Investment Opportunities and Dividend Yield- (Evidence from KSE)

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Abstract– **The purpose of this paper is to investigate the role of firm's financial leverage, market to book value and firm size on dividend payout policy. OLS Regression analysis is used to find the relations between the financial leverage, market to book value, firm size and the dividend payout policy.KSE-100 index companies are selected from the Karachi stock exchange as the representative sample from the total listed companies at Karachi stock exchange for the period of four years from 2008 to 2011. The relationship between the investment opportunity and dividend policy is found negative and significant, but the financial leverage is not significantly affecting the dividend policy although it is negatively related to dividend. Firm size is positively significant towards the dividend policy.**

Keywords– **Stock Exchange, Companies, KSE and Opportunity**

I. INTRODUCTION

Although comprehensive hypothetical and experiential studies to explain the dividend policy were made by many researchers but still it is a puzzle in the area of finance (Black, 1976). Every firm wants to maximize its market value and to do this the management have to look the investment, financing and earning distribution decisions (the dividend policy). So the awareness about the dividend determinants has the strong impact on the value of the firm.

Dividend policy also affects some macro economical issues, because it is a part of national income and its fluctuations reflects the overall picture of the economy as well. (Papadopoulos and Charalambidis, 2007). So not only for the firm itself the dividend policy is equally important for the economy.

There is no contradiction on the view that no single factor can determine the dividend decisions. (Brook et al.,1998) There are a number of factors affecting the dividend policy including leverage, firm size, investment opportunities cash flow, profitability, sales growth, risk and agency cost (Rozeff, 1982; Lloyd et al., 1985; Collins et al., 1996; Ahmad, 2009). Earlier researchers have acknowledged a range of firm specific reasons, which are significant in making dividend decisions including the financial leverage, which has a strong impact on earnings and on the value of the firm.

Due to the excessive use of debts the firm's profits lever up but the amount of interest affects the liquidity and due to which firms with high financial leverage pay low dividends. (Afza and Hammad, 2010). The financing problem a firm is facing also depends on its size which is an important aspect in determining the profits of firm, since firms with small size

have no easy access to external funds due to the lower rate of their assets so they reduce their dividends in order to finance the future profitable projects.

The current study is dissimilar from the preceding Pakistani studies based on the factors used as predictors of dividend policy. Impact of investment opportunities on dividend policy is analyzed, further financial leverage and size of the firm is use as a determinant of the dividend policy. Hence this study aims to explore these corporate characteristics as the determinants of the dividend policy in developing economy of Pakistan.

The remaining article is organized as follows. Section 2 provides the relevant literature and in section 3 theoretical framework is presented and results discussed in section 4 and finally conclusion and implication are reported in section 5.

II. LITERATURE REVIEW

Dividend policy is one of the controversial issues of finance .Earlier studies on dividend provide the diverse results about the dividend and its impact on the firm's value and future prospects. According to Lintner (1956) the payments of dividend depicts the firm's financial performance and the firm's value is increased by the payments of dividend. But after that the Miller and Modigliani (1961) disagreed, they were of the view that the firm's worth is based only on its fundamental earning control and its level of risk.

The concept of *"dividend puzzle* "was introduced based on the different dividend theories and the result was concluded in the form of a unclear decision, because some investors prefer dividends and others not, due to the tax burden and it is not easy for the firms to decide whether to pay dividend or not (black,1976).Many factors have been acknowledged in prior pragmatic researches to influence the dividend payout ratios of firms including profitability, leverage, risk, firm size, cash flow, sales growth, investment opportunities and agency cost (Rozeff, 1982; Lloyd et al., 1985; Collins et al., 1996; Ahmad, 2009). Corporations which are at early growth stage have need of the interior supply of funds to support for new investments and consequently such Corporations are anticipated to give dividends at a lower rate (Myers and Majluf, 1984; Afza and Hammad, 2011).

If the firms have a number of investment opportunities and it is having growing trend then the dividend payout will be significantly low as compared to the firms with low market opportunities. Growing firms are in need of more funds and due to this fact they retain major portion of their profits and

show low dividend per share ratio; and firms with higher market to book value having grater investment opportunities are in need of more funds and hence low payout ratio (Mohammed, 2006).

