

Relationship between Ownership Structure and Capital Structure: A Case of Manufacturing Sector of Pakistan

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ABSTRACT

The purpose of the current study is to examine the relationship between the ownership structure and capital structure in an emerging market like Pakistan for the manufacturing sector. Pakistani firms are comparatively more owner-concentrated and are mostly family ownership oriented. Main area of interest in this study is to investigate the effect of this particular ownership structure on the capital structure. Harfindahl index is used to measure ownership concentration and the relationship between institutional ownership and leverage is also investigated in this study. The period of study is 2006-2009 and data is collected for 121 randomly selected KSE listed companies from major manufacturing sectors and is analyzed using regression analysis using fixed effect model approach. A highly significant negative relationship is found between ownership concentration and capital structure whereas the institutional shareholding relationship with capital structure is found to be insignificant. Besides these two variables of interest, some control variables are also included in the study for which the results are obtained as hypothesized except for firm size and effective tax rate.

KEYWORDS: Ownership concentration, capital structure, institutional shareholding.

1. INTRODUCTION

An appropriate capital structure is one of the important decision areas for any firm as it has significant repercussions not only for the organizational stakeholders but also for the survival of a business organization in the competitive business environment. The existing literature on capital structure stems from the seminal work of Miller and Modigliani (1958) in the context of role of capital structure on the value of the firm. According to Modigliani and Miller, in a simplistic and frictionless business world in which there are no taxes, no transaction costs, and under perfect capital market conditions, the financial policy has no relationship with the firm's value. Since then, a large body of theoretical and empirical research on the topic took place in the developed and developing countries. Researchers attempted to explore if capital structure does affect the firms value, then what are the determinants of an optimal capital structure in different economic, financial and legal frameworks? Various capital structure theories were developed by the researchers but still the optimal capital structure puzzle is unresolved. The contemporary research on corporate finance is progressively focusing more on agency problems, control issues and behavior of management. Non-harmonization of the owner-manager interests is the inevitable result of separation of control and ownership in modern corporate businesses which ultimately becomes the cause of agency conflicts and agency costs. Different control structures proposed by the researchers to reduce the misalignment of interest between owners and managers include: curtailment of the sumptuous use of managerial incentives through the presence of debt in the firms' capital structure, managerial equity ownership to align the interests of managers with external owners, and the existence of external block holders such as institutions as effectual monitors of decisions and performance of the managers.

Pakistani corporate sector is mainly characterized by the high ownership concentration (La Porta et al., 1999; Cheema et al., 2003). Most of the share holdings are owned by the families or other close group of investors (families, directors, foreign or institutional owners). In this set up, the majority shareholders have more control on the firm resources and cash flows, which leads to concentration of control and ownership with the insiders. Moreover, Capital markets are less developed in Pakistan and the size of primary and secondary debt market is significantly small. Therefore, companies are relying more on the banking sector for their debt financing needs (Shah, 2007).

In case of Pakistan, external financing choices and as a result the firm's capital structure decisions are affected by ownership concentration. Large shareholders have a temptation to monitor the management to reduce the agency cost (Shleifer and Vishny, 1986). The ownership controlled firms tend to avoid borrowing in order to minimize the financial distress and to avoid bankruptcy risks (Nam et al. 2003) whereas Grossman and Hart (1986) and Anderson et al. (2003), in their empirical investigation, report the opposite results. Therefore, the existing empirical evidence is found to be mixed.

The relationship between ownership structure and capital structure has been fairly researched in developed markets (Jensen, 1986; Changanti and Damanpour, 1991; Grier and Zychowicz, 1994; Brailsford et al., 2002; Miguel, A. et al., 2004; and Cespedes et al., 2010). These researchers found a significant relationship between capital structure and ownership structure. Although various researchers have explored determinants of capital structure in Pakistan (Shah and Hijazi, 2004; Hijazi and Tariq, 2006; Hasan and Butt, 2009; and Afza and Hussain, 2010), however, to the best of author's knowledge, no study has focused solely on the relationship of ownership structure and capital structure in Pakistan. Current study, therefore, aims to fill this gap by taking sample data from KSE listed manufacturing firms for the period of 2006-2009.

