ISSN 2072-0149

The AUST Journal of Science and Technology

Volume-2

Issue-2

July 2010



Ahsanullah University of Science and Technology

Editorial Board

Prof. Dr. Kazi Shariful Alam Treasurer, AUST

Prof. Dr M.A. Muktadir Head. Department of Architecture, AUST

Prof. Sirajuddaula Shaheen Head, School of Business, AUST

Prof. Dr. Md. Anwarul Mustafa Head, Department of Civil Engineering, AUST

Prof. Dr. S. M. Abdullah Al-Mamun Head, Department of Computer Science & Engineering, AUST

Prof. Dr. Abdur Rahim Mollah Head, Department of Electrical & Electronic Engineering, AUST

Prof. Dr. Mustafizur Rahman Head, Department of Textile Engineering, AUST

Prof. Dr. AFM Anwarul Haque Head, Department of Mechanical and Production Engineering, AUST

> **Prof. Dr. M. Shahabuddin** Head, Department of Arts & Sciences, AUST

Editor

Prof. Dr. Kazi Shariful Alam Treasurer Ahsanullah University of Science and Technology

Determinants of Dividend Payouts : Study on the Insurance Sector of Bangladesh

Mashiur Rahman¹, Dr. Dipak Kanti Dutta², Naznin Sultana Chaity¹

Abstract: The paper investigates the determinants of dividend payout by examining the insurance sector of Bangladesh listed in both Dhaka stock exchange and Chittagong Stock exchange. Profitability has always been considered as a primary indicator of dividend payout ratio. There are numerous other factors other than profitability also that affect dividend decisions of an organization namely growth. leverage, tangible assets, return on assets, gross premium, and total reserves. Available literature suggests that dividend payout ratio is positively related to return on assets, gross premium and it has inverse relationship with debts, tangible assets, reserve, and growth opportunities. This paper is an attempt to empirically analyze the determinants of dividend payout ratio of Insurance sector. The paper also focuses on identifying whether various factors available as per literature influence dividend payout ratio in Insurance sector in Bangladesh in existing scenario or not. Statistical techniques of correlation and regression have been used to explore the relationship between key variables. Thus, the main theme of this study is to identify the various factors that influence the dividend payout policy decisions of Insurance sector in Bangladesh.

Keywords: Dividends, determinants, Insurance sector.

Introduction

Dividend decision of any firm is a very crucial area of financial management. It is one of the most important issues of interest in the financial literature. Many academicians and researchers have developed many theoretical models for describing the factors which should be considered by the managers at the time of taking dividend payout policy. The important aspect of dividend policy of a firm is its dividend payout (D/P) ratio, that is, the percentage share of the net earnings distributed to the shareholders as dividends.

Dividend policy involves the decision to pay out earnings or to retain them for re-investment in the firm. The retained earning constitutes a source of financing. The payment of dividends results in the reduction of cash and, therefore, in a depletion of total assets. In order to maintain the asset level as well as to finance investment opportunities, the firm must obtain funds from the issue of additional debt or equity. If the firm is unable to raise external funds, its growth would be affected. Thus dividends imply outflow of cash and lower future growth. In other words the dividend policy of the firm affects both the shareholders' wealth and the long term growth of the firm. The optimum dividend policy should strike the balance between current dividends and future growth which maximizes the price of the firm's shares.

¹ Lecturers, School of Business, AUST.

² Professor, School of Business, AUST.

THE AUST Journal of Science and Technology Volume-2, Issue-2, July-2010

Dividend is also referred as a reward for providing finances to a firm, as without dividend payout, shares would not have any market value. Dividend may also be considered desirable from the shareholders' point of view as they tend to increase the current wealth of the shareholders.

Prior research focuses on the dividend policies of the developed countries like the US and UK which is characterized by developed capital market with better investor protection and stringent corporate and securities regulations. There are very few studies that concentrate on the dividend policies of emerging economies. As such, this study examines the factors that determine dividend payout ratio in an emerging economy like Bangladesh. The study looks at the issue focusing specifically on the insurance companies in Bangladesh.

