

Impact of Dividend Announcements on Stock Prices of UK Firms Listed in London Stock Exchange

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Abstract

The aim of this paper is to explore the possible relationship between dividend announcement and stock price reactions upon announcements by the quoted firms in London Stock Exchange (LSE). For the sake of this study, an event-study methodology was employed to calculate any abnormal or excess returns around dividend announcements for 100 firms listed in the LSE over a period of 5 years (2010-2014).

The result of the event study indicates that dividend announcements do not convey information to investors (Khan, 2011). The researcher concludes by saying that dividend announcements do not convey any information to share prices, which is in consonance with the M-M Dividend Irrelevance Theory.

Keywords: Dividend Announcement, Signalling Hypothesis, Stock Prices, Event-Study Methodology, London Stock Exchange

Introduction

Dividend decision of the firm is a crucial area of financial management (Pandey, 1998). It is the third major financial decision that every financial manager must make for the growth and survival of his or her business (Pandey, 1998). It is one of the areas in finance where controversy exists and needs to be resolved. John and Williams (1995) opined that dividend is informative and could drive market value of shares up. However, Lorderer and Mauer (1992) asserted that firms, which adopt increasing or constant dividend policy, tend to experience an adverse reaction upon news of issuance of stocks. This empirical evidence has raised a lot of doubts about dividend announcements as it was well documented in Aharony and Swary, 1980; Asquith and Musllins, 1983; Kalay and Loewenstein, 1985 that dividend announcement carries information content and always induces investors to purchase shares.

This paper argues that dividend announcement has an informational content and causes a share price to fluctuate. Previous studies did not attempt to investigate other factors behind the fluctuations in the market value of shares. Miller and Modigliani (1961) argued that dividend policy is irrelevant and does not affect the value of the firm. The basis for their proposition was that both dividend and investment decisions are made simultaneously and as such, it does not matter the pattern of dividend chosen by a firm. However, we know that dividend is paid when there is no profitable investment available and as such, it becomes a passive residual. When this happens, dividend payments lag earnings by one period. Similarly, when dividend announcement is made together with issuance of fresh shares, it becomes so difficult for investors to disentangle the informational content of the dividend due to their believe that firms are raising capital and as such, it will not reveal the information at that time.

Therefore, in order to test this argument, data from the United Kingdom were used because most quoted firms in the London Stock Exchange (LSE) pay dividend at different intervals. Thus, prospective investors are able to tell whether fluctuations in the shares were because of the dividend announcements or other factors.

In addition, it is believed that dividend payments are rigid in developed markets compared to emerging markets (Aivazian et al., 2003), which makes it difficult to adjust dividends. Again, agency problems are not pronounced in developed countries compared to developing ones.

The aim of this paper is to investigate the impact of dividend announcements on share prices of 100 sampled firms quoted in the LSE.

The study was centred on companies quoted in the LSE under FTSE-All-Share Index. The LSE is the oldest stock exchange in the world. It has played a pivotal role in the

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shaping of security market. LSE comprises of FTSE 100, FTSE 250, FTSE 350, and FTSE ALL-SHARE Index, each having its constituents and FTSE ALL-SHARE index making up the entire company in the market. The researcher based his study on stocks of 100 companies quoted in the LSE. Thereafter, a stratified random sampling was done of which 100 companies were chosen based on their market capitalisation to avoid biased exclusion of small-cap companies and examine what happens to their share prices upon announcements. In addition, the researcher examines what happens to share prices upon change in dividend and ascertains whether change in dividend is associated with change in share prices.

This paper contributes to the related previous studies in many ways. First, it points out that dividend announcement does not convey any information to investors. Secondly, it has highlighted the behaviour of stock prices before, around, and after announcements. Lastly, it compares the result of this study with previous studies in order to bridge the gap.

The rest of this paper is organized as follows. Section 2 discusses the review of related literatures. Section 3 describes methodology. Section 4 discusses data analysis and findings. Section 5 presents the conclusion of the paper.

Review of Related Literature

This section of the study examines and evaluates various contributions made by scholars on this topic – the impact of dividend announcements on firm share prices.