The link among the investment opportunities and dividend payout policies is unconstructive and vastly significant. The firms with huge financial opportunities pay fewer dividends. The relation of leverage and dividend payout policy is also negative and significant. Therefore, it can be concluded that rising firms with further investment opportunities pay fewer dividends to their shareholders in Pakistani market (Ahmad, 2009).Firms with high investment potentials would chase very low dividend payout policy in order to retain funds to finance their investments (Joshua, 2010).

There are a number of verifications in the offered literature for the unconstructive association between the MBV and the dividend policy, in a study by Smith and Watts(1992), it is verified that the corporations with the high level of MBV are rated low at the dividend payout policy, Smith and Watts (1992) argue that firms with high MBV set are likely to follow a low dividend payout policy, since dividends and savings symbolize opposing potential uses of a firm's cash resources (Gaver and Gaver, 1993). Jones (2001), broadening and amending the work of Gaver and Gaver (1993), established out that rapidly growing firms were associated with extensively lower dividend yields.

The size of firm is a strong predictor of the dividend policy many earlier researchers like(Afza& Hammad 2010) verify the size as determinant of the dividend with the dividend payout by using 3 years data of KSE-100 index firm from(2005-07)

For future investment opportunities; market to book value is used and it is also evident by the previous studies that the MBV has significant negative correlation with the dividend yield; this study was conducted in Ghana by taking six years data of 22 firms from Ghana stock exchange (Mohammad.2006)

In another study the effect of firm's specific characteristics on dividend payout of 72 companies listed at Athens Stock Exchange from 1995 to 2002 is investigated. The sample was divided into retail and industrial companies but found no statistically significant difference in dividend payout of retail and industrial firms and recommended that leverage is the most important dividend payout determinants and is negatively related with dividend payments (Pappadopoulos and Dimitrios, 2007).

In an emerging economy the determinants of dividend policy using the firms on Amman Stock Exchange between 1989 and 2000 were investigated. Results from Tobit specification suggested that while size, age and profitability were found to be the determining factors of dividend policy in Jordan (Jordan Al-Malkawi 2007).

A few years back Anil and Sujjata (2008) observed the determinants of dividend policy in India from 2000 to 2006 and found short term debt paying capacity and Beta (year to year variability in earnings) the only major determinants of dividend yield.

In a comprehensive study by (Jakob and Johannes, 2008) on dividend in Denmark 3948 firm-year observations from 356 firms during 1988-2004 were examined and concluded that the dividend is dependent on earnings, high ROE, age, size and past dividend patterns.

A few years back in Pakistani perspective, Ahmed and Attiya (2009) explored determining issues of dividend by considering a sample of 320 firms listed at KSE from 2001 to 2006.They found that the earnings and size are major determinants of dividend payout policy in Pakistan and contributed in the existing literature.

Ayub (2005) paid attention on the utility of corporate governance related factors in designing dividend policy and Ahmed and Attiya (2009)examined the impact of general corporate characters on dividend payouts. However, future prospects and investment opportunities are relatively more important than simple profitability.

During years (2005-07), the number of dividend paying corporations in Pakistan has been decreased from 46% in 2005 to 40% in 2007 (Annual Report KSE, 2008).This study has strong implication for those stock investors who are interested in dividends, because the purpose of the study is to examine the reasons behind declining dividend payouts in Pakistan. And the future investors will get benefit from this study while making new investments in KSE.

III. HYPOTHESIS

H1.There is no relation between market to book value and dividend payments.
H2: There is no relation between financial leverage and dividend payments.
H3: There is no relation between firm size and dividend payments.

A. Data and Methodology

KSE-100 companies are selected as a representative sample for the study and the data from 2008 to 2011 is used to test the hypothesis. Data is used by fulfilling the following criteria:

1). firms were listed at KSE during years 2008 to 2011.

2). should not be in loss during the whole study period.

3). should not have fail to pay dividend payment in more than 1 year from 2008-2011.