The study examines the relationship between determinants of dividend payout ratios from the context of a developing country like Bangladesh.

In Bangladesh, insurance sector is playing the most important role in the economic development of the whole country. The Bangladesh insurance sector in relation to the size of its economy is comparatively larger than many economies of similar level of development and per capita income. This study specially focuses on the determinants of dividend payout on the insurance sector of Bangladesh. These have been analysed later after a literature review in part 4.

Background of the Insurance Sector in Bangladesh

Insurance is a system of spreading the risk of one to the shoulders of many and which is a legal contract whereby the insurers, on receipt of a consideration known as premium, agree to indemnify the insured against losses arising out of certain specified unforeseen contingencies or perils insured against. Insurance is not a new business in the Bangladesh. Almost a century back, during British rule in India, some insurance companies started transacting business operation, both life and general, in Bengal. Insurance business enlarged momentum in East Pakistan during 1947-1971, when there were 49 insurance companies transacted their business operation both life and general insurance schemes and these companies were of various beginnings with British, Australian, Indian, West Pakistani and local. Then ten (10) insurance companies had their head offices in the East Pakistan, 27 in West Pakistan, and the rest elsewhere in the world.

After independence, Bangladesh government nationalized the insurance industry in 1972 by the Presidential Order No 95, known as the Bangladesh Insurance (Nationalization) Order1972. After 1973, general insurance business became the sole responsibility of the Sadharan Bima Corporation and the Life insurance business was carried out by the Jiban Bima Corporation, the American Life Insurance Company (ALICO), and the Postal Life Insurance Department until 1994, when a change was made in the structural arrangement to keep pace with the new economic trend of liberalization of Bangladesh. Private sector insurance companies demanded withdrawal of the above restrictions so that they could-

• Underwrite both public and private sector insurance business in competition with the Sadharan Bima Corporation.

• Get reinsurance to the choice of reinsurers.

The Government of Bangladesh modified the insurance system through the promulgation of the Insurance Corporations (Amendment) Act 1990. The changes allowed the private sector insurance companies to underwrite 50% of the insurance business emanating from of the public sector and to place up to 50% of their reinsurance with any reinsurer of their choice, at home or abroad, keeping the remaining for placement with the Sadharan Bima Corporation (Insurance Journal, 1997).

A total of 60 insurance companies are operating in Bangladesh till date. Of these companies, 57 are private, two state-owned and one is foreign. Insurance Directorate, under the Ministry of Commerce, is the regulatory-body of the country's insurance sector (**www.sbc.gov.bd**).

Objectives of the study

The objectives of this study are;

- 1. To investigate the overall dividend payouts by the insurance companies during the study period. A period of study from 2000 to 2009 (10 years) has been chosen.
- 2. To identify the determinants of dividends in the insurance sector in Bangladesh.
- 3. To examine the impact of determinants on the dividend policy of the firms in the insurance industry.

Literature Review

The researchers have developed several theoretical models in attempting to explain why firms pay dividends. This section gives a brief idea about the major theories developed so far in the finance literature. Thereafter it discusses the literature in details as related to the dividend payouts in the emerging countries.

Different theories of dividends:

Different theories of dividends began to develop with the publication of pioneering study of Miller and Modigliani (1961). They propose that under certain assumptions including rational investors and a perfect capital market' the market value of a firm is independent of its dividend policy. They argue

that it is not dividend payment that determines the value of a company but the present and future cash flows from the firm's investments.

An alternative theoretical explanation for the payment of dividends is given by Bhattacharya, S (1979) in his bird-in-the-hand theory. This theory asserts that in a world of uncertainty dividends are more certain than future share price appreciation. That is investors will often tend to prefer dividend payouts than capital gains. As a result, a higher payout ratio will reduce the required rate of return and hence increase the value of the firm. This argument, however, has not received strong empirical support.

