An Examination into the Impact of Firm Size on Bank Debt Use: A Study With Reference to Corporate Firms across Industries in Pakistan

Rabia Asif and Sabahat Nisar*

Abstract: Firm size is considered as the most important and controversial variable in finance literature that determines not only the level of corporate leverage but signals firms' performance. As creditors are more involved in funding large firms' operations, how do small firms get their resources from outside financing? At this level, banks resolve the problems of small and medium size firms and provide short term financing to these size categories of firms. Therefore, it is essential to investigate the corporate need and use of bank debt with respect to firm size. The present paper investigates the use of bank debt across different firms' size. This investigation is conducted using panel data analysis. The results of multiple regressions (OLS) show that there is a significant relationship between the firm specific variables and use of bank debt across firm size.

Keywords: Leverage
JEL Classification: G32

1. Introduction

The firm size is an important factor to evaluate the relationship of firm and its inside and outside operating environment. In today's global economy, the emergent influences of corporations indicate the significant role of firm size which it performs within the business environment. Kumar *et al*. (2001) related economic growth with the growth in size of existing organizations. With the increase in the popularity of corporate size phenomenon, more concentrations are being given to its actual influence on the firms' internal structure. Graham and Harvey (2002) showed that the important area where the effect of firm size has been much inquired is corporate finance area. Evolving issues in this scenario propose that the development of financial markets accelerates the impact of firm size on leverage. This issue is more important from developing economies point of view where the financial markets are not fully mature. The empirical studies on capital structure have already investigated the difficulties of firm's access to external funding. The revolutionary study in this context

conducted by Slovin *et al*., (1992) highlights that company in emerging economies used extensive external financing across size.

Studies on capital structure of Pakistani firms have mostly concentrated on the issue of Leverage ratio (Sheikh & Wang, 2010; Rafiq 2008; These studies treat all sources of debt as homogeneous group irrespective of whether the debt is from capital market or banks and other financial institutions. This is however, insufficient as bank debt is considered unique among many other forms of debt sources (James, 1987). So, it is important to distinguish between bank debt and other debt sources for a number of differentiating features of bank debt. Existing theories supported that before obtaining outside funding, firm must consider the trade-off between the benefits and costs. The potential benefits of bank financing include lower transaction costs, flexibility and renegotiation etc. The potential costs of bank debt include monitoring costs; distortion induces by information monopolies and suboptimal liquidation (Hadlock and James, 2002). Datta*et al.,*(2002) concluded that banks debt is different from other form of debts and that banking relationship add value by signalling good news to other participants about the prospects of borrowing firms.

Factors that differentiate small firms from large firms include level of growth, asset structure and profitability (Pettit & Singer, 1985; Ang*et al.,* 1992; Van Auken & Holman, 1995). While bankruptcy, agency costs and asymmetric information are more severe in small firms, resultantly they have less access to bank financing. In contrast, large firms with large capitalization, better reputation and less bankruptcy and agency costs have easy access to bank financing. The empirical implications of the theory of bank finance across firm size have been seldom discussed (Van Der Wijst, 1989; Mc-Connell & Pettit, 1984) and even less often empirically estimated (Keasey & Mc Guinness, 1990). It means that large discrepancies are found regarding the importance of firm's size in obtaining bank financing in most countries.

The results of prior studies motivate us to examine the same area of bank debt use across firm size with context to Pakistani non-financial firms considering the firm's specific characteristics for a period of 2006-2010. To

the best our knowledge, the previous studies in Pakistan do not discriminate between the bank debt used and total debt used by firms across firm size. For the purpose of this study, we split the sample data into small, medium and large size to explore whether:

- The size of the firm impact firm access to bank financing?
- What factors determine firm choice to obtain bank financing?
- Are Pakistani non-financial firms that use bank debt has similar characteristics as the firms that do not use bank debt?

2. Literature Review

Firm size plays significant role in determining the choice for financial leverage. Since, all the main stream theories of the Capital Structure have explained the relationship between firm size and financial leverage (Schoubben & Hulle, 2004). Although, most of the existing literature on corporate Capital Structure focuses on the impact of firm size on the Capital Structure of either small or large firms in isolation. Still, there is theoretical conflict on the issue whether which firms employ more debts. The theoretical view of the Pecking order hypothesis explains an indirect relationship between both variables. Alternatively, trade-off proposition clarifies direct relation between the firm size and debt financing. Therefore, in order to provide empirical evidence about the size effects on its debt financing choice, the next section will highlight the existing researches that have empirically proved the impact of firm size on debt financing.

