

Dividend Announcement of the Commercial Banks in DSE: Scenario and Effect on Stock Price

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Abstract

In this study we have tried to show the dividend scenario of the listed commercial bank of Dhaka Stock Exchange (DSE) from the fiscal year 2000 to 2013. The study also tried to investigate the effect of dividend announcement on stock prices based on the 28 DSE listed commercial banks. In this context declaring dividends during the fiscal year 2012-2013 have been considered as the observation period and event study methodology has been used. The result by using event study methodology indicates that there is no effect of dividend announcement on stock prices over the observation periods.

Key Words: DSE, Dividend Announcement, Event Study, AER.

1. Introduction

Capital market plays a significant role in the economy as a source of long term financing. A fair, efficient and transparent capital market is essential for a country for its industrialization and economic development. The development of the capital market is crucial for capital accumulation, efficient allocation of resources and promotion of economic growth. The capital market acts as an intermediary between surplus units and deficit units of an economy and facilitates savings into investments. Investors consider several things before they invest their funds in any particular securities such as stock price, share index, turnover, market capitalization, dividend etc. Among them, so far the most important subject matter is return from investment in securities that partly depends on dividend announcement in the stock market. This paper is intended to identify and compare the impact of dividend announcement information on the stock prices of some selected DSE listed commercial banks in Bangladesh

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for the fiscal year 2012-2013. Corporations declare dividend for the benefit of its shareholders. They may either declare cash dividend or stock dividend. As it is with the objective of the corporations to increase the share holders' wealth, they declare dividend as a part of the income to them along with capital gain they achieve through appreciation of the prices of their stocks (Rahman, Amin & Siddiquee). Theoretically, cash dividend means giving reward to the shareholders that is something they already own in the company; hence this will be offset by the decline in stock value (Porterfield, 1959 and 1965). This study covers the impact of dividend announcements on the stock price of some selected private commercial banks at DSE. This paper has selected the banks as sample which had declared their dividend after January, 2013 and before May, 2013. However, National Bank Limited (NBL) and Ultra Bank are not in a position to within sample frame for the above reasons.

There are 4 state owned banks, 4 specialized banks, 9 foreign banks, and 38 private banks operate their banking operation around the country. Among these 55 banks 30 are listed by Securities and Exchange Commission (SEC) [Source, SEC]. The total number of enlisted securities stands at 525 at DSE on June, 2013. Out of these in fiscal year 2012-2013 the turnover of listed banks in DSE has retained top position which is Tk 4,131.06 million. Total market capitalization of DSE was Tk. 197149.04 crore where Banks sector constituted Tk. 35908.10 crore. Appendix- 1 shows the contribution of the listed banks in total capitalization in DSE from the fiscal year 1995-96 to September 2013-14.

In fiscal year 2012-2013 out of the 30 banks 29 announced dividends. Banking sectors paid 29% dividends of total dividends. Appendix-2 shows the dividends scenario of the listed banks in DSE in fiscal year 2012-2013.

From the Appendix-2 it is shown that Shahjalal Islami Bank announced 20% Bonus share as dividend, which is the highest of FY 2013. From the dividend history of the commercial banks it is observed that most of the banks paid dividend regularly to the investors. AB Bank paid the highest 200% B stocks at the FY 2008, as well as Al- Arafah Islamic Bank paid 35% B at FY 2007. Dutch Bangla Bank paid 50% B at FY 2009; National Bank Limited paid 95% B at 2011.

The aim of this study is to show the dividend scenario of the listed commercial bank of Dhaka Stock Exchange (DSE) from the fiscal year 1995-96 to fiscal year 2013-14. This paper also intended to identify the dividend announcement information impact on stock prices of the listed commercial banks in DSE which declared their dividend around the fiscal year 2013-14.

2. Literature Review

A great deal of theoretical and empirical research on dividend effects has been done over the last several decades. Foster and Vickrey (1978) reported that stock dividend issues generate

positive abnormal returns on the declaration date rather than on the ex-date and that the size is not a determinant of market reaction, which primarily supports signaling function of stock dividends. Black, Fischer (1976) found that, In addition to cash dividend and stock dividend, several mixed types of dividend payment are given apart from cash dividend and stock dividend such as mix of bonus issues and dividend, mix of rights issues and dividend. Miller and Scholes (1981) have argued that the observed relationship between common stock returns and dividend yields as attributed to the favorable information contained in the knowledge that a firm will actually declare any dividend.

