

Determinants and Behavior of Dividend Policy in Pakistani Listed Companies

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Abstract

The rationale of the study was to identify the factors which effect dividend payout policy of the firm and whether that policy is stable depending upon last year's dividend and current earnings or not. This study was conducted on Karachi Stock Exchange listed companies and found that leverage and tangibility were significant however other variables have consistent relationship with dividend payout policy as found in literature. It was also found that firms do not follow stable dividend policy however there was strong significant relationship between dividend payout with last year's dividend.

JEL classification numbers: G 30, G 32, G 35.

Keywords: dividend payout policy, Karachi Stock exchange, leverage, tangibility.

1 Introduction

Dividend policy is one of the most controversial issues in modern corporate finance. This has led to the emergence of a number of competing theoretical explanations for dividend policy. No consensus has emerged about the rival theoretical approaches to dividend policy despite several decades of research. Brealey and Myers (2005) list dividends as one of the top ten important unresolved issues in the field of advance corporate finance.

The empirical work on dividend policy has generally been focused on developed stock markets such as the UK, and US.

The examination of dividend policy in emerging stock markets has until recently, been much more limited. Yet the sorts of firm and market characteristics that may

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influence dividend policy may in fact be more likely to be present in developing markets in an exaggerated fashion than in developed markets.

One of the renowned dividend behaviors is the smoothing of firm's dividends through earnings and growth. In his seminal research, Lintner (1956) found that firms in the United States adjust their dividends smoothly to maintain a target long run payout ratio. The findings of Lintner (1956) regarding the dividend smoothing have also been confirmed by numerous studies since its publications. The smoothing of the dividend is the well-known empirical fact but the empirical evidence is based on United States market. The dividend policy of the companies varies from country to country due to various institutions and capital market differences.

The purpose of this study is to investigate the behavior and determinants of dividend policy in Pakistani listed companies. This study empirically examined whether these firms follow stable dividend policies as in developed markets where dividend smoothing is stylized fact in long run or the unstable one. This paper identifies the prominent variables influencing the dividend policies of the selected companies. The outcomes of the research will provide meaningful and handy information in the role of institutional factors which creates dividend policy at firm's level.

2 Literature Review

Based on the earlier work done by different researchers, Black (1976) concluded that "dividends" is a puzzle. This conclusion is a motivation to study the subject in more detail, specially the factors that would be helpful in determining the dividend policy for Pakistan as a country of emerging economy. A study on emerging countries including Pakistan was done by Aivazian, Booth and Clearly (2003) who found that profitability and Investment opportunities play an important role in determination of dividends.

Amidu and Abor (2006) conducted the study on determinants of dividend policy in Ghana. They choose the sample of 20 listed firms of Ghana Stock Exchange (GSE) which represent the 76% of the total GSE listed firms. They have taken the Payout Ratio as dependent variable and defined as dividend per share divided by earning per share. They included the explanatory variables as profitability, risk, cash flows, corporate tax, institutional holdings, sales growth and market to book value. The final conclusion of article was that dividend payout policy decision of listed firms in GSE is influenced by profitability, cash flow position, and growth scenario and investment opportunities of the firms.

Reddy and Rath (2006) examined the dividend policy of Indian corporate firms, trend and determinants and make attempt to explain the observed behavior of the firms listed on Bombay Stock Exchange (BSE) with the help of trade off theory and signaling theory hypothesis. It was found that dividends paying firms were more profitable, large in size, and growth did not seem to discourage Indian firms

from paying higher dividends. The corporate tax or tax preference theory doesn't appear to hold true in Indian context. Finally the dividend changes appear to signal contemporary and lagged earning performance rather than future earnings performance.

Lintner (1956) found evidence that firms had in mind a target payout ratio towards which they moved with stable speed of adjustment. His approach suggested the stylized facts as follow: (i) managers believe that firms should have some long-term target payout ratio whereby they decide on the fraction of earnings they are willing to pay out as dividends in long term, (ii) in setting dividends, they focus on the change in existing payouts, not on the level, (iii) a major unanticipated and non-transitory change in earnings would be an important reason to change dividends, (iv) most managers try to avoid making changes in dividends that stand a good chance of having to be reversed within the near future.

Glen et al. (1995) study the dividend policy of firms in emerging markets. They find that firms in these markets have a target dividend payout rate, but less concerned with volatility in dividends over time. They also find that shareholders and governments exert a great deal of influence on dividend policy and observe that dividends have little signaling content in these markets.

