Effect of dividend announcement on stock prices in banking industry of Pakistan

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ABSTRACT

This paper proves the result of change in dividend on the stock price. The sample of the population depends on the three banking sector of Pakistan which is Bank Al-Falah, UBL and MCB. In this paper descriptive data was gathered of the five years (2008-2012) related the Banking sectors of the payment of dividend and stock price. The descriptive statistics and regression analysis represent that there is positive or negative relationship has been found between the dividend and stock price. It is proved that the dividend has positive regression with the earning per share and negative regression dividend with the stock price.

Keywords: Dividend; Stock Dividend; Cash Dividend; EPS; Profit after taxes

1. INTRODUCTION

Every corporation has the same goal in mind to maximize shareholder’s wealth. This goal is fulfilled in two different ways by re-investing cash into the business to stimulate its growth, or by paying dividends to shareholders. Arnold (2008) definition of dividend policy is to maximize shareholders wealth by maximizing their purchasing power. Dividends are usually described as the distribution of earnings (past and present) in actual assets among the shareholders of the sectors in ratio to their ownership. Dividends are paid from the sectors after tax income. A dividend is a periodic distribution of cash to the stockholders of a firm. In 1961, Miller and Modigliani (M&M) of the other opinion about the dividend policy; they said the dividend policy does not affect the value of the firm. The only thing that could affect the value of the firm is the investment policy.

Theoretical Framework

Gordon (1963) gave another argument against the Dividend Irrelevance Theory by providing the evidence that the dividend policies will affect the value of the firm. From the agency theory viewpoint, the announcement of the dividend may be analyzed as the means of determining agency problem as outsiders will prefer the current dividends over retained earnings. If the dividend is not dispersed in the form of cash, it will give en prospection to the...
insiders to use the fund for their personal use or to invest the fund in a non-profitable project for the benefit of the internals (Easterbrook, 1984; Jahera, 1986).

There are two problems which occur in the agency theory one is **Agency Problem** arise when managers of the organization place personal goals ahead of the goals of shareholders. And the second is **Agency Cost** it arises from agency problem that are borne by shareholders and represent a loss of shareholder wealth. In an ideal world in which all taxes are exempt such as corporate taxes and personal taxes etc. There is a positive possibility for future profit and investment.

The deficiency which is serious to the expansion of theories linked to dividend is systematic decision and information problem which lends importance to the Signaling Theory. Docking, Scott, Koch and Poul (2005) examined the sensitivity of the investor reactions to the recent directional or Volatility of underlying market movements.

They originate that dividend vary announcements obtain a greater change in the stock price when the nature of the reports (favorable or unfavorable) go against of the Jews against the particles of the current market's path during volatile periods. Stock prices play an important role in the banking sector. A stock price of a firm never remains stable. Fluctuations in stock prices are caused due to a number of factors such as tax, interest rate and dividends. So in this technique stock options as a return to managers also influence stock prices (Meek, Rao & Skousen, 2007).

Conroy et al. (2000) found that present dividend announcements are not capable to clarify the market feedback towards announcements. Dividend policy is considered one of the most critical issues for an organization decision because it seems a significant technique for companies to correspond with market participants. It is also major note that the extent to which the firm’s dividend policy is successful in reducing the expected organization expenditure may also depend on its ownership and control structure. The Chinese stock market is responding to changes the whole variables in the long run positions in which create negative results of speculation (Liu & Shrestha, 2008).

The parallel of results of basic dividend models were also well-known by him in both tests based on parameters and non parametric approach. Fernando and Guneratne (2008), worked on bonus shares issuance announcement in “Colombo Stock Exchange”, for sixteen years starting from 1991 and found that such announcements have a positive impact of dividend and stock price.

The price response to dividend openings has been examined by daily stock price data of US companies to manage for another period information announcement and found important abnormal returns (ARs) at dividend opening announcements. Dividend initiations are linked with rise in shareholders’ wealth through stock price increase. (Dasilas, Lyroudi Ginoglou, 2009). Till the year 2009 was over 654 companies were on the KSE board showing the capitalization of KSE up to Pakistan. Martikainen (2008) who study the short time price impact of dividend announcements during a boom and long term impact is recession it’s a big gap between current dividend (D0) and expected dividend (P1).

This research plan to achieve the following objective:

1) To find a way how dividends influence stock prices of the different banking sector.

2) To get the results an important ways that can help the different banking sector.