In this study, the relationship between institutional investors and capital structure is also investigated since many Pakistani companies report a significant number of their shares held by institutions including banks, Insurance companies, investment companies, mutual funds and other financial institutions. According to Jensen (1986), the institutional investors can increase the efficiency of managers by efficient monitoring and ensuring shareholders interests. Higher share ownership of institutions can reduce the cost of debt because they willingly provide loans to the firm, in which they have shareholding, at favorable cost. Also being influential to the board of directors, they provide a mechanism of effective control over the corporate strategic initiatives which results in reduction of opportunistic behavior of management and reduction in agency costs.

The outcomes of present study are expected to provide insights on the impact of a particular ownership-capital structure on the capital structure of a firm which may be beneficial for the financial decision makers to make better strategic financial decisions.

The rest of the study is organized as follows: Section two reviews the existing literature whereas the research design and data description is presented in section three. Estimated results are discussed in section four and section five concludes the study.

2. LITERATURE REVIEW

Many researchers provided empirical evidence that high ownership concentration is found in publically held companies of several countries (La Porta et al., 1999; Claessens et al., 2000; Dzieranowski and Tamowicz, 2004; and Cheema et al., 2003). One facet of ownership concentration is that it put a more rigorous monitoring mechanism on the management operations whereas, the negative aspect, as argued by Kuznetsov and Muravyev (2001), is that large shareholders in highly ownership concentrated firms are able to maximize their value at the expense of minority shareholders as they (large shareholders) have the capacity to influence the firm's decision directly. Fama and Jensen (1983) put forward that the increased insider ownership may entrench managers at some point. Therefore, they employ less debt than what is required for wealth maximization and thus relieve the pressure on firm's free cash flows (Jensen 1986). A negative relationship was found between Insider (managerial) ownership and leverage by Friend and Lang (1988). Agrawal and Nagarajan (1990) showed a negative relationship between managerial shareholding and leverage. Berger et al. (1997) found that firms in which there are no major stakeholders carry less leverage. Brailford et al. (2002) identified a positive relation between leverage and external block ownership. They also argued that the relationship between external block ownership and leverage is varying across the managerial share ownership level.

Driffield et al. (2005) argued that, as ownership concentration increases, leverage also increases and this association exists irrespective of whether a firm is family owned or not. Pindado and de la Torre (2005) and Du and Dai (2005) and Cespedes et al. (2009) also found a positive relationship between leverage and ownership concentration.

Extensive theoretical and empirical literature is available on the role of institutional shareholding in the firms. Friend and Lang (1988) argued that external block holders have motivation to closely monitor the performance of the firm to protect their stakes in the business. Grier and Zychowicz (1994) explored the relationship between capital structure decisions of the firm and institutional ownership and concluded that institutional ownership is serving as the surrogate signaling and disciplinary role of debt. The study found an inverse relationship between institutional ownership and leverage. The negative relationship between institutional ownership and leverage is also observed by Al-Najjar and Taylor (2008). In case of Pakistan, a similar study was undertaken by Hassan and Butt (2009) and found a positive relationship between Shareholding by institutions and capital structure.

Empirical researchers have also included some control variables in investigating the relationship between ownership structure and capital structure. These control variables have significant effect on capital structure choice. Therefore, current study also used profitability, firm size, firm growth, asset tangibility, liquidity and effective tax rate as the control variables.

