

# **Profitability Is An Important Determinant Of Dividend Policy Of Listed Private Commercial Banks Of Bangladesh, True Or False?**

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*This paper determines dividend policy and return on assets for 25 out of 30 Dhaka Stock Exchange listed private commercial banks in Bangladesh during January 2006 - December 2010. Attempts are made to examine what kind of relationship exists between profitability and dividend policy of these banks, and to what degree the dividend policy can be explained by their respective profitability for the same period of time. Using statistical measures like, correlation and regression analyses, it is found that a negative correlation exists between profitability of commercial banks and its respective dividend policy in 2006 but the correlation becomes positive from 2007 onwards. The results also show that, with time, the variation in dividend policies can be strongly explained by variation in their respective profitability. Therefore, the findings suggest that profitability is one of the important determinants of dividend policy of private commercial banks in Bangladesh and that banks should try to detect and control other perceived important determinants as well in order to attract investors.*

**Field of Research:** Corporate Finance

## **1. Introduction**

The economic health of a nation is widely dependant on its financial system, which is reflected by the nation's banking system. Banking sector plays a bigger role in the economic development of a country than it was believed earlier as presented by a number of studies (World Bank, 1996; Almeyda, 1996). The chief regulatory body of the banking sector is the central bank of a country. Bangladesh Bank is the central bank of Bangladesh. However, it is the commercial banking sector that dominates the financial system of the country. The sector comprises of four state-owned, five specialized, thirty private, and nine foreign commercial banks.

In 1971, Bangladesh emerged as a new nation in the global map. The independence was followed by the taking over of the banks operating at that time by the Government. The banks were then nationalized through the Bangladesh Bank Nationalization Order, 1972. With the change in time, some of the state principles were replaced from "Socialism" to "Social Welfare" in 1975. This resulted into the denationalization of some nationalized banks and hence, a significant number of private commercial banks were born. Denationalized banks started showing better performance after this change in terms of their equity position, deposit-mobilization, loan and advances, and investment of fund both in nominal and real terms (Uddin

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and Quadir, 1998, cited by Chowdhury and Ahmed, 2009). Ever since then, private commercial banks have been showing a constant growth of employees, branches, loans and advances, deposits, net income, earnings per share till 2006 (Chowdhury and Ahmed, 2009). The rapid growth and major contribution of private commercial banks to the economy of Bangladesh have given the author an incentive to study and gain a better understanding of the bank performances. The paper wants to see if banks with better performances, in other words, higher profitability, are contributing more to the wealth of capital market investors, thus contributing to the economy, than the lower performers. The objectives of this study are:

- i. Estimating annual returns on assets of 25 out of 30 private commercial banks of Bangladesh listed in the Dhaka Stock Exchange over the period of January 2006 till December 2010.
- ii. Determining dividend policies of these banks during the period of January 2006 till December 2010.
- iii. Examining if a relationship exists between returns on assets and dividend policies of the private commercial banks and to what extent, asset returns can explain dividend policies.

## 2. Literature Review

Academic researches have shown that higher profitability does not always mean higher dividend. Firms with high profits, sometimes give low dividends to retain more, which results in higher growth (Besley and Brigham, 2008). A study on 54 Saudi-listed companies during 1990 to 2006 showed that firms reporting lower profits tend to skip dividends or pay low dividends. Profitability is one of the important determinants of dividend payments (Ajmi and Hussain, 2011). Another study in China during 1994-2006 presents that profitability is an important determinant of dividend policy of a firm (Hang, Shen, and Sun, 2011). A paper based on the data of thirty-six companies listed on the Karachi Stock Exchange during the period of 1996 to 2008 suggests that profitability, along with dividend per share, earnings per share, cashflow, sales growth, and size of the firm are the most critical factors in determining the dividend policy in the engineering sector of Pakistan (Imran 2011). Another research conducted in Malaysia suggests that profitable firms are more likely to pay dividends than less profitable firms. The analysis is based on a sample of 136 firms listed on the Bursa Malaysia Index during the period of 1990 to 1996. The evidence suggests that dividend payers are profitable than non-payers (Ahmed and Shaikh, 2008). A paper presented by Interuniversity Research Master and Doctorate Program in Spain shows that policy of payouts does not depend solely on business profits in cases of European banks. Other economic and financial factors, along with institutional factors, also help in determining dividend policy (Diez Esteban and López de Foronda, 2001).

