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Determinants of Dividend Payout Ratio: Evidence from Dhaka Stock Exchange

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Abstract

The study examines the determinants of dividend payout ratio of the listed firms in Bangladesh. The effect of profitability, operating cash flow per share, corporate tax, current ratio, market to book value ratio and debt to equity ratio on dividend payout are analyzed for the year 2012 for 50 companies listed in Dhaka Stock Exchange (DSE). It is found that corporate tax, current ratio and market to book value ratio have positive relation with dividend payout ratio while profitability, operating cash flow per share and debt to equity ratio each shows a negative relationship with dividend payout ratio. Profitability, corporate tax and market to book value ratios are found to be the most significant determinants of dividend payout ratio.

Keywords: Dividend payout ratio, DSE, Regression, Determinants

Introduction

Dividend policy is one of the most debatable topics and a core theory of corporate finance. Many researchers have presented various theories and uncountable empirical evidences, though the issue is still unresolved and open for further discussion. It is among the top ten unresolved problems in finance literature and we do not have an adequate explanation for the observed dividend behavior of the firms (Allen & Michaely, 2003; Brealey & Myers, 2005). In the developed economies, the decision whether paying dividend or keeping as retained earning has been taken very carefully by both the investors and the management of the firm (Glen et al. 1995).

Dividend decision is important for both the investors and the corporations. The company's management generally decides what proportion of the earnings should be invested and what proportion should be distributed to the shareholders as dividend. 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 the 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 investors about the corporation's risk bearing capacity. Therefore, dividends are more valuable than retained earnings.

There are many reasons as to why the companies should pay or not pay dividends. For example, the dividend pay-out is important for investors because i) dividends provide certainty about the

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company's financial well-being; ii) dividends are attractive for investors looking to secure current income and iii) dividends help to maintain market price of the shares. The companies that have a long-standing history of stable dividend payouts would be negatively affected by lowering or omitting dividend distributions. These companies would be positively affected by increasing dividend payouts or making additional payouts of the same dividends. Furthermore, the companies without a dividend history are generally viewed favorably when they declare new dividends.

The issue of dividend policy is important for several reasons. Firstly, the firm can use dividends as an instrument for financial signaling to the outsider vis-a-vis the stability and growth prospects of the institution. Secondly, dividend plays a significant role in a firm's capital structure. According to the "residual dividend" theory, a firm pays dividend only if it does not have any opportunity of profitable investment. However, many researchers have established a relationship between firm's dividend and investment decisions. Firms normally do not like to reduce the dividend payments; firm's stock price is also affected by dividend patterns and higher dividends can also increase its stock price.

The dividend payout pattern of Bangladeshi firms are not smooth and consistent, even some firms did not even pay dividends in a single year in the whole study period, So we tried to find out why the firms are not able to smooth their dividends and which factors influence the dividend policy of the firms in Bangladesh.

Objective of the Study

The objectives of the study are:

- To identify the impact of various factors determining the firm's dividend paying behavior in the capital market of Bangladesh.
- To analyze the impact of leverage, liquidity, and corporate tax on net profit ratio and that of market to book value ratio on dividend payout ratio.

This research would help both the investors and the corporations to understand the significant factors that determine the dividend payout ratio in Bangladesh. In the policy level, the finding of the study can be put in a place regarding formulating decision about dividend declaration.

Literature Review

Over the past 50 years a great attention was given to define the factors influencing dividend payout policy. Although a huge number of literatures are available in this regard, the dividend puzzle is still unresolved and open for further discussion. The earliest research was undertaken by Lintner (1956) who conducted his study on American companies in the mid 1960. The study concluded that dividend decision is based upon the current profitability and dividends of the previous year. Since then there has been an on-going debate on dividend policy and the results are mixed.

Fama and Babiak (1968) tested the Lintner model on the dividend data of 392 major North American industrial firms for the years 1946-1964. They had mentioned that the firms would try to increase the dividend only when the dividends can be sustained in the future. They concluded that Linter's dividend model has succeeded fairly well in explaining the dividend changes of individual firms whereas Wolmaran (2003) did not find any evidence for the Lintner model in South Africa.

As Black (1976) raises the question, "Why do firms pay dividends?" Further he raises the second question, "Why do investors pay attention to dividends?" Although the answers may appear as clear, yet he concludes that they are not. As they try to explain the fact, the more it seems like a puzzle with pieces that just do not fit together. Various factors can be considered as the determinants of dividend payout policy and a number of logics for dividend payout policy have been declared in the literature, though the researchers do not agree on a single point.

Dividend is considered a disciplinary instrument. By plum meeting the amount of free cash flows through paying dividend, the managers are obligated to surrender to the discipline of the financial markets (Deventer and Warther, 1998). The payment of dividend helps in constraining managers from using profits in non-productive projects or for their personal interests.

