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ASSESSING THE DETERMINANTS OF DIVIDEND POLICY OF BANKS: A STUDY IN BANGLADESH

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ABSTRACT

This study aims to examine different determinants of the dividend policy of banking companies in Bangladesh. The current study considers profitability, investment opportunities, and business risk and ownership concentration to explore their association with the dividend payout ratio. The findings of the study do not support the significant role of these determinants in the dividend policy of banks in Bangladesh except business risk. The significant and positive association between business risk and dividend pay ratio reflects the 'milking the property' strategy of Bangladeshi banks. This study contributes by addition empirical evidence about the determinants of dividend policy in the scarce literature of corporate finance in the context of the emerging economy.

Keywords: Dividend Policy, Business Risk, Banks, Bangladesh

INTRODUCTION

Dividend policy is the practice that management follows in making dividend payout decisions or the size and pattern of cash distributions over time to shareholders (Ahmed, 2015). The profit that a company earns each year is either reinvested in the business or distributed to shareholders of the company. The process of how much and in which way profit is distributed among shareholders is called dividend policy (Zameer et al., 2013). Dividends may be in the form of cash dividends or stock dividends. If the company pays some cash amount per share to

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its shareholders, it is called a cash dividend. On the other hand, when the company issues new stocks to its shareholders in proportion to their existing shares, it is known as a stock dividend. However, the payment of cash dividends depends on the availability of cash and liquidity of the firm (Ahmed, 2015). Most companies begin to pay dividends once they reach a level of business maturity where attractive investment opportunities are generally less available while cash flow generation is stable or growing more slowly when compared to the past (Al-Haddad et al., 2011).

With regard to the dividend decision, a firm has only two options: either to pay or not to pay dividends. However, the dividend issue is quite challenging. It is one of the most controversial issues in finance (Ahmed, 2015). The important elements of dividend policy are not difficult to identify, but the interactions between those elements are complex, and no easy answer exists (Ross, 2009). Many dividend theories have been propounded to explain how the dividend decisions are being undertaken and whether it has an influence on the firm's value. A number of previous studies have provided efforts to determine the factors that influence the dividend policy of a firm. Kania and Bacon (2005) studied the impact of profitability, growth, risk, liquidity, and expansion on the dividend decision/policy of a corporation. The study found that the dividend payout ratio is significantly affected by the profitability (return on equity), growth (sales growth), risk (beta), liquidity (current ratio), control (insider ownership), and expansion (growth in capital spending) of the corporation. The study by Fama and French (2001) revealed the importance of firm size, profitability and growth opportunities in the firm's decision to pay dividends. Another study also found that a firm's dividend policy is affected by profitability, size, debt, risk, tangibility, and growth of the firm (Booth and Cleary, 2001).

The banking sector plays an important role in an economy as it is the dominant sector in a country's economy (Olowe and Moyosore, 2014). Moreover, banking has diversified and complex financial activities that are no longer limited within a country's geographical boundary (Ahmed, 2015). As rational investors, the shareholders of banking companies usually expect to receive some income as a return on their investments. The ability of a bank to pay dividends depends largely on its financial performance (Agyei and Marfo-Yiadom, 2011). In a study, Onali (2010) opines that bank dividend policy and capital adequacy constitute two important pillars for sound and prudent management. This paper focuses on the dividend policy of the banking industry in Bangladesh. The banking industry in Bangladesh is considered one of the most important sectors in the country's economy. The banking sector accounts for about 20 percent of total market capitalization in the capital market of Bangladesh (Hossain and Saleh, 2011). However, the trend of dividend payments in this sector is not stable. Given the strength of the banking sector in the country, individual investors and institutions have been extensively interested in becoming shareholders. Eventually, this expands the need to identify the driving factors of dividend payment policy in this sector. However, there are limited studies to identify the factors affecting the dividend policy of the banking industry in Bangladesh. Therefore, this study attempts to fulfill the research gap by examining the elements that affect the dividend payment of the banking sector in the country. To achieve its objectives, the study conducts an empirical analysis on the determinants of the dividend policy of listed banks in Bangladesh.