Theoretical Framework

The debate on the relevance of dividends to the value of the firm started as far back as 1961 in a seminal work carried by Miller and Modigliani entitled “Dividend Policy, Growth, and the valuation of shares” that was published in *The Journal of Business* in 1961. In this paper, Modigliani and Miller (M-M) believe that under a perfect market situation, the dividend policy of a firm is irrelevant as it does not affect the value of the firm (Khan, 2011). They argued that the value of the firm depends on the firm’s earnings, which result from its investment policy. Thus, when investment decision of the

firm is given, dividend decision is of no significance in determining the value of the firm. The theory upon which this work is based on the signalling hypothesis of dividend announcements. According to the theory, dividends appear to act as an important conveyor of information about companies. An unexpected change in the dividend is regarded as a sign of how the directors view the future prospects of the firm. An unusual increase in the dividend is often taken to indicate an optimistic view about future profitability. A declining dividend often signals that the directors view the future with some pessimism (Khan, 2011). The importance of the dividend as an information-transferring device occurs because of a significant market imperfection known as information asymmetry (Khan, 2011). That is, managers know far more about the firm’s prospect than the finance providers do (Bhattacharya, 1979; Bhattacharya, 1980). Managers in practice may not share complete information with shareholders. This leads to several conflicts between managers and shareholders. The dividend policy of a company helps to reduce the conflicts arising from information asymmetry. It is argued that companies, which pay dividends on a regular basis, may be raising capital more frequently from the primary markets. Dividend pay-out also allocates financial resources in favour of shareholders as against lenders. Lenders have prior claims over a company’s cash flows generated internally. The payment of dividend changes this priority in favour of shareholders as they receive cash flows before the loan principals of the lenders are redeemed (Pandey, 1998).

‘The irrelevance argument has been widely criticised because of its assumption that information about companies is available to all investors’ (Khan, 2011, p. 76). ‘This information content hypothesis suggests that in a world of information asymmetry, where managers know more about their company’s future prospects than outsider stakeholders, a change in dividend may convey information about the future performance of the firm’ (Bhattacharya, 1980, p. 37).

Empirical Framework

Pettit (1972) tried to provide evidence for the hypothesis that changes in dividend levels convey important information to market participants. He collected the announcement dates of all dividend changes for a set

of 625 New York Stock Exchange firms for the period from January 1964 to June 1968. There were around 1,000 dividend change announcements by these firms during that period. He divided his sample into several portfolios according to the degree of dividend change and trends of earnings change. He tested the abnormal return around the dividend announcement date for 14 portfolios of multiple aspects of dividend and earnings and found that the market reacts primarily to significant increases or decreases in dividend announcements. He showed that the stock price reflects all information that will enable an investor to make a wise decision. Thus, the announcement of a change in the dividend would be quickly reflected in the share price, either increasing or decreasing according to the change in dividend.

Aharony and Swary (1980) tried to ascertain if quarterly dividend changes provide information beyond that is already provided by quarterly earnings announcements, and found that the market's reaction to a dividend increase is positive, and negative for dividend decrease.

Kane, Lee, and Marcus (1984) studied the market's reaction to earnings and dividend announcements advertised within 10 days of each other. They used a sample consisting of 352 observations of quarterly dividend and earnings announcements between fourth quarters in 1979 and second quarter in 1981 and found that changes in dividends and earnings have a significant positive relationship with the cumulative abnormal return around the announcements. Mallikarjunappa & Manjunatha (2009) studied stock price reactions to dividend announcements in Indian market and found that 'average abnormal returns do not equate to zero on the announcement day while cumulative average abnormal returns fluctuates significantly'. They conclude by saying that Indian market is not efficient in semi-strong form. Ali, Jan, and Sharif (2015) carried out a study on the effects of dividend policy on stock prices and found that dividend conveys information on the stock prices, which makes it to fluctuate. In a similar vein, Nishat & Irfan (2001) conducted a study on dividend policy and stock price volatility in Pakistan and found that dividend policy affects stock prices.

Methodology

The study examines the impact of dividend announcements on the share prices of firms quoted in the LSE over the period of 5 years. An event-study methodology was employed to calculate the normal and abnormal returns upon dividend announcements dates to identify the reactions of the share upon information arrival in the market.

Data and Sample Selection

The sample was arranged through active equity companies in the UK pound whose base date goes back to 1/1/2008 (in order to obtain 5-year data from 2008 to 2012). There are 602 companies quoted in the LSE under FTSE –All-SHARE INDEX as at 04/04/2013 of which 100 were chosen across various sectors through a stratified random sampling method for the purpose of the study.

The daily share prices data from 2008 up to 2014 were used for calculating the alpha and beta of the market model.