The size of firm is important which influences the relationship among firm and its outside operating environment. As the large firms enjoy good reputation, therefore they have more influence on its stakeholders. The empirical evidences provided by literature highlight the growing influences of business firms in today's global environment which indicate the important role played by firm size within the corporate financial environment. Berger and Udell (1994) proved that size signals about reputation in financing choices. The theory of bank debt use argued the relation of bank debt and firm specific factors are dependent upon firm size. Smith (1987) proposed that firm's choice between bank funding and trade credit serves as a screening device. Employing more trade credit signals about the high default risk, this implies that firms with low risk of default

go for bank debt and vice versa. The monitoring view of bank financing suggests that banks can have access to gather internal information of firms, so they can act as monitoring policies to access firms' internal information.

Among the earlier researchers who empirically investigated and confirmed the positive relationship between firm size and leverage, Schwartz and Tassel (1950) showed that small and medium size firms usually obtain most part of the financing from internal equity capital because high cost of issuing stocks and inability to access the capital markets, it becomes difficult for the small and medium size firms to obtain external financing frequently. Incorporating the same point of view about the impact of small and medium size firm on leverage choice in their study, Titman and Wessels (1988), Coleman and Cohn (1999), Caprio and Demirgu (1997) further highlighted that costly external borrowing and limited access to capital markets make it difficult for small and medium sized firm to obtaining external financing. They further pointed out that firm size limits the firm access to external capital markets and as a result small firms have to rely more on short term financing or equity financing. Keeping in view the impact of firm size in obtaining debt financing, Cardone and Papis (2001) and Pandey (2004) have supported the positive impact of firm size in obtaining external bank financing and highlighted that large diversified firm's posse's high ability to meet interest payments regularly. Also in the views of Fama and Jensen (1983) and Rajan and Zingale (1995), large firms are considered to have high degree of information asymmetry as well as they may have high level of collateral and low default risk (King, 1977). All the above narrated factors explain the easy availability of external bank financing for large firms rather than relying on equity financing.

Evidences from the existing literature on the relationship between size and investment opportunities explain large firms possess high level of leverage ratio. Dittmar (2004) and Gonenc (2005) showed that large firms with more reputation enjoy higher investment opportunities. For this, they need cash flows for investing in positive NPV projects. This factor about the large firms might be evident that as the firms increase in size, their ability to external borrowing increases and as a result, their leverage ratio also increases. Alternatively, small firms being small in size have lower

investment opportunities (due to lack of reputation) and therefore, have low need for external funds as their scope of operations is limited. Hence, the bank and other Financial Institutions will be afraid in financing the projects of small firms as well as they will also avoid exposing themselves to the risk related with the bankruptcy, financial distress and more importantly the loss of ownership related to small firms. It would be important to explore that the size and leverage ratio of firms are also impacted by the financial market development within the country. In this regard, the results of the study conducted by Li *et al.*, (2007) showed that firms of different size obtain benefits from developed economies for example, in developed economies, small firms have also access to obtain costly debt financing. They further concluded that financial market development also impacts the firm access to obtain source of debt financing. Similarly, developing economies make it possible for the large and medium size firms to access long term financing.

While discussing the importance of firm size in business financial environment, Kumar *et al.*, (2001) emphasized that economic growth is related to the growth in the size of existing organizations. Similar findings have been extracted from the study of Rajan and Zingales (1995) whose results showed consistent growth in the size of existing corporations along with economic development. Many other researchers have also explored the same area i.e. choice of leverage across firm size with financial markets development in which firms operate. In this context, Li *et al.*, (2007) concluded that different sizes of the firms' particularly small firms' benefits large economies to assess long term loans while developing economies can only increase their access to long term debt by large and medium firms. Beck *et al.*, (2005) described the impact of corruption, and financial obstacles on growth of the firm categorized according to their size. They concluded that the extent by which firm's growth is restricted by corruption and financial and legal underdevelopment is much dependant on firm's size. Based upon the earlier work conducted by researchers overall the world, it can be viewed that size is an important factor used almost in every study to explore the determinants of Capital Structure Choice. Further lots of work have been done in relation to Pakistan to explore the determinants of financing choice for different industries. The present study makes a difference from the previous studies in that it is an attempt to view the

impact of firm size in obtaining bank debt as external financing choice for Pakistani Non-Financial firms.

