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DETERMINANTS OF DIVIDEND PAYOUT RATIO: EVIDENCE FROM KARACHI STOCK EXCHANGE (KSE)[*]

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ABSTRACT

This study examines the determinants of dividend payout ratio in the largest stock exchange of Pakistan i.e. Karachi Stock Exchange (KSE). The effect of Debt to equity ratio, Operating cash flow per share, profitability, market to book value ratio, current ratio and corporate tax on dividend payout ratio was analyzed for the year 2009 for 50 companies that announced dividend in 2009. Relation of debt to equity ratio, profitability, current ratio and corporate tax was found to be positive with dividend payout ratio while Operating cash flow per share and market to book value ratio has a negative relationship with dividend payout ratio. Profitability, debt to equity and market to book value ratios were found to be the significant determinants of dividend payout ratio in Pakistan.

Keyword: Dividend Payout Ratio; Debt to Equity Ratio; KSE; Determinants.

INTRODUCTION

Dividend payout has always been a debatable subject in corporate finance. Many researchers in past have come up with theoretical models explaining what factors managers should consider while making a dividend decision. Dividend decision is important for both the investors and corporations. It is the decision of company's management that what proportion of the earnings should be invested and what proportion should be distributed to shareholders as dividends. While making this decision the management considers available investment opportunities that would increase future earnings and if such opportunities are not available the management should distribute the earnings to shareholders. (Miller & Modigliani, 1961)

The traditional view of the dividend decision states that at a particular time the amount of cash paid today as dividend is more valuable than the retained cash. The traditional view argues that paying early dividends may not change the corporation risk level but it will change the perception of the investor about the corporation's risk level thus dividends are more valuable than retained earnings.

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In imperfect market investors prefer companies with a dividend pattern similar to their consumption pattern. That is the reason many companies follow a consistent dividend policy and their management consider reduction in dividend as a weakness signal and thus a higher dividend would only be announced if the company can sustain it in future.

Investors have incomplete information in imperfect market. Less amount of information is available so whatever is available is considered as important one by the investors. Announcement of dividend is taken as signal of future growth of the company. All these factors prove the importance of dividend and its relevance.

Company's earnings can be used to buy securities or to retire debt or it can be invested in operating assets or these earnings can be distributed in shareholders in the form of dividends. There are many reasons for paying or not paying dividends. Dividends are important for investors as dividends are considered to be a signal of company's financial wellbeing. Dividends also help in maintaining the market price of the corporation's share. Companies with a history of paying stable dividends would be negatively affected by decreasing or discontinuing dividends. Similarly companies that have never paid dividends would be viewed favorably when they would pay dividends.

In this study the researcher extended Amidu & Abor (2006), Anil & Kapoor (2008) and Gill, Biger, & Tibrewala (2010) findings regarding the dividend payout ratio by investigating with almost the same variables for the Karachi Stock Exchange.

Objective of the Study

Main objectives are as under:

- To examine the factors that determines the dividend payout ratio in Pakistan's capital market.
- To analyze the impact of leverage, liquidity, corporate tax to net profit ratio and market to book value ratio on dividend payout ratio

Significance of this Study

This study is different from all other studies conducted in Pakistan on dividend payout ratio as all previous studies follow time series while this study is based on cross sectional data. No study in the past has taken the variables used in this study. This research would help both investors and corporation to understand about significant factors that determine the dividend payout ratio in Pakistan.

LITERATURE REVIEW

Lintner (1956) explained that the dividends patterns are subjective to the profitability of the company. Those companies that are more profitable are expected to pay more dividends compared to those that are less profitable. Black (1996) concluded in his article that the companies don't know which dividend policy they must use as they are not aware of how many irrational investors are there in the market but a rational investor can maximize his profit by choosing the right dividend policy. "The harder we look at dividend the more it seems like a puzzle with pieces that just don't fit together." Kanwer (2002) in his study analyzed the factors that explain the dividend payout in companies listed on Karachi Stock Exchange using data from 1992-98. The author explained that the signaling theory works in Chemicals, cement and fuel & Energy sectors of Pakistan. Amidu & Abor (2006) studied the determinants of dividend payout ratio in Ghana. Authors examined the data of six years of companies listed on stock exchange. Variables such as profitability, cash flow, Corporate Tax, Sales Growth and Market to Book value were used. Results indicated positive relationships between dividend payout ratios and profitability, cash flow, and tax while the relationship was negative with growth and market to book value. Naeem & Nasr (2007) studied the dividend policy of the firms listed on the Karachi stock exchange for the period of 1999-2004. Authors collected the data of 108 companies and concluded that there was an discrepancy in dividends payments of Pakistani companies. Authors found a decline in dividend payment ratio in 2004. Relation between profitability and dividends payout ratio suggested that companies with higher profit are more likely to pay dividends. Liquidity although being an important determinant of dividend payout found to be insignificant in this study.