Booth et al. (2001) investigated data from ten emerging economies and concluded that the same types of the financial variables affect the capital structure as in the developed countries, however, country specific macro level

factors, may also affect these ratios used to compute these variables. Myers and Majluf (1984) presented the pecking order theory which supports a negative relationship between profitability and leverage. The negative relationship between profitability and leverage is also indicated by Rajan and Zingales (1995) and Antonoius et al (2002). In case of Pakistan, Qureshi and Azid (2006), Hassan and Butt (2009) and Sheikh and Wang (2011) found a negative relationship between profitability and leverage.

The literature reports mixed results regarding the relationship between firm growth and leverage. The negative relationship between growth and leverage is empirically supported by Rajan and Zingales (1995); Deemosak et al (2004) and Eriotis et al.(2007). Whereas, positive relationship between growth and leverage was reported by Krishnan and Moyer (1996).

Baker and Wurgler (2002) posited that the firms with high value of tangible assets can sustain more amount of debt because such firms can get more secure loans. In Pakistani context Shah and Hijazi (2004) and Rafiq et al. (2008) found a positive relationship between tangibility of assets and leverage. On the other hand, Shiekh and Wang (2011) reported a negative and significant relationship between tangibility of assets and leverage. Like profitability, liquidity also shows the surplus funds availability to the firm. Therefore, Kim, Mauer and Sherman (1998) identified a positive relationship between liquidity and growth opportunities. Opler et al. (1999) also found an inverse relationship between leverage and liquidity.

Deesomsak et al. (2004); Mazur (2007); Viviani (2008) and Shiekh and Wang (2011) also found an inverse relationship between firm liquidity and leverage and argued that the results were consistent with pecking order theory. Modigliani and Miller (1963) argued that the firm should strive to get almost all financing in the form of debt due to tax deductibility associated with interest payments. This tax shield effect supports that firm should use higher amount of debt in its capital structure since, by virtue of this, more earnings will accrue to owners. However, some researchers found no evidence regarding tax benefits effect of debt financing such as Fama and French (1998). Some studies found weak relationship like Booth et al., (2001) and Rajan and Zingales, (1995), and Wu and Yue (2009) found significant and positive relationship.

3. RESEARCH DESIGN AND DATA DESCRIPTION

The core research objective of the study is to investigate the relationship between ownership structure and capital structure. Time series panel data is collected for the variables for the period 2006 to 2009. The target population is 389 manufacturing firms from all major sectors of Pakistan. Selected companies in the sample are listed on Karachi Stock Exchange and the final sample comprises of 121 companies. Initially, a sample of 140 companies is selected but due to data unavailability for some financial years or being unlisted during the study period, 19 companies were from the sample.

The annual reports of the companies listed on Karachi Stock Exchange are the major source of data for the current study. Other sources of data include State Bank of Pakistan website, different newspapers and communication through telephone with head offices of companies. In selection of sample firms, consideration was given to all major manufacturing sectors. The break up of sample firms is given as follows:

Table 1: Sample Firms

Sector	Total	Selected	Percentage
Textile	164	33	20.12%
Food and sugar	54	16	29.62%
Chemical and pharmaceutical	43	16	37.20%
Non Metallic Mineral Products	29	16	55.17%
Automobile, Trailers and engineering	22	13	59.09%
Fuel and energy	18	9	50.00%
petroleum and gas	9	4	44.44%
Paper and board	9	5	55.55%
Electrical Machinery and Apparatus	8	3	37.50%
Other Manufacturing	33	6	18.18%
Total	389	121	31.10%

Model Description

The following research model is used in the study:

$$LEV_{it} = \beta_0 + \beta_1(OWN-CON)_{it} + \beta_2(ISH)_{it} + \beta_3(PROFTY)_{it} + \beta_4(FSZ)_{it} + \beta_5(GRTH)_{it} + \beta_6(TANG)_{it} + \beta_7(LIPTY)_{it} + \beta_8(EFF-TAX)_{it} + \xi_{it} \text{----- (1)}$$