3. Research Methodology

For determining the impact of firm size on bank debt, total sample data consists of all non-financial Pakistani firms listed on Karachi Stock Exchange (KSE). For estimating the impact of firm specific variables on bank debt concentration, regressions is estimated; the regression equation will include only those firms that use bank debt as external financing mode. For highlighting the basic importance of firm size in obtaining bank financing across firm's size, firms are categorized according to three size categories. The firms with size less than or equal to total assets of Rs. 10 million are kept in the category of small size, firms having total assets between Rs. 10 million to Rs. 1 billion are kept in the category of medium size and firms having assets greater than Rs. 1 billion are considered as large size. In order to normalize the data, the median value size variable over the study period has been used to categorize the firms according to their size. The data for the independent variables have been collected from Financial Statements of firms obtained from firm's websites, KSE and Balance Sheet Analysis (BSA) published by SBP for the year 2006-2010.

3.1 Variables of the Study

As present study analyzes the impact of size on bank debt concentration, the study will use bank debt concentration by firm as dependant variables. Almost every study conducted on the same area has used the same proxy to calculate the bank debt concentration (FU *et al.,* 2002, Mequita & Lara 2003, Hooks 2003, Ghosh 2007, Olufunso*et al.,* 2010). The analysis of empirical analysis presented below examines how the bank debt usage changes across firm size. The reputation theory provides one justification to inspect such disparity across firm size. In this connection, Berger and Udell (1999), Easterwood and Kadapakkam (1991), Johnson (1997), Slovin *et al.,* (1992) provided some evidence. According to their analysis, reputation of the firm is determined from its size for financing choice. Based upon this theory, the firm's choices of bank debt use and its relation

with other firm specific variables should be different when firms are arranged according to their size. It is intricated for outsiders to monitor firms activities that are small in size because such firm has very low level of information and no remarkable reputation. Consequently, monitoring of small firms is difficult. Therefore, the reliance of this firm is more on self-financing or other suppliers. On the other hand, large firm's more reputation, allow them easy availability of credit across the financial market. Therefore, the reliance on bank debt is little but if bank monitoring is important for such firm, it will go for bank debt.

3.2 Screening Variables

Smith (1987) described the screening view of bank debt use that small firms with high level of default risk will not have access to bank credit; on the other hand a firm with moderate risk level will have access to external credits only while a firm with low default risk will have more access to bank loan. In literature, firm age is considered as one proxy for default risk. Newly established or very young firms are considered at high level of default risk because of lack of sufficient reputation and on-going relationship with other firms. Along with firm's growth and age, the screening view expects that the concentration of bank loan could be more as firm's reputation increases. The other possible proxies for firm screening consist of financial data that is easily observable, i.e, level of firm's sales growth and profitability. Berger and Udell (1994), in their study used sales growth while Easterwood and Kadapakkam (1991) employed profit ratio as proxy for screening and monitoring view. According to them, both high profitability and sales signals low default risk. Therefore, according to the screening theory a positive relationship is predicted between the sales and profitability and firm bank debt concentration.

3.3 Monitoring Variables

Relevant to the existing literature, access to bank debt can be anticipated by tangible assets a firm possesses. Hoshi *et al.,* (1993) used this estimate to observe the firms activities. As the tangible assets could be introduce as collateral against the recovery of loan, a firm with more tangible assets will have high access to bank loan. The monitoring view provides negative relation between level of tangible assets and firm's bank debt concentration.

Conversely, the reputation view provides that relationship of tangibility and bank debt concentration will be positive and then become negative as firm grows in size. The collateral view also supports the reputation view that when a firm is small it has positive relationship between tangibility and access to bank debt. Collateral view highlights that level of default risk can be adjusted with the level of tangibility. Firms with high risk can have access to bank loan only if adequate amount of collateral can be provided to banks. As firms' level collateral is determined by the tangible assets it held, the collateral view suggests a direct relationship between tangible assets and concentration of bank debt for firms that are small in size. Johnson (1997) employed tangible assets to measure the value of collateral in his study.

