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Impact of Leverage on Dividend Payment Behavior of Pakistani Manufacturing Firms

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ABSTRACT: This paper examines the impact of leverage on dividend payment pattern of Pakistani manufacturing firms. 44 companies from five different sectors having regular dividend payment history are included in sample. The annual data for these companies from 2006 to 2011 is used in the study. Simple OLS technique for analysis is used to derive the results of the study. The findings show that leverage has significant negative impact on dividend payment pattern of sampled firms. Dummies variable used to identify the sector specific impact of leverage on dividend payment reveal that affect of leverage on dividend distribution in sugar and textile industry behave differently as compare to other sectors. The results of study help the corporate management to better decide the level of leverage and dividend policy by highlighting the interaction between leverage and dividend payment pattern. That in turn ensures the equity market stability.

KEYWORDS: Leverage, Dividend, Profitability, Size.

1 INTRODUCTION

Dividend distribution decision is one of the fundamental components of corporate policy and has been viewed as an issue of interest in the financial literature. The discussion on this area was initiated by Miller & Modigliani (1956-61) and Gorden & Lintner (1956-62). They come up with contrary view first with relevance and later with irrelevance of dividend policy. Dividend; reward to stockholder for their investment and risk bearing, depends on various factors. Foremost of these determinants are; level of profits, financing constraints, investment opportunities, size of the firm, and pressure from shareholders and regulatory authorities. Dividend paid is the source of satisfaction to investors and way to increase their confidence on management that their resources are used economically and optimally by the directors. Almost every corporation use financial mix in its capital structure in order to coup with the growth opportunities offered by the external environment. This means that the firms finance its capital structure partly by owner and partly by debt equity. This tendency to finance the economic resources of the organization affects the corporate decisions regarding dividend policy.

Corporations usually tend to distribute low amount of dividend as retained earnings are important source of financing the economic resources of the organization (Jaaskelainen 1967). This research paper is aimed to see the impact of financial leverage on dividend payout decisions of the firms. Gitman and Zutter (11th edition) state that "financial leverage signifies the firm's ability to make potential use of fixed financial cost to magnify the impact of changes in earnings before interest and taxes on earnings per share" In simple words it illustrates that how debt financing is contributing towards the firm's profitability and ultimate dividend payout. No doubt that firm using debt financing tends to generate high profit on one hand but also subject to higher obligation to outsiders on other hand. The level of risk to which firms are exposed; with mixed capital structure is too high because there is always possibility that firm may not be in position to cover its fixed financial cost in coming future time. Afza and Mirza (2010) argued that firms' financial position and liquidity has key role for deciding on dividend level. Especially the firms which are operating in those countries where economic conditions are not certain always remain in such brackets. So every year firms set aside a part of its earning as contingency reserve to handle such situations so that firm credibility couldn't be shaken in the eyes of creditors and competitors. That's why; while making dividend payout decisions corporate management has to keep this factor under consideration along with other factors.

1.1 Significance of Study

Corporation often seems much conscious while deciding about the dividend policy. As firm could not afford in long run if it distribute its maximum earnings among shareholders because it left less than required funds to make the firm able for internal financing. Further more if firm is highly leveraged then this strategy would lead to increased level of risk to cover fixed financial costs which will shake the external investor's confidence. Previous research studies have discussed in different context the dividend policy along with the different factors which could affect corporate decisions regarding dividend policy. This study is intended to specifically analyze the impact of leverage along with profitability on dividend policy in context of Pakistani Manufacturing firms. A sectoral tendency of dividend payment decision is analyzed under the influence of leverage. The study will help to understand the behavior of firm's management regarding dividend decisions under the influence of its mixed financial structure and potential of earning.

1.2 Research question

What is the relationship between leverage and dividend payout?

How level of earning effect the dividend decision of leveraged firm?

