

A Study on the Dividend Policy of Private Commercial Banks in Bangladesh

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Abstract: *The paper attempts to study dividend policy and size of all 30 Dhaka Stock Exchange listed private commercial banks in Bangladesh during January 2006 - December 2013. Annual total assets of bank is employed as measurement of its size. Statistical analyses, applying tools as correlation and regression, indicate a negative correlation between size of commercial banks and their respective dividend policy in 2006 and 2007, but it turns positive from 2008 onwards. The paper, however, shows that dividend policy changes in banks cannot be adequately explained by variations in their respective size over the period of study. The size of a private commercial bank, therefore, may not be a prime indicator of its dividend policy in the capital market of Bangladesh.*

Keywords: *Private commercial banks, Dividend policy, Bank size.*

JEL Classifications: *G21 G35.*

1. Introduction

Bangladesh surfaced as an independent nation in the world map in the year 1971. After independence, the Government took over all the banks operating at that time and nationalized them through the Bangladesh Bank Nationalization Order, 1972. Over the next few years, the new born nation witnessed several changes in state principles. One such change was the replacement of “Socialism” by “Social Welfare” in 1975. The result was the denationalization of some nationalized banks and therefore, the birth of a substantial number of private commercial banks

The banking sector of Bangladesh, at present, is comprised of the central bank of the country and the commercial sector. The central bank of Bangladesh, known as the Bangladesh Bank, is the chief regulatory body of this sector. The commercial banking sector consists of fifty-six scheduled banks which operate under the supervision of the Bangladesh Bank. The scheduled banks are comprised of thirty-nine private, nine foreign, three specialized, and five state-owned banks.

Since the inception of the nation, private commercial banks have not only shown an increase in their number, but have also exhibited better performance in terms of their equity position, deposit-mobilization, loan and advances, and investment of fund both in nominal and real terms (Chowdhury & Ahmed, 2009). The growth of the banking sector is an indicator of the economic development of a country as have been shown by several studies (The World Bank, 1996). The speedy growth and substantial contribution of

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private commercial banks to the economy of Bangladesh have proved to be an incentive for further studies and understanding of the bank performances. The paper, therefore, seeks to study the performance of the private commercial banks of Bangladesh by analyzing, if an increase in the size of a bank over time indicates an increase in its dividends. Rise in dividends will increase wealth of the investors of the capital market, which in turn, will contribute to the economy of the nation.

2. Literature Review

Academic researchers have varied in results on the impact of firm size on its dividend policies. A study based on 945 firm year observations of 63 nonfinancial firms in Greece which paid dividends annually from 1993 to 2007, shows that size along with other factors increase the probability to pay dividends (Patra, Poshakwale, & Ow-Yong, 2012). Another paper finds that the dividend policy in Jordan, as a developing country, is influenced by factors similar to those relating to developed countries such as firm size. Furthermore, the factors affecting the likelihood of paying dividends are similar to those affecting the dividend policy (Al-Najjar, 2009). Firm size has a significant impact on the dividend payout of firms; shows a study done on 50 listed firms in Nigeria during the period of 2006 to 2010 (Uwuigbe, Jafaru, & Ajayi, 2012). Another paper using a sample of 1035 Taiwanese firms from 2000 to 2005 finds that firm size along with other factors to considerably influence payout decisions (Wu, Kao, & Fung, 2008). Another study in the UK, however, shows an overall declining propensity among firms to pay dividends over the 1998–2002 periods, after controlling for firm size and profitability (Ferris, Sen, & Yui, 2006). A paper examining the patterns in payout policies worldwide utilizing data from a sample of more than 17,000 companies from 33 different countries, finds evidence in support of a significant worldwide decline in the propensity to pay dividends. Most of the decline is due to the payout policies of smaller and less profitable firms with comparatively more investment opportunities. Larger firms, those with higher profitability, and firms with low growth opportunities have a greater propensity to pay dividends. The proportion of dividend payers varies substantially across industries as well. However, the proportion of firms paying dividends has declined over time, even after firms' characteristics have been controlled for (Fatemi & Bildik, 2012). Dividend-paying companies are likely to be larger and more profitable than nonpaying companies, finds a paper examining the dividend behavior of Indian corporate firms in an emerging market (India) from 1991 to 2001 (Reddy & Rath, 2005). Dividends in Japan, however, are positively related to firm size along with other factors (Aggarwal & Dow, 2012). An analysis based on a sample of 136 firms listed on the Bursa Malaysia Index over a period of six years, from 1990 to 1996, finds firm's size not to be statistically significant, but provides some explanation for the dividend policy choice (Ahmed & Shaikh, 2008). A study on the dividend policy of 48 firms listed on the Tunisian Stock Exchange during the period 1996-2002, shows size negatively impacts the dividend payment (Naceur, Goaid, & Belanes, 2006). An examination on the payout policy of U.S. firms over the period 1980-2008 reveals that the evolution of firm characteristics, including the average firm size, age, and volatility of earnings over time best explains payout policy (Krieger, Lee, & Mauck, 2012). A study investigating the factors determine the dividend payout decisions in the case of Pakistan's engineering sector by using the data of thirty-six firms