OLS regression is used to prove the expected relations between the targeted variables used in the study (See for example; Ayub, 2005; Kumar, 2006; Ahmed and Attiya, 2009). In this study the same evaluation method to analyze the dividend behavior is used.To measure the dividend policy the dividend yield ratio is used the commonly used proxy for future prospects and investment opportunities is "Market-to-Book Ratio" (MBR) (Afza and Hammad, 2010).To measure financial leverage the debt to equity ratio is used and to measure the size of the firm the log of total assets is used which is a commonly used ratio for the representation of the size of the firm.

IV. STATISTICAL MODEL

$DIV = \beta + \beta_1 (MBR) + \beta_2 (LVG) + \beta_3 (SIZE) + \mu$

Where;Div=dividend yield ratio of every firm

MBR=market to book value ratio

LVG=leverage of the firm, which is debt to equity ratio

Size=size of the firm, represent by the total assets of the firm.

A. Results and discussion

Table 1.1: Descriptive statistics

Details	DY	LVG	M_BV	SIZE
Mean	6.314352	1.432434	3.215612	10.05910
Median	5.245000	0.546000	1.570000	9.948563
Maximum	27.63000	182.0000	89.50000	13.95490
Minimum	0.000000	0.047000	0.450000	6.450470
Std. Dev.	4.998304	11.60644	6.951504	1.574994
Observations	284	284	280	284

In The above Table 1.1 the descriptive statistics of the dependent and independent variables is shown. It covers the 100 companies for the period of four years from 2008 to 2011 from the emerging market of Pakistan. In this part of the paper the mean, standard deviation, minimum and maximum values of all the variables are reported. The mean value of the dependent variable (dividend yield) is 6.31 with the standard deviation of 4.99 and the minimum and maximum values for the DY are 0.00 and 27.63 respectively. It means there is a variation in dividend yield among the different sectors of the economy. The mean value of the leverage is 1.43 with the variation of 11.60 and the 0.47 to 182.00 values of minimum and maximum points. These values represents the fact that the financial leverage is of the greater variation in firms of the KSE, which means the capital structure is different in different sectors of the same economy.3.21 is the mean result of MBV and standard deviation is reported as 6.95 with the minimum value of 0.45 and maximum value of 89.5.the third independent variable of the study is size of the firm and its mean value is 10.05 with the variation of 1.57 and minimum value of 6.45 and 13.95 maximum value.

In the above Table 1.2 the correlation between the dependent and independent variables is reported, multi-co linearity among the independent variables is checked by the correlation matrix shown above. All the repressors are not significantly correlated with each other which means the problem of multi-co linearity is not exist, and their individual relations with each other are reported by the correlation matrix.

First of all the relationship of the financial leverage with the dividend yield is negative, and the value of correlation between them is almost -0.091, which means that the increase in the debt in equity ratio the dividend yield will be decreased, so dividend policy is determined by the leverage and this result also support the hypothesis that is assumed earlier. This was also supported by the earlier researchers like (Pappadopoulos and Dimitrios, 2007). From these results it can be inferred that the firms with high financial leverage are tend to give low dividends due to the payment of financial charges on debt their dividend yield is low as compared to the firms which have lower debt o equity ratio and different capital structure.

Secondly the correlation between the Dividend Yield and MBV is also negative and reported that the exact correlation between them is -0.10, which means the second hypothesis is also accepted in which it was assumed that the DY and MBV are negatively correlated. These results are consistent with the previous research conducted by (Myers and Majluf, 1984; Mohammed, 2006; Ahmad, 2009; Afza and Hammad, 2011), in which it was also examined and verified that the MBV and DY are negatively correlated and it can be concluded that the firms with higher MBV have the more investment opportunities and they have low dividend yield ratio and employ their funds in the investing activities to grow more and more. And finally the third hypothesis is examined by checking the relation between the firm size and DY and it is reported by the correlation matrix that he correlation between the DY and firm size is positive, which supports the hypothesis. The correlation with the DY and size is 0.11 and it is positive which means that in Pakistan the firms with large size are paying more dividends as compared to the smaller firms and these results are also supported by many of the other researchers in different emerging markets. So the final hypothesis is also accepted and supported by the previous literature (Ahmad, 2009).