1.3 Study Objectives

"The Purpose of research study is to see the impact of debt financing; that if organization is going to finance its capital structure by debt equity equal to the proportion of owners' equity or by any proportion; how it will affect the corporate decision for distribution of residual earning available for the shareholder"

2 Literature Review

Dividend policy is the issue of interest in financial literature since many years. Much work has been done on this by many experts. Among early theories of dividend Miller and Modigliani (1956-1961) presented the roots of irrelevance of dividend policy that in perfect capital market dividend payout has to do nothing with value of firms and its shares value. They supported their argument by the fact that firm value solely depends upon earning power of its assets and risk associated. Later on Lintner (1961) and Gorden (1962) came up with the view of relevance of dividend policy. They argue that the firm's value is strongly affected by the dividend payout tendency. Their theory was based on "Bird in Hand" argument. They said that "one bird in hand is of more worth then two in bushes". That current dividend payout decreases shareholder's uncertainty and put high value on stock prices. If corporations are not inclined to build equity based fund to meet future dividend distribution and other certain overhead then they probably distribute most of their profit as dividend (Jaaskelainen 1967). Corporate dividend policy is subject to influence by many factors which managers keep in mind while labeling the dividend policy. Leverage is most dominant factor among all. Afza and Mirza (2010) concluded that the companies in which high proportion of shares are held by managers and individuals are more reluctant to pay high dividends as compared with the companies in which managerial and individual ownership is low. However, high operating cash flows increase companies' potential to pay high dividends. Large and highly leveraged firms are more reluctant to pay high dividend as compared to small and low leveraged firms, while profitability increases the companies' dividend payouts. Nissim and Ziv (2001) found that profitability is positively related to dividend payout.

John and Muthusamy (2010) inferred that Earnings per share and price earnings ratio are negatively related to dividend payout. They find that the leverage is negatively related with the corporate dividend payout. Those companies which have employed leverage in their capital structure are more conservative and maintain decreasing trend of dividend payout (Warne & Insan 2011). Malkawi (2008) concluded that more profitable firms are likely to pay higher dividend but firms' financial leverage poses negative impact on dividend payment level. Gill, Biger and Tibrewala (2010) reported Positive relation between profitability and dividend payout in service industry but in manufacturing industry profitability has negative relation with dividend payout. The further argue that dividend determinants are industry specific as reflected in our findings. Their findings also showed that there is insignificant positive relation between debt to equity ratio and dividend payout. Shah, Ullah and Hasnain (2010) argued that the presence of shareholders in board of directors direct the dividend policy in favor of shareholders. This argument is contrary to Franklin findings because influence of shareholders on BOD will make the negative impact of leverage insignificant on dividend payout. Twaijry (2007) argued that Companies' dividend payout is associated with earnings but this relation is not significant. On other hand the level of leverage is negatively related with the dividend level. Chai (2010) found that dividend policy is the function of firm size, capital structure (measured as Debt ratio) valuation and profitability. And foreign ownership has significant influence on dividend policy. Dragota and TATU (2009) inferred that dividend policy of Romanian is not much influenced by Tax regulations which mainly due to delay in implementation. Dividend payout is positively associated with the gross earning of the firms. Highly profitable firms tend to pay more dividends for shareholders satisfaction but in well developed countries firms follow low dividend payout policy (Abor & Bokpin 2010). Kim, Rhim and friesner (2007) argued that Ownership and Leverage level both affect the dividend payment positively and leverage is negatively associated with ownership. Haddad, Zorqan, Musa and Noor (2011) concluded from their study that dividend policy of Banks in Oman is subject to periodic fluctuation which is mainly due to supervision of Central Bank of Jordan to increase the capital and reserve to ensure liquidity against debt obligation and to face foreign competition. Ajmi and Hussain (2011) found the profitability is significant determinant for dividend decision reflecting positive association and leverage is not found as a determinant of dividend; the reason may be that Saudi firms usually low geared. Esteban and Perez (2001) research study comes up with results which show positive relationship between earnings and dividends such that an increase in profits enables higher payouts. They concluded that Companies while deciding dividend payout consider not only profitability but also indebtedness position, growth opportunities and asymmetry information also. Consler, Lepak and Havranek (2011) tested earning per share (EPS) and cash flow per share (CFS) in separate model and found both significantly positively associated with dividend per share (EPS). However they concluded cash flow per share is better predictor of dividend per share. Khan, Burton and Power (2011) found that in Pakistan the determinants of dividend payout levels is influenced by corporate focus on current year earnings, liquidity position and past payout pattern. Literature reviewed demonstrates that firms' dividend policy is negatively influenced by level of financial leverage. However profitability enhances the firm capacity to distribute dividend among shareholders. Highly leveraged firm usually tend to generate high profit on one hand and high risk on other hand as such organization are subject to a larger obligations to creditors. So impact of financial leverage on dividend policy is to be analyzed. This study attempted to conduct this analysis by looking into the corporate practices of dividend distribution of manufacturing concerns.

