

Effect of Dividend Policy on Share Holder's Wealth: "A Study of Sugar Industry in Pakistan"

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Abstract

The present paper focuses on the impact of dividend policy on shareholder's wealth in sugar industries of Pakistan. For this study we have selected the sample of 33 listed companies of sugar industry out of 36 at Karachi Stock Exchange from the food and producers sector. The data is collected for the period of 6 years from the year 2006 to 2011. For this study descriptive statistics and multiple regression analysis is used by taking dividend per share (DPS), earnings per share (EPS), Lagged Market Price Ratio (LMPR), Lagged Price Earnings Ratio (LPER) Price Earnings Ratio (PER) Retained Earnings Ratio (RER) as independent variables and market price per share (MPS) as dependent variable. The R² shows that 99

Index terms— dividend policy, shareholder's wealth, dividend per share (DPS), market price per share (MPS), price earnings ratio (PER), pakistan.

1 Introduction

In the modern and complex environment, globalization and privatization have brought deep competition in every field of activity. It is very difficult for the companies to compete in the markets of stunning nature. To cope with this competitiveness and to add value to the companies, today's the finance managers have to make critical financial decisions. These decisions will lead these companies to long-run objective of maximizing the shareholders' wealth. Shareholders' wealth is shown in the market price of the company's common stock.

Management of a company want to maximize shareholders' wealth. This is possible when the price of the company's common stock is maximum. Shareholders like cash dividends and they also like the growth in earning per share that result from investing the earning of business back into it.

The best dividend policy is the one that maximizes the company's stock price which leads to maximization of shareholders' wealth and also ensures more quick economic growth. The present study is aimed to study how far the dividend payout has impact on shareholders' wealth in general and in particular to study that market value of common stock has strong relationship with cash dividend paid or with the growth in earning per share. And to study that how much importance the shareholders give to the lagged market price of a stock when taking decision to buy a stock.

Managements' primary goal is shareholders' wealth maximization and this can be achieved by giving the shareholders payment on their investments. However, the effect of firm's dividend policy on shareholders wealth is still unresolved. Dividend policy is one of the most complex aspects in finance. Dividend policy is mainly of two types: a) Managed dividend policy b) Residual dividend policy

In residual dividend policy the amount of dividend is simply the cash that is left after the firm makes investment decisions. In this case the amount of dividend is usually very variable and it may be zero most of the times. If the manager believes dividend policy is important to their investors and it has positive effect on share price value, they will adopt managed dividend policy. The best dividend policy is one that increases the company's stock price which leads to maximization of shareholders' wealth.

The dividend decisions can donate to the value of firm or not it is a controversial issue. Firms generally take up dividend policies that suit the stage of life cycle they are in. High-growth firms with big cash flows

3 B) LITERATURE REVIEW

and fewer projects have a propensity to pay more of their earnings out as dividends. The dividend policies of firms may pursue several interesting patterns adding further to the complexity of such decisions. Dividends are dependent on earnings that are, increases in earnings increases the dividend and decreases in earnings sometimes by dividend cuts. Firms are usually hesitant to change dividends. Especially firms avoid cutting dividends even when earnings drop. There are distinct differences in dividend policy over the life cycle of a firm, ensuing from changes in growth rates, cash flows, and plan funds in hand.

2 a) Statement of the Problem

Net earnings are divided into two parts. One is retained earnings and the other is dividends. The retained earnings of the business may be reinvested in business and used for the growth of the business. The dividend is distributed to the shareholders in order to meet their expectation of being made better off financially. So the problem is to take decision that how much earning should be given in the form of dividend payout and how much earning should be kept as retained earnings. Therefore, the present study mainly analyses how far the level of dividend payout affects the I shareholders' wealth and how much importance is given to company growth particularly in Cement Industry of Pakistan. It also analyses that lagged market price of share have any relation with shareholders wealth or not.