Empirically, level of tangible assets held by firm serve as proxy in order to observe firm's activities (Kroszner and Strahan, 2001). A firm that has high level of tangibility will involve in those activities that signals outsiders about the firm's prospects. To view the impact of tangibility, the present study will employ ratio of tangible assets scaled by total assets (Boot, *et al*., 1991; Scott, 1975). It has been argued that firms that are better able to provide collateral against the release of loan can obtain bank debt more often than the firms that do not provide collateral as security against debt. As tangible assets serve as security/collateral against the provision of bank debt, higher the firm's tangibility more access to debt from bank is predicted.

The review of the literature regarding the bank financing in capital structure highlights that the firms that belong to the countries whose financial markets are developed and efficient can have access to external market funds more frequent than the firms of underdeveloped countries. The firm that has easy access to trade credit will have low concentration of bank debt due to the cost associated with such bank credits that is higher than the benefits obtain from such credits. Therefore, the development of stock market within the economy can influence the firm use of debt to great extent. To control for such possibility, we are hereby employing the variable of market capitalization that will stream line the involvement of firm in capital markets. This proxy is the most commonly used proxy for

the financial market orientation (Ergungor, 2004). The anticipated relationship with this variable is considered negative based on the fact that maturity of financial markets affects the financing pattern of the firms. Table 1 shows expected relationship across size category.

Table 1: Predicted Determinant of Firm Bank Debt Concentration

Variable	Expected Relation by firm size		
	Small	Medium	Large
Firm Age	-ve	+ve	+ve
Tangible Assets	-ve	+ve	-ve
Sales Growth	+ve	+ve	+ve
Leverage	-ve	-ve	-ve
Profitability	+ve	+ve	+ve
Short Term debt	+ve	+ve	+ve
Market Capitalization	-ve	-ve	-ve

3.4 Model Specifications

Relevant to the previous studies, it has been found as banks are efficient in handling information asymmetry therefore; the level of asymmetric information can determine a firm's choice for bank financing. Easterwood and Kadapakkam (1991) in their study found that long-term debt is an important determinant of debt from private sources for large firms. The study of Hooks and Opler (1993), Johnson (1997) also found that information asymmetries influence the firm's choice for bank debt concentration. The current study contributes to the literature by analyzing specifically the firm's choice for bank debt concentration relevant to its size. Existing studies either provide evidences about large firms (Easterwood&Kadapakkam, 1991) or small firms (Petersen &Rajan, 1994). One justification for present empirical work is that literature considered firm size to measure its market value, if same hold for all firm size then reputation view argued that the firm's bank debt concentration should vary by firm size. The present study is employing the regressions analysis to view the impact of firm size and its reputation on choice of bank debt concentration.

$$(BDEBT)_{it} = \beta_0 + \beta_1 TANG^{it} + \beta_2 SALES^{it} + \beta_3 LEV^{it} + \beta_4 OPROF^{it} + \beta_5 AGE^{it} + \beta_6 STD^{it} + \beta_7 ORIENT^{it} + \epsilon_{it} \dots\dots\dots\dots\dots\dots\dots(1)$$

4. Results

In almost every study of finance, the techniques of Correlation and Regressions are regarded as the foundation for investigating every financial study. Therefore, based upon the findings of previous literature, the current study analyses the impact of size on firm's bank debt concentration using Least Square Regression model.

Table 2: Summary of Study Variables

Bank Debt Use	BD	Bank Debt/Total Assets	Bank Debt Concentration
Tangibility	TANG	Tangible Assets/Total Assets	Monitoring
Sales	SALES	Log of Sales	Growth
Operating Profits	OPROF	Operating Profit/Total Assets	Growth
Age	AGE	Log of number of years since incorporation	Growth
Leverage	LEV	Total debt/Total assets	Default Risk
Short Term Debt	STD	Short term debt/Total Assets	Default Risk
Orientation	ORIENT	NET worth/Total Assets	Market Capitalization

4.1 Descriptive Statistics

Table 3 summarizes the descriptive statistics of all 283 firms regardless of the size distribution for the study period of 2006-2010. The overall

descriptive statistics of all the firms are similar to the small firm's statistics. It is clear from the statistics that firms in Pakistan tend to rely on bank financing in greater or less proportion based upon their size.