3) To get the optimal dividend and EPS in the banking sector of Pakistan.
2. LITERATURE REVIEW

**Dividend Policy in the Banking Sector of Pakistan**

The first dividend act in the United States was enacted in New York in 1825. Before 1920 U.S. firms for the first time started to "smooth" dividend that is create a fixed dividend payment flow less volatile than earning. Dividend Policy is extensively important topic in the field of finance and it always remains a controversial topic. The researchers studied in the field of finance was always the blood of banking sector and other organization. Frankfurter and Wood (1997) accomplished their study on the evolution of dividends with the observation as whole economy and sectors. The researcher find out a relation with the stock price that is on the basis Pakistani researchers who also considered the banking sector’s as a vital topic. Nishat & Irfan (2003) studied the affect of dividend policy on the stock price threat and found Dividend Yield and Payout Ratio are positively related to the share price. This relation remains the equivalent even behind controlling the Firm volume.

Bhatt and Pander (1994) in their study conducted a survey to ascertain the perceptions of Indian managers about dividend decisions. According to their study the top five determinants of dividend policy are:

- Present earning
- Current dividend
- Expected future income
- Increasing capital base and liquidity

**Earning per Share and Taxes**

Litzenberger and Ramaswamy (1980) presented evidence that seems consistent with negative relationship between tax induce and Earning per share such as \( \text{EPS} = \frac{\text{Total income of common stock}}{\text{Total outstanding share}} - \text{Tax} \) deducted by EBIT.

**The Ex-Dividend Day**

More recently, Kalay and Michaely (1993) The ex-dividend day about fourteen days after the announcement day and about fourteen day before the payment day. If the stock will purchase on the day before the ex-dividend the last day include in the dividend declared. If the stock will purchase on the day of ex-dividend. The buyer will not receive the dividend.

**Theme of Dividend Policy in the Banking Sector**

The study conducted by Naeem & Nasir (2007) observed the determinants and trends of dividend policies. The results of their study show that Pakistani banking sectors are either unwilling to pay dividends or pay a very low amount as dividends and their current dividend decisions depend on the previous year dividends.

**Types of Dividend**

**Cash dividend** is only used for cash payment paid by the common and preferred stocks to the shareholders. The firm sometimes pays in the form of **stock dividends** which is different from the cash dividends because in which pay stock to the shareholder not cash. It ensures that premium gains to the stockholders. The expectation of dividends by owner helps them to determine the share value therefore, dividend policy is an important decision taken by the fiscal managers of any company. The dividend announcement provides information about the current
of funds and allows the market in the direction of estimate the firm’s current earnings (Miller and Rock, 1985). Due to a significant result, the increase in the stock price is unequal to the expected dividends. Stock price is the price tag of purchasing a security on an exchange. Unpaid the path of the discounted value of dividend the stock price may even surpass the market value which is known as the undervaluation in the market or overstatement of investor’s assessment (Downs, 1991). **Stock Split** is a process in which increases the number of shares outstanding and reduce the price per share. The number of share outstanding is multiplying by two and price per share is dividing by two. \( SS = \text{Number of share} \times 2 \) and price per share /2. The Gordon (1962) model, describe an equation about Dividend and stock price. \( P_0 = 1 + gc/rag \times Do \) f change in price Change in price one then Dividend also change D1 R0 = change P1/P-1 = 1+g change Do/r-gP-1.

**Relationship between dividend Policy and Stock Prices**

**CONCEPTUAL MODEL**

**MODEL (1)**

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLE</th>
<th>DEPENDENT VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIVIDEND</td>
<td>STOCK PRICE</td>
</tr>
</tbody>
</table>

It is a positive sign relation between both variables.

**MODEL (2)**

<table>
<thead>
<tr>
<th>Dividend</th>
<th>EPS</th>
<th>Stock Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2 +</td>
<td></td>
<td>H3 -</td>
</tr>
<tr>
<td>H1-</td>
<td></td>
<td>H5-</td>
</tr>
<tr>
<td>H4- Taxes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ SP = \beta_0 + \beta_1 \text{Div} + \beta_2 \text{EPS} - \beta_3 \text{Tax} \]

H1 = Dividend shows negative relationship with the stock price.
H2 = Dividend shows positive relationship with the EPS.
H3 = Stock price shows negative relationship with the earning per share.
H4 = Dividend shows negative relationship with the tax.
H5 = Stock price shows negative relation with the tax.
The dividend decision is an important part of banking sectors for financial decision making because dividend is divided by Corporate Finance_ investment decision and the financial decision. Previous studies conducted on dividend policy provide strong proof for the presence of a relationship between dividend policy and stock prices. New researches conducted to see the result of dividend policy on stock prices first includes the sequential work of Lintner (1956).