The signalling theory developed by John and Williams (1985) asserts that firms may pay dividends to signal their future prospects. The market infers a rise in earnings and cash flows from a dividend increase, leading to a higher stock price. Conversely the market infers a decrease in cash flows from a dividend reduction leading to a fall in stock price. According to signalling models (Bhattacharya, 1979; John and Williams' 1985; and Miller and Rock, 1985) dividends contain this private information and therefore can be used as a signalling device to influence share price. An announcement of dividend increase is taken as good news and accordingly the share price reacts favourably, and vice versa.

According to clientele theory, the different group of investors desire different level of dividends. When a firm chooses a particular dividend policy, the only effect is to attract a particular clientele. If a firm changes its dividend policy, then it just attracts a different clientele. Investors may be attracted to the types of shares that match their preferences for dividends. While many papers find empirical support for the clientele effect (see for example, Elton and Gruber, 1970; Lttzenberger and Ramaswamy) a substantial body of evidence also calls the clientele effect into question (see for example, Kalay, 1982; Frank and Jagannathan, 1998; Jakob and Ma, 2004).

DeAngelo and DeAngelo (2006) focus on the life cycle theory of dividends which states that in their early years, firms pay few dividends because their investment opportunities exceed their internally generated capital. In later years, internal funds exceed investment opportunities and firms optimally pay out the excess funds in order to mitigate the possibility that the free cash flows will be wasted.

Baker and Wrugler (2004a) propose the catering theory of dividends. They argue that decision to pay dividends is driven by investor demands. They contend that managers cater the investors by paying dividends when investors put a share premium on payers and by not paying when investors prefer nonpayer. Accordingly non-payers initiate to pay dividends when demand is high and payers omit dividends when the demand is low. Studies including Baker and Wrugler (2004b) and Li and Lie (2006).

Determinants of dividends:

A number of factors have been identified in various empirical studies to influence the dividend policy decisions of the firm. To enumerate little, profitability, risk, cash flows, agency cost, growth, taxes, price earnings ratio etc. Profits have been regarded as the primary indicator of the firm's capacity to pay dividends. In relation to this regards Linter (1956) conducted a classic study on how U.S. managers make dividend decisions. He developed a compact mathematical model based on survey of 200 well established U.S. industrial firms which are considered to be a finance classic. According to him the dividend payment pattern of a firm is influenced by the current year earnings and previous year dividends. Baker and Powell (2000) conclude from their survey of New York Stock Exchange (NYSE) listed firms that dividend determinants are industry specific and anticipated that level of future earnings is the major determinant.

Pruitt and Gitman (1991) find that risks (year to year variability of earnings) also determine the firm's dividend policy. Rozeff (1982), Lloyd et. al. (1995) use beta value of a firm as an indicator of its market

risk. They find statistically significant negative correlationship between beta and dividend payouts. Their findings suggest that firms having higher level of market risk will payout dividends at lower rate.

Grullon et al. (2002) suggest that as firms mature they experience a contraction in their growth which results in a decline in their capital expenditures. Consequently, these firms have more free cash flow to pay as dividends. Similarly, Brav et al. (2005) suggest that more mature firms are more likely to pay higher dividends. In contrast, younger firms need to build up reserves to finance their growth opportunities requiring them to retain earnings.

Asset tangibility may have an effect on dividend policy because firms with high level of tangible assets can use these as collateral for debt (Booth et al., 2001). Consequently, such firms tend to rely less on retained earnings implying that these firms have more cash that can be distributed in dividends. In contrast, Aivazian et al. (2003) find that firms operating in emerging markets with high levels of tangible assets tend to have lower dividends. This is because firms in emerging markets face more financial constraints when short-term bank financing is a major source of debt. Hence, firms with high levels of tangible assets that can be used as collateral to obtain the necessary financing.

An article by LaPorta et al. (2000) has provided much broader agency explanations of dividends for a multi country- setting. They argue that dividend payouts differ in countries with different levels of legal protection of minority shareholders. They also find that firms operating in these countries and having a rapid growth rate paid fewer dividends than their counterparts with slow

growth rates. This implies that shareholders use their legal power to force managers to disburse cash when investment opportunities are low.