Using data from 1992-98, Kanwer (2002) analyzed the factors that impact on the dividend payout in companies listed in Karachi Stock Exchange. The author explained that the signaling theory works in chemicals, cement, fuel and energy sectors of Pakistan.

Gugler (2003) examined the association between dividend and ownership control structure for a panel of 214 non-financial Australian firms and showed that state owned firms were engaged in dividend smoothing while family controlled firms were not. Further he mentioned that in case of cutting dividend family owned firms were least reluctant compared to the state owned firms

While investigating the determinants of dividend policy of Tunisian stock Exchange Naceur et al. (2006), it was found that those firms pay higher dividends which is in high profitable position with more stable earnings. Moreover, the firms with fast growth distribute the larger dividends in order to attract investors.

Amidu & Abor (2006) studied the determinants of dividend payout ratio using six years data of companies listed on the stock exchange in Ghana. Result shows positive relationships between dividend payout ratios and profitability, cash flow and tax while the relationship is negative with growth and market to book value.

Naeem and 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 discrepancy in dividend payments of the Pakistani companies. Relationship between profitability and dividends payout ratio implies that the companies with higher profit are more likely to pay dividends. Liquidity, although being an important determinant of dividend payout, was found to be insignificant in this study.

Taking 5 years data, Mehta (2012) attempts to analyze the determinants of dividend policy for UAE companies. It is found that size and risk are the two most important considerations in deciding on dividend policy of the UAE companies. In addition, the study shows that the greater is the firm size, the larger is the dividend payout.

Anil and Sujata (2008) examined the determinants of dividend payout in information technology sector of India. Authors conclude 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.

Ahmad and Javid (2010) examined whether the firms listed at Karachi Stock Exchange follow a stable dividend pattern and concluded that the companies at Karachi Stock Exchange are not smooth in their dividends payments. Profitability and cash flow were found to be the most significant factors in determining the dividends payout in Pakistan.

Another research was conducted by Rehman (2012) on determinants of dividend payout ratio in 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 of 50 companies, was analyzed while announcing dividend in 2009. Relation of debt to equity ratio, profitability, current ratio and corporate tax were found to be positive with dividend payout ratio while operating cash flow per share and market to book value ratio had 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.

A research was conducted by Imran (2011) on determinants of dividend payout policy for the case of Pakistan engineering sector. Through this research he found that dividend per share is a positive function of last year's dividend, earning per share, profitability, sales growth and the size of the firm, whereas it has a negative association with cash flow. This negative association between dividend payouts and cash flow suggests that firms plough back their extra cash. The liquidity of the firm has been found to be unrelated to dividend payouts in the case of Pakistani engineering firms.

Okpara and Chigozie (2010) concluded that the current ratio, profitability and dividends for the last year are very important determinants of dividend payout for the firms in Nigeria.

Mistry (2010) conducted a study of determinants of dividend payout ratio in the pharmacy sector of India. He found that the dividend payout ratio has a negative relationship with profitability and liquidity where the relationship of cash flow with dividend came out to be positive.

Methodology

To analyze the determinants of dividend payout ratio, we selected companies from Dhaka stock exchange for the year 2012. Total 50 companies have been selected randomly for the study which paid dividend in 2012. Numerical and financial data were collected to test the hypothesis. For this purpose financial statements of these companies have been used.

Measurement

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

Table 1: Variables Definition

Variables	Definitions
Dependent Variable	
Dividend Payout Ratio	Yearly dividends/Net income after tax
Independent Variables	
Profitability (PROF)	Earnings before interest & taxes/Total assets
Operating Cash Flow Per Share (CFPS)	Operating cash flow/No. of share outstanding
Corporate Tax (TAX)	Corporate tax/Net profit before tax
Market-to-Book Value (MTBV)	Market value per share/Book value per share
Current Ratio	Current assets/ Current liabilities
Debt to Equity Ratio (D/E)	Total liabilities/Shareholders' equity

Corporate Profitability

Corporate profitability has long been regarded as the primary indicator of a firm's capacity to pay dividends. Many researches show that the dividend payment pattern of a firm is influenced by the current year's earnings and previous year's dividends.

Cash Flow

The cash flow position of a firm is an important determinant of dividend payouts. A poor liquidity position means less generous dividend due to shortage of cash.

Corporate Tax

It is argued that if dividends are taxed at a higher rate than capital gain, then pretax return should increase in proportion to dividend yield to compensate for dividend tax.

Current Ratio

Current ratio measures a firm's ability to pay its current liabilities from its current assets. It also measures the ability to meet short-term obligation. Most of the researches found negative relationship between current ratio and dividend payout in different countries.

Market to Book Value Ratio
Market-to-book value ratio reflects the market view of the value of equity in comparison to what the shareholders have contributed to the firm since the day it was established.

