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OWNERSHIP AND CAPITAL STRUCTURE OF PAKISTANI NON-FINANCIAL FIRMS

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Abstract

Existing literature has not yet defined a clear-cut relationship between ownership structure and capital structure. This study aims to contribute to this controversial argument by examining the impact of internal (managerial) ownership and external ownership on financing preferences using the case of non-financial firms listed on Karachi stock exchange during the period of 2008-2012. Our results suggest that the external ownership has a significant effect on capital structure in accordance with the presence of blockholders. In contrast, the internal ownership has a complicated effect; it shows significant positive and negative relationship to leverage at lower and certain higher proportion of managerial shareholding respectively. Besides, the combined analyses suggest that the presence of blockholders negates the impact of managerial ownership on capital structure. This implies that the presence of large and dominant shareholders in Pakistani firms may have caused a bias for debt financing to protect their voting power and returns.

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Introduction

The significance of corporate ownership structure on capital structure choices has been long argued in the academic literature. The debate on separation of control and ownership of corporations at least goes back to Adam Smith (1776) in reference to joint stock companies. The concept of current modern publicly held large corporations and the prescribed role of ownership and control in these corporations was put forward by Berle and Means (1932). The separation of ownership and control especially in large corporations refers to how the shareholders as owners (residual claimants) can monitor the hired managers who run the firm and manage its resources on behalf of the owners. Jensen and Meckling (1976) in their seminal work on the principal-agent problem, defined the agency costs that occurred in relation to the separation of ownership and control. They elaborated the mechanism of causing agency costs in light of the ownership claims held by *insiders* (managers) and *outsiders* (investors with no direct role in management of the firm), respectively.

Since Modigliani and Miller (hereafter MM theorem,1958), the literature has tended to focus on the role of taxes, information asymmetry, or imperfect markets as explanation of capital structure decisions but not including the agency problems (Hart, 1995, p. 147). Existing literature fails to shed enough light on Agency theory's role to understand the conflict of interest between providers of finances and controllers of finances in its relation to capital structure decisions. Hart (1993) argues that the agency approach has more advantage on other theories of capital structure, as it clearly explains why the firm issues senior debt (long term) and why a firm's failure to meet debt obligations leads to bankruptcy as a penalty.

Jensen and Meckling (1976) defined the agency relationship "as a contract under which one or more person (*the principal*) engage another person (*the agent*) to perform some service on their behalf which involves delegating some decision making authority to the agent". Moreover, they point out the managers and the stockholders' relationship as a pure agency relationship, in relation to the separation of ownership and control. Jensen and Meckling (1976, p. 308) defined agency cost as a sum of the following three:

1) *the monitoring expenditures by the principal,*
2) *the bonding expenditure by the agent,*
3) *the residual loss.*

On the other hand, the discussion on capital structure has been theorized by MM theorem (1958). The MM theorem assumes the perfect and frictionless capital markets where the cost of raising equity or debt is irrelevant. Since the theorem was developed, eminent scholars have been extensively examining the real market where transaction costs, monitoring costs, information problems such as moral hazard and adverse selection effects, and other related agency costs are embedded, by looking at the firm's capital structure and estimating the associated agency costs as the deviation from the MM theorem. They developed conditional theories, such as, Trade-off theory, Pecking order theory, Free-cash flow theory and Market timing theory that can help the managers to achieve the optimal mix of debt-equity under specific conditions by way of minimizing the agency costs. According to Jensen (1986) the optimal mix of debt-equity ratio is considered as the point at which the value of the firm is maximized where the marginal costs of debt corresponds to the marginal benefits.

Many empirical and theoretical studies have explored different factors based on cross sectional time series data to seek the firms' optimal capital structure. For instance, the Trade-off theory emphasizes the tax advantage on debt. The Pecking order theory proposes the use of internal funds, debt and equity financing respectively, while the Free cash flow theory also supports the leveraging even though it has the liquidity risk potentially resulting in financial distress. However, scholars have not yet reached a clear consensus. According to Myers (2001) "there is no universal theory of debt-equity choice, and no reason to expect one".