LITERATURE REVIEW

Dividend decision is one of the most important decisions in the corporate world. Determining the most appropriate dividend policy is considered a most important and challenging issue in the real world of corporate finance (Metha, 2012). During the past few decades, many dividend theories have been developed to explain how the dividend decisions are being undertaken and whether it has an impact on the firm's value. These theories can be categorized into three groups. On the right, a conservative group believes an increase in dividend payout increases the firm's value. On the left, a radical group believes a higher dividend payout reduces the firm's value. And, in the center, there is a middle-of-the-road party, founded in 1961 by Miller and Modigliani (MM), which claims that the dividend payout policy has no impact on the firm value (Lambrecht and Myers, 2010; Firer et al., 2012). However, in practice, different corporate organizations apply different types of dividend policies such as residual policy, constant payout residual dividend policy, smooth residual dividend policy, progressive policy, zero policy, and non-cash policy (Kolb and Rodriguez, 1996; Beasley et al. 1999; Zameer et al., 2013). And the dividend policy of a firm is affected by several factors, which range from capital availability, the industry norms, expected earning of the firm, capital project execution, profitability, liquidity and, risk of the firm, size, and leverage of the firm, and clientele or investors group(Hutchinson, 1995; Metha, 2012; Alade and Adediran, 2013).

Many previous studies have attempted to identify the determinants of dividend policy of banking companies across different countries worldwide. In Nigeria, Ibrahim and Yusof (2018) study aimed at examining the factors that influence dividend policy in the banking sector. The study found that the pattern of the past dividend was the most important factor affecting dividend decisions in the Nigerian banking industry. Moreover, a strong relationship was found to exist between taxes and the dividend policy of banks in Nigeria. In Bangladesh, Sumaiya (2013) attempted to identify the factors that affect the dividend payout in the banking sector. The study undertook 30 private commercial banks listed in

Dhaka Stock Exchange (DSE), Bangladesh. The study revealed that the banking institutions' profitability, growth, and size do not significantly affect their dividend payouts to the shareholders. In Jordan, the dividend payment decision of the commercial banks is affected mainly by the control and guidance of the Central Bank of Jordan (CBJ). The other factors affecting the dividend policy of the banks in the country are liquidity and foreign competition (Al-Haddad et al., 2011). In Pakistan, Zameer et al. (2013) identified that liquidity, profitability, last year's dividend, and ownership structure significantly affect the dividend payment behavior of the banking industry in the country. In Lebanon, the dividend payout policies of the commercial banks are positively affected by the firm size, risk, and previous year's dividends but are negatively affected by the growth opportunity and profitability (Maladjian and El Khoury, 2014). In Nepal, commercial banks depend on certain financial indicators while making decisions on dividend policy. The indicators are earning per share (EPS), market price per share (MPS), price-earning ratio (PER), cash dividend per share (DPS), dividend payout ratio (DPR), and dividend yield ratio (DYR) (Bhandari and Pokharel, 2012).

There are several studies on determinants of dividend policy of banking industry in Nigeria. Matthias and Akpomi (2008) identify current profits, financial leverage, capital structure, past dividends, and legal restrictions as the determinants of Nigerian banks' dividend policy. Odia and Ogiedu (2013) examined the impact of profitability and taxes on dividends of the nineteen banks quoted in the Nigerian Stock Exchange (NSE). The study found that the dividend structure and payout by banks are very much influenced by the profitability of Nigerian banks. On the other hand, taxation has a negative and insignificant impact on the dividend policy of banks. The study concluded that there are other factors that determine the dividends of Nigerian banks other than profitability and taxes. Another study attempted to identify the determinants of dividend payout in the Nigerian banking industry (Olowe and Moyosore, 2014). The researchers found that the factors influencing dividend payout in the Nigerian banking sector include profitability, liquidity, revenue growth, size, debt-equity ratio, retained earnings, loan-deposit ratio, loan-loss provision, and activity mix. The study also reported that profitability, liquidity, size, and Activity mix positively influence the dividend payout while other factors such as revenue growth, debt-equity ratio, retained earnings, loan-deposit ratio, and loan-loss provision have negative impacts on the dividend policy of the banks in Nigeria. Osegbue et al. (2014) assessed the impact of free cashflows, current profitability, financial leverage, business risk, and tax payment on the dividend policy of the Nigerian banks. The study found that free cashflows, current profitability, financial leverage, and business risk have a negative impact on dividend payout, while the tax payment positively affects the dividend policy of the banks in Nigeria. The study also reported that banks in Nigeria pay a dividend to reduce the agency conflict and maintain the firm's reputation. In line with the previous studies, Bassey et al. (2014) revealed that current earnings lagged dividend and lending rate were the major determinants of cash dividend payout of the commercial banks in Nigeria. The study also reported that the Inflation rate and liquidity ratio have no significant impact on the dividend payout of the Nigerian banks.