Where

- LEV_{it} = Leverage is a capital structure representation and measured by total debt/total assets for firm i at time t .
 $OWN-CON_{it}$ = Ownership concentration as measured using herfindaal index for firm i at time t .
 ISH_{it} = Institutional ownership represented by percentage of ordinary shares owned by institutional investors for firm i at time t .
 $PROFTY_{it}$ = Profitability as measured by return on assets for firm i at time t .
 FSZ_{it} = Size of Firm is represented by logarithm of total sales for firm i at time t .
 $GRTH_{it}$ = Firm growth as measured by increase (or decrease) in total assets as percentage of total assets of previous year for firm i at time t .
 $TANG_{it}$ = Assets Tangibility is represented by ratio of fixed assets to total assets for firm i at time t .
 $LIPTY_{it}$ = Liquidity as measured by current ratio for firm i at time t .
 $EFF-TAX_{it}$ = Effective tax rate obtained by the ratio of tax provision for given year to profit before taxes for firm i at time t .
 ξ_{it} = Error term for firm i at time t .

Hypotheses:

- H_{a1}**: There exists a negative relationship between Ownership concentration and leverage level of the firm.
H_{a2}: Institutional investor's shareholding (ISH) has a positive relationship with leverage.
H_{a3}: Profitability has a negative relationship with the leverage level of the firm.
H_{a4}: Firm size has a negative relationship with the leverage level of the firm.
H_{a5}: Firm's growth rate has negative relationship with leverage.
H_{a6}: There is a negative relationship between tangibility of assets and leverage.
H_{a7}: There is a negative relation exists between liquidity and leverage.
H_{a8}: Higher effective tax rate affect positively on leverage.

Since the study uses panel data which is coupled with some problems such as autocorrelation, cross-correlation and heteroscedasticity. There are two established approaches present to deal with such problems and to estimate panel data efficiently with least biasness. First is random effect and second fixed effect approach (Gujarati, 2003, pp. 652). For the panel data used in the study, in order to decide which approach is more precise i.e. Random Effect (RE) or Fixed Effect (FE), Hausman test is applied and the Hausman test is found to be significant. Therefore, Fixed Effect (FE) approach is used to estimate the model in current study.

4. RESULTS

Table 2 provides the descriptive statistics of 121 firms from all manufacturing sectors included in this study.

Table 2: Descriptive Analysis of Manufacturing sector firms

Variable	Mean	Std. Deviation	Minimum	Maximum
Leverage	0.5841	0.2479	0.0746	2.3098
Ownership Concentration	0.1860	0.1679	0.0101	0.7246
Institutional Shareholding	11.6887	11.8102	0.0000	51.5600
Profitability	0.0993	0.1222	-0.2789	0.6621
Firm Size	9.4716	0.6889	6.6993	11.2277
Growth	0.1509	0.2457	-0.6517	1.3876
Tangibility	0.4695	0.2183	0.0389	0.9462
Liquidity	1.4520	1.0929	0.0463	7.7200
Effective Tax Rate	0.2145	0.4836	-3.9022	4.4385

In manufacturing sector, on average 58.4 % assets are financed through debt (both short-term and long-term). The minimum debt financing is 7.46 % which reaches to a maximum value of 230 %. This maximum amount indicates that the firm is so buried in debt that its equity becomes negative due to continuous losses. Standard deviation is 24.80 %, which shows much variation among companies in use of leverage. Average value of