Dividends in the emerging economy:

Al-Malkawi (2007) examines the determinants of corporate dividend policy in Jordan. The study uses a firm-level panel data set of all publicly traded firms on the Amman Stock Exchange between 1989 and 2000. The study examines the determinants of the amount of dividends. The results suggest that the proportion of stocks held by insiders and state ownership significantly affect the amount of dividends paid. Size, age, and profitability of the firm seem to be determinant factors of corporate dividend policy in Jordan. The findings provide strong support for the agency costs theory.

Anil and Kapoor (2008) attempts to empirically analyze the determinants of dividend payout ratio of Indian Information Technology (IT) sector. The paper also focuses on identifying whether various factors available as per literature influence dividend payout ratio in IT sector in India in existing scenario or not. It is found that existing variables as per available literature do not explain the dividend payment pattern of IT sector. Only liquidity and beta (year to year variability in earnings) is found to be a noteworthy determinant of dividends.

Al-Yahyaee et al. (2008) examine dividend policy in a unique environment in Oman, where (1) firms distribute almost 100% of their profits in dividends, (2) firms are highly levered mainly through bank loans, and (3) there are no income or capital gains taxes. They find that there are some common factors that determine dividend policy. The common factors are profitability, size, and business risk. Their results also show that agency costs are not a critical driver of dividend policy of Omani firms.

Nandi and Akpomi (2008) explore the impact of taxes on the dividend policy of Nigerian banks. They underscore the theoretical assumptions of the dividend irrelevance theory. The analyses of their study show a significant correlation between taxes and dividend structure of the banks and also suggest that profit is a major variable in the formation of dividend policy of the organizations.

Hypotheses development

In this section I intend to examine some hypothesis in this study. The hypotheses are developed based on the key determinants of dividends. They are discussed as under:

Hypothesis regarding profitability:-

The profitability of a firm has long been regarded as the primary indicator of its capacity to pay dividends. The decision to pay dividend starts with profit. So it is logical to consider profitability as a threshold factor and the level of profitability is one of the most important factors which is considered as determinants of dividend payment. In his classic study, Lintner (1956) found that a firm's net earnings are the critical determinant of dividend changes. Since dividends are usually paid from the annual profits, it is logical that profitable firms are able to pay more dividends. Hence profitability can be regarded as one of the key determinants of dividend and I hypothesise that

H1: The profitability of a firm is positively associated with dividend payouts.

Hypothesis regarding leverage:-

Leverage may affect a firm's capacity to pay dividends because firms that finance their business activities through borrowing commit themselves to fixed financial charges that include interest payments and the principal amount. Failure to make these payments by the due time subjects the firm to risk of liquidation and bankruptcy. Higher leverage might thus result in lower dividend payments. Sometimes some debt covenants have restrictions on dividend distributions. Additionally, Rozeff (1982) points out those firms with high financial leverage tend to have low payouts ratios to reduce the transaction costs associated with external financing. Therefore I hypothesise that:

H2: There is a negative relationship between dividends and leverage.

Hypothesis regarding reserve:-

Reserve is the amount that a company retained from profits without distributing to the shareholders. The organization which retains more reserve generally pays fewer dividends. Therefore a negative relationship is expected between reserve and dividend payout. Therefore I hypothesise that:

H3: There is a negative relationship between dividends and reserve

Hypothesis regarding tangibility of assets:-

Asset tangibility may have an effect on dividend policy because firms with high level of tangible assets can use these as collateral for debt (Booth et al., 2001). Consequently, such firms tend to rely less on retained earnings implying that these firms will have more cash that can be distributed in dividends. This suggests a positive association between asset tangibility and dividends. In contrast, Ail'azian et al (2003) find that firms operating in emerging markets with high levels of tangible assets tend to have lower dividends' This is because firms in emerging markets face more financial constraints when short-term bank financing is a major source of debt. Hence, firms with high levels of tangible assets will have fewer short term assets that can be used as collateral to obtain the necessary financing. Hence I hypothesise that

H4: There is a negative relationship between dividends and tangibility of assets.