Docking, Scott, Koch & Poul (2005) examined the sensitivity of the investor reactions to the recent direction or volatility of underlying market movements. They found that dividend change announcements elicit a greater change in stock price when the nature of the news (good or bad) goes against the grain of the recent market direction during volatile times. For example, announcements to lower dividends elicit a significantly greater decrease in stock price when market returns have been up and more volatile. Similarly, announcements to raise dividends tends to elicit a greater increase in stock price when market returns have been normal or down and more volatile, although this latter tendency lacks statistical significance. We suggest an explanation for these results that combines the implications of a dynamic rational expectations equilibrium model with behavioral considerations that link the responsiveness of investors to market direction and volatility.

Hamid & Chowdhury (2005) used two measures i.e. daily market- adjusted abnormal return (MARR) and daily cumulative abnormal return (CAR) to study the impact of dividend announcement on shareholders' value. They explained MARR as an indicator of the relative daily percentage price change in the dividend paying stocks compared to the change in average market price. CAR has been defined as a measure of the investors' total return over a period starting before the dividend announcement day and after the dividend announcement day. They have taken 137 samples of dividend paying companies listed on Dhaka Stock Exchange and found that MARR on the day of dividend announcement was not statistically significant which entails that the market reacts earlier than the actual announcement of dividend. On the other hand, the findings of CAR results that investors lost more value in the ex-dividend period than the value gained in the pre-dividend period. These findings also suggest that dividend announcement does not carry information about the future earnings and cash flows of the companies.

Rahman & Rahman (2008) in their study of stock price behavior around ex-dividend date from DSE found an increase of stock prices. They have made a conclusion that ex-dividend price increased instead of dropped in DSE that implies a clear preference for capital gains without having any focus of dividends by the stockholders.

Bayezid & Chowdhury (2010) empirically analyzed the stock price reactions to the announcement of dividend of the banking industry of Bangladesh. Their result revealed that stock price reaction to dividend announcement are not statistically significant and dividend announcement doesn't convey any information.

Chowdhury & Chowdhury (2010) gathered secondary data of publicly listed companies, traded in Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE), to see the relationship between capital structure and firm value in Bangladesh. It was observed that by changing its current ratio, operating leverage, EPS, dividend payout ratio or share capital, a firm may increase its value in the market. From the above review of literature it can be said that the research work carried out so far by various eminent scholars, though extensive, has not yet brought in a common conclusion in relation to market bubble. Moreover, very insignificant amount of work has been done in Bangladesh context and the few studies conducted have been largely inconclusive. This study tries to fulfill the gap of explaining stock market paradox whether the stock is really overvalued or undervalued with empirical evidence.

Rahman, Amin & Siddiquee (2012) analyze the impact of different types of dividend declaration, namely stock and cash dividends. Using event study method, MAAR and CAAR, their study found no evidence of abnormal returns on the declaration day for either of the types of dividends.

3. Methodological Framework

In order to examine the impact of dividend announcement on the stock prices, this paper analyzed the stock price behavior of the selected private banks surrounding 60 days of the date of dividend announcement of Dhaka Stock Exchange (DSE). In this regards event study methodology has employed. The event study methodology is well accepted and has been used in a variety of research such as examine return variances trading volume (Beaver, 1968, Patell, 1976, Campbell and Wasley, 1996). Event studies also serve an important purpose in capital market research as a way of testing market efficiency. Systematically nonzero abnormal security returns that persist after a particular type of corporate event are inconsistent with market efficiency. Accordingly, event studies focusing on long-horizons following an event can provide key evidence on market efficiency (Brown and Warner, 1980)

The following necessary steps that should be sequentially followed to study the impact of dividend announcement on stock prices in event study methodology:

Step-1: Specify the Event Window: In conducting the event study it is important to identify the period over which the prices of relevant financial instruments will be examined. This period is referred to as 'event window' (Mackinley, 1997). For this purpose of this study, an

event window is set surrounding the dividend announcement date. The date of dividend announcement has been considered as the date of declaration related to dividend distribution by the respective Board of Directors of the banks. The date of dividend announcement is defined as $t = 0$.

Step-2: Measuring Stock Returns (X_{it}): Returns for each of the trading days for each stock (X_{it}) has to be computed. The daily stock returns of security i , X_{it} calculated as

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

Where,

X_{it} = Returns on stock i for day t

P_{it} = Prices of stock i for day t

P_{it-1} = Prices of stock i for day $t - 1$

Step-3: Measuring Market Returns (Y_{it}): Market Return Rate indicates the returns on the market index. For which data of DSE all-share price index is used. Market Return Rate computed for each of the trading days using the following formula-

$$Y_{it} = \frac{I_t - I_{t-1}}{I_{t-1}}$$

Where,

Y_{it} =Market Return Rate on stock i for day t

I_t = All share price index for day t

I_{t-1} = All share price index for day $t - 1$

Step-4: Measuring beta (β) as the slope: β is calculated by regressing Market Return Rate (Y) on Stock Return Rate (X). Therefore the regression line is: $Y = \alpha + \beta X$

Step-5: Computing Daily Excess Return (ER): After measuring beta, the excess returns can be computed for each of the 61 trading days for each stock as follows –

$$ER = Y_{it} - \beta X_{it}$$

ER is calculated over a period starting from **-30** days to **+30** days relative to the dividend announcement day.