Profitability of a firm can be measured through a number of indicators. One of the many commonly used indicators is return on assets or ROA. Return on assets of a firm is determined by dividing a firm's net income by its total assets (Besley and Brigham, 2008).

Cash dividend and stock dividend are the two main types of dividend policies (Besley and Brigham, 2008). It has been observed in the last few years that private commercial banks in Bangladesh mostly give stock dividend. One of the main

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reasons behind the policy is the recent 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 billion of total capital, whichever is higher. 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.

The paper attempts to study if profitability is an important determinant of dividend policy in Bangladesh. The study wants to see if higher dividend payers are more profitable than no or low payers in the private commercial banking sector of Bangladesh.

### 3. Data and Methodology

The study has been carried out to evaluate the relationship between dividend policy and profitability of selective private commercial banks in Bangladesh that are listed in the Dhaka Stock Exchange (DSE). There are 30 DSE listed private commercial banks in Bangladesh. Out of which, 25 banks are selected to reduce time and cost. The selected 25 banks are: Arab Bangladesh Bank Limited, Al-Arafah Islami Bank Limited, Bank Asia Limited, BRAC Bank Limited, The City Bank Limited, Dhaka Bank Limited, Eastern Bank Limited, Export Import Bank of Bangladesh Limited, First Security Islami 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, Social Islami Bank Limited, Southeast Bank Limited, Standard Bank Limited, Trust Bank Limited, United Commercial Bank Limited, and Uttara Bank Limited. The relevant data and information are collected from the Dhaka Stock Exchange, audited annual reports of different private commercial banks of Bangladesh, and websites of relevant private commercial banks of Bangladesh. Relevant articles and literature in this context have also been consulted.

#### **Profitability**

The study attempts to understand the profitability of the selected banks by looking into their annual returns on assets. In order to calculate annual returns on assets, the net incomes and total assets of each bank for each year have been determined over the period of study. The annual returns on assets for each bank have, then, been estimated by the following procedure:

*Annual return on assets "ROA" = Annual net income/ Total assets as shown in the annual report of the bank*

#### **Dividend Policy**

All dividends declared by the selected banks for the years 2006 to 2010 have been taken into consideration. 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. It has been found that most of the banks in most of the times have declared stock dividend. There were 24 cases out of 125,

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when banks declared cash dividend along with stock dividend. The banks claim that the amount of dividend declared is based on their net profit. Cases where there are both 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 10% and stock dividend of 15% for the year ended 2010. These two rates are added up to come to a single value of 25% for ease of analysis.

For evaluating the relationship between profitability and dividend policy of the selected DSE listed private commercial banks in Bangladesh, data have been analyzed through various statistical measures like the Karl Pearson's coefficient of correlation ( $r$ ), the coefficient of determination ( $r^2$ ), and regression analysis.

### 4. Empirical Findings

The summary statistics of the dividends declared by the selective DSE listed private commercial banks from 2006 to 2010 have been reported below in Table 1. It can be seen from the table that the average dividend of banks for 2006, 2007, 2008, 2009, and 2010 are 25.63%, 36.77%, 27.26%, 31.26%, and 32.96% respectively. It is also evident that dispersion relative to the mean in dividend is the highest in 2007, which decreases over time and then increases again in 2010 as the coefficient of variation suggests. The highest dividends in 2006, 2007, 2008, 2009, and 2010 are 100%, 200%, 100%, 55%, and 95% respectively, which reflect fluctuations with time. The observation is different in the lowest dividend figures over the period where an increase with time is evident.