Most of the previous studies have been done to investigate the relationship between ownership structure and capital structure of the firms in developed economies (Berger, Ofek & Yermack, 1997; Firth, 1995; Friend & Lang, 1988; Grossman & Hart, 1982; Jensen, Solberg & Zorn, 1992; Kim & Sorenson, 1986). These studies examine the relation of debt either with managerial ownership or with large external shareholders except only a few studies such as Brailsford, Oliver and Pua (2002); Firth (1995); Short, Keasey and Duxbury (2002) which have investigated the relation of debt to managerial ownership and external shareholders. Most of the mentioned studies used the data of developed economies such as Australia, UK and US. This study aims to look at the Pakistani firms as the

case of a developing economy, in order to contribute to the analysis of the relationship between managerial/external ownership, particularly the interest alignment hypothesis, managerial entrenchment, large shareholders and the capital structure to seek for the universal applicability of the optimal debt-equity mix.

Literature review

Since MM theorem (1958), the literature has tended to focus on the various factors to explore the capital structure, but very few studies include the agency problems in the study of optimal capital structure. The Agency theory has the power to explain the conflict of interest between providers of finances and controllers of finances in its relation to capital structure decisions (Hart, 1995, p.151). Hart (1993) argues that, despite limited empirical evidence, the agency approach has more advantages than other theories of capital structure, as it clearly explains why the firm issues senior debt (long term) and why a firm's failure to meet debt obligations leads to bankruptcy as a penalty.

First of all, we note great contributions by Jensen and Meckling (1976) analyzing the relations between owners (shareholders) and managers in the principal-agent framework. They argue that the agency cost may vary in accordance with the shirking of activities by the agent, pointing out the importance of close monitoring by the principal to prevent the agent's shirking. In order to minimize the interest conflicts, they propose equity ownership by managers (managerial ownership) to reduce the agency costs and potential shirking actions by aligning the agent's interest with the principal to share the residual.

How does the principal-agent relation affect the capital structure in corporate finance? Hart (1995, p. 151), states that "although the agency approach may not be the whole story, it would seem to be an essential part of any fully developed theory of capital structure". He further argues that a great deal of empirical work on capital structure theories have produced what he called "stylized fact". For stylized facts he refers to, highly profitable firms that have low debt, more tangible asset firms that have high debt, debt for equity-swaps which raise the share prices and so forth (Hart, 1995, p.141). Despite the insufficient empirical evidence of agency approach in capital structure, Hart (1995) argues the strong potential of Agency theory to recognize the agency cost of debt and equity in capital structure choices.

In an agency framework apart from Agency theory, other studies propose different assumptions to tackle the agency conflicts which arise due to the separation of ownership and control. The classical work by Jensen and Meckling (1976) and Shliefer and Vishny (1986) proposes the "active monitoring hypothesis" stating that external blockholders can reduce the managerial *opportunism* caused by the principal-agent relation. Opportunistic behavior of managers include consuming an excessive amount of perks, shirking of their responsibilities, and investing in negative net present value (NPV) projects that prioritize managers' personal benefits instead of shareholders or firms (Fosberg, 2004). Moreover, Berger et al., (1997) study the relationship between *managerial entrenchment* and firms' capital structure, and conclude that entrenched managers may not choose an optimal capital structure. They define entrenchment as "the extent to which managers fail to experience discipline from the full range of corporate governance and control mechanisms".

Information economics sheds light upon other agency costs arising due to information asymmetry, such as moral hazard and adverse selection effects (Akerlof, 1970; Alchian & Demsetz, 1972; Greenwald & Stiglitz, 1990; Jensen & Meckling, 1976). Stiglitz (1985) insist that the concentrated ownership has enough private incentives to control the managers due to their adequate stake in the firm. To achieve the effective control, there exist large expenditures for them to acquire sufficient information for efficient monitoring. By product, there may occur a *free rider* problem particularly when small shareholders get benefits from larger shareholders' efforts. The principal-agent theory insists that if large external shareholders actively monitor management activities, there will be little space for managers to choose a debt level that would maximize their own interest (Brailsford et al., 2002). Active large shareholders can use their voting power to exert control on managers and support more debt in order to keep their majority. Hence, the relationship between concentrated ownership and financial leverage is assumed to be positive. Table 1 summarizes the possible effects of external and internal (managerial) ownership patterns on the choices of capital mix. In general, the principal-agent theory predicts a