listed on Karachi Stock Exchange from the period 1996 to 2008, suggests that the previous dividend per share, earnings per share, profitability, cash flow, sales growth, and size of the firm are the most critical factors determining dividend policy in the engineering sector of Pakistan (Imran, 2011). The proportion of U.S. firms paying dividends drops sharply during the 1980s and 1990s. No matter what their characteristics, firms in general have become less likely to pay dividends (Fama & French, 2001).

Size of a firm can be measured through a number of indicators. One of the many commonly used indicators is the firm's total assets. Total assets are the combined value of all the assets possessed by a firm at a given point of time.

Two main types of dividend policies are cash dividend and stock dividend (Besley & Brigham, 2008). Private commercial banks in Bangladesh have mostly given stock dividend in the past few years. One reason behind the policy is the implementation of Basel-II framework. The accord requires banks to comply with the minimum capital requirement (MCR) of eight percent from January 1, 2010 to June 30, 2010; while a rate of nine percent from July 1, 2010 to June 30, 2011. The rate has been set at nine percent with the risk-weighted assets of the banks or Bangladesh Taka four hundred million of total capital, whichever is higher. The minimum capital requirement is ten percent of risk-weighted assets with a five percent of core capital or Bangladesh Taka four hundred million, whichever is higher, from July 2011. The accord has been adopted to be in line with the international standard. The frame-work motivates banks for distributing stock dividend rather than cash dividend.

Reviewing literature from various parts of the world shows company size has a substantial role to play to contribute to company dividend policy. The paper aims to find out if firm size is an important indicator of dividend policy in the capital market of Bangladesh. The study wants to know if higher dividend payers are bigger in size than low or non-payers in the private commercial banking sector of Bangladesh.

3. Objectives

The objectives of the study are, therefore:

- i. Estimating changes in total assets of 30 private commercial banks of Bangladesh listed in the Dhaka Stock Exchange over the period of January 2006 till December 2013.
- ii. Studying dividend policies of these banks during the period of January 2006 till December 2013.
- iii. Determining if a relationship exists between changes in total assets and dividend policies of the private commercial banks and to what extent, total asset changes can explain dividend policies.

4. Methodology

The paper aims to investigate the relationship between dividend policy and size of private commercial banks in Bangladesh that are listed in the Dhaka Stock Exchange (DSE). There are 30 private commercial banks listed in the Dhaka Stock Exchange during the

period of January 2006 to December 2013 in Bangladesh. The study is conducted on all 30 banks. The banks are: Arab Bangladesh Bank Limited, Al-Arafah Islami Bank Limited, Bank Asia Limited, BRAC Bank Limited, The City Bank Limited, Dhaka Bank Limited, Dutch Bangla Bank Limited, Eastern Bank Limited, Export Import Bank of Bangladesh Limited, First Security Islami Bank Limited, ICB Islamic Bank Limited, International Finance Investment and Commerce Bank Limited, Islami Bank Bangladesh Limited, Jamuna Bank Limited, Mercantile Bank Limited, Mutual Trust Bank Limited, National Bank Limited, National Credit and Commerce Bank Limited, One Bank Limited, The Premier Bank Limited, Prime Bank Limited, Pubali Bank Limited, Rupali Bank Limited, Shahjalal Islami Bank Limited, Social Islami Bank Limited, Southeast Bank Limited, Standard Bank Limited, Trust Bank Limited, United Commercial Bank Limited, and Uttara Bank Limited. Data for the research have been extracted from audited annual reports of private commercial banks of Bangladesh. Websites of the banks under study have been visited to acquire required information. Large amounts of data have also been gathered from the Dhaka Stock Exchange. Relevant articles and literature in this context have also been discussed.

Bank Size

The paper aims to understand the size of the banks under study by looking into their annual total assets. In order to compute the annual change in total assets, the total assets of each bank at the end of each year have been identified over the period of study. The annual change in bank size for each bank has, then, been computed by the following procedure:

$$\text{Annual change in bank size at year "t"} = \frac{(\text{Total assets at the end of year "t"} - \text{Total assets at the end of year "t-1"})}{\text{Total assets at the end of year "t-1"}}$$

Dividend Policy

Dividends declared by all 30 private commercial banks for the years 2006 to 2013 have been determined for study. Dividends for a particular year are declared, recorded, and distributed in the following year. For example: dividends for the year 2006 are declared, recorded, and distributed in 2007. Most of the banks have declared stock dividend over the period of study. There are 54 cases out of 240 observations, when banks declared cash dividend along with stock dividend. Cases where there are cash and stock dividend, the rates of each dividend are added up to come to a single value. For example: the Arab Bangladesh Bank Limited declared cash dividend of 5% and stock dividend of 7% for the year ended 2013. These two rates are added up to come to a single value of 12% for ease of analysis.