**Table 1: Descriptive Statistics of Dividend Declared by 25 DSE Listed Private Commercial Banks in Bangladesh for years 2006 - 2010**

<i>Measures</i>	<i>Dividend-06</i>	<i>Dividend-07</i>	<i>Dividend-08</i>	<i>Dividend-09</i>	<i>Dividend-10</i>
<b>Count</b>	25	25	25	25	25
<b>Mean</b>	0.256316	0.367656	0.2726	0.3126	0.3296
<b>Median</b>	0.25	0.25	0.25	0.3	0.3
<b>Mode</b>	0.25	0.25	0.3	0.3	0.4
<b>Sample variance</b>	0.040042	0.1771168	0.031702	0.012744	0.027596
<b>Sample standard deviation</b>	0.200104	0.420913	0.178051	0.112889	0.166119
<b>Minimum</b>	0	0	0	0.1	0.12
<b>Maximum</b>	1	2	1	0.55	0.95
<b>Range</b>	1	2	1	0.45	0.83
<b>Skewness</b>	2.126323	2.837389	2.972339	0.144134	2.336504
<b>Kurtosis</b>	7.45862	9.331876	12.06114	-0.16677	7.629646
<b>Coefficient of variation</b>	0.780692	1.144855	0.65316	0.36113	0.504003

This study attempts to determine the degree of association or the strength of the relationship between profitability 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 profitability and

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dividend of 25 DSE listed private commercial banks in Bangladesh considering the period between January 2006 and December 2010.

**Table 2: Correlation Matrix between Profitability and Dividend of 25 DSE Listed Private Commercial Banks in Bangladesh over the Period of 2006-2010**

	ROA-06	ROA-07	ROA-08	ROA-09	ROA-10
Dividend-06	-0.005				
Dividend-07		0.620			
Dividend-08			0.495		
Dividend-09				0.666	
Dividend-10					0.829

It is observed that a negative correlation exists between profitability and dividend in 2006. The correlation, however, becomes positive from 2007 onwards. The association between the variables is also weak in 2006, but gains in strength with time. A slight weakening of strength in association is observed in 2008, but the relationship gains momentum from then onwards. The results suggest that the relationship between the concerned variables becomes positive from negative with time and has become statistically significant.

**Table 3: Regression Analysis between Profitability and Dividend of 25 DSE Listed Private Commercial Banks in Bangladesh over the Period of 2006-2010**

Year	Estimated Regression Equation	R-Sq	F	P-Value
2006	Dividend-06 = + (0.26) - (0.19) Profitability-06	0.002%	0.0005	0.982
2007	Dividend-07 = - (0.12) + (36) Profitability-07	38.42%	14.35	0.001
2008	Dividend-08 = + (0.03) + (17) Profitability-08	24.54%	7.48	0.012
2009	Dividend-09 = +(0.06) + (13.8) Profitability-09	44.40%	18.37	0.0003
2010	Dividend-10 = - (0.01) + (14) Profitability-10	68.72%	50.54	3.057E-07

The estimated regression equations are reported in Table 3. It can be seen that the estimated regression coefficient is statistically insignificant (close to 0) in 2006 at 5% level of significance. It becomes statistically significant in 2007 and loses significance with time. It is found that only 0.002% variation in dividends can be explained, or accounted for, by the variation in the profitability in 2006 which increases to 68.72% in 2010. It is also observed that F is insignificant in 2006 (0.0005), therefore regression equation does not help to understand the relationship between profitability and dividend. However, F becomes significant with time, increasing to 50.54 in 2010. Besides, in 2006, there is a 98.2% chance of rejecting null hypothesis when it is true. However, it drops over time to as low as 3.057E-05% in 2010, hence decreasing the chance of rejecting null hypothesis when it might be true, making the association between profitability and dividend statistically significant.

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From the findings, it is seen that profitability is gaining its strength in explaining the dividends of the banking stocks. Thus, higher profits of a company might be an indication of future higher dividends in the capital markets of Bangladesh.

### 5. Conclusion

The paper has studied returns on assets for 25 out of 30 private commercial banks of Bangladesh that are listed in the Dhaka Stock Exchange over the period of 2006 to 2010. The strength of the relationship between the dividend policy and the return on assets of the selected banks is examined. Though there is a weak negative relationship between the two variables in 2006, the relationship becomes positive and more significant over time. This proves that profitability of a company is gaining momentum in determining dividend policy in the capital markets of Bangladesh. Further studies could be done to identify other variables that have an impact on dividend policies so that the private commercial banks in Bangladesh are able to control their market performance and thus contribute to the building of a more efficient capital market in Bangladesh, which in turn, will help build up a growing healthy economy.

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