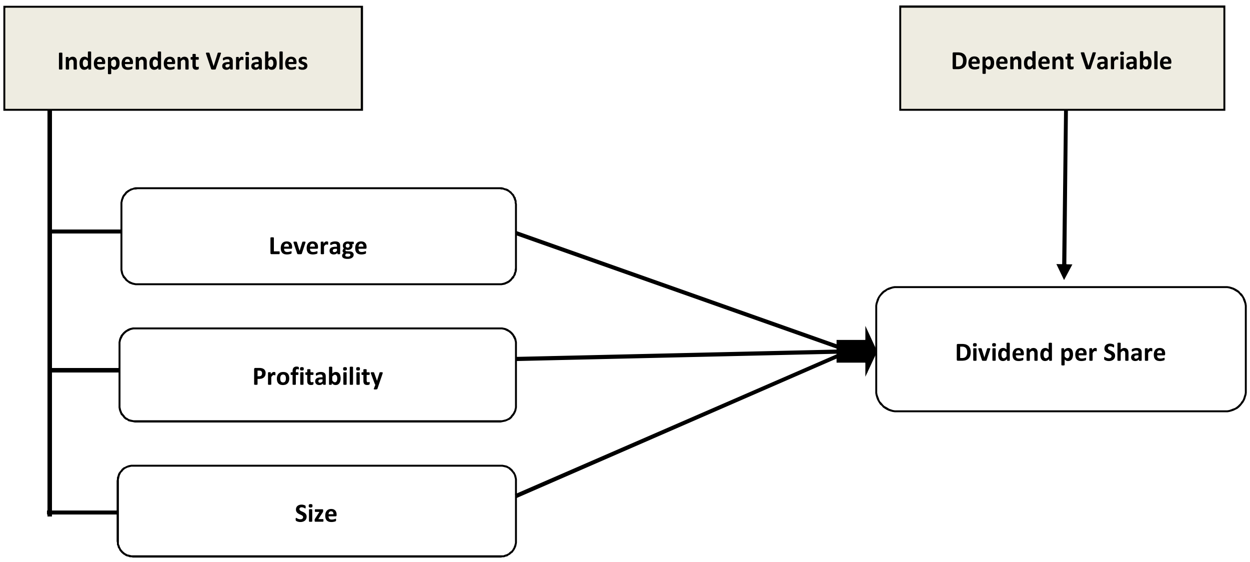
2.1 Hypothesis Statements

On the basis of literature reviewed following hypothesis are derived:

H_1: Debt employment in capital structure is negatively related with dividend per share.

H_2: Level of profitability has positive impact on dividend payment pattern.

3 Conceptual Framework



Debt to equity ratio is used as proxy to measure the level of leverage (LEV) in capital structure of firm. Earnings per share (EPS) are used as proxy for profitability. Size of firm is measured in term of total assets. Size is used as control variable in the study. Dividend per share (DPS) is observed as dependent variable of the study.

4 RESEARCH DESIGN AND METHODOLOGY

The study focuses the manufacturing sector. 44 companies from five sectors namely Textile, Sugar, Pharma and Bio Tech, Chemical and Fertilizer are observed in the study. These companies are selected on the basis of regular dividend payment pattern. Data from 2006 to 2011 for these companies is collected from balance sheet analysis of State Bank of Pakistan. Descriptive statistics are used to map the general behavior of the data. Correlation matrix is used to see the direction and intensity of relationship among variable. Then Multiple Regressions is used to analyze the data and to get answer to the queries of the study. Following quantitative model is used for multiple regression analysis.

$$\mathbf{DPS = \beta_1 + \beta_2 LEV + \beta_3 EPS + \beta_4 Size + \beta_5 \Sigma DM + U_t}$$

Where **DPS** is Dividend per Share, **LEV** is leverage measured in term of debt to equity ratio **EPS** is earning per share used to measure the level of Profitability, **Size** is measured in term of total assets and **ΣDM** are the sector dummies used to capture the sector specific behaviour of dividend payment in presence of leverage in capital structure. $\mathbf{U_t}$ is there error term

5 RESULTS AND DISCUSSION

The results of the study are presented in tables appearing below. Sequence of results presented is as follows: first tables present the descriptive statistics the second one exhibit the correlation matrix. Then the results of multivariate regression is shown; after that the result of general misspecification test is presented