Empirical Findings

Appendix A documents the abnormal and excess returns for the 21-day event period around the dividend announcement dates. 'The median as well as mean abnormal and excess returns were calculated in case any outliers in the data biased the average values reported' (Khan, 2011, p. 122). The root-mean-square deviations are recorded to give an indication of how spread out the abnormal and excess returns is around the mean values (Khan, 2009). A *t*-test statistics was used to determine the statistical significance of mean values while a non-parametric Wilcoxon signed-rank test was used to investigate the significance of the mean values (Celsing, 2017).

A number of findings emerged from study as shown in Table 4.1.

First, there was no significant share price reaction upon dividend announcement on day t_0 . The mean abnormal

return for the 5 years under consideration are -0.78% , 5.33% , -0.81% , -0.88% and -0.98% . However, the mean abnormal returns in the last 5 years given the p -value were higher than the 5.0% critical value. Thus, given the null-hypothesis stated that, there is no significant relationship between dividend announcement and share price. In addition, the null-hypothesis cannot be rejected (Khan, 2009).

However, the outcome of this study suggests that on the announcement day, dividends do not appear to signal any information to investors, which will enable them to decide on which company to invest in. Rather, they revise their beliefs about the worth of the sample company's shares; such a lack of impact is consistent with the semi-strong form of the efficient-market hypothesis (Khan, 2011). One reason for these insignificant abnormal returns on the event day could be attributed to belief that share prices reflect every information that will enable an investor to earn an excess returns.

Secondly, the results in Table 4.1 suggest that the reasons behind insignificant abnormal return on day t_0 might be because of information leakage to the market prior to the dividend announcements day (Khan, 2011).

For instance, 0.56% the highest mean value of abnormal return tabulated in the Table 4.1 is documented for day $t-4$. This implies that at 5% level of significance, the mean value is not statistically significant. The result obtained is similar to that of Uddin (2003) for Bangladeshi sample and Kaleem and Salahuddin (2006) for Pakistan. In that study, they found significant returns a few days prior to the announcement day (Khan, 2011). However, on day $t-7$, another statically abnormal return was found; the mean value was 0.28% and the p -value was 0.041 .

Thirdly, there is also some support that market does not actually assimilate the news quickly upon announcement as reflected in Table 4.1. The largest mean abnormal return of 0.33% was recorded during the event window ($t-4$), and that implies that the investors react on average four days before the announcement.

The Wilcoxon signed-ranked test was employed to check how significant the median are for 21-day event period, 10 days before and 10 after. However, the result shows that there is no significant difference between the mean return

and after. This implies that the median of the difference between before and after is equal to zero.

Finally, the standard deviation as shown in the table shows that the values are large relative to their mean abnormal returns.

The abnormal return ranges from 0.53% on event window $t-7$ to 0.15% on event window $t+4$. The variability in the returns earned may explain why none of the abnormal returns on the event day (t_0) are significant (Khan, 2011). To see whether dividend change convey information to share price, the results from the three groupings (Dividend-Increase, Dividend-Decrease, and Dividend-no-Change) are discussed in the following sections.

Paired Sample Test between the Mean Abnormal Returns 10 Days before and 10 Days after the Event Day

Table 4.1.2 in Appendix B shows the paired mean abnormal returns for the event window of 20 days (10 days before and 10 days after).

The abnormal returns were grouped into two periods to see whether the mean abnormal returns for the window period are statistically different for the paired group from the event day (t_0). The results were as follows: pair 1 shows the average abnormal returns a day after the dividend announcement and a day prior to the event day (t_0) to see if the two combinations are significant from day t_0 (event day). At day $t-1$ and $t+1$, the mean average is 0.07% and standard deviation was 0.21% . At 5% level of significance, it showed that there is no significant difference between the mean return before and after the event day and as such, the null hypothesis cannot be rejected.

Paired 9 recorded the highest mean abnormal return 0.43% and standard deviation of 0.64% followed by paired 2, which has mean abnormal returns of 0.35% and standard deviation of 0.23% though, both are not significant.

Paired 3, 4, 5, 6, 8, and 10 had a negative returns of -0.25% , -0.18% , -0.14% , -0.24% , -0.11% , and -0.12% , and a standard deviation of 0.31 , 0.57% , 0.45% , 0.41% , 0.51% , and 0.40% . However, there was no significant difference between the mean return before and after the

event day. In addition, as such, the null-hypothesis cannot be rejected.

Analysis of Abnormal and Cumulative Average Abnormal Returns (CAAR) Result

To know the cumulative effect of Average Abnormal Returns (AAR) on days surrounding the events, AAR for each of the event periods are being aggregated. In order to know whether CAARs significantly different from zero, *t*-test is carried out. The level of significance used was 5% with appropriate number of degree of freedom. The values of AARs, CAARs, and *t* are presented in Table 4.1. An in-depth look on AARs and CAARs can aid one to comprehend the fluctuations around announcement day.