Hypothesis regarding gross premium:-

THE AUST Journal of Science and Technology Volume-2, Issue-2, July-2010

Gross premium is the amount which is collected from the insured during the financial year. If the company generate more premiums then it is possible to earn more by investing in the profitable project and subsequently company can pay more dividends. Therefore, there could be a positive relationship between dividend payouts and gross premium. Hence I hypothesise that

II5: There is a positive relationship between dividends and gross premium income.

Hypothesis regarding growth:-

Firms with high growth and investment opportunities will need the internally generated funds to finance those investments, and thus tend to pay little or no dividends' Similarly, the pecking order theory predicts that firms with a high proportion of their market value accounted by growth opportunities should retain more earnings so that they can minimize the need to raise new equity capital' Free cash flow theory also predicts firms with high growth opportunities will have lower free cash flow and will pay lower dividends' Accordingly I hypothesise that

H6: There is a negative relationship between dividends and growth opportunities.

Methodology of the study

As already stated, the main purpose of this study is to identify the determinants of dividend payouts in the insurance sector in Bangladesh. The analysis of this paper is based on 10 insurance companies listed with the Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE), Bangladesh, during the period 2000 to 2009. Data was collected from the annual reports of these insurance companies. For the analysis of secondary data and information quantitative research methodologies have been used. For computing the correlation and multiple regression the Statistical Package for Social Science (SPSS), one of the most frequently used quantitative tools, has been applied. To identify the significant determinants of dividend payouts, the following multiple regression model is developed.

The dividend payout (PAYOUT) can be modelled as follows:

DIVTA = α + b1* GROPRE + b2*GRW + b3*ROA + b4*LEV + b5*TANG + b6*RESV+ ϵ

Where α denotes the intercept of the regression equation, b1, b2, b3, b4, b5, and b6 are the regression coefficients of GROPRE, GRW, ROA, LEV, TANG, RESV. ϵ is another parameter, introducing to take account of unmeasured features.

Where,

DIVTA is dividend payouts to total assets. It is the dependent variable. DIVTA is calculated by taking the ratio of dividends and total assets (Barclay et al., 2009).

GRW is growth opportunity of the firm and is measured by the growth in total assets of a bank in a particular year. Firms with high growth opportunities tend to invest more

and may largely depend upon the internally generated cash flows. Therefore, there could be a negative relationship between dividend payouts and growth opportunities.

ROA (Return on assets) is profitability of the firm. ROA is calculated by taking the ratio of operating income and total assets. In general accordance with a signalling perspective (Miller and Rock' 1985), dividend payouts may be positively related with measures of profitability. Jensen et a]. (1992) find evidence of a positive association between return on assets and dividend payouts.

GROPRE is gross premium. Gross premium is measured by taking the ratio of gross premium and total assets. Gross premium is the amount which is collected from the insured during the financial year. If the company generate more premiums then it is possible to earn more and subsequently company can pay more dividends.[•] Therefore, there could be a positive relationship between dividend payouts and gross premium.

TANG is the tangibility of the assets. Tangibility of the assets is measured by taking the ratio of tangible assets and book value of total assets. Banks with high levels of tangible assets will have fewer short term assets that can be used as collateral to obtain the necessary financing. Therefore, a negative relationship is expected between dividend payouts and tangibility of assets.

LEV is leverage. Leverage is estimated by taking the ratio of debt and total assets. By borrowings banks commit themselves into fixed interest payments. Failure to make these payments by the due time makes the banks prone to bankruptcy. Therefore, highly levered firms are likely to pay lower dividends.

RESV is Reserve. Reserve is measured by taking the ratio of reserve and the book value of total assets. The organization which retains more reserve generally pays fewer dividends. Therefore a negative relationship is expected between reserve and dividend payout.