ownership concentration is 0.186 with minimum and maximum value 0.01 and 0.725. Ownership concentration is measured by Herfindaal Index. This index can attain a maximum value of 1.00 in the case if the all of the shares are owned by a single shareholder. The standard deviation for this variable is 0.1679. Institutional shareholding variable provides a mean value of 11.68 % with minimum and maximum values as 0 and 51.56 % respectively. During the study period, average operating profit before finance cost and taxes is 10 % with maximum value 66.2 % and minimum value -0.27.9 % and standard deviation of 12.2 %. This indicates a wide fluctuation in profitability as compared to mean value in Pakistani firms. The variable size has maximum value as 11.23 and minimum value is 6.7 and means value as 9.47 with standard deviation 0.68. Average growth in assets was up to 16 % which is substantial, despite the fact that a mild global recession hit in the selected study period. Maximum growth rate is 138.76 % and minimum value -65.17 % with standard deviation of 24.57 %. Asset tangibility provides the average value as 47 %. That means on average 47 % of manufacturing sector firm’s asset comprised of tangible plant assets. Maximum tangible assets are found to be 94.62 % and minimum value is 3.89 % with standard deviation of 21.83 %. Asset tangibility is specific to the nature of manufacturing operations. In capital intensive industries, comparatively it carries more value, but, on the other hand, some mature manufacturing firms still carry their tangible assets at historical cost less accumulated depreciation. Liquidity variable provides an average value of 1.45 times, which indicates that firms carry surplus short term resources available to pay liabilities maturing in near future. Minimum and maximum values for this variable are 0.0462 and 7.72 times respectively. Standard deviation for liquidity variable is 1.09 times. Final variable used in current study is effective tax rate. The mean value for this variable is 21.44 % for sample manufacturing sector firms with minimum value -390 % and maximum 443 % respectively. Standard deviation for this variable comes out to be 48.36 % which is abnormally high and shows high fluctuation in the reported before tax profitability.

Table 3 reports the Pearson’s correlation among all variables used in the study. The highest value of correlation is -.564 between liquidity and leverage variables which indicates no problem of multicollinearity in the independent variables. The variable leverage shows negative and significant correlation with ownership concentration, Profitability and liquidity variables. This means that increase in ownership concentration ownership concentration, Profitability and liquidity leads to decrease in leverage. Whereas firm size, growth and effective tax rate variables are negatively correlated with leverage but not significant. Tangibility shows significant positive correlation with leverage.

Table 3-Correlation Matrix

Variable	LEV _{it}	OWN-CON _{it}	ISH _{it}	PROFITY _{it}	FSZ _{it}	GRTH _{it it}	TANG _{it}	LIQTY _{it}	EFF-TAX _{it}
LEV _{it}	1								
OWN-CON _{it}	-.155***	1							
ISH _{it}	-.038	-.172***	1						
PROFITY _{it}	-.343***	.245***	-.055	1					
FSZ _{it}	-.067	.164***	.142***	.286***	1				
GRTH _{it}	-.078	.064	.092*	.122**	.052	1			
TANG _{it}	.343***	-.266***	.038	-.225***	-.140***	-.091*	1		
LIQTY _{it}	-.564***	.206***	-.031	.319***	.074	-.042	-.423***	1	
EFF-TAX _{it}	-.026	.007	.058	.127***	.101**	.061	-.181***	.053	1

*Significant at 10 percent (2-tailed)

**Significant at 5 percent (2-tailed)

***Significant at 1 percent (2-tailed)

Table 4 provides regression results for sample manufacturing firms. According to Saleh et al. (2008) if Hausman test result is significant that indicates that Fixed Effect regression approach will give more accurate results and in case if Hausman test is insignificant, then Random Effect approach will provide more precise results.

The Fixed Effect approach is used to estimate the regression equation in current study because the Hausman test is applied and it is found significant (Hausman test value is 37.18 and Prob.> chi2 = 0.0000). The overall R-square value for the model is 0.1424 which is satisfactory. F-Value is 7.29 and Durbin Watson statistic value is 1.838 which confirms that autocorrelation does not exist in this model.

As per empirical findings of current study, ownership has significant negative relationship with leverage and the results are consistent with studies conducted by Friend and Lang (1988); Agrawal and Nagarajan (1990)) and Nam et al. (2003). However, the results are contrary to the findings of Cheng et al. (2005); Driffield et al. (2005);

Pindado and de la Torre (2005); Godfred and Anastacia (2009) and Cespedes et al. (2009) which showed a positive relationship between ownership concentration and leverage.