Step-5: Measuring Average ER (AER): After calculation Excess Return of all the securities the Average Excess Returns (AER) are computed during event period (-30 to +30). AER of all securities is summed up across the trading day-wise by the number of securities (N) i.e. 28 in this study. Therefore calculating AER_t cross-sectional and time-series aggregation is done.

AER_t are estimated as below:

$$AER_{it} = \frac{1}{N} \sum_{i=1}^N ER_{it}$$

Step-6: Computing Standard Error (σ): Standard Error can compute by following formula, where N is the number of securities,

$$\sigma = \sqrt{\frac{\sum_{i=1}^N (ER_{it} - AER_{it})^2}{N}}$$

Step-7: Find t-statistics: t-statistics is calculated cross-sectionally by using the standard deviation of MAAR of the portfolio of dividend paying banks stocks.

$$t = \frac{AER_{it}}{\sigma}$$

This study was done only for some listed commercial banks. So we cannot assure that same results exhibited for all listed companies of Dhaka stock exchange (DSE).

4. Findings

Results of using event study methodology have been shown in the following table. The absolute value of AER on the day of dividend announcement is 0.008(0.8%), which is statistically insignificant. From the result it is also found that all AER_s during the pre-announcement periods and post-announcement periods are statistically insignificant. That is our study supports the Dividend Irrelevance Propoposition¹.

Table: 1

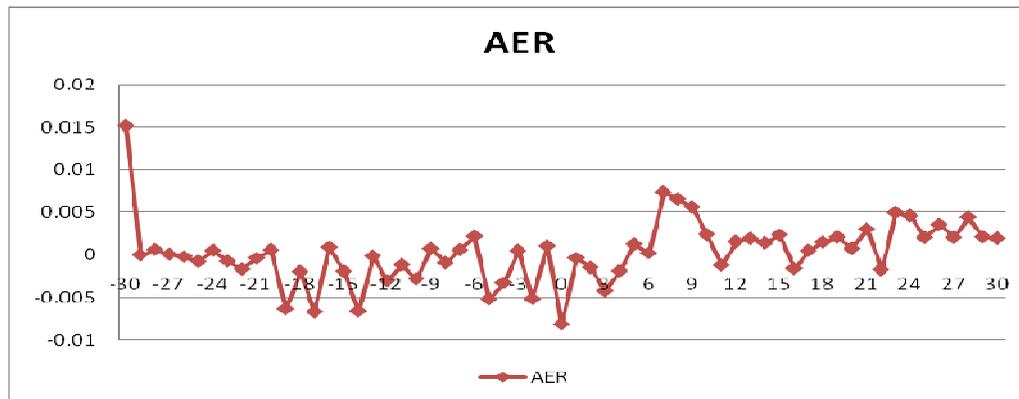
| Day Around The Event | AER | SE | t- Statistics |
|----------------------|--------------|-------------|---------------|
| -30 | 0.015240586 | 0.082478432 | 0.184782683 |
| -29 | 1.96516E-05 | 0.007787602 | 0.00252345 |
| -28 | 0.000624559 | 0.006604789 | 0.09456157 |
| -27 | 9.3534E-05 | 0.008943569 | 0.010458245 |
| -26 | -0.000181054 | 0.005138748 | -0.035233181 |
| -25 | -0.00076568 | 0.010845186 | -0.070600945 |
| -24 | 0.00052973 | 0.011225114 | 0.047191479 |
| -23 | -0.000739196 | 0.006001684 | -0.123164764 |
| -22 | -0.001650307 | 0.014180718 | -0.116376851 |
| -21 | -0.000369531 | 0.010522472 | -0.035118266 |
| -20 | 0.000604573 | 0.006813496 | 0.088731747 |
| -19 | -0.006370366 | 0.010361063 | -0.614837084 |
| -18 | -0.001959441 | 0.007707622 | -0.254221222 |
| -17 | -0.006707989 | 0.016366394 | -0.409863615 |
| -16 | 0.000922458 | 0.01305835 | 0.0706412 |
| -15 | -0.001908561 | 0.00915735 | -0.208418458 |
| -14 | -0.006619943 | 0.014447622 | -0.458202932 |
| -13 | -0.000133196 | 0.013463643 | -0.009893043 |
| -12 | -0.003024627 | 0.010241549 | -0.295329051 |
| -11 | -0.001159036 | 0.006436015 | -0.180085984 |
| -10 | -0.002802333 | 0.013389939 | -0.20928646 |
| -9 | 0.000759937 | 0.013027626 | 0.058332761 |
| -8 | -0.000930903 | 0.010523229 | -0.088461719 |
| -7 | 0.000592763 | 0.009974044 | 0.059430514 |
| -6 | 0.002192303 | 0.006985972 | 0.31381498 |
| -5 | -0.005189324 | 0.008846357 | -0.586605729 |
| -4 | -0.00330628 | 0.010229711 | -0.32320363 |
| -3 | 0.000523756 | 0.009316485 | 0.056218203 |
| -2 | -0.00516495 | 0.010164491 | -0.508136566 |
| -1 | 0.001065918 | 0.010436497 | 0.102133719 |