Table 1 gives the details about the variables used in this study.

variables		Definitions	Expected sign
DIVTA	=	Dividend scaled by total assets	
GRW	=	Growth of total assets	-
ROA	=	Operating income scaled by the total assets	+
TANG	=	Tangible assets scaled by the total assets	-
LEV	=	Ratio of debt and total assets	-
RESV	=	Ratio of reserve and total assets	-
GROPRE	=	Gross premium scaled by the total assets	+

Table 1: Details of variables

Analysis and Results

The collection, tabulation and analysis of the relevant data available from the ten insurance companies' annual reports have been done and the results have been explained in the following paragraphs:

Table 2 represents the descriptive statistics of the sample insurance companies. The results indicate that mean dividend payouts measured by the ratio of dividends and total assets is 0.21975. The mean leverage of sample insurance companies is 0.4555. The mean of reserve is 0.37192. The means of profitability and tangibility of assets is 0.067984 and 0.14790 respectively.

	Ν	Minimum	Maximum	Sum	Mean	Std. Deviation
DIVTA	10	.011504	.027283	.219754	.02197536	.005707472
GRW	10	1.965051	2.764623	2.216971	2.2169710	.245895353
GROPRE	10	.345490	.447724	4.005310	.40053112	.041903847
ROA	10	.051770	.090862	.679844	.06798442	.013233051
TANG	10	.087327	.233945	1.479020	.14790261	.060820298
LEV	10	.361713	.508893	4.555760	.45557632	.045412417
RESV	10	.337255	.448344	3.719170	.37191774	.041722772
Valid N (listwise)	10					

Table 2: Descriptive Statistics

Table 3 presents the mean dividend payouts of the insurance companies over the period 2000 to 2009. It is observed that the mean dividends payout in 2000 is 0.026039 and in 2009 the same ratio is 0.011504. The table suggest that mean dividend payout in the insurance sector has decreased over the study period.

	Table 3: A	Average dividend	payouts over	the study	period.
--	------------	------------------	--------------	-----------	---------

YEAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
DIVTA	0.026	0.027	0.023	0.027	0.024	0.0201	0.027	0.020	0.013	0.012

Note: DIVTA- Dividends payouts.





Interpretation: From the above line graph it can be said that the mean dividend payouts is decreasing from the year 2000 to 2009.

Table 4 presents the correlation matrices of different variables. The reported results suggest that our model does not suffer from multicollinearity problem. The highest collinearity is found between growth and leverage of the firm (-.795).Gujarati (2003) suggests collinearity below 0.80 do not create any serious problem of multicollinearity.

		DIVTA	GRO-PRE	TANG	ROA	GRW	LEV	RESV
Pearson	DIVTA	1.000	.527	671	.776	- 743	- 719	- 782
Correlation	GROPRE	527	1.000	.709	.792	288	- 266	.603
	TANG	671	.709	1.000	673	441	- 406	651
	ROA	.776	792	.673	1.000	.547	- 540	635
	GRW	- 743	288	441	547	1 000	- 795	.755
	LEV	- 719	266	- 406	540	- 795	1.000	- 770
	RESV	- 782	.603	651	.635	755	- 770	1 000
Sig. (1-tailed)	DIVTA	2	.059	017	.004	.001	.002	.000
	GROPRE	.059		.000	.000	.210	.229	033
	TANG	017	.000		.000	.101	. 122	.021
	ROA	.004	.000	000		.051	.053	001
	GRW	.001	210	.101	.051		.000	001
	LEV	.002	.229	122	.053	.000		001
	RESV	.000	033	.021	.001	.001	.001	
N	DIVTA	10	10	10	10	10	10	10
	GROPRE	10	10	10	10	10	10	10
	TANG	10	10	10	10	10	10	10
	ROA	10	10	10	10	10	10	10
	GRW	10	10	10	10	10	10	10
	LEV	10	10	10	10	10	10	10
	RESV	10	10	10	10	10	10	10

Table 4: Correlation matrices

Note: DIVTA- Dividend payouts. GROPRE-Gross premium. TANG- Tangible assets. ROA- Profitability. GRW- Growth. LEV- Leverage. RESV- Reserve.