The AAR show the average deviation of the returns of the stock from their normal returns with the market index. The CAAR is an acronym for cumulative deviations of the securities returns from normal in the market across the periods of the announcements (ranging from -10^{th} days to $+10^{\text{th}}$ day). This shows the cumulative effects of the residuals of all stocks. 'In an efficient market, no one can consistently earn an excess returns since the security price reflects all publicly available' (Mallikarjunappa & Manjunatha, 2009). Therefore, it is difficult to obtain positive or negative AARs prior or after the announcement day. However, the AAR can be positive for some time prior to the announcement day, if the news that arrives market is good one; negative if the market anticipation indicates a negative news. In an efficient market, the AAR should tend to be zero after the event-day ((Mallikarjunappa & Manjunatha, 2009). From this, it follows that the CAARs should level out after the earnings announcement. If it does not happen, the market is not efficient in the semi-strong form. Therefore, one can hypothesize that the semi-strong form of the Efficient Market Hypothesis (EMH) can be accepted if the CAAR rises sometime before the event-day and levels out subsequently and the AAR hovers around zero after the event-day. However, it is believed that CAARs cannot be statistically significant from zero in an efficient market (Mallikarjunappa & Manjunatha, 2009).

The analysis of CAAR shows a negative value on 3 days; t_0 -0.06% , -0.06% on $t-8$ and -0.03% on $t-9$ while

positive 10 times after the event day on $t+1$ to $t+10$, and positive before the event day on 8 times as shown in Table 4.3.1 (Mallikarjunappa & Manjunatha, 2009).

Table 4.3.1: Average Abnormal and Cumulative Abnormal Returns for 21-Day Event Period

Event day	Average Abnormal Returns	Cumulative Average Abnormal Returns
t-10	0.18	0.18
t-9	-0.26	-0.06
t-8	-0.02	-0.03
t-7	0.28	0.24
t-6	0.23	0.44
t-5	0.05	0.51
t-4	0.34	0.80
t-3	0.11	0.90
t-2	-0.27	0.59
t-1	0.18	0.79
t_0	-0.89	-0.06
t+1	0.25	0.19
t+2	0.08	0.24
t+3	-0.14	0.16
t+4	0.15	0.31
t+5	-0.09	0.21
t+6	-0.09	0.17
t+7	0.33	0.49
t+8	-0.14	0.36
t+9	0.17	0.55
t+10	0.06	0.61

Source: Researcher

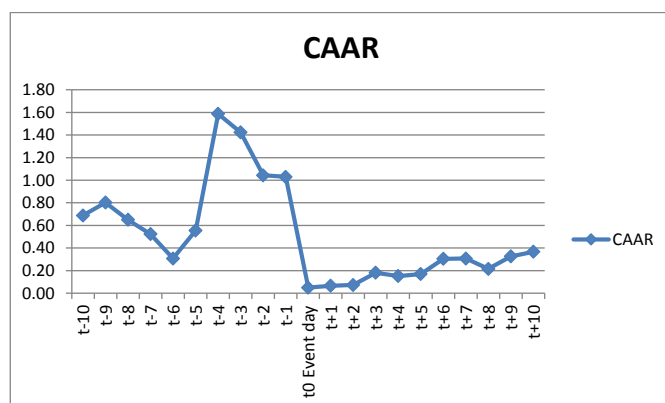
The analysis of the cumulative abnormal returns indicates that positive abnormal returns exist both before and after the event-day.

The *t*-test carried out on the CAAR shows that the returns are significantly greater than zero on 18 days out of 21 days. The result of *t*-test with the analysis of the movement of AARs and CAARs presented previously gives enough evidence to show that the dividend announcement is incorporated into the share immediately as EMH suggest. Therefore, we conclude by saying that EHM is strong-in-semi form and cannot be accepted for the UK market (Mallikarjunappa & Manjunatha, 2009).

Diagrammatic Analysis of AAR and CAAR

The following AARs shows the average abnormal returns surrounding the event day.