Table 1.2: Correlation Matrix

Variables	DY	LVG	M_BV	SIZE
DY	1.000000			
LVG	-0.091568	1.000000		
M_BV	-0.106235	0.001907	1.000000	
SIZE	0.119830	-0.051467	-0.083834	1.000000

Table 1.3: OLS Regression Results

Variables	Coefficient	Std. Error	t-Statistic	Prob.
LVG	-0.007757	0.005645	-1.374130	0.1706
M_BV	-0.012687	0.003624	-3.500401	0.0005
SIZE	0.053680	0.016397	3.273839	0.0012
C	0.191583	0.167877	1.141213	0.2548
R-squared	0.094501	F-statistic		8.905730
Adjusted R-squared	0.083890	Prob.(F-statistic)		0.000012
S.E. of regression	0.414593			

In this table 1.3 the OLS regression results are reported and found that the model is significant because the probability value of the F-statistic is less than 0.05. Individual variable's influence on the dependent variable is also explained.

The first significant independent variable included in the study is MBV and its coefficient is -.012 with the standard error of 0.003 and its p-value is less than 0.05,So it is significant and reporting the negative influence on the dividend policy in Pakistan. It means that the firms with the higher MBV are reluctant to pay dividends and they are investing their funds in the various projects to expand their business activities. As Pakistani market is a growing market and particularly the companies with higher MBV are interested to expand their business activities, so they are investing their funds in the development projects rather than paying dividends This was also verifies by the previous studies like (Ahmad, 2009) and (Muhammad, 2006).

Size of the firm which is measured as the log of total assets is also significant in the model and contributing towards the dividend decisions positively. The value of its coefficient is 0.053 with the standard error of 0.016; these results are also matching with the results of a detailed study by (Jakob and Johannes, 2008; Afza& Hammad 2010) in Denmark. The results are indicating that higher the size of the firm, higher the dividends yield, in other words the larger firms are paying more dividends as compared to the smaller ones with reference to the Pakistani market. The companies with higher value of the total assets are paying more dividends.

According to the many of previous studies the financial leverage have a negative effect on dividend policy, means firms with high financial leverage are paying low dividends. Unexpectedly, the results are showing insignificant relationship between leverage and dividend payments. Financial leverage although negatively related with it indicating the fact that in KSE market the leverage is not effecting the dividend decisions, which means the amount of debt in the capital structure is not effecting the profit distribution among the shareholders of the company. The financial leverage is not affecting the dividend patterns and these results are rejecting one of the hypothesis, these results are according to the study conducted by the (Abor and Bokpin, 2010) in Ghana. This may suggest that, in the case of emerging markets, risk does not seem to play a role in explaining firms' dividend payout decisions.

V. CONCLUSION

In this study the dividend yield is used as depended variable and for these three independent variables is used to check the association of these variables on the DY for the period of four years and found interesting results, By using 100 firms from the Karachi stock market Pakistan.OLS regression analysis is used for the results in E.views 7, and after all the results and discussions it can be concluded from these results that the MBV and Size of the firm are strong predictor of the dividend yield like (Jakob and Johannes, 2008; Afza & Hammad 2010) but unexpectedly the LVG is not significant in determining the dividend policy during the said period, which is against the hypothesis and showing no effect on dividend decisions although negatively related to the dividend payments. This

result is in accordance to a precios study by (Abor and Bokpin, 2010).

This present work on dividend has shown the significance of investment opportunity and size in explaining the dividend payments of KSE market. It is obvious from the research that in Pakistan, the main factors driving dividend policy decisions are investment opportunity and firm size. These results recommend that firms having high investment opportunities in relatively developing stock markets keep sufficient profits for opportunity projects. However, larger firms with low future profitable projects are reluctant to retain profits and paying more dividends to maximize the share holder funds. Future research is needed for detailed understanding on this concern and to put up on some of the conclusions provided by this article.

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