Table 3: Descriptive Statistics for All Firms

Variable	Definition	Mean	Max.	Min.	St. Dev
Bank debt Concentration	Bank Debt/Total Assets	0.2552	9.4066	0.0000	0.5755
Firm Age	Log (number of years)	1.4109	2.1206	0.0000	0.2981
Tangible Assets	Tangible Assets/Total Assets	0.5547	3.6712	0.0000	0.2226
Total Debt	Total debt /Total Assets	0.8525	11.5783	0.0244	0.9786
Short term debt	STD/Total Assets	0.5653	4.0514	0.0192	0.4105
Sales	Log of Sales	2.8240	3.6712	0.0000	1.0173
Profit	Operating Profit/Total Assets	0.1275	9.0000	-0.1557	0.3175
Market Capitalization	NET worth/Total Assets	5.2257	90.035	0.0000	10.537
N=1415					

As far as the descriptive statistics of small size firms are concerned the mean value of bank debt concentration variable is 0.2422 while the mean value for the same variable for medium and large size firms is 0.1815 and 0.1917 which mean that small firms use more bank debt as compared to other two size categories. One possible reason is that as large and medium size firms access financial markets easily therefore, they have alternative source of equity financing so they rely less on bank financing as compared to small size firms. Other possible reasons for large and medium size firms less reliance on bank debt are that as these firms are able to generate enough funds internally, therefore following Pecking order hypothesis, the reliance on external resources is less as compared to small size firms.

4.2 Correlation

In order to test the sample data, Pearson Co-relation test is performed. The correlation estimation of the estimated variables is presented in Table 4.

Table 4: Correlation Matrix

	TD	STD	SALES	TANG	PROFIT	ORIENT	AGE	BD
TD	1	.445**	-.363**	.141**	.079**	-.07**	.059*	.700**
STD		.000	.000	.000	.003	.003	.026	.000
		1	-.338**	.069**	.029	-.038	-.042	.152**
SALES			.000	.010	.277	.155	.117	.000
			1	-.206**	-.057*	0.029	-.09**	-.26**
TANG				.000	.033	0.276	.001	.000
				1	-0.047	-0.24**	0.08**	0.13**
PROFIT					.079	0.000	.001	.000
					1	.037	0.011	.012
ORIENT						0.167	.667	.644
						1	0.037	-.094**
AGE							0.169	.000
							1	.065*
								.015
BD								1

* Correlation is significant at 0.05 level, **Correlation is significant at 0.01 level

The correlation value is highest among the dependant variable and leverage variable. With the Total debt variable it is 70percent while with short term debt variable it is 15.2 percent. The co-relation diagnoses show that total debt variable is strongly correlated with the bank debt concentration while the short term debt is not strongly related as compared to total debt. This is so because bank debt is a part of total debt therefore, co-relation is high

between both. The weak co-relation between short term debt variable and bank debt concentration is because both are not closely related.

4.3 Regression Estimates

Finally, in order to analyze whether firm size impacts its bank debt, linear regression analysis with 8 different variables using pooled cross section data is performed. The regression results of the impact of firm size on bank debt concentration are explained in Table 5.

The regression estimates of the co-efficient of leverage variable show positive relationship for all categories of firms. The firms in Pakistan are highly leveraged because they obtain more external debt. Johnson (1997) foud a positive relationship between leverage and bank debt concentration. It was argued that highly geared firms require quick monitoring from bank because they have little equity stake. Beside this argument, the positive relationship is also due to enhanced reputation, renegotiation decisions and on-going relation with the bank. The co-efficient of leverage variable for all firms category is positive. It means leverage is related to the availability of bank debt based upon the firm size and assumption provided by Johnson (1997) in his study is validated. This result is consistent with the findings of Fattouch and Deidala (2002) who explained that firm size have positive or zero impact on the leverage of the large size firms. The co-efficient of leverage for large size firms is positive as large firms with high leverage ratio obtain more bank debt because bank monitoring is required. As large firms have access to financial markets therefore the choice for bank debt or equity financing is dependent upon information asymmetry and agency costs. Also Fama and Jensen (1983) and Rajan and Zingale (1995) explained that large firms have high level of information asymmetry as well as they have high collateral available and low default risk (King, 1977), therefore, they have easy access to external financing.

The variable of sales is found to be positively related to bank debt use for all categories of the firms. This result supports the screening view of bank debt concentration for all firms. High level of volatility in sales is related with less access to external financing of firms and hence the bank debt concentration. This result is consistent with the previous findings of Bolten and Freixas (2000) who found a positive relationship between the sales and

access to bank financing. While the positive sign of sales confirms the screening view of bank debt concentration with large size firms. The result of sales variables however, reveals the behavior of the bank to predict sales variable as an important determinant in their decisions for the provisions of long term loan to firms especially small size firms for which the relationship is negative and significant. The results of our study reject the predicted findings having positive relation between sales variable and bank financing.