Table 1: Relationship between ownership, control and leverage

Control	External shareholders	Managerial shareholdings
Strong	**I.** While the concentrated ownership may reduce the agency cost, it may encourage the managers to increase ROE through leverage. However, the reduction in managers' shirking would possibly reduce the borrowings (there is no a priori mechanism to explain the relationship). Also, there is no clear-cut explanation of how the leverage may lead to higher risk of bankruptcy.	**II.** There is no a priori mechanism to endorse that managerial shareholding may reduce or fuel "managerial opportunism". Also there is no clear-cut explanation of how it encourages or discourages managers to prefer debt (leverage) or equity (to avoid the risk of bankruptcy).
Weak	**III.** Diffused ownership may encourage the minor shareholders to become "free-riders" on monitoring, resulting in increasing the agency cost. But, debt providers can play the role as monitors to reduce the managerial opportunism.	**IV.** Managers with less incentives under the diffused ownership structure may be involved in severe "shirking" to utilize the corporate sources for their own perks and privileges. But, debt providers can play the role as monitors to reduce the managerial opportunism.

Source: Author's own compilation

positive relationship between concentrated ownership and debt, as well as a positive view on managerial shareholdings against managerial opportunism (Berger et al., 1997; Brailsford et al., 2002; Firth, 1995; Friend & Lang, 1988).

There is no *a priori* causality to determine the relationship between the concentrated/diffused ownership and the capital structure, nor is there a priori causality to determine the relationship between the managerial ownership and the capital structure. In fact, empirical studies provide mixed findings on the relationship between managerial equity ownership and firm capital structure (Bathala, Moon & Rao, 1994; Berger et al., 1997; Brailsford et al., 2002; Firth, 1995; Friend & Lang, 1988; Ruan, Tian & Ma, 2011; Kim & Sorensen, 1986; Short et al., 2002; Wahba, 2014).

Only a very few preceding studies by Brailsford et al., (2002) and Short et al., (2002) on Australian and UK firms respectively, directly explore the impact of large external shareholders and managerial equity ownership on firms' capital structure. Short et al., (2002) find the negative relationship between large shareholders and debt, pointing out the debt and large shareholders as substitute disciplinary devices. The presence of large external shareholders negates the debt related creditors monitoring hypothesis which means that large shareholders as active monitors doesn't support the debt as a monitoring tool. At the same time, they report the positive relationship between managerial ownership and leverage, and state that "increased risk aversion on the part of management owners leads to a reduction in risk-shifting behavior, and consequently a reduction in the agency costs of debt and an increase in the agency costs of equity". Contrary to this, Brailsford et al., (2002) find an inverted U shaped relationship between managers' equity ownership and leverage, that is, up to a certain level it shows positive and at a higher level it shows a negative relationship endorsing the interest alignment hypothesis. At the same time, they explore the positive relationship between large shareholders and leverage, endorsing the active monitoring hypothesis by shareholders.

To the best of our knowledge there is no preceding study that attempted to explore the effects of larger shareholders and managerial equity ownership on capital structure choices in the developing economies, except Ruan et al., (2011) and Wahba (2014), but they explore the relationship only between managerial equity ownership and debt of Egyptian and Chinese firms respectively. Both of these studies explore the significant relationship between ownership structure and capital structure. Ruan et al., (2011), finds that when managerial ownership is less than 18% or more than 46% there is a negative relation with leverage, and positive when managerial ownership ranges from18% to 46%, i.e. a non-monotonic relationship. Similar to findings of studies on developed economies, studies on developing economies also report mixed results and lack of consensus. As pointed out by La Porta, Lopez-de-Silane, Shleifer, and Vishny (1998), in general, the developing economies are more prone to agency conflicts due to weak institutional and legal frameworks and less developed capital markets. This is in

