19 | 0.0291 | 0.2421 | 0.0160 | 0.1357 |
| -18 | 0.0142 | 0.0949 | 0.0759 | 0.4872 |
| -17 | 0.0680 | 0.3638 | 0.1617 | 0.8861 |
| -16 | 0.1811 | 0.7967 | 0.1565 | 0.6953 |
| -15 | 0.1610 | 0.6440 | 0.2511 | 1.0523 |
| -14 | 0.2401 | 0.8865 | 0.2916 | 1.1110 |
| -13 | 0.1887 | 0.6991 | 0.2581 | 0.9791 |
| -12 | 0.0866 | 0.3093 | 0.2537 | 0.9583 |
| -11 | 0.1895 | 0.6346 | 0.2170 | 0.7799 |
| -10 | 0.1723 | 0.5456 | 0.3066 | 1.0782 |
| -9 | 0.0986 | 0.3101 | 0.2389 | 0.8267 |
| -8 | 0.0414 | 0.1268 | 0.1696 | 0.5730 |
| -7 | 0.0760 | 0.2258 | 0.1742 | 0.5701 |
| -6 | 0.0484 | 0.1414 | 0.2543 | 0.8068 |
| -5 | 0.1073 | 0.3112 | 0.2658 | 0.8552 |
| -4 | 0.1764 | 0.4762 | 0.3909 | 1.2021 |
| -3 | 0.1699 | 0.4381 | 0.3949 | 1.1484 |
| -2 | 0.2624 | 0.6567 | 0.4501 | 1.2594 |
| -1 | 0.2464 | 0.6230 | 0.3941 | 1.0884 |
| 0 | 0.2891 | 0.7162 | 0.3336 | 0.8985 |
| 1 | 0.6667 | 1.7272 | 0.3160 | 0.8608 |
| 2 | 1.0023 | 2.6468 | 0.3832 | 1.0632 |
| 3 | 0.9800 | 2.6240 | 0.3642 | 1.0057 |
| 4 | 0.9055 | 2.4406 | 0.3536 | 0.9555 |
| 5 | 0.9261 | 2.5007 | 0.4076 | 1.0679 |
| 6 | 1.0613 | 2.7757 | 0.4994 | 1.2069 |
| 7 | 1.1975 | 3.1022 | 0.5143 | 1.2337 |
| 8 | 1.1341 | 2.7746 | 0.6269 | 1.4434 |
| 9 | 1.2242 | 2.9248 | 0.4940 | 1.0750 |
| 10 | 1.0903 | 2.5205 | 0.4313 | 0.8987 |
| 11 | 0.9176 | 2.1379 | 0.2505 | 0.5268 |
| 12 | 0.7923 | 1.8621 | 0.0705 | 0.1507 |
| 13 | 0.7045 | 1.6872 | 0.0818 | 0.1819 |
| 14 | 0.5559 | 1.3198 | -0.0119 | -0.0262 |
| 15 | 0.4600 | 1.1164 | -0.1840 | -0.4194 |
| 16 | 0.4938 | 1.1634 | -0.2299 | -0.5107 |
| 17 | 0.3812 | 0.9213 | -0.3380 | -0.7727 |
| 18 | 0.2246 | 0.5272 | -0.3965 | -0.8872 |
| 19 | 0.2625 | 0.6009 | -0.4369 | -1.129300 |
| 20 | 0.2218 | 0.4817 | -0.5396 |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Notes: This table displays the cumulative average abnormal returns (CAARs) and their $t$-statistics after dividend and earnings announcement ( $\mathrm{p}<.01$ ). In case of earnings announcement show CAARs is statistically insignificant.


Fig. 4: t-statistics of CAARs of KSE-100 Index firms after Announcement
Several interesting points regarding findings are emerged in this study. It is imperative to state that dividend announcement have an explanatory power of information which are characterized by Karachi Stock Exchange (KSE). The significant AARs and CAARs are recorded in the post dividend announcement period which disclosed the information in the market which support to dividend Signalling theory and alternative hypothesis that dividend announcement have an impact on stock returns. As Gordon (1959) point out that dividend and stock prices have positive correlation which provide predictive information to investors [9,10,35]. According to our study there is negative correlation between information in content of earnings and stock prices. Su (2003) reviewed that earnings information are based upon on the firm size because largest firms provide more accurate financial and earnings information [22]. Louhichi (2008) reason-out that during earnings announcement volume of trade is high abnormally but no impact on stock prices. On the whole of our findings suggested that stock returns response to earnings announcement not disclouse information randomly from the sample of firms in our study which offer some support for the behavioral model.