Who studied different determinants of corporate dividend policy and its effect on firm’s market value by conducting the interviews of top managements of 28 firms. Results show the positive but the irrelevant relation between Stock Price and Dividend Yield after controlling but the insignificant relation between Stock Price and Dividend Yield after controlling the SPS, Cash Dividend and stock Dividend.

Chen, Huang & Cheng (2009) analyzed the effect of Cash Dividend on Share Price for the period 2000-2004 Pakistan. They established that Cash Dividend had a significantly positive effect on the Stock Prices. The researcher showed a positive relationship between the stock price and dividend yield.

3. METHODOLOGY

As it is stated before that every firm wants to maximize shareholder wealth and this goal achieved by two ways one is that he should re-invest to growth its profit or through paying dividend. Arnold 2008 defined that the dividend policy is to maximize the shareholders wealth by maximizing their purchasing power. Miller and Modigliani in 1961 presented that dividend does not affect the firm value and according to Gordon in 1963 said that the dividend affect the value of the firms.

For this purpose three objected was used one is how the dividend influence the stock price, second is to get results an important that can affect the in different banking sectors and third is to get optimal dividend and earnings per share in the banking sector of Pakistan. In this research paper two variables are taken one is independent variable of Dividend and second is the dependent variable of Stock Price. In which also used descriptive method for the accomplishment of the research papers objective.

3. 1. Data Collection

This technique was based on the past research papers. In this research for analysis secondary data was used. The sample of the population was taken three banking sectors which are currently working in Pakistan such as UBL Bank, MCB & AL-FALAH Bank. All these banks are performing outstanding in the market. The sample size consists of three banks. For this purpose five years (2008 to 2012) data were collected regarding dividend income, tax after payment, earnings per share and also stock price.

4. RESULT AND DISCUSSION

Figure shows five year stock price Bank Al-Falah. This figure represents variations of the stock price. The Bank Al- Falah stock price not shows the fix trend. The Bank Al-Falah stock price shows changing. It can be seen the stock price maximum of 2008 is 45.51and 2012 minimum is 15.66.It shows decreasing trend.
Fig. 1. Bank Alflah stock price.

Fig. 2. Formula to calculate stock price.

$$SP = \frac{\text{sum of each year closing value}}{\text{total working days}}$$
Figure shows five year stock price Bank Al-Falah. This figure represents variations of the stock price. The Bank Al-Falah stock price does not show the stable trend. The Bank Al-Falah stock price shows changing. It can be seen the stock price maximum of 2008 is 120.27 and 2012 minimum is 74.80 which shows a decreasing trend of each year.

![Graph showing stock price movements](image-url)

**Fig. 3.** Bank Al-Falah stock price.

Figure shows five year stock price Bank Al-Falah. This figure represents variations of the stock price. The Bank Al-Falah stock price does not show the stable trend. The Bank Al-Falah stock price shows changing. It can be seen the stock price maximum of 2008 is 325.48 and 2012 minimum is 175.69. It shows a decreasing trend.

### Table 1. Descriptive Statistics.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Alfla_EPS</td>
<td>5</td>
<td>3688875.00</td>
<td>9833875.00</td>
<td>6003672.0000</td>
<td>2383986.37487</td>
<td>1.212</td>
<td>.913</td>
</tr>
<tr>
<td>MCB_EPS</td>
<td>5</td>
<td>20526669.00</td>
<td>49342656.00</td>
<td>33626004.2000</td>
<td>11742522.59033</td>
<td>.336</td>
<td>.913</td>
</tr>
<tr>
<td>UBL_EPS</td>
<td>5</td>
<td>11159930.00</td>
<td>26049777.00</td>
<td>18991187.8000</td>
<td>6161585.57445</td>
<td>-.049</td>
<td>.913</td>
</tr>
<tr>
<td>Alfa_dividend</td>
<td>5</td>
<td>248217.00</td>
<td>3490061.00</td>
<td>1078310.8000</td>
<td>1382690.45097</td>
<td>1.986</td>
<td>.913</td>
</tr>
<tr>
<td>UBL_dividend</td>
<td>5</td>
<td>587989.00</td>
<td>886442.00</td>
<td>691658.2000</td>
<td>137011.76233</td>
<td>.889</td>
<td>.913</td>
</tr>
</tbody>
</table>
Summarize descriptive statistics details for four variables affecting the earning per share. The price range mean of 3688875.00 to 9833875.00 and standard deviation is 2383986. The second dividend range is affecting mean of 248217 to 3490061 and standard deviation is 137011. In third taxes range is affecting mean of 119281 to 12058273 and standard deviation is 5183493. And the fourth stock price is minimum is 10.31 to 45.51 and standard deviation is to 15.03.