Debt to Equity Ratio
The debt-to-equity ratio is a financial ratio that indicates the relative proportion of equity and debt used to finance a company's assets. This ratio is also known as risk, gearing or leverage. Pruitt & Gitman (1991) demonstrated that heavy debt financing used by the firms maintains a high growth and dividend payout rate in comparison to those with less dividend payout. They also showed that firm's dividend policy is affected by risk.
D'Souza and Saxena (1999) found inverse relationship between risk and dividend payout ratio and concluded that risk is a significant factor in determining the dividend payout ratio.

Hypotheses
The following are the hypotheses of the study:

- H01: Profitability does not affect the Dividend payout ratio significantly;
- H02: Operating cash flow per share does not affect the Dividend payout ratio significantly;
- H03: Corporate tax does not affect the Dividend payout ratio significantly;
- H04: Market to Book value ratio does not affect the Dividend payout ratio significantly;
- H05: Current ratio does not affect the Dividend payout ratio significantly;
- H06: Debt to Equity ratio does not affect the Dividend payout ratio significantly;
- H1 : The variables profitability, operating cash flow per share, corporate tax, market-to-book value ratio, current ratio and debt to equity ratio affect the Dividend payout ratio significantly.

Result and Analysis

Table 2 provides the descriptive statistics for the variables of the regression model. This shows the mean and the standard deviation of all the variables.

Table 2: Descriptive Statistics

	Mean	Std. Deviation	N
Dividend Payout Ratio	.2995	.25996	50
Profitability	.0758	.05786	50
Operating Cash Flow Per Share	8.4668	19.35010	50
Corporate Tax	.2662	.17749	50
Current Ratio	2.3720	2.01708	50
Market-to-Book Value	3.0855	3.11881	50
Debt to Equity Ratio	3.1532	4.62794	50

Table 2 shows that the mean of dividend payout is 0.2995 and standard deviation is 0.259. The mean of profitability is 0.075 and standard deviation is 0.057. The mean of operating cash flow per share is 8.47 and standard deviation is 19.35. The mean of corporate tax is 0.266 and standard deviation is 0.177. The mean of current ratio is 2.37 and standard deviation is 2.02. The mean of market to book value ratio is 3.09 and standard deviation is 3.12. The mean of debt to equity ratio is 3.15 and standard deviation is 4.63.

OLS Regression Estimates

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	Df1	df2	Sig. F Change	
1	.514[a]	.265	.162	.23799	.265	2.578	6	43	.032	2.195

Table 3 shows that R^2= 0.16 which means that the variables profitability, operating cash flow per share, corporate tax, current ratio, market to book value ratio and debt to equity ratio collectively can explain 16 % of the variation in dividend payout ratio. The value of F is 2.578 and P value= 0.032 indicates that the model is statistically significant and good fit at 5% level.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.876	6	.146	2.578	.032*
	Residual	2.435	43	.057		
	Total	3.311	49			

** Statistically significant at 5% level*

Table 5: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	.207	.104		1.989	.053					
PROF	-1.604	.762	-.357	-2.103	.041*	-.236	-.305	-.275	.594	1.683
CFPS	-.003	.002	-.247	-1.778	.082	-.104	-.262	-.233	.886	1.129
TAX	.747	.240	.510	3.112	.003*	.348	.429	.407	.637	1.571
CR	.006	.017	.045	.332	.742	.013	.051	.043	.931	1.074
MTBV	.028	.014	.336	2.046	.047*	.074	.298	.268	.636	1.573
D/E	-.018	.011	-.322	-1.681	.100	.149	-.248	-.220	.465	2.151

** Statistically significant at 5% level*

Dividend Payout = â0+ β1 PROF+ β 2 CFPS+ β 3 TAX+ β 4 CR+ β 5 MTBV+ β 6 D/E+ ε (Eq. 1)

Dividend Payout = 0.207- 1.604PROF+ 0.747TAX+ 0.028MTBV+ ε (Eq. 2)

Where, PROF is the Profitability; CFPS is the Operating cash flow per share; TAX is the Corporate Tax; CR is the Current Ratio; MTBV is the Market to Book Value Ratio and D/E is the Debt to Equity Ratio. The above equation explains that corporate tax, current ratio and market to book value ratio have a positive relationship with dividend payout ratio. On the other hand, profitability, operating cash flow per share and debt to equity ratio show a negative relationship with dividend payout ratio. In this study profitability, corporate tax and market to book value ratio are significant variables where operating cash flow per share, current ratio and debt to equity ratio are found to be insignificant.

Conclusion

This study examines the determinants of dividend payout ratio of the companies of Dhaka Stock Exchange (DSE) for the year of 2012. We found that in Bangladesh profitability, corporate tax and market to book value ratios are the significant determinants of dividend payout ratio and operating cash flow per share, current ratio and debt to equity ratio are the insignificant determinants of dividend payout ratio. Relation of corporate tax, current ratio and market to book value ratio are found to be positive with dividend payout ratio while profitability, operating cash flow per share and debt to equity ratio have a negative relationship with dividend payout ratio. Future research can be conducted by identifying and taking more variables that influence the dividend payout ratio with longer timeframe which is left for further research.

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