Ahmed and Javid (2009) studied Dynamics and Determinants of Dividend Policy in Pakistan for the time period 2001-2006. The results consistently support that Pakistani listed non-financial firms rely on both the change in dividends and change in net earnings which clearly demonstrate that the firms rely on both current earning per share and past dividend per share to set their dividend payments. They also showed that profitable firms with more stable net earnings can afford larger free cash flows and therefore pay larger dividends. Furthermore the ownership concentration and market liquidity have the positive impact on dividend payout policy. Slack and leverage have the negative impact on dividend payout policy. The market capitalization and size of the firms have the negative impact on dividend payout policy which clearly shows that the firms prefer to invest in their assets rather than pay dividends to its shareholders.

3 Hypothesis of Study

Following Amidu and Abor (2006) Dividend payout ratio can be defined as the dividend per share for a company divided by earning per share of that company, as dependent variable.

Hypothesis 1: The firm size (LGS) is positively associated with dividend payouts

A large firm typically has better access to capital markets and finds it easier to raise funds with lower cost and fewer constraints compared to a small firm. Therefore, *ceteris paribus*, large firms are more likely to afford paying higher

dividends to shareholders. Scott and Martin (1975) found that the size of the firm is very important factor which can affect the firms' dividend policy and debt policy. Firm's log of sales is used as a measure for size. Based on the above discussion and consistent with previous research the size variable is expected to have a positive relationship with dividend payouts.

Hypothesis 2: The firm debt (DR) is negatively associated with dividend payouts

When a firm acquires debt financing it commits itself to fixed financial charges embodied in interest payments and the principal amount, and failure to meet these obligations may lead the firm into liquidation. The risk associated with high degrees of financial leverage may therefore result in low dividend payments because, *ceteris paribus*, firms need to maintain their internal cash flow to pay their obligations rather than distributing the cash to shareholders. Moreover, Rozeff (1982) points out that firm with high financial leverage tend to have low payouts ratios to reduce the transaction costs associated with external financing. Similarly Higgins (1972) suggested that long term debt had negative impact on the amount of dividend paid Therefore, other things being equal, an inverse relationship between debt ratio, defined as the ratio of total debt to total asset, and dividends is expected.

Hypothesis 3: There is a positive relationship between a firm's profitability (ROA) and dividend payouts

The decision to pay dividends starts with profits. Therefore, it is logical to consider profitability as a threshold factor, and the level of profitability as one of the most important factors that may influence firms' dividend decisions. In his classic study, Lintner (1956) found that a firm's net earnings are the critical determinant of dividend changes. The pecking order hypothesis may provide an explanation for the relationship between profitability and dividends. That is, taking into account the costs of issuing debt and equity financing, less profitable firms will not find it optimal to pay dividends, *ceteris paribus*. On the other hand, highly profitable firms are more able to pay dividends and to generate internal funds (retained earnings) to finance investments. Fama and French (2002) used the expected profitability of assets in place for testing the pecking order hypothesis. In another study, Fama and French (2001) interpreted their results of the positive relationship between profitability and dividends as consistent with the pecking order hypothesis. Based on the above discussion, profitability is expected to be a key determinant of corporate dividend policy in Pakistan. To test this hypothesis, the after tax earnings is used as a measure of a firm's profitability. The hypothesized relationship between after tax earnings and dividends is positive.

Hypothesis 4: Firm growth and investment opportunities (MB) are negatively associated with dividend payouts

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. This prediction is consistent with the pecking order hypothesis proposed by Myers and Majluf (1984). Accordingly, it is expected that firm's growth and investment opportunities, as measured by market-to book ratio (MBR), to be negatively related to dividends payouts (Deshmukh, 2003, and Aivazian et al., 2003).

Hypothesis 5: Tangibility is associated negatively with dividend payout

Asset structure defined as total assets minus current assets divided by total assets will be used to capture tangibility. Investments in fixed assets for expansion purpose leave little out of profits to be paid to shareholders as dividends. Therefore it is hypothesized to have a negative relationship with dividend policy. Ramcharran (2001) also finds support that retentions (i.e. lower dividends) are associated with greater growth.

Hypothesis 6: Liquidity (CR) is associated positively with dividend payout

According to Omran and Pointon (2004) Firms that exhibit less liquidity are more inclined to reduce dividends. For the purpose of examining the effect of liquidity current ratio which is calculated by dividing current assets by current liabilities is used.

Hypothesis 7: Firms follow a stable dividend policy

Lintner (1956) model relates dividend to lagged dividends and net earnings. The rationale for this model is that dividends depend directly on current net earnings but also constrained by past dividends, because of reluctance to cut dividends or to raise them to higher levels which may not be maintained.