## 5. Conclusion

The study has focused on examining the stock prices reaction to dividend and earnings announcement of all the firms whose stocks are traded on Karachi Stock Exchange (KSE) in KSE-100 Index over the period of 2010-2014. While not the first study to empirically analyzed the impact of dividend and earnings announcement on stock prices, but our study is a first attempt in Pakistan to evaluate the effect of both events on stock prices and which event provide more predictive information to investors regarding the firms future earnings performance. The stock prices of all the sample firms and KSE-100 Index has been taken to conduct an event study methodology for empirically analysis, here KSE-100 Index is used as benchmark in order to determine the abnormal returns via market adjusted returns model. The impact of both events on stock prices are examined by taking the event window of 41 day, 20 -day before and event 20 -day after the event i.e. $(-20,+20)$. Moreover, we employed $t$-statistics to check the significant level of stock prices reaction. The empirical results show that dividend announcement have a statistically significant impact on stock prices which support the dividend Signalling theory and alternative hypothesis that, dividend announcement have positive impact on stock prices because when the news of dividend announcement spread in the market then on the very next day stock returns is increased which provide signal to investor's about firms future earnings performance which change the investor's deportment. Our finding is consistent with the results of previous study by Suwanna (2012) and Gurgul et al. (2003). Similar to prior studies, the empirical findings seems to reveal the significant explanatory power. Moreover, our results are consistent with earlier empirical studies in various countries such as UK, U.S, China, Nigeria, Thailand, Denmark, Japan, Germany and Amman regarding stock prices behaviour to dividend announcement. The study also assessed the information around the firm's future earnings performance and worth of earnings released to investors on KSE, by analyzing the stock prices reaction to earnings announcement. Our findings shows that earnings announcement have a statistically insignificant impact on stock prices which fail to reject the null hypothesis that earnings announcement have no impact on stock prices. The observation that stock prices decreased in the post announcement period also offers some support for random walk theory and behavioral finance theory. Overall, the findings of my study suggested that stock prices variations in Pakistan with respect to earnings announcement are not random but follow the pattern which reduced the ARs and CAARs around the periods of earnings announcement, this result is not contrast, it should similar with previous findings of Afego, (2013) which is that earnings announcement have no impact on stock prices. Overall, our results indicates that dividend announcement have more impact on stock prices and provide more predictive information's in content of firms future earnings performance via Signalling effect than the earnings announcement because stock returns increased in post announcement period of dividend
announcement which is statistically significant but in case of earnings announcement stock returns decreased in the post announcement period which is statistically insignificant and negative. The study has a number of limitations, most notably that only small number of firms regularly announced dividend. In addition, in Pakistan there is no official source to extract the exact dates of financial events such as dividend and earnings announcement. The market must be efficient for event study methodology to observe an impact of events on the stock prices. It can't be guaranteed however, the firm's used as sample in the study meeting the assumptions or not so the results may biased. The size of firms not put into consideration for the sample firms because some individual stock holding firm provide less information to investors than the large institution which provide more accurate information about the firm's future earnings performance. The empirical findings of this study have practical implications for investors, policy makers and shareholders. In particular, potential investors can exploit the significant abnormal return around the dividend announcement than the earnings announcement. Our study is typically paying attention on investor's deportment to uncovered uncertainty involved in the Pakistani firms about future earnings performance which will assist firms to make informed decision concerning investment which ultimately rises the growth of the country. After reviewing the methodology, empirically findings and conclusion of the study, future research should be directed to improve and continue the research in this field. Some important and relevant recommendations are to expand the area of research might be required large sample size to analyze the effects of events in order to provide more comprehensive evidence. Use different models of analysis i.e. GARCH and SKEW test in order to check the significance level if any changes are observed in the study.

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[^0]:    ${ }^{1}$ A plan offered by corporations to shareholders for the reinvestment of cash dividend in purchasing of additional share such as bonus share or fractional shares on the date of announcement.
    ${ }^{2}$ Other name of stock dividend in which additional shares are issued to existing shareholder in the form of stock against the dividend payment.