line with the argument of Ruan et al., (2011) which states that "agency problems in the Chinese civilian-run listed companies are more severe due to the emerging market environment". Therefore, consistent with the mentioned argument this study tries to explore the impact of ownership structure patterns on capital structure of non-financial Pakistani firms. We hypothesize that although there is no *a priori* causality, given the special context of Pakistan, the concentrated external ownership seemingly having political and economic power in contrast to the managerial equity ownership can be an effective governance tool to reduce the agency problems, e.g. managerial opportunism, entrenchment. In other words, we may say that if the degree of managerial opportunism or entrenchment is high even in the presence of the concentrated ownership, the majority shareholders are less effective monitors being less willing to bear extra monitoring cost. That is, they want to be *free riders* who have few incentives to be engaged in monitoring.

To accumulate empirical cases is, in our view, the only way to answer the puzzle on how internal and external shareholdings would influence the different mix of financing. In this study, we use the data of non-financial listed firms on the Karachi Stock Exchange, Pakistan, as a typical case of a developing economy where the agency cost is considered extremely high, due mainly to the weak regulatory framework for investor protection under the underdeveloped capital market.

Data, variables and research methods

This section deals with the investigation of an empirical relationship between the ownership structure focusing on large external ownership as well as managerial equity ownership (internal ownership) and the firms' choices of capital structure of Pakistani non-financial listed firms. Data and variables used in the study and the estimation method are explained below.

Data sample

This study investigates non-financial firms listed on Karachi stock exchange (KSE) to draw the empirical evidence between ownership and capital structure. We look at the data during the period of 2008-2012. Non-financial firms are regulated by Securities and Exchange

Table 2: Definition of Variables

Variables	Definition
Dependent variables	
Debt-equity ratio (D/E_{it})	Ratio of book value of long term debt to market value of equity
Explanatory variables	
Large external shareholders ($LARG_{it}$)	Computed as a percentage of shares owned by five largest shareholders to total outstanding shares
Managerial-equity ownership (MO_{it})	Proportion of executives and non-executives share ownership to outstanding shares in percentage
Square of Managerial-equity ownership (MO_{it})^2	Square of proportion of executives and non-executives share ownership to outstanding shares in percentage
Control variables	
Firm Size (SZ_{it})	Computed as natural logarithm of assets
Free cash flow (FCF_{it})	Operating income before tax plus depreciation and amortization less taxes and dividends paid
Growth ($GROW_{it}$)	Ratio of market price per share to book value per share. Market price per share is computed by taking the sum of high and low price share divided by 2
Non debt tax shield ($NDTS_{it}$)	Ratio of depreciation to total assets
Dividend (DPS_{it})	Dividend per share

Source: Author based with reference to Brailsford, T.J., Oliver, B. R., Pua, S.L.H. (2002). On the Relation between Ownership Structure and Capital Structure. Accounting & Finance, 42(1), 1–26; Short, H., Keasey, K., Duxbury, D. (2002). Capital Structure, Management Ownership and Large External Shareholders: A UK Analysis. International Journal of the Economics of Business, 9(3), 375–399.

Commission of Pakistan (SECP), however, financial firms are also regulated by State Bank of Pakistan (SBP). On the basis of different regulatory frameworks, financial firms are excluded from this study. We finally look at the data set which includes 186 firms. Due to the availability of data some values are missing and our final data set is unbalanced panel data from different industrial sectors i.e. Cement, Textile, Sugar, Engineering, Chemical, Fuel and Energy and so on during the above mentioned period.

Variables

In order to explore the empirical relationship between ownership and capital structure variables, we used the similar empirical model used by Brailsford et al., (2002) and Short et al., (2002). The variables used in this study are presented in Table II, with their basic computation explanation.

Specification of research model

This study employs the ordinary least square (OLS) regression's fixed effect method for empirical estimation to estimate the impact of explanatory variables i.e. ownership composition (*MEO* and *LARGE*) on dependent variable i.e. debt-equity ratio (*DE*) an indicator for capital structure. Statistically capital structure (leverage) is a function of equity ownership by managers and larger external shareholders, in the light of our hypothesis i.e. capital structure is dependent on ownership composition.