3 b) Literature Review

Many researchers have conducted research on this topic and it is the vast area to research on. Linter has conducted research in 1956 about dividend policy and raised questions which are important in this field of study. Linter (1956) what are the choices of management that influence the firm size, shape, and timing of dividend policy? After the Linter's contribution in determining dividend policy decisions Miller and Modigliani (1961) conducted research in dividend policy decisions and presented the theory of dividend irrelevance which showed that the dividend policy does not affect the stock prices.

Many researchers evidenced the dividend irrelevance theory through their studies like Black & Scholes On the other hand many researchers support dividend relevance theory. They said dividend policy do affect the firm's value and market price of the shares. Gordon (1963) The result of their study show that general effect of dividend yield on price volatility observed at higher significant levels, leads to acceptance of null hypothesis, which states that measure of dividend policy vary inversely with ordinary share price volatility over time.

Azhagaiah & Priya (2008) conducted study on the impact of dividend policy on shareholder wealth in South India. Secondary data used which collected from center for monitoring India economy. Sample of 28 companies in chemical industry has been chosen from 114 listed companies in Bombay stock exchange using multi stage random sampling techniques for period of 1997 to 2006. Multiple regression & stepwise regression model used for data analyzing. Dividend per share, retained earnings per share, lagged price earnings ratio & lagged market price independent variables & market price per share dependent variable. There is a significant impact of dividend policy on shareholder wealth in organic chemical companies while shareholders wealth not influence by dividend payout as for as inorganic chemical companies. Hashemijoo et al (2012) conducted the study of dividend policy on share price volatility in stock market of Malaysia. The aim of this study was found that the relationship between dividend policy and share price volatility on consumer product company in Malaysian stock market. They have taken a sample of 84 listed companies from the period of six years in 2005 to 2010. In this study the share price volatility is the dependent variable and dividend yield or payout ratio is the independent variables. Multiple Regression model are used in this study to analyze the results. The results of this study show that the dividend yield or dividend payout has negative effect in share price volatility.

Zulkifli et al (2012) explains that the impact of dividend policy in share price volatility in construction and material companies of Malaysia. The basic purpose of this study to check the relationship between dividend policy and market price of share. The sample of 106 construction and material companies and final select the sample of 77 construction and material companies for the period of six years in 2005 to 2010. Share price volatility as the dependent variable and dividend yield, dividend payout ratio, leverage, growth, size and earnings volatility are the independent variables. Least square regression model are used to interpret the results of this study. The result shows that the positive effect on the dividend yields in share price volatility. Pani (2008) introduced the dividend policy and stock price behavior in corporate sector of India. The aim of this study is to check the relationship between the dividend and stock return volatility. They used the sample of 500 listed companies for the period in 1996 to 2006 and the sample is taken for six different sectors i.e. electricity, food and beverage, non metallic, mining, textile and service sector. Fixed effect model and pooled OLS model are used to elaborate the results. In this study market value of the firm is the dependent variable and the size of the firm, dividend to retained earnings ratio and debt to equity ratio are the independent variable. The study explores that the dividend paying companies are large, profitable and growth rate of the firm does not seems to deter the dividend payment. Net profit and Dividend and Retention Ratio remain significant in other services, textile and mining industries. Khan (2012) conducted research on the dividend effects on stock prices. The purpose of the study is to improve the dividend policy decisions adopted by the companies. This study helps to explain the effect of dividend policy impacts on shareholders wealth by taking the data from two important sectors chemical and pharmaceutical industry of Pakistan. A data sample of twenty nine companies has been taken from the period 2001 to 2010.

Price volatility is taken as dependent variable which is calculated by using Parkinson (1980) method of extreme values while earnings per Share, Profit after Tax and Return on Equity are taken as independent variables. Fixed and random effect models are applied on panel data to conclude the results. The experimental estimation based on the fixed and random effect model shows the significant positive relation between stock dividends, earnings per share and profit after tax to stock market prices while return on equity and retention ratio have negative and statistically insignificant relationship to stock market prices.