Model	Unstan Coeff	dardized ficients	Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(CONSTANT)	.612	.159		3.857	.031
GROPRE	.102	.039	.752	2.627	.079
TANG	005	.024	056	219	.841
ROA	.250	.153	579	-1.636	010.
GRW	116	.030	-4.985	-3.919	.030
LEV	658 .	.182	-5.239	-3.627	.036
RESV	151	.062	-1.107	-2.439	.093

Table 5: Determinants of dividend payouts

The coefficient of correlation between dividend payouts and the different determinants of dividend payouts has been computed to analyse the impact of different determinants on dividend payouts of insurance sector in Bangladesh (Table 5).

The results indicate that profitability (ROA). growth (GRW), and leverage (LEV) are the key determinants of dividend payouts by insurance companies in Bangladesh. The coefficient of correlation between ROA and dividend payouts is 0.250 (Table-5). The ROA variable was found to be significantly positively correlated to dividend payouts, indicating that firms having higher profits pay higher dividends. Since dividends are usually paid from the annual profits, it is logical that profitable insurance companies in Bangladesh are able to pay more dividends.

The coefficient of correlation between growth and dividend payouts is -0.116 (Table-5). The negative sign before the coefficient of correlation signifies that there is negative correlation between growth and dividend payouts. It suggests that insurance companies having high growth also have opportunities to expand business in the emerging economy of Bangladesh. For that reason, they retained profits in terms of capital reserve or issuing bonus share to the shareholders which results in less dividend payouts.

The coefficient of correlation between leverage and dividend payouts is -0.658 (Table-5). The LEV variable was found to be significantly negatively correlated to dividend payouts, indicating that firms having higher leverage pay lower dividends. This is consistent with the findings of Rozeff (1982). It suggests that banks involved in borrowing pay lower dividends because of commitment of payment of fixed interests to the loan provider.

The signs of the coefficients are consistent with the expectations but they are somewhat insignificant in respect of probability. It suggests that these variables may not serve as the striking factors in determining dividend payouts by the insurance companies in Bangladesh. Other factors may also considered in framing the dividend policy in the insurance sector.

R	R Square	Adjusted R Square	Std. Error of the Estimate		Change	Statis	tics	
				R Square Change	F Change	df 1	df2	Sig. F Change
.989 ^a	.979	.937	.0014347911	.979	23.236	6	3	.013

Table 6: Model Summary

^{a.} Predictors: (Constant), RESV, GRW, TANG, ROA, LEV, GROPRE

The multiple regressions show that all determinants of dividend payouts together have a big impact on the dividend payout of the insurance sector of Bangladesh. The determinants of dividend payout considered in this study have a correlation of 0.989. It means that all determinants together influence 98.9% of the dividend payout of the insurance sector. The model shows R square is 0.979 which implies that 97.9% of the total variation in dividend payouts is explained by the regression model. The F-stat for the multiple regressions model is 23.236 which is significant at 1% level. The reported results are serial correlation by using white standard error estimate for the coefficients.

Conclusion

The study investigated the determinants of dividend payouts in Bangladeshi insurance companies. It used a panel dataset of 2000 to 2009 for 10 insurance companies listed in both DSE and CSE. The study had three main objectives, namely to see the overall dividend payouts in Bangladesh by the insurance companies, to identify the factors that determine the amount of dividends and to examine the impact of determinants of the dividend payout policy. The results showed that overall dividend payouts in Bangladesh by the insurance companies have decreased during the period 2000 to 2009. A decreasing trend is seemed in dividend payouts by the insurance companies because our insurance sector is a growing one and most of the insurance companies retained their profits in terms of capital reserve or by issuing bonus share. It was found that the determinants that affect the amount of dividends include the main factors like profitability, growth and leverage of the insurance companies in Bangladesh. Profitability is to be considered as a threshold factor and it is logical that profitable firms are able to pay more dividends. The reserve is another important variable that influence the dividend payout policy. The results support the hypothesis that the organization which retains more reserve generally pays fewer dividends. Furthermore, growth also considered as one of the key determinant of dividend payout policy, which suggest that high growth opportunities will have lower free cash flow and will pay lower dividends.