The left-hand side shows 10 days before the event day; the right-hand side depicts the days following the event day; and the vertical axis shows the average abnormal returns for each of the event day. As the hypothesis suggests, the return on the event day is not statically different from zero. On the event day (t_0), the return was negative, which could be attributed to under reaction of the investors in the market. From the following graph, the event period both before and after the event day was fluctuating. There were 13 positive returns around the event day, 7 day before (54%) and 6 days after (46%) the event day. Negative returns were recorded on eight times, three before, four after, and one on the event day representing about (38%) of the event period. This implies that returns are positive for 13 days (62%) and negative for 8 days (38%). It is obvious that positive returns are earned more than negative returns both before and after the event day. We can conclude by saying that it is possible to earn more positive returns than negative returns on 5 days surrounding the event day. See the diagram of ARR (Celsing, 2017).



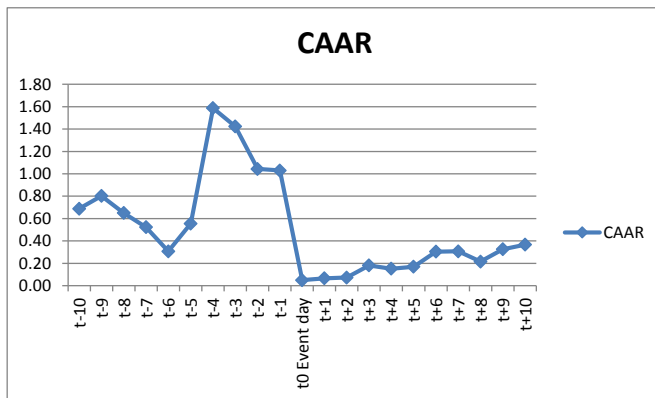
Source: Researcher

Fig. 4.4.1: ARR Values Surrounding the Event-Day

The following CAAR shows the cumulative average abnormal returns surrounding the event day. The left-hand side shows the event day window 10 days prior to the announcement; the right-hand side shows the cumulative

average abnormal returns 10 days after the event day (t_0), and the vertical axis shows the cumulative abnormal returns for each event period. As the hypothesis suggests, at the event day (t_0), the CAAR is negative, which means that the return on the day of announcement is not statistically different from zero. From the graph, the highest cumulative effect was recorded at 4 day before the event day ($t-4$). After that day, the share prices started to fall until it hit negative on the event day (t_0). Thereafter, 2 days after the event day, for example day $t+1$ and $t+2$, the share prices begin to rise and after day $t+2$, they start to fall again. The increase may be attributed to over-reaction of the investors in the market who perceive dividend to signal good fortune to them. After day $t+3$, share price starts to depict increase and decrease for each of the successive day. Furthermore, a t -test was carried out to confirm the result for 21-day event period and it indicated that the returns are significantly greater than zero on 18 out of the 21 days, which represents 85%. The analysis of the CAAR values at 95% confidence interval shows that 8 days (44%) before falls at the right-hand side of the t -distribution while 10 days (56%) after the event day (t_0) falls at right-hand side as well. The values of CAARs do not fall in the left side of the t -distribution of the rejection region on any day prior or after the event day. The analysis illustrates that positive CAARs are possible on all days from the event day upwards. Furthermore, the fact that the t -values do not appear on the left-tailed side of the t -distribution reiterates the findings that the positive returns which are significantly greater than zero could be earned but there was no possibility of negative returns which are significantly less than zero on any day surrounding the event period.

Therefore, we can conclude by saying that since the t -test results combined with the analysis of the share price movement of ARRs and CAARs presented previously give enough evidence that dividend announcements do not have any informational content as suggested by signalling hypothesis of dividend. According to EMH, share prices react upon news. However, the result shows a conflicting thing. We conclude by saying that UK market is not efficient in semi-strong form. See the following diagram of CAAR (Mallikarjunappa & Manjunatha, 2009).



Source: Researcher

Fig. 4.4.2: The Values of CAAR Surrounding the Event-Day

This paper has analysed the empirical results from the event study conducted over the 21-day period to ascertain whether the null-hypothesis could be accepted or rejected. The findings showed that dividend announcements do not contain any informational content, which supports the M-M Dividend Irrelevance theory. Therefore, we cannot reject the null-hypothesis.

Conclusion

The researcher has conducted a research on 100 sampled companies quoted in the LSE over the period of 5 years to investigate the impact of dividend announcements on the share prices and employed event-study methodology to investigate the behaviour of share prices upon announcement. Having analysed the results of event study, this paper concludes as follows:

- dividend announcements do not contain any news that will enable an investor to earn an excess returns;
- the fluctuations in share prices may be linked to under or over reaction in the market by the market participants; and
- the view of Modigliani and Miller (1961) is still valid and therefore, the null-hypothesis cannot be rejected (There is no significant relationship between dividend announcement and share price).