Various statistical measures like the Karl Pearson's coefficient of correlation (r), the coefficient of determination (r^2), and regression analysis, have been applied to study the relationship between size and dividend policy of the Dhaka Stock Exchange listed private commercial banks in Bangladesh.

5. Empirical Findings

Summary statistics of the dividends declared by the 30 Dhaka Stock Exchange listed private commercial banks from 2006 to 2013 are given in Table 1. Average dividend of banks ranges from 14% to 46% in eight years. Dispersion relative to the mean in dividend is seen to be the highest in 2007, as suggested by the coefficient of variation. The year 2007 further witnesses the highest dividend of 395%.

Table 1: Descriptive Statistics of Dividend Declared by 30 DSE Listed Private Commercial Banks of Bangladesh for years 2006 - 2013

<i>Measures</i>	<i>Div-06</i>	<i>Div-07</i>	<i>Div-08</i>	<i>Div-09</i>	<i>Div-10</i>	<i>Div-11</i>	<i>Div-12</i>	<i>Div-13</i>
Count	30	30	30	30	30	30	30	30
Mean	0.25	0.46	0.26	0.29	0.31	0.24	0.14	0.15
Median	0.245	0.25	0.245	0.3	0.3	0.24	0.13	0.13
Mode	0.25	0.25	0.3	0.3	0.3	0.2	0.1	0.1
Sample variance	0.06	0.59	0.03	0.02	0.03	0.01	0.01	0.01
Sample standard deviation	0.24	0.77	0.18	0.13	0.17	0.11	0.07	0.07
Minimum	0	0	0	0	0	0	0	0
Maximum	1.2	3.95	1	0.55	0.95	0.65	0.4	0.4
Range	1.2	3.95	1	0.55	0.95	0.65	0.4	0.4
Skewness	2.24	3.73	2.29	-0.42	1.82	1.13	1.46	1.33
Kurtosis	7.22	15.46	9.06	0.4	6.59	4.51	4.37	4.4
Coefficient of variation	0.96	1.68	0.7	0.45	0.54	0.46	0.03	0.03

(Source: Estimated)

The paper aims to find out the degree of association or the strength of the relationship between size and dividend policy of DSE listed private commercial banks in Bangladesh. Table 2 and Table 3 report the results of correlation and linear regression analysis, respectively, between size and dividend of Dhaka Stock Exchange listed private commercial banks of Bangladesh during the period of January 2006 to December 2013.

Table 2: Correlation Matrix between Size and Dividend of 30 DSE Listed Private Commercial Banks of Bangladesh over the Period of 2006-2013

	Size-06	Size-07	Size-08	Size-09	Size-10	Size-11	Size-12	Size-13
Dividend-06	-0.05							
Dividend-07		-0.198						
Dividend-08			0.018					
Dividend-09				0.074				
Dividend-10					0.214			
Dividend-11						0.045		
Dividend-12							0.385	
Dividend-13								0.128

(Source: Estimated)

It is seen that a negative correlation exists between size and dividend in 2006 and 2007. The correlation, however, becomes positive from 2008 onwards. The association between the variables is seen to be weak throughout the period of study. The association is the

strongest in 2012 during the study period but again loses strength in 2013. The results suggest that the relationship between the concerned variables becomes positive from negative with time but is not statistically significant.

Table 3: Regression Analysis between Size and Dividend of 30 DSE Listed Private Commercial Banks of Bangladesh over the Period of 2006-2013

Year	Estimated Regression Equation	R-Sq	F	P-Value
2006	Dividend-06 = + (0.27) - (0.07) Size-06	0.25%	0.07	0.79
2007	Dividend-07 = + (0.75) - (1.21) Size-07	3.94%	1.15	0.29
2008	Dividend-08 = + (0.25) + (0.03) Size-08	0.03%	0.01	0.92
2009	Dividend-09 = +(0.27) + (0.07) Size-09	0.54%	0.15	0.7
2010	Dividend-10 = + (0.24) + (0.25) Size-10	4.56%	1.34	0.26
2011	Dividend-11 = + (0.24) + (0.04) Size-11	0.2%	0.06	0.81
2012	Dividend-12 = + (0.14) + (0.27) Size-12	15%	4.86	0.04
2013	Dividend-13 = + (0.08) + (0.1) Size-13	1.6%	0.46	0.5

(Source: Estimated)

From the estimated regression equations given in Table 3, it is seen that the estimated regression coefficients are statistically insignificant (close to 0) at 5% level of significance, throughout the period of study. An analysis of R-sq reveals that a small amount of variation in dividends can be explained, or accounted for, by the variation in the bank size during the period of 2006 to 2013. The insignificant values of F from 2006 to 2013 give cues that regression equation might not help to understand the relationship between bank size and dividend. The high p-values (92% in 2008 and 81% in 2011) provide cues that there might be a big chance that any association observed between bank size and dividend could be the result of chance.