Table 4- Regression Analysis- Fixed Effect (Dependent Variable: Leverage = Total Debt / Total Assets)

Variable	Co-eff.	Std. Error	t-value	p-value
OWN-CON _{it}	-0.38788	0.16529	-2.3500	0.0200**
ISH _{it}	-0.00069	0.00193	-0.3600	0.7200
PROFITY _{it}	-0.32583	0.126913	-2.5700	0.0110**
FSZ _{it}	-0.00352	0.016419	-0.2000	0.8300
GRTH _{it}	-0.12599	0.036435	-3.4600	0.0010***
TANG _{it}	-0.23934	0.091762	-2.6100	0.0100***
LIQTY _{it}	-0.07608	0.017372	-4.3800	0.0000***
EFF-TAX _{it}	0.008544	0.015468	0.5500	0.5810
Constant	0.623945	0.164817	3.79	0.0000

*Significant at 10 percent, **Significant at 5 percent, ***Significant at 1 percent

R-Square = 0.1424; F-Value = 7.29; Prob.> F = 0.0000; Durbin-Watson = 1.838 and Hausman test value =37.18 where Prob.>chi2 = 0.0000.

The ownership concentration is negatively related to leverage as expected because in Pakistani firms, due to high ownership concentration more control lies with insiders, they are reluctant to use debt financing to avoid excessive monitoring by lenders. Other justifications for lesser leverage in Pakistani firms includes: Firstly, debt capital markets are not well developed in Pakistan as only few firms have used market based debt securities to raise debt funds. Pakistani companies are relying more on the loans from banking sector (Shah 2007). Banking sector, knowing the wealth expropriation tendency of entrenched owner-managers of Pakistani companies, put up tight debt covenants, which may also be presented as a reason for a negative relationship between ownership concentration and debt. Secondly, average cost of debt was higher in Pakistan during the study period as compared to other countries in the region that makes debt financing a less attractive option. The institutional ownership has negative coefficient with leverage but highly insignificant. Institutional investment is comparatively low in Pakistani firms and also due to volatility of earnings in Pakistani companies in general, institutions are hesitant to invest in corporate sector securities.

As expected, profitability has negative relationship with leverage, which conforms pecking order theory in Pakistani companies. This result is consistent with Myers and Majluf (1984); Rajan and Zingales (1995); Myers (2001); Qureshi and Azid (2006); Hassan and Butt (2009); and Sheikh and Wang (2011). Companies in Pakistan rely more on internally generated funds due to less developed debt capital market from where debt can be raised. Only choice for most of the firms, especially small companies, is banking sector. Banks on the basis of perceived default risk put a more risk premium in the offered interest rate (or mark up rate). This high interest rate makes bank financing a less attractive option for many firms as high cost of bank loans may harm the profitability of many attractive and feasible project which are under consideration of the firms.

Firm size variable in current study shows a negative but insignificant coefficient. Which means that in Pakistan, no consideration is given to the firm size while providing debt financing to the firm. Firm growth shows negative coefficient and highly significant at ($p < .01$) implying that growing firms are not using debt financing to support their expansion, but rely on internally generated funds. Growing firms are normally financially stable and generating substantial resources internally. High information asymmetry in high growth Pakistani firms may also be a reason for lesser leverage for growing firms. The results are consistent with Myer (1997); Rajan and Zingales (1995); Wald (1999); Deemosak et al (2004); Zou and Xiao (2006) and Eriotis et al. (2007).