References

Aharony, J., & Swary, I. (1980). Quarterly dividend and earning announcements and stockholders' returns: An empirical analysis. *Journal of Finance*, 35, 1- 12.

Akbar, M., & Baig, H. H. (2010). Reaction of stock prices to dividend announcements and market efficiency in Pakistan. *The Lahore Journal of Economics*, 15, 103-125.

Ali, S., & Akbar, M. (2009). Calendar effects in Pakistani stock market. *International Review of Business Research*, 5(1), 389- 404

Ali, A., & Sharif, I. (2001). Effect of dividend on stock prices. *Journal of Business and Management Studies: International Journal*, 3, 56-87

Ali, S. S., & Mustafa, K. (2015). Testing semi-strong form efficiency of stock market. *The Pakistan Development Review*, 40(4) Part II (winter) pp. 651-674.

Allen, D. E., & Rachim, V. S. (1996). Dividend policy and stock price volatility: Australian Evidence. *Journal of Applied Economics*, 6, 175-188.

Almujamed, H. I. (2011). Technical Analysis in the Kuwait Stock Exchange. Unpublished PhD Dissertation, School of Business, and University of Dundee, UK.

Al-Malkawi, H. N. (2007). Determinant of corporate dividend policy in Jordan: An application of the Tobit Model. *Journal of Applied Accounting Research*, 23, 44-70.

Al-Najjar, B., & Hussainey, K. (2009). The association between dividend payout and outside directorships. *Journal of Applied Accounting Research*, 10, 4-19.

Al-Najjar, B. (2011). The inter-relationship between capital structure and dividend policy: Empirical evidence from Jordanian data. *International Review of Applied Economics*, 25(2), 209-224. ISSN 0269-2171

Arnold, G. (2013). *Corporate Financial Management* (5th ed.). Pearson Education Limited, Edinburgh Gate Harlow CM20 2JE England.

Azhagaiah, & Priya, S. N. (2008). The impact of dividend policy on shareholders wealth. *International Research Journal of Finance and Economics*, 180-187.

Baker, H. K., & Powell, G. E. (1999). How corporate managers view dividend policy. *Quarterly Journal of Business and Economics*, 38(2), 17-35.

Baker, H. K., Farrelly, G. E., & Edelman, R. B. (1985). A survey of management views on dividend policy. *Financial Management*, 14(3), 78-84.

Baskin, J., (1989). Dividend Policy and the volatility of common stock. *The Journal of Portfolio Management*, 15, 19-25.