Following the existing literature to control the firm specific characteristics that may influence the choices of capital structure, we used the five control variables in our estimation model (Brailsford et al., 2002). Size (*SZ*) is used as control for risk factors i.e. larger firms are assumed as less prone to bankruptcy risk (Agrawal & Nagarajan 1990; Friend & Lang, 1988).

To address the issue of agency costs, control variables of growth (*GROW*) and free cash flow (*FCF*) are used. In the existing literature it is argued that firms' with future growth opportunities have more access to debt and we assume a positive relationship with it. Free cash flow hypothesis suggests that issuance of debt can alleviate the free cash problems, however, there is another argument i.e. availability of free cash discourages the manager from issuing new debt. In this perspective we assume a negative relationship of free cash flow with debt. The Free cash flow hypothesis of Jensen (1986), is discussed as more complex in literature. In order to control for the tax benefits on debt, we used Non-debt tax shield (*NDTS*) and (*DPS*) as control variables in our estimation. *NDTS*, argument by DeAngelo and Masulis (1980), proposed a negative relationship of it with leverage.

In our regression model we performed three estimations to explore the impact of ownership on choices of capital structure of Pakistani non-financial listed firms. Equations 1, 2 and 3, have been employed to empirically explore the impacts of explanatory variables i.e. larger external shareholders, internal managerial ownership and combined impact of internal and external ownership, respectively on dependent variable, i.e. debt-equity ratio a proxy for firm leverage.

$$DE_{it} = \alpha_0 + \beta_1 LARG_{it} + \beta_2 SZ_{it} + \beta_3 FCF_{3it} + \\ + \beta_4 GROW_{it} + \beta_5 NDTS_{it} + \beta_6 DPS_{it} + \varepsilon_{it} \quad (1)$$

$$DE_{it} = \alpha_0 + \beta_1 MO_{it} + \beta_2 (MO)^2_{it} + \beta_3 SZ_{3it} + \\ + \beta_4 FCF_{it} + \beta_5 GROW_{it} + \beta_6 NDTS_{it} + \beta_7 DPS_{it} + \varepsilon_{it} \quad (2)$$

$$DE_{it} = \alpha_0 + \beta_1 LARG_{it} + \beta_2 MO_{it} + \beta_3 SZ_{it} + \\ + \beta_4 FCF_{it} + \beta_5 GROW_{it} + \beta_6 NDTS_{it} + \beta_7 DPS_{it} + \varepsilon_{it} \quad (3)$$

Observed results and discussion

Empirical results

This section presents the empirical finding of the above regressions. These findings are computed by using the fixed effect regression model. The estimation shows the significant relationship among dependent, explanatory and control variables. Since the study uses the data of multiple years, we use White's test (1980) to check the effect of potential heteroskedasticity in fixed effect regression.

Table 3, presents the descriptive statistics of the study. The value of debt-equity ratio ranges from 0 to 1.76. External five largest shareholders own 0.6% share at the minimum to 99.7% at the maximum in the sample firms. The average age of the sample firms is 15.16 years. Other control variables show positive minimum value except the free cash flow and growth variables. This table also shows that Pakistani firms on average paid 5.30 Pakistani Rupees, as a dividend per outstanding share. In order to check the correlation among the variables used in the study, the pair-wise correlation matrix has been constructed shown in Table 4.

This correlation matrix explains the phenomenon of

Table 3: Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Minimum	Maximum
DE_{it}	882	0.430	0.422	0	1.769
$LARG_{it}$	882	0.630	0.199	0.006	0.997
MO_{it}	882	0.283	0.279	0	0.984
$(MO_{it})^2$	882	0.158	0.217	0	0.968
SZ_{it}	882	15.167	1.392	11.974	19.666
FCF_{it}	882	891212.5	4156099	-8464919	73409663
$GROW_{it}$	882	1.367	3.343	-48.026	33.187
$NDTS_{it}$	882	0.035	0.041	0.000006	0.822
DPS_{it}	882	5.371	20.009	0	327.277