**Table 2. Model Summary.**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df1</td>
</tr>
<tr>
<td>1</td>
<td>.944</td>
<td>.891</td>
<td>.855</td>
<td>1284283.56748</td>
<td>.891</td>
</tr>
</tbody>
</table>

**Table 3. Dividend SP Coefficients.**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>749781.211</td>
<td>355512.127</td>
<td>2.109</td>
</tr>
<tr>
<td></td>
<td>SP</td>
<td>-1352.803</td>
<td>3357.375</td>
<td>-.227</td>
</tr>
</tbody>
</table>

This hypothesis shows that the results that there is a negative relationship between the dividend and stock price on behalf of beta = -2.27, t = -.403 and the significant is also rejected because the value is more than p = 0.05.

So, **Hypothesis is rejected = H1**  
SP = β₀ + β₁Div + β₂ EPS − β₃Tax  
It is proved that stock price has negative relationship with dividend.
Table 4. Dividend and ESP Coefficients.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-336505.003</td>
<td>1713832.476</td>
<td>-.196</td>
</tr>
<tr>
<td>EPS</td>
<td>.301</td>
<td>.065</td>
<td>.936</td>
<td>4.608</td>
</tr>
</tbody>
</table>

This hypothesis shows that the results that there is a negative relationship between the dividend and earnings per share on behalf of beta = .936, t = 4.608 and the significant is also accepted because the value is less than p = 0.05.

So, Hypothesis is Accepted = H2

SP = β0 + β1Div + β2 EPS + β3Tax

It is proved that earning per share has positive relationship with dividend.

Dividend with Tax

Table 5. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-2160326.132</td>
<td>1944446.544</td>
<td>1.111</td>
</tr>
<tr>
<td>DIV</td>
<td>-15.006</td>
<td>3.030</td>
<td>-.944</td>
<td>4.953</td>
</tr>
</tbody>
</table>

* Dependent Variable: TAX

This hypothesis shows that the results that there is a negative relationship between the dividend and tax on behalf of beta = .944, t = 4.953 and the significant is also accepted because the value is less than p = 0.05.

So, Hypothesis is Accepted = H3

SP = β0 + β1Div + β2 EPS – β3Tax

It is proved that dividend has positive relationship with tax.

ESP with Stock Price

Table 5. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>130.103</td>
<td>48.070</td>
<td>2.707</td>
</tr>
<tr>
<td>EPS</td>
<td>-1.187E-006</td>
<td>.000</td>
<td>-.350</td>
<td>-.648</td>
</tr>
</tbody>
</table>

* Dependent Variable: SP
This hypothesis shows that the results that there is a negative relationship between the dividend and tax on behalf of \( \beta = -0.350 \), \( t = -0.648 \) and the significant is also rejected because the value is less than \( p = 0.05 \).

**So, Hypothesis is Accepted = H4**

\[ SP = \beta_0 + \beta_1Div + \beta_2EPS - \beta_3Tax \]

It is proved that stock price has negative relationship with earning per share.

ESP with Stock Price

### 5. DISCUSSION & CONCLUSIONS

This paper checks the effect of change in dividend on the stock price behaviour. The findings indicate that the stock prices of all sample of banking sectors change with the change in dividend. When the dividend changes it affects stock price negatively. The sample of the population depends on three different banking sectors. So it is evident that most of the dividend has been found positive relation with other variables. But the stock price has negative relationship with the earning per share. It shows variation of stock price over five years. The irrelevance theory create problem but the relevance theory represent the solution of this problem which occurs in banking sectors of Pakistan. So, if to overcome of such problems like as agency cost, tax and other factor that affect the banking sector of Pakistan. It is proved that dividend has no affect in the banking sector.

**Future research and thinking**

Mishra and Narender (1996) in the sectors which the present research has focused are Services sector. Therefore, in future a comparative study between Dividend policy determinants of Service and Banking sector can be conducted. This would reveal the sector differences in the dividend policy determinants.

**References**


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