| | | | |
|----|--------------|-------------|--------------|
| 0 | -0.008125299 | 0.019075152 | -0.425962475 |
| 1 | -0.000360191 | 0.015075156 | -0.023893012 |
| 2 | -0.001472831 | 0.013703651 | -0.107477297 |
| 3 | -0.004254682 | 0.012930219 | -0.329049479 |
| 4 | -0.001870631 | 0.009831593 | -0.190267339 |
| 5 | 0.001288586 | 0.014316039 | 0.090009986 |
| 6 | 0.000219034 | 0.011940846 | 0.018343268 |
| 7 | 0.007385533 | 0.038889292 | 0.189911725 |
| 8 | 0.006602762 | 0.014912192 | 0.442776073 |
| 9 | 0.005656195 | 0.012029616 | 0.470189184 |
| 10 | 0.002412048 | 0.011598954 | 0.207953943 |
| 11 | -0.001200921 | 0.011053724 | -0.108644061 |
| 12 | 0.001571211 | 0.011257447 | 0.13957086 |
| 13 | 0.00191953 | 0.010495251 | 0.182895086 |
| 14 | 0.001430362 | 0.01061219 | 0.134784836 |
| 15 | 0.002364957 | 0.010811005 | 0.218754556 |
| 16 | -0.001588665 | 0.008306529 | -0.191255014 |
| 17 | 0.000517905 | 0.010570123 | 0.048997071 |
| 18 | 0.001510616 | 0.009331101 | 0.161890464 |
| 19 | 0.002098475 | 0.013325631 | 0.157476571 |
| 20 | 0.000767373 | 0.008806862 | 0.087133548 |
| 21 | 0.003051574 | 0.012391239 | 0.246268676 |
| 22 | -0.001719421 | 0.012398563 | -0.138679044 |
| 23 | 0.004983073 | 0.009392368 | 0.530544913 |
| 24 | 0.004612847 | 0.006135869 | 0.751783755 |
| 25 | 0.002049754 | 0.008198706 | 0.250009491 |
| 26 | 0.003588521 | 0.012081002 | 0.297038316 |
| 27 | 0.002051036 | 0.016054845 | 0.127751856 |
| 28 | 0.004453652 | 0.009447457 | 0.471412783 |
| 29 | 0.002126166 | 0.010846253 | 0.196027731 |
| 30 | 0.00194524 | 0.011261345 | 0.172736029 |

Source: Authors calculations by using Microsoft Excel

¹Modiglian and Miller (1961) argued that dividend policy has no effect on either the price of a firm’s stock or its cost of capital, in a perfect world, the dividend policy is irrelevant to shareholders wealth. This proposition has laid solid theoretical foundation for the dividend policy.

Figure: 1



Average Excess Returns of DSE Listed Private Commercial Banks

The recent conditions of capital market which makes the potential investors reluctant as well as information of dividend payment often leakages to the market a few days before the announcement. Hence, the announcement of dividend normally carries no focus to the market. In addition, asymmetric information prevails in the market due to insider trading and as insiders carries private information, so the outsiders prefer to follow the path of insiders to buy and sell shares. Therefore the shareholders are always become misguided due to asymmetric information and thus positive information regarding dividends also become unfruitful device in the market. As the speculation and manipulation prevails in the market, so speculators play their role in the market for short-term period. However it is understandable that the insiders, the brokers, and the exchange employees are main speculators of the market and they go for short-term gain in the market that causes dividend announcement ineffective. The dividend announcements, ultimately, do not provide any significant impact on the movement of stock prices.