Source: Author's own based on analysis of data

Table 4: Variables correlation matrix

Variable	DE_{it}	$LARG_{it}$	MO_{it}	$(MO_{it})^2$	SZ_{it}	FCF_{it}	$GROW_{it}$	$NDTS_{it}$	DPS_{it}
DE_{it}	1	-0,02	0,12	0,1	0,02	-0,07	-0,01	0,13	-0,11
$LARG_{it}$	-0,02	1	0,03	0,14	0	0,11	0,13	0,04	0,16
MO_{it}	0,12	0,03	1	0,95	-0,32	-0,13	-0,16	0,1	-0,18
$(MO_{it})^2$	0,1	0,14	0,95	1	-0,24	-0,09	-0,15	0,07	-0,13
SZ_{it}	0,02	0	-0,32	-0,24	1	0,39	0,02	-0,12	0,16
FCF_{it}	-0,07	0,11	-0,13	-0,09	0,39	1	0,07	-0,02	0,04
$GROW_{it}$	-0,01	0,13	-0,16	-0,15	0,02	0,07	1	0,03	0,43
$NDTS_{it}$	0,13	0,04	0,1	0,07	-0,12	-0,02	0,03	1	-0,01
DPS_{it}	-0,11	-0,16	-0,18	-0,13	0,16	0,04	0,48	-0,01	1

Source: Author's own based on analysis of data

Table 5: The effect of large external shareholders ($LARG_{it}$) on debt-equity ratio (D/E_{it}) using the fixed effects estimation model

Variable	Coefficient	Std. Error	*t*-statistic	Prob.
C	1.234	0.4918	2.5106	0.0123
$LARG_{it}$	0.1677	0.0844	1.9869	0.0473
SZ_{it}	-0.0613	0.0301	-2.0370	0.0420
FCF_{it}	-5.18E-09	2.25E-09	-2.2975	0.0219
$GROW_{it}$	0.0105	0.0032	3.2578	0.0012
$NDTS_{it}$	0.3827	0.1145	3.3418	0.0009
DPS_{it}	-0.0004	0.0004	-1.0428	0.2974
Notes: R^2 =0.7858; Mean dependent variable = 0.4309; Adjusted R^2 = 0.7265 S.E of regression = 0.2211; *F*-statistic = 13.2569; Prob. (*F*-statistic) = 0.0000				

Source: Author's own based on analysis of data

Table 6: The effect of managerial ownership (MO_{it}) on debt to equity ratio (D/E_{it}) using the fixed effects estimation model

Variable	Coefficient	Std. Error	*t*-statistic	Prob.
C	1.1243	0.3776	2.9771	0.0030
MO_{it}	0.3604	0.1667	2.1619	0.0310
$(MO_{it})^2$	-0.5422	0.1851	-2.9291	0.0035
SZ_{it}	-0.0480	0.0237	-2.0262	0.0431
FCF_{it}	-5.19E-09	2.30E-09	-2.2554	0.0244
$GROW_{it}$	0.0100	0.0031	3.1450	0.0017
$NDTS_{it}$	0.3676	0.1040	3.5333	0.0004
DPS_{it}	-0.0005	0.0004	-1.2169	0.2240
Notes: R^2 =0.7859; Mean dependent variable = 0.4309; Adjusted R^2 = 0.7263 S.E of regression = 0.2212; *F*-statistic = 13.1801; Prob. (*F*-statistic) = 0.0000				

Source: Author's own based on analysis of data

Table 7: The effect of larger external shareholders ($LARG_{it}$) & managerial ownership (MO_{it}) on debt to equity ratio (D/E_{it}) using the fixed effects estimation model