Mohamed, et al. (2008) in their study of 200 companies with highest market capitalization in Malaysian capital market examined the profitability and liquidity as determinants of dividend payout and concluded that profitability and liquidity are significant variables in determining the dividend payout and companies which are more profitable and liquid have more chances of declaring dividends. Anil & Kapoor (2008) observed the determinants of dividend payout in information technology sector of India. Authors explained that there are many other variables except the profitability that determine the dividend payout e.g. cash flow, corporate tax, sales growth and market to book value ratio. Authors examined that the variables mentioned literature influence the dividend payout in information technology sector of India or not. Ahmed & Javid (2009) examined if the firms listed at Karachi stock exchange follow a stable dividend pattern and concluded that the companies listed at Karachi Stock Exchange are not smooth in their dividends payments. Profitability and cash flow found to be significant factors in determining the dividends payout in Pakistan. Gill, Biger, & Tibrewala (2010) examined the determinants of dividend payout ratios using the data of American service and manufacturing firms. The data of 2007 was used in this study and different variables such as profitability, cash flow, Corporate Tax, Sales Growth, Market to Book value and Debt to Equity ratio were used to determine the dividend payout ratio. Results indicated that in manufacturing industry, corporate tax and profitability were significant and in service industry the sales growth was significant.

Mistry (2010) in study of determinants of dividend payout ratio in the pharmacy sector of India used variable like profitability, turnover, liquidity and concluded that the payments of dividends in dependent more upon the decision of the management as the relation between dividend payout ratio and profitability of more companies was negative. The relationship of cash flow with dividend came out to be positive which suggest that companies have enough cash from operating activities to pay dividend but the relation of dividend payout with liquidity was negative that showed that even having cash to pay dividends it is the decision of the management to pay or not to pay the dividends. Ahmad & Javid (2010) studied the association between dividend payout and ownership structure and concluded that there is association between ownership structure and dividend payouts in the non financial sector companies listed in Karachi stock exchange 100 Index. Okpara & Chigozie (2010) in their research examined the determinants of dividend payouts in Nigeria. The authors used factor analysis and econometrics techniques to determine those factors that influence dividend payout in Nigeria. Authors concluded that the current ratio, profitability and dividends for last year are very important determinants of dividend payout.

Corporate Profitability

Baker, Farrelly, & Edelman (1985) explained that current year's earning and previous year's dividend affect the dividend payment pattern of the firms. The projected future profits of corporations determine the dividend payment ratio of the firm. Pruitt & Gitman (1991) studied separation principle by surveying the financial managers of top 1000 US firms. Results indicated a positive relation between dividend payment and profitability. Dividend decisions were determined by the yearly earnings and previous year's dividends. Brook, Charlton, & Hendershott (1998) concluded that stock returns and dividends sends a positive signal about the future financial position of the company but the role of signaling in dividends determination is very small. Goergen, Silva, & Renneboog (2005) concluded that the net profit was the main reason of dicidend changes. Authors explained that firms in Germany that faced loss ommited dividend in the year they faced loss. Mohamed, et al. (2008) explained that profitability is an important determinant of dividend payout and concluded that firms that are more frofitable and liquid have higher chances of announcing dividends. Gill, Biger, & Tibrewala (2010) in their research paper found a positive relationship between profitability and dividend payout. Authors concluded that profitability is a significant determinant of dividend payout ratio in US capital market.