Table-1

	DPS	LEV	EPS	SIZE
Mean	3.693	2.199	15.734	10.305
Median	2.500	1.400	9.015	3.465
Std. Dev.	4.033	6.755	24.973	20.664
Maximum	30.00	84.33	284.17	183.00
Minimum	0.000	0.090	-38.530	0.337
Skewness	2.427	10.94	5.821	4.899

Descriptive statistics during period from 2006 to 2011 of the variable used in the study are shown in above table. On average the companies under consideration of the study pay 3.69 rupees dividend per share (DPS). The possible deviation from average is 4.033. Maximum level of dividend paid is 30 rupees and minimum is zero. The minimum figure zero basically shows the absence of dividend payment in any time period. The average level of leverage employed in capital structure is 2.199% of owners' equity. Level of dispersion of leverage from mean is 6.75. The maximum level of leverage in capital structure of sampled firms is observed at 84.33 and minimum is 0.09. On average the level profitability remain 15.73 rupees per share. Average size of the firms sampled is 10.305 billion rupees measured in term of total assets.

The results of correlation matrix (Table-2) show that there is significant negative relationship between level of leverage and dividend per share. Firm size and level of profitability is positively correlated with dividend per share. The relationship between firm size and dividend payment is not much significant.

Table-2

	LEV	SIZE	EPS	DPS
LEV	1			
SIZE	0.054	1		
EPS	0.027	0.036	1	
DPS	-0.480	0.204	0.565	1

The result of multivariate regression (Table-3) shows that leverage employment in capital structure has significant negative impact on dividend payment behavior of a firm. The coefficient exhibits that 1 percent change in leverage lead to 3.2 percent change in dividend per share. Due to negative impact of leverage on DPS this change will be in opposite direction that increases in leverage lead to decrease in the amount of dividend payment. EPS has significant positive impact on dividend payment pattern of firm. But coefficient of size is insignificant that reveal that the size of the firm doesn't affect the dividend payment behavior of the sampled manufacturing firm.

Table-3

Variable	Coefficient	Std. Error	T-Stat	Prob.
C	4.016	0.648	6.199	0.000
LEV	-0.032	0.011	-2.808	0.005
EPS	0.098	0.010	9.931	0.000
SIZE	0.023	0.021	1.101	0.272
DM-S	-2.703	0.659	-4.103	0.000
DM-T	-3.413	0.659	-5.181	0.000
R-squared	0.504			
Adj. R-squared	0.495	Durbin-W. Stat		1.123
F-statistic	52.494		Prob	0.000

In order to capture the sector specific behavior of leverage impact on dividend payment; the sectoral dummies are used. First dummy is used for sugar sector. The result reveals that behavior of leverage impact on dividend policy in sugar industry is different as compare to other sectors. Similarly the results of textile industry show that affect of leverage on dividend payment pattern behave differently as compare to other sectors. Intercept **(C)** is significant this indicate that there are still other variables which also explain the dividend payment behavior of the firm; which are not included in the study model equation. R-square value shows that this model explains the 50.4 percent dynamics of the dividend policy of sampled firms. The value of F-Stat is significant that show model is good fit.

The results of Ramsey RESET Test (Table-4) in below table exhibit that the functional form of model equation used in the study is correct as value of both T-Stat & F-Stat is insignificant. So there is no issue of general misspecification in model equation of the study.

Table-4

	Value	Df	Probability
t-statistic	0.753	257	0.452
F-statistic	0.567	(1, 257)	0.452
Likelihood ratio	0.582	1	0.446

6 CONCLUSION

This paper provided an account of impact of leverage on dividend payment behaviour of manufacturing firm in context of Pakistan. 44 companies of five sectors are observed for the period from 2006 to 2011. The results of the study reveal that level of leverage negatively affect the dividend payment pattern in sampled firms. The results of the study are consisted with the theoretical arguments that employment of debt in capital structure increase the firms' uncertainty related to coverage of fixed financial cost. Because there may be a situation in future that firm couldn't able to cover even its fixed financing cost. So corporations always attempt to put a portion of current profit aside to play safe. This in turn curtails the firm ability to distribute the residual earnings among its shareholders. So on basis of the results of study it is suggested that corporate management should decide diligently while deciding the employment of debt in capital structure and devising the dividend policy too after financial mix has been decided. Because unrealistic leverage employment leads to increase the uncertainty of the equity holders that in turn could affect the stability of the equity market.

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