Asset tangibility also has a negative relationship with leverage and highly significant at p-value of 1% ($p < .01$). Literature support of negative relationship is provided by Titman and Wessels (1988); Booth et al. (2001); Nivorozhkin (2004) and Shiekh and Wang (2011). Pecking order theory supports this negative relationship as firm with high tangible assets carry lesser information asymmetry. Such firms are able to sell their equity at fair prices; hence, such firms acquire lesser amount of debt. Another more valid reason as indicated by Titman and Wessels (1988) is that tendency of managers to waste funds on unproductive assets such as perquisites is a cause for a negative relationship between leverage and tangibility. Also, if the firm is undertaking risky projects in which there is risk of expropriation of wealth from debt holders to equity holders (agency cost of debt phenomenon), debt providers are reluctant to offer debt financing.

The relationship between liquidity and leverage is negative and significant as indicated by regression results (-0.076, $p < 0.01$). The result is supported by Myers (1984); Opler et al. (1999); Deesomsak et al. (2004); Mazur (2007); Viviani (2008) and Shiekh and Wang (2011). Liquid firms, like profitable firms, also keep surplus funds that can be used to fulfill the financing needs internally, therefore, a negative relationship exists between liquidity and leverage

in Pakistan, following pecking order theory. Effective tax rate variable shows a positive and insignificant relationship with leverage indicating Pakistani firms do not use as a mechanism to obtain tax shield benefits as indicated by Modigliani and Miller (1963). The results of current study find no evidence of use of debt financing to get tax shield benefits like prior studies of Miller (1977); Fama and French (1998); Booth et al. (2001); Miller (1977), Fama and French (1998) and Rajan and Zingales (1995).

5. CONCLUSIONS

Most of the studies on the ownership structure and capital structure have been conducted in developed countries, the present study, therefore, is undertaken in order to explore the relationship between the ownership structure and capital structure in the developing economy of Pakistan. The results reveal that for Pakistani KSE listed manufacturing firms a strong negative relationship exists between ownership concentration and leverage which is consistent with the pecking order theory. Pakistani firms are more ownership concentrated due to which a tendency exists that the large shareholders, which also sit on the board of directors of the firm and sometime also acting as CEOs, tend to avoid the monitoring and disciplinary role of debt providers which are mostly, in case of Pakistan, financial institutions.

No significant impact of institutional shareholding on leverage is supported by current study. In case of Pakistan, institutional investor have lack of interest in the ownership of the corporate sector because of adverse macro economic environment including poor monetary governance, energy crisis, political instability, inflation, economic downturn and most notably terrorism. Institutional investors normally focus on short-term gains in corporate shareholdings and give lesser priority to long term holding of corporate equity securities. Consequently, our estimated results report non significant effect of institutional shareholding on leverage, hence on capital structure decisions.

This study also incorporates some other important determinants of capital structure as control variables which have been included by numerous studies. The profitability shows a negative relationship with leverage which reflects that Pakistani firms are following pecking order theory. Firm growth represents a significant negative relationship with leverage. That imply that growing firms are in general financially stable firms in Pakistan have lesser reliance on debt financing. Asset tangibility, in current research, shows a negative relationship with leverage. In Pakistani firms, which have more information asymmetry, lenders are reluctant to provide debt financing to such firms as they are not sure whether debt funds will be used optimally. Firm liquidity is found to have a strong negative relationship with leverage. Effective Tax rate does not show a significant association with leverage. That implies that Pakistani companies pay no consideration to the tax shield savings aspect of debt financing, despite the fact that Pakistan is among those countries where corporate sector's income is subject to higher tax rates.

It is revealed from the findings of the study that leverage is not optimally used in Pakistani corporate sector for the advantage of creating value of the firm rather it is passive decision area for the large shareholders cum managers of the firms for the monitoring evasion and risk aversion. The corporate law authorities should formulate such regulations that will discourage the equity ownership concentration in few hands because that induces entrenchment effect which negatively impacts the performance of the corporate sector in Pakistan. The outcomes of present study may be beneficial to the decision makers of the firms to make better strategic financial decisions. Current study has important implications for investors, corporate managers and policy makers with regards to the selection of optimal ownership structure and capital structure of the firm, which may be supportive in creating the value for the firm and advantageous to organizational stakeholders.

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