Cash Flow

Alli, Khan, Ramirez, & G (1993) explained that cash flow is more important determinant of dividend than profitability as cash flow determine the ability of the company to pay dividend. Authors argue that profitability do not reflect the company's ability to pay dividend. Brook, Charlton, & Hendershott (1998) examined the relationship of cash flow and dividend payout. Authors explained that increasing cash flows are significant determinants of dividends. The firms with increasing cashflow have a higher tendency of announcing dividends. Mohamed, et al. (2008) found a positive relationship between dividend payout and operating cash flow per share in Malasia. Operating cash flow per share was a significant determinant of dividend payout in their study. Gill, Biger, & Tibrewala (2010) in their study of US capital market concluded that the relationship between cash flow and dividend payout ratio is negative for both manufacturing and service industry. Cash flow was an insignificant determinant of dividend payout ratio in their research.

Corporate Tax

Masulis & Trueman (1998) explained that there is a positive relation between corporate tax and dividend payout. Those firms that have an increasing trend in tax liability, their preference for dividend payment will also increase. Amidu & Abor (2006) in their study of determinants of dividend payout ratio found that corporate tax and dividend payout ratio and positively related. Increasing tax leads to increasing dividends. Gill, Biger, & Tibrewala (2010) found a positive relation between corporate Tax and dividend payout ratio in manufacturing sector of US capital market but the relation of corporate tax with dividend payout ratio was negative in service sector. Authors concluded that in manufacturing sector the Corporate Tax is insignificant determinant of dividend payout ratio but in service sector, corporate tax was significant determinant of dividend payout ratio.

Market to Book Value Ratio

Omran & Pointon (2004) in their study explains that market to book value is a significant determinant of dividend payout. Author studied that the relation of dividend payout is positive with profitability and liquidity. Amidu & Abor (2006) found in their study that the relation of market to book value ratio is negative with dividend payout. Gill, Biger, & Tibrewala (2010) found a positive relation of market to book value ratio with dividend payout ratio in manufacturing sector but in service sector the relation was positive.

Debt to Equity Ratio

Pruitt & Gitman (1991) showed that the firms having a high groth and dividend payout rate use more debt financing in comparison to those with less dividend payout. Authors also explained that firm's dividend policy is affected by risk. D'Souza & Saxena (1999) found a negative relationship between risk and dividend payout ratio. Authors concluded that risk is a significant factor in determining the dividend payout ratio. Gill, Biger, & Tibrewala (2010) showed a positive relation between debt to equity ratio and dividend payout ratio in case of service sector but in manufacturing sector of US the relation of debt to equity ratio with dividend payout ratio was negative. Authors concluded that debt to equity ratio is insignificant determinant of dividend payout ratio in both manufacturing and service sectors of US.

RESEARCH METHODOLOGY

To analyze the determinants of dividend payout ratio the author selected the about 110 companies from Karachi stock exchange 100 Index for the year 2009. Total 50 company's dividend was paid in 2009 so only these 50 companies from 110 total companies were usable. Numerical and financial data were collected to test the hypothesis. For this purpose financial statements of these companies were used.

Measurement

For the purpose of being consistent with the past studies the variables i.e. profitability, cash flow operating ratio, corporate tax, market-to-book value ratio, current ratio and debt to equity ratio were selected. Operating cash flow and current ratio are used for liquidity. Debt to equity ratio is used for leverage and Profitability is the used for profit margin.

TABLE 1
Variables Definition

Variables	Definitions
Profitability (PROF)	Earnings before interest and taxes/Total assets
Operating cash flow per share (CFPS)	Operating Cash Flow/ No. of Shares outstanding
Corporate Tax (TAX)	Corporate tax/Net profit before tax
Current Ratio (CR)	Current Assets/Current Liabilities
Market-to-Book Value (MTBV)	Share price beginning of the year/Net asset value per share-basic
Debt to Equity Ratio (D/E)	Total liabilities/Shareholders' equity
Dividend Payout Ratio	Yearly dividends/Net income after tax

Hypotheses

Following are the hypotheses of the study:

H_{O1}. The profitability does not affect the Dividend payout ratio significantly.

H_{O2}.The operating cash flow per share does not affect the Dividend payout ratio significantly.

$H_{O.}$ The corporate tax does not affect the Dividend payout ratio significantly

H_{O4}.The Market to Book value Ratio does not affect the Dividend payout ratio significantly.