The results of the regression clearly indicate that the co-efficient of the tangibility variable is negative and significant for small size firms while it is positive for medium-and large size firms. The result of tangibility is positive for all firm categories. These results about the variable of tangibility confirm and contradict the previous findings simultaneously. The positive impact of the tangibility is confirmed by Ezeoha (2008) who found a positive but insignificant impact of assets tangibility in obtaining bank financing explaining the less reliance of firms on collateral value in obtaining outside bank financing. Similar positive relation between assets tangibility and firm bank financing has been obtained by Subramanian and Umakrishnan (2004) explaining that firms with low level of tangibility depends more on short term financing than on more tangible firms.

The regression results for profitability variable are positive and significant for large and all categories of the firms while negative for small and medium size firms. While for large size firms profitability is positively related to bank financing. The results clearly indicate that the level of high profitability is positively related with high access to bank financing. The results of small and medium size firms are consistent with the previous findings of Ghosh (2007) and Ezeoha (2008) whose studies also found negative relationship between operating profits and leverage. The results reveal that as firms goes on to be more profitable they rely more on internal financing therefore the relationship between profitability and bank debt use is negative. These results also confirm the re-negotiation view of bank debt concentration and implementation of Pecking Order Hypothesis.

The relation of market orientation shows a negative sign with bank debt concentration for all categories of the firms as well as for medium and large size firms. The results are inline with the previous findings of Ghosh (2007) who found that the firm's access to equity market declines the role of bank

and use of bank debt across all firms sizes also declines. This results confirms the Pecking Order hypothesis that in obtaining financing, the firms tend to rely more on internal generated sources first and then if needed look for external source of financing. The results of the study clearly indicate that if the firms have access to equity markets then the role of banking system declines in providing the financing to firms.

As far as the variable of age is concerned, age is positively related with the bank debt concentration for all categories of the firms. The positive sign of age is consistent with the reputation arguments that older and reputable firms rely more on bank debt. These results also accept our predicted hypothesis of positive relationship between age and bank debt. This finding contradicts the results of Ghosh (2007) while the results are consistent to the study of Ezeoha (2008) who found age to be positively related with external financing.

5.   Conclusions and Policy Recommendations

The empirical evidence suggests that both the monitoring and screening roles of bank debt are important for firms, depending on the firm's size. The differing determinants of bank debt concentration for firms of different sizes suggest that the traditional banking activity of commercial lending will not disappear in the near future. Both small and large firms find bank debt advantageous under appropriate circumstances. It is the on-going relationship established between borrower and lender that allows banks to cultivate informational advantages and reduces monitoring costs in lending to businesses. Policymakers should be aware of the importance of relationships between banks and their business customers when they consider policies which aim to stimulate credit availability to businesses and policies which aim to control default risks of lending.

Table 5: Impact of Firm size on Bank Debt Concentration

	Small	Medium	Large	All
(Constant)	-0.033	0.26	-1.83	0.074
	(0.00)*	(0.01)*	(0.03)**	(0.03)**
LEV	0.486	0.255	0.233	0.013
	(0.000)*	(0.002)**	-0.2	(0.00)*
STD	-0.301	-0.214	-0.303	0.029

	(0.000)*	-0.259	-0.893	(0.003)**
SALES	-0.033	-0.07	-0.267	0.012
	(0.013)**	-0.34	-0.22	-0.32
TANG	-0.015	0.146	0.139	0.05
	(0.008)***	(0.03)**	(0.007)***	(0.005)*
PROFIT	-0.089	-0.058	0.181	0.034 (0.004)*
	-0.38	(0.05)**	-0.31	
ORIENT	0	-0.102	-0.193***	-000*
	-0.69	-0.39	-0.1	0
AGE	0.109	0.037	0.311	0.036
	(0.101)***	-0.199	(0.000)*	(0.003)**
	2004-2008	2004-2008	2004-2008	2004-2008
No. of Observations	630	695	90	1415
R-square	0.592	0.365	0.256	0.529
F-test Value	128.829	104.06	115.63	224.993

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

References

Beck, T., Demirgüç-Kunt, A. S. L. I., &Maksimovic, V. (2005). Financial and legal constraints to growth: Does firm size matter?. *The Journal of Finance*,*60*(1), 137-177.