One interesting finding of my study was that the multiple-correlation results of tangibility of assets: gross premium income and reserve could not satisfy the 5% level of significance. Hence, these have not been considered as the determinants of dividend payouts. It is also notable that this study is carried out for a new financial sector like insurance. Therefore, a further research can be conducted to see the determinants of dividend payouts in the non-financial sectors in Bangladesh. Research can also be done to see whether non-financial sectors pay higher dividends or financial sectors pay higher dividends and what factors drive those dividends.

References

- Bhattacharya, S, (1979), 'Imperfect information, dividend policy, and the bird in the hand fallacy', Bell Journal of Economics 10,259-270.
- John, K. and Williams, J., (1985), 'Dividends, dilution, and Taxes: A signalling equilibrium', Journal of Finance 40, 1053-1070.
- Miller, M. H. and Rock, K., (1985), 'Dividend policy under asymmetric information, Journal of Finance 40, 1031-1051.
- Black, F. and Scholes, M., (1974), 'The effects of dividend yield and dividend policy on common stock prices and returns', Journal of Financial Economics, 1, 1-22.
- Miller, M.H. and Scholes, M., (1982), 'Dividend and taxes: Some empirical evidence', Journal of Political Economy, 90, 1118-1141.
- Elton, E., and Gruber, M., (1970) 'Marginal stockholder tax rates and the clientele effect', Review of Economics and Statistics, 52, 68-14.
- Litzenberger, R. H. and Ramaswamy, K., (1979), 'The effect of personal taxes and dividends on capital asset prices', Journal of Financial Economics, 7, 163-195.
- Kalay, A., (1982), 'The ex-dividend day behaviour of stock prices: A re-examination of the clientele effect', Journal of Finance, 37, 1059-1070.
- Frank, M. and Jagannathan, R., (1998), 'Why do stock prices drop by less than the value of the dividend? Evidence from a country without taxes', Journal of Financial Economics, 47, 161-188.
- DeAngelo, H. and DeAngelo, L., (2006), 'The irrelevance of the MM dividend irrelevance theorem', Journal of Financial Economics 79,293-316.
- Baker, M. and Wurgler, J., (2004),'A catering theory of dividends', Journal of Finance 59, 1 125-1 165.
- Easterbrook, F.H., (1984), 'Two agency-cost explanations of dividends', American Economic Review 74, 650-659.
- Pruitt, S.W. and Gitman, L.W., (1991), 'The interactions between the investment, financing, and dividend decisions of major US firms', Financial review, 26, 409 -430.
- Grullon, G., Michaely, R. and Swaminathan, B., (2002), 'Are dividend changes a sign of firm maturity?' Journal of Business, 75,387-424.
- Brav, A., Graham, J., Harvey C., and Michaely, R., (2005), 'Payout policy in the 21st century', Journal of Financial Economics, '77,483-527.
- Booth, L., Aivazian, V., Demirguc-Kunt, A., and Maksimovic, V., (2001), 'Capital structure in developing countries', Journal of Finance, 56. 87-130.

- Aivazian, V., Booth, L., and Cleary, S., (2003), 'Do emerging markets firms Follow different dividend policies from the U.S. firms?' Journal of Financial Research, 26, 37,1-387.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R., (2000), 'Agency problem and dividend policies around the world', Journal of Finance, 55, 1-33.
- Anil, K. and Kapoor, S., (2008), 'Determinants of dividend payout ratios A study of Indian information technology sector' International Research Journal of Finance and Economics 15, 63-71.
- Nnadi, M. A. and Akpomi, M., (2008), The effect of taxes on dividend policy of banks in Nigeria', International Research journal of Finance and Economics 18, 48-55.
- Al-Yahyaee, K., Pham, T. and Walter, T. (2008), 'Dividend policy in the absence of taxes' Unpublished working paper from Sultan Qaboos University, Oman.
- Amarjit Gill, Nahum Biger and Rajendra Tibrewala, 'Determinants of Dividend Payout Ratios: Evidence from United States' *The Open Business Journal*, 2010, *3*, 8-14.
- Jayesh Kumar, 'Corporate Governance and Dividends Payout in India' Xavier Institute of Management.
- Insurance Journal, 1997.
- www.sbc.gov.bd.