H_{O5}. The Current Ratio does not affect the Dividend payout ratio significantly.

$_{HO6}$. The Debt to Equity Ratio does not affect the Dividend payout ratio significantly.

H_1. These variables affect the dividend payout ratio significantly.

RESULTS AND DATA ANALYSIS

Table 2 provides the descriptive statistics for the variables of the regression Model. This shows the mean and standard deviation of all the variables. Table 2 shows that the mean of dividend payout is 1.665 and standard deviation is 7.61. The mean of debt to equity ratio is 0.27 and standard deviation is 0.440. The mean of operating cash flow per share is 2.17 and standard deviation is 11.17. The mean of profitability is 0.04 and standard deviation is 0.06. The mean of market to book value ratio is 1.26 and standard deviation is 4.77. The mean of current ratio is 9.79 and standard deviation is 24.24. The mean of corporate tax is 0.10 and standard deviation is 0.12.

TABLE 2
Descriptive Statistics

Variables	Mean	Standard Deviation
Dividend Payout	1.6550	7.61363
D/E	.2752	.44036
CFPS	2.1728	11.17602
PROF	.0410	.05915
MTBV	1.2641	4.76532
CR	9.7877	24.23991
TAX	.1011	.12432

TABLE 3
OLS Regression Estimates

Standard Dividend Payout (N = 50) R^2 = 0.48; F = 6.604 F sig.= 0.000; Durbin-Watson = 2.095

	Un-Standardized Coefficients		Standardized Coefficients			Co linearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Cons.)	-3.300	1.482		-2.227	.031		
D/E	7.944	2.008	.459	3.957	.000	.898	1.114
CFPS	-.097	.143	-.142	-.677	.502	.276	3.620
PROF	72.976	17.245	.567	4.232	.000	.674	1.483
MTBV	-.485	.213	-.303	-2.275	.028	.681	1.468
CR	.061	.067	.194	.907	.370	.265	3.774
TAX	.056	6.924	.001	.008	.994	.947	1.056

Table 3 shows that R^2= 0.48 which means that these variables (debt to equity ratio, Operating cash flow per share, profitability, market to book value ratio, current ratio and corporate tax) are explaining 48% of the variation in dividend payout ratio. The Value of F is 6.604 which indicate that the model is good fit. The value of F significance i.e. 0.000 also shows that the model is significant. All variance inflation factors (VIF) are less than 4 and tolerance coefficients are greater than 0.2.

$$\text{Dividend Payout} = b_0 + b_1\, D/E + b_2\, CFPS + b_3\, PROF + b_4\, MTBV + b_5\, CR + b_6\, TAX + € \qquad \text{(Eq. 2)}$$

$$\text{Dividend Payout} = -3.30 + 7.944 D/E + 72.976 PROF - 0.485 MTBV + € \qquad \text{(Eq. 2)}$$

Where, D/E is the Debt to Equity Ratio; CFPS is the Operating cash flow per share; PROF is the profitability; MTBV is the Market to Book Value Ratio; CR is the Current Ratio and TAX is the Corporate Tax.

The above equation explains that debt to equity ratio, profitability; current ratio and corporate tax have a positive relationship with dividend payout ratio. Operating cash flow per share and market to book value ratio has a negative relationship with dividend payout ratio. In this study debt to equity ratio, profitability and market to book value ratio are significant variables and Operating cash flow per share, current ratio and corporate tax are insignificant variables.

CONCLUSION

This study examined the determinants of dividend payout ratio of the companies of Karachi Stock exchange 100 index for the year 2009. Author found that in Pakistan profitability, debt to equity and market to book value ratios are the significant determinants of dividend payout ratio. Relation of debt to equity ratio, profitability, current ratio and corporate tax was found to be positive with dividend payout ratio while Operating cash flow per share and market to book value ratio has a negative relationship with dividend payout ratio. The study has contributed to existing literature about dividend payouts. Interested researchers may identify and examine more variables that influence the dividend payout ratio.

Limitations of the Study

This study used the data of listed companies for 1 year i.e. 2009. Therefore future researchers can conduct study with same variables for more than 1 year. Also, the results of this research can only be generalized to firms that are similar to those that were included in the study.

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Data sources: KSE website and Annual reports of Companies.