Berger, A. N., & Udell, G. F. (1994). Lines of credit and relationship lending in small firm finance. *Jerome Levy Economics Institute Working Paper*, (113).

Caprio, G., & Demirgü, A. (1997). The role of long-term finance: theory and evidence. *The World Bank Research Observer*, *13*(2), 171-189.

Cardone-Riportella, C. and Cazorla-Papis, L. (2001).*New approaches to the analysis of the capital structure of SMEs: Empirical evidence from Spanish firms.*Department de Economia de la Empresa, Working Paper 01-10, Business Economics Series 03, January.

Coleman, S. and Cohn, R. (1999).*Small firm use of leverage: a comparison of man and woman-owned firms.*Conference Proceedings, United States Association of Small Business and Entrepreneurship, San Diego.

Dittmar, A. (2004). Capital structure in corporate spin-offs. *The Journal of Business*, *77*(1), 9-43.

Easterwood, J. C., & Kadapakkam, P. R. (1991).The role of private and public debt in corporate capital structures. *Financial Management*, 49-57. Volume-20.

Fama, E. F., & Jensen, M. C. (1983).Separation of ownership and control.*The Journal of Law & Economics*, *26*(2), 301-325.

Gonenc, H. (2005). Comparison of debt financing between international and domestic firms: Evidence from Turkey, Germany and UK. *International Journal of Managerial Finance*, *1*(1), 49-68.

Graham, J., & Harvey, C. (2002). How do CFOs make capital budgeting and capital structure decisions?. *Journal of applied corporate finance*, *15*(1), 8-23.

Hoshi, T., Kashyap, A., & Scharfstein, D. (1993). *The choice between public and private debt: An analysis of post-deregulation corporate financing in Japan* (No. w4421). National Bureau of Economic Research.

James, C. (1987). Some evidence on the uniqueness of bank loans. *Journal of financial economics*, *19*(2), 217-235.

Johnson, S. A. (1997). An empirical analysis of the determinants of corporate debt ownership structure. *Journal of Financial and Quantitative Analysis*, *32*(01), 47-69.

King, M. A. (1977). *Public policy and the corporation* (Working Paper No. 3). Chapman and Hall; New York: Wiley.

Kroszner, R. S., &Strahan, P. E. (2001). Bankers on boards:: monitoring, conflicts of interest, and lender liability. *Journal of Financial Economics*,*62*(3), 415-452.

Kumar, K.B., Rajan, R.G. and Zingales, L. (2001), *What determines firms size.* Working Paper Series No. 496, University of South California (USC) Finance and Business Economics.

Li, K., Yue, H. and Zhao, L. (2007), Ownership, institutions, capital structure: evidence from Chinese firms. Available at: http://ssm.com/abstract ¼ 891529, November.

Pandey, I. M. (2004). Capital structure, profitability and market structure: Evidence from Malaysia. *The Asia Pacific Journal of Economics & Business*, *8*(2), 78.

Petersen, M. A., & Rajan, R. G. (1994). The benefits of lending relationships: Evidence from small business data. *The Journal of Ginance*, *49*(1), 3-37.

Rafiq, M. (2008). The determinants of capital structure of the chemical industry in Pakistan. *The Lahore Journal of Economics*, *13*(1), 139-158.

Rajan, R. G., &Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The journal of Finance*,*50*(5), 1421-1460.

Schoubben, F. and Van Hulle, C. (2004), The determinants of leverage: differences between Quoted and Non Quoted firms.*TrijdschriftvoorEconomie en Management*, 49 (4), 589-620.

Sheikh, N. A., & Wang, Z. (2010).Financing behavior of textile firms in Pakistan. *International Journal of Innovation, Management and Technology*,*1*(2), 130-135.

Slovin, M. B., Johnson, S. A., &Glascock, J. L. (1992). Firm size and the information content of bank loan announcements. *Journal of Banking & Finance*, *16*(6), 1057-1071.

Smith, J. K. (1987). Trade credit and informational asymmetry. *The Journal of Finance*, *42*(4), 863-872.

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *The Journal of finance*, *43*(1), 1-19.

Fu, T. W., Ke, M. C., & Huang, Y. S. (2002). Capital growth, financing source and profitability of small businesses: evidence from Taiwan small enterprises. *Small Business Economics*, *18*(4), 257-267.