Variable	Coefficient	Std. Error	*t*-statistic	Prob.
C	1.1250	0.4254	2.6443	0.0084
$LARG_{it}$	0.1813	0.0752	2.4088	0.0163
MO_{it}	-0.1919	0.1561	-1.2287	0.2196
SZ_{it}	-0.0510	0.0240	-2.1236	0.0341
FCF_{it}	-5.35E-09	2.25E-09	-2.3783	0.0177
$GROW_{it}$	0.0104	0.0032	3.2395	0.0013
$NDTS_{it}$	0.3776	0.1060	3.5611	0.0004
DPS_{it}	-0.0005	0.0004	-1.0623	0.2884
Notes: R^2 =0.7862; Mean dependent variable = 0.4309; Adjusted R^2 = 0.7266 S.E of regression = 0.2212; *F*-statistic = 13.1984; Prob. (*F*-statistic) = 0.0000				

Source: Author's own based on analysis of data

multi-co-linearity. The values of cross correlation in the matrix are fairly small, which indicates that the multi-co-linearity can be negligible among the variables used for the estimation. The regression results of equation 1, 2, and 3 estimations are presented in Tables 5, 6, and 7, respectively. Table 5 presents the impact of large external shareholders on leverage, Table 6 shows the impact of internal ownership i.e. managerial equity ownership on firm's financing choices and finally, Table 7 presents the firms' financial structure in the presence of large external shareholders as well as managerial equity ownership.

Discussion

The empirical result presented in Table 5 shows that the presence of large shareholders has significant and positive relationship with leverage. This indicates that large shareholders may preferably encourage the managers to use the leverage to increase their return on equity. It also contributes to introducing the managers' performance-based incentives and compensations. These factors and the debt related monitoring by creditors may have contributed to reducing the principal-agent conflicts as highlighted by Grossman and Hart (1982). This relationship also endorses the Stiglitz (1985) argument that larger shareholders with undiversified portfolios need strict monitoring on managers to increase return on their investment. Undiversified portfolio refers to the

phenomenon when someone owns a major proportion of shares in a certain firm, and doesn't have investments in other firms i.e. (diversification). Portfolio diversification in finance literature is highlighted to cope with investment related risk or uncertainty. Therefore, larger shareholders with undiversified portfolios have to perform strict monitoring in order to minimize the risk or uncertainty related to their investment.

The effective regulatory and legal framework of ensuring fair and prompt disclosure in the capital market may discourage the decision makers in firms to rely heavily on debt. However, as La Porta et al., (1998) point out, in general, the developing economies are more prone to agency problems due mainly to the weak institutional, legal and regulatory framework. Under the alleged patronage-client network with the atmosphere of not letting any major listed firms go bust typically observed in developing countries, large shareholders with political and economic power may insist on leverage to seek higher returns on equity while maintaining their majority in shareholding. The Free cash flow control hypothesis (Jensen, 1986) can also explain the positive relationship. Under a close and effective monitoring by the large shareholders, according to the hypothesis, the future obligations for interest payment and repayment of borrowed principal would minimize the availability of free cash under the managers' discretion, which would ultimately reduce the shirking among managers. As put by Jensen (1986), that "debt creation, without the retention of the proceeds of the issue, enables managers to effectively bond their promise to pay out future cash flow". They also state that it does not mean that debt issue will always have positive control effects. These results are in the line with findings of Berger et al., (1997); Brailsford et al., (2002); Firth (1995); Friend and Lang (1988). They all explore a positive relationship between large external shareholders and debt.

The relationship between dependent variable and managerial equity ownership as explanatory variable is presented in Table 6. The results show a positive and significant relationship between them. This relationship implies that the managers use leverage to seemingly seek for their returns in accordance with their own incentives. However, higher managerial ownership proportion than a certain level shows a significant and negative relationship with leverage. These findings show that the managers as major shareholders would come to avoid the use of debt. These finding are consistent with the results of Brailsford et al., (2002) and Ruan et al., (2011). Brailsford et al., (2002), which states "When managerial share ownership reaches a certain point, there is potential for an increase in managerial opportunistic behavior which is associated with a decrease in the debt ratio". Due to this opportunistic behavior there is a possibility that managers may not support debt, partly because they would rather keep their discretion in management to avoid the creditor's monitoring and control or gaining the agency related benefits of debt through their higher equity ownership. Based on these findings it can be argued that higher managerial equity ownership to a certain extent encourages *managerial opportunism* and *managerial entrenchment*. These findings endorse Jensen and Meckling (1976) interest alignment hypothesis of internal and external shareholders. These outcomes are basically consistent with the preceding empirical findings such as, Berger et al., (1997); Brailsford et al., (2002); Kim and Sorensen (1986); Ruan et al., (2011) and Short et al., (2002).