Nazir et al. (2010) explains the determinants of stock price volatility in Karachi stock exchange. This paper investigates the role of corporate dividend policy in determining stock prices. The sample of 73 firms is taken from the KSE 100 index companies of different sectors from the year 2003 to 2008. The data is collected from the balance sheet analysis published by state bank of Pakistan and annual reports of the companies. Price volatility is taken as dependent variable and dividend yield and payout ratio is taken as independent variables. They used descriptive and correlation matrix to find the results. The results showed that the dividend measures both dividend payout and dividend yield has significant effect on stock price volatility and in overall period the size and leverage has negative and non-significant impact on share price volatility.

Rashid and Rahman (2006) introduced the dividend policy and stock price volatility in the context of Bangladesh. The aim of the study is to investigate the relationship between dividend policy and share price volatility. For this purpose they consider the data for the period of 1999-2006. They selected the sample of 104 non financial firms of different sectors listed in Dhaka stock exchange. Price volatility is taken as dependent variable and dividend payout, dividend yield and earning volatility are independent variables. The authors used descriptive statistics and cross sectional regression analysis to conclude the results. The Pearson's correlation showed that there is negative significant correlation between payout and price volatility.

Proffitt and Bacon (2013) conducted the research on dividend policy and stock price volatility in the U.S equity capital market. The purpose of the study is to identify the impact of certain financial variables on the stock price volatility. A sample of 500 publicly traded firms has been taken to explain the results. Price volatility is taken as dependent variable and dividend yield and payout ratio is taken as dependent variable. The ordinary least square multiple regression is used to find the results. Leverage and growth both have negative relationship with stock price volatility and there is positive relationship observed between the payout ratio and the stock price volatility.

Asghar et al. (2011) conducted research on effect of dividend policy on stock price risk in Pakistan. The purpose of the study is to check the relationship between dividend policy and stock prices. The data is taken for the five important sectors i.e., chemical, cement, sugar, engineering, synthetic & fiber for the period 2005-2009 from the published resources of state bank of Pakistan and Karachi stock exchange. Price volatility is taken as dependent variable while dividend yield, dividend payout price ratio, earning volatility and growth in assets taken as independent variables. Regression model based on Baskin (1989) documentation was used to conclude the results. The results of this study prescribes that Price volatility has strong positive correlation with dividend yield but PV is highly negatively correlated with growth in assets.

Joshi (2011) examines the impact of dividend on stock prices in Nepal. The aim of the study is to examine the relationship of dividend and the stock prices in the context of Nepal. The data for this study is taken as 210 listed companies taken for the year 2010/11. Out of 210, 163 companies were selected for the study on the basis of accessibility of data which includes 163 from banking and 46 from non-banking sector. In this study the dependent variable is current market stock price and four other variables are taken as independent namely dividend per share, lagged price earnings ratio, lagged market price per share and retained earnings per share. The descriptive statistics and regression analysis is used to conclude the results. The result of this study showed that dividend per share is a motivating factor and has strong effect on market price per share of the banking and non banking firms. It is also analyzed that dividend per share has greater effect on stock prices than retained earnings per share. Finally the study shows that both dividend and retained earnings per share effect stock prices of banking and non banking sector.

Mokaya, S; Nyang'ara, D and James, L (2013) explains how dividend policy effect market share price in banking industry of Kenya. This study covered the sample of 100 respondents represented a population of 47000 general public shareholders questioners were used to collect the data. Market share value is the dependent variable and dividend policy is the independent variable. Descriptive and inferential statistics were used to determine and explain variable's relationships. The study concluded that National Bank of Kenya had a dividend policy and this dividend policy the major factor driving NBK share value. It has been seen that an increase in dividend payout may result an increase in share price.