4 Data and Methodology

For the study KSE 100 index listed companies were selected and the data covers the time period from 2010 to 2014.

Model: 1

Sample consists of N cross sectional units from the time period 2010 to 2014

Dividend Payout Ratio = $f(\text{CR}, \text{DR}, \text{LOS}, \text{ROA}, \text{MB}, \text{Tangibility})$

$$\text{DPO}_{it} = \beta_0 + \beta_1 \text{CR}_{it-1} + \beta_2 \text{DR}_{it} + \beta_3 \text{LOS}_{it} + \beta_4 \text{ROA}_{it} + \beta_5 \text{MB}_{it} + \beta_6 (\text{Tangibility}) + \varepsilon_{it}$$

In order to check hypothesis 7 this study follows the model used by Kouki and Imen (2005) which is given below as a model 2.

Model: 2

$$DPO_t = a + b DPO_{t-1} + b EPS_t + u_t$$

For the purpose of estimating effect of independent variables over the firm's dividend policy multiple regression model is use. It is opted to use the Ordinary Least Squares method (OLS).

5 Results and Discussion

Table 1 shows the average and standard deviation of the different variables in the study. It also presents the minimum and maximum values of the variables. The descriptive statistics shows that the sample firms pay an average of 0.31 or 31% of their earnings as dividends.

Table 1: Descriptive statistic

	CR	DR	LGS	MB	ROA	Tangibility	DPO
Mean	1.591	1.354	3.996	2.622	0.203	0.384	0.311
Maximum	7.260	28.170	58.900	37.662	12.170	0.992392	2.390
Minimum	0.010	0.1545	0.000	-1.811	-0.370	0.000	-0.620
S.D	1.099	4.6352	5.674	4.417	1.233	0.231	0.366

The result of regression analysis in Table 2 shows that the debt ratio and tangibility were found significant negative relationship with the dividend payout ratio. It means that firms which have more debt in their capital structure are less likely to pay dividends similarly firms which have large spending in fix assets are actually expanding they have growth opportunities that's why pay less dividend. Current ratio, log of sales, market to book value ratio and profitability was found insignificant. However, signs of coefficient are consistent with what has been found in literature about the relationship of dividend with these variables except that of log of sales.

Table 2: Regression Results

Dependent variable: Dividend Payout Ratio	
Independent variables	
C	0.414* (4.097)
CR	0.016 (0.552)
DR	-0.013* (-1.819)
LGS	-0.005 (-1.004)
MB	-0.002 (-0.364)
ROA	0.006 (0.227)
Tangibility	-0.234* (-1.648)
R(square)	0.101

Positive relationship showed by liquidity and profitability which means the more liquid and profitable the firm the higher it would pay dividend. Negative relationship between market to book value ratio and dividend payout shows that if firm has more investment opportunities it would pay less dividend. However, negative relationship between log of sales and dividend payout is against what has been found in literature.

The value of R (square) shows that model only explains 10% of the variation in dividend payout moreover significance of intercept term further confirms that there may be other variables which are responsible for the changes in dividend payment.

Table 3: LINTNER MODEL

year	intercept	Last year's Dividend	Current Earning per share	R(square)
2010	0.072 (1.03)	0.662* (5.81)	0.001 (0.35)	0.553
2011	0.043 (1.688)	0.554* (5.03)	0.007* (2.42)	0.636
2012	0.033 (0.49)	0.511* (3.16)	0.006 (1.58)	0.365
2013	0.159 (2.24)	0.732* (4.13)	-0.001 (-0.34)	0.371
2014	0.173 (1.23)	0.574** (1.93)	0.002 (0.24)	0.135

*=5% **=10%

As shown in table 3 that last year's dividends show a significant relationship but the current year's earnings per share are significant only in year 2011. This strong relationship of last year's dividend with current dividend is consistent with Omet (2004) and Dickens, Casey and Newman (2000) who found that firms use their dividend history to set dividend policy. Insignificance of current earnings/share show that decision of current dividend is strongly dependent on last year's dividend not on current year's earnings. This is inconsistent with Lintner's survey

which revealed that the net earnings is the predominant element which determines current changes in dividends.

6 Conclusion

The purpose of the study was to investigate about those factors which influence firm's dividend policy and whether that dividend policy is stable over time or not. The findings of this study are consistent with their proposed relationship but only leverage and tangibility were found significant. It was also found that these firms do not follow stable dividend policy. In future with addition of more factors which could be microeconomic or macroeconomic in nature with a larger true representative sample of listed firms can give better picture of the determinants of dividend policy in Pakistan.

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