From the findings, it is observed that company size is insignificant in explaining the dividends of the banking stocks. Thus, larger banks might not be an indication of future higher dividends in the capital market of Bangladesh.

6. Conclusion and Recommendations

The paper has determined annual change in size of all 30 private commercial banks listed on the Dhaka Stock Exchange from 2006 to 2013. It further examines the strength of association between dividend and size of the private commercial banks. Results show a negative and statistically insignificant relationship between dividend and size in the first two years of study. Though the relationship becomes positive with time, it still remains weak. This proves that size of a bank might not be a major indicator of dividend in the capital market of Bangladesh. The paper, thus, recommends that investors should not look into the size of a private commercial bank in Bangladesh to get an idea of its dividend policy. They should look for other dividend policy indicators to make investment decisions.

The study has been conducted on eight years' data. Extending the study to cover a longer time period might give different results. Also simple regression analyses have been done on individual years on cross-sectional data taking bank size as the only independent variable. Multivariate regression run on panel data could have given a clearer picture.

This opens up scope for further studies to identify, analyze, and control indicators that can give significant signal about dividend in the private commercial banking sector of Bangladesh. The result will help to build banks that are better market performers and are, therefore, better contributors to the growing economy of Bangladesh.

References

1. Aggarwal, R., & Dow, S. M. (2012). Dividends and strength of Japanese business group affiliation. *Journal of Economics and Business* , 64 (3), 214-230.
2. Ahmed, H. J., & Shaikh, J. M. (2008). Dividend policy choice: do earnings or investment opportunities matter? *Afro-Asian Journal of Finance and Accounting* , 1 (2), 151-161.
3. Al-Najjar. (2009). Dividend behaviour and smoothing new evidence from Jordanian panel data. *Studies in Economics and Finance* , 26 (3), 182-197.
4. Bank, T. W. (1996). *Implementing the World Bank's gender policies*. Washington D C: The World Bank.
5. Besley, S., & Brigham, E. F. (2008). *Essentials of managerial finance*. Orlando: The Dryden Press.
6. Chowdhury, T. A., & Ahmed, K. (2009). Performance evaluation of selected private commercial banks in Bangladesh. *International Journal of Business and Management* , 4 (4), 86-97.
7. Dhaka Stock Exchange. (2015, July 27). *Dhaka Stock Exchange*. Retrieved July 27, 2015, from Dhaka Stock Exchange: <http://www.dsebd.org/>
8. Fama, E. F., & French, K. R. (2001). Disappearing dividends: changing firm characteristics or lower propensity to pay? *Journal of Applied Corporate Finance* , 14 (1), 67-79.
9. Fatemi, A., & Bildik, R. (2012). Yes, dividends are disappearing: worldwide evidence. *Journal of Banking and Finance* , 36 (3), 662-677.
10. Ferris, S. P., Sen, N., & Yui, H. P. (2006). God save the Queen and Her dividends: corporate payouts in the United Kingdom. *Journal of Business* , 79 (3), 1149-1174.
11. Imran, K. (2011). Determinants of dividend payout policy: a case of Pakistan engineering sector. *Romanian Economic Journal* , 14 (41), 47-60.
12. Krieger, K., Lee, B. S., & Mauck, N. (2012). *Do senior citizens prefer dividends? Local clientele vs firm characteristics*. Munich, Germany: University of Munich.
13. Naceur, S. B., Goaid, M., & Belanes, A. (2006). On the determinants and dynamics of dividend policy. *International Review of Finance* , 6 (1-2), 1-23.
14. Patra, T., Poshakwale, S., & Ow-Yong, K. (2012). Determinants of corporate dividend policy in Greece. *Applied Financial Economics* , 22 (13), 1079-1087.
15. Reddy, Y. S., & Rath, S. (2005). Disappearing dividends in emerging markets: evidence from India. *Emerging Markets Finance and Trade* , 41 (6), 58-82.
16. Uwuiigbe, U., Jafaru, J., & Ajayi, A. (2012). Dividend policy and firm performance: a study of listed firms in Nigeria. *Journal of Accounting and Management Information Systems* , 11 (3), 442-454.
17. Wu, M. C., Kao, E. C., & Fung, H. G. (2008). Impact of dividend-protected employee stock options on payout policies: evidence from Taiwan. *Pacific Economic Review* , 13 (4), 431-452.