Khan, A ; Khan.K (2011) conducted research on dividend payout policy and its effect on stock prices. The purpose of the study is to determine the factors of dividend payout policy that affect the stock prices. The sample in this study is 131 companies listed at Karachi Stock Exchange for a period of 10 years from 2001 to 2010. Panel data approach is used to measure the relation between dividend policy and stock prices. In this study price volatility is taken as dependent variable which is calculated by using Parkinson method of extreme values. Retention ratio, stock dividend per share, earning per share, net profit after tax and return on equity are used as independent variables to study the effect of stock prices. The results of this study showed that the stock dividend, earnings per share, profit after tax, and return on equity has positive effect on stock prices and

retention ratio has negative effect on stock prices. Overall it is concluded in this study that dividend policy has significant positive effect on stock prices.

4 c) Objectives of the Study

? To check the relationship between dividend payout and shareholders wealth. ? To check the effect of Earning per Share on shareholders wealth. ? To estimate the impact of retained earnings and past performance of the company on shareholders wealth.

5 d) Needs & Significance of Study

It is very important for the corporations to formulate a dividend policy which enhances the value of the business. Due to the globalization and privatization of the firms, they face very difficulties in making the profits. So the financial managers have to take this area very deep and to think about it that how firms compete in such type of modernized framework of businesses.

6 e) Variables

Based on our problem statement of the study we define the following variables.

7 i. Dependent Variable

Shareholder's wealth is dependent variable which is measured with market price per share.

ii. Independent Variable Dividend policy is taken as independent variable which is measured with the help of six ratios namely price earnings ratio, earnings per share, dividend per share, retained earnings ratio, lagged price earnings ratio, lagged market price ratio.

8 f) Equation used for Analysis

In this study panel data approach is used to analyze the relationship between dividend policy on shareholder's wealth. Descriptive statistics and multiple regression analysis is used to analyze the results. Following regression model is used to show the relationship between dividend policy and shareholder's wealth. H2: There is a significant positive relationship between market price per share and earnings per share.

H3: There is a significant positive relationship between market price per share and lagged market price ratio.

The sample of the study is taken from the food and producers sector and choose 33 companies out of 36 companies of sugar industry. The data is collected for the period of 6 years from 2006 to 2011. Rest of the companies from the sector is excluded from the study.

9 Statistical Techniques

We use multiple regression and descriptive statistics to check the behaviour of the variables and to check the impact of dividend policy on shareholder's wealth.

IV.

10 Results and Discussion

11 33

Table ?? shows the maximum MPS is 1.90% and minimum is -1.8% with an industrial average of 0.15%. The variance from the mean point is 0.80% and standard deviation is 0.89%. The mean value of dividend per share is 0.10% and the maximum DPS value is 0.64% and the minimum value is 0. The deviation from the mean point is 0.26% and the dispersion in the series is 0.16%. The earning per share average value is 0.62%. The maximum value in the series 19% and the minimum value is -22%. The variance from the mean is 87 and the dispersion in the series is 9.33. In our model LMPR average is -0.02 and ranges from minimum -1.98 to the maximum of 0.57. The variance from the mean is 0.16 and the standard deviation is 0.41. The LPER minimum value ranges from -20 to maximum value 6.1 and averages -0.34. The dispersion in the series is 4.23 and the variance from the mean is 17.9. The PER has the highest standard deviation which is 35.8 and variance is 1286.27. The minimum value ranges from -200.8 to the maximum of 23.8 having an average of -5.93. The sixth independent variable is RER whose minimum value in the data is -6.92 and the maximum of 10.8 with an average of 33 observations is 0.30. The standard deviation is 2.37 and the variance from the mean is 5.64. Table 2 shows the multiple regression test. MPS is taken as dependent variable and run the regression using six independent variables namely dividend per share, earning per share, lagged market price per share, lagged price earning ratio, price earning ratio and retained earning ratio. The relationship between MPS and DPS is significant level at 5% which shows that the DPS has strong positive relationship with MPS. The second independent variable EPS has a significant impact on MPS and has a maximum t-value which shows that the MPS has greatly influenced by the earning per share. The third independent variable is Lagged market price ratio which has a significant relationship with MPS at 5% level of significance. The lagged price earnings ratio also affects the stock price and it has a probability of 0.03 which is less than 5% level of significance. The price earnings ratio and the retained earnings ratio have