Finally we examine the combined effect of large external shareholders and managerial equity ownership on firms' choices of financial structure. Our estimation of the correlation is presented in Table 7. These findings endorse the assumption that large external shareholders who are able to effectively utilize their voting power could influence the corporate strategic decisions including the corporate strategy for financing. The existence of larger external shareholders show a significant positive relationship with leverage.

On the other hand, the relationship of managerial equity ownership shows different results, respectively either in the presence or absence of large external shareholders. The presence of large external shareholders negates the significance of managerial ownership on leverage compared to its absence. This finding implies that the close monitoring by large external shareholders can significantly affect the capital structure choices. With this strong control the shareholders may choose a certain debt level that may perhaps reduce the *managerial opportunism* and *entrenchment*.

Control variables in all of the three estimations show the following relationships. Size and free cash flow show negative and significant relationships with leverage. Growth and non-debt tax shield show significant relationship. Finally, dividend per share shows negative but insignificant relationship.

As a whole, our results show that ownership structure significantly affects the capital structure of firms listed in Pakistan. Up to a certain level of managerial equity ownership the interest alignment hypothesis can be applied to contribute to reducing the principal-agent conflict. Managerial equity ownership higher than from a certain proportion with low debt ratio has potential to lead to managerial opportunism and entrenchment. This means managers with higher ownership and transfer of control from external minority shareholders with weak monitoring could utilize the corporate sources for their own perquisites. Simultaneously, the presence of large shareholders seems to be decisive in listed firms to occasionally cancel out the role of managerial equity ownership. The strong control power by Pakistani large shareholders may contribute to reducing the principal-agent conflicts such as managerial shirking, opportunism and entrenchment, though the leverage does not always lead to the firm's value enhancement in the long run.

Conclusion

This study tries to investigate the significance of ownership structure on a firm's choice of debt or equity, i.e. capital structure. To empirically investigate the relationship, the study uses the data of non-financial firms listed in Pakistan. By employing the concept of modern corporation, the separation of ownership and control, the study divides ownership structure into internal (managerial equity ownership) presumably having stronger incentives along with the ownership stake, and external ownership (large external shareholders/ blockholders) apparently as residual claimants with more voting power but delegating the role of management to managers. This structure is the core of Agency theory in terms of principal-agent relationship.

Our findings highlight the presence of agency conflicts, such as managerial opportunism, entrenchment, etc. in non-financial firms in Pakistan. Empirical findings prove that low level of managerial equity ownership helps in aligning the manager's and shareholder interests. However, higher level of managerial ownership does not. Moreover, the presence of active large shareholders is more effective to solve the agency conflicts between principal and agent. Our findings also show that large external shareholders through active monitoring and voting control rights can minimize the influence of managerial equity ownership in an agency's capital structure decisions.

In the case of Pakistan our findings suggest that firms rely on more debt mainly as a tool of monitoring and partially to gain the tax benefits. Another reason to rely on debt could be the possibility of political instability or uncertainty in the market that inflates the cost of equity. Finally, the free cash flow hypothesis assumes a positive relationship between free cash and debt, based on the argument that regular interest payment reduces the availability of free cash under a manager's discretion and can prevent them from shirking. However, in the case of Pakistan free cash flow shows negative relationship to leverage; these findings again support the Pecking order theory of utilizing internal financial sources firstly, in order to reduce the cost of information, monitoring cost, etc.

In capital structure decisions, Agency theory framework recognized the financial distress and bankruptcy as agency costs of debt. Therefore, in developed economies in order to avoid these costs, large external shareholders hesitate to rely on debt in the long run. However, in the case of Pakistan large shareholders are involved in active monitoring and support debt in order to protect their interest and control which they may lose due to dispersed ownership. This phenomenon may exist on their assumption that with more voting and controlling power they can protect their interest.

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