5. Conclusion

This study investigated the effect of dividend announcement on security prices based on the listed commercial Banks in Dhaka stock Exchange (DSE). Event study methodology was employed in this regard and the study period was the fiscal year 2012-2013. On the day of dividend announcement Average Excess Return (AER) was -0.008125299 which was statistically insignificant (according to t statistic). Not only the value of AER on the day of dividend announcement but also all the values of AER are statistically insignificant over the period starting from 30 days prior to dividend announcement to 30 days after the dividend announcement. The result showed that dividend announcement has no effect of stock price of

the listed commercial banks in Dhaka Stock Exchange. If positive and symmetric information prevail in the market and the company stop the leakages of dividend information prior to the declaration date then dividend announcement can influence the stock prices.

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Appendix-1

Contribution of banking sector in total market capitalization in DSE

| Fiscal Year | Total Market Capitalisation (Tk. in crore) | Banks Contribution (Tk. In crore) |
|-------------|---|--------------------------------------|
| 1995-96 | 7936.17 | 850.60 |
| 1996-97 | 10576.34 | 1036.15 |
| 1997-98 | 5784.28 | 574.06 |
| 1998-99 | 4968.40 | 568.64 |
| 1999-00 | 5625.79 | 893.53 |
| 2000-01 | 7136.50 | 2004.50 |
| 2001-02 | 6466.80 | 1931.60 |
| 2002-03 | 7216.30 | 2042.70 |
| 2003-04 | 14185.10 | 5078.60 |
| 2004-05 | 21217.57 | 9818.00 |
| 2005-06 | 20350.20 | 10102.80 |
| 2006-07 | 41154.70 | 23112.80 |
| 2007-08 | 78882.20 | 41640.40 |
| 2008-09 | 100143.30 | 38682.20 |
| 2009-10 | 227640.80 | 64408.30 |
| 2010-11 | 232701.60 | 68061.90 |
| 2011-12 | 193244.08 | 51238.60 |
| 2012-13 | 197743.01 | 41710.10 |
| 2013-14 | | |
| July | 194857.53 | 38336.00 |
| August | 206611.57 | 37358.10 |
| September | 197149.04 | 35908.10 |
| October | 39123.80 | 193688.18 |
| November | 41345.60 | 206860.40 |

| | | |
|----------|----------|-----------|
| December | 42430.10 | 208582.72 |
|----------|----------|-----------|

Source: Bangladesh Bank

Appendix-2

Dividend of listed Banks in FY 2013-14

| Bank | Announcement Date | % of Dividend | |
|----------------------------|-------------------|---------------|--------|
| | | CASH | STOCK |
| Al-ArafahIslami Bank | 07.04.2013 | | 17%B |
| Islami Bank | 31.03.2013 | 8 | 17%B |
| Social Islami Bank Ltd. | 12.05.2013 | 5 | 10%B |
| Dutch Bangla Bank | 24.03.2013 | 40 | |
| Bank Asia | 03.03.2013 | 10 | |
| N B L | 09.02.2012 | | 65%B |
| Mutual Trust Bank | 31.03.2013 | | 10%B |
| Prime Bank | 03.03.2013 | 10 | 10%B |
| Pubali Bank | 25.03.2013 | 10 | |
| NCCBL | 21.04.2013 | | 10%B |
| City Bank | 18.04.2013 | | 10%B |
| One Bank Limited | 10.04.2013 | 5 | 15%B |
| Mercantile Bank | 14.03.2013 | 7 | 8%B |
| Export Import Bank | 28.05.2013 | | 10%B |
| First Security Islami Bank | 18.03.2013 | | 10%B |
| ShahjalalIslami Bank | 29.04.2013 | | 20%B |
| Eastern Bank | 27.02.2013 | | 20 |
| Dhaka Bank | 13.03.2013 | | 16%B |
| A B Bank | 31.03.2013 | | 12.5%B |
| Southeast Bank | 18.03.2013 | 15 | |
| Uttra Bank | 25.03.2012 | 20 | 15%B |
| Rupali Bank | 29.04.2013 | | 10%B |
| Standard Bank | 10.03.2013 | | 17%B |
| IFIC Bank | 31.03.2013 | | 10%B |
| Trust Bank | 25.03.2013 | | 10%B |
| Jamuna Bank Ltd. | 29.04.2013 | 14 | |
| Premier Bank | 10.04.2013 | | 10%B |
| Brac Bank | 27.03.2013 | | 15%B |
| UCBL | 02.05.2013 | 10 | |

Source: DSE Annual Report