probability values 0.88 and 0.30 respectively which shows that there is not of significant relationship of these two variables on the Market price per share of the sugar industries of Pakistan. The R2 shows that 99% variations in MPS are due to the explanatory variables. The p value of the f statistic shows that all the regressors have jointly significant relationship with dependent variable (MPS).

12 a) Hypothesis Testing

Hypothesis testing is used to check the relationship between dividend policy and shareholder's wealth. We use multiple regression analysis to check our hypothesis and the results are shown in the table.

13 No. Hypothesis Results Tools

14 H1

There is a significant positive relationship between market price per share and dividend per share.

15 Accepted Multiple Regression

16 H2

There is a significant positive relationship between market price per share and earnings per share.

17 Accepted Multiple Regression

18 H3

There is a significant positive relationship between market price per share and lagged market price ratio.

19 Accepted Multiple Regression

20 H4

There is a significant positive relationship between market price per share and lagged price earnings ratio.

21 Accepted Multiple Regression

22 H5

There is a significant negative relationship between market price per share and price earnings ratio.

23 Rejected Multiple Regression

24 H6

There is a significant negative relationship between market price per share and retained earnings ratio.

25 Rejected Multiple Regression

V.

26 Conclusion

We have conducted the research to examine the relationship between dividend policy on share-holder's wealth of the sugar industry. For this study we have selected the sample of 33 listed companies of sugar industry out of 36 at Karachi Stock Exchange from ¹

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Figure 1:

earning volatility.
presented his view by supporting the
dividend relevance theory. Studies conducted by
Travlos, Trigeorgis, & Vafeas (2001), Baker, Powell &
Veit (2002), Myers & Frank (2004), Dong, Robinson &
Veld (2005) and Maditinos, Sevic, Theriou, & Tsinani
(2007) support dividend relevance theory.
Gul, et al (2012) investigated relationship
between dividend policy & shareholder wealth in Paki-
stan. For this purpose they used sample of 75 listed
companies & data collected from State Bank of Pakistan
& Karachi Stock Exchange 100 index for period of 2005
to 2010. Shareholder Wealth dependent variable mea-
sured by market price per share & dividend policy
independent variable measured by dividend per share &
multiple regression & stepwise regression model used in
this research for data analysis. The result of this study
that significant influence of dividend policy on sha-
reholder wealth as far as dividend paying companies
are concerned & also find difference in average market
value relative to book value of equity is high between
dividend paying companies & non dividend paying
companies.
Okafor & Mgbame (2011) conducted a study to
analyses dividend policy & share price volatility in
Nigeria by taking sample of 4 banks & 2 firms each firm
food & beverage, petroleum & brewing sectors. Stock &
financial related data of these firms are collected over 8
year period from 1998-2005. Major sources of data
collection annual fact book of Nigerian stock exchange.
Dependent variable price volatility & independent
variable dividend yield, payout ratio, assets growth &

Figure 2:

2

Dependent Variable: MPS				
Method: Least Squares				
Included observations: 33				
Variable	Coefficient	Standard Error	t-Statistic	Probability
C	0.019101	0.024491	0.779916	0.4425
DPS	0.557187	0.144714	3.850258	0.0007

Figure 3: Table 2 :

shareholder's wealth while price earnings ratio and retained earnings ratio has not a significant relationship with market price per share which shows that price earnings ratio and retained earnings ratio does not strongly affect the shareholder's wealth.

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