- Bell, L., & Jenkinson, T. (2002). *New evidence of the impact of dividend taxation and on the identity of the marginal investor*. *Journal of Finance*, 57(3), 1321-1346.
- Bhattacharya, S. (1979). Imperfect information dividend policy, and the 'bird in the hand' fallacy. *Bell Journal of Economics*, 10, 259-270
- Bhattacharya, S. (1980). Non dissipative signalling structures and dividend policy. *The quarterly journal of Economics*, 95, 1-24.
- Black, F., & Scholes, M. (1974). The effects of dividend yield and dividend policy on common stock prices and returns. *Journal of Financial Economics*, 1(1), 1-22.
- Brav, A., Graham, J. R., Harvey, C. R., & Michaely, R. (2005). Pay out -policy in the 21st century. *Journal of Financial Economics*, 77, 483-527.
- Brealey, R. A., Myers, S. C., & Marcus, A. J. (2008). *Fundamentals of corporate finance* (6th ed.). McGraw-Hill Publisher
- Brown, S. J., & Warner, J. B. (1985). Using daily stock returns. *Journal of Financial Economics*, 3-31, North-Holland.
- Bryman, A. (1988). *Social research methods* (4th ed.). Oxford University Press.
- Burrell, G., & Morgan, G. (1979). *Sociological Paradigms and Organizational Analysis*. Heinemann. pp. 1-37.
- Celsing, W. (2017). Share price reaction to dividend announcements. Unpublished thesis.
- Creswell, J. W. (1994). *Qualitative, Quantitative, and mixed methods approaches* (2nd ed.). Sage Publishers.
- De Angelo, H., & Rice, E. M. (1985). Managerial ownership of voting rights: A study of public corporations with dual classes of common stock. *Journal of Financial Economics*, 14, 33-69.
- Dittmar, A. K. (2000). Why do Firms Repurchase Stock? *The Journal of Business*, 73, 331-355.
- Dyckman, T. (1984). Dividend announcements and stock returns. *Interdisciplinary Journal of Contemporary Research in Business*, 3(8).
- Easterby-Smith, M., Thorpe, R., Jackson, P., & Lowe, A. (2008). *Management research* (3rd ed.). London: Sage.
- Elton, E. J., & Grubber, M. J. (1970). The marginal stockholders tax rates and the clientele effect. *The Review of Economics and Statistics*, 52, 68-74.
- Fama, E. F. (1965). The behaviour of stock-market prices. *The Journal of Business*, 38(1), 34-105.
- Fama, E. F., & Blasiak, H. (1968). Dividend policy: An empirical analysis. *Journal of the American Statistical Association*, 63(324), 1132-1161.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25, 383-420.
- Fama E., & French, K. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, 60, 3-43.
- Gill, J., & Johnson, P. (1997). *Research methods for managers* (2nd ed.). Paul Chapman Publishing Ltd. London.
- Graham, J. R., & Kumar, A. (2006). Do dividend clienteles exist? Evidence on dividend preference of Retail investors. *Journal of Finance*, 61, 1305-1336.
- Gordon, M. J., & Shapiro, E. (1956). Capital equipment analysis: The required rate of profit. *Management Science*, 3, 102-110.
- Gordon, M. J. (1959). Dividends, earnings, and stock prices. *Review of Economics and Statistics*, 41, 99-105.
- Institute of Chartered Accountants of Nigeria, (2006). Study Pack on Business Communication and Research Methodology. VI Publishing Limited.
- Kaleem, A., & Salahuddin, C. (2006). Impact of dividend announcement on common stock prices at Lahore stock exchange (Pakistan). *South Asian Journal of Management*, 13(2).
- Kane, A., Lee, Y. K., & Marcus, A. (1984). Earnings and dividend announcements: Is there a corroboration Effect? *Journal of Finance*, 39, 1091-1099.
- Khan, N. U. (2011). Dividend policy and the stock market reaction to dividend announcements in Pakistan. University of Dundee
- Khaled, H., Chijioke, O. M., & Aruoriwo, M. (2010). *Dividend policy and share price Volatility: UK Evidence of Finance*, 27, 993-1007.
- Lintner, J. (1956). Distributions of incomes of corporations among dividends, retained earnings and taxes. *American economic Review*, 46(1), 97-113.
- Lintner, J. (1962). Dividends, earnings, leverage, stock prices and the supply of capital to corporations. *The Review of Economics and Statistics*, 44, 243-269.

- Litzenberger, R. H., & Ramaswamy, K. (1979). The effect of personal taxes and dividends on capital asset prices. *Journal of Financial Economics*, 7(2), 163-195.
- Litzenberger, R. H., & Ramaswamy, K. (1982). The effect of dividends on common stock prices: Tax effects or information effects? *Journal of Finance*, 37(2), 429-443.
- Long, J. (1978). The market valuation of cash dividends: A case to consider. *Journal of Financial Economics* 6, 235-264.
- Lonie, A. A., Abeyratna, G., Power, D. M., & Sinclair, C. D. (1996). The stock market reaction to dividend announcements: A study of complex market signals. *Journal of Economic Studies*, 23(1), 32-52.
- Lonie, A. A., & Abeyratna, G. (1996). The stock market reaction to dividend announcement. A UK study of complex market signals. *Journal of Economic Studies*, 23, 32-52.
- Mallikarjunappa, T., & Manjunatha, T. (2009). Stock price reactions to dividend announcements. *Journal of Management and Public Policy*, 1(1), 43-56.
- Mccluskey, T. (2006). An Empirical Investigation of the Dividend Decision in Irish Companies. Unpublished PhD Thesis, School of Business, and University of Dundee.
- Mccluskey, T., Burton, B. M., & Power, D. M. (2007). Evidence on the Irish financial Directors' views about dividend. *Qualitative Research in Accounting & Management*, 4(2), 115-132.
- Mccluskey, T., Burton, B. M., Power, D. M., & Sinclair, C. D. (2006). Evidence on the Irish stock market's reaction to dividend announcements. *Journals of Applied Financial Economics*, 16(8), 617-28.
- Miller, M., & Modigliani, F. (1961). Dividend Policy, growth and the valuation of Shares. *The Journal of Business*, 34, 411-433
- Miller, M. H., & Scholes, M. S. (1982). Dividends and taxes: Some empirical evidence. *Journal of Political Economy*, 90(6), 1118-1141.
- Pandey, I. M. (1998). *Financial management* (8th ed.). Vikas Publishing House Pvt Ltd.
- Nishat, M., & Irfan, C. M. (2011). *Dividend policy and stock price volatility in Pakistan*.
- Pettit, R. R. (1972). Dividend announcements, security performance, and capital market efficiency. *The Journal of Finance*, 27(5), 993-1007.
- PETROS, J. (2011). Dividend policy and stock price volatility: A case of the Zimbabwe stock exchange. *Journal of Finance and Accountancy*
- Poterba, J. M. (1986). The market valuation of cash dividends. *Journal of Financial Economics* 15, 395-405.
- Ritter, J. R. (1991). The long-run performance of initial public offerings. *Journal of Finance*, 46, 3-27. American Finance Association.
- Schwert, G. W. (1983). Size and stock returns, and other empirical regularities. *Journal of Financial Economics*, 12, 3-12, North-Holland Publishing Company.
- Strong, N. (1992). Modelling abnormal returns. *Journal of Business Finance and Accounting*, 19, 533-553.
- Walter J. E. (1963). Dividend policy and its influence on the value of the enterprise. *Journal of Finance*, 18, 280-291.
- Woolridge, J. R., & Ghosh, C. (1985). Dividend cuts: Do they always signal bad news? *Midland Corporate Finance Journal*, 3(2), 20-32.
- Uddin, M. H. (2003). Effect of Dividend Announcement on Shareholders Value: Evidence from Dhaka Stock Exchange. Global Corporate Governance Forum (Sponsored by World Bank), 13-16 December, Hyderabad, (India).