The study by Ahmed (2015) investigated the impact of two contradictory variables- liquidity and profitability- on the dividend policy in the UAE banking sector. It was revealed that the dividend payout of the banks in UAE has a significant and positive correlation with liquidity but a negative and insignificant correlation with profitability. Agyei and Marfo-Yiadom (2011) examined the relationship between dividend policy and the performance of banks in Ghana. The study found that leverage, size, and growth of the banks enhance the performance of the banks, which ultimately affects the dividend payment of the banks in the country. A study in Bangladesh attempted to trace out the factors that affect the dividend payment of the banking industry (Huda and Farah, 2011). The researchers found that the factors influencing the dividend decision of banks in the country include revenue, earnings per share, cash and cash equivalent factors, and retained earnings. A similar study in Korea examined the inter-relationship between banks' dividend policy and investment decisions in terms of risk management and profit maximization (Lee, 2015). It was revealed that when the banks have positive expectations on future economic conditions, they tend to increase the proportion of risky asset portfolios to maximize expected profits and tend to pay more dividends based on higher expected profits. On the other hand, when the expectation on future economic conditions is negative, the banks tend to prioritize the bank's risk management by increasing the proportion of safe asset portfolios and decreasing dividends based on lower expected profits. Onali (2010) examined the relation between dividends and risk in the banking sector of the four European G-7 countries (France, Germany, Italy, and the UK). The study provided evidence that default risk is positively related to dividends. Retained earnings are negatively related to dividends. Moreover, the study reported that bank dividends are also related to insider/outsider agency issues, profitability, and size.

DEVELOPMENT OF HYPOTHESIS

The previous section reviewed a number of studies that attempted to identify the determinants of dividend policy of the banking sector in different countries. Based on existing literature, we can develop the following hypotheses to identify the factors that affect the dividend payout of the banking industry in Bangladesh:

Profitability and Investments

According to the Pecking Order Theory of Myers and Majluf (1984), companies prefer retained earnings over any other external sources for financing new projects due to the information asymmetry between managers and shareholders. Based on this theory, a more profitable company with a low investment opportunity can be predicted to pay a high cash dividend. However, firms with high investment opportunities may not exhibit this relationship since they would prefer to retain their profit. Fama and French (2001, 2002) confirmed the positive influence of profitability and the negative influence of investments on dividend payout. Although the nature of the banking industry is unique, recent studies by Kanas (2013) and Abreu and Gulamhussen (2013) have indicated that these variables can significantly explain the dividend payout behavior of US banks. Therefore, we predict a positive influence of profitability and a negative influence of investments on the dividend payout of banks in Bangladesh. Therefore, the hypotheses are:

H_1: Firms with higher profitability tend to pay more dividends
H_2: Firms with higher investment opportunity tend to pay lesser dividends

Business Risk

When a firm suffers higher operating and financial risks, it needs to invest more to curb the risks. Rozzef (1982) asserted that firm risks measured by beta negatively affected the dividend payout and confirmed the relationship empirically. Moreover, as the higher level of risk results in a higher cost of external financing, the firm intends to reduce the overall cost of capital by depending more on the internal source of finance. Therefore, we expect a negative relationship between beta and dividend payout. So, the hypothesis is:

H_3: Firms with higher beta prefers to pay a lesser dividend

Ownership Concentration

Highly concentrated ownership may provide a greater degree of control of the firm to the large shareholders. This situation may raise a conflict of interest between minority and large shareholders (Dhnadirek and Tang, 2003; Denis and McConnell, 2003; Lins, 2003; Earle, Kucsera and Telegdy, 2005). Consequently, management actions may be controlled by the large shareholders for their personal benefits (Bena and Hanousek, 2008). According to Kanas (2013), bank owners benefit from higher dividends as they can transfer wealth from the bank to its owners, which can reduce the adverse effect of a potential default on the owners' personal wealth. Therefore, highly concentrated owners of a bank may tend to utilize their influence on the management to distribute higher dividends. The empirical evidence of Chen et al. (2005) from Hong Kong also indicates that highly concentrated ownership tends to pay higher dividends. Therefore, we hypothesize a positive relationship between ownership concentration and dividend payout in this study. So, the hypothesis that can be tested here is:

H_4: Banks with a high concentration of ownership tend to pay a high dividend

MATERIALS AND METHODS

Sample and Data

There were 30 commercial banks listed in Dhaka Stock Exchange (DSE) in Bangladesh till 2011. The study collected data for five financial years (from 2007 to 2011) from these 30 listed Banks. Thus, the sample size of the study was 150 firm years. The data were extracted from the annual reports available either on the official website of the banks or in the CD-ROM provided by Dhaka Stock Exchange (DSE), Bangladesh.

Model and Variables

The study intends to examine the determinants of the dividend policy of listed banks in Bangladesh. Here, the different determinants are the basic function of the dividend policy. In this function, dividend policy measured as the dividend payout ratio is the dependent variable, and profitability, investment opportunity, systematic risk, and ownership concentration are independent variables. The study used an Ordinary Least Square (OLS), Multiple Regression Model, to investigate the relationship between independent variables and dependent variables. The model in the equation form is as follows:

Model 1: $DP = \beta_0 + \beta_1 ROA + \beta_2 IN + \beta_3 BT + \beta_4 OC + \beta_5 SIZ + \beta_6 AGE + \beta_7 LEV + \varepsilon$

The dependent variable, independent variables, and control variables of this study are explained in *Table I.*

Table I: Defining of Research Variables

Variable	**Proxy**	**Notation**	**Definition**
Dependent variable			
Dividend Policy	Dividend Payout Ratio	DP	Cash dividend/ Net Income available to Shareholders
Independent variables			
Profitability	Return on Assets	ROA	Net income available to Shareholders/Total Assets
Investment Opportunity		IN	% of the chance of Total Assets (Fama and French, 2002)
Systematic risk	Beta	BETA	Beta coefficient of the bank's stock
ownership concentration	Sponsor ownership	OC	% of sponsors' shareholdings
Control variables			
Firm Size	Total Assets	SIZ	Log of Total Assets
Firm Age	Listing Age	AGE	Year of listing in DSE

RESULTS AND DISCUSSIONS

Descriptive Analysis

Table II presents the results of the descriptive analysis of study variables. Results show that the dividend payout ratio is 39% which indicates that sample banks distribute, on average, 39% of their earnings among shareholders as dividends for the study period of five years. The findings also revealed that most of the banks in the country prefer to maintain a level of dividend payout ratio each year. The average ROA of 2%, along with the investment opportunity measured in a growth rate of 26%, suggests that the banking industry in Bangladeshis a growing sector with positive profitability. In addition, the mean score of the beta of 0.80 with a standard deviation of 0.20 indicates that the risk of most individual sample banks is lower than market risk ($\beta m = 1.00$). Results in *Table II* also show that the average listing age of the sample banks is around 17 years. The study by Almenifi (2018) also revealed similar findings regarding the dividend payout in the GCC (Gulf Cooperation Council) banking sector. The study found that the average dividend payout by the GCC banking sector was 34%, with a standard deviation of (0.20). The study also reported that older banks in the GCC countries tend to pass a higher portion of their income to their shareholders.