APPENDIX A

Table 4.1: Share Prices Reactions Around 21-day Event Window

Abnormal Returns on 21-day event period.

<i>Event Days</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Minimum Value</i>	<i>Maximum value</i>	<i>Significance level (5%)</i>
t-10	0.1820	0.37679	-0.29	0.69	0.117
t-9	-0.2560	0.35175	-0.72	0.11	0.133
t-8	-0.0240	0.37599	-0.23	0.22	0.087
t-7	0.2840*	0.53003	-0.18	1.00	0.041*
t-6	0.2260	0.36370	-0.22	0.72	0.201
t-5	0.0480	0.50682	-0.75	0.58	0.405
t-4	0.3360	0.40303	0.02	1.03	0.562
t-3	0.1140	0.31533	-0.25	0.49	0.334
t-2	-.2740	0.29552	-0.59	0.19	0.671
t-1	0.1840	0.17672	-0.01	0.46	0.031
t ₀	-0.78	0.15642	-0.12	0.23	0.075
t+1	0.2560	0.32532	-0.17	0.64	0.091
t+2	0.0800	0.33377	-0.47	0.35	0.152
t+3	-0.1400	0.26220	-0.58	0.11	0.094
t+4	0.1500	0.23885	-0.13	0.48	0.160
t+5	-0.0900	0.16852	-0.28	0.14	0.204
t+6	-.0100	0.41917	-0.73	0.32	0.301
t+7	0.3280	0.28030	0.00	0.63	0.064
t+8	-0.1380	0.37599	-0.65	0.26	0.102
t+9	0.1720	0.39789	-0.15	0.84	0.135
t+10	0.0600	0.29283	-0.17	0.56	0.076

Source: Researcher

Note: Figures in (*) shows statistically significance of the number at 95% confidence level.

APPENDIX B

Table 4.1.2: Paired Sample Test between the Mean Abnormal Returns 10 Days Before and 10 Days After the Event Day.

	<i>Source: Researcher</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>T-test statistic</i>	<i>Degree of freedom</i>	<i>Significance level(two-tailed)</i>
Pair 1	AFT1 - BF1	.07200	.20717	.777	4	.480
Pair 2	AFT2 - BF2	.35400	.23223	3.409	4	.027
Pair 3	AFT3 - BF3	-.25400	.30794	-1.844	4	.139
Pair 4	AFT4 - BF4	-.18600	.57440	-.724	4	.509
Pair 5	AFT5 - BF5	-.13800	.45730	-.675	4	.537
Pair 6	AFT6 - BF6	-.23600	.41338	-1.277	4	.271
Pair 7	AFT7 - BF7	.04400	.53998	.182	4	.864
Pair 8	AFT8 - BF8	-.11400	.51062	-.499	4	.644
Pair 9	AFT9 - BF9	.42800	.64317	1.488	4	.211
Pair 10	AFT10 - BF10	-.12200	.40270	-.677	4	.535

Source: Researcher