Table II: Descriptive Statistics

Variables	N	Mean	Minimum	Maximum	Std. Deviation
DP	150	0.39	0.00	0.95	0.28
ROA	150	0.02	-.010	0.04	.018
IN	150	0.26	-0.85	0.58	0.16
BETA	150	0.80	0.00	1.25	0.20
OC	150	0.45	0.03	0.94	0.19
SIZ	150	10.80	9.81	11.59	0.30
AGE	150	17.13	5.00	52.00	9.99

Multicollinearity Analysis

Table III presents the results of Pearson correlations analysis and VIF (Variance Inflation Factor) analysis for four independent variables, including ROA, IN, BETA, and OC, and two control variables consisting SIZ and AGE used in this study to identify the multicollinearity problems to run the regression for dependent variables and independent variables. Results of correlation analysis show that none of the correlation values is more than 0.40. In addition, all of the VIF values are lower (VIF<1.38) than the critical value of 10.00 (Netter et al., 1998). Thus, this study does not suffer from the serious problem of multicollinearity in regression analysis to examine the relationship between the dependent variable and independent variables.

Table III: Results of VIF Analysis & Correlation Analysis

	VIF	ROA	IN	BETA	OC	SIZ	AGE
ROA	1.24	1.00					
IN	1.29	0.32**	1.00				
BETA	1.20	0.18*	0.02	1.00			
OC	1.35	-0.23**	-0.18*	-0.35**	1.00		
SIZ	1.38	0.35**	0.27**	0.29**	-0.40**	1.00	
AGE	1.17	-0.09	-0.27**	0.11	-0.19*	0.09	1.00

**Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed)

Regression Analysis

Table IV presents the results of regression analysis of dependent variables, independent variables, and control variables. Results show that ROA is positively associated with DP, but the relationship is insignificant, which does not support Hypothesis 1. Similarly, the insignificant relationship between IN and DP indicates that Hypothesis 2 is not supported. Though the relationship between BETA and DP is significant, the relationship is positive, which contradicts the prediction of this study. Therefore, Hypothesis 3 is not supported. However, these results imply that risky banks tend to distribute more dividends which, in turn, reflects the 'milking the property' tendency of the listed banks of Bangladesh as well. The findings of this study also demonstrate the insignificant relationship between OC and DP, which does not support Hypothesis 4. Almost similar findings were observed by Athoi et al. (2018). The study found a positive relationship between dividend payout and the beta coefficient of the sample banks. The study also revealed a statistically significant relationship between ownership concentration and dividend payout of the banks. Finally, it reported a positive and statistically significant relationship between profitability and dividend payout, indicating that the profitability of the banks has a positive impact on the dividend policy.

***Table IV*: Results of Regression Analysis**

	Beta	t value	sig
Cont.	.30	.33	.74
ROA	.04	.51	.61
IN	.15	1.63	.10
BETA	.26	3.02	.00
OC	-.03	-.38	.71
SIZ	-.02	-.22	.82
AGE	-.10	-1.16	.25
F value		3.15	
sig.		.00	
R^2		.12	
Adj. R^2		.08	
n		150	

CONCLUSION

The present study aims to examine different determinates of dividend policy of listed banks in Bangladesh. To fulfill its objectives, the study explored the relationship between dividend payout ratio and certain factors (such as profitability, investment opportunity, size, and ownership concentration) of the selected banks over the period 2007-2011. Results of the study do not find the significant association of profitability, investment opportunity, and ownership concentration with the dividend policy of the sample banks. However, the study revealed a significant positive relationship of risk with dividend payout ratio, which is consistent with the 'milking the property' strategy of banks in Bangladesh. It was also found a positive relationship between the age of the banks and the dividend payout ratio. It indicates that relatively matured banks tend to pay consistent dividends in Bangladesh.

IMPLICATIONS

This study would provide further insight or understanding about the various factors that affect the dividend payout decisions in the banking sector in Bangladesh.

Empirical evidence from this study might be useful for the management of the banks and policymakers to design and implement effective and efficient dividend policies of the banks in order to raise the stock price of the individual banking institution in the market.

The findings of this research would be a valuable reference for researchers, policy, and decision-makers, and practitioners keen on corporate organizations' dividend policies.

LIMITATION

The study included a limited number of factors to assess the determinants of dividend policy of the banking sector in Bangladesh.

The study didn't consider the other factors such as capital structure, agency cost, liquidity, previous year's dividend, which might affect the dividend payout decision of the banking institutions at a greater level.

Moreover, further study can be carried out considering macroeconomic factors such as GDP, the tax rate to widen the understanding of key drivers of dividend policy of the banking industry in Bangladesh.

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